

# Present and Future Challenges to Maintaining Balance Between Global Cooperation and Competition

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## **Forewords Provided By**

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# SMA Perspectives

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## SMA Perspectives Series

The Joint Staff and the United States military adheres to the maxim that effective strategy formulation starts with a proper diagnosis of the environment. This is particularly true when the operational environment has high levels of interactive complexity across various domains. In these settings there are no easy choices but we know from centuries of experience that the best plans are informed by thoughtful, disciplined exploration of ideas and diversity of thought. In pursuit of this axiom, the SMA Perspectives Series is a concerted effort to harvest the informed opinions of leading experts but do not represent the policies or positions of the US government. Our hope is that the ideas presented in the pages that follow expand the readers' strategic horizons and inform better strategic choices.

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## Scope

The future operating environment will present US military leaders and planners with both familiar and unfamiliar problem sets that will test the DoD and partner nations' ability to maintain strategic stability. These future challenges are anticipated to be significantly different from those of recent decades. The two overarching challenges are contested norms and persistent disorder. It is expected that adversaries will continue to pursue their national objectives by creatively combining conventional and non-conventional methods to operate below a threshold that they believe would invoke a direct military or other damaging response from the United States or its allies.

This white paper advances the concept of taking action to establish and maintain strategic stability in periods that vary between competition and cooperation. The objective is to create conditions that encourage an adversary to conduct activities that promote cooperation and avoid escalation towards conflict by offering a range of alternative actions that the US and/or another actor can take that will protect the vital interests of both.

Topics addressed include:

- The binary, either-peace-or-war, conception of the operating environment is obsolete, and military power alone is insufficient to achieve sustainable political objectives in the current environment. This necessitates the need for new strategies and a better understanding of what "strategic stability" looks like today, as these differ substantially from past practices.
- This new context includes a decline in popular trust in governments and formal institutions, as well as increased polarization within Western societies that are exasperated by malign influence campaigns and other so-called *gray zone* actions.
- There are contending elements within respective conceptions of strategic stability applied across various domains for the US, Russia, and China. The concept of strategic stability is increasingly challenged as different countries embrace their own different concepts of strategic stability. Trust and influence are overarching concepts in the context of strategic stability, and trust building is a key challenge.
- If great power competition (GPC) is a contest for "advantage, leverage, and influence," and influence is a contest for the affinity of relevant actors and populations, great power competition (GPC) is about winning the affinities of people. Power is shifting to populations, and autocratic regimes that have grown increasingly brittle are the threats. China is a "Titanic," and its population, and those that it negatively impacts around the planet, are icebergs.
- New opportunities and challenges are presented from emerging technologies.
- Predatory economic and business practices, legal actions, public opinion manipulation, and other subversive actions are all means that an adversary might employ to support its competition strategies.

Bottom line: There is a clear need for a "new" security concept that is a blend of legacy deterrence thinking, expanded thoughts on escalation management, and the concept of managing activities along a cooperation-competition-conflict continuum, with the purpose of maintaining strategic stability while promoting US national objectives. To do this requires discussions focused on understanding how the US and its partners should implement recent research about actor behaviors during periods of competition.

## USSTRATCOM Foreword

ADM Charles A. Richard  
USSTRATCOM

As the Commander of United States Strategic Command, I witness daily the complexity of a security environment characterized by destabilizing aggression, proliferation of modern technologies, and expanding nuclear and other strategic threats. Our Command's mission is to deter strategic attack and employ forces, as directed, to guarantee the security of our nation and our allies. Deterrence is not a stagnant mission nor the preservation of a force held in reserve. Deterrence is actively "executed" on a daily basis throughout a continuum of operational environments stretching from competition to crisis to conflict. The precedents we set today (e.g., establish cognitive and physical conditions) directly affect our competitors' military employment decisions now and in future crises when geopolitical stakes and strategic risks rapidly increase.

While many of the concepts articulated in this white paper are not new, they are being examined in the light of today's security environment—one of great power competition. The authors describe characteristics of nation-state competition—dynamics that have existed since the dawn of civilization. What has changed, from my perspective, is the strategic reach of competitors who possess strategic (e.g., nuclear, long-range strike, space, cyber, and information related) capabilities that create room for aggressive policies/actions below the threshold of traditional armed conflict. In this environment, our competitors are emboldened to pursue aggressive security objectives and apply coercive tactics to reshape international security dynamics while relatively confident that they can manage the risk of great power armed conflict. It is with this backdrop that we, collectively, must balance competition and cooperation, maintain stability, and defend our national and alliance security and defense interests.

The argument to blend legacy and modern theories, concepts, and capabilities to inform defense and security policies/actions is compelling. This work truly represents a convergence of ideas (some complementary and some competing) from multiple communities with a common theme of balancing competition and cooperation efforts in order to maintain stability. I particularly appreciate the recognition that the community of responsibility is vast—broader than our national security and national defense enterprises. Our allies, industry, and academic partners all contribute to identifying and establishing solutions for maintaining stability in this dynamic security environment.

The idea of "strategic empathy" is also exceptionally relevant to deterrence. Joint Force engagements and operations must begin with a deep understanding of "RED, BLUE, and GREEN" intent and core interests—particularly as we seek to encourage restraint in heightened states of competition. While competing nations act to advance their own security goals, achieving stability involves recognizing and committing to acceptable behaviors, whether defined by international norms, treaties, or other forms of agreement.

I am frequently asked to speak to the risk of strategic deterrence failure, and in doing so, emphasize the importance of the Joint Force accounting for this risk each and every day. It is through today's operations, activities, and investments that our nation establishes conditions that either encourage or discourage other nations' aggressive behaviors and/or their investments in threatening cyberspace, space, or nuclear capabilities.

Thank you to the multiple contributors to this white paper and to the Joint Staff team that facilitated the work. We, as a department and as a nation, are navigating unfamiliar and dangerous waters, and it is encouraging to see the mental aptitude applied to charting the best course possible.



## USSOCOM Foreword

GEN Richard D. Clarke  
USSOCOM

This SMA white paper provides a thoughtful exploration of ideas around the global competitive space brought into focus by the 2018 National Defense Strategy. My own experiences over more than three decades in uniform highlight the blend of old and new paradigms that define our current strategic environment. Beginning my career as a mechanized infantry platoon leader in West Germany, executing the Cold War deterrence discussed by several authors in this paper, it is tempting to embrace that familiar approach to great power competition. However, the world is different, and our relationship with competitors today is much more complicated. A successful approach will not reenact Cold War strategies, but will find a better balance of activities defined by a refreshed perspective that takes stock of present dynamics and unique challenges on the horizon.

Operationally, USSOCOM is engaged in two significant global efforts every day: a battle against extremism and a battle for influence around the globe. Fortunately, these are not mutually exclusive. As Mr. Daniel R. Lane and Mr. John Collison highlight in their contribution, competition takes place in the human dimension. Furthermore, other concepts evoked in these writings are important to explore—“strategic empathy” and the growing range of options for competition below the level of armed conflict are two worth noting. Special Operations Forces (SOF) excel in this space by gaining placement and access to expand strategic empathy, understand complex environments, and build influence through partnerships.

Often these partnerships are born from a mutual need to combat violent extremist threats. The fight against extremist violence is generational, and the US is the partner of choice. By understanding the value of trust and confidence in promoting stability and influence, SOF teams develop relationships that rebuff the opportunistic and exploitative goals of our competitors, and thereby advance our national interests. At USSOCOM, we view competition as a contest for advantage, leverage, and influence among relevant actors and populations to protect or advance their interests. This competition is a consistent, natural occurrence across human history, but new paradigms and technologies will profoundly impact the character of that age-old balancing act. For instance, data-driven technologies are already transforming information operations.

The nation will call upon SOF to perform a growing range of missions to counter emergent challenges unfit for the scale of traditional military responses. USSOCOM is adapting to today’s complex realities and leveraging US innovation to enable the Joint Force to compete below the level of armed conflict. The concepts and recommendations in this paper are a great contribution to this ongoing, vital dialogue about how we must adapt to secure victory. USSOCOM is committed to being a part of this conversation and a part of the solution.

Special thanks to the Joint Staff and each contributor for your hard work in making this white paper a reality. I encourage each member of the Joint Force to read it, contribute to the conversation, and consider how it applies to your organization’s mission.

## Executive Summary

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This white paper addresses the need for a “new” security concept that is a blend of legacy deterrence thinking, expanded thoughts on escalation management, and the concept of managing activities along a cooperation-competition-conflict continuum, with the purpose of maintaining strategic stability while promoting US national objectives. The two overarching challenges are contested norms and persistent disorder. It is expected that adversaries will continue to pursue their national objectives by creatively combining conventional and non-conventional methods to operate below a threshold that they believe would invoke a direct military or other damaging response from the United States or its allies. The white paper advances the concept of taking actions to establish and maintain strategic stability in periods that vary between competition and cooperation. The objective is to create conditions which encourage an adversary to conduct activities that promote cooperation and avoid escalation towards conflict by offering a range of alternative actions the US and/or another actors can take that will protect the vital interests of both.

### Outline

The first five chapters attempt to define this new emerging operational environment and how best to manage these challenges. The following four chapters (Chapters 6 to 9) do deep dives into various aspects of this new operational environment and advance new strategic concepts. The next three chapters (Chapters 10 to 12) provide needed remedies for the US, its allies, and partners to deal with these developing challenges. In her concluding contribution, LTG(R) Karen H. Gibson advances a new operating model or paradigm to better reflect the complexity of emerging threats. Lastly, LTG(R) Michael K. Nagata provides closing remarks using the “something old and something new” paradigm to capture key findings.

### Purpose and Goal

- Contributors assert that the United States is operating in a “new” security environment for which deterrence alone is insufficient but lacks effective frameworks to incorporate competitive strategies. What is required and advanced in this white paper is an evolving US security model that blends old and new to include:
  - Legacy deterrence thinking,
  - Expanded thoughts on escalation management, and
  - The recognized need to balance US and partner activities along a cooperation-competition-conflict continuum to avoid military conflict while promoting US national objectives and sustaining a comparative advantage.
- Today’s security concept goal is to maintain strategic balance while promoting US national objectives.
- There is a need to codify this evolving approach to national security.

## New and Emerging Observations

- Adversaries are advancing their economic and social agendas by creatively combining conventional and non-conventional methods to compete with the US and its allies below a threshold that they believe would provoke a direct military or other damaging response from the United States or its allies.
  - Competitors are contesting long-standing norms and creating persistent disorder.
- Great power competition is a contest for “advantage, leverage, and influence” of relevant actors and populations.
  - Great power competition is about winning the affinities of people.
  - The greatest threats to stability are autocratic regimes that have grown increasingly brittle.
  - Path to winning this competition will ultimately be the through the hearts and minds of the people—the “relevant actors” of the world.
- Cyberspace has become the central domain for competition.
  - Unlike nuclear weapons, whose use was to be avoided, cyber “weapons” are used daily in ways which undermine democratic governments without causing physical damage.

## Limitations of Current Concepts

- Traditional conceptual frameworks surrounding “strategic stability” focus primarily on nuclear deterrence strategy and policy, which do not reflect over two decades of new weapon development or the new strategic challenges they present.
- The binary, either-peace-or-war, conception of the operating environment is obsolete—military power alone is insufficient to achieve sustainable political objectives in the current environment.
- Our legacy strategic stability models are proving inadequate in today’s increasingly dynamic, complex, and interconnected world.
  - Deterrent threats alone cannot regain lost strategic balance—our actions must both mitigate threats to US vulnerabilities and respond to ongoing actions in the non-kinetic domains.
- The US must improve its ability to adapt to today’s complex realities and adopt new rules and considerations for competition that do not constrain US innovation.
- The US must begin making different choices.
- New thinking is a mission imperative.
  - The US must seize the opportunity to develop concepts addressing the new strategic environment by:

- Expanding the “encourage restraint” element of deterrence to expand the range of choices along the cooperation-competition continuum for the purpose of avoiding military, economic, political, or other unacceptable forms of destructive competition,
  - Creating conditions that encourage an adversary to conduct activities that encourage cooperation and avoid escalation towards destructive competition by promoting a range of alternative actions that the US, its allies, and its competitors can collectively take to avoid threatening any actor’s vital interests, and
  - Challenging paradigms that assume US military technology dominance.
- Strategic stability can be bolstered if it includes “strategic empathy,” or an awareness of the adversary’s core interests and threat perception, to ensure competition remains below the line of direct military conflict.
    - More robust state capacity promotes sociopolitical resilience and stability to counter aggression from powerful neighboring states.
  - It is important to understand the value of trust and confidence in promoting strategic stability—ambiguity works against positive relationship building.

## Overview of Contributions

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In his opening chapter, **Lt Gen (Ret) Robert Elder** posits that potential US adversaries will continue to pursue their national objectives by creatively combining conventional and non-conventional methods to operate below a threshold that they believe would invoke a response threatening their vital interests from the United States or its partners. He goes on to state that trust and influence are overarching concepts in the context of strategic stability, and trust building is a key challenge in this context. The evolving US security model is a blend of legacy deterrence thinking, expanded thoughts on escalation management, and the recognized need to balance activities along the competition continuum to avoid military conflict while promoting US national objectives in an increasingly complex environment characterized by new threats from emerging technologies.

In the following chapter entitled “Keeping a Strategic Rivalry Stable: Why This Time Is Different,” **Dr. Michael Mazarr** takes up the challenge on how to keep these strategic competitions stable, given the reality that these sets of competitions are different in important ways from previous ones for the following reasons:

1. The level of nationalism present in the major rivals today is greater than many prior periods of competition.
2. The three rivals (the US, China, and Russia) enter the current competition with a degree of mutual resentment and suspicion that is, arguably, at least as high as that during the early Cold War.
3. Established lines of communication and relationships are fraying.
4. Merging technologies and techniques allow competitors to reach into each other’s homelands and cause mischief.
5. The nature of many competitive strategies and tools in the so-called “gray zone” makes it increasingly difficult to maintain—or even identify—clear thresholds.

Bottom line: The essential problem is that mutual zero-sum perceptions, and the sense on both sides that rivals do not respect basic legitimacy and seek regime-changing levels of disruption, are very high. He does point out the three countries share some very important national interests that are not inherently opposed and, in some cases, demand cooperation. He concludes by saying the degree of suspicion and resentment on all sides is now very high, and it is not clear if we can expect such stability-inducing national policies any time soon.

In their article entitled “Great Power Competition Below the Line: Comparative (and Contending) Approaches to Strategic Stability,” **Drs. Adam N. Stulberg, Lawrence Rubin, and Dalton Lin** address two key questions:

1. What is strategic stability in the context of competition and cooperation in the gray zone?
2. Is there a universal concept—shared by competitors—that can encourage actions to promote cooperation and mitigate escalation to a devastating first strike?

They argue that strategic stability remains an enshrined but contested organizing concept for great power relations and make a case against conflating strategic stability with deterrence. Furthermore, they state that strategic stability means different things to the United States, Russia, and China as they compete opportunistically across domains with divergent strategies of deterrence, coercion, and influence. The authors also suggest that strategic stability can be bolstered if it includes “strategic empathy,” or an awareness of the adversary’s core interests and threat perception, to ensure competition remains below the line of direct military conflict. In the process, they discuss Russian and Chinese doctrines regarding strategic stability. The authors conclude by stating the United States may want to pursue understandings of strategic stability that retain some elements of the past but are tailored toward existing circumstances. It is wishful thinking to come up with a universal definition that will apply to all states at all times and in all circumstances, however. The strategic stability in this new age and new environment must include “strategic empathy,” or an understanding, not necessarily an acceptance, of an adversary’s core interests and threat perceptions, the authors argue.

In the following article entitled “Peer/Near-Peer Challenges to Strategic Stability: The Need to Securitize State Capacity,” **Drs. Cynthia J. Buckley, Ralph Clem, and Erik Herron** argue that all other things being equal, more robust state capacity promotes sociopolitical resilience, and less robust state capacity leads to instability, perhaps even enabling aggression from more powerful neighboring states. In the process, they make several suggestions:

1. Measures might be taken by states to consider state capacity as a key element of securitization, especially in vulnerable regions, among disaffected population sub-groups, and in post-conflict situations.
2. State capacity shortfalls in delivering social welfare services are antecedents of internal conflict and destabilization.
3. Incorporating state capacity/human security both conceptually and in terms of national security policy better positions the United States and its allies to compete in the global arena with peer/near-peer states, such as Russia, that seek to destabilize geopolitically vulnerable regions in other states by means short of war.

Taking Ukraine as an example, the authors’ initial findings suggest that the US and its allies should significantly upgrade efforts to assist governments in the region with expanded non-military assistance.

In an article entitled “Trust and Confidence in Managing Strategic Stability,” **Drs. Adam B. Seligman and David W. Montgomery** highlight the importance of delineating trust from confidence in exploring the strategic aspects of stability. They go on to state that trust and confidence allow us to manage the ambiguity of social and institutional relationships differently. In this context, confidence is the ability to predict another’s behavior. Trust, on the other hand, is what is required to establish and maintain interaction when there is no basis for confidence and when we cannot predict behavior and outcomes. They end their chapter by stating that much of the world is built upon relationships that carry with them a great deal of ambiguity, which is mitigated by either trust or confidence. Knowing this and properly assessing the relative valence of each in any given interaction situates the ambiguity in a way that allows us to consider what is realistic in our strategic thinking.

In a chapter entitled “The Competition for Critical and Emerging Technology and Its Impact on Stability,” **Lt Col Christopher D. Forrest** states at the outset that a subset of great power competition is the competition for critical and emerging technologies and future innovation. As such, the US should take steps now to promote and protect critical and emerging technology advantages so as to

ensure its technologic, economic, and military edges remain. As the competition for critical and emerging technologies progresses, this becomes even more critical. We may face potential periods of instability ahead as we update our previous paradigms to confront a new reality of contested technological dominance. The paradigm that worked well to defeat the Soviets (i.e., the federal government would take on primary responsibility for funding basic scientific research, and the Department of Defense invests heavily in basic research and technology development) has shifted, and we now see a defense technology sector that is much more dependent on advances in the commercial space than government-funded research and development. He states that as we seek to better understand what the current and future operational environments look like, we should challenge our current paradigms that assume US military technology dominance. He advocates that the best practice will be a combination of two policy initiatives that are in natural tension with each other—critical and emerging technology promotion and protection. This balanced approach to critical and emerging technology promotion and protection is imperative.

**Dr. James Lewis**, in an article entitled “Strategy After Deterrence,” takes on the challenge of developing a strategy commensurate with current challenges and states unequivocally, “Cold War ideas, like deterrence, are inadequate for current strategic challenges, including cybersecurity.” He also raises the question of what deterrence means in an international environment where:

- Opponents have spent years developing strategies to circumvent the United States’ deterrent capabilities.
- They perceive the United States as strategically inept and believe it can be outmaneuvered in ways that reduce the risk of retaliation.
- Cyberspace has become the central domain for conflict, and, unlike nuclear weapons, whose use was to be avoided, cyber “weapons” are used daily in ways that do not pose existential threats.

He states that adversaries use cyber and influence operations, proxy forces, and the positioning of military forces to obtain advantage while managing the risk of conflict. While nuclear weapons reduce the likelihood of major war between nuclear-armed powers, they do not prevent conflict. He also states that protecting US interests will require a multi-pronged approach:

- Protecting US interests will require abandoning the passivity of deterrence to use sustained low-level engagement and coercive actions below the use-of-force.
- Engagement cannot be one-off actions but should be part of a larger campaign to constrain opponents and advance national interests.
- Credibility now has a “shelf life” that is significantly shorter than it was in the Cold War. It must be rebuilt and sustained.

**Lt Col Christopher D. Forrest**, in a chapter entitled “What if Strategic Stability Is Lost?,” makes the point that traditional concepts and lexicon surrounding “strategic stability” focus primarily on nuclear deterrence strategy and policy despite over two decades of development of new weapons and effects that increasingly present additional strategic options. He goes on to explain that traditional approaches to deterrence that seek to maintain the status-quo may be lacking. Compellence, however, seeks to respond and coerce an adversary to stop taking an action that has already begun. From this viewpoint, regaining strategic stability with deterrent threats may be less useful than compellent threats and actions. In the process, he raises a key question: Despite no near-term prospect of a major exchange of nuclear weapons, are we “strategically stable” today? In the process, he offers the following observations:

- We must mature our understanding on what “strategic stability” looks like and the degree to which it is desired or achievable given the maturation and growing ability for cyber, space, and information effects to hold strategic national centers of gravity at risk. These can achieve drastic strategic effect over the course of the long-term.
- Regaining strategic stability with deterrent threats may be less useful than compelling threats and actions that both mitigate threats to US vulnerabilities and respond to ongoing actions in the non-kinetic domains.

We must update our education, training, doctrine, and command structures to enable a fuller use of tools and capabilities to compel vice only deter.

In their article entitled “What Kind of War?” **Mr. Daniel R. Lane and Mr. John Collison** posit that just as the “Cold War” was primarily a confrontation of opposing civilizational systems fought mainly in the non-military dimensions of international relations, the present multilateral contest between the US, China (PRC), and Russia is the foremost modern example of great power competition (GPC) and is presently a struggle of a different character from armed conflict. In the process, they introduce three examples of historical GPCs and the concept of “theory of victory.” They also make the following key observations:

- By focusing overly on preparation for armed conflict, the US government and Department of Defense may not only be misaligning ways and means with the desired ends, but they may also have identified the wrong ends.
- The present GPC differs from previous historical GPCs in the degree of economic interdependence between the competitors.
- Considering such complexities, the US government requires a suitable, acceptable, and feasible theory of victory (ToV) to prosecute a competition of this sort.
- Strategic and operational environments are composed of a fluid mix of cooperative, adversarially competitive, and conflictive operations, activities, and investments (OAI)s—a complex and multidimensional competition continuum—instead of a simplistic “peace/war” binary.
- The objective of GPC is no longer just physical, nor even, more generally, geographical. It is instead positional in the multidimensional space of international relations.
- The critical focus of GPC, the common medium through which all “influence, leverage, and advantage” accrues, is people.

They conclude by stating the present GPC will likely prove to be an ideological competition, pitting the legacy liberal, rules-based, Western model led by the US against its authoritarian and far less inclusive Chinese and Russian alternatives. They also conclude that the path to winning this competition will ultimately be the through the hearts and minds of the people—the “relevant actors” of the world.

In his chapter entitled “The Faults in Our Concepts: Competing Perspectives for Understanding the Nature of Our Security Challenges,” **Lt Col David Lyle** argues that focusing on stability instead of agility gives us a false sense of security. He advises the reader to focus on improving their ability to adapt to the new realities of complexity and seek to design new rules for competition that suit our strengths for innovation and adopting change. This will give liberal powers an advantage over authoritarian regimes who depend on delusions (and often illusions) of competence to hold power. To do this, he advises readers to change how they educate and develop themselves, gaining a greater



appreciation for merits of intellectual humility, the importance of bias awareness and management, and the need for interdisciplinary, multi-model synthesis when framing and addressing complex social problems. He concludes by advocating several significant steps to prepare for this change in mindset:

- Encourage the study of complex systems, network theory, and basic familiarity with statistical analysis and formal mathematical modeling methods.
- Encourage the awareness of unconscious cognitive biases related to personal and collective identity.
- Encourage the development of and institute human capital protections for “game designers.”

In her chapter entitled “New Thinking as a Mission Requirement,” **Dr. Allison Astorino-Courtois** raises the following question: To what extent has US defense thinking shifted—specifically, the basic assumptions that condition how we think about the world—along with the global order? She emphatically states that a new paradigm—a new *way* of thinking—is a mission requirement. Whereas the dominant paradigm in US security thinking and policy during the Cold War can be characterized as rationalist, US-centric, state-centric, political realist/neo-realist, and liberalist, the thinking for the current epoch in history is evolving but not yet sufficient for a new paradigm. In the process, she makes several key observations:

- Competition, like cooperation and conflict, refers to the tenor of the relationships between the interests of two or more actors.
- Compatibility between interests is what differentiates cooperation from competition and conflict.
- There is more than one type of competition.

She goes on to state that it certainly is no longer the case that the terms “adversary” and “friend” are static. Rather, they vary along a continuum from cooperation to conflict and change by issue and contextual factors. Thinking of international actors only as perpetual “adversaries” or “friends” (on all issues) prematurely constrains US options. She concludes by stating that analogizing to the national security challenges that the United States has faced in the past, or seeking to replay Cold War-like thinking and “rebuilding the capabilities that we had during the Cold War,” will put us back to where we were more than 30 years ago—before smart phones, 9/11, before China owned more US debt than Japan, and before severe demographic decline in Russia—rather than allow us to seize the opportunity to innovate and move ahead with concepts and paradigms specifically designed to address current issues head on. In other words, new thinking is a mission requirement.

In his chapter entitled “The New Concept in Practice—What Does This All Mean for the US?” **Lt Gen (Ret) Robert Elder**, in his opening paragraph, summarizes the key theme in this white paper, namely:

“While strategic deterrence principles continue to serve effectively as a means to prevent nuclear attacks on the United States from peer competitors, competition among international actors, ranging from great powers to VEOs, presents new and vexing challenges to US and partner vital interests. Competition is now far from black and white as US competitors find that it is in their interests to cooperate in many areas while they compete in others.”

He goes on to state that the US and its partners can influence a potential adversary to implement a more acceptable course of action by enabling a range of options that provides a competitor’s decision makers the ability to balance the costs and benefits of its actions from a US and partner perspective

with the costs and benefits from its own domestic, internal organization, and third-party perspectives. He concludes by stating that the emerging, but not yet documented, approach to national security expands the “encourage restraint” aspect of deterrence to one that promotes the development of a range of choices along the cooperation-competition continuum for the purpose of avoiding military, economic, political, or other unacceptable forms of competition that would undermine critical objectives of one or more involved parties and possibly escalate to conflict adverse to US or partner national interests.

Next, **LTG(R) Karen H. Gibson** provides her observations and conclusions, synthesizing key points from the preceding chapters. She begins by asking to what extent strategic stability models from the bipolar Cold War era remain relevant, comparing the nuclear era’s relatively simplistic, binary threats with today’s multifaceted threat vectors in six domains. These threats are further complicated by emerging technologies, ambiguity and anonymity, and the lack of acceptable use conventions for cyber and space. She concludes by identifying the need for a new operating model or paradigm to better reflect the complexity of evolving threats and today’s increasingly complex, dynamic, and interconnected environment, while making the following recommendations:

- Prioritize the development of international norms for operations in space and cyber.
- Establish, rebuild, or reinforce robust communication mechanisms with potential adversaries or competitors.
- Avoid viewing many interactions as a zero-sum competition between rivals.
- Consider how best to incorporate aspects of the human dimension into new models.
- Follow a robust interagency and multi-disciplinary approach.
- Incorporate complexity theory into wargames.
- Recommit heavily to basic scientific research, technical development, and engineering applications while promoting the fullest collaboration with private sector innovators.

To conclude, **LTG(R) Michael K. Nagata** provides an overall perspective on the main themes of this white paper. He uses the “something old and something new” paradigm to capture his thoughts, whereby the “something old” is a reflection of where we have been, and the “something new” is a projection of where we should strive to go. He states that during the decades following World War II, the influence and reputation of the United States grew steadily, and the American power and influence derived from that ‘standing’ has been considerable. He goes on to say that in the past several decades, however, this growth in American “satisfaction” has gradually but significantly receded. This has led to the growing international perception that America’s strategic effectiveness, credibility, and reliability is deteriorating, particularly in contrast to the perception of rising power and influence by actors like Russia and China. Increasingly, America is being seen as a globally receding, not an advancing, power. He goes on to say that unless America wishes to follow the path of older empires and gradually return to being just one nation among many, it should be strategically obvious that we must begin making different choices. He concludes by offering a list of potential efforts to “think and act anew”:

- Strategists should consider the practical value of returning to a spirit of American generosity abroad.
- Strategists should find clues for success in applying net assessment theory to illuminate three vital truths: 1) RED—the true nature of the adversary; 2) GREEN—the true nature of the

increasingly complex environment within which we strive against the adversary; and 3) BLUE—most importantly, illumination of our own strengths, weaknesses, and vulnerabilities.

- Strategists should closely examine how weaknesses in non-military government capabilities are undermining America's ability to strategically succeed.

## Chapter 1: Evolving Concept for Establishing and Maintaining Strategic Balance with Competitors

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### Abstract

Over time, international security has evolved from operating in a peace-conflict continuum to one which involves balancing international relationships in order to operate in a continuum that varies between competition and cooperation and specifically avoids conflict, particularly in a military sense. Potential US adversaries will continue to pursue their national objectives by creatively combining conventional and non-conventional methods to operate below a threshold that they believe would invoke a response threatening their vital interests from the United States or its partners. When successfully executed, the activities of relevant actors, both competitors and partners, are balanced so that they do not threaten the vital interests of any of the parties, both in times of cooperation and competition. Trust and influence are overarching concepts in the context of strategic stability, and trust building is a key challenge in this context. The influence aspect of strategic stability recognizes that an actor's decision calculus involves not only its perceptions of the costs and benefits of taking an action but the costs and benefits of not taking an action. Enabling a range of potential courses of action for the US, its partners, and its competitors to consider when international stability is disturbed, regardless of cause, enables decision makers to strike a balance among each of their vital objectives. Each actor must understand the costs and benefits of decisions to act or not act from the perspectives of all parties, to include how these decisions may be viewed domestically. Avoiding conflict and encouraging cooperation in today's environment will require communication and negotiation with even greater granularity than in the past, given the "shades of gray" in which international political, military, economic, social, and information activities will be conducted. The evolving US security model is a blend of legacy deterrence thinking, expanded thoughts on escalation management, and the recognized need to balance activities along the competition continuum to avoid military conflict while promoting US national objectives in an increasingly complex environment characterized by new threats from emerging technologies.

### Contribution

The future operating environment will present US military leaders and planners with both familiar and unfamiliar problem sets, challenge DOD resourcing systems, and test the DOD's ability to maintain the strategic initiative. The two overarching challenges are contested norms and persistent disorder (Joint Staff, 2016). As a result, the Joint Concept for Integrated Campaigning tells us that the US must eliminate institutional remnants of the obsolete, binary peace-war conception of the operating environment (Joint Staff, 2018).

The Deterrence Operations Joint Operating Concept (DO-JOC) has provided a solid foundation for the US to convince adversaries to reject actions that might threaten US vital interests by means of decisive influence over their decision making. In the past, this decisive influence has been achieved by credibly threatening to deny benefits and/or impose costs while also encouraging restraint by convincing the actor that restraint will result in an acceptable outcome (Joint Staff, 2006). The DO-JOC remains relevant, but changes in the security environment have driven an evolution in thinking about how to deal with competitors whose differing objectives could lead to escalation from

competition to conflict. At the same time, there are often areas where international actor objectives overlap, which leads to situations where actors see the need to compete in some areas but to cooperate in others (Joint Staff, 2018).

Potential US adversaries will continue to pursue their national objectives by creatively combining conventional and non-conventional methods to operate below a threshold that they believe would invoke a response threatening their vital interests from the United States or its partners (Joint Staff, 2018). To protect both US interests and the strategic balance with competitor interests requires the US to understand an adversary's perception of the benefits of a Course of Action (COA), its perception of the costs of a COA, its perception of the consequences of restraint or inaction (that is, the benefits and costs of not taking the COA in question), and the adversary's risk-taking propensity. Risk-taking propensity is important because it affects the relationship between the values and probabilities of the benefits and costs the adversary uses to reach a decision (Joint Staff, 2006).

Over time, international security has evolved from operating in a peace-conflict continuum to one which involves balancing international relationships to operate in a continuum that varies between competition and cooperation and specifically avoids conflict, particularly in a military sense. International actors encourage their competitors to conduct activities that avoid escalation towards conflict by offering a range of alternative courses of action their partners and competitors can execute that protect the vital interests of all parties.

The Joint Concept for Integrated Campaigning (JCIC) describes the competition continuum as consisting of three states of relations. The first is armed conflict, where the use of violence is the primary means by which an actor seeks to satisfy its interests. The second is competition below armed conflict, which exists when two or more actors in the international system have incompatible interests, but neither seeks to escalate to armed conflict. The third is cooperation, which reflects mutually beneficial relationships between strategic actors with similar or compatible interests. The JCIC states that, "Although interests will only rarely be in complete alignment, relations that are fundamentally cooperative are strategically important for the United States because they underpin the international order, enhance collective security, help to ensure access, enable burden-sharing, and deter conflict" (Joint Staff, 2018).

Trust and influence are overarching concepts in the context of strategic stability, and trust building is a key challenge in this context. When successfully executed, the activities of relevant actors, both competitors and partners, are balanced so that they do not threaten the vital interests of any of the parties, both in times of cooperation and competition. The influence aspect of strategic stability recognizes that an actor's decision calculus involves not only its perceptions of the costs and benefits of taking an action but the costs and benefits of not taking an action. This requires an understanding of adversary intent, which reflects both its international and domestic objectives. The intent assessment process should begin with a consideration of at least two narratives of adversary behavior: one based on a strategic intent model and a second on an internal logic model (Schaub, 2009).

The strategic intent narrative builds a case that the adversary will act to achieve external goals. This assessment begins with an overview of the adversary's grand strategy: the goals that its leadership has traditionally sought, the goals sought by its current leadership, the environment in which it finds itself and how it facilitates or hinders pursuit of those goals, and the capabilities it possesses to overcome these obstacles and take advantage of situations as they arise (Schaub, 2009).

The internal logic narrative builds a similar case to explain what the adversary intends to do, but its focus is on the internal or domestic imperatives and constraints facing the adversary's leadership. This assessment begins by identifying the structure of the leadership, those who hold those positions, and their relations with one another. It also identifies various internal constituencies the leadership is dependent upon or responsible to, in particular those in a position to sanction or reward those leaders' behavior. Finally, it attempts to identify the internal problem that the adversary's leaders believe they can solve by acting externally (Schaub, 2009).

Enabling a range of potential courses of action for the US, its partners, and its competitors to consider when international stability is disturbed, regardless of cause, enables decision makers to strike a balance among each of their vital objectives. Each actor must understand the costs and benefits of decisions to act, or not act, from the perspectives of all parties, to include how these decisions may be viewed domestically. The methods to maintain strategic balance when the actors are engaged in competition below armed conflict can vary widely, but successful action in this state will require creativity and flexibility to accommodate a fluid political situation and pervasive information environment. To do this, the US and its partners must possess the best possible understanding of how relevant actors will perceive the action(s). This will require a continual reassessment of the competitor's intentions and capabilities in recognition that just as US policy aims could change over time, the competitor's aims and thresholds will also likely change (Joint Staff, 2018).

Maintaining a proper balance between cooperation and competition is critical to avoiding conflict and demands a focus on avoiding unfavorable escalation, particularly during periods of competition. Just as Cold War deterrence was enabled by communication and negotiation, avoiding conflict and encouraging cooperation in today's environment will require communication and negotiation with even greater granularity than in the past given the "shades of gray" in which international political, military, economic, social, and information activities will be conducted. Many US competitors conduct activities characterized by ambiguous intent to confuse public opinion, paralyze political decision making, subvert legal frameworks, and avoid crossing the threshold of military response (Department of Defense, 2018).

Stability mechanisms, applicable across the competition continuum, are the primary method by which the Joint Force affects the human dimension (Joint Staff, 2011). To compete, the US will employ all measures, short of those that might reasonably lead to conflict, in order to achieve US objectives, prevent the competitor from achieving its aims, and improve the overall strategic position. Where necessary, the US will counter or contest competitor actions to ensure that the United States maintains its relative strategic position and the competitor achieves no further gains with caution to avoid jeopardizing other US interests. Cooperation activities are conducted with competitors to achieve US objectives where areas of agreement exist and to maintain relationships and secure bilateral advantage in accord with US and partner interests (Joint Staff, 2018).

Military actions can shape favorable psychological, political, and logistical conditions, in coordination and cooperation with, and in many cases in support of, non-military activities. The US will coordinate military and non-military activities to achieve advantageous psychological impact on friendly, neutral, and adversary actors in the environment, across the different conditions of the operating environment. The US will act to limit an adversary's freedom of action and resiliency, while increasing US and partner nation options and support. The role of information operations is vitally important to explain key actions to diverse stakeholders in both strategic and operational environments (Joint Staff, 2018).

This evolving security model is a blend of legacy deterrence thinking, expanded thoughts on escalation management, and the recognized need to balance activities along the competition continuum to avoid military conflict while promoting US national objectives. It is also influenced by new threats from emerging technologies, such as social media, information operations, cyber-physical weapons, competition in space, directed energy weapons, and hypersonic weapons, to name just a few.

Success in planning and executing a new security strategy will depend largely on how well the US and its partners can address key aspects of the current national security environment to include challenges and opportunities, which the following chapters in this paper will address.

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## Chapter 2. Keeping a Strategic Rivalry Stable: Why This Time Is Different

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### Abstract

Even as the United States undertakes policies and investments to succeed in a strategic competition with Russia and China, it confronts a requirement that is equally as important: keeping these increasingly bitter competitions as stable as possible. In doing so, it must take seriously the likely reality that this set of competitions will be different in important ways from any previous example—in ways that create added risks of instability. This is true for at least five reasons:

1. The level of nationalism present in the major rivals today is greater than many prior periods of competition.
2. The three rivals enter the current competition with a degree of mutual resentment and suspicion that is, arguably, at least as high as the early Cold War.
3. Established lines of communication and relationships are fraying.
4. Emerging technologies and techniques allow competitors to reach into each other's homelands and cause mischief.
5. The nature of many competitive strategies and tools in the so-called “gray zone” makes it increasingly difficult to maintain—or even identify—clear thresholds at which the competitors could agree to implicit break points in the intensity of the competition.

### Introduction

This volume is based in part on a critical insight about US national security policy in the coming decade. As the United States enters a period of intensifying strategic competition with Russia and China, it must find ways to promote its interests, deny its rivals competitive advantage, and deter especially dangerous forms of aggression. But it also confronts a requirement that is equally as important: keeping these increasingly bitter competitions as stable as possible. History—and especially the major recent example of the Cold War—suggests that even rivals whose basic goal is to undermine each other's systems can establish mechanisms of stability that help preserve the peace, both in general and at especially perilous moments.

Even as Washington gears up to contest Russian and Chinese influence, it must attend to this same requirement today. In doing so, however, it must take seriously the likely reality that this set of competitions will be different in important ways from any previous example—ways that create added risks of instability.

### Core Elements of Stable Rivalries: The Historical Record

Apart from the rich literature on the stability of the Cold War nuclear balance, the concept of stability in strategic relationships is somewhat undertheorized in the historical and theoretical literature (for partial exceptions, see Colaresi et al., 2008 and Rasler et al., 2013). Many sources use the term without defining or analyzing it. Often, stability and instability are taken as implicit synonyms for peace and war; an unstable strategic rivalry, by this conception, is one that is headed toward or entering a period of conflict.



It is therefore critical to be clear about what we mean by stability in the international context. Dictionary definitions tend to define stability as resistance to change, or an ability to return to an equilibrium after being disturbed. That core notion—of a relationship that has a stabilizing tendency to return to the mean aftershocks—can help us understand the characteristics of a stable geopolitical competition.

Historical cases point to another fundamental way to understand a stable strategic relationship: Generally, the participants need some minimal agreement on the elements of a shared world or system that both or all sides are willing to accept (Kupchan, 2010, pp. 5-6; Jervis, 1982). If major powers have completely incompatible visions of the world they are trying to create or the status quo they will accept, their relationship will not be stable. Those times in history—such as the heyday of the Vienna System in Europe—when great powers managed to stabilize their mutual relations to the greatest degree involved perhaps the most explicit and wide-ranging agreement to the elements of a shared system (Jervis, 2000). The inverse of that shared expectation represents one of the most unstable situations: When one or more players in a strategic competition seek, or appear to seek, the demise or destruction of their rivals' systems, when the competitors refuse to respect one another's essential legitimacy, stability will be undermined (Kolodziej, 1991; Schroeder, 1992; Jervis, 1978).

Various studies of great power rivalries have pointed to other more discrete factors that help to determine the degree of stability in a rivalry. Stability improves, for example, when major powers tend to compete on peripheral issues rather than ones that affect their rivals' vital interests (Goldgeier & McFaul, 1992). It benefits when major powers can control and temper the actions of their sometimes aggressive and risk-taking allies and proxies (Stein, 1980). Although there is an intense debate about the importance of the balance between offensive and defensive capabilities and technologies, instability can intensify when one or both sides believe that the balance of military capabilities and deployments favors preemptive or offensive war (Glaser & Kaufmann, 1998; Lieber, 2000). Reliable communication channels tend to be critical to maintain stability, especially in crisis (Goldstein, 2013).

### Why This Time Is Different

These and related lessons from history suggest that several characteristics of the emerging strategic competitions make them especially prone to instability.

First, the level of nationalism present in the US's major rivals today is greater than many prior periods of competition. In both Russia and China, while the regimes control and adjust the level of public nationalistic displays to a significant degree, there is evidence that the influence of sometimes angry, conspiratorial, grievance-fueled nationalism—and the accompanying sense of national superiority and grievance—has been growing for some time. Rivals propelled by such wrathful nationalistic narratives will have a harder time tempering their actions and, just as important, their perceptions and beliefs about the motives of others.

Second, these three rivals enter the current competition with a degree of mutual resentment and suspicion that is, arguably, at least as high as the early Cold War. Some historical rivalries took place among countries with ruling groups that saw each other in classic realist terms—as another great power intent on improving its position. To some degree, they saw themselves as comparable players in a global game. Today, however, the situation is more analogous to the early Cold War—competitors who increasingly view each other as inherently malign and illegitimate, and even, in some cases, devoted to one another's destruction as coherent and competitive societies. This creates

an exceptionally dangerous degree of zero-sum perception and a context prone to exaggerated threat perceptions and conspiracy theories.

Third, even as mistrust grows, established lines of communication and relationships are fraying. Few long-term, well-established senior official relationships are in place today between the United States and either Russia or China. Communication mechanisms appear to have degraded significantly in both cases; especially in the case of China, the United States has never established the sort of reasonably robust crisis and persistent channels as it did with the Soviet Union during the Cold War.

Fourth, emerging technologies and techniques allow competitors to reach into each other's homelands and cause mischief (Mazarr et al, 2019). These currently center around disinformation and information manipulation programs and widely discussed means of cyber-attack, theft, or disruption. In the future they will involve vastly more sophisticated and potentially broad-based tools in those two categories, as well as direct physical targeting—through kinetic, biological, or other means—of individuals. If this trend is not constrained by policy, norms, or deterrent policies, the result will be to gradually erase the sense of safety and security offered by sovereign control of borders and create a sense of persistent, ongoing warfare among the competitors.

Fifth and finally, the nature of many competitive strategies and tools in the so-called “gray zone” makes it increasingly difficult to maintain, or even identify, clear thresholds at which the competitors could agree to implicit break points in the intensity of the competition. The result could be a long series of confrontations in which each side engages in a classic competition in risk taking without much sense of where the guard rails are. The danger, of course, is that one side could take an action—as simple as deploying US Navy vessels into the vicinity of a Chinese maritime stand-off with Philippine or Vietnamese ships—that suddenly triggers a significant escalation that no side wanted or expected.

These five factors create a situation in which the emerging strategic competitions between the United States and both Russia and China have the potential for significant degrees of instability. The inherent stability of competitive relationships would appear to compare very unfavorably, at least along the vectors summarized here, to such periods of greater major power stability as the Vienna System or the post-Cold War peak of global institutionalized order. The essential problem is that mutual zero-sum perceptions, and the sense on both sides that rivals do not respect basic legitimacy and seek regime-changing levels of disruption, are very high.

The three countries do share some very important national interests that are not inherently opposed and in some cases demand cooperation—maintaining domestic stability, preserving a stable global economic system, fighting terrorism, and combatting climate change. These in theory offer stabilizing factors even in a period of competition. With the right leadership, and if relationships and communication channels were significantly improved, policies could be developed which would emphasize common interests rather than zero-sum assumptions about hostility. But the degree of suspicion and resentment on all sides is now very high, and such stability-inducing national policies would have to overcome significant contrary momentum.

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## Chapter 3: Great Power Competition Below the Line: Comparative (and Contending) Approaches to Strategic Stability

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### Abstract

What is strategic stability in the context of competition and cooperation in the gray zone? Is there a universal concept—shared by competitors—that can encourage actions to promote cooperation and mitigate escalation to a devastating first strike? This chapter argues that strategic stability remains an enshrined but contested organizing concept for great power relations. Strategic stability means different things to the United States, Russia, and China as they compete opportunistically across domains with divergent strategies of deterrence, coercion, and influence. Notwithstanding these different situational and national contexts, strategic stability remains a potentially valuable organizing concept for demonstrating restraint and illuminating dangerous escalation pathways among great power rivals engaged in continuous competition. This chapter concludes by suggesting that strategic stability can be bolstered if it includes “strategic empathy,” or an awareness of the adversary’s core interests and threat perception, to help ensure competition remains below the line of direct military conflict.

### Introduction

The main event of contemporary great power statecraft takes place below the line of direct military conflict. As illustrated vividly in Figure 1, both the frequency and intensity of Chinese, Russian, and American coercive strategic discourses and force postures are steadily on the rise, as are percentages of each country’s overall international activity. Yet, as depicted in Figure 2, the three great powers practice distinct, mixed strategies marked by different combinations of kinetic and non-military instruments, as well as competitive and cooperative impulses. This raises the question: Is strategic stability still a useful and shared ordering concept for this fundamentally distinct, non-nuclear-centric context of strategic interaction?<sup>1</sup>

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<sup>1</sup> The authors thank Jonathan Darsey for generating Figures 1 & 2.

The views expressed in this article are those of the author and do not reflect the official policy or position of the Department of Defense or the US Government.

### Coercion Events by China, Russia & USA. as % of Each Country's Events and by Intensity - ICEWS 2010 - 2018

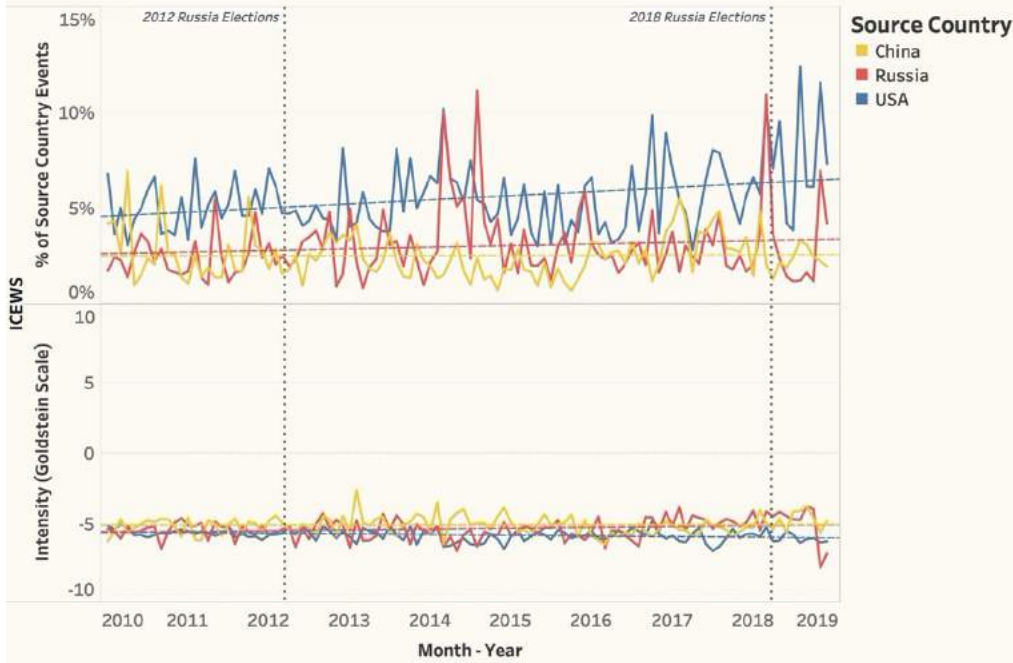


Figure 1. Coercion Events by China, Russia & USA as % of Each Country's Events and by Intensity

### Coercion Events Categorized by Domain of Action (DISMEL) - ICEWS 2010 - 2018

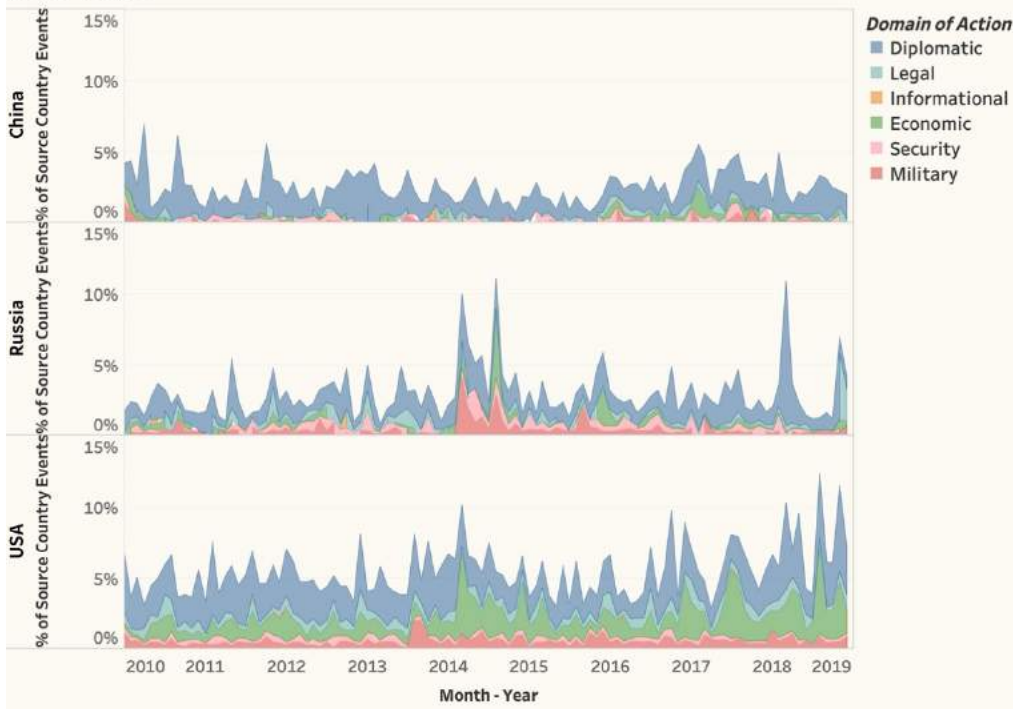


Figure 2. Coercion Events Categorized by Domain of Action (DISMEL)

## Strategic Stability: Used, Abused, but Still Used

The term “strategic stability” is commonly understood as a frame of reference for how the global nuclear order remains stable, revolving around the destructiveness of nuclear weapons (Stulberg & Rubin, 2018, p. 2). During the Cold War, many believed that the superpowers shared a conception of strategic stability, a coexistence where both sides would compete for global influence but would refrain from the first use of nuclear weapons. Furthermore, the security studies community and policy makers largely believe that this shared idea is what prevented major escalation of direct superpower military conflict.

Yet, recent research emphasizes that strategic stability, as an organizing concept, meant different things in different contexts to different actors (Stulberg & Rubin, 2018, p. 3). In the nuclear realm, for example, the Soviet High Command was never consistently committed to the idea of mutual vulnerability or parity. Superiority was preferred, and it was also connected to showing political dominance of a system. On the US side, Washington invested resources at times to achieve nuclear primacy, seeing it as a way to achieve peace through dominance and deter conventional or nuclear aggression. In contrast, China relied on a “lean but effective” arsenal for minimum deterrence (Li, 2016, p. 13).

Today, the international environment looks quite different than it did three decades ago. There are more nuclear states; asymmetric conflicts between sub-regional and regional powers, and between regional powers and global powers, are much more common; and non-state actors play an outsized role in international affairs. Moreover, emerging technologies threaten to expand the windows of opportunities and vulnerabilities of nuclear powers. These new dynamics take place in an era in which the world’s strongest power sees the contemporary period as a return to great power competition after coasting unchallenged for two decades (Department of Defense, 2018, p. 7). And yet, while many analysts may recognize the existence of a new environment, some still focus on the primacy of nuclear weapons, conflating strategic stability with deterrence (Colby, 2018, p. 5). This perspective confuses national strategies for shaping a rival’s calculus with the consequences of reciprocal fears. It also distorts the realities of the regional conflicts in which the United States is a third-party guarantor of stability (such as in South Asia) and regional conflicts that directly involve the United States (such as in NATO’s eastern flank with Russia).

This new environment tells us that strategic stability is more than just mutually assured destruction from a nuclear exchange and that it means different things to different actors. India’s and Pakistan’s respective understandings of strategic stability and deterrence have differed from each other. Still, they seem to have worked out a set of informal thresholds and offramps for de-escalation. Ironically, in the India-Pakistan case, the role of nuclear weapons is minimized by what, some would argue, actually drives dangerous escalation: the use of multi-domain activities. In this case, these measures include the use of sub-conventional actors; the introduction of doctrines, such as Cold Start; the development of Ballistic Missile Defense (BMD); and the various uses of information warfare (Jacob, 2018, p. 216). In the recent escalation in spring 2019, for example, Pakistan and India may have signaled to each other the de-escalatory measures in other domains, such as India’s perceived signaling when its navy did not alter its standard operating procedures during the crisis (Marlow, 2019). This may not have been a coordinated ballroom dance, but there may have been a tacit understanding of escalation in which nuclear threats did not play a direct role.

For Iran, strategic stability is not part of discussions and instead subsumes discussion of “deterrence” and “regional stability” (Tracy Samuel, 2018, p. 116). While Iran’s strategic thinking may change



should it develop a nuclear weapons capability, Tehran's militant clients, as part of its asymmetric capabilities, play a central role in its grand strategy (Ostovar, 2019).

## Russia and Strategic Stability Below the Line

As noted above, prior to the mid-1970s, Soviet nuclear doctrine effectively equated "stability" with "superiority," spurring the military to pursue perceived favorable strategic imbalances vis-à-vis the US. However, with sustained nuclear build-up, socialization to rough parity, and growing confidence in conventional operational capabilities, both the political leadership and High Command converged on accepting that large-scale nuclear war was unwinnable and that the pursuit of mutual deterrence and reciprocal elimination of first nuclear strike incentives lied at the crux of the future strategic relationship with the United States. This culminated in the June 1990 "Soviet-U.S. Joint Statement" that enshrined survivability, retaliation, limited warhead density, and restrictions on strategic defense as priorities for arms control through the end of the decade (Arbatov, 2019).

Since the end of the Cold War, these types of mutual understandings have been severely challenged by both the United States and Russia. The United States' steady pursuit of ballistic missile defense, development of conventional prompt global strike (CPGS) capabilities, the expansion of NATO, and the US failure to negotiate terms of "reasonable sufficiency" in strategic nuclear forces triggered Russian threat perceptions. The Russian military has focused on developing limited use options for operational tactical nuclear weapons to de-escalate (read prevail) a military conflict should deterrence fail, bolstering the salience of nuclear weapons. These interdependent moves seem to suggest an end to strategic stability.

Despite these challenges, strategic stability has persisted as a central organizing concept for Moscow's assessment of mutual deterrence and strategic parity and the efficacy of future arms control, but with some caveats (Pavlov & Malygina, 2018; Chekov et al., 2019; Forss, 2019). More recently, the Russian strategic community has championed strategic stability as the lodestar for revitalizing engagement with the United States. President Putin and Foreign Minister Lavrov repeatedly invoke strategic stability as the rationale for the rapid renewal of New START "as is" and initiation of new arms control geometry in order to stem arms racing with emerging technologies in outer space and cyberspace. Although seemingly distinct from the Trump Administration's reference to "global strategic security"—associated with transparency at integrating China into trilateral nuclear arms reductions—the Russian leadership now intimates the embrace of a non-nuclear frame of reference. In a joint statement with China's President Xi Jinping in 2016, Putin underscored that Russia's vision of strategic stability is no longer limited to predictability and parity in offensive nuclear capabilities. Rather, it pertains to broader political and military dimensions to international relations, such as governing the use of force, respect for legitimate national interests, and adoption of coercive measures writ large; instilling deliberate restraint in building up arms and forming alliances that could be perceived as threatening and precipitate retaliation by other members of the international community; and prompting constructive dialogue for strengthening mutual trust and cooperation to restore strategic balance (Margojev, 2019).

Consistent with this expansive formulation, a prominent group of Russian independent and government experts advanced new principles for multilateral strategic stability. The latter is characterized by a state of relations between all nuclear powers that disincentivizes "any military clash with each other, both intentional and unintentional, as any such clash can evolve into a global nuclear war" (Karaganov & Suslov, 2019). This nascent trend in Russian discourse situates strategic stability in the crosshairs of managing escalation from below a threshold of direct military conflict.

While it is premature to identify specific tenets, there is rich intellectual grist from which to discern a distinct Russian approach to shaping gray zone activities. Specifically, Russia's notion of "next generation warfare" is defined by non-violent dimensions to information-psychological struggle and color revolutions that blur boundaries of peace and war. The use of force is broadly construed as an "amalgamation of hard and non-kinetic power, across various domains, through skillful application of coordinated military, diplomatic, and economic tools" (Adamsky, 2018, p. 153; Jonsson, 2019). These new understandings of the nature and character of warfare inform an eclectic mix of competitive strategies and operations associated with limited war, low intensity conflict, information warfare, subversion, geo-economics, network-centric warfare, and asymmetric warfare and balancing. At base, the main objectives are to reduce the burden on deploying hard and direct military power, while leveraging, at low cost, an adversary's internal weakness, division, confusion, overreaction, decay, and complacency in an open-ended contest for geopolitical superiority (Adamsky, 2018, p. 153; Jonsson, 2019; Fridman, 2018; Berzins, 2018; Radin et al., 2020). Deterrence is both more expansive—aimed at demonstrating resolve by taking coercive action across lower military and non-military levels of competition—and less escalatory—embracing a flexible, tailored, and precise approach to increasing options for coercively signaling to an adversary in order to avert unnecessary escalation. It is also seemingly less about issuing credible threats and explicit red lines, deriving sustenance directly from the concept of "reflexive control" that is aimed discretely at sustaining deception and manipulation of an adversary's perceptions of reality and confounding decision making processes (Chekov et al., 2019; Bruusgaard, 2016; Thomas, 2004; Bagge, 2019).

This evolving Russian approach to orchestrating open-ended, cross-domain coercion carries direct implications for strategic stability. On the one hand, it augurs well for the avoidance of direct military conflict by broadening and deepening the spectrum of opportunistic probing for geopolitical superiority, rather than placing a premium on competition in risk-taking. The novelty here rests less with lowering the bar for vertical nuclear escalation pathways and more with raising thresholds for non-kinetic competition and widening domains for imposing calibrated horizontal and cross-regional damage (Kofman et al., 2020). On the other hand, stability is not about achieving an equilibrium short of direct military conflict but preserving the status quo for Russia to impose its will in sustained cross-domain warfare. The adversary's eventual awakening to the gradual erosion of its position may indeed provoke a disproportionate reaction. Such punctuated escalation would leave little room for strategic signaling and obviate the role of tacit restraint. Furthermore, the fusion of multiple instruments across domains with different stakes for opponents, embellished by deliberate ambiguity and cultivation of controlled chaos, flirt dangerously with stoking inadvertent vertical escalation. The latter becomes especially problematic amid heightened risks of narrative blowback and miscommunication with proxies, as well as the persistence of institutional weakness in Russian decision making. Such pathologies would be compounded by Moscow's seeming disregard for the reciprocal nature of strategic interaction—including how Washington interprets foreign provocation and the violation of its own red lines—that can lead an adversary to escalate precipitously or overreact to Russia's otherwise sincere and more limited intentions (Adamsky, 2018, p.165).

## China and Strategic Stability Below the Line

The Chinese concerns about strategic stability with the United States centers around the so-called Thucydides trap. Chinese thinkers readily acknowledge that China, as a rising power in the international system, will bring structural stress to the incumbent power, the United States, and they are concerned with ways to defy history and avoid war between the two. In this regard, "strategic stability" goes beyond managing nuclear and conventional arms races or controlling military and below the line escalation. Accordingly, nuclear deterrence (or mutually assured destruction), economic interdependence (or mutually assured economic destruction), and people-to-people



exchanges constitute the foundations for Sino-US strategic stability (Jin & Li, 2017, pp. 13-17; Yin, 2016, p. 130; Peng, 2010, p. 3). Above all, the key pillar emphasized throughout Chinese discussion is political trust, or strategic tacit understanding, between the leaderships of the two sides. Chinese foreign policy elites consider the absence of a shared strategic consensus or tacit understanding as the most detrimental factor impacting Sino-US strategic stability (Da & Zhang, 2016; Jin & Li, 2017, pp. 16-19, 25-26; Yuan, 2010, pp. 4-7; He, 2017, pp. 51-52; Xia, 2014, p. 12).

Drawing lessons from the Soviet Union's competition with the United States during the Cold War, China is wary of engaging the United States in a comprehensive arms race. Chinese analysts do not consider nuclear dominance or superiority as a way to achieve strategic stability. On the contrary, China seems to be content with a small and de-alerted nuclear force that is gradually improving its survivability. The idea is to achieve nuclear deterrence through "first strike uncertainty," which aims to deprive potential enemies of the confidence of a completely successful first strike. Combining its nuclear delivery capabilities that are becoming more precise, diversified, and of longer ranges with mobility and concealment of those devices and vehicles, China ensures that first strike uncertainty is sufficient to achieve minimum deterrence (Wu, 2013, pp. 579-614). The strategy will complicate US efforts to achieve strategic stability through nuclear arms control should Washington emphasize transparency of nuclear postures. The strategy also explains China's concerns about US missile defense systems, space forces, and CPGS capabilities. Chinese commentators argue these capabilities and emerging technologies are attempts to nullify China's nuclear deterrence in favor of absolute security for the United States. From China's perspective, both undermine strategic stability (Xia, 2014, p. 12; Zhao, 2018, pp. 174-202; He, 2017, pp. 41-47).

Outside the nuclear realm, it is important to remember that the first and foremost priority of the ruling regime in China remains to maintain the legitimacy of the Chinese Communist Party's (CCP) authoritarian rule of the country. Party members in the government, military, and society are instilled with the "consciousness of the need to maintain political integrity, think in big-picture terms, follow the leadership core, and keep in alignment." In plain words, the CCP keeps a tight grip of all levels of the state machinery in China; all officials in the Chinese party-state are assessed by their awareness and faithful implementation of the political lines set up by the core party leadership. The party's strict control over the military is especially crucial, as the CCP remains a staunch believer of Mao Zedong's axiom that political power grows out of the barrel of a gun. As a result, in discussing strategic stability, Chinese analysts emphasize the anchoring effect of communication and commitment at the leadership level between China and the United States.

This rationale flows naturally from the peculiar purpose of the contemporary Chinese state. With a Sino-US strategic tacit understanding endorsed by the top leadership in Beijing, struggles against the United States in all aspects need to fall in line with the political direction set up by the core leadership, thus allowing strategic stability to follow. This was evidenced by the strategic tacit understanding of engagement since the end of the Cold War, through which Washington hoped to trigger China's political liberalization and Beijing hoped to continue China's economic development. Despite periodic tensions—such as the Taiwan Strait crises in 1995-96, the bombing of the Chinese embassy in Belgrade in 1999, and the Hainan Island incident in 2001—both sides were able to avoid vertical and horizontal escalation and resume normal relations (Da & Zhang, 2016, pp. 43-45).

As China continues to narrow its capability gap with the United States, Chinese commentators acknowledge that structural tension between the dominant power and the rising challenger makes a new strategic consensus or tacit understanding difficult to achieve. The recognition, interestingly, leads to an organic view of cross-domain competition and cooperation between China and the United States. Chinese analysts emphasize the importance of maintaining working relations with the United

States in different issue areas (Jin & Li, 2017, pp. 23-24, 26; Yuan, 2010, p. 3; Da & Zhang, 2016, pp. 54-57). Issues in which both sides have conflict but involve no core interests include nuclear security, counterterrorism, cybersecurity, global warming, and environmental degradation, among others. The Chinese treat such cross-domain competition and cooperation as ways to explore the limits of each other's interests and to build up *modus operandi* between the two incrementally. Maintaining working relations while engaging in cross-domain competition offers an alternative way to gradually forging a strategic tacit understanding because tension resulting from competition could trigger conversations between political leaders. For instance, in the early 2010s, China became more confident in asserting its interests, while the United States pivoted its attention to Asia in response. In the face of mounting tension, China and the United States were able to begin a discussion on military confidence-building mechanisms (CBMs) after President Obama's summit with Chinese President Xi Jinping at the former Annenberg Estate in California in 2013. Chinese analysts praised the summit and the follow-up CBMs discussion for avoiding crises similar to the 2001 Hainan Island collision, effectively enhancing strategic stability (Da & Zhang, 2016, p. 56).

In line with maintaining the CCP's authoritarian rule, Chinese thinkers emphasize the importance of focusing on China's own development even when they discuss the matter of strategic stability. They argue that ensuring continuous economic growth is crucial to sustaining the CCP regime's legitimacy, dealing with daunting domestic issues, and preserving social stability. Without domestic stability, China's outward power projection would become unattainable. This inward-looking emphasis reflects not only domestic necessity but also the confidence that time is on China's side, which historically has proven to be critical to facilitate strategic patience and restraint (Copeland, 2000). In addition, Chinese analysts have pointed out that to continue developing its national strength, China requires a benign external environment and needs to participate actively in global governance to shape such an external environment. In this sense, China is engaging the United States in a competition over ideas of governance and models of modernization. Such a competition bodes well for maintaining strategic stability because a contest of this kind is less likely to escalate to direct military conflict. However, it poses different challenges to the United States. Washington needs to find effective ways to counter China's "discourse power" or even "sharp power," where China provides and interrupts lucrative financial and business opportunities to influence positive international perceptions of China, suppress expression of opinions that go against China's interests, and coerce international actors to succumb to China's demands. On the one hand, the United States will need to help democratic regimes bolster resilience by consolidating their institutions and coordinating liberal countries' actions against encroachment from China's illiberal power. For instance, Washington could lead the way of establishing regulatory structures that force China's actions to be more transparent in democratic societies. On the other hand, Washington also needs to prevent such actions from creating a perception among Chinese decision makers that the United States aims to abort China's growth that effectively threatens the regime's security. Such a delicate balancing act might mean, ironically, that while defending its dominant position and liberal values, the United States will need to show it is willing to accept certain vulnerability in interdependence with China and refrain from actions that could implicate it as supporting regime change in Beijing. Last but not least, many Chinese commentators have pointed out the important role of public opinion in maintaining strategic stability (Yuan, 2010, p. 7; Jin & Li, 2017, pp. 14, 17). In a nutshell, Americans are anxious about being overtaken by China, while the Chinese people are anxious about being denied their place in the sun. Both Beijing and Washington need to avoid the situation that puts respective public opinion on a collision course. Taming negative public sentiment toward the other side, thus, could be a crucial signal of self-restraint that contributes to bilateral strategic stability (Kai & Johnston, 2017; Weiss, 2013).

## Implications for the US

The US did not begin the nuclear age in pursuit of strategic stability. The United States relied on its strategic nuclear arsenal to offset its conventional disadvantage in Europe throughout much of the Cold War. Eventually, leaders in Washington and Moscow arrived at the conclusion that strategic stability, the way they thought each party understood it, was the key to preventing a nuclear war between the two superpowers.

During the post-Cold War period, particularly coming off the 2010 Nuclear Posture Review (NPR), the United States went its furthest to reduce its reliance on nuclear weapons in an official document and in practice with the Obama Administration's Prague 2009 pledge. Yet, the challenge of where China fit into the equation remained. If Russia and the United States did indeed lower their numbers and found a way to maintain strategic stability, what would that mean for China? Furthermore, what effect would nuclear pledges between the US and Russia have on their respective relationships with China as the latter rises in power and influence? Neither the US nor Russia has been able to comfortably fit China into their respective understandings of strategic stability. However, both Washington and Moscow will not be able to address their frustration if they fail to appreciate that Chinese thinkers do not consider strategic stability from the aspects of number and transparency but rather technological gaps and their impacts on each party's resolve to launch an attack (Li, 2016, pp. 14-15).

These questions remained while Russia's modernization, its assertive foreign policy in its near abroad, as well as its interference in elections in Western states, signaled Moscow's desire for a more robust role in regional and global affairs. The Trump Administration, meanwhile, seemed to abandon the early Obama Administration pursuit of strategic stability by favoring superiority to achieve this stability consistent with the 2018 Nuclear Posture Review. This stance and the withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty officially communicated concerns about Russia's violations, its destabilizing activities below the line, and China's unfettered development of weapons that might disadvantage US forces in that area of responsibility.

With all of this focus on nuclear weapons, there are other domains in this relationship that can be destabilizing. Many fear the race toward hypersonic weapons capabilities, anti-satellite capabilities, autonomous weapons systems, artificial intelligence (AI)-enabled targeting platforms, and other emerging technologies, will have destabilizing effects on US-Russia and US-China relations.

This chapter has shown how strategic stability means different things to different actors and that the nuclear element, although very important, does not look like it did during the Cold War and is not the central element in strategic stability. In light of these conclusions, the United States may want to pursue understandings of strategic stability that retain some elements of the past but are tailored toward existing circumstances. It is wishful thinking to come up with a universal definition that will apply to all states at all times and in all circumstances.

Nonetheless, "strategic stability" can still be an important organizing framework as an aspirational condition that restrains rivals due to their fear of escalatory actions rising above the line of direct military conflict. The challenge is that all three competitors—Russia, China, and the United States—adhere to different, confusing, and potentially conflicting strategies that risk inadvertent escalation. Thus, strategic stability in this new age and new environment must include "strategic empathy," or an understanding, not necessarily an acceptance, of an adversary's core interests and threat perceptions. This type of framework would go a long way toward identifying offramps from risky escalation pathways. Along these lines, strategic empathy could convey practical elements of

reassurance by discerning and by identifying a rival's act of self-restraint in a time of crisis that may involve multi-domain activity. This appreciation of an adversary's position can guide efforts at strengthening domestic resilience and facilitate constructive de-escalatory measures, in the least, and cooperative gestures at most, to ensure activities remain below the line of direct military conflict. The United States, China, and Russia could benefit from heeding this call.

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<sup>2</sup> More specifically, strategic stability applies to the consequences of reciprocal fears and incentives confronting adversaries. In contrast, deterrence rests with efforts to shape the calculus of one rival by another. See Stulberg and Rubin, "Introduction," p. 5.

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## Chapter 4. Peer/Near-Peer Challenges to Strategic Stability: The Need to Securitize State Capacity

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### Abstract<sup>3</sup>

This chapter defines state capacity in the context of stabilization among state actors and why the state capacity-legitimacy-stability linkage is, in the first instance, tied to the geopolitical dynamic between/among states. We discuss the elements of state capacity (within the larger rubric of human security), both in terms of the state's ability to extract resources from the population to sustain and defend itself (including financial and manpower), and the reciprocal need for the state to provide services to its citizens to ensure their loyalty. Our overarching working hypothesis is that, all other things being equal, more robust state capacity promotes sociopolitical resilience and less robust state capacity leads to instability, perhaps even enabling aggression from more powerful neighboring states. We also posit a more precise understanding of how state actors, especially peer/near-peer competitors, engage in a range of activities designed to undermine neighboring states' capacity, in what context these interventions are most effective, and when such action may be predictive of further interventions, up to and including kinetic warfare. Informed by ongoing research on three specific case studies, we assess "warning signs" of vulnerability to external influence to develop a predictive model of the effects of external intervention on state capacity. Finally, we suggest measures that might be taken by states (and which should be considered as part of the US Government's national security planning) to consider state capacity as a key element of securitization, especially in vulnerable regions, among disaffected population sub-groups, and in post-conflict situations.

### Introduction

This chapter defines state capacity in the context of strategic (de)stabilization among state actors and explores the ties between the state capacity-legitimacy-stability linkage and the geopolitical dynamic between/among states. There is a well-developed social sciences literature relating to state capacity and its by-product, human security. More specifically, several studies investigate how state capacity shortfalls in delivering social welfare services are antecedents of internal conflict and destabilization (Taydas & Peksen, 2012; Hillesund et al., 2018). Given that, we suggest that strengthening human security through enhanced or robust state capacity measures may also deter state-on-state aggression, kinetic or otherwise; yet rarely is the subject seen as relevant to the international security/stabilization discourse. **Incorporating state capacity/human security both conceptually and in terms of national security policy better positions the United States and its allies to compete in the global arena with peer/near-peer states (such as Russia) that seek to destabilize geopolitically vulnerable regions in other states by means short of war** (Buckley,

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Clem, & Herron, 2019a). Further, because conflict is “development in reverse,” in an ongoing or post-conflict situation restoring state capacity is arguably the best way to restore legitimacy (Collier et al., 2003) and, ultimately, geopolitical stability. We also suggest a methodology for assessing the efficacy of state capacity measures and, based on preliminary results from a case study in progress of Russia’s efforts to destabilize a neighbor (Ukraine is the example here), how states might address the problems involved in confronting destabilizing efforts by hostile neighbors. In this last regard, we show that attacks, either deliberate or collateral, on state capacity infrastructure and personnel are a frequently overlooked dimension that must be remediated simply to regain the status quo ante. Likewise, large numbers of conflict internally displaced persons (IDPs) create additional strains on state capacity, as their needs must be addressed. As made clear in the 2018 National Defense Strategy (Karlin, 2018), given the increasingly aggressive policies of the Russian Federation as the Central Eurasian regional hegemon, the post-Soviet space and adjoining areas—our focus here—will continue to be one of the world’s most unstable and violence-prone regions, presenting serious challenges to DoD and other national security policymakers in the US Government and its NATO allies (US, Department of Defense, 2018). Finally, we suggest that states take measures to ensure that state capacity is a key element of securitization, especially in vulnerable regions, among disaffected population sub-groups, and in post-conflict situations.

## The Elements of State Capacity

Longstanding interest in state capacity as a social science research theme is traceable to the pivotal *Bringing the State Back In* (Evans, Rueschemeyer, & Skocpol, 1985) and subsequently by such works as *Politician’s Dilemma* (Geddes, 1994) and *Seeing the State* (Corbridge et al., 2005), all of which brought to the fore an emphasis on the state as a powerful agent of socioeconomic change—and not merely an instrument. In its simplest form, state capacity refers in part to the ability of the government to extract the means for survival from the population on the territory that it controls. Intuitively, the state must be able to deploy forces required to defend itself (military capacity), maintain public order, and to exercise a monopoly on the use of violence within its territory (through, for example, police powers) (Hendrix, 2010). Likewise, the facility to generate revenues (taxation, customs duties) has been seen as a measure of state capacity (Savoia & Sen, 2015). Given that these extractive functions are meaningful and even necessary for state viability (resilience), in order to improve the accuracy of geopolitical threat assessments other measures should be adduced that are indicative of the state’s bureaucratic capacity to deliver services to its population (i.e., to provide some minimal level of well-being). This is because, as Østby (2008) has shown, social inequality has “...a robust positive significant effect on conflict” (p. 157). Thus, Taydas and Peksen (2012) demonstrate in a large international study that: “Improving the conditions of the constituency through broad investment in social welfare programs appears to be an effective conflict-prevention strategy.” Further, in keeping with the belief that political legitimacy is tied to the right of citizens to choose amongst candidates and parties in a representative democracy; the state must also demonstrate the bureaucratic capacity to administer free and fair elections. The full range of these state capacity functions is seen as governance, with the assumption being that some states will perform better and others worse, and that poorer outcomes relate to instability. Defined broadly as “...a government’s ability to make and enforce rules, and to deliver services,” judgments about the quality of governance might be based on assessments of bureaucratic quality (i.e., inputs) (Fukuyama, 2013). Rotberg (2014), however, stresses the need to examine results empirically (as outputs) by using variables that measure the impact of delivery (e.g., life expectancy as a measure of healthcare). To better conceptualize bureaucratic capacity, we examine both input and output measures, while also incorporating how residents perceive outcomes.



## Only the Strong (States) Survive

A substantial body of research dealing with the viability of states focuses on measuring “strength,” “fragility,” and “failure” (Carment, Prest, & Samy, 2009; Grävingsholt, Ziaja, & Kreibbaum, 2012; Tikuisis, Carment, & Samy, 2013). The principal rationale for these studies centers on designing policies for providing vulnerable states (“Poor State Performers”) with development assistance as a means of staving off failure, internal conflict, and resultant humanitarian crises. The potential for transnational or state-on-state conflict is recognized in some studies but rarely fully developed in comparison with intra-state conflict. For example, the use of economic measures such as per capita GDP at the national level to assess the strength of states, (see Tikuisis & Carment, 2017) is of limited utility for our purposes because (a) national-level data almost always disguise intra-state differences that frequently coincide with “horizontal” regional or ethno-cultural differences and are the vectors through which conflict usually arises, and (b) indicators of “vertical” social inequalities that exist within states, using measures such as the Gini coefficient to capture imbalanced distributions of well-being, again lack the “ground-truthing” required to assess threats to stability.

## Engaging Competitors in the “White Zone”

Considerable recent attention focuses on the existence of and operations in the “gray zone,” a conceptual space along the peace-to-war continuum roughly between the absence of conflict to the left and full-scale, multi-domain warfare to the right (Barno & Bensahel, 2015). Questions concerning the novelty and utility of the concept aside (Elkus, 2015), there are certainly cases where peer/near-peer competitors, especially Russia, are refining capabilities to employ a variety of non-kinetic tactics with the intention of influencing other states’ behavior and/or destabilizing them. What we find lacking in the gray zone discussions is the recognition that the success or failure of actions taken in that realm depends to a large extent on the strength or weakness of state capacity institutions in the adjoining “white zone” at the far left side of the spectrum. While threats in the “gray zone” are no doubt real and Western democracies may be lagging the fight in responding to them, exactly what societal “vulnerabilities” are remains vague and, even more challenging, is how to formulate and implement countermoves to address weaknesses that invite attacks in the first place (Sheppard & Conklin, 2019).

## Can Well-Being Be Securitized?

If the “white zone” is, even hypothetically, a pre-conflict contested space, what is the role of state capacity in enhancing the prospects for stability in the face of destabilization efforts? Secondly, how might the success or failure of efforts to make state capacity and human security more robust be assessed, in both pre-conflict (i.e., deterrence) and post-conflict (i.e., recovery) situations? Our DoD Minerva Research Initiative funded research first seeks to conceptualize and operationalize state capacity delivery in order to evaluate its explanatory/predictive power in studies of viability/vulnerability of states. We next disaggregate these state capacity measures to the sub-national/intra-state regional level to avoid the problems referred to above with most cross-national analyses and allowing the exploration of state capacity as an indicator that varies regionally within states. We chose two welfare components of state capacity, the provision of healthcare and education, and elections administration as a measure of political legitimacy. Health is an obvious indicator of national well-being, reflecting the capacity of states to provide quality services to their populations, including supportive infrastructure such as water, communication, transportation, general health advocacy regarding safe food and drug supplies, and attitudinal support of positive health behaviors (nutrition, smoking, drinking, etc.). We assume a priori that summary health indicators often veil

significant underlying variation within states, both geographically and in terms of socioeconomic position. Geographic differentials in population health, or place effects, are sizable, and linked to elements as essential as transportation access (Delamater et al. 2012) and as complex as collective social functioning (MacIntyre et al., 2002). As Kim et al. (2018) argue: "...while the state must have the capacity to adopt a policy, local governments must have the capacity to implement it" (p. 191). In the same vein, scholars across disciplines maintain that the state provision of education provides a uniquely valuable window into "how public agencies function in practice and relate to citizens on the ground" (Mangla, 2015, p. 884). Like healthcare, educational efforts by states are central to goals of social mobility, opportunity, and development (Uslane, 2017; Qarakhani, 2014). Finally, state capacity cannot be successful if the political environment is characterized by arbitrary decision-making or the prospect of government instability, so we have also developed variables that allow us to assess this crucial component of democratic state capacity in terms of elections. Citizen input in decision-making is at the core of democracy, and the regular conduct of public votes is at the core of democratic state activity. Elections require vast technical, personnel, and financial resources and are challenging to implement even under the best of circumstances. Increased scholarly interest in the integrity of elections has directed attention to the role that electoral management bodies—bureaucratic state capacity—play in ensuring that the process is fairly and efficiently conducted (Claassen et al., 2008; Birch, 2012; Alvarez, Atkenson, & Hall, 2013).

### State Capacity in Central Eurasia and the Russian Threat

In our larger study of state capacity and geopolitics, we investigate three countries that border on Russia: Estonia, Georgia, and Ukraine. Given the highly imperfect borders that these states inherited as a result of the collapse of the USSR (Megoran, 2012; Clem, 2014), in particular the fact that large ethnic Russian populations were included in areas where these states bordered Russia proper (Estonia and Ukraine) or where ethnic regions under Moscow's influence were problematic (Georgia), dynamic tensions were virtually guaranteed and conflict likely. More recently, of course, Russia and Georgia fought a brief war in 2008, Estonia was beset by cyber attacks originating from Russia, and large-scale fighting ensued after the Russian invasion of Ukraine's Crimean and Donbas regions in 2014. Thousands of casualties resulted from these conflicts, and several million people were internally displaced, many of who remain in refugee/IDP camps to this day, mostly in Ukraine. So-called de facto states, which are now Russian clients, were hewn from Georgia (Abkhazia and South Ossetia) in what became known as "frozen conflicts," and the military threat that Russia poses to Estonia engendered the stationing of NATO troops in that country under the Enhanced Forward Presence concept.

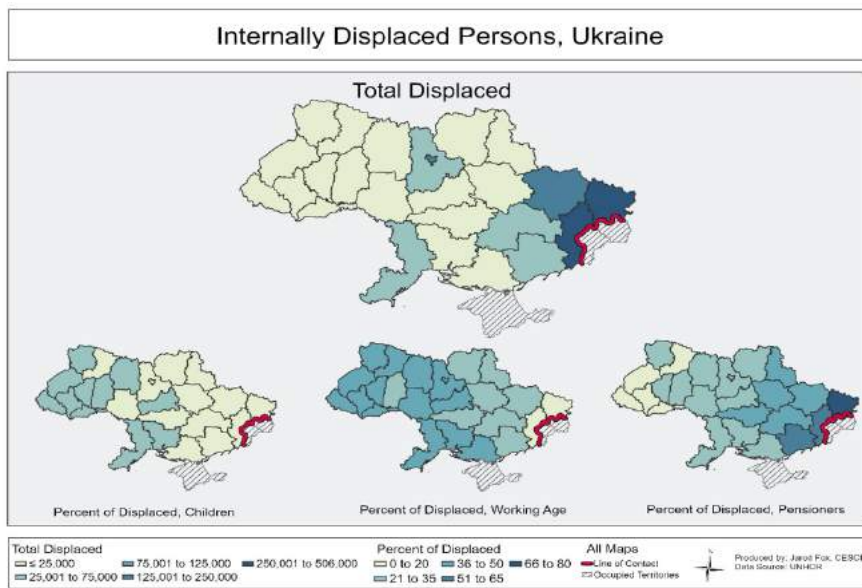
### State Capacity and Russia's War on Ukraine

As part of our remit, we are in the process of forensically examining state capacity indices for the regions of Ukraine before the crisis of 2013-14 to determine the extent to which human security shortfalls existed in the areas where Russia first attempted to suborn the inhabitants. There is some evidence to support the idea that economic conditions in the Donbas region—specifically trade ties with bordering Russia and the jobs connected thereto—pre-disposed local inhabitants to support the Moscow-sponsored civil unrest that preceded the actual Russian invasion, and without question led to their detriment after the event, "...underscore[ing] the ex-post inefficiency of war" (Zhukov, 2015). Mykhnenko (2020), however, ruled out any purely economic rationale for the fighting and instead concluded that the absence of an economic determinist explanation makes the case that (with which we concur) the direct and rapidly escalating kinetic attacks on Ukraine by Russian forces beginning in the summer of 2014 was the principal reason why this conflict began and why it continues, albeit at a lower level of intensity, to this writing (Clem, 2018). Neither of these studies, however, examines

the broader human security milieu in the Donbas that was a byproduct of pre-conflict state capacity. That said, the exigencies of the present conflict with Russia made it imperative to initially factor in to our state capacity-legitimacy-stability paradigm the challenges arising from the obvious need to address the humanitarian crisis shortfalls in government controlled areas (GCA) of eastern Ukraine and the impacts on the Ukrainian government’s bureaucratic capacity to deal with almost 1.5 million IDPs. Although significant effort on the part of the Ukrainian government enabled a surprisingly effective conduct of the 2014 elections in Ukraine, there were nevertheless disruptions owing to the fighting in the eastern regions (Herron & Boyko, 2016).

### Ukraine’s Conflict Related Human Security Challenges

A far more urgent task has intervened: the pressing need to undertake an inventory of the extent to which the state capacity physical infrastructure in Ukraine has been damaged or destroyed in the ongoing war with Russia and to assess the implications of that damage for human security in Ukraine. We have completed that inventory and, as we have reported elsewhere, enormous damage has indeed been wrought, either deliberately or collaterally, to the healthcare and education infrastructure of eastern Ukraine (Buckley, Clem, & Herron, 2019b; 2019c; 2019d). Scores of hospitals and clinics, schools and childcare facilities, and supporting infrastructure have been destroyed or badly damaged. Civilians living in the GCA near the approximately 500 km “line of contact” (LOC) between government forces and Russian troops and their local proxies remain very much at risk, as casualties continue to mount. We present here for the first time our results on the situation regarding IDPs, which is concerning in the context of state capacity delivery and human security on several levels. As is evident in Figure 3, the vast majority of IDPs remain concentrated in the GCA of the easternmost two oblasts (regions) on or near the LOC and in the regions adjacent thereto to the west, with the more vulnerable pension age population remaining in particularly risky areas. Although many children have been evacuated to the safety of western regions, and working age adults have likewise relocated to the central and western regions of the country, the burden of the government in delivering services to its citizens most affected by the war is exacerbated by the proximity of IDPs to the conflict zone and, of course, the added problem of serving the hundreds of thousands of those who must now be accommodated in the central and western oblasts.



**Figure 3.** Internally Displaced Persons, Ukraine

## Remediating State Capacity Shortfalls: Urgent Action Required

The conflict in the Donbas resulting from Russian aggression presents the Ukrainian government and its partner states with daunting challenges to restore and enhance state capacity and thereby stabilize its geopolitical situation. In effect, Russia has, by its actions on the ground, “re-borderized” this region by creating and sustaining the so-called Donetsk and Luhansk People’s Republics, backed by Russian military forces. This re-borderization has in turn created a highly vulnerable new frontier zone in eastern Ukraine in which the Ukrainian government’s capacity to serve its citizens remaining in that area is seriously degraded. Although a full analysis of the impact of state capacity on geopolitical stability in the post-Soviet space is pending the completion of our project, initial findings, especially as they relate to the implications of conflict in Ukraine, suggest that the US and its allies should significantly upgrade efforts to assist governments in the region with expanded non-military assistance. In our view, this challenge vastly exceeds the more obvious and newsworthy military aspects of the immediate crisis or the larger threat scenarios posed by Russia.

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## Chapter 5. Trust and Confidence in Managing Strategic Stability

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### Abstract

Discussions about stability—especially those approaches that explore the strategic aspects of stability—are often built on assumptions around the role trust plays in social life. In this white paper, we argue the importance of delineating trust from confidence, because they imply different types of social and organizational relationships, and thus different types of interactions. Trust and confidence allow us to manage the ambiguity of social and institutional relationships differently and appreciating the implications of this is increasingly significant as we increasingly focus on an era of great power competition.

In considering the challenges to national security of maintaining a balance between global cooperation and competition, the idea of “trust” appears central to both kinetic and non-kinetic strategic planning. It is present in how we think about troop coordination; how we talk about allies and adversaries; and how we rely on the myriad of non-human systems at our disposal—be it computers and electronic communication capabilities, human-machine teaming, or the accuracy of tools ranging from maps to weapons. Without trust, the organizational infrastructure put in place falls apart. Hence, “building” trust and enhancing influence is advanced as essential to strategic stability. While we do not disagree that there is utility in trust, it is important to point out that there are cultural and structural implications for how trust is understood in different relational environments.

In this white paper, we argue that distinguishing between trust and confidence is a critical first step in approaching the different operational environments in which we work. Trust is often assumed to imply the reliability we seek to foster across domains where we strategically operate. Yet assessing the objectives of another—individual, group, or nation—in relation to our own priorities and objectives is more fluid than what the concept of trust carries. As we explore the distinction between relationships of trust and those of confidence, we turn to how both manage ambiguity, ending with a note on the central ways in which trust-relations are built.

### Distinguishing Trust from Confidence

The 1990’s saw a proliferation of studies on trust (Giddens, 1990; Putnam, 1993; Fukuyama, 1995; Seligman 1997). Much of that literature argued, either explicitly or implicitly for understanding trust as a social “lubricant”—beyond the workings of the market or contract—that made social life possible (Arrow, 1974). Bringing in social choice theories (Axelrod, 1984; Elster, 1989), ideas of generalized exchange (Sahlins, 1974), and the production of public goods (Eisenstadt, 1995), these theories, in one way or another, concerned themselves with those aspects of social interaction not encompassed by market exchange.

To understand the workings of trust, it is useful to follow Niklas Luhmann’s (1979, 1988) distinction between trust and confidence as two distinct modes of social interaction. Confidence, for Luhmann (1988), was predicated on knowledge of what will be and hence on our ability, or assumed ability, to predict another’s behavior (which one could foresee in either positive or negative light). This

knowledge may be based on a system of sanctions (which grounds most market exchange); on considerations of rational action by another; and/or on familiarity with others. By “familiarity,” we mean in the way social connections develop relationally, e.g. because Jim played stickball on East 13th Street as a boy (or went through basic training, etc.), he shares with me certain codes of conduct, certain moral evaluations, certain ways of being and acting that bring me to have confidence in him. We are alike, the same, and hence I can predict his actions. Knowledge of what will be—confidence and prediction—are here based not on sanctions but on sameness, on familiarity, on knowledge (or assumed knowledge) of how another will act. Of course, the relevant other may not be “the same” at all, but we often draw certain conclusions (true or false) from modes of dress, speech, where someone went to school, the neighborhood where he grew up, the religion she confesses, and so on. All of this is used to construct a story of sameness that allows us to have confidence in our ability predict behavior (Seligman, 1997).

Trust, however, is something very different. Trust is what is required to establish and maintain interaction when there is no basis for confidence, when we cannot predict behavior and outcomes. Trust is what we need when we interact with strangers—who we do not know yet, and for whatever reason consider dangerous. Trust is what is necessary for interaction if the other is unknowable. And the other is unknowable when we cannot impute or predict behavior because: (a) there is no system (legal or otherwise) within which sanctions can be imposed, (b) we cannot assume the same types of rational calculation by all actors in the situation, or (c) there is no underlying sense or terms of familiarity or sameness that would allow such prediction (Hart, 1988).

This notion of “system limits” is critical to the idea of trust as a discrete mode of relationship, because system limits are really the limits of knowledge, the limits of our ability to predict the behavior of another. This contrasts with more locally organized societies, such as those characterized by kinship-based obligations that have very high levels of prediction and confidence based on a combination of familiarity and sanctions. Hence, to say that societies like Japan and many in Africa that maintain primordially defined sets of obligations and responsibilities are societies with high levels of trust is a misnomer. Rather, they are societies with high levels of confidence based on well-known and mutually reinforced kinship obligations. Predictability is high, variability low. The system—of obligations, responsibilities, and mutuality—is clear and visible and hence confidence in behavior remarkably high.

The corollary to this is that whatever is outside the system is foreign, unknown, and hence dangerous. Boundaries are clear and relatively well marked, and when situations arise that do not fit into system categories—such as friendship between individuals in a system that can only “think” in terms of ascriptive, primordial categories—these are immediately translated into terms the system can accommodate: hence the phenomenon of blood-brotherhood, where friendship is symbolically transmuted into a primordial tie. In Rwanda and many other conflicts in post-colonial Africa, it was the opposite that happened: friendships and even conjugal families were dissolved as the more clearly demarked boundaries of blood “trumped” the uncertainty and openness that is the hallmark of friendship.

It is only when the personal agency of the social actor can come to play a major role, when it emerges as a potential for shaping the nature of interaction, that trust must come to play a part in defining interpersonal relations. This is, of course, the connection between trust and risk. Trust is not only a means of negotiating risk, it implies risk (by definition, as a means of negotiating that which is unknown). The risk implied is precisely that which is inherent in another’s realization of her agency; were all action circumscribed only by normatively defined role-expectations, there would be no risk, only confidence (or lack thereof). Trust, as already noted, implies that risk is incurred when we



cannot “know” the other, and so cannot expect a return or reciprocal action on the other's part. Thus, in Luhmann's terms, “trust cannot be demanded, only offered and accepted” (Luhmann, 1988).

## Building Trust and Managing Ambiguity

What is offered (or not offered, as the case may be) is precisely the suspension of judgment and the imposition of our own categories on what is different and strange. However, to remain in a state of suspended judgment, of not knowing—and not claiming to know—the other is always risky because it demands that we trust in behaviors we can neither define nor predict. Agreeing to submit ourselves to this hiatus in explanation and judgment is no mean feat. It is extremely difficult and exhausting, for it demands living in suspense and with an appreciation that our understanding of the situation is incomplete, uncertain, and problematic. We admit the lack of complete knowledge, while not remaining in total ignorance. Indeed, by blurring the distinction between knowledge and ignorance, we set up the possibility of “forming conjectures to guide action” (Dewey, 1997).

In making such conjectures, the risks taken are not free-standing and totally open-ended. They are, in fact, circumscribed by vast oceans of confidence which frame it, limit it, and, we would claim, make it manageable. The steady accumulation of knowledge (through the confidence-building mechanisms noted above) that leads to conjecture—predicated on past behaviors and existing structures—provides the stage upon which risks—strategic and operational in the face of a conundrum—are taken. This is important to appreciate. Endless, un-circumscribed, or uncontrolled risk would be something approaching danger rather than simply risk and thus met with appropriate measures. Such measures of security provision and so of confidence-building would override the type of careful consideration and open-ended conjectural reasoning that are the hallmarks of trust. On the other hand, an organizational actor who is unwilling to tolerate any uncertainty, doubt, and suspended judgment, who is unwilling to take risks and mobilize the requisite trust for doing so, will never manage to move beyond the existing status quo.

Trust then, does not arise without effort. It is itself predicated on already existing structures of confidence (e.g. sanctions, familiarity, or purported rationality) that allow one to take a further step into trust. If validated, the trust feeds back to increase the bases of confidence toward making further steps, toward trusting more. When trust proves misplaced, the ability to develop or explore new modes of interaction are seriously circumscribed and increased measures of confidence-building are required.

In daily life, trust and confidence tend to appear together and either reinforce or negate one another. There is no free-standing trust, but nor is there social life predicated solely on confidence. Much of the world is built upon relationships that carry with them a great deal of ambiguity that is mitigated by either trust or confidence (or often some combination of both). Knowing this and properly assessing the relative valence of each in any given interaction situates the ambiguity in a way that allows us to consider what is realistic in our strategic thinking, especially with regard to the other.

Relationships of trust can be developed, but in the case of discussions around maintaining strategic stability, it requires exploring collaboration through risk. In an era of great power competition, it becomes clear that assuming technological overmatch is unreliable. Rather, we must explore cooperative, non-kinetic options for influence. As Talleyrand is said to have told Napoleon on viewing the serried rows of Le Grand Armee: “You can do everything with bayonets except sit on them.”

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## Chapter 6. The Competition for Critical and Emerging Technology and Its Impact on Stability

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### Abstract

As the US charts its path in the great power competition in the months, years, and decades to come, it is worth reflecting on the many facets of the competition and how they interrelate and impact stability and security. A subset of great power competition is the competition for critical and emerging technologies and future innovation. Understanding and tracking the strength of competition is critical because the state and trajectory of this competition has outsized impacts on stability and US national and economic security. The US should examine future scenarios where it is at technical parity with near-peer competitors in certain areas so as to assess possible future impacts to long-held assumptions and military strategies that rely on technical dominance. At the same time, the US should take steps now to promote and protect critical and emerging technology advantages so as to ensure continued technology, economic, and military edges remain.

### Introduction

As the US charts its path in the great power competition in the months, years, and decades to come, it is worth reflecting on the many facets of the competition and how they interrelate and impact stability and security. Rightfully so, the Joint Force has focused most strongly on the military element of competition between the US and the pacing competitors of China and Russia as directed in the 2018 National Defense Strategy (Department of Defense, 2018). At the same time, however, the 2017 National Security Strategy reminds us that economic security is national security (The White House, 2017) and takes a broader approach to great power competition which illuminates the interrelated elements of technology, innovation, research and development, and industry and military capability. In this light, a subset of great power competition is the competition for critical and emerging technologies and future innovation. Understanding and tracking the strength of competition in this area is critical because the state and trajectory of this competition has outsized impacts on stability and US national and economic security.

Historically, the US has assumed and relied on technical advantage against its adversaries, but this may not always be the case in future security environments. The US should examine future scenarios where it is at technical parity with near-peer competitors in certain areas so as to assess possible future impacts to long-held assumptions and military strategies that rely on technical dominance. At the same time, the US should take steps now to promote and protect critical and emerging technology advantages so as to ensure continued technology, economic, and military edges remain.

### The Competition for Critical and Emerging Technologies

The main components of the competition for critical and emerging technologies are ideas and innovation, research and development, technology creation, and access to global resources that are critical enablers to technical production (rare earths, microelectronic components, etc.). Simply put, innovation and science and technology are an ecosystem that stretches from idea generation, to incubation and development, to fielding and use. This ecosystem is under constant pressure and

competition at all stages of development and the dynamics that affect this ecosystem range from global/regional cooperation (the benefits of free and open research in basic sciences) to intense and adversarial competition and conflict (illicit technology transfer, theft, and espionage). The resulting impact of these dynamics ripples across the broader great power competition and directly affects the economic and security/military competitions. Shared advances in basic science and research improve economies and national power in those states that are best positioned to take advantage and use the knowledge to propel new technology developments to commercial use for the betterment of society and national security (Droegemeir, 2019). Illicit technology transfer, as practiced by the People's Republic of China (PRC), combined with Chinese Communist Party (CCP) practice of Military-Civil Fusion can create instabilities in the security environment as US technology advantages are copied and incorporated in competitor states at lower cost. (O'Keefe & Page, 2019).

As the technology competition unfolds, the impacts of advances or retreats in any one particular technology area can ripple across multiple sectors of society. For the Joint Force, the most acute impacts are likely to be felt in areas of critical and emerging technology that are the main drivers of future economic security and military advantage. The White House Office of Science and Technology Policy has described these critical technologies as "industries of the future" as they are likely to be the key drivers for US innovation and future economic development (Krastios, 2020). They are "artificial intelligence (AI), quantum information science (QIS), 5G, biotechnology, and advanced manufacturing" (Krastios, 2020). In addition to these broad technology areas, the Joint Force must also account for advances in military-specific emerging and disruptive technology. Developments in cyber-physical weapons, directed energy, hypersonic weapons, Artificial Intelligence and Machine Learning for Command and Control, synthetic biology, and deep fakes are all emerging technology developments with the potential to be disruptive to current operating concepts and military strategies. Because of the potential disruptive nature of these technology areas and their applications, the outcome of the broader technology competition will have direct impact on US military capability and advantage; precisely because it is likely no longer true that the US will be the sole owner or user of these technologies. We already see evidence of near-peer competitors such as China and Russia making advancement in hypersonic weapons, deep fake applications for information operations, and AI for population control (Stone, 2020). As the competition for critical and emerging technologies progresses, we face potential periods of instability ahead as we update our previous paradigms to confront a new reality of contested technological dominance.

## A Period of Increasing Technological Competition

The bulk of the Joint Force that is serving in the mid-senior grades, and all of the Joint Force at the junior grades have been conditioned to expect US technical and military dominance on the battlefield and in society in general. This is literally all that we have known, and the military advantage given by the "second offset" in terms of US capabilities such as stealth, Global Positioning System awareness and precision guided munitions enabled such concepts as Air-Land battle, Air-Sea battle and the type of network-centric warfare that quickly dismantled Saddam Hussein's Iraqi army in the 1990s. A longer view of history, however, would likely show a more transient period of US technological dominance. The rise and establishment of US technological dominance took shape mostly after World War II and was enabled by the feeble state of many of the other world's leading economies coming out of the war (Irwin, 1983). A US Government post-war approach to technology policy neared consensus on the following points: the federal government would take on primary responsibility for funding basic scientific research, the Department of Defense would invest heavily in basic research and technology development in order to develop weapons and related technologies needed to defeat the Soviet Union, and the responsibility for commercial technology development would be left to the private sector (Irwin, 1983). This policy formula worked well, and the US saw great technology

advantage against the Soviets that also sustained it in the post-Cold War era. However, as the science and technology landscape evolved, the policy consensus shifted, and we now see a defense technology sector that is much more dependent on advances in the commercial space than government funded research and development. For example, in 1965 the Department of Defense consumed 72% of all integrated circuits produced in the US. By 1990, this number was down to 8% as the Department grew more dependent on technology development in domestic, and increasingly global commercial markets (Irwin, 1983). This example is not meant to draw judgement as to how the US managed its technology policy post-World War II, but to highlight the growth in commercial and international dependencies that ensnared military technology development and production. It is these dependencies, coupled with increasing vulnerability from illicit and licit technology transfer amongst near-peer competitors that combine to create a potential future world where US technology dominance is no longer a given as it was in the 1940s-2000s (a time span that encapsulates nearly all of the years our current Joint Force has served).

Therefore, as we seek to better understand what the current and future operational environments look like, we should challenge our current paradigms that assume US military technology dominance. This is not to say that the loss of dominance is a foregone conclusion, as the US has some of the best innovation, science and technology, and commercial development bases in the world. At the same time, as we look into the future it is not unreasonable to expect tighter competition in the technology sphere and the implications of technological parity with near-peer adversaries in certain key areas have the potential to impact military strategy and praxis and the prospects for stability in the security environment. The time to prepare, mitigate, and counter challenges in the technology competition is now.

### Promoting and Protecting Critical and Emerging Technologies

In addition to challenging our current paradigms about the perpetual state of unopposed technological and military advantage, what can the Joint Force do to help advance the technology competition and ensure a continual edge in critical and emerging technologies? While there is likely no single silver-bullet policy, the optimum approach will almost certainly be a combination of two policy initiatives that are in natural tension with each other: critical and emerging technology promotion *and* protection. Technology promotion is relatively straight-forward, it is the state of natural openness of basic research that promotes shared learning and information exchange for the betterment of science. This is both good and necessary and largely helps in the overall competition for technical and scientific talent, resources, expertise, and reputation. Protecting critical and emerging technologies also is relatively simple in concept, making it harder for those wishing to steal or otherwise gain unwanted insight into US technical and scientific advances and protecting cutting edge military programs and systems. It is the combination of the two approaches, however, that proves daunting. If we accept that we cannot “promote” our way out of the competition just as much as we cannot only “protect” our way out, then a balanced approach becomes necessary. There are those who would say the US must simply “run faster” than our competitors and envision a fair and open race where the best man or woman wins. However, based on the deliberate approach the CCP and others have taken with regards to technology transfer and Military-Civilian-Fusion, the better analogy is attempting to win a race where your competitor is riding your back—literally every step forward you take, he takes with you, and leverages your leg strength to advance in the race.

A balanced approach to critical and emerging technology promotion and protection is also not without historical precedent. In the height of the Cold War, the US struggled with similar challenges in terms of the balance between free and open research and preserving technical competitiveness. For example, in 1987 the National Academy of Sciences released a report on “Balancing the National

Interest: US National Security Controls and Global Competition” (Foerstel, 1993). Similarly, in 1985 President Reagan published National Security Decision Directive 189, “National Policy on the Transfer of Scientific Technical and Engineering Information.” This policy authorized the use of a classification system to control information generated during federally funded fundamental research in science, technology, and engineering universities and laboratories (Ibid.). As the Joint Force, the Department of Defense, and the wider US government fully engage in great power competition we would be wise to remember previous time periods when US technology dominance was challenged and how balanced approaches that used both elements of promotion and protection enabled continued growth in the US economy and national defense capabilities. The role of US industry as a technology innovator and provider is critical even in light of global competition. The challenge for DoD is to develop stronger links to U.S industry through a more concerted effort to promote partnerships and mutual trust relationships to serve national security. Perhaps just as importantly, the Joint Force itself must recognize not only the potential for emerging technologies such as AI, hypersonic strike, directed energy and deep fake engineering to be disruptive to current planning and operational concepts, but portend a future period when the use of these technologies and capabilities is not simply wielded effectively by the US but by its near-peer competitors. We can run mighty fast, but not faster than the competitor glued to our back.

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## Chapter 7. Strategy After Deterrence

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### Abstract

One dilemma for US strategy is the still-powerful influence of Cold War strategic thought. Cold War ideas like deterrence are inadequate for current strategic challenges, including cybersecurity. Our opponents will not be deterred from taking action against the US and will discount signals, words, and threats. What does deterrence mean in an international environment where opponents have spent years developing strategies to circumvent United States' deterrent capabilities and believe they can outmaneuver the US. Drawing from examples of great power competition, protecting US interests cannot be solely based on classical deterrence; in most cases it will require the use sustained low-level engagement and coercive actions below the use-of-force. For now, this means moving in the direction of "fighting and fighting to win," rather than deterring.

### Contribution

*"A military is built to fight...and focus on fighting and fighting to win."*  
- Xi Jinping at the 19th Party Congress

One dilemma (among several) for US strategic thinking is the still-powerful influence of the dead hand of Cold War thought. If there are historical precedents for the current situation, it is not the somewhat static bipolar competition of the last century but instead some combination of nineteenth century great power competition and the rise of aggressive authoritarianism in the 1930s. Yet we continue to try to apply Cold War ideas to strategic challenges, including cybersecurity, and chief among these is the concept of deterrence. What does deterrence mean in an international environment where:

- Opponents have spent years developing strategies to circumvent United States' deterrent capabilities
- They perceive the United States as strategically inept and believe it can be outmaneuvered in ways that reduce the risk of retaliation.
- Cyberspace has become the central domain for conflict, and, unlike nuclear weapons, whose use was to be avoided, cyber "weapons" are used daily in ways that do not pose existential threats.

We need to discard Bernard Brodie's assertion that "the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them." While nuclear weapons reduce the likelihood of major war between nuclear-armed powers, they do not prevent conflict among them. If anything, conflict among major powers is increasing, albeit in new forms, usually intended to achieve coercive effect without requiring violent acts against the US. The motives of the authoritarian regimes that challenge the United States and the West (and are the source of conflict) make compromise unlikely for the foreseeable future. They will continue to use coercive actions (force, the threat to use force, and cognitive manipulation) to advance their interests while staying below an informal threshold that, if crossed, would risk triggering a damaging response. There were similar thresholds in the Cold War, but technological and political changes now make low-level

conflict more effective and enticing. Our opponents likely calculate that actions that does not rise to the level of the use of force will not provoke a damaging response by the US.

Cyberspace is the principle arena for the new conflict. Operations in cyberspace provide much-expanded opportunities for war as a political act. Speed and the possibility of covertness make offensive operations attractive, as does the persistent weakness of cyber defense. These factors make cyberspace a relatively low-cost, low-risk domain for coercion and "almost-force." It also means that a cyber strategy centered on defense or deterrence will be inadequate.

Cyberspace is not the only arena for conflict. US strategic competitors—Russia, China, and Iran—have created tactics that allow them to pursue their strategic goals while managing the risk of direct military engagement. They use cyber and influence operations, proxy forces, or the positioning of military forces to obtain advantage while managing the risk of conflict. The expansion into the South China Sea or the occupation of Crimea are examples of these new tactics. If the intent of our opponents was initially to push back against a triumphalist United States, they now see opportunities to gain regional dominance and reshape global rules and institutions in ways that favor their interests (especially China).

It appears, pace recent actions against Iran, that US opponents believe it is possible to take action against US interests without retaliation. A Russian interlocutor with ties to the Federal Security Service, the successor to the KGB, said, "After the [2016] election interference, we waited for the US response and were surprised when nothing happened." A Chinese general, when asked about the risk of engaging with the United States in cyberspace replied that it had "great capabilities, no will." If opponents believe that the risk of warfare with the United States is low and manageable and that it will not use nuclear weapons except in response to an existential crisis, they will test the limits of what can be done to harm US strategic interests (or determine if there are any limits at all).

This testing takes place in an environment characterized by increasing conflict as the international order created by the US after 1945 is challenged by authoritarian regimes. This conflict is over political and economic influence and over the values that that guide the international order. The Cold War is not a useful precedent. Then, two powerful opponents confronted each other and, while avoiding general conflict, engaged in proxy war, testing, and the occasional bellicose verbal confrontations. However, they were deterred from direct armed conflict by the threat of nuclear war. Nuclear deterrence works as well now as it did in 1990, but the game of strategy has shifted.

Brodie and other nuclear strategists assumed that nuclear weapons would never be used. In contrast, cyber "weapons" are used on a daily basis. This sets the context for deterrence and any signaling that accompanies it. Possessing a powerful cyber force but having it glower at opponents from the sidelines does not deter, and the signal this sends, no matter what words accompany it, is unconvincing.

Engagement is the best way to change this. Defining what is unacceptable requires pushing back. Engagement cannot be one-off actions but should be part of a larger strategy to constrain opponents and advance national interests (and this will unavoidable require redefining US national interest to fit the current international environment). A new strategy must be accompanied by planning how to manage the risk of retaliation, since we can expect opponents to react and respond in the hopes of frightening or punishing the United States. This is in essence using some level of offensive operation (not threats or signals) to reset opponent calculations of risk. Whether this is called "defend forward," "persistence engagement," or "active defense," the underlying assumption is that sharp rebukes,



"painful but temporary and reversible," will reset opponent's analysis of the benefits of continued cyber actions against the United States.

Credible threats are central to strategies intended to modify opponent expectations of the risk of actions against the US, but American credibility must be rebuilt. Credibility has a "shelf life" that is significantly shorter than it was in the Cold War, and, judging from Russian, Chinese and Iranian reaction to US penalties, will degrade relatively quickly unless regularly refreshed. This is not a stable situation. Powerful incentives created by desires to defend their regimes and to take advantage of perceived western weakness, drive our opponents to seek constant engagement and regularly challenge American interests and seek change in the international order.

Opponent's actions show that they are not deterred in key areas and believe they can take damaging actions without risk if they stay below the implicit "force" threshold that their actions and our responses have defined. Merely possessing powerful military forces is insufficient given opponent efforts since the late 1990s to develop and use strategies to circumvent them, and there has been an erosion of the US position in Europe, Asia, the Middle East, and Africa. The pivotal moment for deterrence and cyber conflict was the Syria redline debacle in 2010. After that incident, we saw for the first time coercive political actions against targets in the American homeland. Administration efforts to rebuild credibility after 2010 were probably undercut by the indecision over the 2016 interference, and things have not improved greatly since then.

Contrast the current situation with the Cold War. Then, the Soviets found US threats and signals to be credible. The United States had won a global war to defend Europe, bombed cities, and used nuclear weapons. That history shaped Soviet thinking about conflict with the United States. Credible threats were linked to a clear retaliatory threshold. Eisenhower's declaration that nuclear weapons would be used if there were "trustworthy evidence of a general attack against the West" clearly linked weapons use to US interests.

That declaration still holds, but it is not sufficient to stop opponents from taking action, as they have thought carefully about how to circumvent the nuclear and conventional threats posed by American forces. Our strategies need to evolve in response. The United States has had the luxury for 30 years of not facing serious competition. This hampers the development of strategy. It has not had to define national interests in a serious way as they appeared unchallenged after 1989, and it lacks strategies to reverse opponent strategic gains.

A new strategy will need to take a number of factors into account, among them the weakness of our allies and the changes that technology has brought to interstate conflict. In this new environment, the United States cannot expect to conquer or defeat opponents. Even if regime change was possible, it has not worked well since 1945, and there has been no serious thought about what regime change in Russia or China would mean for US interests and global stability. It is hard to see any outcome that would be positive. That means that the United States has opponents who are not going away and who are not going to stop using coercion to seek change at the expense of the US. This is where the similarities to the nineteenth century are of greatest use in reassessing strategy.

Drawing from the example of nineteenth-century great power competition, protecting US interests today and in the future requires an understanding that deterrence is insufficient; the US and its partners must incorporate the use of sustained low-level engagement to reset opponent calculations. We can mirror the tactics of our opponents to minimize the risks of escalation without forsaking coercive effect. Sustained engagement does not come without risk, but the days in which the United

States faced no strategic risk are over. The task is to engage and manage the risk of escalation without rejecting for more assertive actions.

There are a number of corollary requirements for this task, including reconsidering and redefining national interests (if only to be less platitudinous), reconsidering the utility of our current force posture and weapons acquisitions (which often date to the last century), building new mechanisms for direct diplomatic engagement on security issues with strategic opponents, and developing and funding non-military strategies for confrontation and competition. These are things that the United States has not had to do for decades and, as it is currently organized, may not be able to do at all absent reform in how it thinks about strategy.

The US will need to actively defend its interests in a world where the predominance of western values and American leadership can no longer be assumed. Our opponents will not be deterred from taking action against the US and will discount signals, words, and threats. The United States will need to rely on engagement below the use-of-force threshold to advance its national interests and eventually restore some equilibrium of power in international affairs. For now, this means moving in the direction of “fighting and fighting to win,” rather than deterring, calibrating risk and taking opportunities in new domains created by technology.

President Xi’s comment that opens this essay is the modern counterpoint to Brodie and the archetypal strategy of deterrence. The British historian Paul Kennedy, whose work on the decline of the British Empire is often applied (inappropriately) to the United States, made an interesting point on why empires fail—it is not that they do not recognize problems, it is that they continue to apply old solutions that once worked to new problems where they are no longer effective. The sooner we recognize that deterrence and signaling are not well suited for most of the competitive challenges to US leadership, the better it will be for defending US interests.

## Chapter 8. What If Strategic Stability Is Lost?

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### Abstract

Traditional concepts and lexicon surrounding “strategic stability” focuses primarily on nuclear deterrence strategy and policy. Today, however, we increasingly face challenges with conventional deterrence and great power competition against near-peer competitors that primarily occurs below the level of armed conflict. At the same time, we face a sea-change in terms of the strategic impacts non-kinetic tools such as cyber effects operations, space effects, influence operations, and illicit and licit technology transfer have on traditional military and national advantages. All of this begs the question, despite no near-term prospect of a major exchange of nuclear weapons, are we “strategically stable” today? Furthermore, as a Joint Force, do we have the correct paradigm as to what “strategic stability” looks like in today’s era of great power competition? Is strategic stability reasonable given the asymmetric tools our adversaries have developed, or should we accept a degree of instability to change the status quo and recapture US advantage in key areas? This paper will walk us through some of the challenges associated with “strategic stability” today, and how the Joint Force may wish to adopt a new paradigm for the great power competition in the years and decades ahead.

### Introduction

One could almost be forgiven for looking back on the Cold War era with rose-colored glasses, reflecting on the “good old days” when deterrence strategy and policy was primarily focused on nuclear matters and grounded in well-accepted concepts of assured second strike, mutually assured destruction, and strategic stability between the United States and the Union of Soviet Socialist Republics. Today, however, while these concepts remain and nuclear deterrence challenges still get priority billing in policy circles, we increasingly face challenges with conventional deterrence and great power competition against near-peer competitors that primarily occurs below the level of armed conflict. At the same time, we face a sea-change in terms of the strategic impacts non-kinetic tools such as cyber effects operations, space effects, influence operations, and illicit and licit technology transfer have on traditional military and national advantages. All of this begs the question, despite no near-term prospect of a major exchange of nuclear weapons, are we “strategically stable” today? Furthermore, as a Joint Force, do we have the correct paradigm as to what “strategic stability” looks like in today’s era of great power competition? Is strategic stability reasonable given the asymmetric tools our adversaries have developed, or should we accept a degree of instability to change the status quo and recapture US advantage in key areas? This paper will walk us through some of the challenges associated with “strategic stability” today, and how the Joint Force may wish to adopt a new paradigm for the great power competition in the years and decades ahead.

### Are We “Stragically Stable” Today?

Today’s Joint Force faces complex and dynamic security challenges that include but extend beyond issues of traditional nuclear deterrence and stability. The growth in capability and capacity in conventional military power of near-peer competitors such as China and Russia combined with the ability to use non-kinetic tools such as cyber, space, and influence operations to affect key strategic centers of gravity calls into question the very concept of “strategic stability” in today’s geo-political

environment (Edelman & Roughhead, 2018). Even if the specter of a major nuclear weapons exchange is relatively low in the near-term, are we in a period of strategic stability, or instability?

Historically, we have used the concept of “strategic stability” to describe a security environment that accepts regional or local conventional military conflicts or crises so long as these events could reasonably be contained to conventional kinetic force-on-force exchanges that did not spill over to an exchange of nuclear weapons between adversaries (Podvig, 2012). This was primarily driven by the nature of weapons of war themselves, with major nuclear weapons alone as a class of weapons that present strategic risk to militaries, population centers, and the way-of-life a country based on their nuclear yield and potential for wide-spanning effects that threaten key strategic centers of gravity (Wills, 2010). Today, however, the Joint Force must contend with a range of weapons and effects that have just as much potential to disrupt large sectors of the military and civilian society and can also hold key strategic centers of gravity at risk; albeit not via bombs or missiles, but from keyboards, social media, and the cyber and space domains.

Given the existence of and growth in weapons and effects that can equally disrupt or hold at risk key strategic centers of gravity and segments of society, it is long past time that we account for these factors in assessing the current environment of strategic stability. Looking purely through a lens of nuclear deterrence and the prospects for major nuclear war, one could argue that today’s environment, while complex and dynamic is “strategically stable” (Kristensen, 2012). However, once we account for the added strategic weapons and capabilities described above, the assessment dims. One of the advantages of using tools such as cyber and space effects and influence operations to disrupt or degrade key strategic centers of gravity is that they are readily useable once a capability is developed, can be employed at levels below traditional kinetic violence that would engender a conflict, and can be designed so attribution is opaque. Examples abound, from Russian and Chinese influence operations that seek to undermine faith in democratic institutions and elections (Office of the Director of National Intelligence, 2017), to large-scale data theft of military significant private corporations (National Counterintelligence and Security Center, 2018) to illicit and licit Chinese technology transfer from US research labs and universities (Barrett, 2020). While each one of these events is a single data-point, they are but a string of examples demonstrating capability and intent to penetrate American society, disrupt and degrade democratic principles, and blunt traditional advantages in critical technology and military superiority. With these added lenses, the argument for “strategic stability” becomes much harder to sustain and may break down altogether. In this light, it is clear that for the concept of “strategic stability” to remain meaningful, a new paradigm should be explored. If nuclear deterrence holds, but US advantages and societal norms and faith in democratic institutions are eroded through other means, adversaries and competitors may very well achieve strategic objectives without the US going to DEFCON 1.

## Do We Have the Correct Paradigm?

While the concept and lexicon of strategic stability is alive today in Joint Force strategy and planning, it is no longer front and center and what does rise to the top ties strongly back to its nuclear origins and roots. For example, Joint Publication 5-0, Joint Operations Planning, contains much on “stability operations” but this is through the lens of post-conflict stability and peacekeeping (The Joint Staff, 2017). If one wants to find doctrine on strategic stability in the larger sense, this is best found in Joint Publication 3-72, Nuclear Operations. Therefore, when Combatant Commanders and the Joint Force at-large refer to issues regarding strategic stability, it is typically within the context of nuclear deterrence and stability—despite over two decades of development of new weapons and effects that increasingly present additional strategic options. Given the National Defense Strategy’s emphasis on conventional deterrence and joint force lethality (Department of Defense, 2018), these conversations

have been evolving, but so far have not resulted in a wide-spread adoption of a new paradigm by the Joint Force. While previous issues of strategic deterrence and stability were typically the purview of US Strategic Command as the primary nuclear force provider, today's Unified Command Plan does account for US Cyber Command and US Space Command that can bring strategic effects to the geographically responsible Combatant Commanders. That said, the language and paradigm of what constitutes "strategic stability" has largely not caught up to these changes. The resulting impact is that as a Joint Force, our interpretation and insight into what is "strategically stable" is diffuse and often confused. (Hersman, Stadler, & Arias, 2019). This is further complicated by the range of effects cyber and space can achieve, ranging from the tactical to the national-strategic. Furthermore, the widespread use of information operations, typically seen as operations that accompany traditional kinetic activities, now have the potential to achieve strategic effects through multiple social media and other platforms on their own. We have come a long way from "leaflet bombs" but it is not clear that our paradigms or understanding of the strategic nature of these effects has been sufficiently updated.

The question of an updated paradigm holds true not just from how we view US capabilities and effects that are non-nuclear and hold strategic value, but extend to how we view adversary and competitor actions in today's environment. Given the examples discussed previously, it is easy to come to wide ranging views as to the degree of "strategic stability" present in today's environment. This is significant because uneven or misperceived understanding as to adversary and competitor actions and their strategic significance hampers consolidated approaches and whole-of-government responses and mitigations. While the US military may view an adversary action in cyberspace or the information domain as a series of "tactical effects" with minimal direct impact to defense capabilities, the same actions may have direct effects on non-defense related infrastructure or societal perceptions that risk undermining confidence, trust, or the ability to respond to future crises or conflicts. More than ever before, adversary and competitor actions in one domain, say the information domain, have cross-cutting effects across US sectors and instruments of national power. How the US Government views these effects from the standpoint of strategic stability and possible US responses is crucially important. For its part, the Department of Defense and the Joint Force should re-examine its current paradigms to account for non-traditional capabilities that present strategic risk, even if those capabilities are not traditional military weapons systems.

## Changing the Paradigm and Joint Force Implications

If the Joint Force were to adopt a new paradigm of strategic stability, one of the first questions it would face would be to what degree does it seek "strategic stability" in the first place? By updating paradigms to understand and account for adversary and competitor actions that produce strategic effects below the level of armed conflict, we will likely conclude that far from a stable environment, we see dynamic instability as adversaries seek to change the status quo and erode traditional US advantages (Edelman & Roughead, 2018). It is then quite possible that traditional approaches to deterrence that seek to maintain the status-quo may be lacking; deterrence after-all seeks to prevent an actor from a taking a certain action that has not yet occurred (Schelling, 2008). Compellence, however, seeks to respond and coerce an adversary to stop taking an action that has already begun. From this viewpoint, regaining strategic stability with deterrent threats may be less useful than compellent threats and actions that both mitigate threats to US vulnerabilities and respond to ongoing actions in the non-kinetic domains. If traditional deterrence and strategic stability is chess, compellence in a dynamically unstable security environment is Go, where deliberate actions are calculated for long-term effect and the objective is to out-manuever and surround an opponent over the course of the game vice in a single Clausewitzian-like battle for the center of the board.

The implications and recommendations to the Joint Force are manifest, we must first update our paradigms to account for non-traditional capabilities that are not “weapons systems” but nevertheless can achieve drastic strategic effect over the course of the long-term peacetime strategic competition. Second, we must update our education, training, doctrine, and command structures to enable a fuller use of tools and capabilities to compel vice only deter. Finally, we must mature our understanding on what “strategic stability” looks like and the degree to which it is desired or achievable given the maturation and growing ability for cyber, space, and information effects to hold strategic national centers of gravity at risk. In doing so, we must also more fully engage within the inter-agency to appreciate the seams/gaps our adversaries and competitors seek to exploit and more fully account for the dependencies across Departments and Agencies that currently restrict our vision on strategic stability, shared vulnerabilities, and US responses.

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## Chapter 9. What Kind of “War”?

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### Abstract

The present great power competition (GPC) between the United States, People’s Republic of China, and Russian Federation is of a character different from armed conflict and occurring mainly in the non-military dimensions of international relations. This differing character is consequential, and its potential termination conditions and outcomes, if any, bear on the utility and applicability of US military force and the DOD within it. If the present GPC continues to exclude armed conflict, then by overly focusing on preparation for violence, the USG and DOD may not only be misaligning ways and means with the desired ends but may also have identified the wrong ends. The essay offers three examples of historical GPCs and the concept of a Theory of Victory (ToV). It follows with a brief discussion of potential issues associated with US objective formulation for the present GPC, questioning if stability—strategic or otherwise—should always be an assumed objective. It then discusses possible ToVs toward which our adversaries appear to be striving and the lack of official English versions of several pertinent key documents. The essay concludes by offering an ideological and human-focused core ToV that the US, its allies, and partners might pursue—in comparison with the present material-focused DOD model.

### Contribution

*“The first, the supreme, the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature.”*

— Carl von Clausewitz, *On War*

### Introduction

The present multilateral contest between the United States (US), People’s Republic of China (PRC), and Russian Federation (RF) is the foremost modern example of great power competition (GPC). At present, it is a struggle of a different character from armed conflict, just as the “Cold War” was primarily a confrontation of opposing civilizational systems fought mainly in the non-military dimensions of international relations. How, though, does this competition end? What does the range of desirable outcomes look like? If this contest is, in fact, very different from war, then by focusing overly on preparation for armed conflict, the USG and DOD may not only be misaligning ways and means with the desired ends but may also have identified the wrong ends. To begin addressing these questions, this essay discusses three examples of historical GPCs and the concept of “theory of victory.” A discussion of potential issues associated with US objective formulation for the present GPC follows, questioning the assumed desirability of stability as an objective. Against these considerations, the essay briefly discusses the objective visions (i.e., Theories of Victory [ToVs]) toward which our adversaries appear to be striving. Taking partial inspiration from the Cold War, it then concludes by offering an ideological and human-focused core ToV for the US, its allies, and partners—in comparison with the present material-focused DOD approach.

## Great Powers and Great Power Competitions

As collectives, nation-states comprise groupings of consequential people, groups, and organizations (relevant actors) and are themselves actors, with the strongest among such nation-states being called “great powers.” The requirements for being considered a great power are not well defined, but possession of nuclear weapons is one commonly suggested criterion, while others include geographic size, population, military, and economic strength. GPC is the striving among the top-tier nation-states for access to and influence over physical, informational, and human resources conducted through the decisions of human beings and the decision-like activity of their automated systems.

One common aspect that GPCs share is that they can extend over decades and transition into seemingly new recharacterized contests, sometimes with different groupings of competitors or different competitors entirely. Examples of past GPCs that remain relevant to the new contest confronting the United States, its allies, and partners include the Great Game between the United Kingdom and Russia from the early 19th through early 20th century; the Scramble for Africa from the late 19th to the early 20th century; and the Cold War between the United States, its allies, and partners and the Union of Soviet Socialist Republics (USSR) and its satellites during the second half of the 20th century. The present GPC differs from these, however, in the increased degree of economic interdependence between the primary competitors. Among these examples, the present GPC with the PRC and Russia perhaps most resembles the Scramble for Africa, and although occurring on a global scale, it is interesting that Africa remains high in Chinese and Russian interests. Such GPCs are also complex and causally interrelated. On its surface, the Scramble for Africa might seem to have been the shortest and most geographically confined among these examples, either ending or culminating with the irruption of the First World War in 1914 and taking place almost completely in Africa. One might argue, however, that it did not actually end that year, but instead transformed and progressed indirectly through the First World War, onward into the Second World War, and through the completion of European decolonization in the 1970s, and it continued to reverberate in its legacy and consequences throughout the remainder of the Cold War and into the present day.

Considering such complexities, the USG requires a suitable, acceptable, and feasible ToV to prosecute a competition of this sort (Bartholomees, 2006). Hal Brands also articulates requisites for such a ToV, advancing “12 Bedrock Principles of Long-Term Competition” (Brands, 2019, p. 32), the first of which is itself to “have a theory of victory.”<sup>4</sup> Each of these 12 principles combines aspects of holism, asymmetry, and influence. All are relevant to the present GPC, but two seem to stand out as areas

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<sup>4</sup> For convenience, Brand’s full list is:

- a. Have a Theory of Victory,
- b. Leverage Asymmetric Advantage,
- c. Get on the Right Side of the Cost Curve,
- d. Embrace the Ideological Competition,
- e. Compete Comprehensively and Holistically,
- f. Operate Multilaterally to Win Bilaterally,
- g. Exploit the Importance of Time,
- h. Know Your Competition Intimately,
- i. Institutionalize a Capability to Look Forward as Well as Backward,
- j. Understand that Long-Term Competition Is a Test of Systems,
- k. Pace Yourself, and
- l. Remember that Competition and Confrontation are Not Synonymous.

wherein the DOD and USG are falling particularly short: “knowing the competition intimately” and “embracing the ideological competition” (Brands, 2019, pp. 36-43).

When examined, strategic and operational environments are composed of a fluid mix of cooperative, adversarially competitive, and conflictive operations, activities, and investments (OAI) by and among their relevant actors—a complex and multidimensional competition continuum—instead of a simplistic “peace/war” binary (Joint Staff, JDN 1-19, 2-4). Already in use for the past two years, the Competition Continuum revises the older Conflict Continuum and provides a visualization tool that can be used in many ways to depict the character of interactions between competitors across many considerations. Its doctrinal institutionalization, however, is pending CJCS signature of the revised *JP 1, Joint Warfighting* and *JP 3-0, Joint Operations*.

## Formulating Appropriate Objectives

### Stability and instability as objectives

Stability should no longer be assumed as an objective. In GPC, adversaries will increasingly enjoy “stable,” yet undesirable, dominance of certain areas beyond simple military control. In cases where this is to the detriment of the local population and governments (or otherwise politically unacceptable given the interests of the US, its allies, and partners), policymakers will likely wish to disrupt these “stable” conditions and thereby diminish adversary malign influence. GPC thus implies not just resisting adversary encroachment but also reversing it. Therefore, policymakers, designers, and planners must not assume that stability will always be a primary and constant objective. As a caveat, however, while stability in adversary-dominated regions or systems may not be desirable, any deliberate destabilizing activities should only be undertaken as an approach of last resort and only when beneficial to the local populations most affected. If the US, its allies, and partners determine that such destabilization is necessary, then they must also offer a replacement alternative agreeable to those affected that will improve their circumstances. Doing otherwise will alienate the very people whom we are trying to help and create opportunities for adversaries to exploit. Such an approach may help avoid producing the debilitating multi-generational negative human effects such as those that attended previous GPCs.

### Objective mismatch

Of the twelve American Principles of Joint Operations, the first and foremost is that of the objective (Joint Staff, 2017, I-2, A-1-A-4). In short, this is the “why,” the end or ends to which OAI are being undertaken in the service of policy aims and/or interests. Historically, military objectives have predominantly been physical, occasionally informational, and when especially well conceived, nested in the service of broader economic, informational, and diplomatic policy objectives. In the twenty-first century iteration of GPC, however, the objective is no longer just physical, nor even more generally geographical, but instead “positional” in the multidimensional “space” of international relations. At present, however, the United States’ foremost instrument of national power, its Department of Defense (DOD), seems to be aiming to “win” a primarily kinetic war with the PRC (and/or RF) that will likely never be fought. By insufficiently considering other alternative objectives, the DOD may be thereby positioning itself to lose the broader and all-important competition in the other dimensions of national power and international relations. Given the tremendous capability, capacity, and expense of its military, the US cannot afford for it to effectively become an inconsequential “wasting asset.” (Krepinevich, 2009)

## National power

*“Power is the ability to influence the behavior of others to get a desired outcome. Historically, power has been measured by such criteria as population size and territory, natural resources, economic strength, military force, and social stability. Hard power enables countries to wield carrots and sticks to get what they want. [...] Soft power is the ability to attract people to our side without coercion”*  
(Cohen, Nye, & Armitage, 2007, 6).

The United States and the Soviet Union fought the Cold War in an unrestricted fashion, albeit with the caveat that, in general, both sides intentionally sought to avoid escalation and thereby avoided direct lethal and kinetic confrontations. Instead, they employed non-lethal (or at least non-kinetic) means in most cases, or otherwise employed proxy forces and surrogates in the pursuit of dominance. In this context, soft power is somewhat like societal gravity, a passive informational attractive force that develops between countries and other political entities due to their alignment of interests, reputation, and prestige. “Smart power,” the artful integration of diplomatic, informational, military, and economic hard and soft power to achieve a natural and non-propagandistic form of influence, is a hybrid form of such force (Nye, 2005, pp. x, 5-11).

Harvard economist Niall Ferguson hypothesizes that half a dozen “killer apps,” hitherto almost uniquely Western sociocultural institutions, account for a “great divergence” in power and economic fortunes between Western European countries and East Asian states that occurred from the late 18th century through the end of the 20th century (Ferguson, 2011). These are: (1) competition (both intra-state and international), (2) scientific revolution (focused on experimental method), (3) property rights (enabled by rule of law), (4) modern medicine (multiplying life expectancy), (5) consumer society (propelling economic growth), and (6) work ethic (Ferguson, 2011). Each of these is simple as a concept but complex in its internal constitution and institutionalization. Each is societal, an adaptation of culture, social systems, and psychology, as well as governmentally instantiated. With the adoption and improvement of most or all of these institutions by East Asian countries and their disturbingly increasing abandonment by key sectors of Western society (e.g., academia, industry, government, etc.), this historic trend is reversing (Ferguson, 2011). For example, the PRC has already surpassed the US in absolute Gross Domestic Product (if its official figures are to be believed). It is, however, difficult to transition to democracy without private property rights, the one “app” that the PRC has purposefully failed to adopt (Ferguson, 2011). Whether or not the PRC’s export-driven economic expansion can long endure without such rights remains to be seen. Some or even much of the PRC’s growing advantage lies simply in that country’s mass and the large and growing size of its productive population, which translate into economic potential and speed of operation.

## Knowing the competition

The PRC and RF have their own objectives or ends in mind. Many Western publications have examined these in the case of the PRC. Of course, the PRC and RF have also generated and promulgated documents that inform their own peoples (and, importantly, their state security forces) as to their objectives and oftentimes detail as to how and when they are to be achieved. Identification, education, and training for USG personnel regarding these documents would seem to be imperative. After all, if one is to counter or attack an adversary’s strategy, so doing would theoretically demand an understanding of that strategy, or at least its underlying ToV.

## Great Power Competition from the Communist Chinese Perspective

The official People's Liberation Army (PLA) component of the PRC's strategy initially manifested with the 2003 publication of the *Political Work Guidelines of the People's Liberation Army* (Mattis, 2018) and 2013 publication of *The Science of Military Strategy* (Mattis, 2015), the latter of which apparently lacked an English translation as of November 2015. Though not a strategy in and of itself, a more recent manifestation of China's strategic policy is *China's National Defense in the New Era*, the PRC's tenth defense white paper, released last April (PRC SCIO, 2019). These documents address and institutionalize the "Three Warfares"—public opinion, psychological, and legal (Mattis, 2018). Public opinion warfare focuses on influence operations in the information environment with an emphasis on propaganda, psychological warfare focuses on the human aspects and interpretation of that environment, and legal warfare (or "lawfare") seeks to control or subvert the formal institutions of international and national decision-making and standardization. The PRC's strategy—meaning the Chinese Communist Party's (CCPs) strategy—is much broader than this, however, and per the previously noted documents, also relies heavily upon OAs in the military, informational, diplomatic, financial, intelligence, economic, legal, and development sectors to pursue these warfares (Mattis, 2018). The lack of an available and accessible official English-language translation of such a key work is problematic and potentially symptomatic of an awareness deficit within the DOD, given its limited number of personnel literate in Mandarin.

## Great power competition from the Russian perspective

Considering the Russian perspective on ToVs, the theoretical analysis and contributions of Valery Gerasimov, the Chief of the General Staff of the Russian Federation Armed Forces and its First Deputy Defense Minister, have been well publicized and analyzed over the past several years. While seminal, his contributions alone (Gerasimov, 2013; Coalson, 2016) do not constitute a strategy in their own right. Rather, they are either an articulation of his thinking on Russia's "New Generation Warfare" or, more likely, an interpretation of perceived US competitive approaches (Bartles, 2016). On the other hand, to inoculate against future international accusations and reprimands, the Russians (as the Soviets before them) often accuse their adversaries of malign activities they themselves intend to conduct.

One likely Russian ToV that emphasizes and articulates competition across multiple dimensions of international relations, however, is Aleksandr Dugin's 1997 *Foundations of Geopolitics: The Geopolitical Future of Russia*.<sup>5</sup> Unfortunately, to date, no trustworthy, publicly available English translations seem to exist. Dismissed by some as absurd and even fascistically despicable, others regard Dugin's treatise and other works with great seriousness. After all, *Mein Kampf* received a similar mixed reception in its day, so it would seem wise to listen carefully to what our most capable adversaries say that they *intend to do to us*. In one example, in his 2004 review of the book, John

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<sup>5</sup> A Russian-language online posting (from 2000, perhaps an update or reprint) is posted at <http://arctogaia.com/public/osnovygeo/>. For purposes of researching this paper, I arrived at an unexpectedly comprehensible English translation of this web page-based version using the Google Chrome browser. In fact, the translation is so flowing and devoid of the typical shortcomings of Google machine translations that it reads suspiciously as if it was previously translated by a human with an excellent command of the English language. Not being literate in Russian, however, I cannot otherwise attest to the actual accuracy of the translation. *Goodreads.com* has a link to an English translation published August 1, 2017 stating that the original was first published on January 1, 1999. So the exact dates of the various iterations from 1997, 1999, and 2000 are unclear.



Dunlop, now an emeritus fellow at the Hoover Institution, states that: “There probably has not been another book published in Russia during the post-communist period that has exerted an influence on Russian military, police, and statist foreign policy elites comparable to that of Aleksandr Dugin's 1997 neo-fascist treatise, *Foundations of Geopolitics*.” (Dunlop, 2004, 46-56). Dunlop's review identifies significant RF efforts observable in the world today. For example, Dugin advocates for “subversion, destabilization, and disinformation spearheaded by the Russian special services;” “use of Russia's gas, oil, and natural resource riches to pressure and bully other countries into bending to Russia's will;” destruction of Ukrainian territorial integrity; incitement of maximal social and societal divisions within the West; and the “Finlandization” of all of Europe” into Russian satellite states (Dunlop, 2004, p. 50). As such, *Foundations of Geopolitics* does seem to be, at least in effect, an inspirational blueprint for the present Russian program of unrestricted warfare against the West, if not the complete Russian grand strategy itself. Given the probability that Dugin's work has influenced many Russian strategic thinkers, as was the case with the PRC's *The Science of Military Strategy*, the lack of an official English-language translation (compare this to the previously mentioned PRC documents) seems alarming.

## Embracing Ideological Competition

### Relevant actors are the “medium of victory” in great power competition

Despite nascent efforts to improve its capabilities to operate in the information environment, DOD and broader USG efforts still seem to devote insufficient attention to “embracing the ideological competition” (Brands, 2019, pp. 36-37). The West's adversaries all promote ideological systems that differ from the rules-based, liberal international order that the United States helped establish, has led since the end of World War II, and has used to help bring so many in the world out of poverty while simultaneously averting great power war for over seven decades. Among these alternative authoritarian models, the PRC's seems to be the most viable—an immense, nationalistic industrial state and economy bordering on, if not actually fascistic (at least by the economic definition), heeding the command of the Chinese Communist Party (CCP). In comparison, the RF's model is that of a nationalistic, kleptocratic petrostate servicing the silovik oligarchy orbiting and supporting Vladimir Putin; the Islamic Republic of Iran is a theocratic petrostate that violently persecutes its dissidents; the Democratic People's Republic of Korea (DPRK) is a nationalistic, ideological extortion-state whose sole claim to legitimacy is its nuclear arsenal; and the proto-Islamic Caliphate is presently a diffuse net of competing physical and virtual alternatives. For brevity, among these models, this section will focus primarily on GPC considerations pertaining to the PRC and RF, with the caveat that the resulting observations will probably also be applicable to competition with the other three adversaries. In so doing, it asserts that (1) “winning” in GPC is ultimately winning the affinity and trust of people, their organizations, and societies (i.e., their “hearts and minds”); (2) soft power for influencing relevant actors is vital in GPC; and (3) these relevant actors are the essential “medium of victory” in GPC.

### “Winning” in great power competition is “winning hearts and minds”

In February 2019, leaders in USSOCOM's Strategy, Plans, and Policy (J5) Directorate proposed that GPC “... is the interaction among actors in pursuit of the influence, leverage, and advantage necessary to secure their respective interests.” (Miller et al., 2019, pp. 6-7) The authors further propose that in competition short of armed conflict, “actors employ all tools of statecraft in order to maximize the impact of power applied toward advancing national interests without engaging in direct conflict” (Miller et al., 2019, p. 6). Under this interpretation, accruing and wielding influence, advantage, and

leverage, rather than seeking and exercising direct control, signals success (Miller et al., 2019, p. 6). Influence occurs and is measured in terms of the multi-dimensional (e.g., political, social, economic, security) freedom of action through accumulation of mutually advantageous relationships with relevant actors, including individuals, groups (civic, interest, etc.), populations (political entities), nation-states, and groupings of nation-states. GPC is the aggregate of these relations.

What “David and Goliath” stops short of explicitly stating, however, is that the critical focus of GPC, the common medium through which all “influence, leverage, and advantage” accrues, is *people*. Through their affinities, allegiances, behaviors, decision-making, perceptions, motivations, and will, people serve as the fulcrum of the triangular lever of these three interrelated factors of influence, advantage, and leverage. It is people who provide friendly freedom of action, whether by facilitating friendly OAI, not opposing them, or opposing them ineffectively. It is people who make decisions; control geographic locations and infrastructure; and assist or resist US, Ally, and Partner efforts; and it is those same people whom we are trying to influence and whose affinity we are striving to *win*. Thus, renewed GPC is taking place in the arena of individual, group, organizational, and governmental affiliation, popular or otherwise—the *human dimension* of the international environment.

### A Cold War similarity

The new GPC with the PRC and RF shares at least some aspects in common with the Cold War, perhaps the most important among these being that the competing great powers are either already armed with nuclear weapons or striving to produce them. While essential to forestalling Soviet conquest of Europe and other regions, however, the military dimension of the Cold War was essentially (and fortunately) a blocking action for the US, its allies, and partners, and it was not terminally decisive. The Cold War was ultimately won (if it can really be said to have been) not in decisive military battles for the Fulda Gap, the North Atlantic, Southeast Asia, or the North Pacific, but instead through economic competition over oil production and prices and informational competition for the hearts and minds of the people of the Eastern Bloc. It was also won through a diplomatic competition that evolved into cooperation—engagement and rapprochement between President Reagan and Secretary Gorbachev—that coincided with a loss of confidence among Eastern Bloc peoples in their Communist, centrally-planned economic systems.

### Soft power for influencing relevant actors is crucial in great power competition

Manifestations of American and Western “soft power” such as these had enormous economic and informational dimensions. The Poles of the Solidarity movement protesting Communist rule and the East Germans tearing down the Berlin Wall represented popular sentiment among the peoples of the Eastern Bloc who rejected Soviet-style communism and wanted what the West offered. Estonians regularly drove to the north of the country to watch broadcasts of “Dallas” and “Knight Rider” leaking in from across the Gulf of Finland (Kilmi & Aarma, 2010). Apparently, many other people in Russia and other states of the Warsaw Pact such as Romania also developed an affinity for the relative abundance that the diverse peoples of the West enjoyed (Couldrey, 1989). Evidence of the difference in prosperity was visible on the Eastern side of the Iron Curtain through these and a variety of other channels, including personal visits of Soviet politicians, military officers, and academics—*very* relevant actors—to Western Europe and North America.<sup>6</sup> This eventual change of sentiment,

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<sup>6</sup> The author remembers a story told to him by a U.S. Navy instructor at CINCLANTFLT HQ in or around 1995. The U.S. Navy, perhaps the Atlantic Fleet Commander, had received a delegation of Soviet counterparts as part of a program of reciprocal high-level visits. Upon seeing the vast numbers of cars parked on the base (and presumably nearby bases), a high-ranking Soviet Admiral confided his staff’s conjecture that the Americans



however, came only through and after decades of application of national will and power by the Western allies and their partners across a range of OAI. Despite these governmental and intergovernmental efforts, however, perhaps the most decisive power that the West exercised during the Cold War was its societal soft power.

## Conclusion

Great Power Competition is continuous, extends over time, and is devoid of the sort of finite and clear end-states imagined in traditional military campaigns and plans. As the present multilateral GPC progresses, stability may not always be the desired goal that it has been under American hegemony when adversaries may hold an undesirable position of influence, advantage, or leverage. It is thus imperative that the DOD and USG properly characterize and understand the new strategic contest's multiple dimensions and apply a different or extended perspective on how to compete. The US, its allies, and its partners need to thoroughly understand the PRC and RF and the objectives that they are pursuing, paying due attention to theorists who may or may not yet be fully appreciated like Dugin. Fundamentally, like the Cold War, the present GPC will likely prove to be an ideological competition, pitting the legacy liberal, rules-based, Western model led by the US against the its authoritarian and far-less inclusive Chinese and Russian alternatives; and the path to winning this competition will ultimately be the through the hearts and minds of the people-the "relevant actors" of the world.

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must have brought and staged all of the cars in the United States to Norfolk to both deceive and impress them, making the base(s) sort of a nautical "Potemkin's village." His U.S. counterpart assured him that this wasn't the case but was met with continued incredulity; and so, he embarked upon a small "demonstration." He invited the Soviet delegation to accompany him down to the carrier piers at the main naval station, at the feet of which are vast parking lots holding thousands of cars, all of which must have been staged, according to the Soviets' theory. At precisely 1515 (or perhaps 1615), the signal for "knock off ships work" sounded. Shortly thereafter, perhaps ten thousand or more sailors streamed off the carriers and other ships, got into their cars, and drove away. The Soviet Admirals were supposedly, as the story went, astounded at the level of affluence this indicated in American society. The author has also heard of a similar story from his U.S. Army counterparts involving Soviet generals, their American counterparts, military trucking capacity, and agricultural harvest operations. The leader of the Soviet delegation, possibly the Chief of their General Staff or equivalent at the time, asked his American counterpart how many trucks he had to relinquish control over to support the fall harvest. Apparently, the Soviets devoted a great deal of dual-use military trucking capacity to the "battle of the harvest." This time, however, it was the American generals who were shocked to learn that such a requirement might even have to be levied upon the military, while the Soviets were shocked that the American side was under no such onus. Sadly, the author cannot attest to the accuracy or validity of either story but remembers them fondly as fables regarding the importance of influence in GPC, as well as a strong and diverse national economy.

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## Chapter 10. The Faults in Our Concepts: Competing Perspectives for Understanding the Nature of Our Security Challenges

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### Abstract

Stability is important for the coordination of any social activity, but focusing on stability instead of agility gives us a false sense of security, and points us towards models—both formal and intuitive—that do not sufficiently capture key insights about the organic realities of an increasingly connected world. Our reliance on models that were built for a more stable world is literally killing us with the arrival of COVID-19, an undeniable attention step that is highlighting conceptual and analytical shortcomings that we can no longer afford to ignore, even if that admission threatens the old institutions and cultures that give us our sense of self-identity. Rather than focusing on maintaining the old rules and balances of the game, we should be focusing on improving our ability to adapt to the new realities of complexity and seek to design new rules for competition that suit our strengths for innovation and adopting change. This will give liberal powers an advantage over authoritarian regimes who depend on delusions (and often illusions) of competence to hold power; applied tightly to complex social systems, their blanket rules will increasingly generate far more surprise than stability in the future. To do this, we must change how we educate and develop ourselves, gaining a greater appreciation for merits of intellectual humility; the importance of bias awareness and management; and the need for interdisciplinary, multi-model synthesis when framing and addressing complex social problems.

### Introduction

On the one hand, it seems more than a little ironic to publish a white paper on strategic stability during one of the most destabilizing events in human history. As we type, the worldwide arrival of the COVID-19 virus is challenging and changing the world order in ways we cannot yet adequately appreciate. On the other hand, this is the perfect time to test the validity and durability of some of the concepts presented here in real time and to gauge how well some of the frameworks presented can help us make sense of an otherwise bewildering set of rapid changes in the world order. This chapter will focus on the concepts that help us to orient ourselves as we seek to understand and proactively manage the tensions between continuity and change and examine how conceptual faults in our prevailing concepts may be limiting our ability to think and act strategically.

### To live is to cooperate and compete, and to do both is to model

Complementary mental models are the foundational basis of all human intercourse. Even before we are born, our brains build mental models, physically and chemically encoded in networks of neurons, that help us respond to external threats to our own survival (Sapolsky, 2005; Klein, 1998). As we grow and learn, the foundations of advanced thought are encoded in concepts or mental submodels of some part of the world that give us the ability to evolve and adapt from familiar to novel situations (Frankish, 2012, pp. 151-170). It is the capability to think in terms of concepts that current artificial intelligence currently lacks, making it weak and brittle outside of narrow, relatively well-structured applications. As we became increasingly sophisticated as a social species, we developed and formalized the concepts and models of language, art, stories, mathematics, and science, all of which

provided us with the foundations for new, increasingly rich modes of collaboration, social coordination, and the sharing of received knowledge from others who came before us. But at every level of life, the challenge remains the same—grappling with the implications of both continuity and change. We must constantly adapt ourselves and our groups to survive in the face of new external realities, while other groups, often in competition with us, are trying to do the same. But very often, we find a false sense of security in the way we did things in the past and avoid change even long after the need to change is obvious.

To coordinate our social activities, we have built multiple layers of concepts that combine our knowledge and efforts, helping to establish our individual and collective identities. At the foundations of our cognition, it is complementary (approximately shared, even if not identical) mental models and the shared activities they make possible that form the foundation of culture. But on the other side of that coin, our sense of identity only goes so far; our loyalties to others and to groups outside of the ones we belong to have limits (Gat, 2006). That drives competition both inside and between our various circles of identity and social association as we negotiate the essentials of the politics of mutual survival—who gets what, how much do they get, and who gets to be in charge? All of these activities depend on models, both tacit and explicit, to help us negotiate the challenges of social life, including both competition and conflict.

### The faults in our concepts, and thus our models

Perhaps the most powerful models we've built, outside of the incredibly complex and mostly unknowable ones inside our own heads, are the theoretical and mathematical models that we describe collectively as science. Science depends upon measurable consistencies in physical structure and flows to establish reliable knowledge that can then be harnessed for the purposes of prediction and purposeful action. Past societies captured their collected knowledge of this structure in physical models such as massive stone rings in the earth that marked the arrival of the seasons and carved calendars modeling the movement of the stars through the ancient sky. They crafted tools that physically embedded scientific concepts such as the abacus, sextant, compass, or slide ruler. Institutions also preserved and advanced knowledge, and over time, social cooperation has allowed for technical specialization, as other humans provided for their basic survival and the comfort needs of the specialists. And while humans have used technology and mathematics to make models of the physical world for as long as they have been leaving ruins for archaeologists to discover, our attempts to apply such rigorous methods to understanding human social intercourse are still remarkably nascent and often get us into trouble. Science deals well with stable structure and processes; humans tend to be far less predictable.

When modeling non-sentient physical phenomena, we can usually use consistencies of physical and chemical structure and the power of mathematics to approximate them in order to describe, predict, and sometimes control those phenomena in ways that serve our desired outcomes. This is what epidemiologists are trying to do by modeling the physical properties of the COVID-19 virus right now. At the heart of the Enlightenment was the idea that there were constant laws that described all actions in the physical universe, and once these laws were detected and captured in the formal descriptions of science and mathematics, humans could tame and control the physical world. This optimism drove us towards amazing scientific discoveries and new technologies that took humans across the oceans, under the seas, connected them wirelessly from across the globe, and even took us to other worlds outside of our own, giving us glimpses of our universe's past as we looked deeper and deeper into space. But all of those challenges, while amazingly complicated, were achievable due to the relatively consistent and unconscious structure of the physical and electromagnetic environments to which the technology we invented gave us access. That same mode of scientific

inquiry does not necessarily help us plumb the vagaries of the human heart and mind when we try to model social interactions. Studies of cooperation and competition often follow a similar path; even if modeling aggregate social behaviors at a higher level of abstraction is still useful for gaining insights about complex social systems, these models are not sufficiently granular to explain the true, largely unconscious psychological motivations that really drive human decision-making, and hence our resulting collective human behaviors, when decision outcomes are very sensitive to specific factors and contexts. Our brains are built more for safeguarding our sense of identity and belonging than maintaining scientific objectivity. Models that assume we are rational actors, or utilitarian thinkers, often miss the real base motivations that drive our decisions, which are often different than the rationalizations we invent to explain those decisions later. This bias towards choices that affirm our identities and reputations also applies to scientists themselves, as they seek to apply formal models they have developed to model social situations. While the tools themselves may be objective within the parameters of their design, the decisions about what questions and data to apply them to, and which to ignore, are always subjective.

Is there anything more human than assuming that our own views of the world are much more descriptive of reality than they actually are? The same biases in thought and preference that push us towards preferences for certain people, groups, and activities also help to guide the way we construct the mental models with which we interpret reality and what parts of reality we choose to examine or ignore. (Mlodinow, 2012; Eagleman, 2011). Variance in biases and preferences conveys an adaptive advantage to the groups who have many people with varying skills and interests, bringing to the collective many possible ways to cope with novel new situations as long as the group dynamics allow them to contribute (Page, 2017). When the ever-changing external world throws unexpected things at you, it is the diversity of the skills, resources, and coping mechanisms available to you and your groups that determines if you successfully adapt and flourish or attenuate and die.

But the flipside of having biases that are helpful in some situations is that they are usually accompanied by mental blind spots and ego (Dobelli, 2013). Recency bias and our innate need for validation and inclusion often fool us into believing that what any problem requires is what we're good at and what we are comfortable with—it is the classic “I have a hammer, this problem is obviously a nail” cognitive error. These blind spots become even more entrenched when a certain model of a certain viewpoint becomes part of one's personal or collective identity. To question the model becomes equivalent to questioning the social value of the person or group according to which they define their identity. True objectivity is identity and ego free, which does not pair well with being a functional human being in society. Just as we have seen many people try to fit the challenge of understanding the spread of the COVID-19 virus into the tools they have, we have also seen many people trying to fit our recent wars into theoretical paradigms with which they were comfortable. In both cases, not a single model or explanation has been satisfactory to capture the complexity of the phenomenon we were studying. This should make us question if the fundamental paradigms we used to build those frameworks and models were ever sufficient for the task in the first place.

Perhaps above all, people seek security within their social groups and are even willing to sacrifice their lives to secure their belonging in those groups in a future that they will not be there to see themselves. Whether one goes to the choice of Achilles to seek eternal fame over long life in *The Iliad* or one reads thousands of military narratives that all converge on the idea that the real reason soldiers fight and die is for the soldier next to them, the foundational psychological mechanism of identity is the same. We value the esteem of others; our minds are naturally primed to pick up on social cues that assure or threaten our place in the social pecking orders of the tribes that bring us our sense of ourselves, and socially aware people calibrate nearly everything they do to ensure that they are signaling their right to inclusion in the groups that they care about (Quartz, 2015). The



psychology of identity and the way people seek preservation of social status almost above all else are the most solid and consistent foundations for any social theory. It is these micro-motivations, not the macro-behaviors of the large group, which should serve as the most reliable basis for social modeling as the world becomes increasingly connected, meaning that broad theoretical abstractions, while admittedly easier to build, will increasingly obscure more than they explain. Human nature, and specifically status seeking within the context of group membership, is the most reliable basis for social predictions across cultures and eras.

Even before the world became as complicated and connected as it is today, no one person or group could ever capture all of the insights needed to understand how the world and society work. The flip sides of specialization, and the natural need for identity and secure status within specialized groups and tribes, are ego and hubris, the comforting self-delusion that one's own orientation to the world is both adequate and correct. We become "predictably irrational" when faced with realities that our preferred models are not adequate to explain reality, and we often ignore compelling evidence when it threatens our sense of position, status, and self-image (Areilly, 2010). When faced with the possibility that our favorite concepts and models are inadequate, we usually rationalize ways to preserve the old model, rather than to admit their shortcomings, a phenomenon described by Thomas Kuhn over fifty years ago in *The Structure of Scientific Revolutions* (Kuhn, 2012). At times, we vastly oversimplify our descriptions of our problems to make them match the tools we have, rather than to seek new tools that actually fit the challenge or to admit the inherent limits of our own science and knowledge. One of the ways we do this is to assume that stability = predictability = goodness, and therefore stability is the preferred answer to our collective security challenges. But are we fooling ourselves?

### The false promise of stability as a desired end

While it is true that some degree of systemic stability, or inner structure, is required for this dance of life to take place, it's also true that continuous adaptation is the key to survival in competitive biological environments at every level. At the level of biology, life itself is sustained by continuing, partially structured, stable conversions and flows of matter and energy, with the biological system regulating itself in the sweet spot between the uncontrolled disorder of chaos and with stasis equating to death in nearly every case (Capra, 1997). In many ways, this description can also be applied to societies at a higher level of scale; both describe organic networks with the right flows of positive and negative feedback to keep the system vibrant and alive. But it is also natural for the life and growth of one biological entity to sometimes require the destruction and death of others, and this will always result in both cooperation and conflict with other entities when resources are scarce or when status is threatened. Stability suits those who already have power and status under the current system, and they will seek to preserve the flows and rulesets that provide them power and status. Those who do not have power and status will seek to overthrow that system and create a new one that favors their status and desires. And if they cannot achieve the desired degrees of either stability or change in the social status quo through competition, there will eventually be conflict.

But even when competition can be managed without escalating to conflict, expecting stability will increasingly be unrealistic as the world gets increasingly connected, and thus further subject to large disruptions from small origins due to the tight coupling of social, informational, energy, and economic systems. The COVID-19 virus is perhaps the biggest attention step the modern world has yet experienced that should awaken us to the fundamental instability of modern social intercourse and the surprising results that often come with hidden degrees of connection and codependence, even if the possibility of a global pandemic should not have surprised us at all given the epidemiology we already had available. Surprises result when our ability to model the world is inadequate to capture

and describe the system effects we are experiencing and when our high degrees of connectivity without adequate “circuit breakers” create large effects from seemingly small inputs, such as a pandemic spreading across the world because of a virus passed from bats in a single Wuhan wet market. So, we do indeed seek to maintain a modicum of stability, that sweet spot between order and chaos that seems to serve the majority of the interests of general society. But our orientation is inadequate, and ignorant at worst, if we think we can preserve the current status quo for any significant length of time in the face of such high degrees of new connection and interdependence. There are too many forces working against stability in such tightly coupled natural and social systems to understand, gauge, and seek to control them all. Rather than emphasizing the preservation of a status quo that was built upon the foundations of a system that no longer exists, we should be seeking to maximize our adaptive fitness and our ability to create new advantages in the new emergent system that actually confronts us.

The COVID-19 epidemic will force us to finally admit some of the serious deficiencies in the way we are currently modeling and making sense of the world ecosystem, both in the formal and intuitive senses. Most of our theories of international relations, commerce, and grand strategy tend to be oriented from a “top down” perspective, discussing the policy of states, international organizations and institutions, and this has bled over into our analysis of this contagion. Most of our initial statistics used to make sense of the contagion emphasized nation state confirmed case and death totals and compared this outbreak to past outbreaks using statistics that generalized results over wide areas, making COVID seem like just a slightly worse case of the flu. But these methods neglected the virus’s indifference to our artificially drawn borders, and the “small world” properties of contagion of a virus that spread in ways that were highly contingent upon interactions that were not adequately being measured in those comparisons (Ray, 2020). As a result, at the time of writing, we are looking at a much larger swell in COVID-19 cases than even some seasoned epidemiologists predicted using the math that worked well enough for past viruses with different contagion profiles (Tufekci, 2020). Advocates of complex systems theory have warned us for decades that many of our problems cannot be adequately modeled with the assumptions behind either statistics or calculus and that we need new types of multivariable analysis to even understand what kinds of problems we are facing in highly connected systems (Taleb, 2007; Mlodinow, 2008; Levitin, 2016). This crisis will be an unwanted chance to test their theories with real data.

Even worse than the formal modeling challenges, the structure of this epidemic has confounded the intuitive mental models we use to make sense of the world. Most municipalities set arbitrary metrics—such as the number of confirmed COVID cases—with which to judge the tradeoffs between keeping institutions open to bolster the economy, similar to how one often waits for the first few drops of rain to fall before closing the windows. But with the delay between infections and indications (and often lack of indications), taking that approach meant that people who had not taken tight lockdown measures were actually swimming in an invisible flood of COVID-19 all around them for up to a week-and-a-half to two weeks after arrival before any significant actions were taken. Most of our intuitive mental models, and even formal models, were designed for much more linear problems, or at least exponential ones with relatively even distributions of outcomes. This does not match up with the contingency and tight coupling of highly complex systems such as the social system we built much faster than we were able to make sense of it.

While we do have epidemiological models that are taking some of these factors into account, we have no adequate models to assess what the steps needed to defeat the virus will do to the world economy, and how it will affect balances of power in the future. As we try to impose our semblance of order upon highly connected systems, we are going to increasingly run into the kinds of dilemmas similar to managing forests. As seen in the forests, the tighter the controls imposed, the less likely an

enduring, organic balance in the ecosystem results. Even worse, they are more vulnerable to contagion (Scott, 1998, pp. 11-52). There may be some degree of intervention you can bring to alleviate some of the pressure—like the controlled burn that minimizes the impact of a much bigger forest fire later—but the more unknowable the system is, the more difficult it will be to manage them by positive effort. The superior strategy is to approach these kinds of problems with analytical humility and to assemble large teams to help you understand what you can usefully control, as well as how to deal with what you cannot, given the organic physical and social realities of the situation.

What this crisis has made clear is the danger of becoming too tightly coupled to an authoritarian regime more worried about its own power and prestige than adequately dealing with the systemic effects of a health crisis. While it is still far too soon to measure the true cause and effects of the virus, early indications show that the Chinese Communist Party's (CCP's) active suppression of early warnings of the virus, and its inability to admit the true nature and depth of the problem in Wuhan, allowed for the spread of this deadly virus to every corner of the travelled world. In addition, the CCP's influence over the World Health Organization, which echoed China's erroneous reporting on the initial threat of the virus and praised its response, also appears to have played a part in preventing other countries from realizing the true threat of the crisis until it was far too late to prevent a world pandemic. It has become increasingly clear that the forces of globalization would not temper the CCP's thirst for political and economic power and control, and that their system of control—blanket rules issued by the elites at the top, enforced with state control of ubiquitous communications and surveillance—does not only create fragility only in China, but also across the entire system that depends on “just in time” deliveries of goods and services to achieve their economies of scale. In other words, that system only works when stability rules, but it generates instability by its own design.

The West is currently stuck in similar flawed, hubris-laden concepts when it comes to the design of its military campaigns in the face of complex systems. Not even the most powerful military in the world can impose order from the top when the bottom-up social organics cannot support it, or when the contagion preventing stability is coming from across borders that you cannot cross without causing an even bigger contagion. Our interventions in places like Vietnam, Afghanistan, and Iraq with the intent of introducing Western style representative governments and market economies might be compared metaphorically to trying to sustain tropical fish in a mountain lake; you can do it so long as you pump in the external energy and resources at great costs to control the temperature, the alkalinity, the saltiness, the pH, etc. But once you remove any one of those artificially provided pieces, the stability of the entire system crumbles. The campaign against ISIS may have tacitly understood what T.E. Lawrence tried to convey in a quote that ironically was once displayed in the courtyard of the NATO Regional Command South headquarters in Kandahar, “Do not try to do too much with your own hands. Better the Arabs do it tolerably than that you do it perfectly. It is their war, and you are to help them, not to win it for them. Actually, also, under the very odd conditions of Arabia, your practical work will not be as good as, perhaps, you think it is” (Lawrence, 1917).

### Modeling at the heart of strategy

Modeling is also at the heart of strategy, which for the purposes of this paper we will call a deliberate effort to either threaten or use intentional physical violence to gain competitive advantage in complex social situations. Strategists must account for the sources of both continuity and change in their strategic estimates, and typically the foundation of strategic theory is the idea that despite constant change in the details of human conflict (called the changing character of war), there is at the core of human experience a continuity that transcends era and cultures, the constant nature of war. Entire libraries of books have been written about what should be included in each category, many of them focusing on changes in technology and tactics, proclaiming that one or the other, or the

combination of the two, has been so significant that changes in degree have equaled changes in kind that presage a change in the fundamental nature of war (Milevski, 2016; Mewett, 2014). But these proclamations are neither consistent nor helpful, and they are usually deployed to diffuse historical criticism of partially constructed theories that neglect what is actually consistent across cultures and eras and what is captured in the existing body of strategic studies literature.

The most useful definitions of the nature of war are tied to the historically consistent human psychological motivations behind combat, described in Thucydides' elegant shorthand as fear, honor, and interest (Thucydides, 1998). Crucial to most modern definitions of strategy and war is the Clausewitzian idea that there should be deliberate political intent behind the use of physical force during acts of war, separating war as an activity from opportunistic vandalism, informational or economic sabotage, or random mayhem (Clausewitz, 1989). Defining the nature of war in this way—as tied to physical violence for deliberately sought political ends—helps us to talk about the differences between competition and conflict and provides a useful way to model the differences between them, the severity of actions, and the significance of political intentions normally associated with each. Character of war issues—force presentation, tactics, logistics, etc.—require modeling as well in order to manage the tactical and operational challenges. But none of these things help you determine if you're likely to get the psychological decision you're really seeking, in which the loser decides that the war is over to forego the application of threatened continued violence, as Thomas Schelling once described it (Schelling, 1966).

Both science and strategy are inherently team activities; no single person or group has all of the insights necessary to detail specificity of all relevant problems and the ability to sustain a global view of how each problem is tied to another. Science and strategy under conditions of complexity are more about connected multidisciplinary teams than clearly articulated plans with clear timelines, specifically stated measures of performance, and measures of effectiveness. While the top-down approaches of traditional international relations theory and economics will always have explanatory utility, they are insufficient to describe the kinds of tight, local connections that drive the emergent results in highly complex social systems. We need to put greater emphasis on the bottom-up approaches that are more closely aligned with the bottom-up emergence of ecosystems, the collective “Macrobehaviors” that emerge from the combined influence of multiple individual “Micromotives” that we describe in the aggregate as sustainable social outcomes (Schelling, 2006). In the case of strategic success, those micromotives exist in the minds of people seeking to secure their social status, and we must constantly ask, “Are the aims we are setting for ourselves realistic given the social organics that we actually have to work with in this situation—am I trying to put a tropical fish in a mountain lake?”

### Embracing change and multi model approaches

We will always need a certain degree of stability for social intercourse, but our attention should be more properly focused upon agility, improving our ability to anticipate and roll with the changes rather than to chase an unsustainable, backwards-looking status quo. Continuing strategic advantage is not about mastering the old rules of the game and trying to play that game indefinitely, but rather continuously seeking to influence rules of the emerging game in ways that favor your strengths and the achievement of your desired outcomes (Sinek, 2019). This requires concepts that better capture the modern organic realities of connection than our past approximations, as well as greater awareness of the cognitive biases that often make us really bad at tracing or anticipating systemic effects. The most significant steps we could take to prepare for this change in mindset would be to:

1. Encourage the study of complex systems, network theory, and basic familiarity with statistical analysis and formal mathematical modeling methods as part of basic public and military education so that we can better match the appropriate models, mindsets, and responses to complicated and complex problems without mistaking one for the other.
2. Encourage awareness of unconscious cognitive biases related to personal and collective identity and how their influence impacts how we form intuitive mental models and apply the tools of science and analytics.
3. Encourage the development and institute human capital protections for “game designers,” those people who leave their tactical tribes of origin early to build and lead multidisciplinary teams consisting of members from various tribes and silos of identity and who are skilled in synthesizing strategic assessments drawn from various specialized models and perspectives.

Taking these steps would help us to better harness our collective skills and talents and bring them to bear on challenges that above all require a greater degree of intellectual humility and collaboration than we may have required in the past. The present and future reality is that in a highly connected world, almost every problem is an interdisciplinary problem. We’ll always need specialized concepts and models for the specific insights they bring, but we also need new concepts better oriented to the realities of connection and change that will help us place specialized insights into a more comprehensive, systemic view of the whole. With a greater awareness of how bottom-up interactions are the real generators of stability, we will likely choose better interventions, and build better safeguards against contagions of all kinds.

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## Chapter 11. New Thinking as a Mission Requirement

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### Abstract

We are, by now, well aware of the rapid changes in the global system and the national security challenges that have emerged as a result. Since the early 1990s, we have seen a return to multipolarity, unforeseen diffusions and transitions of power, and the appearance of novel threats to US interests. If we take a Kuhnian view of the advancement of knowledge—that sophisticated understanding is accumulated by way of significant, revolutionary paradigm shifts often associated with noted changes in the nature of the subject—changes in the international system would demand reevaluation of how we think about the global security environment and defense of US interests in it. If there has been a marked difference in the nature of the world relative to what was seen when US national security was last focused on “great power competition,” the question is whether a new paradigm—a new way of thinking—is now a mission requirement.

### The “Old” Paradigm

A paradigm is a conceptual lens that consists of our theories of reality, our assumptions, our standards of right and wrong, and what we identify as good and bad. It represents a way of thinking about and interpreting our observations of the world. By shaping our perceptions, paradigms can lead to distortions of reality. The danger is that we may perceive threats that are not there or miss the ones that are because we ignore or misinterpret information that does not conform with the paradigm.

The dominant paradigm in US security thinking and policy during the Cold War can be characterized as rationalist, US-centric, state-centric, political realist/neo-realist, and liberalist. It is rationalist in the assumption that one state’s behavior can be explained sufficiently to allow another to make estimations about how that state would behave in the future. In practice, the Cold War paradigm is both state- and US-centric, reflecting the (perhaps subconscious) beliefs that the most important global interactions happen between major powers or blocs and that the United States is central to major world events. It fits firmly within the *political realist* and *neo-realist* schools of thought, in which an anarchic international system generates security dilemmas that impel states to compete for greater defensive or coercive power than every other state. That is, threat and power maximization are the ultimate motivators of state behavior. The dominant Cold War paradigm is also liberalist, as it clearly reflects an American tendency to see the world as divided between free people living under (Western) democratic regimes and less fortunate “unfree” people living under authoritarian rule. Political and economic stability are retained by voluntary adherence to the rule of law—in this case, a set of US-led, Western institutions and structures that established norms of acceptable state behavior. As an outgrowth of this, ideologies in opposition to these rules are seen as the sources of serious political conflict.

### Some Assumptions Have Relaxed, but Do Not Yet Represent a Post-Cold War Paradigm

The 2017 National Security Strategy (NSS) was the first since the 9/11 attacks that did not include counter-terrorism as a significant defense priority. Instead, it turned the United States’ strategic



attention to a turbulent international environment propelled by near-peers threatening US global interests, not by projecting military power in conventional ways, but by employing new types of conflict in a “competitive” zone—a rapidly expanding set of activities designed to remain below the level of armed conflict. Together, the 2017 NSS and 2018 National Defense Strategy (NDS) broadened the binary conceptualization of the operational environment to one in which peace and warfare are the endpoints of a continuum of competitive activities that manifest in constantly changing ways.

How do these documents compare to the elements of the Cold War paradigm outlined above? First, the thinking these documents project remains rationalist and US-centric. Indeed, while there is evidence that strict US-centrism relaxed somewhat during the previous Administration, this has been eclipsed by the current Administration’s preference for unilateral solutions to many issues around the world. The general state-centrism of Cold War thinking was challenged by 20+ years of counter-terror and counter-insurgency operations, though the renewed refocus on US competition with China and Russia suggests a continued presumption that critical global interactions happen between major powers or blocs, regardless of continued concern with violent non-state actors. US strategic thinking today also remains unabashedly liberalist. This is despite the fact that, in practice, since the 1990s, the United States has participated in interstate conflict less frequently than in what would otherwise be seen as civil wars or insurrections, challenging US interpretations of Cold War-legacy international norms, treaties, and laws. The dissonance between our assumptions and the behavior of the United States and other major states may explain the difficulty that the United States has had in devising appropriate responses to “gray zone” challenges to these norms (e.g., to Chinese island building in the South China Sea). Of course, other actors do not necessarily have the same restrictions, which may be one of the reasons that Chinese and Russian hybrid warfare seem so insidious to those in the West. US defense thinking also remains clearly founded in *neo-realist* political thought, even as the common understanding of the nature of power has broadened. Coercive military power may still be viewed in the defense community as the ultimate influencer, but there is also an appreciation that the tools at the disposal of the Department of Defense are not relevant to all security challenges that the United States is likely to face.

The most substantial alteration to Cold War thinking represented in the NSS, NDS, and other related documents is that ideological differences are no longer identified as the main sources of serious interstate conflict and threats to US interests. Instead, the competitiveness inherent in the environment, particularly among major power competitors, generates threats and conflict. That is, conflict is presumed to arise from the nature of the global system—one in which actors might be at peace, in competition, or engaged in warfare at different times or simultaneously.

## Competition as a Security Concept

What does the notion of a competitive zone imply for international affairs and US policy and objectives? This is a question that likely will require decades of analysis, real world experimentation, and refinement to resolve. However, beginning the effort to come to a common understanding of central concepts is a step towards new thinking.

### “We All Know What Competition Means”

Because competition appears in nearly all aspects of life, most people have at least an intuitive understanding of what “competition” entails. However, possessing a generalized understanding of the concept is different than specifying it in a way that is commonly understood and explicit enough to support analysis and planning. This is evidenced by a series of recent remarks made by senior US defense officials. Within these remarks, we can identify (at least) five different uses of “competition”

in the context of international affairs:<sup>7</sup> 1) a state of being at the midpoint of war and peace,<sup>8</sup> 2) a US strategy,<sup>9</sup> 3) a theory of the international system or a worldview,<sup>10</sup> 4) a strategy comprised of unprincipled activities used by others to diminish US power (i.e., gray zone activities),<sup>11</sup> and 5) a term used to describe a power relationship.<sup>12</sup> These uses are not mutually exclusive, nor are they synonymous. They reflect different conceptual bases that, when applied to other settings and domains, may be taken to suggest different priorities and operations than intended. Even scholars of international relations—the discipline that studies how states interact—have failed to adequately explore the concept of competition among states but have assumed the fact of competition in order to focus on what it produces (e.g., interstate war, escalation).<sup>13</sup> Understanding patterns of behavior that emerge in a competitive environment and studying the outcomes that such an environment produces are not the same thing.

## Suggestions for (New) Thinking About Competition as a State of Being

Competition, like cooperation and conflict, refers to the tenor of the relationships between the interests of two or more actors.

The currency of international relations is national interest, meaning that the real sources of what we experience as peace, tensions, aggression, or war are not the relationships between actors themselves, but rather the relationships between those actors' interests.<sup>14</sup> What these relationships are (versus what they produce) can then be described along a spectrum of increasing opposition, starting from zero, in which specific actor interests are complementary or “cooperative,” in competition, or in conflict as the degree of opposition increases. Warfare may occur when interests are in direct conflict, but this is not a surety.

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<sup>7</sup> Interestingly, between January 2017 and January 2020, the White House very rarely uses the words “competitive,” “compete,” or “competition” in public statements on national security. The most frequent use of the terms is in the context of “unfair” economic competition.

<sup>8</sup> For example, see Secretary of Defense Mark Esper’s use of the phrase “complex competitive environment” in his remarks to the House Armed Services Committee in December 2019 to describe the operational environment in which the United States found itself.

<sup>9</sup> For example, in “Time to Update Our Strategic Vision and Goals,” written by Secretary of the Navy Richard Spencer in November 2019, he calls for the US to solidify a “competitive advantage” versus China and Russia.

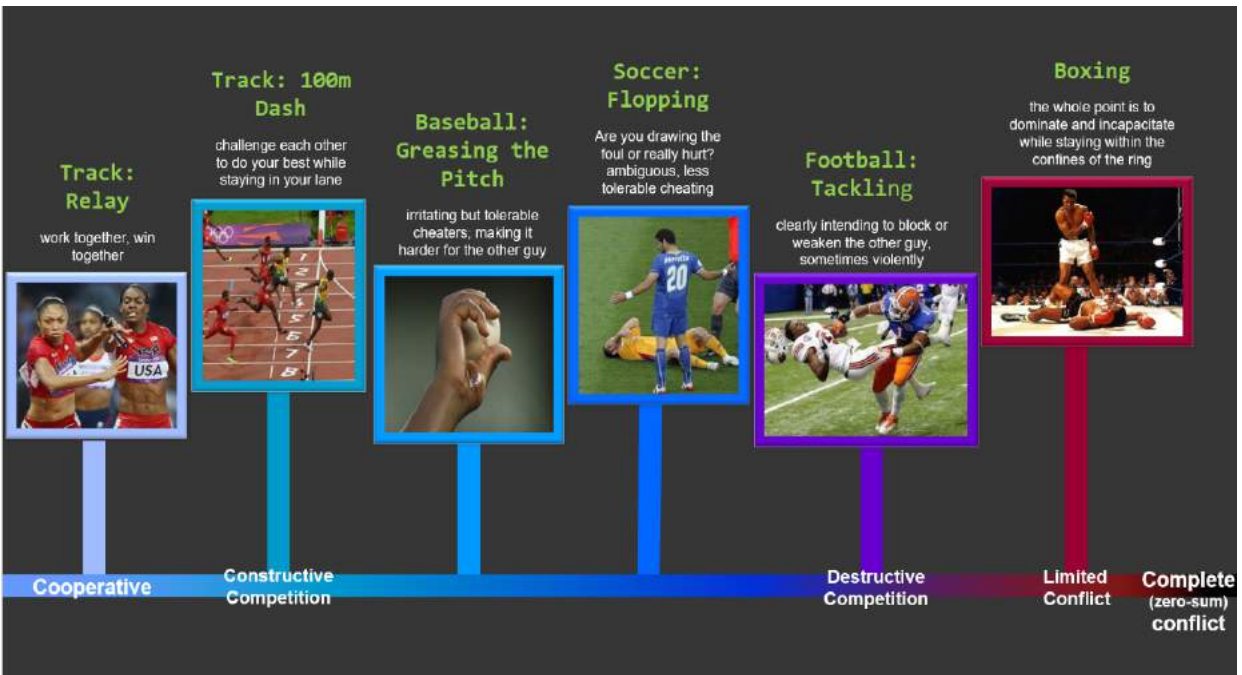
<sup>10</sup> The 2017 National Security Strategy notes that “competitions” happen in a “competitive world.”

<sup>11</sup> See, for example, remarks by Secretary of Defense Jim Mattis regarding Chinese activities in the South China Sea at the International Institute for Strategic Studies (IISS) Shangri-La Dialogue in June 2018.

<sup>12</sup> National Security Advisor Robert O’Brien discussed China and Russia as “peer competitors” in a public statement to the Atlantic Future Forum on November 21, 2019.

<sup>13</sup> The 2018 Joint Concept for Integrated Campaigning (JCIC) and Joint Doctrine Note 1-19: Competition Continuum (JDN 1-19) extended the ideas of the NDS to represent the continuum from cooperation to conflict.

<sup>14</sup> The interests of any group (families, VEOs, governments) can be binned into five categories: 1) domestic interests, which, for states, is typically defined in terms of preserving regime stability and/or constituent support; 2) economic interests, generally defined as the means to achieve economic growth and prosperity; 3) prestige, defined in terms of the capacity to influence others; 4) security, which, for states, is generally defined in terms of defense or national defense and, for smaller groups, in terms of safety; and 5) identity interests based in culture, values, honor, history, sectarianism, and ethnic nationalism.



**Figure 4.** Obligatory sports analogies to explain the different positions on the Operational Continuum

A further implication is that identifying a relationship as cooperative, competitive, or conflictual can only be done in terms of a specific issue. As all actors have multiple interests, an important feature of this view is that the United States can simultaneously have cooperative and conflictual interests with the same actor. For example, the United States has had conflicting trade interests with China at the same time that the two have shared an interest in maintaining some degree of stability in the Asia-Pacific. The point is, the United States and another actor may be both rivals and partners at the same time.

**Compatibility of interests is what differentiates cooperation from competition and conflict.** Having determined the common currency of cooperation, competition, and conflict (i.e., relationships between actors' interests), we can now discuss the distinctions between these concepts. Cooperation is distinguished from competition by the degree of disparity actors perceive between the national interests that they perceive to be at stake on an issue. Cooperative or non-oppositional relationships between actors' interests encourage working together toward a particular, mutually preferred outcome. Work together, win together. Cooperation is a state of being in which actors believe they have identical or complementary interests. Just as important as articulating the differences between cooperation, competition, and conflict is appreciating that different gradations of competition have different implications for US policy and operations.

**There is more than one type of competition.**

Once there is some degree of opposition between actors' interests, the threshold between cooperative zones and competitive zones has been passed. Immediately adjacent to cooperative interest relationships is constructive competition. Constructive competition is a state in which actors see their interests on a particular issue to be in some degree of non-threatening, non-damaging opposition. The activities that manifest from constructive competition may not be preferred, but they are tolerable and can even generate innovation and efficiencies as competitors challenge each other.

In fact, it is the ideal mode in a dynamic global system as it stimulates productivity and movement, the discovery of synergies, and opportunities for cooperation.<sup>15</sup>

As the degree of opposition between actors' interests intensifies, the relationship moves from a zone of constructive competition to a zone of *destructive competition*, a state in which actors' interests are opposed in ways that are threatening or potentially threatening.<sup>16</sup> Competition that is destructive, as the name implies, is not tolerable. Tactics consistent with destructive competition can range in severity from international rules violations (e.g., stealing intellectual property) to actions seen as sufficiently harmful that necessitate displays of armed force or other actions to deter escalation to direct military confrontation.

While destructive competition and conflict are close cousins and the terms are sometimes used interchangeably, military planners and policy makers concerned with the proportionality of US response options need a more precise understanding of the distinctions between them than currently exist. Competition generally does not involve violence or coercive actions but occurs in accordance with established international rules and norms.<sup>17</sup> As the perceived disparity between actors' preferences becomes more acute, however, the likelihood of directly aggressive behavior increases as well.<sup>18</sup> For these reasons, one actor's use of coercive force against another can serve analysts and researchers as a useful differentiator between destructive competition and violent conflict; it is observable and thus measurable.<sup>19</sup>

The third variety of competition, *weak competition*, includes situations in which competitors impede an actor's ability to obtain its objectives by outperforming that actor, for example, by developing new and better ways to produce, gain, or control information. Although it may be tempting to do so, an opponent cannot be blamed for outcompeting the United States. If the real obstacle to achieving US desired outcomes and objectives is our own behavior (e.g., lack of resolve, failure to plan and prepare for the future, bureaucratic inertia, imposition of excessive costs in red-tape and time on its businesses), the true challenge rests with the United States, not its competitor. Concepts of defense and deterrence are by definition strategic and, therefore, not relevant when the source of a state's inability to retain or expand its power is itself. Moreover, actions taken to inhibit or deter an outperforming opponent mistake the source of the problem, and thus ensure that the remedial actions will not dampen the perceived challenge or threat.

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<sup>15</sup> Theoretically, constructive competition is also the engine of growth in a capitalist economy.

<sup>16</sup> This definition is similar but broader than is implied by Chairman of the Joint Chiefs of Staff (CJCS) General Joseph Dunford's use of the term "adversarial competition" in "The Joint Force—Maintaining a Competitive Advantage" (published Jan 5, 2017 at <https://medium.com/@thejointstaff/the-joint-force-maintaining-a-competitive-advantage-d445012bf4e9>).

<sup>17</sup> See Merriam-Webster online dictionary. Retrieved from <https://www.merriam-webster.com/dictionary/conflict>.

<sup>18</sup> See Department of Peace and Conflict Research (PCR) Dataset definitions Uppsala University. Retrieved from <https://pcr.uu.se/research/ucdp/definitions/>.

<sup>19</sup> Note that this posits a more definitive point between competition below armed conflict (destructive competition) and armed conflict than does the JDN 1-19, which defines competition below armed conflict as "situations in which joint forces take actions outside of armed conflict against a strategic actor in pursuit of policy objectives. These actions are typically nonviolent and conducted under greater legal or policy constraints than in armed conflict but can include violent action by the joint force or sponsorship of surrogates or proxies."

## A Final Thought

An important implication of defining competition in terms of the relationships between the specific interests of two or more actors is that, if it ever was, it certainly is no longer the case that the terms “adversary” and “friend” are static. In this sense, when we speak of China as a US competitor, what we are actually saying is that one or more Chinese interests are in conflict with one or more US interests. Moreover, the habit of using “cooperative,” “competitive,” and “conflictual” as inclusive descriptions of the US’s relationship with another state, rather than references to relationships between particular interests, introduces hidden assumptions and narrows the range of what seem to be reasonable explanations for the behaviors of other states. This vestige of an “old” paradigm, in turn, conditions which actions look to be the optimum US response. The NSS and NDS suggest a continuum of relationships among state interests from cooperation, to competition, to conflict that may vary by issue and context. In short, thinking of international actors only as perpetual “adversaries” or “friends” (on all issues) prematurely constrains and can undermine the effectiveness of US options.

If relaxed, is the basic Cold War paradigm sufficient to guide policy makers and planners to promote US interests into the coming decades? While the national security challenges that confront US strategists and decision makers today may appear similar to those faced in the past, it is important to recognize that they can only be, at most, limited variants of the past. As a result, analogizing to them, or seeking to replay Cold War-like thinking and “rebuild capabilities that we had during the Cold War,” will inevitably position US strategic thinking where it was more than 30 years ago—before smartphones, before 9/11, and before China owned more US debt than Japan, among other changes. Continuing to pursue honest evaluation of defense concepts, definitions, and embedded assumptions will enable defense thinkers to seize the opportunity to innovate and move ahead with concepts and paradigms specifically designed to address new and emerging security challenges in the most effective ways possible. In other words, new thinking is a mission requirement

## Chapter 12. The New Concept in Practice: What Does This All Mean for the US?

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### Contribution

As the authors of this white paper have outlined in the previous chapters, while strategic deterrence principles continue to serve effectively as a means to prevent nuclear attacks on the United States from peer competitors, competition among international actors ranging from great powers to VEOs presents new and vexing challenges to US and partner vital interests. Competition is now far from black and white as US competitors find that it is in their interests to cooperate in many areas while they compete in others.

The US, its partners, and its competitors employ Competition-Cooperation strategies to maintain a level of military stability to avoid direct military conflict even as they seek to destabilize the balance of power in other areas favorable to national or organizational objectives. Rather than a binary decision associated with traditional deterrence, a competitor (potential adversary) considers the cost and benefits of a range of options. Recent history makes it clear that a would-be adversary's behavioral decision calculus focuses on its perception of not only the costs and benefits of taking an action but the costs and benefits of not taking an action.

For an adversary, the “no action” option might be unacceptable due to the decision-maker's assessment of how domestic, internal organization, or third-party actors might react to this lack of action. It is useful to acknowledge that the United States and its partners face similar decision challenges relative to their need to satisfy domestic and third-party perspectives. Recognizing this likely concern on the part of the competitor, the US and its partners can influence the competitor (potential adversary) to implement a more acceptable course of action by enabling a range of options that provides the competitor's decision-makers the ability to balance the costs and benefits of the competitor's actions from a US and partner perspective with the costs and benefits from its own domestic, internal organizations and third-party perspectives. As an example, Europe, and to a lesser extent the United States, did not recognize the implications on Russian politics that resulted from the ousting of the elected Ukrainian President, Viktor Yanukovich, and the overthrow of the Ukrainian Government. Russia had tolerated Ukrainian government efforts to attain a closer relationship with the European Union (EU) but was concerned that a comprehensive trade agreement would negatively impact Ukraine's trade agreements with Russia. The downfall of the Ukrainian President left Russia with few options to address the effective loss of control over territory which included a Russian military base, and so Putin was left with a hybrid warfare invasion as the only acceptable course of action.

We learned from recent gray zone studies that because the intent of gray zone activities is ambiguous, such activities are difficult to deter. As a result, these studies suggested alternative approaches to counter, or if possible, prevent, activities that could ultimately lead to an unacceptable effect—political, economic, social, or military—which would then potentially drive an escalatory response on the part of the “offended” actor. As an example, the US co-existed with the Soviet Union for years, but the two actors cooperated to avoid nuclear war while competing with one another on many fronts—politically, socially, economically, and, through surrogates, militarily—while avoiding effects



that would drive an unacceptable response from the United States. The emerging approach shifts from a “binary” peace-war concept to a competition-cooperation continuum that can be applied to other activities that most US competitors would agree are unacceptable. As an example, to avoid bringing Russia into the Kosovo Conflict, or to drive Milosevich to a drastic self-preservation course of action, Europe and the US made it clear that NATO had no intention to invade Serbia and cooperated with Russia to achieve a diplomatic solution which ended Serbia’s genocide against the Albanians in Kosovo, which was actually popular among the population.

Recent history suggests that the US seeks opportunities for cooperation to maintain a military, political, and economic balance even as it competes to advance less critical goals and objectives. The focus has shifted to promote the development of mutually beneficial choices to encourage cooperation among competitors and thus enable multi-actor cost-benefit maximization. This clearly requires some understanding of a potential competitor’s goals and objectives, both domestically and externally, and an understanding of how actions to advance US goals and objectives might threaten those of US competitors (and vice versa). Of course, this doesn’t preclude conflict if a competitor is unwilling to cooperate, but it also suggests the value of providing off-ramps for an un-cooperative competitor to consider as a competitive situation escalates from a disruption of its relationship with the US into a crisis.

Just as Cold War deterrence was enabled by communication and negotiation, application of competition-coordination principles to avoid direct military conflict requires communication and negotiation with even greater granularity than in the past, particularly given the “shades of gray” in which these negotiations are likely to be conducted. The paper argues that success in planning and executing a new strategy for national security in a multi-actor Competition-Cooperation environment requires that the US and its partners address the national security problem from a number of perspectives.

The first is the existence of a wide array of potential threats and opportunities: The US faces an array of state and non-state actors, whose political, cultural, ideological, and religious values and goals often differ from our own and those of our partners. Increased nuance in how we view other actors in the international system will certainly complicate efforts to understand and influence their perceptions, but it can also suggest previously unused sources of leverage and influence. As it seeks to deter hostile action, the US must take into account the potential for mutual miscalculation and deal with that in forging strategies, plans, and operations.

Another is the existence of an asymmetry of stakes versus an asymmetry of power. Some actors may perceive their stake in the outcome of a crisis or the opportunity to exploit a stability disturbance to be great enough to act regardless of US military superiority. The differential between stakes in the outcome can undermine the effectiveness of a Competition-Cooperation strategy, even extending to traditional approaches to deterrence. Nuclear deterrence among great powers benefits from a clear symmetry of stakes and a relatively symmetric balance of power. The US must provide the means to overcome imbalances of stake and power to bolster the credibility of US Competition-Cooperation strategy and actions.

The US economy and military forces enjoy and employ significant technological superiority that provides a competitive edge relative to most competitors, but this also creates vulnerabilities that adversaries can exploit. Planners must address US vulnerabilities, identify ways of eliminating them where feasible, and compensate for them when necessary.



Emerging technologies have become new threats to US and partner interests. Social media, information operations, cyber-physical weapons, competition in space, directed energy weapons, hypersonic weapons, and other threats offer the promise of great tactical advantage from an offensive perspective but tremendous threats from a defensive viewpoint.

US and partner competition strategies are constrained by western legal and ethical frameworks which do not limit the actions of their competitors. Actors challenging western values and principles conduct operations designed to create ambiguity and confuse public opinion, paralyze political decision-making, subvert legal frameworks, and avoid crossing the threshold of military response. Many US competitors employ predatory economic and business practices: China and Russia, in particular, exploit western free market economies and open societies to achieve national objectives through a combination of economic, legal, social, and military means. There have been vast advancements in social marketing in the business world with insights from organizational psychology that can have bearing on national security thinking. The US can apply concepts from social marketing in the business world to gain new insights into how it competes against nations and organizations with different social mores. It can also apply cross-cultural cognitive science to better understand the differences in how its competitors think about competition, deterrence, compellence, and coercion.

The emerging concept for operations in the competition continuum can be viewed as a merging of principles from the Joint Concept for Integrated Campaigning (JCIC), which considers the entire “cooperation-competition-conflict” continuum with the principles outlined in the Deterrence Operations Joint Operating Concept (DO-JOC). Deterrence and escalation control have traditionally focused on averting high-end conflict, specifically avoidance of a nuclear exchange, but over time it has broadened to include nuclear assurance and escalation control. The emerging, but not yet documented, approach to national security expands on the “encourage restraint” aspect of deterrence (as described in the DO-JOC) to one that promotes development of a range of choices along the cooperation-competition continuum for the purpose of avoiding military, economic, political, or other unacceptable forms of competition that would undermine critical objectives of one or more involved parties and possibly escalate to conflict adverse to US or partner national interests.

## Observations and Conclusion

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### Abstract

To what extent are strategic stability models developed during the bipolar Cold War era still relevant? If not, where do they need a refresh? Do deterrence models accurately reflect our dynamic and increasingly complex security environment, or do we need a new security concept that evolves legacy thinking to accommodate twenty-first century realities? The COVID-19 pandemic vividly illustrates how thoroughly entwined each nation's fate is with others. Simply put, we live in an increasingly complicated, dynamic, and interconnected world. This paper compares the relatively simplistic, binary threat environment of the nuclear era with today's multifaceted threat vectors in the additional domains of cyber, space, and influence or information. Unlike in the Cold War, when we had a commonly understood framework for warfare governed by international treaties and law, we lack a shared international understanding for acceptable conduct in conflict and competition, especially for the new operating domains. Burgeoning capabilities in cyber offer ambiguity and anonymity, not to mention an ability to touch the US directly, immediately, and continuously. Also, we may no longer be able to assume the American military's continued technological supremacy, as both global rivals and increasingly capable commercial entities race to develop and apply new technologies. The paper concludes that legacy strategic stability models will prove inadequate when applied to the twenty-first century world. It ends with several recommendations for developing a new operating model or paradigm to better reflect today's environment.

### Introduction

To what extent are the strategic stability models developed during the bipolar Cold War era still relevant? If not, where do they need a refresh? Do deterrence models accurately reflect our dynamic and increasingly complex security environment, or do we need a new security concept that evolves legacy thinking to accommodate twenty-first century realities?

My daughter contracted the coronavirus in March. She recovered after six weeks, but I marvel at the fact that a microbe can travel in three months, one person at a time, from a market in Wuhan, China to a healthy young woman in North Carolina. Epidemics have decimated populations for millennia, moving across or between continents at the speed of foot travel, horses, or sailing vessels, but COVID-19 sped around the globe at a pace that is unprecedented, vividly demonstrating the deeply tangled and near-instantaneous connections that shape the modern world.

The challenges to our pandemic response illustrate how thoroughly entwined each nation's fate is with others, profoundly illuminating both the interconnectedness of our economies and the fragility of global supply chains. Pharmaceuticals come from China and India. Medical equipment is manufactured in Mexico. Closing borders to halt disease prevents migrant labor from harvesting crops. Widespread collaboration in the race for a vaccine stands in sharp contrast to fierce competition for medical supplies and protective gear. In balancing health and safety with commerce and the economy, there is no simple tradeoff between saving lives and losing jobs.

We live in an increasingly complicated, dynamic, and interconnected world. Surely our legacy strategic stability models, evolved from nuclear deterrence concepts of the twentieth century, will prove inadequate in the face of such complexity.

## The Algebra of Legacy Stability Models

When I think of the Cold War-era strategic stability model, I envision a teeter totter or seesaw, a long narrow plank balancing on a single point or fulcrum, with US power on one side and Soviet power on the other. The model is not static, but dynamic. Elements of power shrink and grow on either side over time, disturbing the plank's balance and setting it in motion, but the device remains in a general state of equilibrium, with neither side ever touching the ground, though perhaps they come dangerously close in times of heightened tension, such as the Cuban Missile Crisis.

The two superpowers have a generally shared understanding of this operating system, with nuclear deterrence at its core. Underpinned by the Mutually Assured Destruction concept, mechanisms like hotlines, communication channels, and inspection treaties keep the system in balance. Rules of conflict are governed by treaties and international law (e.g. the Geneva Convention, the Law of Armed Conflict, the Intermediate-Range Nuclear Forces [INF] treaty and Strategic Arms Reduction Treaty [START]), and other agreements. Competition between the two global superpowers is largely peripheral, confined primarily to proxy wars and indirect action, providing a level of trust and confidence that helps mitigate ambiguity.

This model operates primarily in three dimensions or domains—air, sea, and land—and many of its elements are binary. There are two primary powers, the US and the USSR. The state of play is primarily binary as well in that the two nations can endure a cold, albeit tense, peace or a hot and destructive war. They are either directly in conflict or they are not. Finally, the decision to employ nuclear weapons is the ultimate binary choice. One could probably describe some version of this model algebraically, maybe using non-linear equations, but with algebra, nonetheless.

## Calculus and Complexity Theory to Describe the Modern Environment

Algebra worked well in the ancient world, but by the 17<sup>th</sup> century, emerging scientific discoveries demanded more elegant and accurate models for predicting physical events. Astronomers, for instance, found algebra too cumbersome for describing movements in the solar system, which required reams of complicated equations and unwieldy variables. With the invention of calculus, Isaac Newton soon developed formulas that accurately described laws of motion and gravitation. The new language of calculus provided a far more accurate means of describing, modeling, and predicting physical activity, furthering countless scientific advances.

Similarly, the algebraic model I used above to describe Cold War strategic stability concepts is just too simplistic for describing our dynamically unstable, multi-domain security environment. Like medieval astronomers, we can no longer use mere algebraic equations to model the world we live in. Instead, we need to invent the equivalent of multivariate calculus or even complexity theory to describe our security environment.

Consider the multifaceted nature of threat vectors alone. There is now potential for conflict in as many as six dimensions, not three, with the addition of cyber, space, and cognition or influence. Critically, binary rule sets no longer apply. Rather than reflect a bipolar world, today's Great Power Competition models must account for the rise in influence of both Russia and China. Instead of a discrete distinction between peace and war, international relations are measured on a continuous spectrum ranging from cooperation through competition to conflict. Further complicating matters, a relationship may occupy several points on this spectrum simultaneously, as illustrated by our economic interdependence with China concurrent with a battle for global influence.

Today's security ecosystem is also convoluted by emerging technologies, especially in new domains of conflict such as cyber and cognition. Unbounded by the limits of topography, adversaries now have the ability to impact US capabilities directly and immediately. We have lost many of the protective boundaries afforded by geography. During the Cold War, there would have been little doubt who was responsible for any nuclear strike. Conversely, modern cyber operations and information campaigns are easily obfuscated or anonymized. Ambiguity complicates attribution and thus response.

Despite a menu of options, nuclear weapon employment would be a fairly discrete process, whereas cyber events occur almost non-stop along a broad continuum ranging from cyber reconnaissance and probing, through data extraction or corruption, to potentially crippling attacks against critical infrastructure. Similarly, influence or cognition activities can be continuously executed and may be both broad and sweeping or microtargeted against individuals. Finally, where numerous treaties and international conventions govern nuclear weapons use, we lack similar norms and agreements for activities in cyber and space, with ambiguous boundaries for acceptable use. In short, there is no shared understanding of rules for the new environment.

Another characteristic of the modern era is the growing role of private sector entities, not only in terms of technology development and commercial sector applications, but also vulnerabilities and attack surfaces. Applications for nuclear and conventional weapon technologies outside the national security realm have historically been pretty limited. In contrast, the tremendous commercial opportunities for employment of communication, cyber, artificial intelligence, space capabilities, and influence tools drives private sector development against potentially lucrative capabilities, sometimes in advance of government and defense-driven development. Maybe it's also time to reconsider Cold War paradigms for government-led research and development, given the growing strength of commercial experimentation and application.

Our primary adversaries make no distinction between the public and private sectors—ours or theirs. Instead, they view us as one entity—America—whose capabilities must be eroded. In many cases, they already have the ability to launch cyber-attacks from the safety of their own borders to cause localized, disruptive effects to critical infrastructure, water and wastewater services, transportation systems, critical manufacturing, the financial sector, emergency services and more. Increasingly, our domestic threat surface lies outside government control, newly vulnerable to attacks launched from foreign lands.

Legacy stability concepts were best suited for wargaming interactions between nation states, but the 9/11 attacks demonstrated the outsize role of non-state actors. Further, we have only recently begun to acknowledge the global security threats posed by climate change, other environmental issues, and disease. A single plank balanced on a fulcrum is obviously a poor analogy for multivariant, multi-domain threats operating along a continuous spectrum of conflict, sometimes continuously.

## Implications and Conclusion

George Box, a mid-twentieth century model statistician, is known for his adage that no model is right, but some are useful. Perfection is impossible, but we clearly need a more useful operating model or paradigm that better reflects the complexity of emerging threats, the dynamism and speed with which change can occur, the broad spectrum of non-kinetic capabilities, and the continuum and interdependencies of state relations.

Models rely on rule sets, whether binary, Boolean, or otherwise. As such, we should prioritize developing international norms for operations in both space and cyber that more clearly define

guardrails or limits of acceptable behavior. This would be an important precursor for developing a more commonly understood security model.

Despite tremendous advances in technology, warfare remains at its core a very human activity. Accordingly, we need a means of incorporating significant aspects of the human dimension into our model. How do we reflect destabilizing trends and dynamics such as growing popular movements and nationalism; increasing suspicion, mistrust, and resentment between nations; and competing soft power and influence efforts?

Developing the requisite ability to see, know, and understand the human domain requires cultural expertise and a deep understanding of history, or ready access to such knowledge. Sustaining that expertise entails significant investments by the intelligence community, growth and sustainment of the Foreign Service and diplomatic instruments, and either establishing or rebuilding robust mechanisms for communicating with adversaries on a broad variety of issues, to include cyber and space.

It would be a mistake to define relationships in absolutes or view competitive issues from a zero-sum perspective. Interactions with major adversaries occur along the entire spectrum ranging from cooperation through conflict. Besides shaping strategies designed to prevent or prevail in conflict, a successful model must also shape decisions in the compete zone. We should identify areas for cooperation, too, such as climate issues, counterterrorism, pandemics, migration, and space. If anything, the deep complexity, interconnectedness, and dynamism of today's operating environment argues for greater engagement with the world than withdrawal.

While it's not clear what a new security model should look like, its development requires a robust interagency and multi-disciplinary approach. Wargames may be useful in refining the model, but not if they include flawed assumptions about the world in which we operate. We must always beware the institutional inertia associated with old-think, existing strategies, favored platforms, or service dogma. Finally, in an environment that can no longer be defined by simple algebra, we would benefit from incorporating concepts based on complexity theory into such wargames and the operating models that result from them.

The US has historically relied on technical advantage to provide a significant edge over potential adversaries, but our strategic paradigms should not assume indefinite technological supremacy. The nation must recommit heavily to basic scientific research, technological development, and engineering applications of new developments in quantum information science, artificial intelligence, machine learning, hypersonics, directed energy, biotechnology, 5G, and other fields. Obviously, we would benefit from the fullest collaboration and cooperation possible between private sector innovators and defense and other government-sponsored research elements.

Finally, globalization and technological developments have led to a security environment that is far more dynamic, complex, and interconnected than we ever imagined in previous decades. Under these conditions, perhaps the pursuit of stability based on overmatch is a false aim, and we should focus instead on a strategic framework that embraces agility, resilience, and the rapid application of technology in order to prevail. Regardless, the time to reassess our strategic stability framework and doctrine is now.

## Perspective: Something Old and Something New

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### Introduction

The works gathered within this Strategic Multilayer Assessment project are a tour de force of strategic thought and fine nourishment for the energies of any strategic leader or analyst. In particular, the hard-won wisdom described by my former Army colleague, Lieutenant General (Retired) Karen Gibson in conveying our need of a new “calculus” for today, not yesterday’s old “algebra,” should be a revelation for anyone striving to understand America’s pursuit of its own security.

As I reviewed these collected works, the old phrase “something old, and something new...” kept intruding into my thoughts and may contain at least a few useful clues for readers who seek to use this publication as a platform for their own endeavors. The “something old” is a reflection of where we have been. The “something new” is a projection of where we should strive to go.

### Something Old

History has no beginning, but many American strategists “start their history clock” at moments such as WWII, or, more recently, the events of 9/11. If one starts at the Second World War, the decades of augmenting American military and economic power and reach that ensued, regardless of setbacks such as Vietnam, are generally credited for the growing and sustained American “strategic satisfaction” we have enjoyed for many decades. Perhaps most satisfying of all was the credibility that became attached to America’s self-proclaimed designation as “the leader of the free world.” While never universally endorsed, the influence and reputation of the United States grew to the point this designation was, while admittedly imperfect, nonetheless a credible claim for much of the world. The American power and influence derived from that “standing” has been considerable.

However, in the past several decades, this growth in American “satisfaction” has gradually but significantly receded. A powerful argument can be made that, since the events of 9/11, the United States has increasingly been encountering “strategic disappointment” in arenas and pursuits where we had become accustomed to prevailing. Among this list of disappointments are the perceived failures of our work to stabilize, and preserve useful strategic relations with, post-intervention Iraq, Afghanistan, Syria, or Libya. Another is the continued growth of terrorism despite enormous expenditures and energies by US-led coalitions to combat it globally. Perhaps most disappointing of all is the growing international perception that America’s strategic effectiveness, credibility, and reliability is deteriorating, particularly in contrast to the perception of rising power and influence by actors such as Russia and China. Increasingly, America is being seen as a globally receding, not an advancing, power.

Unless America wishes to follow the path of older empires and gradually return to being just one nation among many, thereby abandoning the advantages that our citizens have enjoyed, it should be strategically obvious we must begin making different choices.

## Something New

Invoking Lincoln is overused in government writing, but nonetheless, a line from his second inaugural address seems apropos, “As our case is new, so we must think anew, and act anew. We must disenthrall ourselves, and then we shall save our country.”

I offer here a small list of potential efforts to “think and act anew,” though the reader will find the first to be a reinvigoration of something that America was once acclaimed for, and thereby redounded to our strategic benefit in ways underappreciated today.

1. Strategists should consider the practical value of returning to a spirit of American generosity abroad. Since at least the US Marshall Plan at the end of WWII, the world rapidly developed a strong and sustained impression that America, while predictably zealous in pursuing its increasingly global interests, also was determined to be the most “generous” nation while doing so. Emblematic of this practice were activities of the Peace Corps; the once strong activities of the now-defunct US Information Agency and its information resource centers and libraries in developing countries; and the US Government’s highly publicized and energetic participation in charitable, medical, food, educational, construction, and other philanthropic activities without any expectation of reimbursement or return. Similarly, American strategic thought once emphasized the important value America derived from the favorable reputation, and thereby the influence, that we garnered through our sustained generosity. Today, it is more common for American leaders and politicians to heap scorn on such activities than to endorse them. In so doing, how much strategic influence have we surrendered? It is probably useful to examine how much influence some of our “near peer” competitors are winning in places we traditionally had the greatest influence, and this despite the fact that our competitor’s “generosity” is typically much more suspect (and sometimes transparently hollow) compared to what American efforts once were.
2. Find clues for success in applying net assessment theory. This strategic assessment theory pioneered by Andy Marshall can be a powerful, though very sobering, method for examining the difficulties of any strategic endeavor. When applied, it illuminates three vital truths: 1) RED, the true nature of the adversary; 2) GREEN, the true nature of the increasingly complex environment within which we strive against the adversary; and most importantly 3) BLUE, illumination of our own strengths, weaknesses and vulnerabilities. Practitioners of net assessment theory typically come to realize that it is BLUE that is the most important to understand, but since it requires unflinching honesty about ourselves, it is also the most difficult to compile and to persuade senior leaders to accept. Nonetheless, it is priceless.
3. Closely examine how weaknesses in non-military government capabilities are undermining America's ability to strategically succeed. It has become numbingly routine for both national security practitioners and pundits alike to complain about the shortages of capacity/capability among non-DOD elements of the USG. Decades of shortages in Foreign Service Officers, USAID developers, law enforcement officers, intelligence professionals, and beyond have become a constant lament, but also appear to have become “background noise” that leaders and analysts have become numb to. Meanwhile, budgets and manpower for the US military continue to comparatively flourish. Accordingly, without a rejuvenation of the US Government civilian sector, are we consigning ourselves to forever being disappointed with our ability to strategically succeed at non-DOD activities abroad, or to capitalize on US military successes, and what are the strategic consequences if true?



## Biographies

### ADM Charles A. Richard

Admiral Chas Richard is a native of Decatur, Alabama and graduated with honors from the University of Alabama in 1982. He earned master's degrees with honors from the Catholic University of America and the Naval War College.

His most recent assignment was Commander, Submarine Forces in Norfolk, Virginia. Other flag assignments include Deputy Commander, U.S. Strategic Command, Director of Undersea Warfare (OPNAV N97) at the Pentagon, Deputy Commander of Joint Functional Component Command for Global Strike at U.S. Strategic Command, and command of Submarine Group 10 in Kings Bay, Georgia. His operational assignments include command of USS Parche (SSN 683) as well as Submarine NR-1, then the U.S. Navy's only nuclear-powered, deep-submergence submarine. He also served aboard USS Portsmouth (SSN 707), USS Asheville (SSN 758), and USS Scranton (SSN 756).



Admiral Richard's staff assignments include service as the executive assistant and naval aide to the Under Secretary of the Navy; chief of staff, Submarine Force Atlantic; and command of Submarine Squadron (SUBRON) 17 in Bangor, Washington. Other staff assignments include director of resources on the staff of the Under Secretary of Defense (Policy); squadron engineer on the staff of SUBRON-8 and duty on the Deputy Chief of Naval Operations (Submarine Warfare) staff. He has also served as a member of Chief of Naval Operations' Strategic Studies Group XXVIII, studying the integration of unmanned systems into naval force structure.

Admiral Richard assumed his current duties in November 2019. As Commander, U.S. Strategic Command, he is responsible for one of 11 Unified Commands under the Department of Defense. USSTRATCOM is responsible for the global command and control of U.S. strategic forces to meet decisive national security objectives, providing a broad range of strategic capabilities and options for the President and Secretary of Defense.

## GEN Richard D. Clarke

General Richard D. Clarke currently serves as the 12<sup>th</sup> Commander of U.S. Special Operations Command (USSOCOM) headquartered at MacDill Air Force Base, FL.

Prior to assuming command of USSOCOM, General Clarke served as Director for Strategic Plans and Policy (J5), Joint Staff, the Pentagon, Washington, D.C.

General Clarke's other assignments as a general officer include: Deputy Commanding General for Operations, 10th Mountain Division from 2011 to 2013; the 74th Commandant of Cadets, United States Military Academy at West Point from 2013 to 2014; and the Commander of the 82nd Airborne Division.

His formative and key, Army and special operations, assignments include: Director of Operations, Joint Special Operations Command from 2009 to 2011. Eight years in the 75<sup>th</sup> Ranger Regiment first as a company commander, then as a battalion commander, and finally as the regimental commander. He also served as commander of 3rd Battalion, 504th Parachute Infantry Regiment, 82nd Airborne Division.

General Clarke has led Soldiers at all levels in Airborne, Ranger, Mechanized and Light Infantry units in five different divisions, the 173rd Airborne Brigade, and the 75th Ranger Regiment in the United States, Europe, Iraq and Afghanistan. His deployments while serving in the aforementioned positions include Operations Desert Shield and Desert Storm, Operation Joint Guardian in Macedonia, three deployments in support of Operation Enduring Freedom, four deployments in support of Operation Iraqi Freedom, and one deployment as the commander of the Combined Joint Forces Land Component Command - Operation Inherent Resolve. G

General Clarke was born in Germany and raised in an Army family. He is a graduate of the United States Military Academy at West Point, NY, and was commissioned into the Infantry in 1984. He holds a Bachelor of Science degree from West Point and a Master of Business Administration from Benedictine College. He is a distinguished graduate of the National War College earning a master's degree in Security and Strategic Studies.



## Dr. Allison Astorino-Courtois

Dr. Allison Astorino-Courtois is Executive Vice President at NSI, Inc. She has also served as co-chair of a National Academy of Sciences study on Strategic Deterrence Military Capabilities in the 21st Century, and as a primary author on a study of the Defense and Protection of US Space Assets. Dr. Astorino-Courtois has served as technical lead on a variety of rapid turn-around, Joint Staff-directed Strategic Multilayer Assessment (SMA) projects in support of US forces and Combatant Commands. These include assessments of key drivers of political, economic and social instability and areas of resilience in South Asia; development of an analytic approach used to identify USINDOPACOM requirements for humanitarian support in a Megacity (case study: Dhaka, Bangladesh); development of a methodology for conducting provincial assessments for the ISAF Joint Command; production of a "rich contextual understanding" (RCU) to supplement intelligence reporting for the ISAF J2 and Commander; projects for USSTRATCOM on deterrence assessment methods; and, work for USSOCOM on operationalizing its "gray zone" concept.



Previously, Dr. Astorino-Courtois was a Senior Analyst at SAIC (2004-2007) where she served as a USSTRATCOM liaison to US and international academic and business communities. Prior to that Dr. Astorino-Courtois was a tenured Associate Professor of International Relations at Texas A&M University in College Station, TX (1994-2003) where her research focused on the cognitive aspects of political decision making and how to "market" peaceful conflict resolution to adversarial actors. She has received a number of academic grants and awards and has published articles in multiple peer-reviewed journals. She has also taught at Creighton University and as a visiting instructor at the US Military Academy at West Point. Dr. Astorino-Courtois earned her Ph.D. in International Relations and MA in and Research Methods from New York University. Her BA is in political science from Boston College. Finally, Dr. Astorino-Courtois also has the distinction of having been awarded both a US Navy Meritorious Service Award and a US Army Commander's Award.

## Dr. Cynthia J. Buckley

Cynthia J. Buckley (Ph.D., University of Michigan, 1991) is Professor of Sociology and Faculty Affiliate of the Center for Russian, East European and Eurasian Studies and the European Studies Center at the University of Illinois at Urbana-Champaign. A social demographer by training, her research focuses on the intersections of health, social inequality, population change, and social stability. Her work has appeared in a variety of academic journals including *Demographic Research*, *The Gerontologist*, *International Migration Review*, *Comparative Economics*, and *Population Research and Policy Review* as well as several media and policy outlets. She is the lead editor of *Migration, Homeland and Belonging in Eurasia*, (Johns Hopkins University Press). Dr. Buckley has held a number of policy



consultancies in Eurasia in the areas of reproductive health, health service provision, education, and data collection for the US Department of State, the Carnegie Foundation, the Central Intelligence Agency, and other regional governments, international agencies, and nonprofits.

### Dr. Hriar “Doc” Cabayan

Dr. Hriar “Doc” Cabayan is currently a member of the Office of Defense Coordination at the Lawrence Livermore Laboratory. He joined the laboratory in 1977 and worked on nuclear weapons effects, Strategic Defense Initiative related efforts, and directed energy programs. In 1997 he joined the Joint Staff/J-39 where he managed the Strategic Multilayer Assessment (SMA) Program. In 2007, He received the Joint Meritorious Civilian Service Award from the Office of the Chairman, Joint Chiefs of Staff in 2007 and again in 2019. He returned to Lawrence Livermore Laboratory in October 2019.

Dr. Cabayan received his doctorate degree from the University of Illinois in Urbana, Illinois. After graduating, he taught mathematical physics for four years at New York University’s Courant Institute of Mathematical Sciences and McGill University.



### Dr. Ralph Clem

Ralph S. Clem (Ph.D., Columbia University, 1976) is Professor Emeritus of Geography and formerly Director of the Center for Transnational and Comparative Studies (1999-2005) at Florida International University (FIU) in Miami where he was a faculty member from 1974-2009. He is currently a Senior Fellow in the Steven J. Green School of International and Public Affairs at FIU and a Research Affiliate at the Center for Russian, East European and Eurasian Studies at the University of Illinois at Urbana-Champaign. His primary research interest is on the study of the geopolitics of Russia and Eastern Europe, with a focus on military and national security issues. His publications include *Nationality and Population Change in Russia and the USSR* (Praeger Publishers with Robert Lewis and Richard Rowland), *Research Guide to the Russian and Soviet Censuses* (Cornell University Press), and *Political Geographies of the Post-Soviet Union* (Taylor & Francis with John O’Loughlin). He retired from the Air Force after 35 years of active and Reserve service with the rank of Major General, having served in a fighter squadron and at the National Security Agency, the Air





### Mr. John Collison

John Collison is a Huntington Ingalls Industries (HII) contractor supporting Headquarters USSOCOM J59 Concept Development and Integration (CD&I). Mr. Collison supports Joint and SOF concept development, and SOF capabilities development and analysis. John is a retired Army Lieutenant-Colonel with over 26 years of active duty service in the Civil Affairs and Infantry career fields. He served on the USSOCOM Staff, the Army Staff and various assignments in both Civil Affairs and Infantry units as an Operations Officer, Executive Office, Company Commander and Platoon leader. John's overseas assignments and deployments include; Cambodia, Egypt, Honduras, Bosnia, Iraq, and Alaska.



### Lt Gen (Ret) Robert Elder

Lieutenant General Robert Elder (USAF, retired) joined the George Mason University faculty as a research professor with the Volgenau School of Engineering following his retirement from military service as the Commander of 8th Air Force and US Strategic Command's Global Strike Component. He currently conducts research in the areas of command and control, assured communications, strategic stability and deterrence, competition-cooperation management, and international actor decision-making. General Elder served as the Central Command Air Forces Deputy Commander for Operation Enduring Freedom, Air Operations Center Commander and Deputy Air Component Commander for Operation Iraqi Freedom, and Commandant of the Air War College. He was the first commander of Air Force Network Operations and led the development of the cyberspace mission for the Air Force. He received his Doctorate in Engineering from the University of Detroit.



## Lt Col Christopher D. Forrest

*Currently on detail to the National Security Council as the Director for Defense Innovation and Emerging Technology*

Lieutenant Colonel Christopher D. Forrest, Indo-Pacific Division Chief, Headquarters Air Force CHECKMATE, Pentagon. As Indo-Pacific Division Chief at Air Force CHECKMATE, Lt Col Forrest leads a team of air-power strategists to provide the Air Force Deputy Chief of Staff for Operations and Chief of Staff of the Air Force best military advice on current and near-term operations and strategy. His portfolio entails assessment, operational planning support, lethal and non-lethal effect integration, clean-sheet strategy and concept development for the China and North Korea problem sets. His recent work involves a deep-dive project on Great Power competition and competitive strategy. Lt Col Forrest is a 1998 Distinguished Graduate of the US Air Force Academy. Prior to his assignment at CHECKMATE, Lt Col Forrest served as the Chief of Strategy and Plans and Chief of Targeting at the 613th Air Operations Center, HQ Pacific Air Forces, Joint Base Pearl Harbor Hickam, Hawaii. In his role as Chief of Strategy and Plans, Lt Col Forrest conducted operational planning, Concept of Operations development, and strategy for the Commander, Pacific Air Forces and Theater Joint Force Air Component Commander to CDRUSINDOPACOM. In his role as Chief of Targeting, Lt Col Forrest was responsible for targeting strategy, cyber/non-lethal effects integration, and operational-level planning for INDOPACOM operational and contingency plans.



Prior to his assignment in Hawaii, Lt Col Forrest served in various roles and locations as an A-10C Instructor/Evaluator Pilot, to include leadership positions as Director of Operations for the 455th Expeditionary Operations Support Squadron, Bagram Air Base Afghanistan and Chief A-10C Evaluator at the 23d Fighter Group, Moody Air Force Base, Georgia. He was awarded 52nd Wing Flight Lead of the Year in 2003 for his aerial combat actions in Operation Enduring Freedom providing Close Air Support to CJTF-180. Additionally, Lt Col Forrest completed multiple tours as an Instructor Pilot in the T-38C as a lead instructor and initial cadre for the Air Force Introduction to Fighter Fundamentals course at Randolph Air Force Base, Texas.

Lt Col Forrest is a Command Pilot, with over 3,000 hours, including over 380 combat hours. He has flown the T-37, T-6, T-38A, AT-38B, T-38C, T-1, OA-10A, A-10A, and A-10C.

**EDUCATION** 1998 Bachelor's Degree in Political Science, United States Air Force Academy (Distinguished Graduate) 2004 Squadron Officers School, Air University, Maxwell Air Force Base, AL 2008 Master's Degree in International Affairs, Fletcher School of Law Diplomacy, Tufts University 2008 Air Command and Staff College, Air University, Maxwell Air Force Base, AL 2011 Advanced Certificate in Nuclear Policy and Surety, Defense Nuclear Weapons School, DTRA 2017 Air War College, Air University, Maxwell Air Force Base, AL

**ASSIGNMENTS** January 1999 – May 2000, student pilot, Euro-NATO Joint Jet Pilot Training, Sheppard Air Force Base TX May 2000 – October 2000, A-10A student pilot, Davis-Monthan Air Force Base, Arizona November 2000 – November 2001, OA-10A Fighter Pilot and Battalion Air Liaison Officer, 25th Fighter Squadron, Osan Air Base, Korea UNITED STATES AIR FORCE

December 2001 – December 2004, A-10A Assistant Weapons Officer, 81st Fighter Squadron, Spangdahlem Air Base, Germany December 2004 – November 2006, T-38C IFF Instructor Pilot, Flight Commander and Chief of Weapons, 49th Fighter Training Squadron, Moody Air Force Base, GA November 2006 – October 2008, T-38C IFF Instructor Pilot and Chief of Scheduling, 435th Fighter Training Squadron, Randolph Air Force Base, Texas November 2008 – November 2009, A-10C Instructor Pilot and Assistant Director of Operations, 25th Fighter Squadron, Osan Air Base, Korea Dec 2009 – February 2012, Executive Officer to the Director Air Force Safety Center and Air Force Chief of Safety, Air Force Safety Center, Kirtland Air Force Base, NM February 2012 – May 2013, A-10C Chief Evaluator Pilot and Chief of Standardizations and Evaluations, 23d Fighter Group, Moody Air Force Base, GA May 2013 – Oct 2013, Director of Operations, 455th Expeditionary Operations Support Squadron, Bagram Air Base, Afghanistan Nov 2013 – February 2015, A-10C Evaluator Pilot and Wing Chief of Inspections, 23d Wing, Moody Air Force Base, GA February 2015 – February 2016, Chief of Targeting and Effects Team, 613th Air Operations Center, HQ PACAF, Joint Base Pearl Harbor Hickam, HI February 2016 – February 2018, Chief of Strategy and Plans Team, 613th Air Operations Center, HQ PACAF, Joint Base Pearly Harbor Hickam, HI March 2018 – Present, Chief Indo-Pacific Division and Air Power Strategist, HQ Air Force CHECKMATE, Pentagon, VA

MAJOR AWARDS AND DECORATIONS Meritorious Service Medal with five oak leaf clusters Air Medal with 2 oak leaf clusters Aerial Achievement Medal Air Force Commendation Medal with 1 oak leaf cluster Air Force Achievement Medal with 3 oak leaf clusters Air Force Outstanding Unit Award with Valor Device and three oak leaf clusters Combat Readiness Medal with 3 oak leaf clusters Afghanistan Campaign Medal with one oak leaf cluster Global War on Terrorism Expeditionary Medal Korean Defense Service Medal

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS Fellow, Center for the Study of Weapons of Mass Destruction, National Defense University Fellow, Service Chief's Fellowship Program, Defense Advanced Research Projects Agency Fellow, China competitive studies program, Johns Hopkins School of Advanced International Studies

OTHER ACHIEVEMENTS 2014 White House Fellowship Regional Finalist

PUBLICATIONS "Coercive Engagement: A security analysis of Iranian support to Iraqi Shia militias," Strategic Studies Quarterly, 2009 "Strategic Shaping: Expanding the Competitive Space," Joint Forces Quarterly, 2018

#### EFFECTIVE DATES OF PROMOTION (CHRONOLOGICAL ORDER)

Second Lieutenant	27 May 1998
First Lieutenant	27 May 2000
Captain	27 May 2002
Major	01 September 2007
Lieutenant Colonel	01 February 2013

(Current as of March 2019)



## LTG(R) Karen H. Gibson

LTG Karen H. Gibson has served in a variety of joint and operational intelligence duty assignments in the United States, Middle East, Afghanistan, Africa, and Korea and has commanded at the company, battalion, and brigade levels. A Deputy Director at the Office of the Director of National Intelligence, she most recently served as Director, J2, U.S. Central Command; Director, CJ2, Combined Joint Task Force-OPERATION INHERENT RESOLVE; Deputy Commanding General for U.S. Army Cyber Command's Joint Force Headquarters; and Director, CJ2, Combined Joint Task Force-Horn of Africa.



LTG Gibson holds a Bachelor of Science in Industrial Engineering from Purdue University, a Master of Science in Strategic Intelligence from the Joint Military Intelligence College, and a Master of Science in National Security Strategy from the National Defense University. Her military education includes the Military Intelligence Officer's Basic and Advanced courses, Postgraduate Intelligence Program, and the U.S. Army Command and General Staff College. She is also a Distinguished Graduate of the National War College.

## Dr. Erik Herron

Erik Herron is the Eberly Family Distinguished Professor of Political Science at West Virginia University and serves as one of the leaders on the CESCO Project. He has conducted research across Eastern Europe and Eurasia, including a term as a Fulbright scholar in Ukraine and fifteen election observation missions. He has published research about political institutions, governance, and elections in many academic journals, and four books: *Mixed Electoral Systems: Contamination and its Consequences* (with Federico Ferrara and Misa Nishikawa), *Elections and Democracy after Communism*, *The Oxford Handbook of Electoral Systems* (with Robert Pekkanen and Matthew Shugart), and *Normalizing Corruption: Failures of Accountability in Ukraine*.



## Mr. Daniel R. Lane

Mr. Lane is a Strategy and Analysis Specialist in the Concepts Development and Integration Division of United States Special Operation Command's Strategy, Plans, and Policy Directorate (USSOCOM J59). He is a retired U.S. Navy Surface Warfare Officer with specializations in marine nuclear and conventional propulsion engineering, mine warfare, anti-terrorism, and force protection. Mr. Lane is presently completing a Master of Science Degree with the National Intelligence University in Strategic Intelligence. He is a graduate of the U.S. Army's Command and General Staff College at Fort Leavenworth, Kansas, the U.S. Navy's Nuclear Propulsion Program, and the Ohio State University. The first half of his Navy career was spent at sea in the engineering, combat systems, and operations fields while assigned to a range of surface combatants. The latter quarter of his career was spent ashore, initially at U.S. Central Command where he was involved in planning exercises, security cooperation activities, counter-proliferation activities, and assessing USCENTCOM's information operations and self-assessment capabilities. His final assignment was at Navy Expeditionary Combat Command N3/5 where he specialized in force development, planning, and irregular warfare analysis. After retiring from retiring in 2009, Mr. Lane worked at USSOCOM as a Senior Operations Analyst for Irregular Warfare, leading development and certification of the USSOCOM's Joint Task Force 487. Afterwards, as member of Admiral McRaven's Afghanistan Operational Planning Team, he contributed to the subsequent development of this concept into a unifying command for all theater Special Operations in Afghanistan. This effort led to the deployment of Special Operations Joint Task Forces (SOJTF) to both Afghanistan and Syria. Mr. Lane subsequently deployed to Afghanistan from late 2012 through early 2013 in support of the first SOJTF and NATO Special Operations Component Command. Since 2014, Mr. Lane has been the USSOCOM lead action officer for Capabilities-Based Assessments (CBAs) of Special Operations Command and Joint Concepts including the USSOCOM Concept for Operating in the Human Domain (SC-OHD), the Joint Concept of Operations for Scalable Effects with Non-Lethal Weapons (SENLOW), the Joint Concept for the Human Aspects of Military Operations (JC-HAMO), and the Joint Concept for Integrated Campaigning (JC-IC). He has also been USSOCOM's lead contributor to the Joint Staff J39 Joint Information Operations Warfare Center's (JIOWC) development, CBA, and implementation of the Joint Concept for Operating in the Information Environment (JC-OIE), the upcoming 2019 revision to the DoD Strategy for Operating in the Information Environment, and various other futures efforts. He is the lead author for the Human Aspects Driven Activities (HADA) Joint Doctrine Note X-20 currently in development. Mr. Lane also conducts research into futures and future technologies and is actively involved with developing future SOF operational concepts and approaches.



## Dr. James Lewis

EXPERTISE: Cybersecurity and Technology, Defense and Security, Economics, Geopolitics and International Security

ASSOCIATED PROGRAMS: Technology Policy Program

James Andrew Lewis is a senior vice president and director of the Technology Policy Program at the Center for Strategic and International Studies (CSIS). He has authored numerous publications on the relationship between technology, innovation, and national power. His current research examines international security and governance in cyberspace, the geopolitics of innovation, the future of warfare, and the effect of the internet on politics. Lewis is an internationally recognized expert on cybersecurity and technology and was one of the first to approach cybersecurity as a policy and strategic problem. His writings include the best-selling *Cybersecurity for the 44th Presidency*, the national cybersecurity strategy cited by President Obama in the first speech by a U.S. president on cybersecurity and that became a template for cyber strategy in other countries. Lewis was the rapporteur for the United Nations' successful 2010, 2013, and 2015 Group of Government Experts on Information Security, whose reports set out the global agenda for cybersecurity by emphasizing norms for responsible state behavior, confidence building, and capacity-building measures.



Before joining CSIS, Lewis worked at the Departments of State and Commerce as a foreign service officer and as a member of the Senior Executive Service. His government experience included a range of politico-military and negotiating assignments, including the development of groundbreaking policies on commercial remote sensing, encryption, and advanced conventional weapons. He was assigned as a political advisor to the U.S. Southern Command for Operation Just Cause, the U.S. Central Command for Operation Desert Shield, and the Central American Task Force. Lewis served on the U.S. delegations to the Cambodian peace process and the Permanent Five talks on arms transfers and nonproliferation, and he negotiated bilateral agreements on transfers of military technology to Asia and the Middle East. He led the U.S. delegation to the Wassenaar Arrangement Experts Group on advanced civilian and military technologies. Lewis led a long-running Track 2 dialogue on cybersecurity with the China Institutes of Contemporary International Relations. He has served as a member of the Commerce Spectrum Management Advisory Committee, the Advisory Committee on International Communications and Information Policy, and the Advisory Committee on Commercial Remote Sensing and as an advisor to government agencies on the security and intelligence implications of foreign investment in the United States. Lewis is frequently quoted in the media and has testified numerous times before Congress. He received his Ph.D. from the University of Chicago.

A full list of publications by James A. Lewis is available at: <https://www.csis.org/articles-chapters-and-research-james-lewis>

## Dr. Dalton Lin

Dalton Lin is an assistant professor at the Sam Nunn School of International Affairs, Georgia Institute of Technology. Before joining Georgia Tech in 2016, he was a postdoctoral research fellow at Princeton University with the Princeton-Harvard China and the World Program. His current research interests center around explaining contemporary China's foreign policy and regional countries' responses to it. His most recent work includes "China's Soft Power Over Taiwan" (with YH Chu, in *Soft Power with Chinese Characteristics* (Routledge, 2019)) and "The Political Economy of China's 'Belt and Road Initiative'" (in *China's Political Economy under Xi Jinping: Domestic and Global Dimensions* (Rowman & Littlefield, forthcoming)). Dr. Lin is also the Executive Editor of the website, Taiwan Security Research (<http://taiwansecurity.org>).



## Lt Col David Lyle

Lieutenant Colonel David J. Lyle (BS in Humanities, USAFA; MBA, Louisiana Tech; MMAS, US Army Command and General Staff College; MAAS, School of Advanced Air and Space Studies) is a liaison for the LeMay Center for Doctrine and Education, Air University, currently stationed in the Pentagon. He has served in various strategy and operational planning assignments, including as the Director for the Combined Personnel Recovery Center for Afghanistan, Deputy Director of Strategy & Concepts/Warfighting Education at Air University, the A-5 (Strategic Plans) of the 9th Air and Space Expeditionary Task Force–Afghanistan in Kabul; director of staff for the 505th Command and Control Wing, Hurlburt Field, Florida, and has served on numerous joint air component coordination element (JACCE) assignments. Lt Col Lyle is an Air Operations Center initial qualification honor graduate and Command and Control Warrior Advanced Course graduate, holding US Army qualifications as a joint planner and distinguished master strategist. A master navigator with more than 2,400 flying hours in the B-52H, Lieutenant Colonel Lyle flew 43 combat missions over Kosovo and Afghanistan.





### Dr. Michael Mazarr

Michael Mazarr is a Senior Political Scientist at the RAND Corporation, which he joined in October 2014. Prior to coming to RAND, he served as Professor of National Security Strategy and Associate Dean at the U.S. National War College in Washington, D.C. He has served as special assistant to the Chairman of the Joint Chiefs of Staff, president and CEO of the Henry L. Stimson Center, senior vice president for strategic planning at the Electronic Industries Alliance, legislative assistant in the U.S. House of Representatives, and senior fellow and editor of *The Washington Quarterly* at the Center for Strategic and International Studies. He holds AB and MA degrees from Georgetown University and a Ph.D. from the University of Maryland School of Public Affairs.



### Dr. David W. Montgomery

David W. Montgomery is Associate Research Professor in Government and Politics and the Center for International Development and Conflict Management at the University of Maryland, College Park. He is the Director of Program Development for CEDAR—Communities Engaging with Difference and Religion and has taught at the University of Pittsburgh, Emory University, and Boston University. As well, he directs the Minerva Research Initiative for the U.S. Department of Defense, Basic Research Office (Research and Engineering) and Strategy and Force Development Office (Policy). His books include: *Living with Difference: How to Build Community in a Divided World* (University of California Press, 2015), *Practicing Islam: Knowledge, Experience, and Social Navigation in Kyrgyzstan* (University of Pittsburgh Press, 2016), *Everyday Life in the Balkans* (Indiana University Press, 2019), and *Central Asia in Context: A Thematic Introduction to the Region* (University of Pittsburgh Press, forthcoming).



## LTG(R) Michael K. Nagata

Lieutenant General (Retired) Michael K. Nagata served in the U.S. Army from February 1981 to August 2019. His military career spanned 38 years of active service; including 34 years as a member of US Special Operations Forces. His final government position was Director of Strategic Operational Planning for the U.S. National Counterterrorism Center from 2016 to 2019. Today, he serves as a Strategic Advisor, and Senior Vice President, for CACI International in Arlington, Virginia.



Throughout his career, LTG(R) Nagata deployed in multiple Contingency and Combat special operations and campaigns across three continents, including East and North Africa, the Middle East, and Levant, and Central and South Asia; predominantly in the Counterterrorism & Counterinsurgency arenas. He also served in both Strategy and Policy positions in the Office of the Secretary of Defense, the Joint Staff, two assignments in the U.S. Intelligence Community, and extensive service within US Embassies.

LTG(R) Nagata and his wife Barbara have five children, and currently resides in Arlington, Virginia.

## Ms. Nicole Peterson

Nicole Peterson is an Analyst who assists in qualitative research and strategic analysis in support of Strategic Multi-Layer Assessment (SMA) efforts primarily focused on national security issues and Department of Defense (DoD) concerns. She has contributed to NSI's Virtual Think Tank (ViTTa®) and discourse analyses during her time at NSI. Nicole coordinates SMA's speaker series, which encompasses a broad range of topics from radicalization of populations and violent extremist organizations to artificial intelligence. She is also the publisher of SMA's weekly newsletter, which summarizes SMA speaker sessions, outlines upcoming events, and disseminates relevant publications. Nicole began her career at NSI as an undergraduate intern for its commercial sector and was subsequently promoted to an associate analyst for its government sector in 2016. She graduated with honors from the University of San Diego where she received a BA in applied mathematics and a minor in accountancy.



## Dr. Lawrence Rubin

Lawrence Rubin is an associate professor in the Sam Nunn School of International Affairs at the Georgia Institute of Technology and an associate fellow at the International Institute for Strategic Studies. His research interests include Middle East politics and international security. During the 2017-2018 AY, Rubin served as a senior advisor in the Office of the Secretary of Defense for Policy through a [Council on Foreign Relations International Affairs Fellowship](#).



Rubin is the author and editor of three books, including *The End of Strategic Stability? Nuclear Weapons and the Challenge of Regional Rivalries* (Georgetown University Press, 2018) co-edited with Adam Stulberg, *Islam in the Balance: Ideational Threats in Arab Politics* (Stanford University Press, 2014) and *Terrorist Rehabilitation and Counter-Radicalisation: New Approaches to Counter-terrorism* (Routledge 2011) with Rohan Gunaratna and Jolene Jerard. His other work has been published in *International Studies Review*, *Politics, Religion & Ideology*, *Democracy and Security*, *International Area Studies Review*, *Middle East Policy*, *Terrorism and Political Violence*, *Contemporary Security Policy*, *Democracy and Security*, *British Journal of Middle Eastern Studies*, *Lawfare*, the Brookings Institute, *The National Interest*, *The Washington Quarterly*, and *The Washington Post*.

Rubin has held positions at the [Belfer Center for Science and International Affairs](#) (Harvard Kennedy School of Government) as a Research Fellow and at the [Crown Center for Middle East Studies](#), Brandeis University as a lecturer on the Robert and Myra Kraft chair in Arab politics. Rubin received his PhD in Political Science from UCLA (2009) and earned degrees from University of Oxford, London School of Economics, and UC Berkeley.

## Dr. Adam B. Seligman

Adam B. Seligman is Professor of Religion at Boston University and Director of its Graduate Program in Religion. He lived for close to 20 years in Israel. He was Fulbright Fellow in Hungary from 1990 to 1992. He has been Visiting Professor of Sociology at Harvard University and Visiting Professor of Management at Massachusetts Institute of Technology's Sloan School of Management as well as in universities in Japan and Israel. He is Founding Director of CEDAR - Communities Engaging in Difference and Religion which, since 2001, has developed a unique pedagogy and set of practices directed to the challenge of living with difference. He has written or edited close to two dozen books, including: *The Idea of Civil Society* (Free Press, 1992), *The Problem of Trust* (Princeton, 1997), *Religious Education and the Challenge of Pluralism* (Oxford University Press, 2014) and *Living with Difference: How to Build Community in a Divided World* (University of California Press, 2015). In 2020, he received the Dr. Leopold Lucas Prize.





## Dr. Adam N. Stulberg

Adam N. Stulberg is Sam Nunn Professor and Chair at the Sam Nunn School of International Affairs at Georgia Tech. He teaches undergraduate and graduate courses on international security; global nuclear security and (non)proliferation; geopolitics of energy; Russia/Eurasian politics and security affairs; as well as inter-disciplinary courses on science, technology, and international security policy. His current research focuses on Russia's gray-zone conflict behavior, as well as energy security dilemmas and statecraft, new approaches to strategic stability, and nuclear trading and trafficking networks.

Dr. Stulberg earned his Ph.D. in Political Science from the University of California, Los Angeles (UCLA), as well as holds an M.A. in International Affairs from Columbia University, and a B.A. in History from the University of Michigan. He served as a Political Consultant at RAND from 1987-1997, and as a Senior Research Associate at the Center for Nonproliferation Studies (CNS), Middlebury Institute of International Studies at Monterey (1997-1998). He is currently Associate Director, Strategic Energy Institute, an institute wide center at Georgia Tech.

Dr. Stulberg has authored or edited five books. He also has published widely in leading international academic and policy journals, including *Foreign Affairs*, *Security Studies*, *Review of International Political Economy*, *Energy Research & Social Science*, *Orbis*, *Problems of Post-Communism*, and the *Bulletin of the Atomic Scientists*.





## Strategic Multilayer Assessment Joint Staff, Deputy Director of Global Operations (DDGO)

**E**stablished in 2000, Strategic Multilayer Assessment (SMA) provides planning and decision support to combatant commands and other US government (USG) departments and agencies.

*SMA's mission is to enable decision makers to develop more cogent and effective strategy and doctrine, bridging the gap between the academic research community and operators and planners.*

SMA addresses complex operational or technical challenges that transcend typical department boundaries and lie outside the core competencies or expertise of a single command or agency. SMA executes projects that require mixed method, multidisciplinary approaches and creates teams combining expertise from across the USG, academia, international partners, and the private sector. SMA is agnostic to outcome, emphasizing scientific rigor and thorough examination and analysis. SMA does not write policy, plans, or doctrine and does not perform intelligence analysis.

*SMA mission areas include, but are not limited to:* information operations, counterproliferation, fragile state dynamics, countering violent extremism, gray zone, strategic and great power competition, warfighter technology gaps, and 21<sup>st</sup> century deterrence.

### SMA Outreach & Events

SMA built and sustains a community of interest comprising over 5,000 individuals and has ties to 175 US universities, 20 foreign universities, 14 major think tanks, and eight foreign military organizations. To join the SMA email listserv and receive notifications regarding SMA reports and upcoming events, please send your name, email address, and organization to Ms. Mariah Yager ([mariah.c.yager.ctr@mail.mil](mailto:mariah.c.yager.ctr@mail.mil)).



SMA holds weekly speaker series events featuring leading experts discussing emerging national security challenges facing the combatant commands, the Joint Force, US allies, and the world. Access the event archives, which include audio or video recordings when available, written summaries of presentations, and speaker bios and briefing materials, at <https://nsiteam.com/sma-speaker-series/>

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