# Through the Joint, Interagency, and Multinational Lens: Perspectives on the Operational Environment

## Volume 1

Dr. David A. Anderson
Ms. Heather R. Karambelas
General Editors

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# Foreword

Life-long learning is a continuous endeavor. The Army profession expects our members to submit scholarly writings and share what they've learned through expertise, research and experience. These are invaluable contributions to broadening our institution's professional body of knowledge. Publishing scholarly works benefits the writer's professional qualifications, supports research efforts across the military, academic, and educational community, and enhances the organization's collective wisdom.

This compendium, *Perspectives on the Operational Environment*, is the first volume in a new series titled, "Through the Joint, Interagency, and Multinational Lens." Published by the Department of Joint, Interagency, and Multinational Operations (DJIMO) faculty at the US Army Command and General Staff College, this is a concerted effort to routinely share the thoughts of our distinguished faculty on key topics of value to our profession.

On 31 October 2014, the Army published its Army Operating Concept (AOC) *Win in a Complex World* that describes "how future Army forces will prevent conflict, shape security environments, and win wars as part of our Joint Force and working with multiple partners."

*Perspectives on the Operational Environment* complements the AOC's discussion on anticipated threats and the future operational environment. These articles explore a multitude of factors influencing the operational environment that directly affect our Army's ability to understand and shape the security environments where our forces operate. The articles provide a balanced perspective that challenges conventional thinking and offers alternative perspectives of the dynamically evolving operational environment.

Ms. Heather Karambelas' introduction provides an excellent summation of the compendium's articles and a roadmap for our readers to grasp the complexities that form the operational environment. I am confident you will find this scholarly work professionally enriching and well worth the read. Enjoy!

Gregory H. Penfield
Colonel, AR
Director, Department of Joint, Interagency, and Multinational Operations

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LEAVEN WORTH

AD BELLUM PACE PARATI

# Introduction

What we need to do is always lean into the future; when the world changes around you and when it changes against you – what used to be a tail wind is now a head wind – you have to lean into that and figure out what to do because complaining isn't a strategy.

– Jeff Bezos, Founder and CEO of Amazon.com

It is with this vision of leaning into the future that we, in the Department of Joint, Interagency, and Multinational Operations, embark on this opportunity to produce a compendium of our independent research and thoughts. We will proceed united by our vision that through education, we can make a difference in how officers perceive the complex environment we live in and develop plans to make this world a better place.

We begin our journey with some thinking about thinking. Mr. Kurt VanderSteen will help us with this by providing some insights into looking at military operations from a system's perspective; to view the operational environment as an interconnected whole having properties and characteristics with far reaching impacts. Next, Lieutenant Colonel Paul Oh will build on this perspective by considering a framework to use various metaphors to better understand the different types of systems we are likely to face in the future. Beyond just center of gravity, he posits that using other metaphors is a way planners can creatively and critically explore uncertain environment and formulate possible solutions. There are many ways to critically and creatively look at the world around us, but these first two chapters inform us that we must continue to revise and assess how we view the world if we are to best adapt to its ever changing nature.

Next we will look to some of our authors for views about our national strategy. Lieutenant Colonel Greg Sharpe and Major Ken Rich (PhD) share their vision of an expansion beyond our traditional instruments of national power of diplomacy, information, military, and economics (DIME) to include the space domain. Their chapter highlights the vital nature of assured access to space as a key consideration in developing our national security strategies. For his chapter, Dr. Rich Berkebile examines how the organizational structure of terrorism manifests in the domestic environment. He suggests contrary to public discourse, hierarchically organized terrorist groups are more dangerous than networked or leaderless resistance arrangements. Nonetheless, leaderless resistance is the dominant 21st Century domestic threat and requires new approaches to combating terrorism. Together, these two chapters remind us that a strategy must be ever responsive to evolving technologies and challenges.

There is always a challenge when you try to assess the future. Two of our authors attempt to do that by analyzing the past to gain insights into what may be ahead. These authors have identified specific issues of concern. Dr. David Anderson provides a qualitative analysis into the economics associated with genocide and proposes that there are indicators and warnings to prevent future genocides. As a result of his research, he also identifies some long-term economic consequences following a genocide. As Dr. Anderson looks to

economics as a way to predict genocide, the next author, Mr. Jeff Vordermark explores the complex aspects of water availability/scarcity as a national security issue that represents both a likely trigger for future conflict and also a unique challenge to national interests and operational planning.

Any compilation of articles by professionals in the field of Joint, Interagency, and Multinational Operations will have authors with concerns about our partnerships with other nations. Dr. Phil Pattee examines some positive case studies in building partnership capacity and also identifies some challenges and pitfalls from negative case studies. He argues that the host government is not capable of self-sustaining security unless the bulk of revenue for maintaining the government structure comes from internal sources. This challenge must inform how the US should partner with nations to achieve long term security in a way that is sustainable by the nation we are supporting. The authors who follow go more in depth about our partnerships in specific regions. Mr. Jim Cricks takes a new look at General Eisenhower's rational long-term perspective on the European security environment. The views Eisenhower formulated during the formation of NATO are drastically at odds with the current construct. Cricks offers recommendations on a strategy to bring the future relationship between the US and Europe closer to Eisenhower's original vision. In addition, Dr. Geoff Babb looks at China and Asia and the history of American military involvement in the region as the foundational context for future Army initiatives in the areas of the Pacific Partnership, Security Force Assistance, and Regionally Aligned Forces. The last chapter on partnerships brings concerns closer to home with an insightful chapter from Lieutenant Colonel Anne Reiffenstein (Canada) on some challenges of the current security agreements between Canada and the United States in the wake of 9/11.

Our final chapter goes beyond thinking about thinking, current issues, and partnerships, and on to what happens once we have time to consider everything else. That is when we get to the business of teaching field grade officers from all branches of the US military, as well as, some interagency students and select international officers. Dr. O. Shawn Cupp and Ms. Heather Karambelas evaluate the current state of Homeland Security education for the military and consider whether the current requirements are enough in the face of potential terrorist actions and the other myriad of events that could face US forces domestically.

This collection is not meant to provide a definitive solution to any specific issue, but will hopefully provide some insight into different perspectives in the joint, interagency, and multinational realm. There are many right ways to do things and we hope that through writing our journal, you will be inspired to consider things differently and from a new and enlightened perspective. Perhaps, stop looking for the "right" solutions and instead, seek the "best" solutions for operations in the complex world in which we live.

We dedicate this compendium to those who plan strategies, campaigns and operations, and to those who seek the perspectives of many in order to secure the desired end states for our great nation. We will continue with diligence to educate our officers toward this lofty goal. Come along, and lean into the future with us! Enjoy, Heather.

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# Chapter 1

## Shadows on Cave Walls: Systems Perspective in the Operational Environment by Mr. Kurt P. VanderSteen

Perspectives of the operational environment are often at odds with reality, and like flickering shadows on the walls of a cave, are incomplete images of reality that can only be seen in the light of the sun. Operational level commanders and staffs struggle to make sense of similarly shadowed perceptions of the operational environment, but lack the ability to appreciate reality in all its complexity. They default to preferences for reductive methodologies and stove-piped processes, fixating on events, nodes, actors, and objects that fail to account for local dynamics, adaptation and emergent properties of a system. There is a tension between reductive and holistic perspectives that must be resolved. Although joint doctrine emphasizes holistic approaches, there is a natural tendency to prefer analytical frameworks that reduces the ability to comprehend the whole of a system, its essential unity, and properties that differ at each systemic level.

The Allegory of the Cave is a reminder that comprehension of reality is incomplete and fraught with potential misperceptions of cause and effect by failing to consider the whole of a system in addition to its individual parts.[1] Although Socrates – speaking through Plato – referenced a theory of forms as the basis of all true knowledge, perceptions of reality must also take into account that perspectives are subject to similar misconceptions of the underlying nature of reality. Because perception is dependent on perspectives subject to incomplete information, visualization must include an ability to both zoom in and zoom out, taking in multiple perspectives in the context of the operational environment. A systems perspective requires both a holistic appreciation of the operational environment, and the analytical tools necessary for determining relationships between its parts. A systems perspective means that commanders and staffs must wrestle with complexity, but also find ways to simplify for solving problems in complex environments.

### Understanding Systems

Don't fight the system, change the rules and the system will change itself.[2]

– Russell L. Ackoff

A review of systems literature reveals that there are multiple explanatory schools of thought. There is systems theory, systems thinking, systems approach, complex adaptive systems, systems analysis, systems science, and many others. Engineers speak in terms of inputs and outputs, physicists describe natural forces, and managers are interested in organizational variables. They all, nonetheless, hold a concept in common: a recognition that there is a sort of coherency to their subject of study that defines their purpose – a conceptual unity that binds together the parts to the whole, and is regarded as having properties and self-organized rules of behavior that can be studied and understood.

There are also multiple definitions for systems. Its metaphorical root from the Greek, sustēma, literally means to "make stand together," to combine. According to Webster's, a system is

> a group of interrelated, interacting, or interdependent constituents forming a complex whole…a functionally related group of elements…a set of interrelated ideas or principles…(an) organizational form…(a) naturally occurring group of objects…a set of objects or phenomena grouped together for classification or analysis…(indicating) harmonious, orderly interaction.[3]

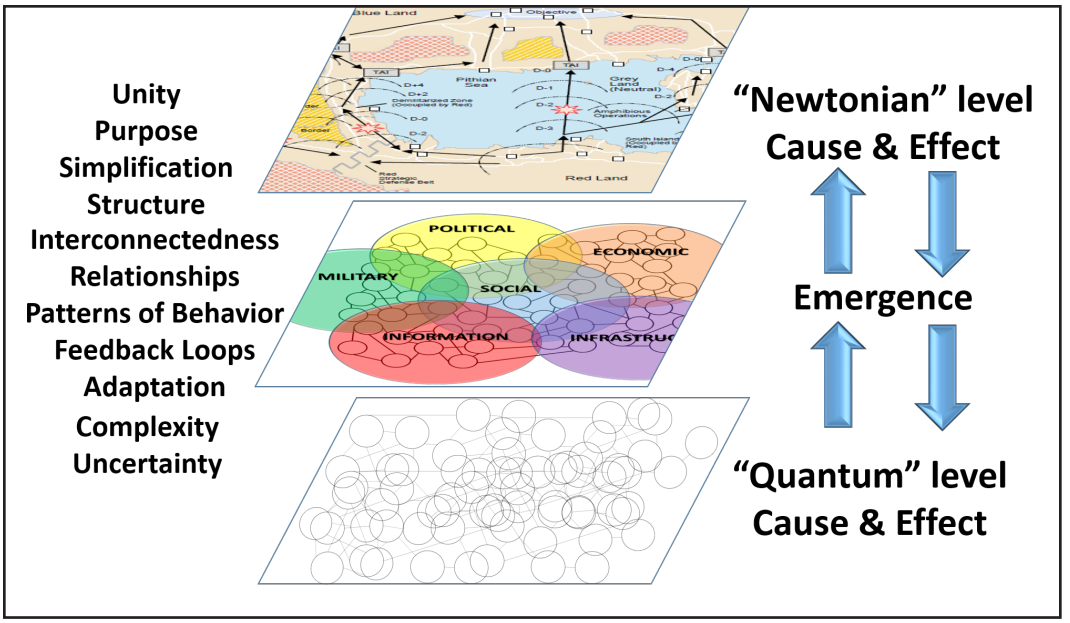


Figure 1. Understanding Systems. Created by author.

The joint doctrinal definition closely follows from the dictionary definition: "A system is a functionally, physically, and/or behaviorally related group of regularly interacting or interdependent elements forming a unified whole."[4] Although definitions are important, they don't provide meaning because context is lacking. They are reductionist by nature. We can define a market system as a medium of exchange for goods and services but the definition does not provide us a way to understand individual choices made for those goods and services. More relevant to military professionals is the ability to comprehend the characteristics, properties and behaviors of systems within the context of the operational environment. There is no single agreed upon taxonomy for explaining complex systems, perhaps because there are far too many differing types of systems to provide a useful framework.[5] Theorists explain system attributes and structures differently, but most agree on the basics that are most important in any perspective of the operational environment: complex systems are manifested by interconnectedness of the parts and their relationships with the unified whole, they have feedback loops connecting causal chains and display adaptation

through feedback loops, their organizational structures are tied to purpose, and they display emergent properties as a result of multiple interacting elements within the system. (Figure 1).[6]

Systems are considered in light of the whole and its parts that form a unified interconnectedness. System boundaries are flexible in that their parts are not fixed but the whole is still recognizable. An automobile is still an automobile even if its engine quits, and a dog without its tail is still a dog. System boundaries provide a heuristic to differentiate the strong associations of the elements within a system from weak links and associations with other systems. For example, operational planners "bound" the operational environment through considerations of the geographical space within which it will employ capabilities. Areas of responsibility, areas of interest, areas of influence, and the joint operations area are examples of geographical boundaries that may change based on context.[7] But it doesn't account for conceptual systems influencing the geographical construct such as social and religious systems.

A system is comprised of parts, but the sum of parts in themselves do not constitute the whole. It's not that the whole is greater than the sum of its parts as expressed by many theorists, but that the whole is different in essence and scale than its subordinate parts.[8] This difference is profound but often misunderstood. Nobel Prize recipient Robert Laughlin observed this phenomenon in quantum physics and his realization that the organization and behavior of sub-atomic "quantum" particles is fundamentally different than the "Newtonian" emergent reality we observe with our senses.[9] The observed rules of a system differ by scale and the context of the environment. A city is comprised of neighborhoods, but the collective behavior of a city is different than its neighborhoods. The properties of water include the ability to flow, but its property changes as it begins to freeze into a solid mass. You cannot study the behavior of an isolated water molecule and infer its ability to freeze, and studying the fight or flight behavior of an individual soldier will not allow us to predict the collective will-to-fight of an army.[10]

When you study the parts of a system and how the parts apply to the whole, there is a natural tendency to prefer simple cause and effect explanations. Following the 2015 Super Bowl Seahawk loss to the Patriots, most commentary revolved around the final Seahawk call to pass on 2nd and 1, resulting in an interception rather than having Marshawn Lynch "The Beast" bulldoze his way into the end zone. Most Seahawk fans fixated on the decision to pass as the "cause" of defeat rather than appreciating the multiple interacting and causative elements that got them to that condition. Every team experiences missed opportunities, critical injuries, and poor execution when it really matters; but in the end, the team with the most points left on the scoreboard when time runs out, wins. What is typically left out in the analysis is the whole of the situation – in other words, deep complexity and accumulated effects over time. Cause and effect can be difficult to comprehend, especially over time where effects are delayed and seemingly unconnected with its causes. In linear systems, inputs equal outputs. Providing sufficient food and water to devastated populations to meet their immediate needs following a natural disaster is a linear solution where cause and effect is easily traced. In non-linear events and delayed feedback loops, cause and effect can be ambiguous because there are too many variables and feedback mechanisms that

hamper complete understanding and resist control.[11] War is the realm of non-linear systems interacting in unpredictable ways. Similar to conditions prior to World War I, Operation Iraqi Freedom (OIF) was envisioned as a brief war by policy makers and military planners, but after a decade of intervention, unexpected events overcame the ability to reorient against newly emerging problems in a rapidly shifting environment. Non-linear systems are also sensitive to initial conditions, whereby extreme events can arise from seemingly harmless initial causes or the "butterfly effect."[12] To use the previous natural disaster example, if humanitarian aid continued through recovery, an unforeseen effect might be the devastation of local economies caused by the replacement of locally generated service providers with outside agencies.[13] Delayed effects are common attributes of complex systems.

Feedback loops explain the causal dynamics of an interconnected system characterized by adaptation over time. Feedback can reinforce or amplify, interrupt and delay, or balance conditions within a system.[14] Positive reinforcement is a mechanism that cause systems to continue, increase, or anticipate inputs. Success using a particular tactic or stratagem in combat operations over time leads to the anticipation of continued success. But much like anything in life, too much of a good thing can cause system failure; adversaries also adapt – the negative feedback loops they experience in losing may cause their defeat, or force adaptation to succeed. The goal of "shock and awe" tactics at the start of a conflict is to cause cascading negative feedback loops that overcome the ability of enemy systems to adapt and lead them to collapse, but if they have time to learn and adapt, shock and awe is less effective as a defeat mechanism. German blitzkrieg tactics that initially overwhelmed the Soviets on the eastern front were eventually reversed by environmental conditions, operational overreach, and the Soviets adapting with their deep attack doctrine.

Escalating tendencies in war are common: a "spark" can lead to effects wholly out of proportion to the observed causes, which indicates that deeper "quantum" level causative effects are taking place. This reciprocal action, characterized by escalating feedback loops, was first noted by Clausewitz and further expounded upon by Rene Girard as the "hidden structure of social phenomena."[15] Reciprocating actions can cause escalation, and without dampening effects such as diplomatic interventions, war and the likelihood of extreme violence is increasingly probable. Extreme actions seem to take over and atrocities build on atrocities. Many of the humanitarian tragedies of the late 20th century including violence in Rwanda and the Balkans caught policy makers by surprise with their sudden escalation to extreme violence.

Conceptually, organizational structures develop as a result of the property of emergence in systems. All dynamic systems that change over time, such as social systems, trade systems, and waging war, represent emergent phenomena and a system's purpose can be inferred from their structures within the environment. Most importantly, emergence is a local phenomenon based on the multiple interactions of events, actors, and nodes at the lowest levels, although their effects will appear at higher system levels.[16] Local dynamics in one system in turn influence other systems causing change hierarchically within an overall system. The Taliban originated in the madrassas of Pakistan, but developed as a local phenomenon in Kandahar province within the context of warring factions following the mujahedeen civil war, and quickly spread throughout the country.[17]

"Murphy" lives at the local level; too many Murphys or unanticipated negative feedback loops and accumulated effects in a hierarchical system can have consequential effects at higher levels. This is where we get the idea of the "strategic corporal" who can influence both positive and negative actions up to the national level, such as the events associated with Abu Ghraib in 2003. It highlights the deep causative factors at work in a system that are not observed but have the potential to manifest themselves over time. Although deep structural causation provides the bulk of system effects, they resist isolation of variables and measurement, and are only understood through their effects by observing patterns of behavior.[18] These local dynamics become self-organizing, but can also be influenced by top-down dynamics whereby the whole of a system influences its elements.[19] In a system of war, individual engagements and battles influence the operational approach and strategy, which is in turn influenced by strategic goals and operational intent.[20]

The movie Dr. Strangelove portrays the potential for top-down and bottom-up effects as a result of internalized structures and patterns of behavior. Political and military actors at the international level (the Soviet Union and United States) created a system of mutually assured destruction (MAD) in order to prevent nuclear war. From their perspective, fail-safe systems would prevent the accidental triggering of nuclear weapons for anything less than total war, which neither side wanted. Assumptions related to trust relied on all subordinate actors following their rule sets. But the rules and fail-safe systems did not account for Murphy. A rogue Air Force General (Ripper) decided on his own to launch a B-52 nuclear strike against the Soviet Union because the rules allowed him to "game the system" and bypass orders from the Pentagon on the assumption that it might be destroyed in a first strike. Although Ripper's base was stormed by paratroopers and the recall code was found, Murphy again shows up as an unforeseen and unwanted partner. The only way to send the recall code to the Pentagon was through a payphone, and the soldier who retrieved the code did not have change in his pocket to use it. Eventually, the code reached the Pentagon and the B-52s were recalled – except one: a lone B-52, with its communications system damaged by the Soviet's air missile defense continued its mission, all because the rule sets they followed emphasized completing the mission in the absence of orders. And because the Soviets had a "Doomsday Machine," the singular B-52 dropping its bomb triggered a nuclear Armageddon.[21]

Murphy can be somewhat anticipated and temporarily defeated through redundancies and baked-in procedures to dampen catastrophic effects over time, but there are too many Murphys to effectively manage at higher levels. Clausewitz's concept of friction is a close cousin to Murphy in that at higher system levels such as a Combatant Command headquarters, there is a tendency for commanders and staffs to have an abstracted perspective of nodes, actors, and events, and the potential exists to ignore the messy local dynamics and details of subordinate systems that can have negative effects at higher levels.[22] Like friction, events build over time creating enormous complexities requiring extraordinary effort to overcome. Small problems accumulate over time but can snowball into crisis. The Ebola virus is an example of a phenomenon originating in the jungles of central Africa, but having the effect of threatening global populations. This reveals the indeterminate and uncertain nature of

the operational environment and why there is a tendency to inadequately discern cause and effect relationships in complex systems.

Above a certain level, all systems contain nested subordinate elements or sub-systems that also display hierarchical relationships. These sub-systems provide differentiated functions that, in the aggregate, constitute the scope and scale of a particular system. As such, they highlight the structures and organization of systems as properties of emergent behavior and can be observed. For example, the system of joint military forces is comprised of component elements able to function in the air, land, sea, space, and information domains of the operational environment. By themselves, the service components cannot replicate the whole of the joint force because they fulfill a specific function within the structure of the overall system. The "parts" of a system can themselves hold the property of unified interconnectedness, such as the nation-state as a part of the international system. The conceptualization of interconnectedness consists of events, actors, nodes, or clusters that have relationships with each other – they are linked by behavior, function or physical relationships. Relationships within and between systems is the proper focal point for understanding system behavior and emergence, but there is a natural inclination to dwell on events, actors, nodes, or clusters rather than their relationships with each other.[23] There is a nugget of truth to the old saw that we "get caught up in events." Our focus narrows to only considering the event itself, with other elements not taken into account. Fighter pilots talk of "target fixation" where situational awareness is lost to focusing only on the immediate threat.[24] Surprise and deception rely on nodal fixation by the adversary rather than considering context and contingency. Success for Operation Overlord in WW II depended upon establishing patterns of behavior to convince the Germans that the invasion would likely take place at Calais rather than Normandy. During the Hezbollah-Israeli war of 2006, the Israelis searched vainly for a nodal "asset" to target as the center of gravity but were thwarted because Hezbollah – knowing Israeli doctrine – chose not to present them with a center of gravity to attack.[25] Having a systems perspective means that operational level commanders and staffs need the ability to step back or zoom out from analytical fixation and comprehend the whole of a system before zeroing in on one of its pieces.

Over time, interactions within and among systems and their emergent properties leads to the discovery of patterns. Humans are hard-wired to discern patterns, perhaps as a built-in survival mechanism.[26] We can observe traffic patterns, housing patterns, thought patterns – for every system observed there are recognizable patterns and these patterns in turn help to understand the nature of the studied system. Most academic disciplines are differentiated by the patterns of the systems they study. For example, in international relations the main schools of thought – realism, liberalism, and constructivism observe and study the patterns of state-to-state relations in the greater context of an anarchic international system. The differing schools of thought tend to focus on patterns associated with different properties within the international system. Realists explain causative behaviors leading to conflict based on human nature. Liberals focus on institutions, and constructivists observe actor identities and information flow. Since none of them alone provides certain predictive power, it is useful to have multiple perspectives and consider different characteristics of the environment depending on context and circumstances.[27]

It is common to call a system open or closed, but the distinction is relative; there are no purely closed systems because all systems are influenced by their environment.[28] Analytical isolation of nodes and elements of a system from the context of the environment is a sure way to exclude the characteristics and behaviors that might influence them. A node, actor, or element may belong to multiple systems based on relationships; this is certainly a social property observed in human relations and their multiple identities based on differing relationships. An Afghan may have a weak association with the state of Afghanistan, but strong associations with family, community, tribe, religious affiliations and trade partners. Their associations are largely local or proximate to their position in a system. Within the joint force, a deployed army brigade may be interconnected with their local communities, regional leaders, reserve elements, interagency partners, and many other systems that are not fixed but change over time.

We can map these associations and discern interconnectedness, organizational structure, and patterns of behavior through studying a systems' networks. Joint doctrine uses node and link analysis to describe networks in order to target adversary forces, and describes nodes as the material aspects of a system, with links being "technical, human/social, functional, organization, and thought/intent relationships between nodes."[29]

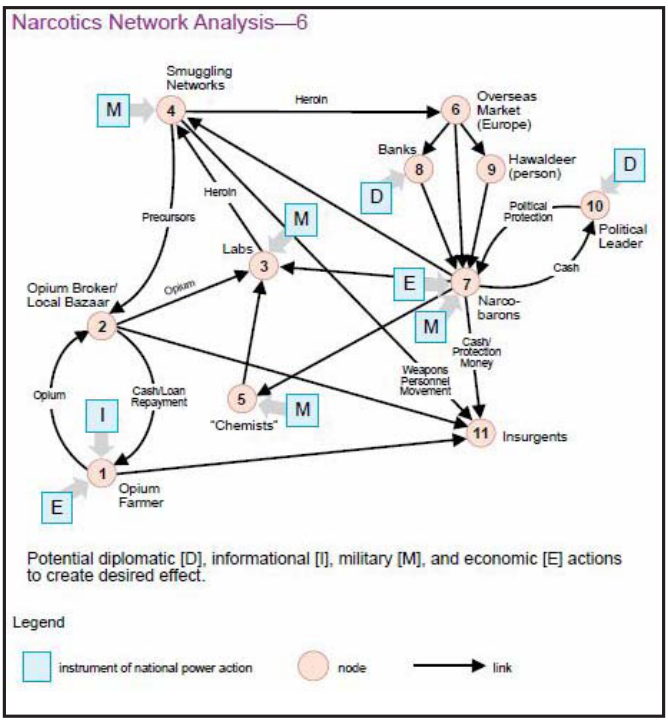


Figure 2. Node and Link Example from JP 2-03, *Geospatial Intelligence Support in Joint Operations*.

Ultimately, our ability to understand networks depends on mapping out the links and relationships between its nodes or actors (Figure 2). In network theory, the property of the

networks reveals its underlying structure of interconnectedness. All it takes is "one link per node to stay connected," and less than one connection, you don't have a network.[30] In his seminal paper, "The Strength of Weak Ties," Mark Granovetter identified the relationships between strong and weak ties, or links in a network. Although counterintuitive, weak ties play some of the most important roles in networks. Social network systems can be characterized by dense clusters with strong ties based on kinship and associated friends, but weak ties connect these clusters and provide information flows that cannot be provided internally. [31] For example, most potential job opportunities are a result of information from outside our immediate family or friendship cluster. It might be a friend of a friend or "heard through the grapevine" that gets results. Weak ties or links are an important property of systems, but often ignored in an analytical pursuit for targeting "strong" nodal clusters. Breaking weak links isolates the clusters – they can't communicate and the system breaks down. This is an especially important concept for countering terrorism, with terror networks spanning the globe and having weak ties with other terror networks, funding sources, and potential recruits. Consider the "small world" effect. We often remark that it is a small world whenever we meet someone far away from home who knows someone in our family or local social network.[32] The small world effect is essentially a "shortcut" for how we connect to seemingly far away and isolated network clusters.

Connections, ties, or links determines the strength or fragility of a system, with the most important being the "hubs and connectors" that have the greatest number of links between nodes and are characterized by proximity and purpose.[33] The internet is a digital system of hubs and connectors and overall determines its structure. For example, the search engine Google ranks pages by the number of links. The more links, the stronger the association.[34] Their algorithm exploits the aggregate pattern behavior from individual web searches to provide the most probable location of information desired by an aggregate of individuals. Hubs and connectors follow from an understanding of power laws whereby the majority of the effects in a system are produced by a few strong hubs of dense connections. Power laws are an aspect of the organizational properties of emergent systems and they tend to dominate any dynamic system. Early in the 20th century, Italian economist Vilfredo Pareto discovered a power law to describe how 20 percent of the population owned 80 percent of the wealth. This became known as the Pareto Principle or 80/20 rule, as opposed to a normal "bell-curve" average distribution.[35] Most organizations display patterns where roughly 20 percent of the workers produce most of the organizational output – which is why leaders should spend more time with the 20 percent of their best workers to leverage their effects rather than having their time dominated by trying to raise the performance level of the other 80 percent.[36] Since dense hubs and connectors in the operational environment are the confluence of many actors and provide the majority of system effects, they are potential centers of gravity and decisive points for operations.

Analysis by itself is not enough to appreciate the dynamics of the operational environment. Embracing the whole of a system and its complexities enables perspectives sensitive to its overall nature, and not be fooled by discrete particulars. Systems with complex interrelationships, and subject to power law, gives us a glimpse of the dynamic nature of emergent events which can be characterized by extremes and unpredictable outcomes. There is

no "average" event, and predictions become suspect. In a simple system with few interactions you can predict outcomes because you can trace cause and effect, but in systems dominated by power law effects, there are few predictable patterns to exploit. On their surface, they appear stable, but their underlying structure can produce extreme outcomes. Nicholas Taleb calls this type of system "extremistan" where "Black Swan" negative events occur, such as stock market crashes, pandemics, and other disasters that catch us off-guard."[37] The so-called Arab Spring was a black swan event that few could predict, although some were aware of the underlying tensions internal to the Middle East that brought it about.[38] The world was caught by surprise when in the space of a few short months Tunisia, Egypt, Libya, and Syria were in upheaval, regime change, and civil war seemingly sparked by the self-immolation of a Tunisian street vendor. Similar to World War I, world leaders were shocked at how circumstances changed in the blink of the eye. They couldn't see or visualize how this could happen – perhaps due to a lack of imagination or a failure to visualize alternatives – but more likely because small delayed effects over time were not considered until disaster struck and most of Europe was at war.

## Visualizing and Describing Systems (We Murder to Dissect)[39]

A city cannot be a work of art.[40]
– Jane Jacobs

How we visualize, perceive, and think about systems influences how we understand them. Our "mental models" are reflections of our beliefs and assumptions about reality and how the world is structured.[41] Derived from the Latin *perspecere,* to literally "closely inspect," perspective is the means by which we sense the environment and derive understanding about systems. Perspective is (to closely inspect) "the relationship of aspects of a subject to each other and to a whole."[42] The relationship between systems and perspective becomes obvious: we are now an actor or "node" interacting with a system that we study, and we not only investigate the individual elements of a system, but our perspective must also appreciate the whole based on relative position and orientation within the system. Position in a system not only determines the perspective of actors, but also the relative positioning of other actors in a system because they are all interrelated.[43] Local actors tend to have weak perspectives of the higher systems they are nested within, and actors participating at higher levels tend to view local dynamics as an abstraction, largely because they follow different rule sets, have different immediate goals, and sense the environment differently. In large cities, people identify primarily with their neighborhoods – it's what they sense and make sensible: its people, daily rhythms, and unique architecture shape their perspectives and each neighborhood is different. At city hall, neighborhoods are merely blocks of buildings and streets on a map. One perspective is bottom-up, the other is top-down.

Leaders and planners disassociated from local dynamics view the operational environment from a distance. This is both a strength and weakness. In order to comprehend the whole of a situation, they necessarily need to step back from the chaotic welter of interrelated variables to grasp the larger patterns and outlines, but at the same time appreciate the parts of a system – the local dynamics of the environment where emergence happens. This is why we use "operational art and design" combined with mission command because the

reductionist elements of operational design enables an abstract rendering of the operational environment and provides a military plan of action that accounts for the system of war in all its abstract possibilities. It combines holistic and analytical perspectives. But we cannot confuse art with reality. To paraphrase and substitute a military analogy for Jane Jacobs' insights to art and the life of a city: "to approach the entire operational environment, or even a campaign, as if it were a larger architectural problem, capable of being given order by converting it into a disciplined work of art, is to make the mistake of attempting to substitute art for life."[44] Artists and designers *see* things differently. The resulting perspective is abstract and transfers that abstraction into a plan of action.

The Swiss-born artist, architect, and planner who called himself Le Corbusier held an abstract but not holistic vision of how people should live. From a distant perspective, his sketches of city life appeals to the modernist vision of order with geometric shapes, tidy functional segregation, grand boulevards, striking high rises, and green parks to gather in, but ultimately proved to be almost unlivable when his plans were translated into reality because people don't live life from a distance.[45] They live life locally and operate by rules different from artists and designers. Cities organically develop over time with millions of adjustments unorganized by any central authority, which is another aspect of emergence.

We are all potentially blind to local dynamics where emergence takes place. It is a mistake to visualize a campaign plan as you would the blueprints for a house. War as a human endeavor is messy, diverse in its expressions, and not subject to control through abstract and potentially arbitrary symbolism. A military strategy and campaign plan can only illuminate a general approach towards accomplishing strategic aims; we cannot impose order on emergent properties in other systems except through extraordinary effort, but we can influence behaviors through tactics and operations.[46] The executers of tactics and operations at the lowest levels tend to have better perspectives and insights into the nature of the local dynamics of war. To them, war is not an abstraction even if they cite factors such as liberty and patriotism as important reasons to fight. Motivation in battle does not come from strategic aims or the commander's intent, but from the ability to stay alive and protect their comrades.[47] This is why perspectives conflict and the need exists for understanding from top-down to bottom-up. You cannot administratively order victory, but at the same time, tactical success without strategic effect is useless. Structures are tied to purpose, and through time, contingency, and adaption, structures also adjust. Societies are always rearranging social structures and governance suited to the character of the times. When structures cease to adapt to changing circumstances, they create fragility and place the entire system at risk. Man-made systems are purpose-built – they are created to fulfill desired order and conditions suited to circumstances in relation to the overall environment. But over time, most structures are subject to turning inward to support internal demands rather than the purpose by which they were created, which is a systems effect unique to human creations. This is where bureaucracy often conflicts with contingency and the need to adapt to changing circumstances. Bureaucracy tends to order itself in reflection of its own desired ends rather than for their created purpose.[48] Perceptions at different system levels vary and must be accounted for as part of a systems perspective.

What we perceive about the operational environment is a result of the mental models and thinking used as a lens through which we come to know and understand systems.[49] Because mental models are based on our experience and "frame" our views of the world, they are often unchallenged assumptions about how things really work. Assumptions about the willingness of the Iraqi military to fight, and their relatively stiff resistance in Operation Iraqi Freedom I, was a result of having planned and war-gamed only against conventional forces, and not the Fedayeen that threatened V Corp's rear area.[50] Our beliefs and assumptions from previous experiences mold our perceptions, and the military's previous experience with Desert Storm and mass surrender likely framed the operational approach for OIF I. It's not that having mental models is wrong. What can be dangerous is for awareness to exist below the conscious level – where our implicit understanding remains hidden and unquestioned.[51] Because complex systems are dynamic, our perceptions of systems must also be dynamic and subject to change; it requires constant effort to challenge our own thinking about the world as we see and perceive it.

Richard Nisbett studied perception based on cultural differences and found a striking difference between eastern and western approaches to thinking. He found that there is a tendency for those raised in the intellectual and cultural traditions of the west to focus on objects, and for Asians to largely consider context before the objects themselves.[52] Based on his findings, both traditions may already have deep cultural biases already built into their lens of perception. A wide-view appreciation for context is necessary to perceive the big picture and the whole of a system, but granularity is lost. Advances in science and technology would be impossible without the ability to thoroughly analyze component pieces of nature, also called reductionism. It requires both a wide-view lens as well as the microscope to fully gain an appreciation for complex systems.

The criticality for understanding the entirety of a system was demonstrated by British Imperial actions to protect their colonies and trade pipelines as part of their strategy for defeating the Central Powers in World War I. They thought in terms of empire and not simply defense of the homeland or trench warfare in France. All systems of empire were interrelated and important to their strategy – communications, trade, governance, shipping, insurance, credit, raw materials, and many others.[53] Analysis of each sub-system within the Imperial system was also beneficial to deciding strategy and discovering the important relationships between them. Although the British Navy was a critical requirement in defense of sea routes and convoys to protect shipping, a more important condition created was to guarantee the insurance system. This policy enabled merchant shipping to continue whereas military protection alone was insufficient to entice shipping companies to risk their capital ships and assume the burden of losses.[54] British leaders understood the nexus of finance, shipping, and insurance and were able to successfully exploit that insight.

Daniel Kahneman identified two thinking systems: System 1 and System 2. System 1 is what we rely on for most situations and what we find effortless: our intuitions that are formed from past experience, emotional conditions, and provides us the ability to make quick decisions. System 2 is deliberate, requires more effort, and uses deliberate reasoning to provide a "check" on hasty System 1 thinking.[55] Having a systems perspective requires both thinking systems. Intuitive thinking is considered the key to adaptive decision making

according to Gary Klein and is consonant with Clausewitz's concept of *coup d'oeil*.[56] It's the ability to quickly size up a situation and make an immediate decision. More importantly, it is invaluable for navigating through complex situations and making sense of ambiguous and incomplete data within the context of the situation.[57] We need intuition to understand the relationships of the parts to the whole. But we also need analytical thinking and structured reasoning to support intuition.

Mental models are a natural source of biases. System 2 thinking is meant to formally investigate claims made through intuition.[58] The formal reasoning systems include deduction and induction, but for most other occasions we rely on analogical, or reasoning based on "like" experiences we compare with previous mental models. We use deductive reasoning related to systems when general principles are already held to be true to make specific conclusions, and inductive reasoning is observing particulars in order to derive general principles. Deductive reasoning is largely a result of our mental models accrued over time; it requires knowledge about a system to reason about it and assumptions play a key role.[59] An example is to say that bureaucracies tend to stagnate over time. The military is a bureaucracy, so it will tend to stagnate over time. Most intuitive decisions are based on deductions: we trust what we know, but tend to forget our biases as a result. Inductive reasoning is the key to scientific scholarship, but is subject to probabilities that the evidence gathered making a general principle is true. Rather than rely on mental models, the method of induction builds its own model for depicting reality. The problem as seen by Jim Manzi and others is that the inductive model is always contingent to the individual context and circumstances of the data itself.[60] For example, by observing historical enemy patterns of behavior, strategists may conclude that since a first strike was never launched, it is unlikely that they will do so in the future. This theory is contingent on historical observances that may prove false in the next incident. Taleb calls this the "Turkey Problem." Because a turkey is well fed and cared for day after day, a turkey might assume from past experience that the future was bright – up to the point of being served for Thanksgiving dinner.[61] William Starbuck noted that "research quality is a political judgment" where the gathering and analysis of data is subject to investigative biases where "cherry-picking" can occur to justify a deeply entrenched worldview.[62]

There is another method of reasoning attributed to Charles Pierce and Arthur Conan Doyle, creator of the fictional character Sherlock Holmes, called abductive reasoning that combines the formal reasoning methods with a twist. Holmes uses induction to gather data, abduction to create a hypothesis that accounts for the facts of the data, deduces consequences from the hypothesis, and tests the hypothesis to solve the problem.[63] In discerning the complexities of the operational environment, all reasoning methods assist with determining significant and relevant information decision makers need.

There is also a tendency to think analogically by comparing a current situation to previous mental models, an aspect of intuitive thinking used to compare and contrast what is known with new information. But entrenched mental models prohibit reflective thinking about the context, resulting in flawed perceptions. When President George W. Bush held a meeting at Camp David shortly after 9/11 to discuss options for striking Al Qaeda, he was disappointed with limited options presented by General Hugh Shelton;

"The military options look like five or ten years ago," reflecting a use of force analogy for limited intervention from the Clinton administration.[64] Jeffrey Record relates how previous presidents often used flawed analogies from Munich and Vietnam related to national security decisions. Munich meant appeasement and Vietnam meant quagmire.[65] Despite metaphors being powerful language tools that relate imagery from one domain to another – as in the case of Clausewitz relating war to a chameleon in the way it changes its character but not its nature – they can also be sources of misperception.[66] Because context changes, metaphors appropriate to one situation may not be appropriate to others. Center of Gravity (CoG) as a metaphor originally expressed by Clausewitz is appropriate in a system of war between recognizably coherent adversaries, but is not useful describing state systems fighting amorphous and changing entities such as Al Qaeda or more recently ISIS.[67] They may also serve to oversimplify and distort complex meaning as a result. By substituting the CoG for the true object of the campaign as expressed in endstate conditions, we mistake an efficient cause – or what brings something about – with the final cause which is what we set out to achieve in the first place. Defeating the CoG in phase III operations and regime change during OIF I did not lead to "build(ing) a society based on moderation, pluralism, and democracy."[68] Stability operations may call for metaphors associated with *cultivating* system behaviors and not striking a system off-balance as the CoG suggests.[69] A system perspective challenges assumptions based on mental models in order to adapt to changing circumstances in the operational environment.

Because perceptions of the operational environment depend on system location, perspectives will naturally diverge. Janine Davidson points out that the president's perspective is different in kind, and not degree from the military perspective. The military has difficulty determining potential options without presidential guidance, and the president cannot make a decision without understanding military options available.[70] Because the president has to think through national level variables such as domestic support, congressional actions, international opinion, finance and other systems, decision making occurs at a higher systemic level than the military which is a component element of the overall whole of government and society. Having a systems perspective would enable recognition that military strategy is necessarily subordinate to political outcomes and the calculation of decision makers.

JP 5-0 has systems perspective as an output of step 1 and "Understanding the Operational Environment" in the joint operations planning process (JOPP), but it should also be considered a precondition that provides the *a priori* frame of mind for each participant in order to be open to system behaviors and characteristics.[71] It can also be an output from the collective efforts of the staff and most importantly, considers the operational environment from different perspectives and points of view. This is at the heart of having cross-domain and cross-functional perspectives. A joint staff has members from service elements and unified action partners. They represent the different domains that their capabilities are employed in: air, maritime, land, space, and cyber/informational and thereby have a geospatial perspective of their respective systems. Joint capabilities are integrated and synchronized in time, space, and purpose representing its cross-functional nature and perspective that must be part of all joint operations. Although joint intelligence doctrine discusses geospatial and systems perspectives for intelligence preparation of the

operational environment (JIPOE), it should also be emphasized as fundamental to all joint operations and planning.[72]

Despite his 19th century framework of reference, Clausewitz embodied having a system perspective and his insights in *On War* reflected an appreciation for the complex and dynamic behavior of systems.[73] Although he thoroughly analyzed the constituent parts of war, more importantly he investigated its characteristics by keeping the whole of war in mind.[74] He did employ abstract reductive tools to help explain those dynamics, chief among them being the paradoxical trinity and center of gravity, but overall he sought to link the elements he analyzed to the whole phenomenon of war.

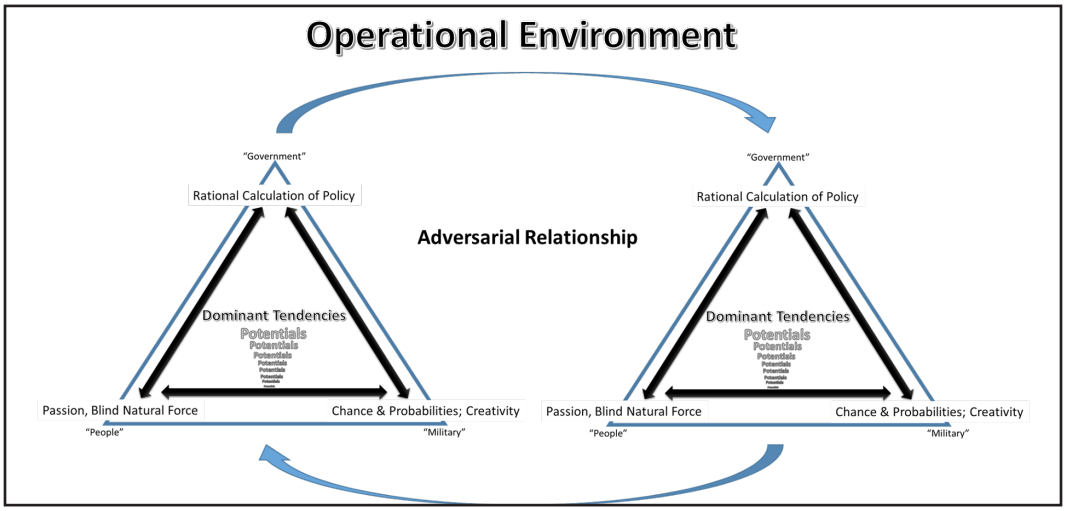


Figure 3. The Trinity and Dominant Tendencies as Operational Context. Created by author.

Joint doctrine still uses center of gravity as part of operational art and design, but does not relate it to the "trinity" from which centers of gravity emerge. In joint doctrine we relate centers of gravity to the objective and use a reductive analytical approach to explain its parts for purposes of targeting. More importantly, doctrine grounds our understanding of CoGs *relational to the context of each adversary and the operational environment.*[75] This is an aspect often overlooked, where the adversarial or reciprocal nature of interconnectedness is dependent on the characteristics of each belligerent and the context of the overall operational environment. They form a unified or "entangled" system of war. The behaviors of each – in themselves separate systems – interconnect and thereby modify their respective behaviors through adaptation as a result.

Internal to each trinity, there is a dynamic that reflects the underlying tensions between the three primary interrelated forces within a human system of war. Although many mistake the "Newtonian" conceptualization of government, military, and people that is the visible structure of the system, as a "total phenomenon," the underlying "dominant tendencies" of rational calculation of policy based on political intercourse; chance and probabilities "where the creative spirit is free to roam;" and passion as "a blind natural force" holds true for any system of war and these three tendencies are "variable in their relationship to each

other."[76] From these tendencies we can derive an understanding of the underlying potentialities inherent in its properties. Passion has the potential to create unmitigated enmity and hatred for others. Calculation has the potential for miscalculation, and chance and probability reveal the uncertain character of war where potentials are largely unseen and unforeseeable. When you combine adversaries in a reciprocating relationship with each other and their inherent tendencies and potentials interact, extraordinary complex outcomes are possible and reflective of its combined systems behavior (Figure 3).

A systems perspective does not require a complete view of the operational environment, which in reality is impossible because there are far too many variables both seen and unseen. By focusing on the relationships of the dominant tendencies and potentials in a system, the most important characteristics can be grasped and more importantly influenced. Nicholas Taleb uses the "green lumber fallacy" to describe knowledge – mostly related to theories – unimportant to discovering how things actually work. A successful trader of "green lumber" thought the lumber he was trading was painted green, when it was actually unseasoned lumber. Its color didn't matter to how he perceived the system for trading lumber.[77] "I have to know more facts before making a decision" is a common refrain, but largely unnecessary in most operational situations, and facts in themselves without meaning may provide an illusion of subject matter mastery.

The entanglement of trinities leads to discovery of potential centers of gravity that reflect a comprehensive systems perspective of both adversaries: "One must keep the dominant characteristics of both belligerents in mind. Out of these characteristics, a certain center of gravity develops, the hub of all power and movement, on which everything depends."[78] Those characteristics may include analysis, with joint doctrine emphasizing diplomatic, informational, military, and economic (DIME) characteristics for the strategic environment, and political, military, economic, social, information and infrastructure systems (PMESII) at the operational level.[79] You don't analyze these characteristics separately, but through their interrelatedness in its dominant tendencies. Meaning and understanding of where CoGs are found related to the overall system is established when we relate CoGs to the dominant characteristics between belligerents, which establishes the context for their relationship, and also the relationship between the dominant tendencies internal to each system.

Although centers of gravity are reductionist elements of a system, they represent the Parentian power law (80/20 rule) where the CoG exercises the greatest influence within its system. Overcome the enemy CoG, and you've solved 80 percent of the problem. Having a systems perspective is to focus on relationships and not the actors, nodes, events – or categories of information such as DIME and PMESII. This is key to understanding the elements of operational design – they are abstract symbols of a system's dynamics and they are all interrelated. Termination and endstates are related to strategic policy goals, center of gravity is linked to completion of endstate conditions, objectives and effects are determined through their relationship to achieving defeat of the CoG, decisive points are the keys to getting at CoGs, culmination occurs when objectives cannot be met, and the remainder of the elements can also be explained in relation to each other within the context of the operational environment.

The important role of reductive and analytical tools now becomes important. A holistic appreciation for the operational environment embraces its complexities, but also considers its most important attributes in the context of a given situation. "At the other end of complexity is simplicity," and the most important elements for understanding the enemy system, such as identifying centers of gravity, simplifies our ability to determine the problem, focus efforts, and create an operational approach.[80] Mission Command exploits this dynamic. Local actors must deal with complex emergent reality whereas at higher levels, complexity is more abstract; "Everything in war is simple, but the simplest thing is difficult."[81] War plans should strive for simplicity to reduce friction at its lowest levels.

When commanders and staffs at the operational level use systems perspective to make sense of the operational environment, they are more attuned to the dynamics of the operational environment. They would know their position in the overall security system is subordinate to the greater goals of the higher strategic system where the military is the means to effect national level policies. They would understand that any operational approach needs to be simple to be effective in a complex environment. Planning would account for adaptation and insights to the relationships between actors, nodes, and elements of a system expressed through emerging patterns, feedback loops, and traced through networks.

When you leave the cave and blink in the blinding clarity of light, reality is more clearly perceived and you are not be misled by the incomplete forms of shadowed ignorance.

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# Chapter 2

## Center of Gravity and Beyond: Power and Perils of Metaphors in Joint Planning by LTC Paul S. Oh

In all domains of life, humans use the familiar to explain and grapple with the unfamiliar; warfare is no exception. Used properly, a metaphor powerfully and effectively takes an understood concept to form and communicate meaning in another. Used improperly, it stifles creativity in thinking and forces a meaning on a system that may not be there. The military's current fixation with the Center of Gravity (COG) metaphor serves as a prime example of a useful conceptual construct that can pigeon-hole planners into a rigid and sometimes unhelpful way of thinking. As the Joint Force prepares for an uncertain future, the proper use of metaphors becomes increasingly important in constructing understanding, and planners ought to freely think beyond Center of Gravity to utilize the full power of metaphoric thinking in our planning process.

This essay does not argue against the importance of understanding Center of Gravity as related to military operations, nor how various authors have adapted the metaphor to suit the use of today's planners. It does posit that planners may need to complement Center of Gravity with other metaphors to better understand the environment and formulate an operational approach. This argument is in three sections. First, I explore the power of metaphors as well as potential dangers associated with their use. Second, I outline the shortcomings of focusing exclusively on the Center of Gravity as *the* metaphor in understanding the environment and formulating solutions. Third, I suggest a framework to think beyond Center of Gravity for the use of other metaphors to prepare for the nation's next conflict. I conclude with some implications for Professional Military Education.

### The Power of Metaphors, and Their Dangers

According to Donald Schoen, language is highly metaphorical and the "creation of metaphors is the process through which concepts are formed and displaced from old to new domains."[1] A metaphor takes aspects of an idea and transfers them to explain the unfamiliar. When one uses the reasoning to understand the new, meaning is created. Numerous examples exist in the history of warfare. Sun Tzu summoned the imagery of *torrential water* to describe momentum and the *strike of a hawk* to describe timing.[2] Korea was a *police action,* while Vietnam was a *quagmire*. LTG McKiernan saw the final stretch into Baghdad as entering football's *Red Zone*.[3] Clausewitz referred to war as a *duel* where *wrestlers* attacked the opponent's *Center of Gravity*. The power of metaphors lies in their ability to shape our thinking, give meaning to our experiences, and ultimately influence the way we formulate solutions.

As George Lakoff and Mark Johnson point out, "We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience…by means of metaphor."[4] A metaphor will alter a conceptual system and influence the formulation of solutions to solve the problem in that system. For example, several psychologists in 2008 considered the four metaphors of *war, law enforcement, social epidemic,*

and *prejudice reduction* in framing the Global War on Terror. As expected, each metaphor highlighted a certain aspect of the counter-terrorism problem, and served to prescribe a certain set of solutions.[5] In the end, framing the counter-terrorism fight as a *war* effectively put the military instrument of power at the forefront. In another example, General Franks' use of the metaphor *speed kills* resulted in a brilliant defeat of Iraqi conventional forces, but arguably led to a slow recognition of the emerging insurgency.[6]

Hence for military planners, metaphors become crucial in properly framing the environment and proposing solutions. But planners ought to appreciate the great power and perils of metaphors. The use of the right metaphor can enlighten and reveal, but clinging too long to that metaphor or the use of the wrong metaphor can hide and sometimes deceive. A metaphor can unwittingly keep us from focusing on aspects of the unfamiliar that are inconsistent with that metaphor. Lakoff and Johnson explain: the construct "that allows us to comprehend one aspect of a concept in terms of another…will necessarily hide other aspects of the concept."[7] Therefore, our use of metaphors should never be stagnant; the changing environment may require a corresponding change in metaphors or addition of new ones.

Such flexibility in conceptual thinking is inherently difficult because of what behavioral psychologists have labeled confirmation bias and belief perseverance.[8] Once we choose a metaphor, we tend to look for facts that confirm our choice and implement the solution that flows from that metaphor, thereby reinforcing "the power of the metaphor to make experience coherent."[9] We cling to our beliefs and make metaphors self-fulfilling prophecies. Unfortunately, our doctrine and professional military education only reinforces such tendencies by focusing planners on finding the *Center of Gravity* and does little to encourage use of different metaphors for different situations.

## Center of Gravity, the Only Metaphor for the Military?

Military theorists and practitioners continue to debate the utility of the *Center of Gravity* metaphor.[10] On one side, some argue that Clausewitz' 19th century metaphor has outlived its usefulness and should be supplemented by others stemming from new disciplines of science.[11] On the other side, advocates deem *Center of Gravity* still a useful concept, albeit with certain caveats.[12] Still others advocate a clean break from Clausewitz's original concept to make it applicable to modern planners' needs.[13] Embedded in the curriculum of the Command and General Staff College, for example, is an analytical method formulated by Dale Eikmeier, where students are taught to apply the ends-ways-means construct to identify the primary means (or the COG) that can implement the ways to achieve the ends of the campaign.

What is not arguable, however, is the central place of *COG* in today's Joint Doctrine. The Joint intelligence manual advocates developing a systems perspective of the Operational Environment. By understanding the political, military, economic, social, information, and infrastructure (PMESII) variables and their interaction with each other, the J-2 is to lead the staff in visualizing potential *Centers of Gravity*.[14] In the current Joint planning manual, the analysis of the *Center of Gravity* resides as the centerpiece of formulating the

operational approach. Doctrine states that "one of the most important tasks confronting the JFC's staff during planning is identifying and analyzing friendly and adversary *COGs*."[15]

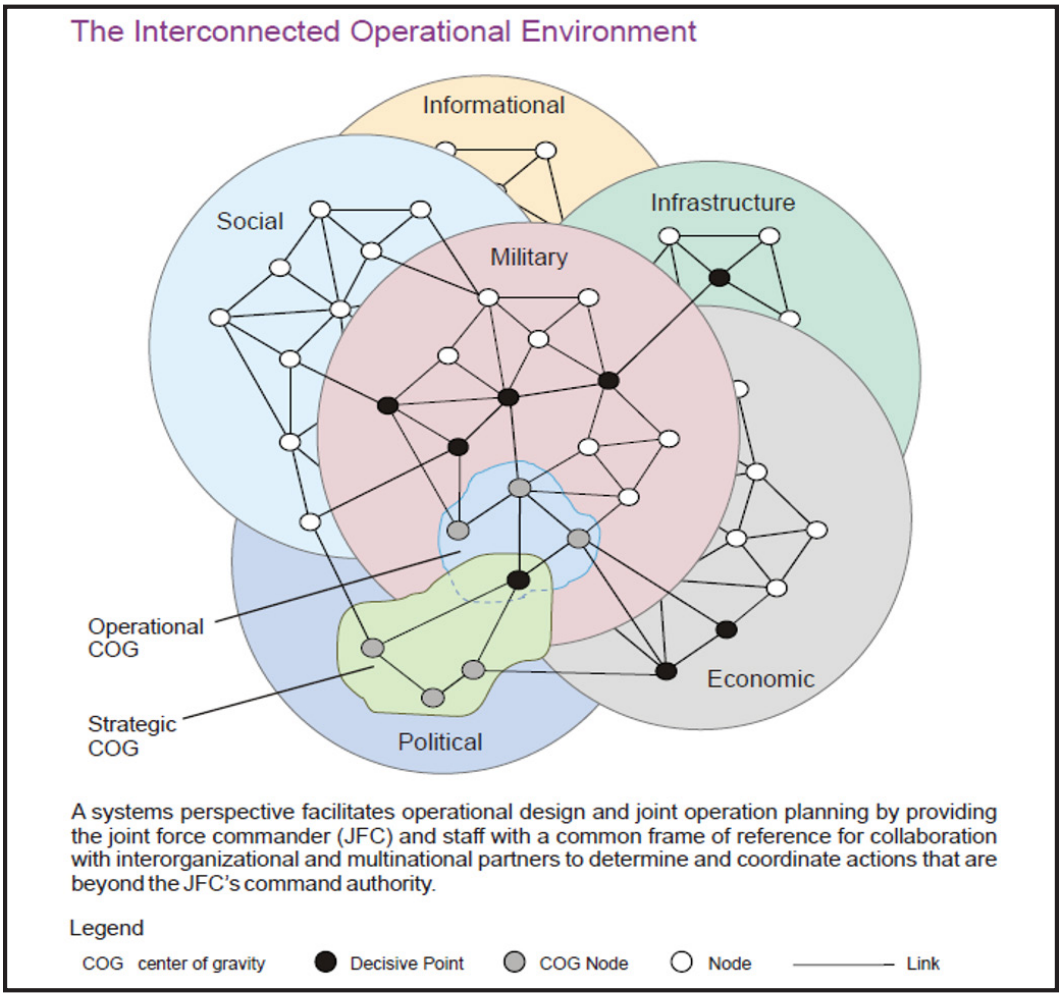


Figure 4. The Interconnected Operational Environment. Joint Publication 3-0, *Joint Operations*.

In one sense, the use of *Center of Gravity* illustrates how powerful thinking in metaphors can be. The *COG* can help focus limited resources on attacking or defending the right critical requirements or vulnerabilities associated with the "source of power that provides moral or physical strength, freedom of action, or will to act."[16] But as with all metaphors, *Center of Gravity* also dictates a particular conceptual construct which presupposes certain rules and implies a certain set of solutions. We pre-decide, for example, that our adversary is cohesive enough to have a *Center of Gravity*. Such a construct arguably feeds the military's proclivity to find the enemy and offer decisive battle to achieve ultimate victory.

But in constructing our thinking in this fashion, the danger is that we may blind ourselves from different ways of looking at our adversaries and potential solutions. On 21

January 2015, author Ori Brafman spoke to a class of CGSC field grade officers on his *starfish* metaphor to describe decentralized organizations without heads to "thump" if you want them to die.[17] Brafman's ideas of decentralized, networked, leaderless organizations are intimately familiar to those who fought in Iraq and Afghanistan. Our Joint Doctrine, however, does not provide space to incorporate such metaphors, which would then imply a set of solutions different from decisive battle directed against an adversary's *Center of Gravity*.

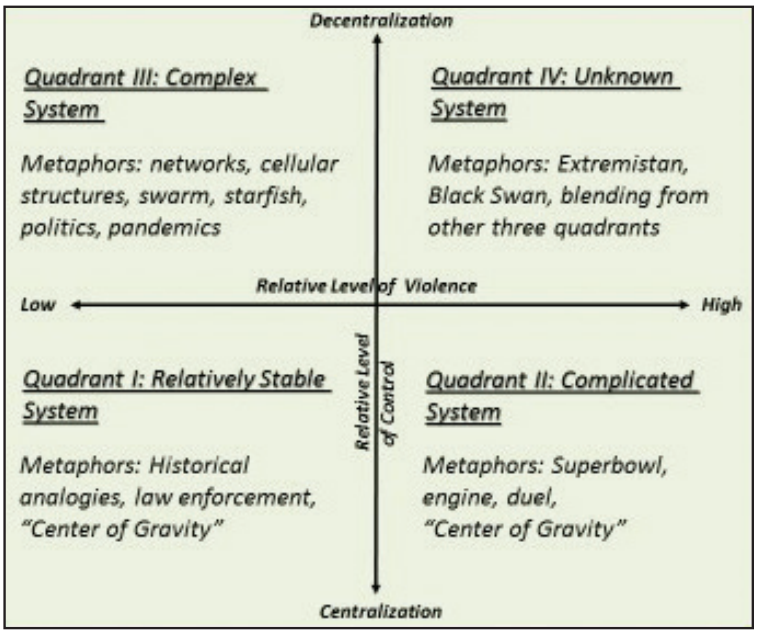


Figure 5. Alternate Mapping of an Operational Environment. Created by author.

In another case study, Emile Simpson's analysis of 21st century conflict posits that shoehorning conflicts characterized by fragmented political environment into a traditional concept of war can result in strategic confusion. He uses the metaphor of *domestic politics* in liberal democracies which takes place "in a fragmented, kaleidoscopic environment, in which sections of the electorate are thinking about their own interests, effectively competing vis-à-vis one another."[18] Solutions, then, include politically nuanced actions geared towards influencing "target audiences to subscribe to a given narrative."[19] His use of the *domestic politics* metaphor illuminates an approach that can at the very least complement other approaches stemming from other metaphors. As the operating environment continues to increase in complexity, it is time to think beyond *Center of Gravity* for additional metaphors that may create new understanding and spur innovative solutions.

## Beyond Center of Gravity

Today's Joint planning includes the use of operational design, defined as "a process of iterative understanding and problem framing that supports commanders and staff in their application of operational art with tools and a methodology to conceive of and construct viable approaches to operations and campaigns."[20] Using this methodology, commanders and staffs conduct conceptual planning by studying the environment, identifying the problem, and formulating a broad approach for a solution.

The first step in operational design is *Understanding the Operational Environment*. Doctrine prescribes a "PMESII analytical framework to analyze the operational environment and determine relevant and critical relationships between the various actors and aspects of the operational environment."[21] As it incorporates aspects of systems theory, Joint Publications 5-0 notes that "most important to this analysis is describing relevant relationships within and between the various systems that directly or indirectly affect the problem at hand."[22] But at this point, doctrine automatically assumes that the analysis of the operational environment will lead to the identification of the friendly and adversary *Centers of Gravity*.[23] This may not always be the case.

An alternate mapping of an operational environment using two frequently observed variables can produce an entirely different understanding. The first variable is the relative level of control the system of opposition has over its parts. This stems in part from the number of entities in the system, their independence from each other, the number of objectives the various entities want to achieve, and how concentrated they are in terms of mass. The level of control may vary from "decentralized" to "centralized." The second variable is the relative level of violence, and stems in part from the different types of tensions existent in the system. It is associated with the amount of *friction* and *fog of war* present. The level of violence can vary from "low" to "high." Depicting the level of control on the Y-Axis and the level of violence on the X-Axis results in a simple framework composed of four quadrants. These quadrants serve as frames that planners can put on a system which they can then use as heuristics for describing that system and the types of metaphors associated with it. Planners will continually need to reframe as other factors, including US military forces, are introduced into the system.

## Quadrant I: Relatively Stable System

In a perfect world, all conflicts occur in Quadrant I. The United States faces one centralized adversary whose ability to prosecute violence is limited. In this relatively stable system, the understanding of the environment and formulating solutions are relatively simple to comprehend. With less risk, planners can delve into *historical analogies* to construct understanding. "This is like Grenada," a planner may say, and dust off lessons learned from 1983 to formulate an operational approach. Planners may also use *law enforcement* metaphors as the operation may involve an arrest of a leader, prioritizing limiting collateral damage, and the need for collection of evidence. The use of *Center of Gravity* can also be useful, though identifying one may be relatively easy.

## Quadrant II: Complicated System

In Quadrant II, the decisions regarding war are still held in the hands of the few who through hierarchical structures control the many. They are likely to control the traditional organizations born in the Industrial Revolution, to include a conventional military force, and provide the direction to achieve their objectives of war. But different from Quadrant I, the adversary's ability to prosecute violence greatly increases, resulting in a complicated system. Their ability to inflict damage on the US increases the uncertainty of the project as well as *friction* and the *fog of war*. This quadrant is where inter-state wars reside, and here is where the military consistently returns in its doctrine and Professional Military Education to practice the fundamentals of warfare.

Metaphors in this quadrant are heavily influenced by those found in Newtonian science. This science is preoccupied with independent variables where the whole is sum of the parts, and is based in reductionism, determinism, and materialism. [24] The pervasive influence of Newtonian sciences is easy to understand for it provides "simplicity, coherence, and apparent completeness."[25] Of note, this alternate mapping is in essence Newtonian. Although its simplicity may provide insight, the weakness of this framework is that its reductionism does not account for emergent behavior of the system which may require reframing. This reductionism greatly influences the military's planning process and how we seek to solve problems. Reduce the enemy's *Center of Gravity* to its critical requirements and critical vulnerabilities, for example, then we can properly allocate assets for its destruction.

In Quadrant II, Newtonian-influenced metaphors are applied to conflict between binary actors. Clausewitz's metaphors, for example, illuminate the nature of conflict in this system. War is a *duel* on a larger scale between two rationally thinking actors; imagine a pair of wrestlers trying to impose ones' will through physical force.[26] In American parlance, it is the *Superbowl,* the culmination of years of preparation for decisive victory over an opponent. To win, proper identification of the *Center of Gravity* is paramount. "A *Center of Gravity* is always found where the mass is concentrated most densely," [27] writes Clausewitz; striking here to cause the mass to shift or lose balance is the most effective way to defeat your adversary.[28] To misidentify may mean the misallocation of precious resources and misapplication of force against an adversary who is attempting to strike our *Center of Gravity*.

But these metaphors start to lose their relevancy as the level of control manifested by the adversary becomes more and more decentralized. Clausewitz himself recognized this; he readily identified the factors of "unity" and "cohesion" in determining the presence and number of *Centers of Gravity*.[29] By overlooking these essential prerequisites, however, the military is predisposed to look for a *Center of Gravity* even if one may not exist.[30] Automatically defaulting to the *Center of Gravity* metaphor ignores the developments in other sciences witnessed in recent decades which provide alternative metaphors to understand the environment and formulate solutions.

## Quadrant III: Complex System

Quadrant III is characterized mostly by decentralized level of control. Although the level of violence may be lesser than Quadrant II, the multiple independent entities and their varying degrees of interdependence makes this system increasingly complex. The entities may be united loosely by purpose or ideology but possess their own objectives. They have no clear leader and execute their mission using simple guiding rules. Though the Professional Military Education focuses on Quadrant II, the military's most recent experiences reside in Quadrant III. The mantra that we're fighting a complex enemy in Afghanistan, for example, has become all too familiar.

Metaphors in Quadrant III are heavily influenced by new approaches to science based on complex systems and chaos theory. This new non-linear approach is marked by a shift in our assumptions regarding the method of inquiry from analytical thinking dealing with independent sets of variables to holistic thinking dealing with interdependent sets of variables.[31] These interdependent sets of variables give rise to collective emergent behavior based on their interaction, relationships, and associated positive feedback.[32] The emergent behavior, by its nature, cannot be analyzed nor manipulated by analytical tools and is best described by utilizing a holistic systems approach instead of simple causal explanations.

The dominant metaphor of this quadrant is the *network*. This metaphor conceptualizes organizations that have a unifying purpose, independent members that are interdependent with each other, link themselves voluntarily and omni-directionally, have multiple leaders, and have integrated levels.[34] Other metaphors are variations of this idea. *Swarms* are "networks of distributed intelligence which enable bees, ants, and termites to evolve complex forms of collective behavior on the basis of simple rules of interaction."[35] Genghis Khan's Mongol hordes and German U-boat wolf pack tactics are examples.[36] Once again, a *starfish* metaphor connotes a decentralized organism that is flexible and survivable. And as Simpson described, networks of entities may interact in ways analogous to *domestic politics,* where victory may simply mean greater relative power *vis-à-vis* other entities.[37]

## Quadrant IV: Chaotic System

The last quadrant represents the system that is marked by extreme decentralization of control and extremely high level of violence. It is chaotic in the sense that disorder reigns, and our ability to understand the system and formulate coherent approaches is limited. It is representative of Nassim Taleb's *Extremistan*, a world that is "dominated by the extreme, the unknown, and the very improbable."[38] Taleb uses the metaphor of a *Black Swan* to describe the events that characterize this quadrant -- highly improbable, unpredictable, carrying massive impacts, and causing us to concoct an explanation that makes them appear less random and more unpredictable than they actually were.[39] *Extremistan* generates *Black Swans* and stands in contrast to *Mediocristan*, the "tame, quiet, and uneventful province"[40] where predictions based on the analytical sciences are proven methods to predict future events.

This quadrant is arguably where metaphors are needed most, but where they are hardest to come by. The chance that our next major conflict is not something we've predicted

or envisioned is very likely. As Taleb argues, *Black Swans* dominate much of our history. A simple *Center of Gravity* analysis may not be adequate. The system will likely be so unfamiliar that planners will struggle to find a metaphor to make sense of it. In such an instance, planners may need to draw from the other three quadrants to find the right construct to facilitate understanding. Christopher Paparone labels this process "sensemaking," where leaders shift through "competing constructions of reality."[41] Planners will need to draw from *historical analogies*, theory behind *Center of Gravity*, and constructs from complexity science to start to understand the unknown. As Robert Stetson Shaw reminds us, "You don't see something until you have the right metaphor to let you perceive it."[42]

To close, this framework addresses the need to challenge, change, and sometimes discard metaphors. Currently, however, planners have difficulty recognizing the new and novel in a system because there is little freedom to explore new metaphors. Our planning construct keeps us fixated on one metaphor while our human nature seeks evidence to confirm this construct. Instead, planners ought to challenge constructs to ensure that there are facets of the system that are not being overlooked. In the end, metaphors are heuristics to understanding the system and by extension, what type of war we're fighting.

## Implications for Educators

Among the branches, the US Army is receptive to Taleb's argument. The Combined Arms Center's "The Human Dimension White Paper" states, "It is increasingly difficult to anticipate the multiple emerging threats to US security interests and adjust the Army's organization, material resources, and facilities to cope with them."[43] Because the Army cannot quickly optimize these components to meet the wide-range of threats, the white paper lays out a framework for investing in its most agile resource: its people. "The Army of the future," it posits, "must produce leaders…who think broadly about the nature of the conflict in which they are engaged." [44] These leaders must be armed with superb critical thinking skills that can help the profession prepare for the unknown.

To help create such leaders, professional military educators who teach planning ought to help their students think beyond Quadrant II analysis. To be clear, teaching the fundamentals of Joint planning to include Operational Design, *Center of Gravity* Analysis, and the Joint Operational Planning Process is integral to the education of today's officers. But remaining in this quadrant translates to remaining in the familiar. Especially in design's first step of Understanding the Environment, exploration into other quadrants using metaphoric thinking serve as an opportunity to foster creative and critical thinking to keep pace with the changing system. As Alan D. Beyerchen argues, "metaphor-ing…is a process of exploring some interesting possibility space" for "metaphors are open to novelty, surprise, inspiration and even mutation."[45] Metaphors help us understand the new in terms of the familiar. If we are to prepare an officer corps that can adapt to the unknown, we ought to go beyond *Center of Gravity* to utilize the full power of metaphors in our planning process.

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11. See Christopher R. Paparone and William J Davis, "Exploring Outside the Tropics of Clausewitz," in *Addressing the Fog of COG*, ed. Celestino Perez (Fort Leavenworth, KS: Combat Studies Institute Press, December 2012), 70.

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13. Dale Eikmeier, "The Center of Gravity Debate Resolved" (Monograph, School of Advanced Military Studies, 16 December 1998), 40.

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# Chapter 3

## Assured Access to Space: An Examination of the Space Domain as a Tool for National Power

by LTC Gregory K. Sharpe and MAJ Kenneth C. Rich, PhD

It is increasingly clear that Space is becoming critically important to how the United States employs several key instruments of national power.[1]

– COL Frank Todd

The spectacle of limitless space is mesmerizing. When contemplating the space domain, most envision NASA – through the lens of science fiction – exploring the far reaches of outer space for the benefit of mankind. Still others view the space domain through an operational lens and envision the multiple systems which enable our joint force to achieve an asymmetric advantage on the battlefield. Few, however, view the space domain through a strategic lens and recognize the direct link between assured access to space, vital national interests, and instruments of national power.

Assured access to space is vital to promoting and protecting vital US national interests. Moreover, space-based capabilities are directly linked to each instrument of our national power. The diplomatic, information, military, and economic instruments of power (DIME) are all enabled in some way by assured access to space. Numerous challenges, however, are threatening US military and civil space operations and have serious implications for our national security. The stark reality is that the US is dealing with a growing number of foreign entities that either possess, or are actively developing the ability to degrade, disrupt, and destroy our space-based capabilities. Moreover, many foreign entities are attempting to develop space-based capabilities on their own, which could lead to less dependence on US capabilities and/or strengthen their power relative to ours. While space is recognized as a vital enabler of the joint force, research regarding space as a tool within each of the instruments of national power is scarce. Therefore, this paper uses case studies to illustrate the positive and negative effect of specific space domain issues on the four instruments of national power.

## National Power

### What is National Power?

Although the concept of "power" is the foundation of most political analysis, it continues to remain a highly contested concept with a wide variety of usage and definitions.[2] One view is that national power can be defined as the set of available means that can be leveraged towards national objectives that support the "pursuit of four enduring national interests: security, prosperity, values, and international order."[3] Another view is that national power can be defined "simply as the capacity of a country to pursue strategic goals through purposeful action."[4] Two distinct dimensions of capacity emerge from this latter view: external and internal. The external dimension relates to a nation's capacity to use its economic, political, and military strength to influence the global security environment. Additionally, the internal dimension relates to a nation's capacity to produce

superior technologies through efficiently transforming available resources into knowledge that promotes "purposeful action."[5] Consequently, both dimensions should be viewed as a requisite for defining national power.

Scholars have challenged the "elements of national power" approach of exercising national power, arguing that the "relational power" approach better defines power as a multidimensional construct as opposed to power as a one-dimensional possession of nations.[6] The majority of extant scholarly literature focuses on a relational construct of "power as a means, the strength or capacity that provides the ability to influence the behavior of other actors in accordance with one's own objectives."[7] Basically, a nation exercises power in order to have influence within the international security environment. More specifically, power can be viewed as the ability to get someone else to do something they would not otherwise do. This influence can be accomplished either by positive means (carrots) or negative means (sticks).

Since definitions of power vary widely, a simple model to describe power might be more useful. This model can be described as three distinct approaches to power: resources and capabilities, conversion, and outcomes."[8] The first approach can be envisioned as "power-in-being"and are the resources and capabilities available to be used towards achieving a nation's interests.[9] Power-in-being is essentially the natural resources, population, technology, and economic capabilities available for promoting national interests. Consequently, nations can be thought of as "capability containers." [10] These capabilities, however, must go through a process of conversion to serve as instruments utilized to achieve desired outcomes. Power is viewed not as resources and capabilities, or "converted" power-in-being, but as an outcome meeting the desired ends the exercise of power was initiated to begin with.[11] The final approach – outcomes – is what decision-makers value the most.

Resources converted into capabilities that will achieve the desired outcome can be conceptualized as instruments of national power composed of "tools" derived from the elements of power. Elements of power fall into two distinct categories: natural and social. Natural elements of power refer to a nation's geography, natural resources, and population. Social elements (economic, political, military, psychological, and informational) are concerned with the ways a nation's population organizes and alters their environment.[12] Instruments of power are distinctly different that the elements of power, however, in that the former is a sub-component of the latter. Instruments of national power can be viewed as the "ways" resources are used and derived from elements of power. For example, a "show of force" is a "way" within the military instrument of national power and derived from the military element. Instruments of national power are how you achieve power in outcomes. It is through the use of various tools within the instruments of national power, however, where you can apply power to create a desired outcome.

## Instruments of National Power

The first international relations scholar to define the instruments of national power was Edward Carr, who in his seminal work of 1939 stated that, "Political power in the international sphere may be divided, for purpose of discussion, into three categories: (a) military power, (b) economic power, (c) power over opinion. ... But power is an indivisible whole;

one instrument cannot exist for long in the absence of the other."[13] The idea of instruments of national power, however, is only a generalization and terminology is not widely agreed upon. Additionally, depending on circumstance, these named instruments are "merely quick jumping off points on the way to discussing the concrete capabilities – or 'tools' – of the departments and agencies that house the instruments."[14] Moreover, a nation's power cannot be assumed to be absolute, and is only relevant in relation to other state and non-state actors in the international security environment. So the question, therefore, is "how do nations exercise power?"

There are numerous means for exercising national power and multiple ways in which to categorize them. A prevalent view for classifying the means of influence in the international security environment includes the following categories:[15]

- **Diplomatic.** Diplomacy is the principal instrument for engaging with other states and foreign groups to advance US values, interests, and objectives, and to solicit foreign support for US military operations.
- **Informational.** Information remains an important instrument of national power and a strategic resource critical to national security.
- **Military.** The US employs the military instrument of national power at home and abroad in support of its national security goals
- **Economic.** A strong US economy with free access to global markets and resources is a fundamental engine of the general welfare, the enabler of a strong national defense.

## Space Power

According to Joint Publication 3-14, Space Operations, space power is defined in as "the total strength of a nation's capabilities to conduct and influence activities to, in, through, and from space to achieve its objectives."[16] This definition inherently conveys that space has become critical to how the United States utilizes the tools available within each of the instruments of national power. As the National Security Space Strategy states, "space is vital to US national security and our ability to understand emerging threats, project power globally, conduct operations, support diplomatic efforts, and enable global economic viability."[17] Therefore, assuring free and open access to space has become a vital national interest. Moreover, a nation's space power includes not only a nation's military space capabilities, but it's civil and commercial systems which also contribute significantly towards achieving national objectives. For example, military, civil, and commercial partnerships in environmental monitoring and communications are critical to the nation's space capabilities and their ability to achieve national objectives.[18] With regard to this focus on national objectives of the entirety of a nation's space capabilities, a more complete definition of space power would be "the pursuit of national objectives through the medium of space and the use of space capabilities." [19] The US is not alone in the recognition of space as a vital national interest, however. As international actors continue to pursue their own space and counterspace capabilities, the US will continue to encounter both opportunities and challenges within the space environment.

Both military and civilian US space operations are facing the stark reality that a growing number of nations are developing – or currently possess – the ability to disrupt, degrade, and destroy our space capabilities; thereby thwarting our ability to safeguard our assured access to space.[20] Consequently, if the US is to continue to remain the leading global leader in space, space power must be effectively utilized as a tool within each of the instruments of national power in order to address these challenges and achieve the desired outcome. Achieving desired outcomes, however, will be difficult due to the increasingly congested, contested, and competitive nature of the space environment.

Achieving desired outcomes that support national objectives is the main purpose of a nation's space power. Space power, therefore, can be thought of as a "tool" available within each of the four instruments of national power to achieve national objectives. Space power definitions, while varying widely, all have a common focus – "to use space and deny its use to enemies."[21] Consequently, securing space assets, controlling the medium of space, and deterring the hostile use of space capabilities, is essential to national space power.[22] Space has fundamentally changed over the last several decades, however, becoming an increasingly congested, contested, and competitive domain. The rate of increase and amount of space objects is staggering; more than 1,100 active satellites and 22,000 pieces of man-made debris are currently being tracked.[23] Additionally, the National Aeronautics and Space Administration (NASA) estimates that there "likely several hundreds of thousands of additional pieces of debris too small to track with current sensors yet still capable of damaging satellites in orbit."[24] Combined with a growing global competition in space with now more than 60 space-faring nations, and an increasing number of potential adversary's utilizing a wide range of counterspace capabilities, it is quite clear that access to – and the protection of – the new global commons of space is essential to national security.

## Space Power Events Expressed as a Tool Within DIME

Assured access to space is vital to promoting and protecting vital US national interests. The diplomatic, information, military, and economic instruments of power (DIME) are all enabled in some way by assured access to space. Moreover, space-based capabilities are directly linked to, and can be used by, each instrument of national power as a tool to achieve national policy objectives.

## Diplomatic

Diplomatic tools are used to influence international situations to achieve national interests. Space capabilities enable diplomatic interactions and the application of other diplomatic tools. Satellite communications allow for ambassadors to quickly collaborate and build coalitions or consensus on an issue of national policy. Remote Sensing images can inform the diplomats of other nation's actions which better enables signaling by the Department of State in private talks or in public forums such as UN National Security Council meetings. However, space power not only enables other diplomatic tools, but can be a diplomatic tool itself.

On December 12, 2012 North Korea launched the Kwangmyongsong-3 satellite into orbit. With this key international event, North Korea joined the elite club of 11 other countries

capable of space launch with their own launch vehicles.[25] North Korea showcased its space launch program and consequently increased its international prestige and taunted the rest of the international community. North Korea used this satellite launch as a diplomatic tool to illustrate their strength and the inherent weakness of United Nations resolutions that are not backed by the military instrument of national power.

North Korea previously incurred the wrath of the international community for testing nuclear weapons. On October 9, 2006, North Korea tested a nuclear weapon resulting in international condemnation and the unanimous passing of UN resolution 1718. This resolution stated specifically that North Korea must "not conduct any further nuclear tests or launch of a ballistic missile."[26] Three years later, North Korea tested another nuclear device. The UN Security Council acted unanimously once again passing resolution 1874 using the exact same language. Both resolutions invoked Chapter VII of the UN Charter, but neither allowed for military force as an enforcement mechanism.

In the beginning of April 2012, North Korea announced it would launch a satellite in late April 2012 to celebrate the centennial birth date of Kim Il Sung. This prompted diplomatic posturing in the media and international policy forums between the United States and North Korea. The United States' stance was that this launch was a violation of previous UN resolutions and agreements made in the six nation talks. The central complicating factor is that space launch capability roughly translates into intercontinental ballistic missile launch capability, and therefore particularly concerning to the US, Japan and South Korea. The United States began to apply political pressure to stop the North Korean launch.

North Korea's response was that the launch was legal according to the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, otherwise known as the Outer Space Treaty.[27] Article I of this treaty declares that space is free to access for any state. Therefore, according to Article I, North Korea could legally launch a satellite.

This is one example of using space power as a tool of diplomacy in the international community. The United States used diplomatic tools to try to stop the launch. The North Koreans used the successful launch as a tool to boost their international prestige and power. The open source debate illustrated the importance of space lift capabilities, the dual-use nature of rockets and the lack of enforcement mechanisms inherent in the international community's main diplomatic tool – the UN Security Council.

Another event occurred when on April 29, 2014, Dmitry Rogozin, Russia's deputy prime minister, tweeted: «After analyzing the sanctions against our space industry, I suggest to the USA to bring their astronauts to the International Space Station using a trampoline.»[28] In the late 1980s, when communism was collapsing, the US diplomats made a strategic decision with regards to the superb Russian rocket engine capability. In an effort to both keep the Russians from complete collapse and keep the rocket engines from falling into nefarious party hands, "President Bush and, after him, President Clinton urged US aerospace executives to look for Russian rocket business partnerships that made sense."[29] In the ensuing decades, the US Aerospace industry became reliant on the Russian built rocket engines. At the beginning of 2014, when this comment was made, the majority of

lift capability certified to launch the nations national security satellites used Russian rocket engines.[30] The decision to stop most research on rocket engines made diplomatic and economic sense until Russia once again emerged as a player on the international stage.

This scenario is one example of space being used as a diplomatic and economic means to help mitigate the economic challenges of another government. However, it also illustrates the diplomatic power one country, who is a sole supplier, can exert over another. Since this comment was made, Congress and the aerospace industry scrambled to reduce the impact of a possible embargo. The commercial space industry stepped up to certify their engines and launch capabilities. Congress took steps to ensure the US no longer buys Russian rocket engines by attempting to codify their intent, in law, with an import ban.

Space Power can be an effective soft power tool. Space capabilities can enable and compliment other diplomatic tools. Space-lift capability enables a country to maintain a presence in the new global commons. Additionally, the technical and economic implications of being a space faring nation increase the international prestige and negotiating power.

## Informational

Informational power is a government communicating its intent, desires and views to various audiences, as well as, obtaining information used to make key decisions. The dual nature of informational power makes it difficult to point to specific entities that exercise the information tools. National media, diplomats, and intelligence agencies all use informational tools. Diplomatic démarches inform rogue or wayward governments and entities of a government's displeasure with their actions. Public policy statements declare a nation's intentions. Like the diplomatic tools, the informational tools are heavily reliant on space based capabilities. Remote sensing and space based signals intelligence inform decision makers around the world. Media sources receive stories and publish information globally using satellite communications either directly or indirectly. Space power can be used in the information realm to highlight a nation's power and achievements.

On September 24, 2014 the world media was awash with reports that India had become the first Asian nation to reach Mars, and the first to achieve this milestone on their first try.[31] Although India has a space program almost as old as that of the United States, it is little known on the world stage. The Indians have accomplished several key space faring milestones. They first launched a rocket in 1963. In 2008, they sent a deep space probe to the moon. They are also one of the few commercial space launch providers. The media coverage of the Indian Mars Orbiter Mission (MOM) overshadowed NASA's Mars Atmosphere and Volatile Evolution (MAVEN) spacecraft, which reached Mars two days earlier. This information campaign illustrated India's space prowess, and increased interest in the Indian Space program can increase their soft power as other regional countries vie to develop and launch satellites with the Indian Space Agency. The perception of a reliable and prestigious launch capability can translate into an increased price or negotiating position for commercial launch contracts.[32] It also illustrates to India's neighbors its long-range rocket ability, therefore increasing deterrence.

The International Space Station (ISS) is among the greatest international cooperative endeavors in the history of engineering, science, and technology.[33] Launched on October 31, 2000, the international space station is a premiere example of international cooperation for the betterment of mankind and increasing the body of human knowledge. The principle contributors are the United States, Russia, the European Space Agency, Japan and Canada. Additionally, the space station has been visited by astronauts from 14 different countries.[34] While scientists and academics have a tendency to work together across geopolitical lines, governments do not. The international space station is one such joint governmental venture and illustrates an example of collaboration. The research conducted on the space station directly translates into earthly rewards. Advances in neurosurgery inspired by the ISS robotic arm, water purification systems modeled after the ISS water system, and tele-ultrasound technology developed to diagnose astronaut issues are a few examples that have enriched our lives on earth. A message that could be leveraged from this venture, by participating countries, is that they have proven how flexible and cooperative they can be.

Because there is no one organization at the governmental level responsible to the informational instrument of national power, there is no one illustrative example of how space power has been used as a tool of informational national power. Information about a nation's space program can increase its soft power, driving other nations to conduct business with them. Information sharing, like USSTRATCOM sharing the catalog of space objects with the international community, can increase the positive image others have of a country. However, space capabilities can be used to withhold information. Libya, Iran and Ethiopia have all used electronic jamming of satellite media to keep the international community in the dark on internal issues.[35] Iran jammed Thuraya satellite based phones, the BBC and the Voice of America during the protests in Tehran in 2009. They attempted to control information flow out of the country, exemplifying the suppression of information as a way to exert informational power.

## Military

The most visible and easily translatable instrument of national power is military. It is often the only instrument with a standing, professional planning staff to synchronize its use. Additionally, it is often resourced more than other tools. The other world powers have grown to appreciate how space enabled the United States military is and are developing capability to negate the asymmetric advantage it offers. Space-based positioning, navigation and timing enables forces to know where they are in relation to each other, reported enemies, and their surroundings. It offers more precision in munitions placement, decreasing collateral damage. Remote sensing yields strategic warning in denied airspaces. Multispectral data enables worldwide weather prediction and allows for predictive reaction to natural disasters – such as typhoons.

On January 11, 2007, China destroyed the FY-1C polar orbiting weather satellite with a kinetic kill vehicle resulting in over 2000 pieces of trackable debris left in orbit. In October 2006, President Bush published his National Space Policy (NSP) that contained a strongly worded message to other space nations that the United States would take actions to preserve its space capabilities.[36] The tone of the 2006 NSP was distinctly more adversarial

than in years past. President Eisenhower used the NSP to create NASA and split military use and developments of space from commercial and scientific exploration for the benefit of all mankind. President Kennedy used the NSP to commit the United States to landing on the moon. President Bush's policy was meant to illustrate the United States' resolve in preserving our access and capabilities in space, but was taken as a challenge to other space powers.

The January 2007 Chinese Anti-Satellite (ASAT) test was a military response to President Bush's NSP. The Chinese military showed its capability of shooting down low earth orbit satellites from a mobile launch system. It ushered in a new age of space and "marked the end of an era characterized by a lack of friction between space-faring nations and a general acceptance of norms governing the common use of space."[37] The show of force illustrated Chinese strength and the United States' inability to actually enforce the tone of the 2006 NSP. The Chinese government was quick to point out that this was not militarization of space, an outcome they had been trying to avoid through international policy such as the Prevention of an Arms Race in Outer Space Treaty. There is doubt within the international community, expressed in numerous articles, if the Chinese Government knew about and blessed the military action of testing the ASAT weapon. However, the result was indisputable.

In late January 2008, satellite USA-193 (as designated by the International Launch Registry) malfunctioned within weeks after launching. The hydrazine on board presented a health risk to whatever nation the satellite might hit when deorbiting. Since the responsibility to cleanup and rebuild any structure destroyed after a satellite launch falls on the launching country in accordance with the Outer Space Treaty of 1967, the United States took preventative action. On February 14, 2008, the United States answered China's ASAT test by destroying USA-193 from a sea-based Aegis cruiser, floating in the Pacific Ocean. This ASAT not only destroyed the satellite but created much less debris, which would rapidly deorbit. The answering show of force demonstrated to the Chinese that their low earth orbit systems were also vulnerable and the US ASAT capability was equally as hard to target preemptively. The precision and planning in which it was conducted also allowed the US to claim higher moral ground by not creating a significant amount of long-term orbiting space debris.

Military use of space is prevalent and the most easily recognized of the tools illustrating space power. The recent success of the global, power-projecting US military relies on a space backbone. Every space faring nation recognizes it. Space power has also been used to illustrate the fragile nature of space capability and the need to keep the global commons of outer space demilitarized.

## Economic

The economic instrument of national power aims to shape international activity through government spending and monetary policy. Trade alliances promote US interest abroad, while trade sanctions and tariffs protect US interests at home. Debt forgiveness can enable an emerging country to rise out of poverty and subsequently be indebted via allegiance vs. money. Space power can also be used to help or hinder economic growth and therefore

national power. The previous example of US policy to buy Russian rocket engines enabled Russia to keep its aerospace industry more solvent. Economic involvement with space can be a tool used by the government to further its goals.

Satellite communication is a premium commodity for a global power. It is a prerequisite for a force projection based military, enables diplomats to rapidly communicate, promotes information sharing globally and speeds the processing of international commerce. Military satellite communication systems are both expensive and highly over-requested. Introducing partnerships into procuring and using military SATCOM can benefit all countries involved. International partners investing in the new Wideband Global Satellite Communications System enabled the US military to procure and launch an additional satellite. At the cost of limited reduced access to the whole network, the military gained an additional satellite with more capability than the entire older Defense Satellite Communications System constellation combined. Increasing partner capacity fits with the national military strategy[38] and saves money for the fiscally constrained military in the process.

On September 29, 2013 the SpaceX Falcon 9 launch vehicle successfully launched a satellite into orbit. Commercial space organizations have been a part of the United States space program since the 1962 Communications Satellite Act of 1962 allowed the US government to participate as a private corporation and led to the development of INMARSAT and INTELSAT. Recent advances in commercial remote sensing led to innovative new tools that are indispensable to modern life. It would be hard to imagine navigation in a new city without a Google map to rely on. Additionally, commercial remote sensing has enabled the government to more effectively and rapidly react to natural disasters. The Commercial Remote Sensing Space Policy encourages the commercial sector to develop new technologies to meet the needs of national agencies, increasing soft power of technical dominance and increasing the overall gross domestic product. Access to certified commercial launch platforms can assist the government in overcoming a Russian rocket engine embargo as illustrated previously.

While commercial capabilities have been extensively explored to increase our own government's capability, the use of US commercial space capability as a tool to improve other country's institutions is still nascent. Encouraging easy access to US commercial vendors for development of satellites or launch systems can target partners the US wants to develop closer ties with. Without giving away national secrets or endangering our own military capability, commercial companies can expand the US global reach by developing dual use communications systems, new remote sensing capability and other scientific ventures that more closely tie our economy with potential partners or adversaries. As a result of the economic interdependence, the US can achieve deterrence and stability.

## Conclusion

National power is difficult to define and even harder to translate into a means to lead to national policy goals. The majority of extant scholarly literature argues that a nation exercises power in order to have influence within the international security environment. Nations exercise this power converting resources into capabilities that will achieve the desired outcomes. The instruments of national power (diplomatic, informational, military

and economic) can be viewed as the "ways" resources are used and derived from natural or social elements of power. The instruments are applied using "tools" that enable a government to focus the elements of power within one of the four instruments. Space power is one tool that is available within each of the instruments of national power to pursue national objectives through space and space capabilities.

Space power is a unique source of power available to a select few countries in the international security environment. The preceding discussion illustrated how space and space power can be used as a tool in each of the instruments of national power in order to achieve national policy objectives. An area of further research would be to develop an overarching framework for applying these tools in a non-threatening way to achieve policy aims without creating a new arms race or militarizing the new global commons. While understanding that space power is available, knowing how to apply it in a manner capable of influencing another nation or instigate, within another country, a change in behavior would be better.

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# Chapter 4

## Inchoate Revolution: Organizational Structure and Terrorism in the Domestic Security Environment by Dr. Richard E. Berkebile

Louis Beam, iconic Klan and neo-Nazi extremist, is widely credited with popularizing the idea of *leaderless resistance*. Beam himself credited the idea to former OSS Colonel Ulius Louis Amoss' 1962 publication by that name.[1] Beam's essay, also titled *Leaderless Resistance*, emphasized the relationship between organizational structure and internal security and survival. Many suggest contemporary terrorist groups across the ideological spectrum adopted organizational reforms in accord with Beam's essay.[2] A different literature emphasizes the 21st Century benefits of *networks* for both terrorists and the security apparatus opposing them.[3] Yet a third set of literature cites the effectiveness of hierarchically organized terrorist groups.[4] Existing research examines these issues in isolation and few have addressed the idiosyncrasies of the domestic American security environment.

There is considerable confusion surrounding the structures of leaderless, networked, and hierarchical terrorism. The term network is overused and often misclassified or underspecified. Many conflate networked or leaderless resistance organizational structures with the internet technology enabling them. Others lump networks or even hierarchies with leaderless resistance structures. This lack of clarity results in policymakers, academics, and security practitioners speaking past each other and *ad hoc* approaches to counterterrorism. This chapter examines the impact of organizational structure on terrorist violence in the domestic security environment. It unfolds in steps. First, theorized bonds between organizational structure and the effectiveness of terrorism are outlined. Second, testable questions on effectiveness are formulated. Third, the research design is discussed. Lastly, the findings are presented.

### Terrorism and Organizational Structure

Organizational structure is a function of leadership, communication, and the arrangement of constituent cells or nodes. In this context, leadership is the degree to which an individual or small committee can set policy and enforce compliance within an organization. Communication refers to who transmits information to whom *within* the structural arrangement and whether the transmission is unidirectional, bidirectional, or omnidirectional. Except in permissive environments, terrorist communication *outside* the structural arrangement are, or should be from their perspective, highly controlled for security reasons. The arrangement of cells is simply a physical depiction of communication patterns.

Terrorists use four basic types of organization structure – hierarchies, networks, and two leaderless resistance subtypes of autonomous cells and lone wolf attackers. On a hypothetical entitativity scale, hierarchies are on top followed by networks. In other words, these organizational structures have social substance and reach beyond the capabilities of the individuals comprising them. They reflect the beginnings of institutionalized revolutionary social movements. Autonomous cells and lone wolf actors lack the structural sophistication to organize and lead revolution. Aspirations may be lofty, but their inchoate

organization is unlikely to achieve lasting revolutionary effect. Each organizational arrangement has theorized strengths and weaknesses.

## Hierarchies

Since the late 1960s, hierarchically organized terrorist groups have wreaked havoc across the American landscape. Most were Marxist-Leninist groups such as the Armed Revolutionary Independence Movement (MIRA), Independent Armed Revolutionary Commandos (CRIA), or the New World Liberation Front (NWLF). Hierarchies have centralized leadership and bidirectional communication up and down a pyramidal chain of command. They often have task specialized cells for operations, propaganda, intelligence, or constructing bombs. Theorized advantages of hierarchies include the ability to set and enforce policy, control public messaging, centrally distribute information, achieve efficiencies through economies of scale and specialization, and negotiate with governments and supporters.[5] Disadvantages include lethargic information dissemination, exploitable operational security, unimaginative adaptation, vulnerable to single or limited points of failure through leadership decapitation, and isolation from supporters in nonpermissive environments.[6]

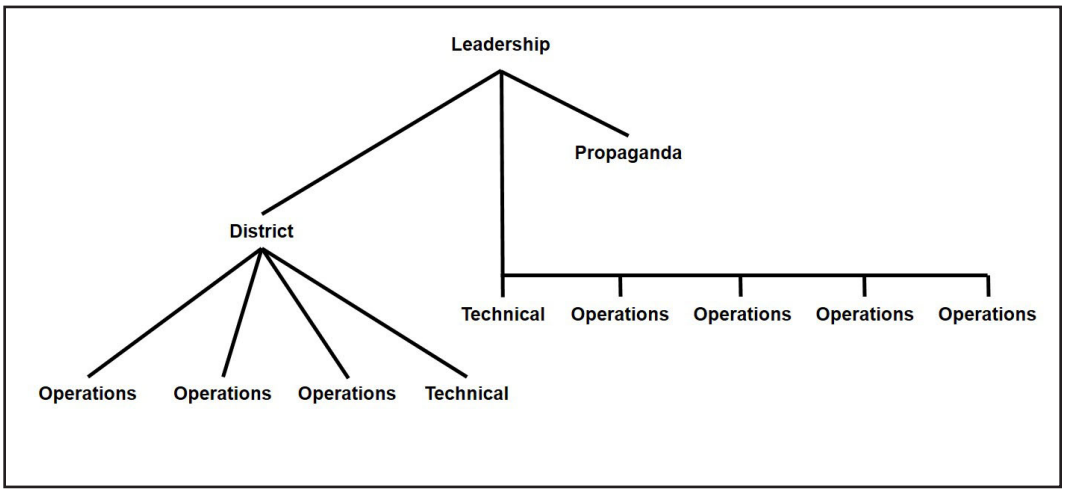


Figure 6. Notional Hierarchy. Created by author.

## Networks

Several scholars posit contemporary groups, and those located in the United States in particular, are adopting networked structures.[7] While the neo-Nazi The Order, or *Bruder Schweigen*, and extreme anti-abortion Army of God were effective terror networks in the 1980s, they essentially disappeared from the landscape by the mid-1990s. The most resilient networks have been anarchist offshoots such as the Earth Liberation Front (ELF) or Animal Liberation Front (ALF) and religiously justified violence from dispersed cells of

abortion opponents. These organizations surged in the late 1980s and are still operative today.

Terror networks feature less centralized – albeit not totally absent – leadership, with omnidirectional communication across a relatively horizontal, "flat" organization. Networked cells are largely self-sufficient and must be able to provide their own operational planning and logistical and technical support. Some information and intelligence support can be shared directly from one cell to another. Ideological, propaganda, or media support, even if only in the form of *ex post* endorsement, are largely under the control of a leadership with otherwise weak control over individual cells.[8] A *terrorist network* is an organizational structure. The internet is a *communication network* that enables communication among cells, regardless of organizational structure. Although often linked together, neither is a necessary component of the other.

Network advantages include adaptability, flexibility, and responsiveness. These manifest in reduced vulnerability to infiltration, leadership decapitation, or the loss of logistical infrastructure, the ability to synchronize or *swarm* attacks and disperse afterwards, initiative, the ability to rapidly add or divest cells, less susceptibility to societal isolation, quicker recruiting of those disposed to militancy, and strong trust relationships among cells.[9] Disadvantages include obstacles to collective action such as strategy implementation or bargaining positions, internal competition for leadership, ill-discipline, lack of organizational loyalty and splintering, lower recruiting and training standards, and uneven technical prowess.[10]

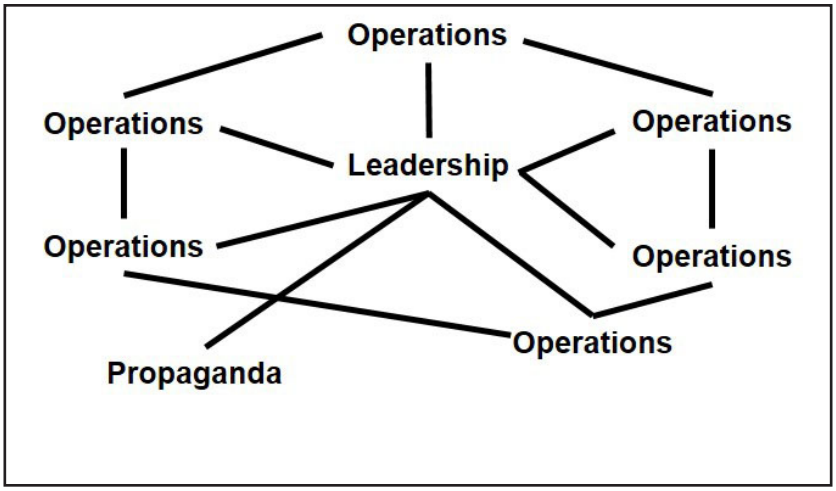


Figure 7. Notional Star-Type Network. Created by author.

## Leaderless Resistance

Leaderless resistance is frequently conflated with networked organizational structure. The differences are subtle, but real. Networked organizations feature omnidirectional communication among cells. As a security measure, leaderless resistance communication is unidirectional.[11] It requires an overarching philosophy or ideology, a call to arms from

a charismatic figure, and perhaps the ability to access technical manuals on the conduct of violence. "The answer to this question [no central direction] is that participants in a program of Leaderless Resistance through phantom cell or individual action must know exactly what they are doing, and how to do it. It becomes the responsibility of the individual to acquire the necessary skills and information as to what is to be done... No one need issue an order to anyone."[12] Leaderless resistance refers to the lack of structure above cell level. It comes in two varieties. Autonomous cells – Beam's *phantom cells* – and lone wolf operators.

## Autonomous Cells

Homeland autonomous cells have spanned the decades from the 1970s to the 21st century. Many never made headlines. They successfully committed attacks but then faded away through failure to claim their violence, arrest, fear of arrest, or lack of commitment. The high end of membership is perhaps represented by the eight-person United Freedom Front which conducted attacks from the mid-1970s into the mid-1980s. On the low end, the three person cell of Timothy McVeigh, Terry Nichols, and Michael Fortier killed 168 and injured 600 at the Oklahoma City federal building. John Allen Muhammad and Lee Boyd Malvo, also known as the D.C. snipers, killed at least 10 people in 2002.

Autonomous cells are single cell organizations. Members often had prior links with militant hierarchies or networks. They were usually inspired from outside the cell by charismatic figures or social movements. However, autonomous cells do not regularly communicate with other cells or groups. Within the cell, policy is likely set by a dominant personality but it is not hierarchical leadership *per se*. The cell may be content not to grow at all or have full intent to become the vanguard of mass revolution. Advantages include excellent operational security, discipline, and strategic coherence.[13] Disadvantages include isolation, limited technical ability, few repertoires beyond violence, internal power struggles, and lack of resilience in the face of arrests or casualties.[14]

## Lone Wolf

Lone wolves are solitary, self-help revolutionaries. Like autonomous cells, they draw inspiration and perhaps technical knowledge from established organizations but they are neither privy to internal communications nor members. They are logistically independent. They develop their own tactical intelligence. Lone wolves are revolutionary fellow travelers, but eschew organization altogether. Some of the more infamous lone wolves include the neo-Nazi Joseph Paul Franklin who killed at least 13 and wounded at least 2 between 1977 and 1980 or radical environmentalist Ted Kaczynski who killed 3 and injured 23 over almost two decades between the 1970s and 1995.

In 1998, white supremacist Thomas Metzger popularized the idea of the solitary revolutionary, or *lone wolf*, in his *Begin with Lone Wolves.*[15] However, the tactic's use in the homeland predates the article. Among researchers, defining lone wolf terrorism is more contentious than Metzger's original concept. Both Hewitt and Pantucci outlined conditions when attacks by more than one perpetrator could be counted as "lone wolf" terrorism.[16] In other words, they included what I defined as autonomous cells. Hamm and Spaaij defined a

lone wolf as a single attacker not belonging to or under the direct command of an organized group.[17]

Depending on individual communication security practices, lone wolves are extremely difficult to detect or deter.[18] There is evidence potential solitary actors do succumb to internet temptation. They broadcast their intentions – increasing their vulnerability to preventative arrest.[19] The main disadvantage of lone wolves is their individual limitations on skill and motivation.[20] As Kaplan and Costa observed, this type of terrorism can be *messageless* resistance.[21]

From the perspective of larger terrorist causes, the benefits and detriments are more complex. Lone wolves cost virtually nothing and can always be disowned should their actions cause unintended political effects. If they are citizens, there is no need to cross borders and may be no need to infiltrate organizations. For example, Army Major and Al Qaeda sympathizer Nidal Hasan killed 13 and wounded 31 others on Fort Hood, Texas in 2009. As a citizen, he had no need for a passport. As an Army officer, he had legitimate access to a military installation. On the other hand, the timing, target, location, and frequency of attacks are at the lone wolf's whim.

## Questions

The debate is both loud and confused over relationships between organizational structure and the effectiveness of terrorism. However, informed counterterrorism policy requires more than anecdotal evidence and case selection bias. On the whole, conventional wisdom fears networked terrorism most because of its reputation for operational security and seeming ability to strike in unexpected locations. An often overlooked consideration in the debate is the differences among security environments. Terrorist organizational effectiveness may vary between the United States and, for example, Western Europe, India, or Mexico. A first step toward generalizable knowledge is to explore the available data in terms of testable questions with conceptually valid and specified variables.

## Question 1: Which structure attacks the most?

Effectiveness can be measured in terms of the *quantity* of violence. The more widespread and frequent the violence, the less legitimate the government appears. This indicates the seeming ability of terrorists to attack at will. By demonstrating they cannot be contained or punished, other antisystem groups are encouraged to join the fray. The more disorder, the more favorable conditions are for regime or social change.

## Question 2: Which structure produces the most casualties?

Perhaps it is not the quantity of violence that matters but its *quality* as measured in casualties. Casualties garner public attention, undermine governmental legitimacy, create public fear and insecurity, and demonstrate a seriousness of purpose. If terrorists create enough casualties, they may reach a tipping point causing policy change, governmental implosion, or mass mobilization to their cause. Casualties put the terror in terrorism. Fear is what matters.

## Question 3: Have organizational structures changed across time?

While the ability to carry out attacks matters, so does the resilience and survivability of terrorists themselves. Beam posited hierarchies were simply not viable because the government was adept at collapsing them. Even Al Qaeda's English language *Inspire* magazine called sympathizers to engage in individual and small cell terrorism in the homeland vice overseas training and travel.[22] Additionally, terrorist organizational structures adapt to their environment.[23] So do security agencies. As terrorists develop tactics and techniques of violence, law enforcement adjusts to counteract them. An organizational structure may be more effective in one era than another.

## Research Design

The intent is to test the effectiveness of organizational structures in the domestic environment. We want to know how terrorist organizational structure manifests in different outcomes. This research is exploratory rather than a predictive theory of terrorism. Data characteristics can be discerned through relatively simple empirical methods. I attributed individual terrorist events to organizational structures and tested for mean values over time. Data characteristics both inform the debate and the development of causal theory.

The research time period is 1970-2013, for a total of 44 years. Data were assembled from the 2014 version of the Global Terrorism Database (GTD), supplemented with selected lone wolf attacks identified by Hewitt, Spaaij, and Hamm.[24] Original GTD records for 1993 were lost.[25] However, 37 events occurring in the United States were recovered. Because GTD data was supplemented from other sources and there is no reason to suspect organizational structure biased which records were lost, 1993 data was retained.[26] I excluded 20 events not meeting all 3 GTD terrorism definitional criteria of political violence, intended for an audience beyond the victims, and outside the bonds of warfare.[27] For more information on working with GTD data, see Berkebile (2015).[28] The final event population was 2444. Of these, 770 had indeterminate organizational structure. Of the 770 missing cases, nearly two thirds were from 1975 or earlier.

## Dependent Variables

Several dependent variables are plausible indicators of terrorism's "effectiveness."

## Number of Attacks

Operationalizing the quantity of attacks was straightforward. Each event in the population was attributed to a hierarchy, network, autonomous cell, lone wolf, or missing. Every attack counted as one with no differentiation for casualties, property damage, or complete miscarriage of the attack. The annual rate of violence was simply the number of attacks divided by the years in the sample.

## Number of Casualties

The GTD codes each event for killed, wounded, or as missing data. The casualties' variable added the number of killed and wounded. If the figure for killed or wounded was known but the other value was missing, the known quantity became the total casualties.

Occasionally, the GTD records fractional casualties, for example 2.5, because they are a result of separate actions. In these cases, I rounded one figure up and the other one down so casualties were expressed as integers.

## Explanatory and Control Variables

Explanatory variables reflect hierarchical, networked, autonomous cell, and lone wolf organizational structures. For robustness, a leaderless resistance variable combined autonomous cell and lone wolf variables into a single category. Another robustness variable combined networks and autonomous cells. Systemically induced violence may have influenced the selection and activities terrorism. In 2004, Rapoport theorized on the global systemic diffusion effects of four "waves" of modern terrorism.[29] I used temporal control variables to reflect systemic effects in the spirit of Rapoport's theory.

Attributing structural type was problematic. Structures are not mutually exclusive and terrorist enterprises can have hybrid characteristics. Structures can also vary across space, particularly for transnational groups located in more permissive environments than can be found in the United States. I followed Heger et al. and attributed structure based on constituent groups. Heger's example captures it well.

> While we may consider the larger al-Qaeda network to be a decentralized alliance, its constituent parts may be highly hierarchic, representing a duality that should be consistently addressed in any empirical analysis. We believe coding groups at as micro a level as possible is preferable because local organizational traits seem more likely to affect attack patterns than transnational (or regional) alliances.[30]

Structures may also vary over time due to leadership views, splintering, or adaptation. For example, Al Qaeda was essentially a hierarchy from the collapse of the Najibullah regime until the United States invasion in 2002, networked thereafter and increasingly dependent on lone wolf operatives.[31] Terrorist groups are clandestine, and discerning organizational arrangements is often educated guesswork. Some groups use fictitious names to deny involvement or create the impression of a larger coalition. Even public statements on structure must be treated skeptically as little more than self-serving pronouncements to emphasize the egalitarian or mass roots nature of their cause.

Finally, GTD attributes events to groups or generic descriptors. Structural type was attributed based on clues gained through a combination of research on groups or individuals, time period, attacker ideology, descriptions from literature, pronouncements from groups themselves, and event characteristics gleaned from the GTD. When no indicators of organizational type could be found, it was coded as missing data.

## Hierarchies

Marxist-Leninist groups, to include ethnically based Chicano, Puerto Rican, and Black nationalists, tended to be hierarchies. Among right wing groups, anti-Castro groups were generally hierarchical. Neo-Nazi and Klan groups tended toward hierarchy into the 1980s and slowly transitioned into leaderless resistance types by the mid-1990s. The religiously based Jewish Defense League and its offshoots as well as core Al Qaeda were hierarchies.

Other indicators included attacks involving large numbers of perpetrators or evidence of specialized cells.

### Networks

Anarchists, including related groups such as the Animal Liberation Front (ALF) or Earth Liberation Front (ELF), and anti-abortion activists tended to be networked. Some right wing groups developed into networks starting from the late 1980s. The Black Liberation Army (BLA) was an oddity. Despite its Marxists roots, it consisted of cooperating independent cells lacking a centralized chain of command.[32] To qualify as a network, a group required at least two regularly communicating cells and no evidence of a strong, centralized command structure.

### Autonomous Cells

Autonomous cells consisted of a single cell. Both networks and hierarchies require regular interorganizational communication across cells or nodes. That is not the case for autonomous cells. Individual members of autonomous cells often had previous affiliations with networked or hierarchically organized groups, but prior affiliations were discounted when there was no evidence of continuing communication.

### Lone Wolves

Attacks perpetrated by a lone individual, without indications of group membership, were coded as a lone wolf. The attacker may have been inspired to commit the act or even had some communication with a hierarchy or network, but such communication may be characterized as external to the group. Not all solitary attackers were categorized as lone wolves. Individuals belonging to an organization but acting alone were considered members of the larger organization and coded accordingly.

### Leaderless Resistance

Beam's essay and appeals from groups such as Al Qaeda or the Islamic State do not differentiate between lone wolves and autonomous cells. The framework separating the two may be artificial if they communicate with an external group performing a coordination function. The leaderless resistance variable combined the autonomous cell and lone wolf structures. Still, most cases represent domestic terrorism – political violence perpetrated by Americans on fellow citizens. An independent coordinating group would have difficulty concealing or protecting itself in the United States. Externally based groups, such as Al Qaeda or Islamic State, may be better able to securely perform a coordinating function.

### Loose Networks

In practice, differences between autonomous cells and networks may be a matter of degree and differentiating them arbitrary. There may be unobserved communication from the autonomous cell to a network or a very weak command structure and reliance on ideological bonding in what may be termed a loosely affiliated network.[33] After all, a theorized feature of networks is the ability to rapidly add or discard cells. Individuals can and do realign themselves between networks and autonomous cells. The loose network variable

combined networks and autonomous cells. As with leaderless resistance, concealing linkages between a network and autonomous cells may be difficult within the United States.

## Third Wave

Period variables are proxies for the diffusion effects from systemic causes on domestic terrorism.[34] The first represents third wave terrorism. Rapoport described the third wave as "New Left" terrorism kindled by the Vietnam War and diffusing across Western Europe, Japan, and the United States.[35] Vietnam predates the data left-truncated at 1970. Nonetheless, the risk of bias is low as late 1960s terrorism was not much different from the early to mid-1970s. The third wave was coded as "1" for 1970 through the beginning of a nativist interval in late 1989.

## Nativist Interval

The end of the Soviet Union removed the Marxist alternative to Western liberalism and could have resulted in a lull in systemic effects.[36] A nativist interval represents inward looking development of revolutionary ideologies among disaffected domestic groups. The nativist interval was coded as beginning with the highly symbolic fall of the Berlin Wall on November 9, 1989 and ending on September 11, 2001. Additionally, inspection of the data reveals a sharp decline in leftist terrorism in the late 1980s, perhaps due to resignation or a less permissive domestic environment.

## Fourth Wave

Rapoport described the fourth wave as religiously inspired terrorism.[37] Although this wave's roots may be traced to the Iranian revolution, the September 11, 2001 attacks in the United States were a global systemic shock that continues to reverberate into 2015 and most likely for the foreseeable future. The fourth wave was coded as beginning on September 11, 2001 and ending with the right truncated data at the end of 2013.

## Findings

## Which Structure Attacks the Most?

| Structure | Years 1970-2013 | Attacks | % Total Attacks | Annual Rate |
|---|---|---|---|---|
| All Structures | 44 | 1674 | 100% | 38.0 |
| Hierarchy | 44 | 843 | 50.4% | 19.2 |
| Network | 44 | 407 | 24.3% | 9.3 |
| Autonomous Cell | 44 | 139 | 8.3% | 3.2 |
| Lone Wolf | 44 | 285 | 17.0% | 6.5 |
| Leaderless Resistance | 44 | 424 | 25.3% | 9.6 |
| Loose Networks | 44 | 546 | 32.6% | 12.4 |

Figure 8. Quantity of Violence. Created by author.

Of all homeland terrorism, hierarchies accounted for roughly one half, networks a quarter, lone wolves 17 percent, and autonomous cells a mere 8 percent. Substituting the leaderless resistance variable created a rough equivalence with networks at a quarter each. The loose network variable represented a third of all attacks. Hierarchies produced violence at a mean annual rate of 19, over double that of networks, triple lone wolves, and sextuple autonomous cells.

This suggests hierarchical collective action strengths, specialization, and economies of scale make them more efficient producers of violence at a more rapid pace. Networks, having a more centralized structure and human resources than autonomous cells or lone wolves, outperformed them in quantity and rate of violence. Surprisingly, better resourced autonomous cells attacked less than lone wolves. This may indicate autonomous cells have more difficulty making decisions or have greater concerns with survival through avoiding arrest than lone wolves. Alternatively, autonomous cells could reflect small groups of friends prone to impulsiveness, lack of commitment, or an embryonic structure that failed transition toward becoming a network or hierarchy.

## Which Structure Produces the Most Casualties?

| Structure | Years 1970-2013 | Casualties | % Total Casualties | Attacks | Mean Casualties |
|---|---|---|---|---|---|
| All Structures | 44 | 7185 | 100% | 1674 | 4.3 |
| Hierarchy | 44 | 5391 | 75.0% | 843 | 6.4 |
| Network | 44 | 187 | 2.6% | 407 | 0.5 |
| Autonomous Cell | 44 | 1172 | 16.3% | 139 | 9.1 |
| Lone Wolf | 44 | 435 | 6.1% | 285 | 1.5 |
| Leaderless Resistance | 44 | 1607 | 22.4% | 424 | 3.9 |
| Loose Networks | 44 | 1359 | 18.9% | 546 | 2.5 |

Figure 9. Quality of Violence. Created by author.

Hierarchies also produced the highest quality of violence over time, tallying three-fourths of all casualties. Autonomous cells were second at 16 percent and lone wolves outperformed networks. When framed as a leaderless resistance variable, the casualties well surpassed the network variable. The loose network variable was dominated by its autonomous cell component, suggesting it may not be a conceptually valid combination.

The results suggest discipline and perhaps specialization in skills such as bombmaking produces better quality violence. Autonomous cells created the greatest mean number of casualties at 9.1 followed by hierarchies at 6.4. The strength of autonomous cells was surprising, as was the weakness of networks. High mean autonomous cell casualties can be attributed to a rare event – the 818 casualties produced in the Oklahoma City bombing. Removing that case drops the mean rate to 2.6, a figure more in line with expectations. Low network casualties could reflect difficulty with collective action and relative egalitarianism.

Network violence was mainly attributed to ALF, ELF, and violent abortion opponents. ALF and ELF have anarchist roots – an ideology deeply opposed to hierarchy and authority. The Army of God, a violent anti-abortion group, did not particularly stress egalitarianism, but had weakly centralized leadership.[38] All these groups tout selective violence, not intended to injure "innocent" victims.

## Have Organizational Structures Changed Across Time?

There is evidence of both variation and constancy across time. This suggests both systemic wave diffusion effects and the domestic environmental condition the selection and effectiveness of organizational structures. The first variation is the steady decline in the aggregate quantity and rate of terrorism. Even after adjusting for the additional 8 year span of third wave terrorism, the direction is consistently negative. This suggests the homeland security environment is increasingly inimical to terrorism. This good news is offset by an alarming increase in the aggregate quality of terrorism. Third wave terrorism averaged 1.6 casualties per attack compared to the 6.1 and 16.9 of the nativist interval and fourth waves respectively.

| Structure | 3rd Wave 1970-1989 (20 years) | Nativist Interval 1990-2001 (12 years) | 4th Wave 2002-2013 (12 years) |
|---|---|---|---|
| All Structures | 1107/100% | 355/100% | 212/100% |
| Hierarchy | 790/71.4% | 47/13.2% | 6/2.8% |
| Network | 124/11.2% | 194/54.6% | 89/42.0% |
| Autonomous Cell | 77/6.9% | 28/7.9% | 34/16.0% |
| Lone Wolf | 116/10.5% | 86/24.2% | 83/39.2% |
| Leaderless Resistance | 193/17.4% | 114/32.1% | 117/55.2% |
| Loose Networks | 201/18.2% | 222/62.5% | 123/58.0% |

Figure 10. Quantity of Violence by Period (Attacks/Percent total). Created by author.

The second variation is the precipitous decline of hierarchically organized terrorism. In the fourth wave era, hierarchies accounted for just 2.8 percent of all attacks and an annual rate of 0.5 attacks. It has almost disappeared from the American landscape despite strong evidence it the optimal structure for producing both quantity and quality violence. Of note, 5 of the 6 fourth wave hierarchy attacks were transnational and originated outside the domestic security environment – Al Qaeda and the affiliated Al Qaeda in the Arabian Peninsula. Unfortunately, like the general trend, the casualty rate produced by hierarchies has skyrocketed. Much of the horrific fourth wave 517.8 rate is accounted for by a rare

event – namely the toll from the September 11 Twin Towers attack in New York. However, even removing the Twin Towers attacks leaves a fourth wave casualty rate of 86.0.

The decline of hierarchies has been replaced by growth in other structures as a percentage of all attacks. Networks rose to 54.6 percent of all homeland violence during the nativist interval, but declined to 42 percent by the fourth wave. Similarly, the raw number of network attacks surged during the nativist interval but declined to only 89 during the fourth wave. Autonomous cells grew only slightly as a percentage from the third wave to the nativist interval, but doubled to 16 percent of all violence by the fourth wave. On the other hand, the raw number of autonomous cell attacks has been basically flat since the 1990s. Lone wolf attacks as a percentage of violence have steadily and dramatically increased, quadrupling from the third wave to nearly 40 percent by the fourth wave. Accounting for the lengthier third wave, per annum lone wolf attacks have been steady. In general, leaderless resistance organizational arrangements are trending positive in the contemporary environment, accounting for over half of all domestic terrorism.

| **Structure** | **3rd Wave 1970-1989 (20 years)** | **Nativist Interval 1990-2001 (12 years)** | **4th Wave 2002-2013 (12 years)** |
|---|---|---|---|
| All Structures | 55.4 | 29.6 | 17.7 |
| Hierarchy | 39.5 | 3.9 | 0.5 |
| Network | 6.2 | 16.2 | 7.4 |
| Autonomous Cell | 3.9 | 2.3 | 2.8 |
| Lone Wolf | 5.8 | 7.2 | 6.9 |
| Leaderless Resistance | 9.7 | 9.5 | 9.8 |
| Loose Networks | 10.1 | 18.5 | 10.3 |

Figure 11. Quantity of Violence by Period (Annual Attack Rate). Created by author.

Aside from hierarchies, the rate of violence has been relatively consistent over time. Networks peaked in the nativist interval, increasing from 6.2 attacks per annum to 16.2, but declined down to 7.4 by the fourth wave. The rate of violence from autonomous cells and lone wolves has remained steady. Autonomous cells and lone wolves, and possibly networks, have structurally induced limits to the production of violence. This suggests hindrances in collective action, economies of scale, or specialized skills. Lone wolves, obviously, are limited to the skills of an individual.

Similarly, restrictions apply to the quality of violence. Interestingly, networks appear particularly inept at producing casualties. Although enjoying more resources than autonomous cells or lone wolves, this arrangement may hinder decision making. By definition,

networks have weak central leadership. However, networked cells may not exercise as much initiative as organizational theorists expect. Autonomous cells are likely to have a strong leader, albeit within a small group. Lone wolves face no impediments to decision making. Despite high profile cases, the deadliness of lone wolves has not increased much over time. Autonomous cells evolved into more proficient casualty producers since the third wave. This arrangement may have benefitted most from the information revolution, operationalizing technical knowledge into more casualties.

| **Structure** | **3rd Wave 1970-1989 (20 years)** | **Nativist Interval 1990-2001 (12 years)** | **4th Wave 2002-2013 (12 years)** |
|---|---|---|---|
| All Structures | 1445/1.3 | 2163/6.1 | 3577/16.9 |
| Hierarchy | 1245/1.6 | 1039/22.6 | 3107/517.8 |
| Network | 36/0.3 | 136/0.7 | 15/0.2 |
| Autonomous Cell | 47/0.7 | 822/29.4 | 303/8.9 |
| Lone Wolf | 117/1.0 | 166/1.9 | 152/1.8 |
| Leaderless Resistance | 164/0.9 | 988/8.8 | 455/3.9 |
| Loose Networks | 83/0.4 | 958/4.3 | 318/2.6 |

Figure 12. Quality of Violence by Period (Total Casualties/Mean Casualties). Created by author.

## Conclusion

Lenin was correct about the necessity for a professional revolutionary vanguard.[39] Contrary to conventional wisdom, hierarchies are the most dangerous terrorist organizational structure. Hierarchies have the ability to produce more attacks, at a greater rate, and with increasingly more bloodshed. The good news is the United States has succeeded in creating a domestic security environment inimical to hierarchical organization. The May 19 Communist Order, a successor to the Weather Underground, conducted its last attack in 1985.[40] The right wing Order II and religiously based Jewish Defense League conducted their last attacks in 1986.[41] Dormancy, however, should not be mistaken for death. Anti-system organizations and social movements are still part of the American political fabric. Even worse, the potential from hierarchically organized transnational terrorists threatens to abruptly intrude on the domestic environment.

Network has evolved into ubiquitous, all-purpose term conflating disparate concepts. When disaggregated into specific organizational structures and disassociated from communication technologies, differences in organizational effectiveness emerge. Networked structures have strengths as learning organizations, but they are not the ideal arrangement for terrorism in the United States. This research confirms Eilstrup-Sangiovanni's finding

on the limitations of *clandestine* networks.[42] Networked organizations surged during the nativist interval of the 1990s. But they are losing ground to leaderless resistance structures in the contemporary era. This suggests their limitations are known or they are less secure than autonomous cells or independent lone wolves.

Autonomous cells are becoming more technically proficient at producing casualties and account for a greater percentage of homeland violence since the September 11, 2001 attacks. Yet autonomous cells have real limits in their sustained rate of attacks. Contrary to public discourse, lone wolf violence has changed little since the 1970s. Although it account for an increasingly greater percentage of all terrorism, it is not due to increased deadliness or production. Overall, leaderless resistance structures are dispersed and their violence episodic. Few heed extremist calls for crowd sourced revolution. However, better internal security keeps these organizational arrangements survivable and technology potentially makes them more deadly. In the 21st Century United States, terrorist violence is real but revolution is inchoate.

## Implications

It is unclear exactly why domestic structures migrated from third wave hierarchies to nativist interval networks to fourth wave autonomous cells and lone wolves. Plausibly, it is a combination of reasons. First, the security environment is hostile to illegal groups with a chain of command. The United States law enforcement community has been effective in prosecuting terrorists and breaking up hierarchies. Victims have been successful seizing assets as compensation for damages. Additionally, systemic waves of terrorism impact the style and effectiveness of terrorist organizations.

Second, not all environmental changes are on the supply side. The demand for revolution may also be low. Terrorist causes have not been popular in the United States and mass insurgency may simply not be practical.[43] The selective service draft was a major source of popular discontent in the 1960s and 1970s. It concentrated those seeking to avoid service on college campuses, a traditional recruiting ground for leftist revolutionaries. The Defense Department's passionate protection of the all-volunteer military removed a major incentive to resistance.[44] Without oxygen, so to speak, a single spark will not ignite a prairie fire.[45]

Third, legal and law enforcement reforms need to concentrate on defeating the excellent operational security of autonomous cells and lone wolf operators. Bakker and de Graaf advocated preventing terrorism by disrupting the process of *how* it is done over discerning *who* the potential terrorists are.[46] However, determining who would-be terrorists are is likely to be just as important. The use of informants and social media monitoring could be a necessary requirement. Unlike terrorists belonging to groups, mental illness is rife among lone wolves. It approaches 40 percent compared to 1.5 percent of the general population.[47] This implies civil commitment reform may help prevent terrorism or even apolitical mass gun violence.[48]

## Future Research

Further study is needed to discern or confirm the attribution of organizational structure to specific terrorist groups. The number of missing cases is high, but may be further re-

duced through diligent research. This chapter provided insight to the character of domestic terrorism, but considerably more can be done to identify specific causal mechanisms and testable hypotheses. I offered systemic wave effects as a factor, but alternative explanations need to be explored. Lastly, further research may identify relationships between ideologies and organizational structures. Investigating these relationships may provide security professionals with additional clues to combat terrorism.

## Notes

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# Chapter 5

## Behind the Economics and Consequences of Genocide
## by Dr. David A. Anderson

Human history provides us innumerable cases of genocide. Notable examples from the 20th Century include Armenia, The Holocaust, and Rwanda. From 1955-2005 there were thirteen episodes of genocide alone.[1] Writings addressing the causes of these catastrophic events – including the economic dimension – fill scholarly literature. However, there is little scholarship about how economic conditions, including social-economic interplay, interact qualitatively leading to genocide or to the post-genocide economic fallout and recovery in a nation. This work addresses the void in the literature through a case study approach focusing on the Rwanda genocide of 1994. It also draws upon the Cambodia genocide of the mid-1970s and the Sudan genocide of the mid-2000s as means of cross-country comparison – seeking to garner similarities in experiences. This paper identifies leading economic indicators as a sort of early warning system to prevent genocide. It also identifies the economic consequences to the welfare of a nation after genocide occurs and the economic imperatives to prevent civil conflict relapses that can lead to genocide.

### Background

Rwanda is a former German and later Belgian colony. It is made up of two primary ethnic groups – Hutu 85 percent and Tutsi 14 percent. Before colonization the Tutsi minority evolved into a ruling class that Belgium later leveraged to rule Rwanda. Tutsi became the favored group when it came to employment in/out of government and for educational opportunities. This situation created animosity toward Tutsis since they were the minority and the Hutus considered them non-native people.[2]

The Hutu majority began systematically seizing power in both the public and private sectors leading up to Rwanda's independence from Belgium in 1962. What followed was a concerted effort to displace the Tutsi population. Many Tutsis were killed or fled into exile. By 1962, approximately 120,000 people, mainly Tutsis, had sought refuge in neighboring countries. For years, organized attacks ensued led by displaced Tutsis and moderate Hutus against the Rwandan Hutu-led government. Displaced Tutsis in Uganda formed the Rwandan Patriotic Front (RPF) in 1988 with the intent of repatriating Rwandans in exile and overthrowing, or at least creating an equitable power sharing arrangement, with the existing government.[3]

During the fall of 1990 the RPF used its primary operating base in Uganda to attack Rwanda. The Rwandan Hutu government response branded Tutsis inside Rwanda as "accomplices and Hutu members of the opposition party as traitors."[4] Thus began the Rwandan Civil War. Outside sources such as the United Nations and the Organization of African Unity brokered peace arrangements from 1990-1994 but to no avail.

### Pre-Genocide Economic Situation

In 1990 fully 90 percent of the country's working population remained employed in the agriculture sector.[5] Traditionally, the Tutsi were cattle herders and the Hutus farmers, but

both groups turned to farming and even grew similar crops as food for local consumption and coffee for export.

Rwanda's human fertility rate was among the highest in the world, but the increasing population density had the effect of reducing the average amount of cultivated land per family to below subsistence levels.[6] In 1984, the average family farmed 1.2 hectares (about 3 acres). By 1990 it was merely 0.9 hectares (about 2.2 acres). Between the years 1985-1992, Rwanda's main export was coffee. During this same period, coffee prices fell 72 percent. The two other major exports did not fare much better. Tin prices fell 35 percent and tea fell 66 percent.[7] During 1989-1990, farmers managed to grow 40 percent more coffee but received 20 percent less in net income for their crop.[8] In 1983, per capita GDP was $355 US dollars. By 1990, it had fallen to $260 US dollars.[9]

Between 1976 and 1994, Rwandan external debt increased 2,000 percent.[10] In light of a growing trade deficit and external debt balance, the Rwandan government implemented a structural adjustment plan in 1990 supported by the World Bank and International Monetary Fund. Rwanda devalued its currency 40 percent and removed price controls causing the inflation rate to rise from one percent to 19 percent.[11] In 1992, the value of the Rwandan franc dropped a further 15 percent. Inflation subsequently rose 10 percent in each of the next two years further eroding the purchasing power of the Rwandan's already reduced annual income. Structural adjustments also included tighter monetary policy and government expenditures, privatization of state run companies, and promotion of private sector activities. Unfortunately, the government's use of scarce financial resources for defense in order to address the escalating civil war undermined the possible success of the program.[12] Defense spending increased 300 percent during the period 1990-1992.[13] In the fall of 1990, the Rwandan military grew from a force of 5,000 to a force of 40,000. The civilian militias further drafted to augment the military would later come to be primarily responsible for the mass killings of Tutsis during the genocide.[14]

By 1992, the agriculture sector only accounted for roughly 20 percent of GDP but more than 88 percent of the labor force. During the period 1986-1992, the purchasing power of Rwandan exports dropped by 59 percent.[15] At the beginning of 1994, the population of Rwanda living below the poverty line (less than $1.25 US dollars per day as defined by the World Bank) remained high at 53 percent.[16] Poor prospects for employment complicated the potential return of Tutsis in exile. The Hutu-led government was not interested in their return, regardless. Finally, young people lost hope in the prospect of land ownership or employment opportunities suitable to support a family.[17]

All the aforementioned issues, programs, and events coupled with social, economic, and political animosity between the Hutu-led government and the Tutsi population became a powder keg waiting to explode. It eventually did in April of 1994.

## The April-June 1994 Genocide

On 6 April 1994, a rocket attack – attributed to the RPF – on a plane that killed the presidents of Rwanda and Burundi led to genocide in Rwanda. Ironically, the two leaders were returning from a conference in Tanzania addressing ways to end ethnic violence.[18]

Fueled by the death of their Hutu president and a radio broadcast encouraging the killing of the Tutsi "cockroach," up to one million Tutsis and moderate Hutus were massacred between April and June 1994. In July 1994, the RPF defeated these genocidal forces and seized power in Rwanda.[19]

The unemployment rate among the Hutu led to greater participation in the genocide.[20] Those conducting the killing were largely the Hutu political party's militia, known as the Interahamwe, who were young, and part of the population considered poor.[21] The more resources one possessed, the more likely one was attacked.[22] Those who participated in the killings desired mainly land.[23] The attacks were also an opportunity to settle old scores, while seizing lands.[24] In fact, attacks in Northern Rwanda were largely Hutu on Hutu over land disputes.[25]

As a result of the genocide, Rwanda's GDP dropped to approximately $150 US dollars per capita, a reduction of 44 percent below the 1993 level.[26] All international financial institutional support (e.g., World Bank and International Monetary Fund) ceased. Inflation rose from 14.9 percent in 1993 to 47.3 percent in 1994.[27] Agriculture represented about one-third of GDP and 87 percent of total employment. The trade balance for Rwanda dropped to a negative 60 percent of GDP.[28] External debt equated to 125 percent of GDP.[29] A huge portion of the labor force was displaced, dismissed from their government/state run business jobs, or killed. The educational system collapsed, while social welfare services suffered tremendously.

## Post-Genocide Rwanda

Following the genocide, economic growth was notable largely due to an extremely eroded starting point, significant influxes of foreign aid,and debt forgiveness. [30] In 1995, 84 percent of Rwanda's external debt was owed to International Financial Institutions (IFI).[31] By 1997, 70 percent of its people lived in poverty. Many were returning Tutsi.[32] Between 1990 and 2005 approximately 50 percent of Rwandan forests disappeared.[33] Just prior to the 1994 genocide, GDP was $ 270 US dollars per capita. It has risen to merely $387 some 20 years later.[34] Inflation during this same period has largely offset this marginal growth in income.

Just prior to the genocide, with 7.2 million people, Rwanda's population density was around 240 people per square kilometer. The population has grown from 7.8 million in 2003 to 11.8 million in 2014. The corresponding population density went from 297 per square kilometer to approximately 480 per square kilometer.[35] Today, half of Rwanda's population is under 20 years of age.[36] Agricultural output as a percent of GDP went from approximately 50 percent in 1995 down to 33 percent in 2013. Yet, 80 percent of the labor force remains working in the agriculture sector.[37] It took until the year 2000 before the country's GDP reached a pre-genocide figure.[38] However, the poverty rate remained high at 61 percent.[39] In 2011, it reached a low of 45 percent.[40] In 2014, the GDP makeup for Rwanda was 47 percent service related, 33 percent agriculture, 15 percent industrial based, and 5 percent other.[41]

Foreign aid throughout the post-genocide period has equaled 50 percent of Rwanda's government budget and capital investment.[42] Country exports are one-third of imports[43] and 15 percent of projected 2015 GDP will be derived from foreign aid.[44] Foreign aid has been critical lifeblood to Rwanda stabilization and growth; however, foreign aid contributions are being systematically phased out. No viable internal sourcing mechanisms exist to offset this eventual gap without adversely impacting commercial activity and domestic consumption. This may prove very problematic for Rwanda as it faces most of the same economic issues it had before the genocide. Some have even grown worse in scale or magnitude, such as population growth and population density. Rwanda is now the most densely populated country in Africa. Other issues such as exhausted natural resources, shrinking farm sizes, low real income growth, few job prospects outside the agriculture sector, trade imbalance, and infrastructure/social welfare shortfalls prevail as well. Ironically, the Tutsi government is now in charge and has to contend with displaced Hutu, and Hutu rebel groups (e.g., Democratic Forces for the Liberation of Rwanda operating out of the Democratic Republic of the Congo), seeking to return to Rwanda and be part of a united government, or simply take control of the government.

## Economic Analysis

The following economic analysis is conducted through the application of related civil conflict theory and *five notable research findings*, as a means of assessing the socio-economic conditions associated with Rwanda's genocide. Two additional country cases (Sudan and Cambodia) are drawn upon to glean common conditions that exist/existed among these countries. The analysis outcome will then be synthesized to provide a generalized common operating picture of economic factors adversely shaping the environment among poor, conflict riddled states. The intent is to identify those needing critical attention going forward in order to prevent future genocides from occurring.

### *There is a strong relation between identity and the genocide phenomena, interaction rationalized and managed by the state.*[45]

This was the case in Rwanda. Between 1960 and 1994 the Hutu-led government fueled hatred among the Hutu population toward the Tutsi population within Rwanda. They nurtured propaganda demonizing Tutsis as outsiders and capitalist villains looking to hoard wealth, and suppress and subordinate Hutus within the country. The Hutu population was led to believe that the Tutsis were out to overthrow them so they must act first. Later, the government fatally conveyed this message through radio broadcasts on 6 April 1994, resulting in the mass killing of Tutsis.

This action is also consistent with other conflict research findings indicating that during times of economic crisis, people look for someone to blame.[46] Hutus attacked Tutsi largely out of "interethnic economic competition."[47] The genocide attack is also consistent with civil conflict findings which state that poor countries with a dominant, large ethnic group consisting of between 45-90 percent of the population are twice as likely to experience conflict.[48] This certainly appears to be the case for Rwanda.

A similar situation occurred one year earlier in the bordering country of Burundi. An investigation into the 1993 mass murders committed in Burundi indicate that most of those killed held more "wealth in terms of livestock and human capital" than their perpetrators.[49] This was also the case in Sudan where government sanctioned Sudanese Arabs killed, displaced, and starved out residents in southern Sudan and Darfur for their agricultural land and oilfields. Nazi fascism in Germany appealed to peasant workers and farmers because of its anti-capitalism propaganda, which portrayed Jews as the commercial privileged. At the beginning of the great depression of 1929, the Nazi party began blaming Jews for Germany's economic misery. Rwandan Hutus depicted Tutsis similarly.[50] For example, Hutus falsely blamed Tutsis for Rwanda's economic crisis of the 1980s, which was really brought upon by plummeting commodity prices in primary exports.[51]

***Genocides generally take place in countries experiencing economic stressors. Poverty and the lack of economic opportunities are noteworthy instigators.[52]***

Cross-country studies repeatedly find a connection between poor economic conditions and civil conflict.[53] Economic factors such as low per capita income, low GDP growth rate and disproportional resource distribution are significant contributors to civil conflict.[54] Per capita income of less than the equivalency of $700 US dollars is inherently destabilizing. Low income countries such as this face a 14 percent chance of internal conflict within five years.[55] Those with low levels of land ownership and a low score on the Human Development Index experience greater levels of violence.[56]

The economic conditions that lead to genocide may be very diverse. Besides including the aforementioned economic factors, they may also take the form of external market shocks, growing domestic debt, over population, unemployment, inflation, robust shifts in domestic economic policy, to name a few of the most notable contributors.[57] Arguably, ethnic discord, political frustration and economic hopelessness prompted the Rwandan government to condone genocide as a "way out" or "pressure release" over the ongoing economic crisis. Similar type conditions existed in Sudan, which is later addressed.

***Limited economic options lead to joining rebel groups and the ability to finance conflict leads to greater levels of violence.[58]***

Financial support from outside sources such as a country's diaspora, neighboring countries, and third party countries or entities, are strong facilitators of conflict.[59] Uganda and the US were significant supporters of exiled Tutsis. Both countries provided various forms of aid—from refuge and food to arms—allowing thousands of armed Tutsi to return to Rwanda from Uganda to stop the genocide and eventually over through the government. Again paradoxically, exiled militant Hutus now operate from The Democratic Republic of the Congo (DROC) attacking Tutsis in Rwanda while hoping to return to Rwanda someday.

As noted earlier, foreign financial aid gave the Rwandan government the means to form a sizable army and militia to combat Rwandan Tutsis in the country and those Tutsis being harbored in neighboring countries seeking to return via armed conflict. Similarly, The Khmer Rouge took over Cambodia in 1975 after the US stopped military support to the military-led government of Cambodia,. a government it had helped put in power. The

Khmer Rouge was supported by the former Prince of Cambodia and allied North Vietnamese. Subsequently, the Khmer Rouge leader, Pol Pot, "purged" the old society in Cambodia via mass killings. The Khmer Rouge, through its killing squads, targeted the educated, ethnic minorities, and those living in cities. Ethnic Chinese, Vietnamese and Cham Muslims were notably singled out and killed. Some 425,000 Chinese were killed, effectively half of Cambodia's Chinese population.[60] In the end, one-quarter of Cambodia's entire population died during Pol Pot's reign.

In Sudan, the Sudanese government was able to garner financial and arms support from China to combat southern rebel groups and empower militia/Jangaweed to rid the south of Sudan and the Darfur region of non-Arab and "troublesome inhabitants" from agricultural and oil rich land.[61] They seized land and assets for their services. [62] The financing and weapons were paid for through oil exports, primarily to China. Russia also sold weapons to Sudan.[63] Southern Sudan had an ally of sorts in Chad. Chad supported southern Sudan rebels in retaliation to claims that the government of Sudan was supporting rebel groups in Chad seeking to over-through its government.[64]

***There are three primary economic risk factors that can lead to internal conflict: low per capita income, low GDP growth rate, and the dependence on natural resources for export.[65]***

In the context of poverty, lowering a country's natural resource exports as a percent of export revenue significantly reduces the probability of internal conflict.[66] Rwanda's near exclusive dependency on the exports of coffee, tea, and tin have proven problematic for the economic well-being of the country, as well as its political stability. During the late 1980s and early 1990s when the price of these commodities plummeted, great economic strain was placed on the country. Per capita income—already well below the poverty level– fell from $250 US dollars in 1988 to $235 US dollars in 1992.[67] During this same period civil war broke out compounding the troubling economic situation. To this day, Rwanda remains dependent on these same export commodities for its foreign currency revenue. Furthermore, Rwanda's extensive dependency on employment in agriculture, while the agriculture sector is markedly becoming a smaller fraction of the country's GDP, continues to be troubling. These conditions, coupled with inadequate foreign direct investment in Rwanda, particularly in the service and industrial sectors, and the country's dependency on foreign aid, add significantly to Rwanda's challenge.

Although Cambodia no longer appears to face internal security issues since ousting Pol Pot and the Khmer Rouge some 20 years ago, it has the same post-conflict/genocide challenges as Rwanda. The globally competitive garment industry accounts for 70 percent of its exports, leaving it vulnerable to input pricing competition and an increasingly saturated market place among producers.[68] Four million people live in poverty and it remains one of the poorest countries in Asia. Its economic development challenge is very intimidating. It has a youthful population – half of its population is under the age of twenty-five. Its people are under-educated, under-skilled, and rural. There are few job prospects outside subsistent farming. Thirty-five percent of the country's GDP is derived from agriculture, yet 56 percent of the working population is employed in this sector.[69] Over 50 percent of

the government's operating budget comes from donor countries and IFIs. Other inhibiting issues to Cambodia's economic development are "shortages of infrastructure, limited access to social services, inadequate access to land and poor governance."[70] As with Rwanda, the post-genocide economic issues faced by Cambodia are similar to those that led to their genocide.

Since the time when northern and southern Sudan were united by the United Kingdom under the rule of a single government body in 1946, the south of Sudan looked to reverse the situation. Through a prolonged and bloody civil war, South Sudan gained its independence in 2011. The same economic development challenges faced/facing Rwanda and Cambodia have existed throughout Sudan's modern history. The civil conflict that led to state sponsored genocide deepened the social and economic despair of the Sudanese. Discovery of oil in southern Sudan and the oil boom during the ten years leading up to South Sudan independence further fed the intensity of the conflict.[71] Now, there was a significant export commodity to fight for as well. It created a "kill or be killed" mentality among people in the south of the country. This mindset was reinforced in 2005 when a comprehensive peace agreement failed upon the death of Sudan's Vice-President Garang who was, at the time of his death, the administrative head of the south.[72]

Three years after the independence of South Sudan both countries are mired in political and economic instability. Sudan lost 75 percent of its oil revenue due to the secession of South Sudan.[73] The agriculture sector (subsistent farming) continues to employ some 83 percent of the work force, while accounting for only 27.4 percent of GDP.[74] Approximately 50 percent of the population lives in poverty. Its per capita income is among the absolute lowest in the world. Its exports are one-third less than its imports and it has a public debt that exceeds annual GDP.[75] Finally, it depends primarily on oil exports for foreign currency revenue while at the same time US imposed sanctions make it difficult for the country to trade any goods and derive that income.[76]

South Sudan struggles with establishing peace and stability. Civil discord has led to a reduction in oil production in 2012 by 50 percent over transshipment fees with Sudan. The country receives some 70 percent of its income from oil revenue and 60 percent of its GDP from oil exports.[77] More than 50 percent of its population lives in poverty. Per capita income is among the absolute lowest in the world. Its annual budget for 2013 was 15.5 percent of GDP.[78] Other noteworthy economic development hurdles include: "inter-tribal conflicts; poor infrastructure; virtually no manufacturing or commercial agriculture base or service; extremely low human capital with one of the world's lowest adult literacy levels at 27 percent."[79]

***"Mass murders that reduce the population can raise capital intensity by effectively redistributing capital, such as land, from the diseased to the survivors. This raises the living standards of the remaining population."*** [80]

Many of the most genocide-affected areas in Rwanda experienced a greater living standard among those residing in the same areas six years after the genocide. They owned more land assets, livestock, durable goods and total assets per capita.[81] They also had greater ag-

riculture production and income. This implies a correlation between displaced people and deaths resulting from genocide and increased prosperity of those remaining–fewer people to capture the rents.[82] However, the gains appear short-lived in the long run in the case of Rwanda. Poverty remains high. The population continues to grow faster than the economy can absorb. The mean size of family farms continue to shrink and the vast majority of people remain employed in agriculture. Furthermore any short-run gains have been more than offset by: the trauma of genocide on society; fueled hatred toward Hutus by Tutsis; displaced or killed human capital; brain drain; financial capital flight; and loss of desperately needed foreign direct investment. It has also led to a need to commit more scarce resources to defense for stability promoting purposes and does not account for the social, political, or economic impacts on neighboring countries.

## Conclusion and Recommendations

Aside from the degree of economic fallout from the genocide committed in Rwanda, Sudan, and Cambodia, these countries economic challenges are not notably different from most poor, conflict-ridden countries. They all suffer from the lack of endowments and economic diversity, large youthful populations, high unemployment/under employment, a shortage of FDI, low income/GDP, negative trade balance, poor fiscal and monetary policy, brain drain, capital flight, corruption, some form of ethnic tension, and much more.

Approximately half of all post-conflict civil wars have a relapse within 10 years.[83] Some of these civil conflicts have a genocide component to them. An effective tool to reduce the likelihood of a conflict relapse is prioritizing economic recovery but economic recovery may take years. [84] However, rapid economic growth is even more effective in reducing post-conflict risks than it is in conflict prevention.[85] Unfortunately, many conflict laden countries do not have much of a pre-conflict economic base, let alone a post-conflict base to work from. Rwanda's post-conflict economic success has largely been a function of the significant amount of financial aid it has received over the past 20-plus years. However, it has produced little in the way of enduring economic outcomes sustainable beyond receiving future financial aid from the international community. This is not to say that civil conflict or genocide is now imminent. However, the undercurrent of the country's economic fragility will certainly surface with the contraction of government spending due to the impending reduction of aid dollars made available to Rwanda. It is also highly unlikely that the social infrastructure developed via aid funding will be sustainable. The financial means of the Rwandan government does not exist under the country's current economic structure. The subsequent pressure placed on the economy to be more self-sustainable will also prove problematic because discretionary income among Rwandans is very low. The fallout will certainly lead to heightened ethnic tensions that may be an opportunity for displaced Hutu rebels to mount destabilizing attacks from locations such as DROC.

Generally speaking, economic transformation is not only needed in Rwanda, but all poor and conflict-ridden states. With as many as one-quarter of all countries struggling economically, it becomes a too costly proposition for developed countries and IFIs to make enduring investments to effectively stabilize and economically advance them all. The funds are just not available in the quantities necessary. With this in mind, particular attention

must be paid to those countries with underlying ethnic tensions that could be readily fueled by job, land, and capital scarcity stressors. Furthermore, anecdotal evidence suggests that conflicts with a genocide component also occur in countries whose neighbors are poor and conflict prone. They appear to be enablers and/or have a spillover affect that adds to general instability. In these cases, resources must be committed to stabilize bordering states of those prone to ethnic and religious strife. This requires an enduring commitment by IFIs, bilateral country arrangements, and private sector capital investment. It will also require developed countries to enhance their preferential arrangements for the exports of all poor countries. This must include ridding their agricultural subsidies that inhibit poor agricultural-based countries from competitively exporting their products, including those at least semi-processed. In other words, poor countries need export outlets for the higher value-added processing of commodities to capture more of the income associated with final consumption. Higher incomes generally equate to lower risk of civil conflict due to "increased opportunity costs of violence." [86]

Finally, all poor countries should establish a strategic industrial policy that favors/promotes private sector development, commensurate social and economic infrastructure, and details a clear plan to manage scarce resources. This would be a positive step in encouraging the right aid and investment from the international community and private sector, which both have many competing priorities and interests.

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# Chapter 6

## Future Conflict – Water as a Strategic Issue
## by Mr. Jeffrey D. Vordermark

… the English language derives the word "rival" from the Latin word "rivalis," meaning persons who live on opposite banks of a river used for irrigation.

– Water Encyclopedia

The purpose of this article is to examine global water insecurity issues and their potential impact on the US military and our interagency partners through the lens of current US national security documents. The urgency of the issue of water scarcity emerges with growing frequency in current news and analytical reporting, and it's lack is highlighted by such disparate developments as migrations of at-risk populations, rapidly growing demand because of modernization and industrialization, and even a rise in the amount of land under agriculture and the attendant impact on water quality as a result of fertilizer run-off. According to a May 2010 study about water competition, the Economist stated that "When the word water appears in print these days, crisis is rarely far behind. Water, it is said, is the new oil."[1] Yet water-related issues seem to be only an afterthought in documents such as the National Security and National Military Strategies, and fail to adequately inform the various diplomatic and military domains of power that rely on them for strategic direction. As US Military actions today involve a broader range of military operations, it is increasingly probable that future missions will include direct response to water-related issues. This will affect regional planning by combatant commands and potentially impact the direction of Mission Strategic Plans at US Embassies, and may well figure in to future doctrine development, budgeting, and personnel decisions in order to properly address emerging water insecurity issues. Because of this there is a need to frame, at the national strategic level, the issues and challenges related to water in this era of global instability and challenge.

### A Paradigm Shift in Water Resources

The argument can be made that water is emerging as a potential source of conflict, and that water-specific infrastructure has become a legitimate target for global agents of instability. After Saddam Hussein invaded Kuwait in 1990 Saudi Arabia, Bahrain, and the United Arab Emirates hosted multinational forces to reverse the invasion. Saddam's response was to attack their reverse osmosis water purification plants with a deliberate release of raw oil into Persian Gulf waters.[2] These Gulf countries relied on expensive saltwater desalination systems to supply drinking water for their own citizens. Any introduction of oil at the plant intake affects reverse osmosis membranes and renders the system inoperable, a key vulnerability exposed in an unconventional, yet effective, attack. Two decades hence, the reliance on desalination plants has grown across the globe, and the danger to water resources is clear and certainly not limited to desalination plants. An ever-increasing number of countries with water demand issues can be placed under threat. As policymakers grapple

with future challenges, the unanswered question is whether or not military forces will need to be postured to respond to water insecurity issues in the coming years.

As US policies continue to adjust to the post-Cold War environment, the employment of military means to intervene in the resolution of regional issues has spiked. Instability due to a host of causes such as tribal conflict, climate issues, failed states and ungoverned space, or even drug wars is prevalent. The use of military forces to achieve US interests and objectives is therefore being applied in an expanded context, one that of necessity must account for water issues as we move forward. Failure to anticipate the scope and potential impact of water insecurity will mean US forces may not possess the capability to effectively respond, and key in-country relations with State Department and other actors will need to be developed on the fly instead of having been already anticipated.

This is relevant because an important paradigm shift is occurring in terms of water availability. In the past, technology allowed supply to stay ahead of demand. Waterways were shifted, reservoirs created, wells drilled, and new ways to find fossil aquifers or generate potable water from seawater developed. By today's standards these are relatively easy actions, thus most of the world's readily available water supplies have already been tapped. More importantly, some vital groundwater resources in water-poor areas are either depleted or subject to seawater contamination, permanently ruining the aquifer. In the meantime populations grow, demand increases, and stability in the post-Cold War era seems more dream than reality in many regions. The time has come to discuss the impact of an entire country running out of water resources and to consider the second and third order effects of nuclear capable powers being brought to the brink of conflict over water sharing issues.

If this was unimaginable a decade ago, it is not today. There is very real concern that Yemen, an unstable state with a heavy Al Qaeda presence, may indeed run out of water soon. On the other end of the spectrum, tension between nuclear-capable competitors India and Pakistan over sharing of the Indus River could develop into conflict. If there is some sort of development in either location, how must the United States respond? Yemen is an unstable country in a fractious region. US leverage with either India or Pakistan is questionable, and the pace of regional developments tends to outstrip policy advances as these and other Asian countries become increasingly important global players. If the United States is to be able to effectively intercede in either of these examples, action must be taken by policymakers that will serve to energize the development of military capacity in terms of equipment, doctrine, and education to meet these challenges. Military actions by themselves will not be sufficient. The May 2010 National Security Strategy (NSS) stated, "No international order can be supported by international institutions alone. Our mutual interests must be underpinned by bilateral, multilateral, and global strategies that address underlying sources of insecurity and build new spheres of cooperation."[3] The clear need for diplomatic energy in this regard also exists, thus, much like the emergence of US policy regarding Middle East threats to Gulf oil during the Cold War, first articulated in the Twin Pillars policy in the 1970s, it is time to investigate similar approaches which address water as a source of insecurity.

## US Water Policy Guidance

Cooperative development regarding shared waters has been a US foreign policy consideration for decades. During the height of the Cold War, the United States worked to limit Soviet influence and the potential for instability over water in the Middle East by "promoting cooperative development of the region's water resources as a promising route to political accommodation." [4] However, such policies are often reactive versus predictive, and in the case of water insecurity there is growing evidence of a need to add specificity if we are to adequately and thoughtfully address emerging problem areas. There is scant guidance concerning water issues currently available to shape regional and strategic planning efforts.

The 2010 NSS only addresses access to clean water in order to meet basic humanitarian needs – guidance seemingly geared towards survival of affected populations ostensibly in a crisis similar to the 2004 tsunami that wiped out Banda Aceh in Indonesia. While ready access to clean, potable water is crucial in humanitarian crisis and disaster relief scenarios, national security implications specific to the United States are not addressed. Neither is the accepted necessity of reestablishing water infrastructure in the wake of these disasters as a key to setting conditions for long term stability and thus economic growth. Aside from a catastrophe like Banda Aceh, water insecurity could trigger instability due to civil unrest, forced migration, and tension or conflict over the resource. The February 20, 2015 NSS links water issues to climate change, noting only a single, but important, reference to water and its potential as a source of conflict.[5] If anything, this most recent NSS is even more dismissive of the impact water competition may represent than the previous iteration of the document.

Concern over competition for this increasingly valuable commodity in areas such as the Nile River basin or between nuclear capable riparian along the Indus River valley has yet to be clearly captured in national level documents by US policymakers. The lack of guidance regarding water insecurity means there is nothing to drive subordinate planning or supporting policies. Without cogent national guidance, emphasis on water insecurity issues will remain vague in other strategic documents as well, impacting not only the U. S. Military but other interagency players as well.

The 2010 National Military Strategy (NMS) addressed briefly the subject of water, citing population growth and urbanization in the Middle East, Africa, and South Central Asia that will contribute to increased water scarcity and may present governance challenges.[6] Fresh water is a finite resource that some nations are blessed with in abundance, while a great many experience the lack due to climate or geography. Technology can resolve some of these problems, but the expense (see link) may be well beyond local means. Demand for water, based on population growth and resource competition, is outstripping some areas where supply has traditionally met demand, and in some locations this is reaching a crisis stage.[7]

The Quadrennial Defense Review (QDR) of February 2010 links any discussion of water issues to that of climate change, which it contends will contribute to food and water scarcity, increase the spread of disease, and may spur or exacerbate mass migration.[8] This outlook is indicative of the trend of dealing with water issues not as a proximate cause

of instability, but symptomatic of more acute issues related to accompanying regional or environmental events. This narrow framework limits the scope of understanding, and disregards other potentially destabilizing dynamics such as emerging political or resource competition, or upstream development of waterways.

The 2014 QDR introduces the concept of improved energy and water security, and recognized that increased competition for water could result in a potential for conflict, especially in fragile states.[9] The only document that offers any granularity regarding water issues and security is the 2010 Joint Operating Environment (JOE), published by the United States Joint Forces Command.[10] Water scarcity, pollution, contamination, and diversion were all factors listed by the JOE as potential factors of instability. Unfortunately, the JOE stops short of addressing implications for the role of military forces except to consider a need for water purification in support of humanitarian relief operations. This brings us back to a linkage with the NSS and the limited concerns found in that document, which fall short of the emerging global realities regarding water insecurity. For the military professional, water can no longer be confined to the local provision of humanitarian relief. Diversion of water, upstream development, or competition for this resource could all become proximate causes of conflict. Failure to understand and plan for this may become costly in the future. The most unstable regions of the world, highlighted in the JOE (see figure 13), also lie geographically in the most water-stressed regions. The lack of policy available to address the predicament does little to support the broader US interests of stability and security unless water insecurity is specifically addressed. This, in turn, will drive anticipation and more effective preparation.

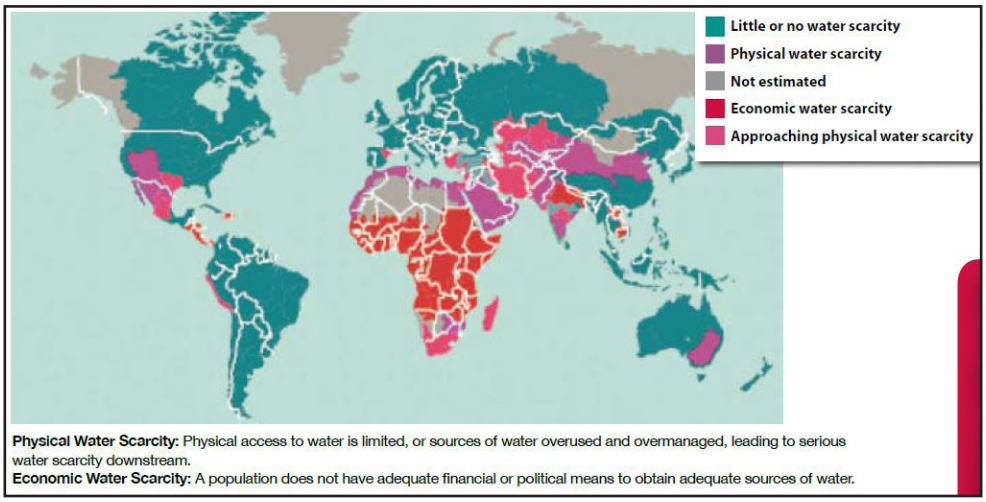


Figure 13. Physical and economic water scarcity. Graphic courtesy of 2010 Joint Operating Environment report.

## New Threats to Water Resources

The post-Cold War operating environment has been made more complex by the rise of influential non-state actors, such as Al Qaeda, who are not bound to historical agreements or internationally recognized protocols. While many enduring historical agreements exist

between nation-states concerning the utilization of shared resources, disagreement today may also include non-traditional actors. Michael Klare spells this out by noting "Other parties to these disputes, such as the Palestinians and the Kurds, may lack regular armies but can bring other forms of pressure to bear – terrorism, guerilla warfare, rioting, and civil disobedience."[11] In today's age of transnational and non-state actors, these elements also represent a potential destabilizing factor regarding water insecurity.

Threats to water infrastructure do indeed exist.

> Al Qa'eda has been investigating how to carry out devastating attacks through cyberspace by seizing control of dam gates or power grids using the internet. Evidence found onAl Qa'eda laptop computers in Afghanistan indicates that cyber terrorism could be a reality, and does much to explain the recent establishment of U. S. Cyber Command, which had the charter to conduct full spectrum military cyberspace operations.[12]

"Logs showed that Al Qa'eda members visited websites that offer a software and programming instructions for the digital switches that run water, power and communications facilities."[13] Such an attack, if successful, would have significant second and third order effects on economy, agriculture, and stability in addition to serving the primary purpose of Al Qa'eda, which would be the weaponization of water. Taking a page from history, Al-Qa'eda would not be the first aside from Iraq to attempt to turn the forces of nature into a weapon.

There is an historical precedent for this type of asymmetric warfare, as a subset of conventional conflict, during Operation CHASTISE in World War II. The goal of this unique operation, conducted by the newly formed 617 Squadron of the Royal Air Force was to inundate the important German industrial sector of the Ruhr river valley with water by bombing a key dam.[14] Following World War II, operations like this generated Geneva Convention protocols and such targets were precluded from future consideration. According to the Geneva Convention, Article 56: Protection of Works and Installations Containing Dangerous Forces:

> Works or installations containing dangerous forces, namely dams, dikes and nuclear electrical generating stations, shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population. Other military objectives located at or in the vicinity of these works or installations shall not be made the object of attack if such attack may cause the release of dangerous forces from the works or installations and consequent severe losses among the civilian population.[15]

While international conventions appear to provide assurances that actions such as Operation CHASTISE will not be repeated, in today's operating environment we cannot discount the possibility that rogue states and transnational actors will act outside these established norms. The asymmetric attack of dams and hydroelectric facilities that could affect large numbers of people must be an operational and perhaps even strategic consideration.

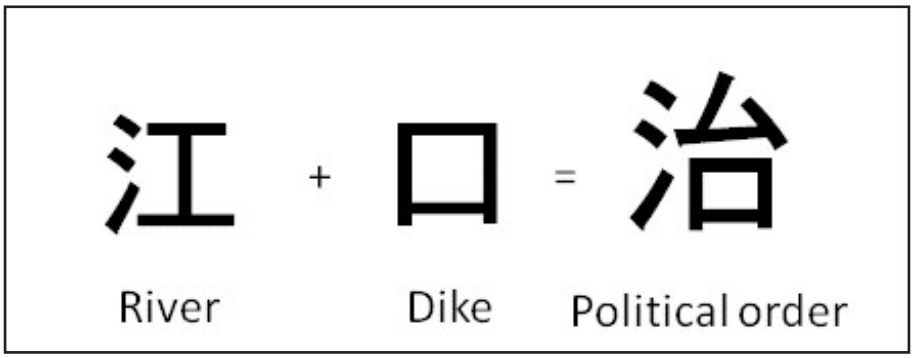


Figure 14. Chinese symbols for river and dike, linked to define the concept of political order. Created by author.

It is interesting, and instructive, to note that the Chinese symbols of "river" and "dike" are linked to define the concept of "political order."[16] Since the key goal of any terror group is to sow disorder, an attack on targets such as dams and hydroelectric facilities become perfectly logical options for a group seeking to discredit and topple a sovereign government. For this reason US forces remained stationed at Haditha Dam in Iraq for years in order to protect it from attacks by insurgents long after the regime of Saddam Hussein had ceased to function.

Authors Jerome Priscolli and Aaron Wolf in their book "Managing and Transforming Water Conflicts," argue that concerns over water as a source of conflict between nation states is actually diminishing because of a trend toward bilateral or regional cooperation. Water politics operates increasingly under the paradigm that the availability of the resource is decreasing and costs, aside from cooperation, are too high.[17] While acceding to the fact that violence over water does exist, they note that it does not generally rise to the "state level." The analysis does not, however, address the increasing predilection of transnational terror groups to use water as leverage and water-specific facilities as targets. In July 2010 a group calling itself "the Caucasus Emirate" was deemed responsible for an attack on a hydroelectric power plant in Russia's North Caucasus region. The same group claimed responsibility for an August 2009 attack on a hydropower plant in Siberia that killed 75 people.[18] Such facilities are today legitimate targets for these groups. Their actions could increase cross-border tensions since a rogue transnational actor's threats to a vital riparian resource could precipitate a cross border response ultimately leading to conflict between sovereign governments. The potential dangers are evident if not addressed in a prescient and deliberate manner by senior planners and policy-makers.

## Global Water Issues – Emerging Areas of Concern

In the discussion of factors that contribute to potential instability in today's international arena, climate change and water would seem outside the normal bounds of consideration and planning for the military. As we have seen, the key documents that inform planning do little to highlight water as a key and emerging issue. However, as populations increase,

the need to feed and house ever-increasing numbers of people is severely stressing finite natural resources. A Time.com blog posting in December 2010 noted that "Yemen could be the first nation to completely run out of water in a few years, a prospect that does not bode well for its young population of 24 million that is expected to double in 20 years, or anyone worried about the rising influence of an Al Qa'eda branch in one of the Middle East's poorest nations."[19] The implications help to frame the emerging operational environment in the region.

A nation such as Yemen, where extant social, political, and extremist problems already generate instability, should represent a cause of concern for policy analysts and regional strategists. That problems in Yemen could be exacerbated by water insecurity, leading to further destabilization represents more than just a case study on water scarcity. Since the most recently published QDR only addresses water issues from the perspective of global climate change, and does not include any consideration for a State's domestic inability to control water utilization and consumption (a human-engineered, vice hydrographic problem) it is becoming more necessary to adjust our regional combatant command operational and strategic focus on this challenge.

In the case of Yemen, climate change alone does not adequately capture the challenges that may lead to instability. Competition over water could directly threaten US interests and represent another factor as to why policy should include such issues. The concerns in Yemen, although unique, do not represent the most vexing. Rivalry between the two major regional powers of India and Pakistan has been a concern of US policymakers for decades. Not only does the historical animus between the two countries persist, but the attainment of nuclear capability by both sides has served to raise the stakes. Thrown into this mix of ethnic, religious and geographic tension is the continuing need to share the waters of the Indus River under the provisions of the 1960 Indus Waters Treaty. Ongoing Indian construction of the Baglihar Dam is of great concern to Pakistan, not the least of which is based on their fears that India may develop the capacity to build a dam large enough to present a potential threat of deliberate flooding. The details of this riparian drama have been laid out in a 2006 study by Robert G. Wirsing and Christopher Jasparro, who note that "Pakistani officials maintain that the Baglihar dam's design supplies India with the means, on the one hand, to economically squeeze, starve or strangulate Pakistan, or, on the other hand, to flood Pakistan, conceivably for military purposes."[20] The latter point is consistent with actions that led South Korea to develop their Peace Dam, and demonstrates that the aforementioned Article 56 of the Geneva Convention does not represent an apparent restraint.[21]

How US policy concerns address the potential water issues between these two nuclear powers remains unspecified. India, with its huge population and economic influence, represents a key regional relationship for the US. Pakistan enjoys a special relationship as a major non-NATO ally, and its support to the US remains crucial to successful resolution of the Afghan conflict. Both countries are key players in a region of the world that is increasingly important to the United States in terms of economic and military influence. The Wirsing and Jasparro study characterizes the seriousness of the issue via the views of a senior Pakistani diplomat who noted "Water has become *the* core issue between India and Pakistan."[22] Astute followers of regional events will appreciate the gravity of this situation.

Many consider the most pressing issues to be the conflict over Kashmir or tensions due to transnational terrorists similar to the attack on the Taj Mahal in November 2008.[23] However, it would be unwise to discount the potential for instability due to tensions over development of the Baglihar Dam. Many of these same issues and potential for instability can be ascribed to China's attempts to harness the Mekong River, which would negatively impact millions of people and could lead to conflict with Laos, Viet Nam, and Cambodia, whose people depend on the river to sustain fishing and farming activities. Upstream development represents a valid source of tension affecting regional relations, and it is an area that, according to Richard Cronin, could be a source of hostility in the future. [24] The second and third order aspects of development must be appreciated by military leaders and strategists. As noted in the International Water Security study, "Any water project inevitably redistributes (in)security."[25] In the world of riparian development, what meets the needs of one state, group, or people has an impact on others, and as the shift in paradigm emerges policy must anticipate who may be affected by this redistribution.

Perhaps the most vexing and problematic of all scenarios may be associated with the Middle East Peace Process. Lost in the rhetoric of Israel's security and right to exist versus statehood for the Palestinians, a major but largely underappreciated aspect of the issue is access to water and water rights for both sides. According to Scott Peterson writing for the Christian Science Monitor, securing access to water has been a major consideration of Israeli actions for decades. The goal has been to secure not only viable river sources, but areas necessary to control aquifers as well:

> Among the first to recognize that water and its sources were strategic assets to fight for – or to target – were the Zionist Jews... As early as 1919, they claimed that the "minimum requirements" for a viable Jewish state were "dependent" on controlling the headwaters of the Jordan River, Mt. Hermon on the Golan Heights, and Lebanon's Litani River... Israel for decades has been pumping 80 percent of the water from the aquifer that was mostly under the occupied West Bank, and Palestinians have been prohibited from drilling any new wells themselves. Today fully half of Israel's water supply comes from territory captured in 1967.[26]

Anyone familiar with the ongoing Israeli expansion of illegal settlements would not be surprised to learn that an underlying constant regarding location of the settlements is the existence of ground water suitable to sustain projected needs of the settlement. This is a zero sum game for either side. Palestinians are cut off from access to needed water for agriculture and subsistence, while the Israeli settlements increasingly encroach on what are very limited available resources. There is also growing Palestinian frustration, as shown by a recent BBC article that states "Palestinians say they are prevented from using their own water resources by a belligerent military power, forcing hundreds of thousands of people to buy water from their occupiers at inflated prices."[27] These resources are finite, and in the end could become the proximate cause of renewed conflict.

A fact sheet produced by the Emergency Water and Sanitation-Hygiene group (EWASH) notes a key destabilizing aspect over shared water resources because the coastal aquifer shared with Israel is the single source of fresh water supplying the entire Gaza

Strip. "With more water being pumped from the aquifer annually than natural recharge rates; seawater and surrounding saline aquifers intrude into this fresh water source causing salinization."[28] There is also concern that water infrastructure was targeted by Israeli forces during Operation CAST LEAD in 2008 and which has continued up until 2011.[29] Such information, factual or otherwise, leads to the notion that water can be used as a weapon by a nation-state actor to achieve policy goals over the long term. Such goals could include not only enhancing domestic water security, but also the use of water as a lever against an adversary in order to achieve broader policy goals.

However, in the case of Israel, it is not just the Palestinians who are affected. The Golan Heights, currently under Israeli occupation, contain important water resources for Syria as well. According to the BBC, "Stalled negotiations on Syria's dispute with Israel over the Golan Heights – occupied by Israel in 1967 and annexed in 1980 – also foundered on water-related issues. Syria wants an Israeli withdrawal to 5 June 1967 borders, allowing Syria access to the Jordan and Yarmouk rivers."[30] While this is a dangerous game, it is clear that, whether as a lever or a cudgel, manipulation of access and control to water can be an aspect of another nation's policy that must be appreciated and considered.

## Implications of Inaction

Water is rapidly becoming a potential factor of instability and the United States military is not favorably postured to react to related insecurity issues. Without national level guidance that will serve as a driver for education, training and equipment procurement this will not change, and the military's ability to address regional water issues will remain limited. True, the capability exists to deploy rapidly to areas in human crisis and generate water production in the short term, but once the military departs any capability to produce water does as well.

Relevant doctrine, a natural derivative of NSS and NMS guidance, regarding an approach to water insecurity issues is insufficient. Currently more effort has been put in to addressing and protecting US hydro facilities under the Department of Homeland Security than in analyzing and institutionalizing response options for a regional scenario thousands of miles away where limited infrastructure exists. To be effective in today's complex operating environment, Soldiers and leaders must be provided the doctrinal tools and planning guidance necessary to respond effectively. This will serve to drive the development of equipment, force expertise, and education of personnel that is lacking at present.

Procurement of military equipment above and beyond the provision of limited water purification is also an area of potential concern. In the future it may not be enough to bring in reverse osmosis units or employ an engineer unit to dig a well. The scope and duration of future conflicts may be far beyond these options. What can or should be done to better capture the potential requirements to supply or generate water needs in a country like Yemen? Are prepositioned stocks in place that can mitigate this, and should they be? Will the primary responders be provided from elsewhere within the interagency? Since the equipment needed may be highly specialized, have local contract sources been identified? The US military stresses the need to be adaptive and flexible, so perhaps any equipment changes in this regard can be evolutionary. What may prove most effective in the ability to respond

to future challenges is the development of military experts and decision-makers capable of inherently understanding the challenges associated with water as a source of conflict.

Effective development of competency in this regard starts with the education of mid-grade military officers who need to understand the potential issues. Professional military education would benefit from the incorporation of instructional content that addresses the scope of today's water insecurity issues so that, as future senior leaders and strategists responsible for the employment of military forces, they are intellectually equipped to address these challenges. These same individuals should be armed with a framework to understand and appreciate both the historical and hydro-political context of water and their impacts on the operating environment. Failure could lead to more problems than may be solved. Professional military education, which has adjusted instructional content over the last decade to include focus on culture and religion, will not affect similar change to address water insecurity issues absent emphasis from higher levels.

The US Army has recently adopted the concept of regionally aligned forces as a way to deal more effectively with challenges in the various combatant commands. In practice, these units are supposed to develop regional expertise and thus be more effective in response to regional challenges. In order to address the competency of regional expertise outlined in the concept, understanding of water insecurity issues should be addressed if the concept is to go beyond the ability to merely train adequately at the company level.[31] Just as it takes years to properly develop Foreign Area Officers proficient in regional languages, history, and culture, regionally aligned forces will need years to develop subject matter experts on water insecurity specific to their regions. This will take not only time but the development of programs related specifically to water insecurity that can produce advisors capable of synthesizing the historical, cultural, legal, and hydro-political aspects of water problems. No such expertise is readily available today, and this may represent perhaps the most important shortcoming with regard to the military's extant ability to respond.

## Conclusion

*"The West is where water has the same value as blood."*[32]

Failure to account for such critical underlying challenges in both a historical and policy context could lead to unanticipated issues if US Armed Forces are mobilized for a water insecurity related mission of any kind. The lack of emphasis on water insecurity in US national level documents may lead planners across the interagency sphere to believe that water has little or no overall impact in the conduct of operations or bilateral relations. However, in regions of the world that do not enjoy a wealth of it, and which experience significant and protracted ethnic or regional strife, water becomes a foremost concern. Indeed – it becomes a dangerous issue if there is anger over water deprivation, as in case of Gaza, or domestic and policy fears over upstream development on strategic waterways like the Indus, Tigris, and Nile Rivers.

Water insecurity issues can no longer be ignored in today's complex environment. The US military has been used increasingly in operations that are well outside the traditional realms of conventional combat. Concurrently, the global challenges regarding competition

for dwindling water resources demand that national level policies keep pace if our national level institutions are to effectively respond. In the future it is highly likely that instead of water issues being a subset of US military operations, they may actually be the proximate cause for the introduction of military force. In turn, the military that will serve the nation's interests best will be the one poised to doctrinally and intellectually take on these challenges.

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# Chapter 7

## Building Partner Capacity: Avoiding the Imperialism Problem
## by Dr. Phillip G. Pattee

### Does the United States Have an Imperialism Problem?

Whenever the United States and imperialism are mentioned together there are some who will nod their heads knowingly and others who are equally puzzled with the association, insisting that America briefly and reluctantly had an empire a century ago, but willingly gave it up. In the first group, Noam Chomsky insists that the United States was founded explicitly as an empire and its policies even today reflect that idea.[1] Chomsky has consistently criticized the United States and its foreign policy as imperialist, so much so that many in the second camp simply dismiss him. Nevertheless, if the United States government intends to improve its ability to shape world opinion and influence events, it should listen to its critics as well as its supporters. The United States does have an imperialism problem in that in many of the nations it would like to influence most, either the government or the populace, see it as imperialist. Despite many successes the United States has compiled using security cooperation and foreign assistance to build partner capacity, there are also too many examples of waste. Looking systematically at how aid flows to a recipient nation provides insight into how dependency is created that results in informal empire. Neither donor nor recipient gets what they strive for when dependency exists. This essay will examine systemic issues that affect the United States' ability to engage in foreign aid and security cooperation that create a dilemma I call the imperialism problem and a possible way forward aimed at mitigating the problem.

### What Does Imperialism Mean?

Imperialism has both a formal and an informal component. A formal empire exists when one nation takes political control of another region, or people, usually through military conquest or colonization. This was the type of empire the great powers of Europe held with their overseas colonies up until the mid-twentieth century. The United States also had a formal empire with the acquisition of Spain's former colonies following the Spanish-American War. Imperialism today, however, is mostly understood as informal in that a strong nation exerts political, cultural, and economic influence over another government, region, or people without actual annexation or colonization. Informal empire exists alongside and within formal empire, and can remain even after a formal empire ends.

One might wonder at the difference between informal empire and effective foreign policy, especially given that the object of foreign policy is to advance one nation's interests by influencing other nations. With respect to that idea, let's acknowledge that informal empire could be a method of foreign policy, but a more nuanced differentiation is between effectively using soft power and crossing over into informal imperialism by relying too much on hard power. Joseph Nye explains soft power as the ability to obtain what you want without the hard power methods of coercion or paying for it in a quid pro quo. Soft power is based on the attractiveness of a nation's values and systems.[2] Foreign aid and

security cooperation use generous amounts of hard power, both economic and military, in that large amounts of money and military equipment are often provided. Nevertheless, it remains true that a significant aspect of their effectiveness comes from the soft power that is a component of the aid offered, or what Nye terms smart power.[3] The attractiveness of the United States' values and systems of government and commerce ought to be an important aspect of recipient nations' desire to become a partner, and a significant motivator in recipient governments' making and sustaining reforms of their own volition. In my view, when soft power is effectively incorporated into foreign aid and security cooperation, the stronger and weaker nations cooperate and partner to achieve common goals. Conversely, in informal empire the weaker nation experiences a situation wherein its goals are subordinated to those of the stronger nation, its desires are ignored, and its people sense that the government's ability to please a foreign power is more important than addressing their own concerns. In other words, the soft power component of the relationship is lacking either because it never developed or because it atrophied in the course of implementing the aid program. Like an object in motion in water, motion is possible but gets more difficult if the water cools and thickens to a slush. Finally, a phase transition occurs and the object is stuck in solid ice. It is impossible to move again until the water is liquid again. It is difficult to define the point at which a donor nation's policy has moved from soft power into informal imperialism, but one knows when resistance has hardened, cooperation ceases and recipient nations become cynical, even subverting intended policies. A phase transition has occurred when the weaker nation senses that it is no longer a partner but a subordinate. The various ways that aid flows to a recipient nation demonstrates the potential to create dependencies and how informal empire comes about.

## Foreign Aid Flow Paths Create Imperialism

While foreign aid comes from many sources it is often categorized by whether it comes from governments or private entities. The distinction is important here because aid provided by private foundations and charitable donations would avoid the problem of a recipient becoming dependent on a foreign government. The amount of money involved is somewhat difficult to pin down, with different sources providing widely varying sums. For example, the National Priorities Project reported that official US government foreign aid was $23 billion in fiscal year 2012, and if aid to foreign militaries were included, the total became $37 billion.[4] The website ForeignAssistance.gov shows figures worldwide for 2012 as $1.64 billion and for 2013 as $11.95 billion, which is considerably less than numbers reported by the National Priorities Project.[5]According to an April 2007 *Washington Times* article, private aid totaled about $95 billion, over three times the total of official US government aid, which was around $28 billion that same year.[6] Scholars William Easterly and Tobias Pfuze reported in their 2008 study that the total of official foreign aid combined from all wealthy nations to developing countries was $103.6 billion. Despite the fact that one cannot definitively state the amount of foreign aid, what one can say about the levels is that collectively total private aid exceeds official government aid and because of that fact it may seem that idea of imperialism is overblown.

Some factors must be considered, however, that support the idea that there is an imperialism problem. Among them are the concentration of aid from specific sources, and another is how much of the aid pledged actually reaches intended recipients. First, the largest Private Foundation in the world is The Bill and Melinda Gates Foundation with assets over $43 billion. The Gates Foundation has provided $32.9 billion in grants since its inception with payouts on the order of $3.6 billion and $3.9 billion in 2013 and 2014 respectively. The Gates Foundation specifically targets projects that provide preventive healthcare and education. The George Soros' Open Society Foundation, designed to help former communist countries transition to democracy – a goal that supports US interests – provided $404 million in total global development in 2009.[7] Compare these amounts to the US government's official aid figure of $23 billion and one can see that official government aid is about six times that of the Gates Foundation and over fifty times larger than the Open Society Foundation;therefore, the US government can at any given place and time show up with significantly more economic clout.

A second factor to consider is the idea of Phantom Aid, a term coined by the non-governmental group ActionAid International and used to describe the difference between aid pledged and aid that actually reached intended recipients. Rich nations pledged 0.7 percent of their GDP to aid for developing nations. If that money were actually programmed in 2003, then $195 billion would have been committed to aid yet $69 billion was the actual programmed aid. Of the programmed number, only $27 billion became real aid that reached those for which it was intended. The difference between the $195 billion pledged and the $27 billion in real aid, or $168 billion, is Phantom Aid.[8] Critics chalk the difference between pledged aid and programmed aid as something wealthy nations use for leverage and recipient nation accountability. The pledged aid is not fully provided because recipient nations did not meet certain conditions or milestones. Thus the wealthy nations can take credit for generosity because of the large pledge while simultaneously blaming the recipient nation for failure to adhere to a standard, making provision of the aid impracticable. As much as 61 percent of the programmed aid is eaten up through expenses and waste: technical assistance (20 percent), debt relief (14 percent), transaction costs (13 percent), focus issues that do not alleviate poverty such as building cheap roads or buildings (7 percent), aid tied to purchases of goods or services from the donor nation (4 percent), refugee spending (2 percent), administrative costs (1 percent).[9] While private foundations are themselves not entirely immune to the problems of Phantom Aid, official government aid is relatively more prone to the problem. The decrement between pledges and actual aid exacerbates the imperialism problem because large pledges sound like promises to recipients who grant concessions. Later, smaller payouts do not produce the actual development desired. The difference reduces a donor nation's credibility impacting soft power. This phenomena is explained more fully later.

Yet a third factor to consider is the role of institutions such as the World Bank Group, the International Monetary Fund, and the Inter-American Development Bank. Because these institutions provide loans at favorable rates to developing nations and grants to the poorest nations, and are owned by the member nations themselves, one could argue that this mitigates any imperialism problem. On the other hand, because western powers

created these institutions, dominate the boards of directors and can use that position to impose their values and conditions for loans, some recipient nations see the organizations as tools western powers use to conduct imperialism. It is tempting to chalk this idea up to developing nations' hyper-sensitivity to colonialism left over from days of formal imperialism, but this criticism has been around for decades and nations wishing to avoid the imperialism problem should be equally sensitive. For example, Jyrki Käkönen wrote of the World Bank as a bridgehead of imperialism in 1975,[10] Payal Parekh and Oren Weinrib discussed why the developing world hated the World Bank in 2002,[11] and recently China has established its own development bank, ostensibly to undermine the outsized economic influence exercised by western powers.[12]

Assistance flows to recipients through vastly differing mechanisms for an equally diverse set of goals. A discussion of all the differences in aid is beyond the scope of this essay. For my purpose here, foreign aid flows into a recipient nation through three main channels: individuals and households, governments, and the private sector. Aid given directly to households or individuals is generally consumed immediately. The bulk of this type of aid is humanitarian and consists of food, water, shelter, and medical care. Aid of this sort can come from both private and governmental sources and is relief vice developmental. While it often results in improved perceptions and goodwill toward donor nations it does not generally lead to improved partner capacity or economic growth in recipient nations.[13] A second channel is foreign aid provided to the recipient nation's government. The government then uses these funds to supplement its budget for a variety of purposes, including building infrastructure or to pay for specific services. If done well, this type of aid can increase the capacity of the nation to partner with others and lead to economic development. The third channel of aid goes to the recipient nation's private sector in the form of microfinance that helps the populace to establish and expand businesses. Capital accumulation leads to economic growth and development.[14]

Foreign aid provided to households as humanitarian assistance is not intended to create dependency or lead to the imperialism problem. In practice, however, it can if it is not temporary because excessive aid eliminates the need for locally procured goods. Care must be exercised in this regard because if assistance replaces commodities available locally then businesses face bankruptcy. Few people will pay a merchant for items available abundantly and free of charge from charity. Business profits can be undercut, harming local economies.[15] If done poorly this type of aid can create additional dependence and breed a level of resentment. When done well, the temporary aid gives a necessary boost to local communities in dire need of assistance.

Foreign aid channelled to the government supplements the recipient's budget, thus easing fiscal constraints and allowing the administrators latitude to spend locally generated revenues for other purposes. Where governance is effective and local economies have a solid foundation, spending on economic infrastructure generally produces additional economic growth through improved access to international markets and accumulation of private capital. That growth allows more local taxation and improved government revenue which ultimately alleviates the need for future foreign aid.[16] This is the goal of foreign aid and is the path needed to avoid the imperialism problem. For example, USAID has accomplished

much since its inception including development of over fifty nations that no longer receive US foreign aid and are net consumers of US agricultural products. Additionally, the agency has provided governance assistance that helped 36 nations to successfully transition to democracy.[17]

Depending on both the donor government's and the recipient government's response to foreign assistance, however, the aid could largely be wasted in the form of Phantom Aid, possibly creating conditions for dependency and a path to the imperialism problem. If the government uses aid to increase consumption or for investment in areas that do not produce economic growth, then the long-term improvement in capacity, on average, will not materialize. Corruption alone consumes billions of dollars of aid. A few other examples of where this could be a problem is spending on more elaborate and expensive military hardware, or on infrastructure improvements that cannot be maintained locally. In both cases near-term gains in interoperability or access to markets materialize but decay quickly because local technical knowledge and industry is underdeveloped.[18] Weak governments also can reduce taxation to temporarily improve public support but this increases the dependency on foreign aid to operate. If foreign aid is a significant portion of the budget, say over half, then conditions are set for the recipient government to be more responsive to foreign powers than the needs of the local populace. Alternatively, if the aid provided was in the form of a loan, recipient governments often experienced a situation where excessive aid has overburdened their budget with loan repayment. Between 1970 and 2002, in the African nations Burkina Faso, Rwanda, Somalia, Mali, Chad, Mauritania, and Sierra Leone, foreign aid provided more than seventy percent of the government's revenue. A phase transition had occurred where the relationship became frozen in dependency. The public perception became one of the government being propped up and controlled by a foreign power, or imperialism.[19]

One method that donor nations have implemented to preclude recipient nations' misuse of aid is to tie the aid to improvements in governance and changes to policy. The idea is that as governance improves, corruption is eliminated, and monies are increasingly used to benefit development, which then improves partner capacity. Nevertheless, where corruption is prevalent, perverse incentives for false reporting occur and this inadvertently sustains poor governance. Despite the fact that the conditions for aid are well-intended, the recipient government finds itself having to continually respond to foreign power to sustain the aid instead of developing to the point where aid is no longer necessary.[20] These are examples of waste that fall into the category of Phantom Aid. Efforts to increase transparency and verification can be interpreted as prying into state secrets; efforts to disenfranchise political leaders are generally coercive. This leads to elites in the recipient nation's populace and government perceiving the donor nation as hegemonic and imperialist.[21] Thus, if too many strings are attached, recipient governments that are able may decline further participation and the relationship with the donor nation is hamstrung.[22]

## Attempts to Address Faults in the System of Foreign Aid

Because of these systemic pitfalls, the United States has sought ways to improve foreign assistance. Hearkening back to the days of the European Recovery Program, often

known as the Marshall Plan, the United States has implemented measures to make aid packages more the responsibility of recipient nations. For example, "the Millennium Challenge Corporation [MCC] encourages eligible countries to submit proposals based on the felt needs of the country, as determined by the country's leaders in conjunction with citizens, civil actors, and development partners."[23] The program criteria for a Millennium Challenge Account are produced by the eligible countries themselves and must include evidence that they were developed through consultation with the recipient nation's citizens, including women, non-governmental organizations, and the private sector. The proposal must include measures of economic growth and poverty reduction, and be implemented and managed by the recipient nation.[24] The level of control exercised by recipient nations over foreign aid programs funded through Millennium Challenge Accounts contrast starkly with other foreign aid programs. A Ghanaian minister pointed out that in other aid programs the donor proposes how funds are used; in Millennium Challenge recipients propose how the funds are used.[25] This difference illustrates exactly the imperialism problem. When the foreign aid donor controls funding and agendas, the recipient has a subordinate position, thus the imperialism problem. When the foreign aid donor controls funding but the recipient controls the agenda a partnership is formed.

In June of 2007, Lael Brainard of the Brookings Institute presented testimony to the Senate Committee on Foreign Relations concerning the effectiveness of US foreign assistance. At that time, he highlighted the importance of transparency and stakeholder ownership of the program as keys to effectiveness.[26] The indicators that the Millennium Challenge board of directors use to determine which nations are eligible for aid fall into three broad pillars: economic freedom, investing in people, and ruling justly (a combination of good governance and political freedoms). Measurements against these indicators are provided by a variety of third parties thus having the effect of making MCC qualification transparent and neutral. To qualify, a candidate nation must score above the fiftieth percentile in comparison to their income peer group on control of corruption, above the threshold level in democratic rights, which is met by doing well against either political rights or civil liberties indicators, and by having a satisfactory composite of upper fifty percentile on over half of all the indicators that Millennium Challenge uses.[27] Rebecca Stubbs argues that those criteria can be subject to domestic political partisanship in the United States which would tend to erode the non-partisan and impartial nature of decisions made by the board of directors. She states that economic freedom tends to reflect the ideas and preferences of conservative Republicans, while investing in people would be the policy preference of progressive Democrats.[28]

The criteria the Millennium Challenge Corporation uses to assess candidates is not static. In 2012 several new indicators were added including gender in the economy, access to credit, and child health care. Natural resource management was modified to natural resource protection and voice and accountability was changed to freedom of information.[29] Because candidate nations must qualify against the criteria, many will have to adopt practices that arguably reflect policy preferences of Democrats and the Obama administration, and those nations are left to question whether the criteria are objective standards or subtle forms of manipulation used to further the administration's foreign policy. While the indicators

reflect values that the administration believes are important, the practice of modifying and adding criteria that developing countries must meet also makes qualifying for an account less likely. Their inclusion generally makes countries that score well against them more favourable for accounts, but as Stubbs points out, the relative weight of the indicators is somewhat fluid, with potential recipients having satisfactory scores against two of the good governance criteria being the only mandatory criteria for qualifying. She argues that the Millennium Challenge Board of Directors potentially exercises too much discretion over eligibility and recommends that good governance become the highest priority in determining a country's eligibility. Driving her recommendation is the need to eliminate government corruption. This, she argues, should be given more weight than democratic institutions in determining which countries qualify. Good governance or ruling justly includes: civil liberties, political rights, voice and accountability, government effectiveness, rule of law, and control of corruption. Overemphasizing the democratic institutions of civil liberties, political rights, and voice and accountability are the most direct measure of democratic institutions. Because scoring above the threshold level in either political rights or civil liberties is mandatory for a nation to qualify, democracy is almost a *de facto* qualification. Attempting to impose democracy too rapidly can in some cases impact a nation's values and social systems. These are changed only slowly and the emphasis on them can keep an underdeveloped nation from qualifying for funds for decades. Using those as qualifying criteria, in 2004 Millennium Challenge excluded Vietnam, Bhutan, and Mauritania from eligibility despite the fact that they scored more favourably than other qualified nations on over half of the other indicators. [30] Thus, strict adherence to this criterion can be perceived as imperialist in that it implicitly aims at changing regimes in non-democratic governments. In contrast, government effectiveness, rule of law, and control of corruption should figure more highly in which governments qualify for Millennium Challenge Accounts.

## Avoiding Pitfalls and Maximizing Soft Power

The idea that governments in potential recipient nations will implement institutional reforms so that they can qualify for a Millennium Challenge account is known as the MCC effect. Their willingness to voluntarily implement reforms is a direct indication of the soft power aspect of foreign aid. The effect is real but not all of the criteria are equally powerful for affecting governments to reform. In a stakeholder survey conducted by the Millennium Challenge Corporation in 2012, respondents showed that candidate nations welcome the criteria in general but respond more favourably and more rapidly to fiscal policy, business registration and reduction of corruption. Candidate states are least influenced by the indicators political rights and civil liberties.[31] The democracy indicators – political rights, civil liberties, and voice and accountability – possibly lack a "compelling political motivation for leaders to undertake reforms that might result in their removal from office."[32] The survey result supports the idea of an imperialism problem and should temper expectations that such criteria will directly bring about democratic reforms.

Also symptomatic of a perception of imperialism and similar to misgivings about the World Bank Group and International Monetary Fund, candidate countries responding to the stakeholder survey indicated skepticism with the idea that the Board of Directors selects

countries based on merit against the eligibility criteria rather than some other foreign policy imperative. The Millennium Challenge Board of Directors currently provides written explanation of its decision to countries that it determines are compact or threshold eligible, but does not explain its decisions to countries it designates ineligible.[33] Trust and transparency could be improved if the board also committed to explaining to candidates why they were ineligible. A somewhat surprising finding was that nations classified as threshold eligible have shown more initiative in implementing necessary reforms because of the incentive for future funding as a compact nation.[34] With that voluntary behavior in mind, ineligible nations might follow suit if they were provided a clear path to eligibility. In this way the imperialism problem is avoided by nations voluntarily committing their own resources and talent to development first in order to gain eligibility with the result that the government responds to and meets the needs of its citizens. Once eligible, the recipient government remains in control of its agenda and priorities because once it is eligible it proposes, implements, and monitors the aid program.

The question remains of what to do in areas where government is so ineffective that it is incapable of meeting eligibility criteria or making sufficient reforms to become eligible. Several comprehensive studies that looked at the effectiveness of foreign aid and security cooperation have concluded that some aid is effective even in poorly governed nations. In these countries, the aid that goes directly to improving production, whether in agriculture, mining, or manufacturing, effectively contributes to capital accumulation in the public sector. The accumulated capital leads to domestic investment and additional economic growth. As confidence in the local economy improves and stabilizes, the government can increase its tax base and revenue stream. This gives willing governments the resources needed to implement reforms necessary to root out corruption, improve rule of law, and provide services. Once a local economic base and good governance are established, investments in infrastructure provide access to international markets, and attract foreign direct investment.[35] At some point, these nations should become Millennium Challenge Account eligible.

There are also important links between development and human capital in poorly governed nations. Education is an important factor that over time, albeit sometimes decades, leads to improved individual earning potential, safer and more efficient working conditions, better healthcare, and improved governance, which then enable the nation to sustain its development. The world's largest donors have tended to allocate about half of their aid to countries with good governance. The seven biggest donors provide over half of the foreign aid worldwide.[36] The reason being is that aid provided almost always has at least a subsidiary issue of influencing the recipient governments' policies in favor of the donor nations, thus contributing directly to the imperialism problem. The result is that much of that aid is resented, and circumvented—ultimately wasted. In locales with poor governance and significant corruption, aid should be channeled directly to those who will use it to improve production so that development and capital accumulation can progress in poorly governed nations. In countries with weak governance, less funding and attention should be given to the government early on. First priority should be to improvement of the production sector and to develop human capital. This creates the necessary conditions to sustain development. The relative investment needed to improve production and human capital is cheap

compared to building infrastructure and attempting to overhaul and monitor government institutions.[37]

A RAND assessment of the Warsaw Initiative Fund (WIF) Program, a program designed to provide funding to partner nations that would be unable to engage in Partnership for Peace (PfP) activities without it, showed similar trends. The Rand study consisted of interviews with sixty-five knowledgeable people not directly responsible for administering the program, a thorough review of literature, and data analysis that covered fourteen different PfP nations. While Rand could not guarantee an exhaustive review of data, the researchers were confident that their approach was data-informed. Moreover, because clear patterns emerged with respect to data and interviews, the researchers believed the study to have achieved a high level of objectivity.[38] Efforts to improve transparency within national defense ministries were favorably received within Europe. Those ministries that belonged to former Warsaw Pact nations generally showed progress. In these nations, governance is well established and effectively controls the entire country. Within the Middle East and Central Asia, efforts to reform ministries were less successful, particularly where government control of the nation is diluted in regions beset with tribal loyalties. Only gradual, at best, progress toward a NATO model is currently possible.[39] In the areas where central government control of the nation is weak, a more appropriate route to development is to strengthen the local economy, and invest in human capital. Development can then progress toward improved governance and building economic infrastructure. Once those building blocks are in place and the citizens and their national government are invested in each other then military partnership and integration can proceed with some prospect of success.

A limitation of the Warsaw Initiative Fund is a restriction that funds are used for partner nation defense forces only. In nations that have security forces also comprised of national police and border patrol, typically organized under an Interior Ministry, as is the case in Central Asia and the Caucasus, the restriction prevents adopting a whole-of-government approach. Improving border security and national police as well would increase overall security, boost international investors' confidence, and spur overall development. Efforts aimed at restructuring recipient governments are beyond the scope of WIF, and recipient countries have shown little interest in voluntarily reforming to get WIF assistance with internal security forces.

Another RAND study conducted to assess the impact of security cooperation found that the programs on average did correlate to reduction in a state's fragility, or improved stability. There were, however, caveats to this assessment. The correlation is strongest for a one year effect at the low end of resource expenditure with diminishing returns for longer periods of aid and higher spending. Among the program components most valued by recipient nations is the professional education undertaken at neutral locations such as the Marshall Center and aid to develop in country specific professional academies. The study also showed that there must be a functioning governmental base upon which to build. Countries with stronger state institutions and greater state reach into all of the nation's territory showed better results. The more democratic the state, the greater the improvement gained through security cooperation. This seems at odds with the earlier observation that pushing for democracy harms America's soft power, but security cooperation has historically

worked well in Europe, Latin America and the Asia Pacific because these areas have had capable, if not democratic, governments. Weak governments in the most unstable nations could do little with the security cooperation assistance provided; there was no statistical correlation between program expenditures and decreased fragility. This was the trend in the Middle East and in Africa. In other words, governments must be strengthened through development aid before security cooperation efforts are worthwhile.[40]

## Current and Historical Cases: Still Much Work to be Done

In early 2012, the Washington Post quoted a senior military official who indicated that sustaining the Afghan National Army and police forces was essential if the United States was to succeed in Afghanistan. Maintaining the army and police forces would collectively cost about $4 billion a year. Of that total, the Afghan government can afford to pay about 12 percent, or around $480 million. The remaining 88 percent of the cost must be made up by outside donors, the bulk of which will be from the United States.[41] A World Bank alert in November 2011 pertaining to Afghanistan's economy painted a bleaker picture, warning that greater than 90 percent of the Afghan government's revenues came from foreign donations.[42] At the May 2012 Chicago summit, NATO states pledged support for Afghanistan through 2024 at which point the Afghan government is to take over the full financial burden of maintaining a force some 228,000 strong. This necessitates the Afghan government growing its present contribution some 26 percent per year to raise the amount from just under $500 million presently to about $4 billion by 2024. The Afghan government's performance in mobilizing its revenue stream in recent years, generally stagnant since 2011, suggests that it will have trouble meeting its present funding commitment. If this is so, the Afghan government will face a choice of cutting spending on other programs that are intended to improve the nation's development and stability or reducing the size of the security force.[43]

Support for the Afghan National Army (ANA) and police comes from four funding streams: the UNDP Law and Order Trust Fund (LOTFA) for national police, the ANA Trust Fund, the Afghan government budget, and the bilateral United States Afghan Security Forces Fund (ASFF). Since 2007, more than $900 million has been pledged to the ANA trust fund and the pledges for 2015 amount to $400 million. The ANA Trust Fund is administered by a board of trustees who are to "monitor and review the management of the funds with a view to ensuring its cost effectiveness."[44] Transparency, accountability, and independent audits of financial flows are pillars of managing the fund.[45] LOFTA is funded for 2013. The last numbers available show funds at about $350 million, with Germany, Japan, South Korea, and the U.S financing the bulk of pledges. In previous years the funding levels ranged from about $500 to $600 million.[46] With the Afghan government contributing about $500 million from national revenues, these three sources total approximately $1.350 billion of the $4 billion requirement. That means $2.65 billion should be funded through the United States Afghan Security Forces Fund (ASFF). Nevertheless, the Office of the Secretary of Defense requested ASFF funding at $4.9 billion in fiscal year 2013, $4.7 billion in 2014 and $4.1 billion for 2015. The request is based on funding the Afghan security forces at $5.4 billion, which is $1.3 billion over what had been estimated in 2012. This total

includes $0.8 billion from the international community and $0.5 billion from the Afghan government. The reality is that the United States is prepared to pay fives time what the remainder of the international community has committed and eight times what the Afghan government has at stake. As incentive for Afghanistan, only 50 percent of the FY 2014 amount may be distributed until the bilateral agreement is signed.[47]

General John Campbell, head of the NATO coalition's non-combat mission in Afghanistan, recently classified statistics about Afghan security forces stipulating that this information could be used by Taliban to threaten Afghan and US forces. Over 4,600 Afghan forces were killed in 2014. With soaring casualty rates and desertions, nearly 20 percent of Afghan National Army positions remain unfilled. Recruiting and retention are not making up for shortfalls.[48] This troubling data indicate that despite the billions invested the ANA is not likely to be self-sustaining any time soon.

Despite the fact that the United States has had a heavy hand in Afghan governance for over 10 years, the level of corruption as indicated by Afghanistan's score on the MCC country scorecard is essentially unchanged from 2006 to 2015. It was at the 9th percentile in 2006 and the 4th percentile in 2015.[49] Eliminating corruption is a key first step toward attracting direct foreign investment. Similarly, Afghanistan's score on investing in people shows little progress. Primary education expenditures have never exceeded the 27th percentile and the most recent data available are from 2007.[50] These alarming statistics show that Afghanistan has not made progress toward becoming an attractive nation for foreign investors to risk their money. Without investment in markets and investment in human capital, Afghans will remain in poverty indefinitely irrespective of democratically imposed government.

In contrast, US aid to South Korea provided after the 1953 Panmunjom armistice that terminated the Korean War lasted about twenty years. During that time the United States provided over $3.6 billion. That amount was supplemented by other nations and a variety of non-governmental organizations, bringing the aid package to nearly $4 billion. The South Korean security forces consisted of an approximately 540,000-man army, a strong air force (equipped with the F-84, F-86, F-5, and were then about to receive the new F-4C), a small navy capable of holding off North Korean naval forces, and a reserve militia consisting of another 2 million men. The South Korean forces were largely conscripts which kept costs much lower.[51]

The international community accepted that South Korea was secure enough to begin investing in the late 1960s. Ford began assembling cars and trucks there in 1968. Caterpillar and International Harvester extended long term credit and many more companies followed suit. A major reason for a fifteen year lag between initial foreign aid and significant inflow of private investment was that companies had to wait for the education system to produce technically competent people to work in government and corporations.[52] During this period, South Korea was ruled nearly entirely under authoritarian regimes of Syngman Rhee and Park Chung-hee with only a brief and failed attempt at democracy between the two leaders. One can also look at the record of Lee Kuan Yew in Singapore and Augusto Pinochet in Chile as other cases.

Taking sum of all of the above, if the United States deliberately attempts to use foreign aid and security assistance as tools of foreign policy to shape another government's structures and policies, it must keep in mind that this is relying on a combination of hard and soft power. The aspects of the United States that appear to be most attractive to developing nations are somewhat surprisingly not the democratic institutions, political rights and civil liberties, but are instead the free market system's ability to generate capital, create jobs, provide pragmatic education and lift people out of poverty. When the United States uses strings-attached methods or forms of manipulation to push governmental reforms, it is relying on the hard power aspects of foreign aid to bring about change rather than what is inherently attractive about the United States. In doing so (by being imperious) the United States undercuts the soft power aspect of its aid. This is important because for a developing nation to become a capable partner it must become self-sufficient in generating government revenue and voluntarily reform its institutions to promote effective governance – otherwise that nation will remain reliant on aid. The voluntary nature of the change is affected by soft power. Over reliance on hard power in an attempt to institute democratic institutions is expensive and because it is ineffective. On the other hand, emphasizing improvements in production and investing in human capital is attractive to recipient nations, so it maximizes soft power. Moreover it is effective and inexpensive. This strongly suggests that by creating markets and providing access to education as a higher priority than creating democratic institutions the United States could be more effective while spending less money. This does not suggest that political rights and civil liberties are unimportant, but emphasizing those over development of markets and human capital does little to relieve poverty and facilitates the imperialism problem.

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# Chapter 8

## Developing a New Relationship with Europe: Lessons from NATO's Origins by Mr. James R. Cricks

Vagueness seems to be no crime or fault – the answer is "In Europe Eisenhower can solve all the problems." Sweet – but valuable only as an opiate! Goddamit – is there no desire to *know* where we are going.[1]

– General Dwight Eisenhower (diary entry)

General Dwight Eisenhower was in anguish in 1950 when he was presented with the complex task of forming a peacetime military coalition to face the threatening Soviet Union. Political leaders of Western Europe and President Truman were united on only one issue, that he should lead a new collective defense of Europe under the North Atlantic Treaty Organization (NATO). Without clear guidance, Eisenhower knew he had to think his own way through this wicked operational problem. The remarkable aspect of his solution is that it seems obvious today because many parts of it, including partial European integration, have come into being. Could a 16-month military assignment that rarely gets more than a passing mention by historians really have been that significant? If we are to think our way out of the current deficit in strategy, we also need to consider a new approach. Even Eisenhower, if his writings are a reliable guide, would press for a new security relationship with Europe.

Europe was in disarray as colonial powers were in their death throes and smaller nations were focused on internal turmoil. France had always been a leader but now Eisenhower in a letter to George Marshall assessed France "as an area of weakness, rather than of strength, in any defensive structure until this psychological swamp has been drained."[2] Their political leadership was floundering and trying to hold on to Indochina was taking much of their attention. France may have been considered a world power at the UN Security Council but at home they were still unnerved by their quick loss to the Germans in WWII.[3] Even when Prime Minister Pleven announced a plan to create a European army, it produced little enthusiasm without a commitment from the US The smaller nations were worried about their own defenses without modern munitions and equipment. Twice in the twentieth century, a rising power from the east had rolled through their countries. There was little reason to be optimistic about new guarantees that someone would come to their aid if the Soviet Union decided to gamble on conquest.

The US was uncertain about any commitment to entangling ties to Europe. President Truman had won office in an unlikely triumph over Republicans but his budget initiatives were still highly suspect in Congress. Senator Robert Taft and other Congressional leaders were concerned about the inflation created as Americans began spending the money that had been previously pent up by the controls of World War II. Taft was also a prominent candidate for the next election and an obstinate opponent of NATO, as Eisenhower would later find out.

Although Eisenhower was no longer on active military duty, he never really disengaged from working on central strategic issues. Eisenhower had been leading a foreign policy group from the Council on Foreign Relations (CFR) in New York City even before President Truman had considered selecting him for this new effort. As his CFR leadership was ending, he drafted a letter to President Truman outlining some of his thoughts before returning to Europe. Eisenhower thought there was a "definite risk of global war" but atomic weapons and Russian unpreparedness for large scale action had bought the US some time.[4] New painful sacrifices were now needed in the US, even higher taxes, longer work hours, military service, and temporary restrictions on individual freedom. He was hesitant for the US to accept the military command of NATO forces. In the event of greater European cooperation, Eisenhower suggested reintroducing 20 US divisions into Europe with accompanying air and naval forces. Chairing this study group gave him an opportunity to consider the complex interplay between economics and military strategy, preparing him for upcoming NATO policy discussions.

These CFR sessions allowed Eisenhower to begin to formulate a strategic approach to collective security based upon a trinity of important factors. As he outlined them, these factors were: first, the spiritual strength of the people; second, the economic strength of the nation; and third a reasonable amount of organized military strength. His conception of these factors reveals how he had continued to mature as a strategic leader after World War II.

His understanding of spiritual strength was a nuanced blend of patriotism, self-confidence, intellectual capacities, integrity, forthrightness, courage, and stamina. His preference for all things American was clear in his writings and his golf pilgrimages to Augusta, Georgia with like-minded friends. His spiritual fight was not as simplistic as the Christian religion colliding with Communist atheism. Still, Eisenhower saw Western civilization and its values as superior to the Russian-style Communist system. Adding a bit of ethnic superiority to his equation, he told a British collogue in 1951 that "It is just not sensible to think 190 million backward Eurasians can conquer the entire western civilization with its great history and its great economic, political, and material resources, if we are merely ready to forget all lesser considerations and get together on an intensive and cooperative program."[5] For him, the Soviet Union was an unholy union between Russian imperialism and personal greed for power with the ideological doctrine of Communism. Eisenhower often talked about his greatest challenge in Europe being morale. He knew he would have to sell and inspire a unified multinational force into being. He disagreed with General Marshall about universal service, advocating sacrifices by both Europeans and young Americans.[6] He maximized the cachet of his reputation while tirelessly inspecting NATO units from Norway to the Mediterranean. He continually displayed his stamina to the press even when his true health was considerably more precarious. In a letter to George Sloan, Director of US Steel, he observed "I go back again and again to the simple basic belief that, unless we clearly understand and respect moral force in this world of ours, we will fail to establish true objectives for our great national efforts…The greatest weapon that freedom has against the Communist dictatorship is its ultimate appeal to the soul and spirit of man."[7]

On the second point, Eisenhower thought the economic factor should be given prominence because "our country is required to serve as the principal arsenal of the free world."[8] A weak US economic situation could also affect the morale and the spiritual strength of the West. He thought our strength included materials, productive capacity, scientific genius, the vigor of the people, and geographic location. He often had concerns about strategic materials, such as oil from Iran or manganese imports from Russia. As NATO commander, he commented that these concerns kept him awake at night.[9] Eisenhower also had strong reservations about the big federal expenditures needed to fund a defensive build-up under the new US' NSC 68 strategy. He thought the Soviets could win the global struggle without firing a shot if the US continued towards insolvency with its huge deficit spending. Understanding his own educational shortcomings, Eisenhower relied on Wall Street friends for their advice because of his own lack of training in economics. He understood his job was to provide the best military advice to a leadership that would make economic decisions. He frequently corresponded with Averill Harriman, a former businessman, who was also Truman's Special Assistant and a member of the NATO's Temporary Committee.[10] After numerous discussions with European civilian leaders, he finally understood as his tour was ending that "the real answer is political and economic federation among West Germany, France, Italy, Holland, and Benelux, at least."[11] His position on this critical issue must have increased its credibility at a time when European leaders were searching for solutions on how to build a post-colonial future.

On the final point of his evaluation, Eisenhower's calculations about military strength assumed a unified effort. Germany and Japan would be the "traditional counterweights" to Russia with the US having the means to support a multinational defense.[12] The most important factor was confidence and a will to fight. The Russian use of force, deceit, propaganda, and subversion could erode the fighting potential of Western Europe, so the US should consider spending scarce funding on the information side of the struggle. The US had significant air and naval forces to hold the northern and southern flanks if the main fight occurred in Europe's central region. The US would reinforce the center with significant forces but the French would lead the ground effort. The US presence on the ground would be indication that they would be committed to any conflict from the start. He saw the advantage of having atomic weapons, but Eisenhower thought they may have been oversold as a solution to the force ratio problem. In a letter to Admiral Stevens, an American expert on the Soviet Union, he cautioned that air-men may believe in the decisive value of nuclear warfare but he did not share their assessment.[13] Eisenhower was skeptical of any silver bullets and preferred an intensive program of cooperation to build an integrated defensive force. Much to the concern of French leaders, he realistically pressed for the Germans to have a major role and conferred with Chancellor Adenauer to finesse this issue with the German public. Although he was the military leader, much of his time was spent with the larger political and economic issues. He was highly critical of the Washington "staff mind" that was focused on smaller problems of command systems to the detriment of thinking about the bigger problems of national attitudes, industrial capacities, military programs, and present strength.[14] While the transfer to Europe of American military units

was essential, our major and special contribution should be in the field of munitions and equipment not forces.

If Eisenhower was reviewing today's situation, it is likely he would note the imbalance between our factors of strength. The Western world is entering a new period of a strategic inflection that could allow us to make important rebalancing similar to the changes made in the early 1950s in response to global Soviet aggression. A realist's review would question some of our primary institutions and current modes of operation. The scope of the review should be well above periodic NATO strategy reviews and instead focus, as Eisenhower did, on the larger issues. Richard Haass, Joseph Nye, Zbigniew Brzezinski and others have already made important contributions to this discussion about the need for a change in strategy.[15] To continue this conversation, I have assembled these recommendations that if adopted could bring about a long overdue change in our relationship with Europe.

In Eisenhower's time, restoring European morale was his prime objective. The decision to select General Eisenhower as the first Supreme Allied Commander Europe was designed to reassure Allies who were uncertain about their unified leadership. He felt the French military could take a leading role in the NATO defense over time if they had confidence in their own abilities.[16] In the past 50 years, European generals have excelled at many multinational leadership positions in NATO, EU and UN operations. For example, the British-led Allied Rapid Reaction Corps (ARRC) has been the first NATO command in Bosnia, Kosovo, and Afghanistan. The ARRC regularly practices commanding land, air, and maritime forces during Arcade Fusion exercises. Other non-US Corps regularly take similar lead-nation leadership roles. NATO has its own strong multinational educational institutions at the NATO School in Oberammergau and the NATO Defence College in Rome to support their commanders. It is time to change the relationship with the US having the supporting role in European defense and Europeans having the supported role. US Commander-in-Chief General John Pershing did this supporting role admirably in WWI when General Foch was named in 1918 to provide strategic direction to the British, French, and American armies. Once again, Europeans would provide the bulk of the force and the direction. This time, a Polish national or another European Ally may command the force but the staff will be integrated as SHAPE has been since its initiation. European defense can only fully mature if there are more opportunities for leadership by qualified officers from non-US nations that contribute inordinately. One does not have to look much further than the World Cup or Eurocup soccer championship to see European teams performing at the highest level during intense competition. It is more than just a question of who directs soldiers in Europe, it is a fundamental revaluation of the responsibility for regional self-defense. Both Truman and Harriman saw the role of Supreme Commander as a "super ambassador."[17] Eisenhower saw the role as a spokesman "selling and inspiring."[18] This initiative for greater participation has its roots in the civic republicanism of Europeans like Plato, Aristotle, Plutarch, and Cicero. As General Eisenhower reported to Congress in 1951, "Nobody can defend another nation. The true defense must be found in its soul, and you cannot import a soul."[19] Evidence of the spirit to resist must go beyond conversations about the low percentage of their economies dedicated to military expenditures.

It is also imperative that the tools that European commanders have to understand their environment continue to create information dominance. Improved information systems should be linked to this new version of European regional civic republicanism. Confidence in European leadership will improve if there is greater sharing of key information. The NATO Alliance has traditionally considered intelligence to be a national responsibility. Only by exception in operations, such as the Allied Military Intelligence Battalion in Bosnia, did the Allies form a multinational intelligence collection organization. Even though the NATO Airborne Early Warning & Control (NAEW&C) aircraft has monitored Alliance airspace, Europeans have still relied upon the US for the bulk of its other information. Subsequently a NATO Intelligence Fusion Centre was established in 2006 to provide intelligence to meet the SACEUR's operational and strategic requirements. Last year, a group of Allies began the process to operate Global Hawk remotely piloted aircraft providing new intelligence collection. These are good steps but there will remain two distinct tiers of regional awareness within NATO because of the US-European imbalance. It would seem reasonable that if Europeans can successfully lead the supercollider program and the European Space Agency's Rosetta comet project, they could have the capability to lead in this arena if it is their priority. Using modern systems, a European Commander can acquire a more comprehensive picture of the situation on the ground. This is not a niche capability, it is a fundamental requirement for greater European leadership.

Many American leaders have resisted the creation of a European military suspecting that it would undermine their global position. If our strategy for Africa is to support the African Union in solving African challenges, why should we not have a similar strategy for Europe? Early in Eisenhower's opening 1951 tour of NATO, he heard from Belgian Paul-Henri Spaak advocating the concept of an integrated European defense force. Later, he advocated supported the principle of the European Army after careful consideration.[20] This concept was not seriously reconsidered until British and French leaders came together at St. Malo in 1998 and declared; "The [European] Union must have the capacity for autonomous action, backed up by credible military forces, the means to decide to use them, and a readiness to do so, in order to respond to international crises."[21] Secretary Albright expressed US reservations with the 3-D construct: "Any initiative must avoid preempting Alliance decision-making by de-linking ESDI [European Security and Defense Identity], avoid duplicating existing efforts, and avoid discriminating against non-EU members [e.g., Turkey]."[22] In 2009, the European Union unanimously adopted Article 42 for the common defense of the Union. Even before that time, the EU was conducting military missions on three continents (Europe, Africa, and Asia). More recently, EU Commission President Jean-Claude Juncker called for a "Euro-Army" adding that forming this force would demonstrate to Russia and others that Europe could react credibly. His proposal was met with general support from Germany but opposition in the UK.[23] Eisenhower would probably not have thought European reliance on the US for military leadership after six decades to be healthy. The longer term goal should now be for the EU taking over NATO security responsibilities within Europe.

Eisenhower felt strongly that US forces were in Europe on a temporary basis until European forces could assume their own defense. He commented, "Over the years, I agree

that there is no defense for Western Europe that depends exclusively or even materially upon the existence, in Europe, of strong American units."[24] If the US assisted with forces, it would be naval or air units reinforcing for limited periods of time. He added, "If in ten years, all American troops stationed in Europe for national defense purposes have not been returned to the United States, then this whole project will have failed."[25] The reduction in ground forces is one area that the US has made great progress since the end of the Cold War. From a robust presence with two army corps, US forces have reduced since 1989 by 85% down to a cavalry regiment and an airborne brigade combat team. These forces have become an economy-of-force operation with an increasingly critical role played by partnership trainers at the Joint Multinational Training Command. The National Guard also contributes significantly with forces based in the US but habitually working with 21 European nations. These changes match the vision Eisenhower had of the US military in a supporting role. Even with the new focus on Article V operations in Eastern Europe, the US presence should be mobile and expeditionary. It should be integrated within other NATO forces so that it is ubiquitous to the extent possible.

Competition for the dominant narrative was critical to Eisenhower's approach. The Allies successfully defined their struggle with the Soviet Union and Communism as a fight for freedom and democracy. Earlier the Berlin airlift in 1948 was a strategic opportunity for the West to demonstrate their support for those who were willing to oppose extreme coercion. General Eisenhower, as SACEUR, continued as a spokesman for active defense of Western civilization as much as he was a commander of NATO forces. In reality, most of the forces remain under national control and are only commanded by Eisenhower and subsequent SACEURs in specific NATO operations. Eisenhower's articulation of the struggle was normally at a level beyond just military confrontation.[26] It should once again be central to our approach to a wider European defense. Americans and Europeans in Pew Research Center polls both overwhelming support greater economic cooperation, yet many are ignorant of how closely our prosperity is already linked.[27] Renewed Russian threats of economic or nuclear coercion toward Western nations could be a unifying force if it is intelligently confronted. The power of popular protest was manifest in the streets of many European cities following the recent Charlie Hedbo massacre in Paris. There is still a significant distinction made in Europe between the personal freedoms found in the US and the West and those in Russia. This gap is especially apparent when focused on freedom of the press since Vladimir Putin has taken leadership and Russian independent press has been strangled. In spite of that, RT, Russia's state-funded international television news network, receives more YouTube views than any other news channel in the world. Its budget has greatly increased since its founding in 2005. Margarita Simonyan, Editor-in-Chief of the RT network comments "People don't believe you anymore, but they believe us. They believe that our picture of the world is closer to reality."[28] The major voices defending Western thought should not be military voices but they should be supported in a deliberate manner. In some ways, it resembles a military campaign with information battles fought at decisive locations in the infosphere. Later, when Eisenhower became president, he continued to work on crafting a coherent argument for the US public and NATO allies concerning what was to be accomplished. The psychological aspect of the struggle was emphasized

in his message: "In any event, I believe that the United States needs a very, very much stronger information service. In our case, I would not call it propaganda because the truth is all we need."[29] The value of the attractiveness of soft power, as described by Joseph Nye, should not be underestimated or squandered on trivial issues. Information is an area where the US has greater potential if it is better developed. With Hollywood, Madison Avenue, and Silicon Valley in the US, our nation has great expertise in framing a narrative.

General Eisenhower recognized the long-term interdependence of economic and military strength. Military strategies must begin with a clear conception of economic realities, as he commented "I think the main purpose of my presentation is to point out that there is no true basis for the complete separation of so-called economic from military factors.[30] The economic power the US was able to generate in WWII was as significant as Eisenhower's leadership. It continued to be a significant American advantage that made the competition between the Soviet Union and the West untenable. For example, the technology created by the US space program has benefited the military but the industries it spawned continue to make US dominant in many high-technology sectors. Russia, as the successor to the Soviet Union, has an even weaker hand now. The Russian economy is dependent upon the export of raw materials, especially energy. With a declining population, they are losing the productive workers needed to be transformed into a multidimensional powerhouse.[31] China may temporarily cooperate with Russia because they require resources, but Russia must be alarmed at the economic growth of their neighbor. Siberia is underpopulated, undeveloped, and ripe for Chinese expansion. South of the Amur River, China has a large expanding population and it will not forget the humiliating 1860 Convention of Peking that gave Russia control of Vladivostok and stretches of their Pacific coast.[32] The Russian ruble is also under attack and has lost much of its value to Western currencies. Recent sanctions are a factor but capital has also been fleeing because of more fundamental dynamics. According to the Organisation for Economic Co-operation and Development (OECD), Russia's economic situation is fraught with difficulties as rampant corruption and dominating state-owned-enterprises sap any strength. Other nations are hesitant to be too closely tied to a poor performer. Despite Russian anger, Ukraine chose closer association with the European Union starting much of the current conflict. The Russian-led Eurasian Economic Union is a weak competitor to the EU. It offers few attractions for anyone except for despotic leaders worried about internal political challenges that may be brought about by vibrant economies. As Joseph Schumpeter observed, vibrant capitalism relies upon creative destruction as old corporations are replaced by new stronger competitors. New investment is uncertain. Hydraulic fracturing was risky and controversial but it has created new opportunities for the US. Other huge opportunities for greater cooperation between the US and Europe can be opened by the Transatlantic Trade and Investment Partnership (TTIP). Europe could also take steps to end their energy dependence on Russia by developing new techniques for connecting US suppliers with their energy markets. Russia was considering a pipeline under the Black Sea to connect to Europe, instead the US and Europe could create a pipeline under the Atlantic or other new imaginative programs.[33] The ultimate solution does not have to be apparent if the will is there to seriously investigate cooperative alternatives. Focusing

on economic issues in the near-term will give both sides of the Atlantic capital that could be spent on future security requirements.

The response of the West to increased friction should be multifaceted with NATO as only one tool. NATO is predominantly focused on military matters. The US and European nations are also actively involved in other security institutions serving different roles. The Organization for Security and Cooperation in Europe (OSCE), with Russia and 56 other participating states, is the world's largest regional security organization. Its weakness is that, like NATO, it requires consensus to act so Russia can block many initiatives. Its strength is that it began with the 1975 Helsinki accords agreeing to norms of human rights, rule of law, media freedom and democracy.[34] When OSCE debates an issue it can transparently involve all the nations in difficult discussions about current events. Based upon these discussions, OSCE has created 18 field missions performing a variety of different missions. These field operations, such as the OSCE Special Monitoring Mission to Ukraine, reporting using integrated multinational methods on the situations. Observation with current technologies, such as cell phones and the internet, can be a powerful force in mobilizing nations and their publics toward action. The 1998 OSCE Kosovo Verification Mission (KVM) led to a later NATO mission, even without UN authorization. Russia protested about the ultimate NATO action but it had agreed to the initial OSCE observation mission. Building better capabilities at OSCE can be risky but still worthwhile. In March, German and Russian foreign ministers urged OSCE to increase its number of observers in Ukraine's east so there is hope of future support. General Eisenhower recognized the advantage of a multilateral approach as he actively sought the involvement of even the smallest nations. After his introductory tour of NATO nations, Eisenhower highlighted the willingness of Luxembourg to cooperate if they were given artillery. He arranged for Canada to quickly transfer equipment to them.[35] American leadership is strongest when it enables allies to accomplish shared goals. OSCE can create this same synergy of nimble like-minded parties to creatively respond to new challenges. Smaller nations, minority groups, democracy observers, and media advocates can all play a major role supporting a dialogue.

Eisenhower's approach was in many ways superior to our current construct and key portions should be reconsidered. His 1951 report to Congress was beyond even a "whole of government" vision incorporating all the strengths of Western civilization. It was not a short-term analysis as much as it was an evaluation of the total will to defend focusing on patience. He was willing to compromise on points as long as the direction was forward together. He understood well that a war was raging in Korea and priorities must be adjusted through the rough and tumble of politics. His strategic view was flexible and not mired in operational programmatic details. He understood the limits on the US obligation to support other nations in their defense. It was a realist's approach. It still has value today.

## Acknowledgements

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# Chapter 9

# The Foundations of Sino-American Military-to-Military Relations: From the Boxer Relief Expedition to the Joint United States Military Advisory Group – China, 1900-1949

by Dr. Joseph "Geoff" Babb

America's military role in China and Asia grew as the United States expanded across the Pacific beginning in the middle of the 19th Century. Civilian adventurers, soldiers, sailors, marines, and airmen were participants in a unique set of events and activities as China transformed from the final decade of dynastic rule, through the Nationalist era, to the reality in 1949 of two Chinas – the People's Republic of China (PRC) on the mainland and the Republic of China (ROC) on the island of Taiwan. Military units and key individuals supported America's evolving national goals and interests in the complex domestic, regional, and global conflicts involving China, as both enemy and ally, over the course of the first five decades of the 20th Century.[1]

The nature, extent, and strategic underpinnings of American military involvement over that first fifty years provides a backdrop to help understand today's military-to-military relationships with both Chinas. Seventy years after the end of the World War II, the United States is still committed to selling defensive arms and maintaining military cooperation with the Chinese government in Taipei while also conducting military-to-military engagement activities with the Chinese government in Beijing. This article provides an overview of America's entrance into Asian and Chinese affairs and broadly chronicles the wide-ranging and varied actions and activities of the United States military in China from the International Relief Mission in June 1900 during the Boxer Rebellion to the evacuation of the Joint United States Military Advisory Group (JUSMAG) mission to Japan in early 1949. By the summer of the following year, the US Seventh Fleet was in the Taiwan Strait protecting the Nationalist government of Chiang Kai-shek (Jiang Jieshi) and by the fall, the military of the United States, as part of a United Nations force, was in combat with Chi-nese Communist forces on the Korean Peninsula.[2] The current situation in Korea, China's turbulent relationship with Japan, and the ever present potential for crisis in the Taiwan Strait all progressed from this critical period of American involvement in Asia.

## The Backdrop to American Military Involvement

First to arrive was the merchant, who tried out what he could do on foreign shores, and then, particularly if the merchant got in trouble, the naval diplomat, a captain or commodore with a warship who provided a little gunboat diplomacy to help out the merchant. The missionary followed along behind, seizing the opportunity to try to improve the local people's spiritual welfare.[3]

Although the first American ship, *Empress of China*, landed at Whampoa (Huangpu) near Canton (Guangzhou) in southern China in 1784 to trade (ginseng root for tea), the first official diplomatic action between the United States and China was a coercive com-mercial agreement signed in July 1844, known as the Treaty of Wangxia.[4] This

pact was executed approximately two years after the humiliating defeat of the Chinese by British Forces in the First Opium War (1839-1842) and the resultant Treaty of Nanjing. To ensure the United States also benefitted from greater access to the China trade, Caleb Cushing, the nation's first government emissary to China, negotiated a separate treaty. The United States was granted "most favored nation" status and parity in matters of import and export duties and tariffs along with Britain and the other European powers.[5]

America's own aggressive military behavior in Asia during this time was focused on the then closed, insular nation of Japan. In 1853-1854, the "Black Ships" of Commodore Matthew C. Perry's Asiatic Squadron were ordered by President Millard Fillmore to "open up" Japan. This successful incursion, along with the diplomatic actions that followed (specifically, the Treaty of Kanagawa in March 1854), was a catalyst to historic political, military, diplomatic and social developments. Japan's Meiji Restoration, beginning in 1868, led to unprecedented changes in that nation's military capabilities, foreign policy, and regional outlook. With the purchase of Alaska from Russia in 1867, America's military and diplomatic role in Northeast Asia became more significant and prominent.[6] This transformation in Japan, a country that would become China's mortal enemy in less than thirty years, occurred while both Chinese dynastic and revolutionary leaders were incapable of successfully defending its sovereign territory.

The ruling Qing or Manchu dynasty itself was a legacy of an external armed force that seized and retained power in China by military conquest. The Manchu Banners traced their lineage back to the nomadic warrior cultures of the northern steppes. However, once the Qing dynasty was established in Beijing, and sovereignty and influence was attained over an area larger than China today, this once-powerful military slowly and inexorably began to deteriorate as both internal and external threats challenged its authority. The growing weaknesses and inadequacy of these forces in the emerging security environment, against both foreign and domestic forces, influenced key regional officials to build more modern military formations. This included units that were trained, equipped, and advised by foreign armies, manufacturers, and individual military officers. However, this effort, in which American arms merchants and civilian mercenaries participated, was incomplete and flawed. Nevertheless, the foreign aid offered provided a glimpse of the potential for a more competent Chinese military in the future. In the Taiping Rebellion of 1855-1865, an adventurer from Massachusetts, Frederick Townsend Ward, died leading the mercenary Ever Victorious Army fighting under the flag of the Qing rulers in the successful defense of Shanghai.

> Though Ward was only thirty years old when he died, he had managed to forge for himself, in a chaotic time and by whatever methods were at hand, a personal and financial success of imposing stature. He had, as well, managed for the first time to train Chinese troops to fight in the more effective European manner; had provided a model for Li Hung-chang's [Li Hongzhang] own Huai army; had impressed Li with the possibility of strengthening herself [China] along Western lines….[7]

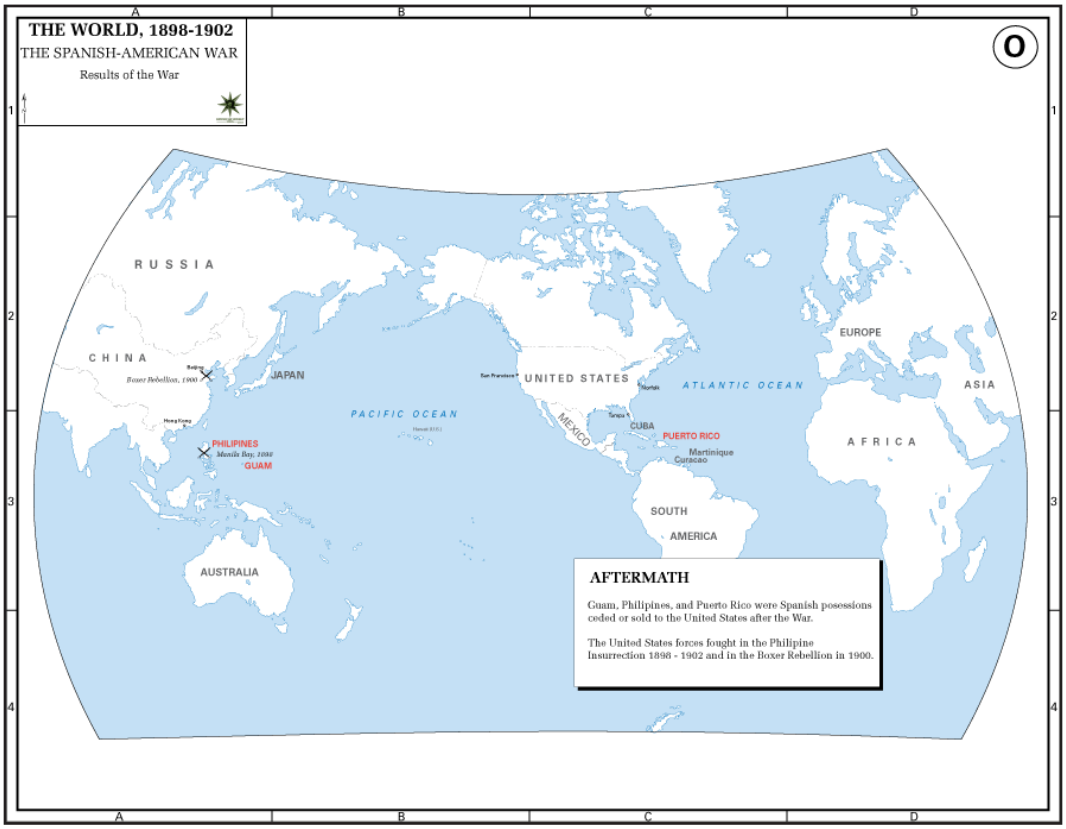


Figure 15. World map of the results of the Spanish-American War. Courtesy of Department of History, US Military Academy at West Point.

Two decades later in 1884-85, a war with France over the colonization of a Chinese tributary state (in what is now Vietnam) clearly displayed progress, but also the unevenness of Qing military modernization when opposing a competent European military force. At the time of the Sino-French War, China maintained about fifty steam-powered warships, some built locally and some purchased abroad. Foreign experts, including a newly arrived American graduate of the US Naval Academy named Philo McGiffin, provided training and technological expertise to the Chinese, and sometimes even served in leadership positions within the Chinese military.[8] Nevertheless, by the time this costly war with France ended, China had lost nearly one-third of its newly acquired navy. Its ground forces, how-ever, had acquitted themselves quite well in several battles in northern Vietnam.[9]

Less than a decade later, China was involved in an even more devastating and humiliating foreign conflict. The Sino-Japanese War of 1894-1895 was the direct outcome of a challenge by Japan to replace China's influence in Korea. By treaty, both China and Japan were committed to send forces, but Japan was in a better position to respond. In late July 1894, Japan's navy sank a Chinese troopship (leased from Britain) carrying reinforcements to the peninsula. On land, Japanese ground elements attacked and defeated a Chinese force garrisoned near Seoul. War was declared on August 1, 1894. As war spread to northern

Korea, Manchuria, the Shandong peninsula southeast of Beijing, and the island of Taiwan, Chinese forces suffered a fate similar to the Sino-French War – they were consistently defeated on the battlefield, only this time by the rising Asian power, Japan. The negotiations ending the war (i.e., the Treaty of Shimonoseki) forced the Chinese to leave Korea and ceded Taiwan to Japan, under whose control it would remain for the next fifty years.[10]

At the turn of the 20th Century, the rapid rise, modernization, and aggressiveness of Japan as a major military power were a concern for China and the other foreign powers in the region. The weakness of China and expanding foreign encroachments was troubling for the United States, which sought a sovereign China open to unencumbered foreign trade. In 1899, in order to check the ad hoc partitioning of China (also characterized as "carving up the melon"), the United States Secretary of State John Hay announced the "Open Door" policy.[11] At this same time, the United States military was involved in a war with Spain in both the Caribbean and, more importantly for America's future role in China, in the Pacific. After the quick defeat of Spanish naval forces in Manila Bay, American Army and Marine units defeated the land forces, occupied the Philippines, and became heavily involved in guerrilla warfare and stabilization missions.[12]

The United States was now a growing power in Asia and had both ground and naval forces permanently forward stationed. The US was now positioned to play a greater role – diplomatically and militarily – in the region, and especially in China.

## American Military Forces: On the Ground in China for the Next Half Century

The anti-foreign disturbances in China in 1900, usually referred to as the Boxer Rebellion, afforded the United States (which had participated with the other Powers in a joint expeditionary sent to rescue the beleaguered legations in Peking) an opportunity to make a statement of policy which went a step beyond the Open Door notes of the preceding year. In a circular note to the participating Powers, dated July 3, 1900, Hay declared that the "policy of the Government of the United States is to seek a solution" of the difficulties in China which would "preserve Chinese territorial and administrative entity" and "safeguard for the world the principle of equal and impartial trade with all parts of the Chinese Empire.[13]

The Boxer Rebellion or Uprising was the result of the interplay of complex domestic and international factors.[14] The Boxers, the "Righteous and Harmonious Fists" (Yihe Quan), formed in the late 1800s as an anti-foreign, anti-Manchu movement of religious fanatics who believed their magical powers could make them impervious to the effect of weapons. The uprising began in the 1890s with sporadic attacks on Western missionaries and especially Chinese Christian converts in the Shantung (Shandong) region. In early 1900, the Boxers (many of who were unemployed youth as a result of floods and the loss of agricultural opportunities in the area south of the capital) moved north to Beijing. In June, as Chinese imperial forces looked on, the Boxers began a siege of the foreign legation area (embassies) of the capital.

Forces from eight nations (Russia, Japan, France, Italy, Germany, Austro-Hungry, Great Britain, and the United States) were involved in the defense of their legations in either Beijing or the foreign concession area of Tianjin. In June 1900, multinational forces (from the aforementioned countries) undertook an expeditionary relief operation. After one failed attempt by a smaller multinational force of several thousand, that included US Marines and Sailors, a force of about 18,000 was assembled and moved on Beijing in August. This force included a USMC battalion and elements of the U. S. Army's 9th and 14th Infantry Regiments, the 6th Cavalry, and accompanying artillery and support units under the command of Major General Adna Chaffee.

Figure 16. During the fiercely opposed relief expedition to Peking in the Boxer Rebellion in 1900, when two companies of the US Army's 14th Infantry Regiment were pinned by heavy fire from the east wall of the Tartar City and the Fox Tower between abutments of the Chinese City Wall near Tung Pien Gate, volunteers were called for to attempt the first perilous ascent of the wall. Graphic courtesy of US Army.

While the exact size of the opposing Chinese forces is not known, it is estimated that from 60,000–90,000 Imperial troops and over 100,000 Boxers attempted to stop the multinational rescue force of about 20,000. This loosely organized foreign force, whose largest contingents were Japanese and Russian troops, inflicted another humiliating and disastrous defeat on the Qing government that was forced to sue for peace and once again signed another "unequal" and financially costly treaty.[15]

> The Boxer Uprising was a major psychological watershed in the history of Chinese military development. China's military modernization had begun much earlier, but the appearance of the Boxers represented a temporary retreat from this modernization. In particular, the Boxer's reliance on traditional Chinese martial arts, not to mention their use of swords and lances to oppose modern weapons,

> failed miserably.... The only road left open to China after the Boxers was to modernize and adopt western methods.[16]

In September 1901, the Boxer Protocols were signed officially ending the conflict. In addition to a large indemnity, the agreement established a permanent foreign military presence to guard the legations and maintain a corridor from the coastal Dagu (Taku) forts to the capital to protect the foreign population in the Beijing-Tianjin area. Of note, the American portion of the indemnity was used to bring more Chinese students to the United States.[17] Beginning in 1900, the US would continuously maintain ground forces in China for most of the next fifty years. The Marines, and at times US Army units, guarded the legation in Beijing and deployed additional elements to China in times of crisis. After the Boxer Rebellion, the Army's 9th, 14th and 15th Infantry Regiments conducted occupation and stabilization duties predominantly in the area of Tianjin. These units established American military governance of the area for a short period. Additional US Army units from the Philippines periodically reinforced and supported the forces in place. Concurrently, the US Navy, which had operated in and around China since the 1850s, expanded its Asiatic Squadron in the early 1900s to increase coastal and inland waters patrols in order to protect American citizens and insure the free flow of commerce.[18] This Yangtze (Yangzi) River Patrol or YANGPAT continued for almost 90 years.

In 1904–1905, two of America's Boxer Rebellion allies, Russia and Japan, commenced hostilities over control of key territory and railroad lines in Manchuria and northeast China. Japan's decisive victory at sea at the Battle of Tsushima Straits, and costly but successful offensive operations on land against Russian forces on Chinese territory on the Liaodong Peninsula and in Manchuria, presaged that nation's coming dominance in northeast Asia. Russia was militarily defeated by this newly emerging Asian power and was forced to make concessions to the Japanese in the Treaty of Portsmouth (New Hampshire) in 1905. This diplomatic effort earned President Theodore Roosevelt the Nobel Peace Prize. This essentially foreign war waged on its territory was further evidence of China's diplomatic and military weakness and a harbinger of the collapse of the dynastic form of government.[19] In 1911, the Qing dynasty's internal family intrigue and regime weakness reached crises proportions. The end of thousands of years of dynastic rule began as a local revolt in Wuhan (Wuchang and Hankou area on theYangzi) in central China, but soon spread across the entire country.[20]

In 1912, after more than seventy years of internal turmoil and foreign encroachments beginning with the First Opium War, the once powerful Qing dynasty finally collapsed and a new government was formed. The Republic of China emerged under the temporary leadership of Sun Yat-sen (Sun Zhongshan), a southern Chinese medical doctor and political activist who had attended school in Hawaii. Turmoil soon followed and General Yuan Shi-kai, a senior military officer in the Qing regime, replaced Sun as the leader of the Republic of China. In that year, the US 15th Infantry Regiment deployed to China and moved into barracks in and around Tianjin. This regiment began a permanent American Army presence that would continue until 1938 – a period when China struggled for unity, stability, and competent governance. While sometimes under the direct command of military superiors in Washington or in the Philippines, more often than not the unit's instructions came from

the ambassador, the State Department's most senior representative in China. The regiment also operated within an ever-changing coalition of allied forces conducting what would now be called a "presence" or multinational stabilization mission.

The primary tasks of this unit were to "show the flag" (i.e., maintain a national physical presence in the area) and keep the noncombatant evacuation corridor, from the embassy compounds in Beijing to the coast, open and safe. In concert with the other foreign powers, including Japan and Russia, American forces were also tasked to protect their citizens residing in China, whether embassy officials, businessmen, or missionaries. These forces in China were part of a Pacific military presence in the Philippines, Hawaii, and at sea emblematic of the United States' growing power and influence in global and Asian affairs. The command and staff alumni of the 15th Regiment, who would serve in China over the coming decades, included some of America's most distinguished military officers.[21]

Figure 17. Soldiers of the US Army's 15th Infantry Regiment Smiling and Marching on a Rural Road. Courtesy of University of Wisconsin Digital Collection Center.

First among these was George C. Marshall who played a crucial role in US-China policy formulation and implementation under two presidential administrations (Franklin D. Roosevelt and Harry S. Truman). The list also includes the two officers, Joseph W. Stilwell and Albert C. Wedemeyer, who later represented the United States military in China during the Second World War as commanders of the China-Burma-India and then China Theaters, respectively. Both would also serve as Chief of Staff to Generalissimo Chiang Kai-shek, heading America's military advisory effort and at times commanding Chinese forces.

In the mid-1920s, after the death of Sun Yat-sen, Chiang Kai-shek took on the task of building a competent and modern military force and organizing a government. He quickly mounted military campaigns to reunite the country by establishing control over the various regional warlords. Chiang then moved to neutralize the power and influence of the

Communist wing of the Nationalist Party. However, Chiang's "Shanghai Massacre" of 1927 and the "Five Extermination Campaigns" that followed in the 1930s did not completely eradicate the growing Communist movement. The survivors and future key Communist leadership were able to retreat into the hinterland of northwest China and rebuild popular support and military capabilities. In 1936, while in Xian planning the next anti-Communist campaign, Chiang was kidnapped by one of his own generals and forced to negotiate a cease-fire agreement with Mao Zedong's Communist forces. This Second United Front call for the Chinese to stop fighting each other and fight together against the Japanese.

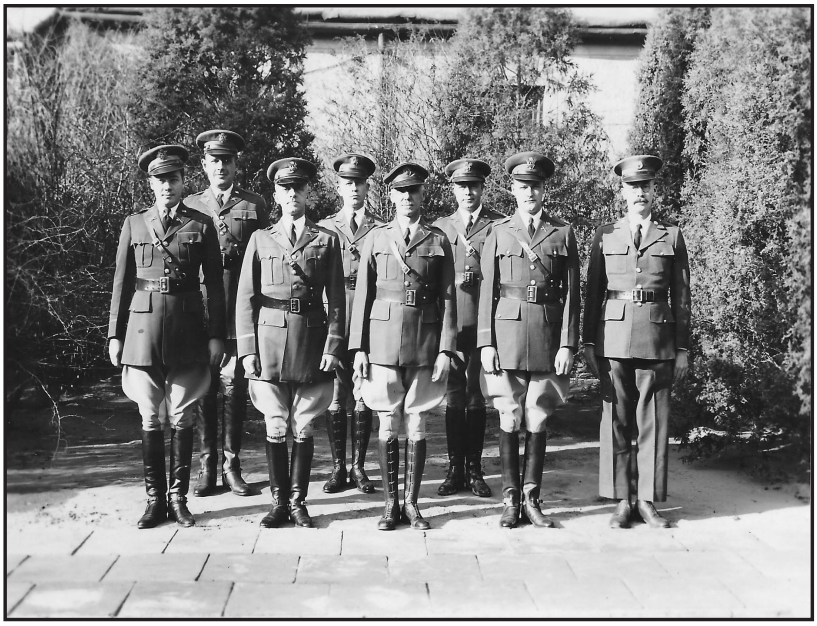

Figure 18. US Military Attaches and Staff in China in 1936. Front row: Jernigan, Constant, Stilwell, Dorn and Ogden. Back row: Tormey, Roberts, and Sutherland. Not in photo: Crist, who was in Nanjing. Photo courtesy of LTC Frank N. Roberts (RET), USA.

While internal factors dominated Chiang's political-military agenda, Japanese military efforts in the early 1930s in northeastern China and Manchuria could not be overlooked. Following the Mukden (Shenyang) Incident in 1931, the Japanese military became more aggressive in Manchuria. In 1933, the Japanese engineered the declaration of the puppet government of Manchukuo (Country of the Manchu) headed by the deposed Qing emperor of China, Puyi. The loss of Manchuria and continued threat of Japanese expansion further into Chinese territory served as a catalyst to bring the various factions vying for power in China together to oppose their common enemy. On July 7, 1937, an incident at the Marco Polo Bridge on the western edge of Beijing precipitated all-out war between China and Japan. However, despite decades of warning, China, Chiang, the Communists, and the remaining autonomous warlords were ill prepared for the coming conflict with the powerful, well-equipped, and well-trained Japanese.[22]

## An American Combat Effort Emerges

From 1912 until 1937, American forces had been observers, protectors, participants, and victims of China's internecine warfare and Japanese aggression that characterized the chaos and conflict in Republican-era China. However, in the second half of 1937, as the "Second Sino-Japanese War" expanded from northern China to Shanghai and then inland along the Yangzi, the US initially responded by increasing its combat forces in China. Yet despite the need to protect civilians and financial interests, these combat forces were ultimately withdrawn (with the exception of a small number of Marines). The danger to American forces and citizens was highlighted by the unprovoked attack on an American gunboat on at anchor near Nanjing.

On December 12, 1937, the USS *Panay* was attacked and badly damaged by Japanese aircraft with significant casualties among the crew. While the Japanese later apologized and paid reparations, this attack is indicative of the confusing situation in China and the deterioration of relations between Japan and the United States. An Army attaché, Major Frank N. Roberts, who would later serve as Stilwell's G-2 in China Burma India (CBI), was awarded the Distinguished Service Cross for his actions during this incident. The following year the 15th Infantry Regiment was withdrawn from China in March 1938, although USMC units would remain through 1941. While US isolationist sentiment to avoid war in Europe and Asia was strong at home, there was also growing support back in the United States to somehow aid China in its war against Japan.[23] While the United States military attachés in China watched and reported on the evolving conflict, other current and former American military officers began to play important roles.

Claire L. Chennault, who retired from the Army Air Corps in the spring of 1937, was hired by the Chinese government to improve the Chinese Air Force (CAF). He states in his own memoirs, *Way of a Fighter,* "Less than four months later I was flying through Japanese flak and fighters over Shanghai in the midst of the Sino-Japanese war."[24] Chennault would assist Chiang in building an air arm and was the force behind the creation of the American Volunteer Group, the Flying Tigers. The American involvement with the CAF had actually begun in 1932 with the sale of aircraft and the deployment of Colonel Jack Jouett, along with a small group of United States Army Air Corps (USAAC) reserve officers, who set up a training school in Hangzhou in eastern China.[25] This effort continued for two years, but a disagreement with Chiang over its use caused its premature end.

After a failed Italian advisory mission and aircraft sales, Chennault was hired and given a new mandate after the poor showing against the Japanese in 1937-1938. He was to train, and if possible, help equip the CAF for the long conflict ahead. His comment on working with the Chinese is instructive:

> Teaching is a difficult job at best. With mechanically minded Americans teaching classically educated Chinese to fly, there was ample opportunity for all the clashing elements of the two conflicting civilizations to rub raw against each other in nerve-wracking discord. In later years, many American newcomers to China marveled at my ability to deal smoothly with the Chinese and generally attributed

it to some occult touch. The ability was acquired the hard way through years of experience – often bitter, often painful, but always instructive.[26]

Another American, Evans Carlson, also spent several months in the late 1930s in China attached to the American embassy. Carlson had previously served in a military protective detail to President Franklin D. Roosevelt as a Marine Captain and later gained fame as the leader of the United States Marine Corps, 2nd Raider Battalion in the South Pacific. His mission in China was to observe the Sino-Japanese conflict and assess the Communist forces of Mao's 8th Route Army. American military and diplomatic personnel would later be deployed with the Communist forces from 1944-47 in what was known as the United States Army Observer Group better known as the "Dixie Mission" to Yenan, Mao's headquarters in northwest China.[27]

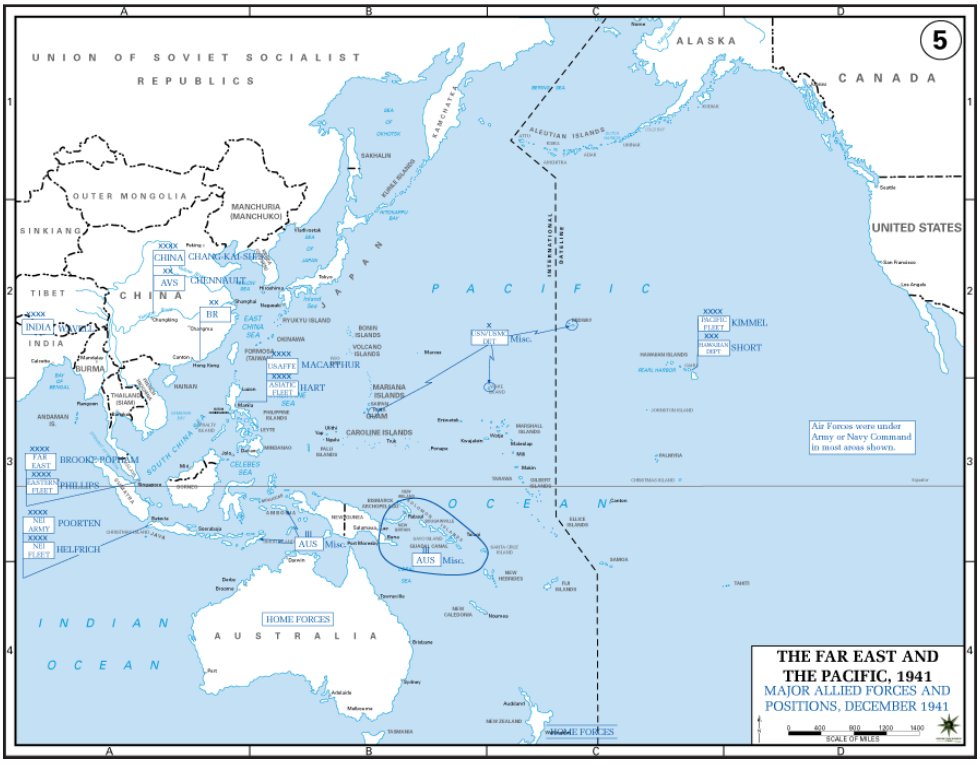

Figure 19. Map of major Allied forces and positions in the Far East and Pacific, December 1941. Courtesy of Department of History, US Military Academy at West Point.

During this period, Joseph W. Stilwell, in China serving as a military attaché in the embassy (a post he held from 1935-1939), was charged with reporting on the performance of the Nationalist forces and the conflict with Japan. His memoir – *The Stilwell Papers* – provides significant insights into the personal feelings of an American military officer with an in-depth knowledge of the operational and tactical situation. He reported on the performance of China's armed forces and capabilities and limitations of China's key military leaders. Barbara Tuchman's book, *Stilwell and the American Experience in China, 1911-*

*1945,* chronicles his military career and long service in Asia.[28] These and other American military personnel, diplomats, businessmen, reporters, and missionaries kept up a steady official and unofficial correspondence back to Washington and America on the situation in China.

By 1941, President Roosevelt and his administration had decided to assist China through a program called Lend-Lease. This arms sales program, approved by Congress in March 1941, immediately began providing access to military equipment and material to the European theater, especially Britain and the Soviet Union. However, China was also a part of this innovative program. In May 1941, the defense of China was "declared vital to the defense of the United States."[29]

> These decisions resulted in a project for completely reequipping 30 Chinese divisions under Lend-Lease by the end of 1942. Artillery, anti-aircraft guns, armored vehicles, and tanks were to be sent from the United States. In addition, machinery and supplies for China's arsenals would be sent to help increase her own output of small arms and ammunition.
>
> In anticipation of the arrival of these supplies, an American military mission under Brigadier General John Magruder arrived in Chungking in November 1941.The mission supported by Lend-Lease funds was composed of specialists in all the phases of modern warfare. They were to survey China's needs for additional arms and help train the Chinese troops in the use of American equipment.[30]

The American Military Mission to China (AMMISCA) had barely begun when American forces were attacked at Pearl Harbor and in the Philippines in December 1941.[31] Critically, in early 1942, Japanese forces attacked out of Thailand into Burma seizing the port of Rangoon and severing the critical line of communication for the delivery of American equipment to China.[32]

## Americans at War in China, Burma, and India[33]

*Be American but not too American, let the Chinese be Chinese but never too Chinese.*[34] –
Colonel Haydon Boatner, Liaison Officer to the Chinese forces at Ramgarh, India, 1942

General Joseph S. Stilwell arrived in China just in time to take part in the failed defense of Burma, and conducted his famous retreat back into India. He also took command of Magruder's AMMISCA. British and Chinese divisions in Burma in 1942, like those Allied forces in eastern and central China, the Philippines, Hawaii, Malaya, Singapore, and Indonesia, suffered early defeats at the hands of Japan's Imperial Army and Navy. The first Americans sent to the China-Burma-India Theater (CBI) were advisors and trainers for the Ramgarh Training Center in northeastern India where over the next year the three divisions and supporting arms of the Chinese Army in India (CAI) would be reorganized, trained, and equipped from units that had retreated from Burma and replacements from China. Expanded plans to train, equip, and advise a total of sixty Chinese divisions were part of an overarching strategy to use Chinese ground forces in a major role in the destruction of the Japanese military.[35] In addition to the Army effort, the Navy sent Commander Milton

E. (Mary) Miles to head the Sino-American Cooperation Organization (SACO) headquartered in Chongqing. Miles, in addition to conducting missions to support the Navy's effort in China, also served as the head of the Office of Strategic Services (the forerunner of the Central Intelligence Agency) in China, a position that was not under Stilwell's command. SACO and a small British advisory contingent were assigned to build Nationalist guerrilla units to fight and collect intelligence behind Japanese lines.[36] Nevertheless, the big effort was to help rebuild a Chinese Army that had been decimated in the early years of the war with Japan.

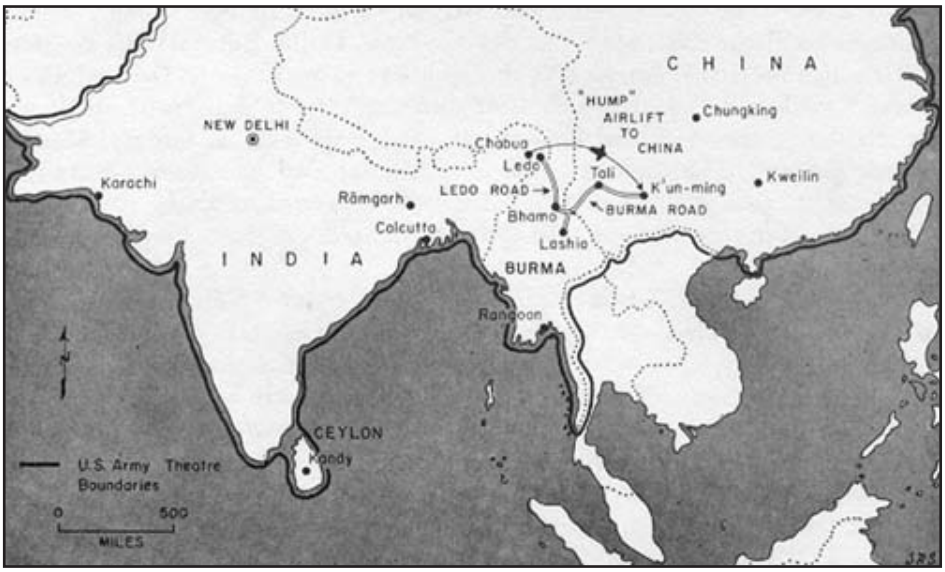


Figure 20. Area of operations, Asiatic mainland, 1942-45. Photo courtesy of US Army Medical Department Office of Medical History.

The key Chinese units for the first offensive to retake Burma would be organized at Ramgarh in Assam. Once enough American equipment, supplies, trainers, and advisors were made available to build sufficient Chinese armies (corps) and divisions in both India (CAI) and China (the Y- and Z-forces), the attack would commence. This whole effort began with the AMMISCA "advise and assist" mission outlined in an August 1941 War Department memorandum. The combat advising mission came when American declared war on Japan.

1. Advise and assist the Chinese Government in all phases of procurement, transport, and maintenance of materials, equipment, and munitions requisite to the prosecution of its military effort.
2. Advise and assist the Chinese Government in the training of Chinese personnel in the use and maintenance of materials, equipment, and munitions supplied as defense aid material by the United States.

3. When requested assist personnel of other Departments of the [United States] Government in carrying out their respective duties in furtherance of the objectives of the Lend-Lease Act pertaining to China.
4. Assist the Chinese Government in obtaining prompt and coordinated administration action by the United States authorities necessary to insure the orderly flow of materials and munitions from lend-lease agencies to the Chinese military forces.
5. Explore the vital port, road, and railroad facilities with a view to the establishment and maintenance of adequate lines of communications.[37]

Over the next two and half years, Stilwell, acting as Chiang's Chief of Staff and the senior United States military officer in China, oversaw a wide range of tasks. Arguably, the most critical was building a modern, competent, well-equipped and supplied Chinese military capable of defeating the Japanese. The Ramgarh Training Center (RTC) was a laboratory and training ground not only for the Chinese assigned there, but also for the American trainers, administrators, and advisors. The new military equipment, logistics support, technical expertise, and pay all provided leverage for a broad program to improve the combat performance of China's army and, perhaps more importantly, to provide a model for a more effective and efficient modern combat force for the long term stability of China and Asia.

In 1943, the British 14th Army, under General Sir William Slim and the CAI from Ramgarh, began the counteroffensive to retake Burma. Later the US 5307th Composite Brigade (Merrill's Marauders) and elements of the Y-Force under Brigadier General Frank Dorn's Chinese Combat Command in Yunnan would also deploy to Burma. This action eventually reduced the risk of flying supplies over the Himalaya Mountains (i.e., "the Hump") and opened up the final segment of the Stilwell (Ledo) Road from India through Burma to China, and reestablished the Rangoon, Burma to Kunming, China, ground, rail, and river line of communication.

As of December 1943, the Ramgarh Training Center had trained 5,368 officers and 48,124 enlisted men of the Chinese Army in India. During 1944 many contingents of Americans were processed through the RTC including men of the Z-force [the second group of 30 divisions to be equipped and trained by the United States), Field Replacement Depot and replacements for the 5307th Composite Regiment (Provisional) destined to become part of the Mars Task Force.[38]

General Stilwell and the United States Army proved it could conduct a large-scale advisory and assistance effort under very difficult wartime conditions with the forces of a country whose culture and military traditions could hardly have been more different. However, the relationship between Chiang Kai-shek and "Vinegar Joe" Stilwell had deteriorated significantly over a variety of issues, probably the most significant of which was his authority over Chinese forces in Burma. This problem surfaced initially in the spring of 1942 (during the retreat) and continued to complicate command and control in the training program and 1943-44 offensives. Chiang would not relinquish centralized control of his forces from the national military headquarters in Chongqing to Stilwell in Burma.[39]

In July 1944, President Roosevelt dispatched Major General Patrick J. Hurley, a National Guard officer from Oklahoma, successful lawyer, businessman, and politician with no experience in Asia, to assess the situation and serve as his personal representative to China.[40] One of his key tasks was to attempt to smooth out the Chiang-Stilwell relationship. Initially, Hurley was directed to persuade Chiang to place Stilwell in direct command of all Chinese forces in Burma and China. After initially agreeing to this new command arrangement, Chiang changed his mind and called for Stilwell's relief. With the reluctant agreement of Marshall, the President made the decision to replace Stilwell. An October 31, 1944 White House Memorandum offers the following reasoning for acquiescing to Chiang's request:

1. The Generalissimo is the head of the Chinese Republic.
2. That the Generalissimo is the head of the Chinese Government.
3. The Generalissimo is the Commander-in-Chief of the Chinese Army.

The memo ends with the following statement: "General Stilwell will return to take a very important job fully commensurate with his rank."[41]

In October 1944, the CBI was split into two separate headquarters. LTG General Albert C. Wedemeyer took command of United States Forces China Theater (USFCT) and LTG Daniel I. Sultan commanded US Army forces in Burma and India. Wedemeyer commanded a growing cadre of military trainers and advisors, and when released from operations in Burma, the one ground American combat unit in theater, the Mars Force made up of the 475th Infantry Regiment reconstituted from Merrill's Marauders and the 124th Calvary Regiment from the Texas National Guard. One of Wedemeyer's first initiatives was to consolidate the American trained, equipped, and advised Chinese divisions (CAI, Y-Force, and Z-Force) into the Alpha Force.

In April 1944, the Japanese had launched the ICHIGO offensive to secure a land line of communication from Korea to Southeast Asia. This operation threatened Chongqing, Kunming, and airfields in central China. When the threat to Kunming and Chiang's governmental center at Chongqing had ended, Wedemeyer, the former War Department strategic planner, presented a campaign concept to Chiang to take advantage of the Japanese decision to withdraw. By the spring of 1945, 39 of the planned 60 divisions to be built by the US were ready and available to begin offensive operations against the Japanese. This time Chiang accepted the American plans for changes to the training, the organization of combat forces and logistical units, and the increase in the number of American military advisors.[42]

From April through June of 1945, the Nationalist forces – with units recently redeployed from Burma and newly trained and reorganized elements of Alpha Force, both with American advisers – conducted a campaign against the Japanese at Chihchiang (Zhijiang).

The Chihchiang campaign demonstrated that Chinese troops could successfully face the Japanese if they had sufficient strength, coordinated their movements and actions, and received a steady supply of food and ammunition. By aggressive maneuvering, the Chinese had outflanked a determined foe and forced its retreat. Wedemeyer's ALPHA Force, whatever its shortcomings, had proved its worth.[43]

In June and July 1945, Chinese forces were massed for an attack to the coastal areas southwest of Hong Kong. However, before that objective could be reached, the atomic bombs were dropped on Hiroshima and Nagasaki, the Soviets attacked into Manchuria, and the Japanese capitulated. China's more than eight year war with Japan was over. The Japanese surrender ceremony in China was held in Nanjing on the 9th of September.[44] With the end of the war, the character and level of support to Chiang and the Nationalist military changed significantly. The missions and tasks assigned to the military personnel that remained in China became even more complex. The United States military planned and supported the movement of major elements of Chiang's forces to the eastern part of China to take the surrender of Japanese garrisons and assist in the reoccupation of its territory. There were over four million Japanese military and civilian personnel to be repatriated from China, Manchuria, Taiwan, Hainan, and northern Indochina.[45] As one of the victorious Allies, China was designated to take the Japanese surrender in Indochina north of the 18th Parallel with the British taking the surrender of Japanese forces in southern Vietnam.[46] The Chinese forces that conducted this mission were accompanied by an American advisory element supervised by Brigadier General Philip E. Gallagher.[47]

In September 1945, in addition to those remaining Army forces, Wedemeyer was given command of the 1st and 6th Divisions of the USMC III Amphibious Corps (IIIAC) to conduct post war missions in China Theater. Approximately 50,000 Marines were deployed to China to protect key Chinese ports, facilities and ground lines of communication in North China as well as participate in the repatriation effort. In September 1945, the 60,000 American Army and Navy personnel in China, like their compatriots in all the other theaters of World War II, were eager to enjoy the peace and begin the process of redeploying to the United States.[48] However, the Communist and Nationalist Chinese forces entered another phase of their struggle to recover from the ravages of war and occupation, stabilize the nation, and build a competent national military establishment and government.

Nearly a year before the end of the war with Japan, the Roosevelt administration began an effort to assist China in addressing the problems of uniting the country politically and preventing a return to civil war.[49] The American military advisors remaining in China after the Japanese surrender played an important supporting role in this struggle for military, political, and national unity. After Chiang's government re-located back to its capital in Nanjing, Army, Air Force, and Navy Advisory Groups were formed and manned. These elements were consolidated in 1947 into the Joint United States Military Assistance Group China (JUSMAG-CHINA) and would remain active until February 1949. Over these four years, the American military personnel in China were tasked to conduct a wide variety of missions in a very politically charged, and usually ambiguous, operational environment.

The post war period of American military support and assistance can be roughly divided into two overlapping phases. The following activities characterized the two periods: (1) repatriation, redeployment, and negotiation; and, (2) conditional support, Nationalist success, then overreach, defeat, and retreat. During the first phase, the United States and the military advisors on the ground were committed to deploying the Nationalist forces to reoccupy their sovereign territory and to support the Allied effort to repatriate the Japanese left in China. The United States facilitated negotiations for national political and military

reconciliation. This effort was led first by Ambassador Hurley, and after his abrupt resignation, by General Marshall. Marshall successfully brought both sides back to the peace table. An Executive Headquarters was formed that included American military personnel that acted as a ceasefire monitoring organization. Marshall's efforts would ultimately fail, and by January 1947 he returned to the United States. The Dixie Mission to Mao and the Communists ended in early 1947, as did an American planning effort to train and equip Communist forces. During this period Army, Air Force, and Navy personnel continued to train, equip and support the Nationalists, although the equip effort was suspended for a period of time during the Marshall negotiations to gain leverage over Chiang.

The second phase began with the breakdown of negotiations and the decision to conditionally support Chiang and the Nationalists in the escalating civil war. After several months of Nationalist victories in late 1946 and in the first half of 1947, the tide began to turn in favor of the Communists with a series of successes in northeastern China. As late as the summer of 1948, American senior advisors were advocating Nationalist acceptance of organizational and operational changes for the Nationalist military that looked remarkable like those not implemented under Magruder, Stilwell and Wedemeyer in the war with Japan.[50]

This assessment by General David C. Barr, the last senior military advisor to serve on mainland China is instructive:

> JUSMAGCHINA was forced to leave China long before its mission was accomplished. Whether the mission, to create a modern armed force in keeping with the needs and resources of China, could ever be accomplished is questionable. Even with considerable outlay of American personnel and large supplies of military aid over a long period of years, an armed force comparable in effectiveness to that of even mediocre United States troops probably cannot be produced within a decade.[51]

A September 1948 report in a classified weekly *Intelligence Review*, produced by the United States Army G-2, provided the obituary of the Alpha Force. By the fall of 1948, these 39 divisions had been reduced, reorganized, and reconfigured and were now on par with the rest of the worn out and defeated Nationalist Army. Rather than reduce the number of divisions in the Nationalist Army and concentrating on improving the quality of this more manageable force as had been recommended as early as 1941, the best units were used up and fought until exhausted or surrendered. Rather than using these forces as a model to maintain and build on, they were now in the same poor condition of the rest of the units that faced Mao's Red Army.[52] The American advisors had produced a force that could win. However, arguably, the Nationalist military could not be built or maintained without a major continuing advise and assist effort. General Barr closed out JUSMAG-China in February of 1949. By October 1950, the United States would be fighting Chinese Communist forces in Korea and the 7th Fleet would be on station in the Taiwan Strait. Five decades of American military intervention, occupation, advice, and assistance in China had failed to achieve America's goal of a strong, democratic China with a military capable of defending its sovereign territory and maintaining internal stability.

## Postscript

In May 1951, a Joint Military Assistance and Advisory Group reformed on the island of Taiwan. In 1954, the US signed a Mutual Defense Treaty with Chiang's relocated Republic of China. This treaty was in force until 1979 when the United States, after nearly a decade of negotiations, recognized the People's Republic of China as the one official government of China. Nevertheless, under the provisions of the Taiwan Relations Act of 1979, the United States military continues to support the defense of Taiwan through arms sales and limited direct military-to-military interaction including education and training at US facilities.[53] In the early 1980s, after more than thirty years of estrangement from the vast majority of the Chinese people, United States also began to undertake military-to-military engagement with the Communist People's Liberation Army.

In January 2015, General Vincent Brooks, Commanding General, United States Army Pacific, visited Beijing and said the following: "We know that there are still gaps in our relationship, and that we have work to do to strengthen the cooperation between our two countries, especially in the military-to-military arena."[54] The relationship between the United States and the Chinas remains a work in progress; however, a better understanding of the past is an important asset in building the future. The activities of the United States military in China and Northeast Asia in the fifty years between the deployment of forces to participate in the multinational intervention against the Boxers and combat against the Chinese People's Volunteers in Korea were foundational to today's efforts by United States Pacific Command and United States Army, Pacific.

## Notes

1. S.C.M. Paine, *Wars for Asia, 1911-1949* (New York, NY: Cambridge University Press, 2012). In chapter 1 Paine makes the argument that wars in China during the period examined were national, regional and global.

2. The Romanization of Chinese names and places used in this document is Pinyin, the system used in the People's Republic of China and broadly accepted in academia. The exceptions in this document are Chiang Kai-shek and Sun Yat-sen that are used in the more widely known spellings throughout rather than the Pinyin Jiang Jieshi.

3. John King Fairbank, *Chinese-American Interactions: A Historical Summary* (New Brunswick, NJ: Rutgers University Press, 1975), 11-13.

4. Kemp Tolley, *Yangtze River Patrol: The US Navy in China* (Annapolis, MD: US Naval Institute Press, 1971), 2-4.

5. US Department of State, *United States Relations With China: With Special Reference to the Period 1944-1949*, Department of State Publication 3573, serial Far East Series 30 (Washington, DC, August 1949). (Hereafter cited as *China White Paper*). This controversial document was released by the Truman Administration to explain to the American public its actions toward China at the end of World War Two and though the Nationalist defeat. The documents begin with a brief synopsis of Sino-American relations beginning in the mid Nineteenth Century.

6. Arthur P. Dudden, *The American Pacific: From the Old China Trade to the Present* (New York: Oxford University Press, 1992), 16.-21; Michael Edwards, *The West in Asia, 1850-1914* (New York: Capricorn Books, 1967), 143-52.

7. US Department of State, *United States Relations with China*, 73.

8. "Philo McGiffin Home Page," www.esva.net/~davidpoyer/mcgiffhp.htm. Last accessed on March 8th, 2015

9. Bruce A. Ellman, *Modern Chinese History*, 116-137; Richard O'Connor, *The Spirit Soldiers: a Historical Narrative of the Boxer Rebellion* (New York: Putnam, 1973) Pages

10. S.C.M. Paine, *The Sino-Japanese War of 1895-: Perception, Power and Primacy* (New York: Cambridge Press, 2005). The study of the 1st Sino-Japanese War provides an excellent source of information on this important, but little written about conflict. Elleman, *Modern Chinese Warfare*, 95-112.

11. *China White Paper*, 2-3.

12. Brian M. Linn, *The Philippine War, 1899-1902* (Lawrence, KS: Kansas University Press, 2000)

13. *China White Paper*, 2.

14. Paul A. Cohen, *History in Three Keys: The Boxers as Event, Experience, and Myth* (New York: Columbia University Press, 1997). This study of the Boxer Rebellion provides not only an excellent history of the key players and events of the conflict, but also the complex social, economic, political and economic issues as well. This study also uses Elleman for an evaluation of the military aspects of the rebellion.

15. Elleman, *Modern Chinese History*, 116-137; Richard O'Connor, *The Spirit Soldiers: a Historical Narrative of the Boxer Rebellion* (New York: Putnam, 1973), 237-61. O'Connor's account describes in detail the military aspects of the conflict.

16. Elleman, *Modern Chinese History*, 137.

17. Dudden, *American Pacific*, 120.

18. Dudden, *American Pacific*, 121.

19. Dudden, *American Pacific*, 122-123.

20. Edward A. McCord. *The Power of the Gun: The Emergence of Modern Chinese Warlordism* (Berkeley, CA: University of California Press, 1993). McCord makes a compelling case for the rise of the political autonomy of military commanders at the end of the Qing through the rise of the Republic. A national Army did not rise in China as political support for Qing central forces would not allow for the rise of a truly modern Army. That task was left to the regions and the warlords, a problem that was not overcome until the establishment of the People's Liberation Army in 1949.

21. Alfred E. Cornebise, *The United States 15th Infantry Regiment in China, 1912-1938* (Jefferson, NC: McFarland and Company, 2004), 27. This book provides an historical account of this regiment's time in China outlining its mission, organization, manning, and the changes in command and control it experienced during its more than twenty-five years of duty in and around the Tianjin area.

22. McCord, *The Power of the Gun*. This study discusses in detail the evolution of the warlord's period with special attention to the period after the 1911 Revolution. McCord sees the development of warlordism as part of the political process that emerged with the weakness of the Republic government and part of the process of building a new political order. The key is that for Jiang, the warlords were as much political rivals as military counterparts.

23. Tolley, *Yangtze River Patrol*, 246-252.

24. Robert B. Hotz, ed., *Way of a Fighter: The Memoirs of Claire Lee Chennault* (New York: G. P. Putnam's Sons, 1949).

25. Wanda Cornelius and Thayne Short, *Ding Hao:America's Air War in China, 1937-1945* (Gretna, Louisiana: Pelican Press, 1980), 49.

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27. Carolle J. Carter, *Mission to Yenan: American Liaison with the Chinese Communists, 1944-47* (Lexington, Kentucky: University of Kentucky Press, 1997), 12-15.

28. Barbara W. Tuchman, *Stilwell and the American Experience in China: 1911-1945* (New York: Macmillan Company, 1970).

29. Edward R. Stettinius Jr., *Lend-lease: Weapon for Victory* (New York: MacMillan, 1944), 109.

30. Stettinius, *Weapon for Victory*, 115.

31. Romanus and Sunderland, *Stilwell's Mission to China*, 28-29.

32. William G. Grieve, *The American Military Mission to China, 1941-1942: Lend-Lease Logistics, Politics and the Tangles of Wartime Cooperation,* (Jefferson, North Carolina: MacFarland and Company, 2014) 7-11.

33. There are three volumes in the US Army in World War II series (The Green Books) on the China-Burma-India Theater. Charles S. Romanus and Riley Sunderland wrote *Stilwell's Mission to China, Stilwell's Command Problems, and Time Runs Out in CBI.* These three books provide an excellent examination of the period 1941-1945 in China.

34. Haydon L. Boatner, Notes for US Liaison Officers with Chinese Units, Boatner Papers, Box 6, Hoover Institution of War, Revolution, and Peace (Hereafter cited as Hoover Institute) Stanford, CA.

35. Rana Mitter, *Forgotten Ally: China's World War II, 1937-1945* (Boston, MA: Houghton, Mifflin, Harcourt, 2013) 4-14.

36. The story of SACO is contained within the book, *A Different Kind of War*, by Milton E. Miles

37. Romanus and Sunderland, *Stilwell's Mission to China*, 30.

38. Weidenburner, Ramgarh Training Center, (http://cbi-theater-5.home.comcast.net/~cbi-theater-5/ramgarh/ramgarh.html).

39. Romanus and Sunderland, *Stilwell's Command Problems.*

40. Barbara G. Mulch, "A Chinese Puzzle: Patrick J. Hurley and the Foreign Service Officer Controversy" (PhD. diss., University of Kansas, 1972). Mulch describes in detail the Hurley mission and its problems.

41. White House Memorandum 2644, 31 October 1944, Official File 2629-2669, FDR Library.

42. Romanus and Sunderland, *Time Runs Out*, 264-276.

43. Kraus, *China Offensive*, 17.

44. Kraus, *China Offensive*, 16-18.

45. Gordon K. Cusack, "Repatriation in the China Theater," *Military Review* 28, no. 2 (May 1948): 58-62.

46. Ronald H. Spector, *United States Army in Vietnam Advice and Support: The Early Years, 1941-1960* (Washington, DC: United States Army Center for Military History, 1985), 51-54. Chapter 4 of this US Army in Vietnam series published by the Center for Military History discusses the deployment of four Chinese armies (50th, 60th, 62nd, and 93rd) into northern Vietnam with accompanying American liaison officers under the command of Brigadier General Philip E. Gallagher. True to form, this Army Group was commanded by a Yunnan warlord, Lu Han, and he and his men made the most of this exile by Jiang.

47. Spector, *United States Army in Vietnam*, 51-54.

48. Schnabel, *History of Joint Chiefs 1945-1947*, 185 (see chap. 1, n. 10).

49. Romanus and Sunderland, *Time Runs Out*, 72 (see chap. 1, no. 6) and *China White Paper* (see chap. 2, no. 9). Chapter 2 of this document discusses the Hurley mission in detail.

50. Barr Report, Final Report, National Archives. This report includes the 19 April 1946 "Basic Study of a Proposed Organization of the Chinese Department of National Defense."

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# Chapter 10

## Neighbours… and Friends? Homeland Security and US – Canada Relations by LCol Anne E. Reiffenstein

Geography has made us neighbors. History has made us friends. Economics has made us partners. And necessity has made us allies. Those whom nature hath so joined together, let no man put asunder.[1]

– President John F. Kennedy

South Park aside, the question "Does Canada pose any threat to the security of United States of America?" might elicit some concerns regarding Canada as a possible entry to the US for terrorists based on a muddle of erroneous and factual news reports.[2] Canada is viewed by many Americans as a benign entity to the North with most Americans perceiving Mexico as a greater potential area of security concern, with its transnational criminal organizations, and human pipelines that permit illegal migrants and illegal drugs to flow across the southern US border.[3] The Canada-US border prior to 9/11 was seen by many citizens on both sides of it as a formality, where the greatest concern was Canadian shoppers sneaking their American bargains back into the Canada without paying duty.[4] The events of 9/11 changed that easy border crossing and those changes are evolving through the advent of new border policies and bilateral security arrangements. The US's physical security is of greater import than ever before, while Canada tries to ensure its economic security with its largest trading partner while acknowledging the American concerns.

Canada and the US's competing national security interests are highlighting the friction points between the two countries and has the potential to cause a divide that would be detrimental to both nations. To understand the origins of this divide, an examination of the history of the Canada-US relationship is relevant as it shapes what choices have been made in forming the respective roles and the approaches taken by both nations towards the security of North America. Also to better understand the frictions in the Canada-US relationship, an examination of the challenges of a smaller country living next to a super power warranted with the various ways it is able to influence the larger neighbour through quiet diplomacy and through balancing enough security to satisfy the larger neighbour without posing a threat: a "defence against help" strategy. Further, an overview of how 9/11 and the creation of homeland security measures have altered the nature of the relationship; in some ways strengthening it, and in others undermining it. Also, a possible solution to ameliorate the frictions between North American nations: the proposals for "Fortress North America" is examined as to its viability and desirability. With this review of the history of the Canada-US relationship, the dynamic of living next to a superpower, the post 9/11 environment and the possible amelioration of relationship frictions through "Fortress North America," it becomes apparent that there is a disconnect between the two nations. Though geographic neighbours forever, the Canada-US respective security concerns could drive the two nations apart, to their mutual detriment.

## Canada – US relations: a Brief History of the world's "friendliest neighbours"

The security relationship between Canada and the US has evolved over time from the US being the primary threat to Canada as a country, to security partner, to bi-lateral partnership followed lastly by an uneasy alliance. Each of these eras have been characterized by key events, with Canada's defence against the US initially relying on a reluctant Britain, followed by the period in World War II when Canada, realizing that Britain could no longer be the security guarantor, turned to the US as a partner in defence. This security relationship was formalized with the creation of the North American Aerospace Defense Command (NORAD), but since the establishment of NORAD there have been significant challenges in managing the security relationship, notably by the Canadian government closing the door on participation in Ballistic Missile Defence program in 2005.

## The US as the Primary Threat to Canada.

Following the American Revolution, the US posed a threat to British controlled territories, now known as Canada, which were seen as ripe for invasion. The security of the colonies was based on the British guarantor who over the next one hundred years was increasingly reluctant to pay for a viable defence of Canada. This reluctance to foot the bill led to the establishment of the Canadian regular army and militia system in the late 1800s.[5] There were three US invasions of Canada, in 1775, 1812, and the Fenian raids in 1866 which resulted in little gain for the Americans.[6] However, there were two considerations, which heightened Canada's security concerns. The first was the Mexican-American War in 1846-48 and the annexation by the Americans (under the Treaty of Hidalgo) of large swathes of territory. The second was the extremely large and successful standing Union Army at the conclusion of the US Civil War. The British/Canadian view was that the Union Army was more than capable of mounting a decisive attack to the North. The British were relieved when the Canadians decided to take on the defence of their own territory with the locally raised militias, removing British troops from the risk of battle with the US and freeing them up for service in other more troublesome conflicts like the Boer War in 1899.[7] Under the new Dominion of Canada confederated in 1867, the Canadian militia supported by regular force Artillery in Quebec and Ontario assumed the responsibility of defence, though at the time its capability was largely symbolic.[8] None of the US threats materialized and, barring the inept Fenian Raids into Canada, there was little in the way of tangible threats to newly minted Dominion. Canada remained closely aligned with Great Britain supporting the Queen/King and Country throughout the Boer War and World War I.[9] Though friendly during the 1920s and 1930s, both the Canadian military and the US Army had invasion plans at hand to ensure that they were ready to attack the other's country in the event hostilities broke out between the two nations.[10]

## Kingston Dispensation and the Permanent Joint Board of Defence

Two seminal events occurred in Canada-US security relations in 1938 and 1940. In 1938, the American President Franklin D. Roosevelt gave a speech in Kingston where he clearly articulated what has become known as the "Kingston Dispensation."[11] The Kingston

Dispensation remains the foundation of Canada – US security relations. In this address Roosevelt stated that "America would not stand idly by were the security of Canada was threatened."[12] [Canadian Prime Minister Mackenzie] King then responded by "pledging that as a good and friendly neighbour, Canada had a responsibility to see that it did not become an avenue of attack for the United States."[13] This was a new vision of a North American security that linked the two countries respective security concerns. This Kingston Dispensation set the framework for the future of the Canada-US security relationship with its stated obligations by both parties. The US publicly agreed that a secure Canada was in fact a required element of the US defence posture.

By 1940, Mackenzie King was becoming more nervous about Canada's defence and security, and harboured significant concern about Canada's reliance on a faltering Britain that was struggling to defend itself during of the Battle of Britain.[14] Coupled with Roosevelt's proposed Lend-Lease agreement to Britain that was winding its way through Congress, which would have resulted in Canada being bypassed economically by the US and Britain, these concerns meant King felt that Canada needed to strike an accord with the US.[15] He entered into an agreement with Roosevelt that resulted in the Permanent Joint Board on Defence to oversee Canadian and US defence and security concerns.[16] Roosevelt insisted on this being a permanent endeavor, not just for the war years, with a view to having American troops being stationed in Canada and building US installations on Canadian soil. Canada acquiesced to the US forces in Canada but with the understanding that at the end of the war installations would be bought back by the Canadian government.[17] Churchill, when informed by King of this agreement, instead of being pleased of being relieved of the burden of Canada's defence, correctly viewed this in the context of the long term where Canada was migrating from the British sphere of influence to the American Sphere.[18] This agreement was critical in the evolution of Canada-US relations moving from enemy, to peaceful coexistence, to alliance with its larger neighbour to the South.

## NORAD

NORAD was established in 1957 in order to tie Canada and the US together for air defence to counter the threat posed by Soviet long range bombers.[19] This bi-lateral partnership has remained, though its relevance over time has been questioned.[20] NORAD was a significant moment in Canada-US relations with respect to security as it marked the creation of a bi-national organization where the resources were pooled and commanded in tandem. It was, however, born under a bit of a cloud as it was not an instrument stemming from political discourse but instead seems to have been engineered into existence by the US Air Force and the Royal Canadian Air Force.[21] The air forces had been working in close concert during the 1950s, focused on defending North America from the threat of Soviet Bombers making their way across Canada to bomb targets in the US. In the 1950s they had developed lines of radar arrays that were intended to provide early warning of Russian aircraft. The Pine Tree Radar Line was established across the 50th parallel in Canada with the US paying for two-thirds and Canada paying the remainder, followed by the construction of the Mid-Canada Radar Line which was at the 54th parallel, and the very expensive Distant Early Warning (DEW) Radar Line was constructed in the high Arctic

at the 70th parallel.[22] The US footed the bill for the establishment of the DEW line and subsequently forbade Canadian entry to the sites without prior US military approval. The draft agreement for NORAD had been negotiated prior to a Canadian election being called in 1957 that resulted in a surprise landslide defeat for the incumbent government and sent waves of concern through the Canadian military.[23] As such, the Canadian Chief of Staff, General Charles Foulkes, along with his former comrade George Pearkes, at the time the Minster of National Defence "stampeded" the new Prime Minister Diefenbaker into signing the agreement before the new Cabinet had even met.[24] The Canadian Prime Minister's approval of the NORAD agreement caught everyone off guard and though welcomed by the US, created some anti-American outcry and concern in Canada.[25] From that point on, the air defence of North America was the shared responsibility of the US and Canada, and continues today with the expansion to include a maritime mission in 2006.[26] There were proposals to expand the mandate of NORAD post-9/11 however there were some concerns by Canada with respect to the implications of this for Canadian sovereignty and US having greater influence on employment of Canadian military.[27]

## Sorry but no Thanks: Ballistic Missile Defence

Advances in surveillance technologies in the 1960s, as well as the creation of the Inter-Continental Ballistic Missiles replacing the threat of the long-range bombers, resulted in a reduction of the importance Canadian territory in securing North America.[28] In 1957, the US began its Ballistic Missile Defence Program, and while Canada was not directly involved in the emplacement of the giant radars in Europe, the data from this array was directed to NORAD for reporting purposes. There were rising concerns in the 1960s, about the potential deployment of nuclear missiles in Canada under the ABM treaty. Consequently, in 1968, as part of the NORAD renewal agreement, a clause was inserted into the agreement allowing Canada to opt out of future ballistic missile defence programs. At the time, this was not really a significant issue as there were no programs in place that foresaw deployment of missiles to Canadian territory.[29] Indeed, ballistic missiles seemed such a remote possibility that the non-participation clause was dropped in 1981 from the NORAD renewal. In March 1983, President Reagan announced the Star Wars program, creating the potential for what was viewed as the weaponization of space, causing an enormous Canadian outcry over potential participation in this American program.[30] The anti-Star Wars protests went on in Canada until 1985 when the Canadian government announced that Canada would not participate directly in the program but the Canadian aerospace industry would be permitted to support and engage in this US program.[31] Canada's peripheral participation continued through several decades until 2005 when the Canadian Government announced, much to the American administration's surprise, that Canada would not participate in the Ballistic Missile Defence program. This caused a chill in the relationship between the two nations and many of their *ad hoc* relationships. This announcement was motivated primarily by Canadian domestic political considerations as the Liberal government in power feared that participation in the Ballistic Missile Defence program could result in a no-confidence vote in Parliament resulting in their government falling.[32] This announcement was also viewed as example of the failure of quiet diplomacy between Canada and the US with its very

public rejection of the US security concerns, fuelling the American view of Canada as an unreliable ally.[33]

The history of the relationship between Canada and the US illustrates how it has evolved over time from direct threat, to security partners, and now to friendly but uneasy neighbours.

## Neighbour to a Super Power: Sleeping Next to the Elephant

In 1969, Pierre Trudeau, the Canadian Prime Minister, famously described his assessment of the relationship with Canada's neighbor: "It is in some ways like sleeping with an elephant. No matter how friendly or temperate the beast, one is affected by every twitch and grunt."[34] Does this still describe the Canada-US relationship post 9/11? In 2003, Brian Bow, a political scientist, likened the Canada-US relationship to that of a crocodile and a crocodile bird; mutually useful, while never forgetting their relative positions of power and the levels of their mutual interdependence.[35] Since the Kingston Dispensation, Canada has used the approach of quiet diplomacy, while exercising independent policy, resulting in what some have referred to as a schizophrenic approach and giving the impression of Canada as an unreliable partner for the US security. [36] Others have stated that this reflects a maturation of Canada's security policy and that it is evolving to emulate the Finnish approach to living next to a super power, which is captured by the "defence against help" theory.[37]

Howard Cody, an American professor of political science, characterized Canadians as subdivided into two factions.[38] The first faction prefers a policy of supporting the US in its international and domestic endeavours. These "continentalists" are those who promote North America having an agreement similar to the European Union.[39] The business community in Canada would prefer this, as it leverages free trade and would make sound economics. This view is not confined to Canadians; there is also a faction in the US promoting the creation of North America as a trading block. The Council on Foreign Relations recently published a report chaired by David Petraeus recommending that the US turn its efforts and attention to North America with a view to creating a free trade block similar to the European model between Canada, the US and Mexico.[40] The continentalists endorse a position of Canada as a reliable and trustworthy ally of the US and they seek to influence American policy from within the embrace of this close relationship.[41] This runs contrary to the second Canadian faction that Cody has identified, which can be categorized as the "hyper-sovereigntists."[42] This faction is very vocal and is hyper–sensitive to the perception of American influence on Canadian domestic and international policy.[43] This group aspires for Canada to be a peace–seeking middle power with influence on the world stage separate from the US.[44] Any overt support and agreement with the US international policy is viewed with derision and suspicion, and is seen as demonstrating Canada's lack of independence and kowtowing to the thinkers in Washington.

These two factions have caused Canadian politicians to employ a quiet diplomacy over the years where behind closed doors and through *ad hoc* bilateral agreements the Canadian government has aligned their policies with American ones, while in public promoting an "independent" position. This has caused Canada to appear somewhat schizophrenic to its

American neighbours where support is professed in private but in public there is emphasis on the "Canadian" position and its independence from American actions.[45]

Prior to 9/11, American governments were relatively comfortable with the quiet diplomacy of their neighbour. However, after the attacks in 2001, the Canadian position on a number of security issues cast doubt on Canada's reliability as an ally. First was the Canadian positions on landmines, with the Ottawa Treaty in 1999 banning anti-personnel landmines, a treaty which the US neither signed nor publically supported.[46] The second issue causing the US to question its northern neighbour was the Canadian support given to the creation of the International Criminal Court, an institution again not supported by the US.[47] The third issue was the very public failure of quiet diplomacy to reach an accord on the Ballistic Missile Defence Program, previously discussed, where Canada surprised the Bush administration after months of negotiations with a negative decision.[48] These Canadian policy decisions were intended to show independence. However, taken along with Canada's rejection of the US call to join the "Coalition of the Willing" in Iraq, they resulted in a significant cooling of relations and undermined the "trustworthiness" of Canada as an American ally.[49] Some have indicated that this was not a step backwards for Canadian-US relations, but instead was a maturing of the relationship where Canada should have a relationship with the US similar to that of Finland with Russia. Nils Ørvik, an academic at Queen's University in Kingston Ontario, first proposed this approach called "defence against help" in 1973 and used Finland as the illustrative example.[50] Finland ensures its sovereignty and security by ensuring that it maintains the military at such a level that Russia doesn't feel threatened by insufficient security or conversely by too large a force. This has resulted in Finland's careful balance of having a sufficient sized military to secure its borders and regions, while at the same time staying out of NATO, remaining a member of the European Union, and maintaining Russia as its largest trading partner.[51] The "defence against help" theory is where the smaller country creates a security apparatus that is robust enough to provide a limited defence so as not to be helpless, but not so much as to be a threat to their larger neighbour. This theory seems to describe the Canadian security arrangements with its neighbour, when considering the multitude of ad hoc bilateral security agreements in place between Canada and the US.[52] The agreements on cross-border policing, sharing of intelligence, local agreements between states and provinces, as well as military-to-military agreements, including NORAD, provide a sufficient Canadian security apparatus to prevent the US from either feeling threatened by a weak Northern border or concerned about an overly influential neighbour. Consequently, despite Canadian policy declarations that may publicly diverge from American policy and fly in the face of the US's national interest, there is little impetus for direct interventions in Canada to preserve US homeland security.

The relationship between Canada and the US has been characterized as recognizing the interconnection between the two countries, with sufficient Canadian security presence to prevent "American" help, while still maintaining an independent security policy in order to satisfy those hyper-sovereignty factions in the country.

## Post 9/11 Relationship Friction

The attacks on 9/11 triggered the creation of the Department of Homeland Security and its subsequent focus on the physical security of the US. Canada's economic security continues to be compromised by US border security efforts and policies, creating friction in the relationship.

The attacks on 9/11 were a watershed moment for the American security policy as summarized by President Bush's pronouncement in November 2001 of "You are either with us or against us."[53] Security policy became the defining national interest for the US with respect to its neighbours, while Canada's national interests remain primarily economic. The creation of the Department of Homeland Security, and a renewed focus on keeping terrorists out of country, resulted in significant changes to border controls and management. This had a direct impact on Canadian economic security. In 2014, 75 percent percent of Canadian exports were to the US while 66 percent percent of goods imported to Canada were from the US. With increasing border controls in place, the over 28,000 trucks that cross the border on a daily basis bringing goods to the US are negatively affected by the slowing of crossings.[54]

In 2012, the Fraser Institute published a study which estimated the cost of thickened borders on Canadian tourism, trade and government programs as close to $19 billion which in 2012 translated into 1.48 percent percent of the Canadian GDP.[55] There have been a series of initiatives to address the North American border concerns, the first being Smart Borders that was a risk management approach to the flow of goods to North American shores.[56] This was followed by the Security Prosperity Partnership with Mexico, the US and Canada which was intended to find cost efficient ways to better effect border management, but which met with little success.[57] The latest initiative announced, Beyond the Borders, a Canada-US bilateral agreement, has been a negotiated to address both countries' concerns, creating greater security partnerships between the two countries, but frictions still occur. For example, Canada has proposed an additional crossing to the Ambassador Bridge (the Detroit-Windsor crossing) the busiest crossing between the two countries where in 2010 over $500 billion in goods was transported daily. This bridge has received approval but Canada will pay 95 percent percent of the costs of the bridge and will also pay the total cost of the US customs plaza that is required for crossing to be operational.[58] Though the US will cover the costs for the manning and operations of this customs plaza, this lack of accommodation for a neighbour's national security concerns illustrates a small crack in the relationship. This by itself would not be a concern but in Canada, this is seen as one irritant of many, along with the Alaskan government's imposition of the "Buy American" provisions for the building of a ferry terminal in Prince Rupert, British Columbia.[59] This case prompted the Canadian government to apply the Foreign Extra-territorial Measures Act in retaliation, halting construction of the Ferry terminal.[60] As well, the ongoing saga of the Keystone XL pipeline that the US administration has been reluctant to approve, has contributed to a chill in the relationship between Canada and the US. President Obama has suggested that the project seems to disproportionately favour Canadian companies, and as such assesses there is little impetus to rush the approval of the project forward.[61]

This has resulted in a cooling of relations between the two countries to the extent that a former Canadian ambassador to the US, who is considered the Canadian elder statesman on Canada-US affairs, has suggested the relationship is at an all-time low.[62] However, even with the chill in Canada-US political relations, the bilateral security partnerships are continuing to evolve. As an example, there are Canadian Army Generals serving in several US Army Corps as Deputy Corps Commanders; there has been increased Canadian Army Brigade participation in US Army Warfighter exercises as well as the many successful joint FBI – RCMP investigations against terrorist threats.[63] Canada's contribution to NATO in Afghanistan brought the two nations together, working side by side successfully. Even in less than ideal diplomatic times, the relationship between Canada and the US security forces, military, police and intelligence organizations are continuing their cooperation under Beyond the Border and *ad hoc* bilateral agreements.

Though 9/11 has created challenges in Canada and the US working together, the working relationships seems to endure despite the political friction caused by the competing national interests.

## Fortress North America: A Possible Solution?

Securing the continent under the auspices of a "Fortress North America" has been proposed since 2005 but though it may address both Canada's concerns about economic security and the US concerns about entry of people and goods into the US, it may come at too great a cost to Canadian sovereignty.[64] Canada's schizophrenic approach to American security policies, coupled with the American's disinterest in the economic interests of Canada, means there continue to be those who see Fortress North America, or a continental approach, as the best way ahead for two countries. Fortress North America has been discussed in the last decade with the Council of Foreign Relations promoting the idea of a harmonized North American economic and security zone.[65] Indeed, this was brought forth during the Ebola outbreak, with proposals for of cutting off access to North America from those countries that were infected in order to prevent the spread of the disease on the continent.[66] By having one security policy throughout North America, American security could be achieved less through border maintenance and more through protection in depth, by intercepting those with intent to do harm away from the shores of North America, building on the existing relationship with NORAD. For Canada, Fortress North America would facilitate that unfettered access to the American market, and enhance that essential trade relationship, essentially building on the NAFTA and creating greater economic prosperity for the country.

This proposal, which on the surface seems to be building on existing relationships and bilateral agreements, needs the agreement of all parties. Canada would have some concerns. The first concern is the equal treatment of the Canadian and Mexican border. Canada does not want one American policy for both neighbours, as it believes that the differences between Canada and Mexico are too great and would result in greater border restrictions for Canada.[67] A second reservation is that Canada would be concerned with the US making all the security decisions, as it would have the preponderance of forces and potentially make decisions that would undermine Canadian sovereignty.[68] The third Canadian reservation is

that there is a steadily decreasing public interest in Canada towards greater security cooperation with the US. A joint Canadian study, *Nanos-UB North American Monitor Tracking perceptions on US-Canada relations, 2005-2014* has followed public perceptions on both sides of the border, and over the last ten years has seen a decrease in Canadian support for a closer security relationship from 64 percent in favour of closer ties in 2005 to 46 percent in 2014.[69] Over the same time period, US support for closer security ties also dropped but only by 8 percent from 73 percent to 65 percent. With the lack of Canadian public support and with the present chill in Canada-US relations there is little chance of there being more action taken on harmonizing the North American economic and security policies.

## More Than Just Neighbours?

In the post 9/11 era, the US's concern about the physical security of its country has direct implications on Canadian economic security. Though Trudeau's description of "sleeping next to the elephant" is most frequently used, the more apt description of the relationship between the two countries is Bow's of the Crocodile and the Crocodile bird.[70] Canada's careful relationship with the US, stemming from history, based on quiet diplomacy, has evolved to Canada using the approach of "defence against help" with a myriad of security related bilateral agreements and partnerships to keep the Americans satisfied with the Canadian security efforts, preventing unwanted "help." As the frictions increase, with each nation's security interests clashing in public forums, the bilateral working relationships continue to function well, however there is little appetite to further these bilateral agreements into a larger North American community beyond what is currently in place. The recognition of the difference in security interests and their validity will be of far greater import to addressing the growing divide between these two neighbours. Though geographic neighbours forever, without greater understanding on both sides of the border, the respective Canada-US security concerns could tear asunder what nature and circumstance has joined together.

*This paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada, the Canadian Department of National Defence or the Canadian Army.*

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Joint, Interagency and Multinational Operations

CGSC

U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE

LEAVEN WORTH

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# Chapter 11

## Are We Doing Enough to Educate Our Military Leaders in Homeland Security Operations?

by Dr. O. Shawn Cupp and Ms. Heather R. Karambelas

On April 17th, it was revealed that Missouri National Guard orders and briefings labeled US citizens as "enemy forces" and "adversaries."[1] The guard was activated to prevent and respond to potential escalations in violence stemming from the verdict announcement in the case against a Ferguson police officer who shot an unarmed black teenager, Michael Brown. This controversial case inflamed concerns with police abuse and over-reaction across the nation. The National Guard changed the verbiage later and leaders made an effort to educate the forces about why this type of language is inappropriate in a homeland situation. However, once orders are published and execution begun, it is too difficult to change. Situations like this increase public fears of over militarization in response to domestic situations. This is just one example of why the military needs more Defense Support to Civil Authorities (DSCA) education. There are specific challenges with operating in the homeland. All forces should be prepared should the need arise.

## Introduction

Within the framework of national security, when the stakeholders work together toward a common goal it is called unified action. Joint doctrine describes *unified action* as "the synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort."[2] Coordination and cooperation towards a common objective are required when the participants are not in the same organization or command. In the homeland, there are potentially dozens of federal, state, local, and private industry stakeholders forces must identify and coordinate with.

Among the joint services (Army, Navy, Air Force, Marines, and Coast Guard), homeland security is "a concerted national effort to prevent terrorist attacks within the United States; reduce America's vulnerability to terrorism, major disasters, and other emergencies; and minimize the damage and recover from attacks, major disasters, and other emergencies that occur,"and DSCA is the effort undertaken to support civilian efforts to prevent and respond to emergencies.[3] The Army trains to execute four specific mission sets; offense, defense, stability, and DSCA. Decisive action is the simultaneous application of tasks within any, or all, of those mission sets. Every service member must know how DSCA missions are similar to and different from offense, defense, and stability. Service members must understand the DSCA context. This basic understanding is fundamental and it must be taught and reinforced in all services and at all ranks.

In 1999, Marine General Krulak used the term "Strategic Corporal" to describe the junior service member who can have an impact on the national and international perception of any given situation.[4] When the primary news audience is US citizens, concerns are elevated. Omnipresent media and the 24-hour news cycle means education and training are even more critical for the "Homeland Private." The Homeland Private not only must

understand the ramifications of their actions and words but that all interactions are with fellow Americans. Those include impacted citizens, planners, first responders, rumor mongers, and other military members of multiple Compositions of Forces (COMPOS). Every audience brings a different point of view, different information requirements, and multiple needs for assistance. The skilled Homeland Private does not come into being without an educated leader. The need for officers who can foster this type of critical thinking is why leader development is the Chief of Staff of the Army's number 1 priority.[5]

In 2014, the United States faced emergencies along a full spectrum of natural disasters and adversarial threats in which organizations train to support functions deemed critical to the security of the homeland. Although the Department of Defense, specifically the Army Corps of Engineers, is the only emergency support function *primary* agency for public works and engineering, defense assets are expected to support all events that could present a hazard. None of the emergencies of 2014 resulted in an extensive federal response, but every day the nation is faced with the possibility of a catastrophic event exceeding civilian response capabilities. Because federal response is sometimes required, preparing our military leaders is vital. These leaders should be broadly educated to act in the event of either a homeland security or homeland defense threat.

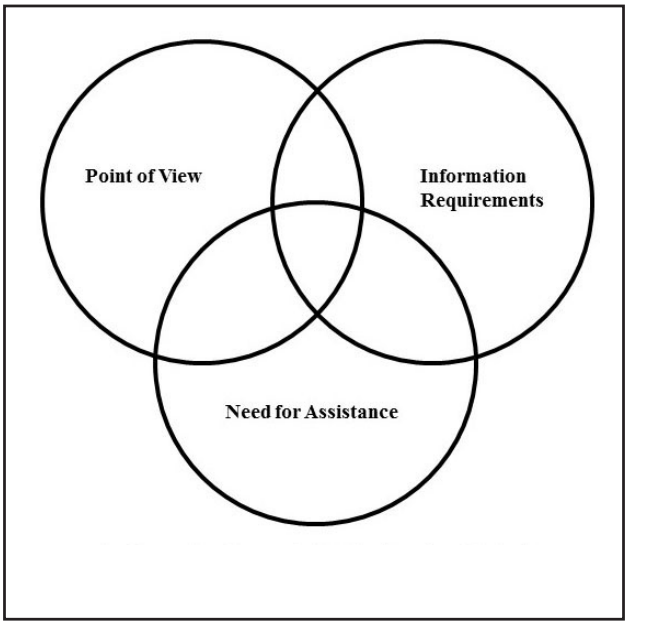


Figure 21. Audience Requirements for the "Homeland Private." Created by author.

## Current Operational Environment

A two part challenge faces military support to domestic incidents: an increase in federalization of emergencies at the same time as deep budget cuts and sequestration. A significant increase in federalization of disasters began with President Clinton in 1993. The highest number of presidential disaster declarations, before 1993, was set in 1977 at only 61.

President Clinton declared 158 in 1993, and from that point on, each president increased the number of declarations made in their terms of office. Since 9/11, the number of federalized disasters increased even more dramatically. President George W. Bush increased federalization even more, and President Obama's presidency has continued the growth in federalized disasters with each passing year.[6] For every year federalization increased, there has been a correlated reduction in state and local budgets toward preparedness and initial response to disasters. Although there is significant concern that increased federalization reduces the state and local willingness and ability to respond, it is unlikely the federal government is going to decrease federalization of disasters. "DSCA presents a challenging operational environment for military leaders requiring effective navigation of laws, policies, and in some cases politics."[7] Federalization is a part of these disasters and politics is part of that environment. With such dramatic increase in federalization of disasters, there is concern yhat the demand for forces will challenge us in ways not yet discovered. A report from 2012 stated NORTHCOM operations and DSCA missions "[are] not a place for on-the-job training."[8] "The Chairman of the Joint Chiefs of Staff indicate that the DOD will continue in its support of DHS and absolutely requires a formal educational process for Homeland Security support."[9] Statements like these support an increase in education and training programs for DSCA operations.

Homeland security is founded on a tiered response. That response relies on state and local government to exhaust their capabilities before the federal government acts. However, states and local governments benefit by federalizing emergencies because the financial burden is transferred to the federal government. The federal government benefits through public perception that a strong central government is able to provide security and essential services. There is a risk in the expectation that the federal government should always respond to disasters. Although federalization disincentivizes preparedness, current public expectations will never allow the federal government to sit idle as communities fail. One reality is that most disasters should be handled at the state and local level. An inconvenient fact is that federalization is here to stay. There is too much publicity in disasters for political neutrality.

A way to meet these centrifugal challenges is to better educate and train military leaders for homeland missions. Having every service member understand both homeland security and DSCA is a good way to justify maintaining our current force structure. With current and looming cuts in budget, the services, including the US Army, are looking for ways to continue to be relevant in the changing global environment. Recognizing not only the significance but the easily identified need to participate in DSCA is another piece to the national security puzzle. In a less stable, post-Cold War world, that puzzle has seemingly become more ill-defined and uncertain. Simultaneous budget cuts to the services and unprecedented federalization of disasters only adds to the uncertainty.

The government still needs to engage overseas in offense, defense, and stability missions of decisive action, but many do not see the need or requirement to expend resources on training, exercising, and educating Soldiers on DSCA and other homeland security operations. The drawdown of forces from Afghanistan and Iraq provides the opportunity to view DSCA as important within the framework of our national security policy. In many

respects, the transition from a heavily concentrated focus on stability as a task of decisive action to DSCA seems self-evident. Even with the experiences and history surrounding Hurricane Katrina, the argument for a well-trained military to conduct DSCA is lost in the debates over sovereign debt and future defense spending.

## Doctrine

This article describes the need to increase the education and training on homeland security for all service members. The issue is not doctrinal – homeland defense and DSCA are both fully integrated in Army Doctrine 2015. In joint doctrine, homeland defense operations are within the range of military operations which the forces must be prepared to support. The specific guidance for the integration of the armed forces into DSCA is in JP 3-28.[10] The 2011 ADP 3-0 defines DSCA as one of the four key tasks of Decisive Action under the United Land Operations construct.[11] Thus, it is identified with offense, defense, and stability operations as fundamental in the US Army mission set. ADP 3-28, *Defense Support of Civil Authorities*, further clarifies the concepts of all-of-nation approach to incident management and identifies the primary contribution of the military as DSCA.[12] In ADRP 3-28 three primary purposes are highlighted: to save lives, alleviate suffering, and protect property.[13] Challenges of organizations that must work together to ensure national security at home have a place in doctrine. Our challenge is in educating those responsible to conduct unified action in the homeland. Leaders must have the understanding of the unique ways of operating in which the response is not just military forces, but also a variety of tribal, state, local officials, private industries, and a citizenry who must all work together toward common goals resolve events.

## Potential DSCA Events

What expertise would be required for the next Super Storm Sandy, or Hurricane Katrina? Landslides in Washington State or wildfires in the west would each pose unique challenges. In early 2015, there were international cases of attacks against military members in the UK and Canada that could spread to the US or even include communities outside our domestic bases. How prepared are we to provide unified action toward a positive solution in cases like these? Currently, there are Defense Coordinating Elements (DCE) aligned directly with each of the Federal Emergency Management Agency (FEMA) regions. Those people who are assigned as permanent members of the DCE are trained and prepared to work with the key audiences in their regions; however, better education and training for all military members could provide more options when incidents occur. Most requests for assistance to the federal government are made when states and tribes are unable to respond to weather events like floods and snowfall. Most of the time, what they need is money to get back to their previous condition. There is always the potential, however, that troops could be needed to assist with tasks as mundane as filling sandbags to protect from flooding, evacuations, or clearing roads. Even issues as technical as providing medical assistance to develop Ebola policies are not beyond possible. Any of these types of events would require leaders trained and prepared to assist federal agencies in their response. This requires leaders who understand the specific issues and concerns of working domestically.

A Chemical, Biological, Nuclear, or Radiological (CBRN) event would require the expertise of military forces for evacuation, decontamination, and security of effected sites. The military is the only agency that has specialized Personal Protective Equipment (PPE), detecting equipment, and tracking systems necessary for these events. In addition, military medical professionals could be brought in to help with trauma care and assessing casualties. Army mortuary affairs could help with identification of bodies and organization of remains. Naval hospital ships could provide clean drinking water, medical/ surgical facilities, and dental access. Hospital ships can also provide a space for tenant activities, such as Army veterinarians to conduct limited animal care or for food inspection.[14]

Any risk to our agricultural markets would cause significant impacts to our economic national interests and there is always concern over naturally occurring contagious animal diseases like bovine spongiform encephalopathy (mad-cow disease), rift valley fever, or others. These events would require the mass destruction of thousands of animals in place or potentially enforcing multi-state stop movement to prevent spread to other herds.[15] Something of that level could easily go beyond what state and local officials are capable of responding to. In the last year, the United States has also been forced to consider naturally occurring diseases like Ebola and Measles that entered our nation on a small scale, but remind us how vulnerable we are to potential pandemics.

## Recent DSCA Examples:

Super Storm Sandy is an excellent example of the military contribution to a coastal emergency. Army engineers provided support to reinforce dams and levees before the storm, and supported ground movement to repair damaged infrastructure. There are a multitude of other responsibilities for which the military was found uniquely prepared. Consider some other specifics of Super Storm Sandy that hit the Eastern seaboard on October 29, 2012.

The US Navy supported the disaster relief by providing people and equipment for in direct support of FEMA operations. The USS *Wasp*, USS *San Antonio*, and USS *Carter Hall* positioned off the coast of New York and New Jersey to aid in these efforts. The *Wasp* and the *San Antonio* provided helicopters for both medical needs, and search and rescue operations. Supplies were transported ship to shore using landing craft specifically available to the Navy. The Navy was able to provide command and control options, infrastructure survey capabilities, damage assessments and underwater port surveys. Hull technicians and damage controlmen from the Navy helped repair the Hoboken Ferry Terminal. After the initial response, the Navy provided 20 high-volume pumps, 128 sailors, and 30 Navy civilians to support ongoing FEMA recovery operations.[16]

From the Army, over 450 people from Army North HQ, along with 7,400 National Guardsmen, responded to this devastated area to provide support to local, state, and federal response efforts. Six of the ten defense coordinating elements were also deployed to provide coordination between elements of the DoD and other responding agencies.

The defense coordinating elements, led by a defense coordinating officer, have the ability to coordinate requests for DoD to assist in search and rescue missions,

> medical evacuations, aerial damage assessments, distribution of food, water and blankets, establish temporary shelters, provide generators and pumps, provide communication equipment, transportation capabilities and many other functions to support disaster relief efforts…For those in the JFLCC Coordination Element, managing the large influx of DoD forces into New York, New Jersey and other affected states is an important task...From Army North's 24-hour Combined Operations and Integration Center, military planners, in conjunction with defense coordinating elements, monitored and assisted 'unwatering' missions to clear NYC subways, tunnels, water treatment plants and other critical sites; debris-clearing missions; the establishment of gasoline and diesel fuel points for first responders and residents; aerial assessment missions; transportation of utility crews and other responders into the affected areas; evacuation of patients from flooded medical facilities or facilities that lost power; and many other lifesaving and life-sustaining missions.[6]

From one severe weather event, it is apparent the support necessary to return to a state of normalcy requires the dedicated efforts of an entire nation to include its military. Now consider the additional impacts and requirements that a terrorist attack could create. Widespread panic and troops to provide security or enforcement for state ordered evacuations or shelter in place would require different types of expertise. Recently, the US has been faced with a different threat. That threat is violence from riots across the country.

There are two key examples of recent riots; Ferguson, Missouri, and Baltimore, Maryland. On 24 November 2014, riots erupted in Ferguson, Missouri, when a grand jury failed to indict a white police officer who shot an unarmed black teenager (Michael Brown). Traditional police were unable to bring calm to the area so the Missouri Governor, Jay Nixon, ordered over 2,200 National Guardsmen to prevent widespread destruction and restore order. More recently on 27 April 2015, Maryland Governor Larry Hogan declared a state of emergency in the City of Baltimore and activated National Guard forces to restore normalcy to the area following riots after the death of a black man in police custody (Freddie Gray). Approximately 2,000 Army National Guard troops responded along with police forces from neighboring states.[17] National Guard Soldiers in both cases were asked to move into densely populated civilian regions and provide security and stability to the area. In 1967, when race riots occurred in Detroit, 8,000 National Guard soldiers along with 4,700 active duty troops from the 82nd Airborne Division were used to restore order.[18] So it is not beyond reason to prepare for issues today which could escalate to need a similar response. This kind of support requires specific understanding of domestic issues and concerns and further explains the need for more education and training for homeland security across the military.

## Challenges to DSCA Education

There are challenges to DSCA education. First, there must be a decision that educating for homeland security, homeland defense, and DSCA are important. Although the Officer Professional Military Education Policy (OPMEP)[19] mandates what is taught to officers includes homeland security, it is not prescriptive as to the content. CGSC education in-

cludes an overview of homeland security as a type of operation among the thirteen types of joint operations. DSCA is taught as another facet of decisive action, although the focus of discussion remains on Offense, Defense, and Stability. It is only through voluntary participation in the Master of Military Arts and Science (MMAS) program in which officers can choose to research a topic, and then as students, add to the body of knowledge through a thesis. For officers who are specifically interested in gaining better understanding, elective courses provide background in either specific homeland topics or education required to operate at a defense coordinating element.

There is also a lack of understanding about the resources available for education and training in a DSCA environment. There are free online courses provided by either Northern Command or FEMA which educate on many of the issues potential in the event of national disasters. Northern Command provides DSCA Phase 1 training, which provides an overview of DSCA considerations and tasks, as well as FEMA courses online which provide the details about the frameworks and methods by which the federal government coordinates response with authorities on the ground who respond. The Joint Maneuver Training Center (JMTC) at Camp Atterbury, Indiana has extensive resources available for joint forces to train with community and interagency partners to respond to all types of domestic events.[20] Along with the base to support staff level exercises, the Muscatatuck Urban Training Center allows units to actually experience the kinds of challenges they could face in a DSCA event. Scenarios are as basic as evacuating people from damaged buildings and crowd control to underwater neighborhoods allowing divers to practice rescue and recovery techniques. The facilities to train and educate are available. The issue, then, is the priority of homeland security education. Once that priority is embraced, using the resources already available could take place.

Another challenge in educating for events domestically is that assignments within the US do not have the same perceived officer promotion as officers serving in deployed positions. In general, officers do not feel they will get promoted and remain in valuable positions if they are not in the "tough" jobs overseas. As long as there is no value in the minds of officers to fill these positions, there will not be a value in pursuing this type of education on their own. In many ways it should be intuitive that protecting the homeland is a priority. The current assignments process does not reflect it.

## Summary and Recommendations

Is DSCA the forgotten task of Decisive Action? Not right now. The emphasis on offense, defense, and stability missions overseas since 9/11 changed the perception of DSCA. Understanding the requirements of a Homeland Private, the conceptual aspects of DSCA, and training and educating field grade officers will ensure that homeland security and DSCA stay a relevant mission sets despite current fiscal constraints.

There are three easy ways to improve the response to domestic events. First would be to reduce federalization of disasters. Putting the responsibility to prevent and respond to natural disasters back with states and local responders would ease the likelihood for increased response of federal forces. Since that course of action is unlikely, the services should work to integrate more Homeland Security/Defense education into the current train-

ing models. Education for officers, at a minimum, could include the online DSCA 1 course, and the online FEMA courses on the National Response Framework and National Incident Management System. These are important baselines of knowledge for leaders who may be called upon to serve domestically. Another way would be to integrate domestic scenarios into the current combat training centers. Warfighter exercises could introduce domestic issues into current rotations as could rotations at the Joint Readiness Training Center, and the National Training Center. Although the full range of domestic events that could require a federal response is difficult to predict, when an event happens, the services must be prepared. Homeland Security cannot be a forgotten task in the Range of Military Operations any more than it can become a forgotten task of Decisive Action. Educated leaders who understand the importance of DSCA will enable the critical development of Homeland Privates in across the military. The Honorable Paul McHale said it best, "It is time for America's leaders to recognize the role that US armed forces will inevitably play in response to future catastrophic disasters and to ensure that NORTHCOM has the necessary capabilities – people, training, and equipment – to protect and defend the US homeland."[21] More education and training for homeland security should be required of leaders to ensure the domestic response never falters.

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Kurt served in Ranger and Airborne assignments as an enlisted infantry soldier and non-commissioned officer. As a commissioned infantry officer, he served in various command and staff positions. While on active duty, he participated in multiple deployments including Desert Shield/Desert Storm, Operation Joint Guardian, KFOR (Kosovo), and he was Chief of Plans for CJTF-76 and 10th Mountain Division in Afghanistan. He also deployed to support planning for Operation Odyssey Dawn at USAFRICOM Headquarters. He has a Masters of Military Arts and Science in Strategy from the Command and General Staff Officer Course (CGSOC).

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