

Contesting the Psychological Domain During Great Power Competition

Jeremiah Deibler

The views expressed are those of the author and do not necessarily reflect the official policy or position of the Department of the Air Force, Department of Defense, or the United States Government.

It is comparatively insignificant but nonetheless relevant to discuss Great Power Competition in the wake of the coronavirus (COVID-19) crisis. Despite the need for global cooperation amid the COVID-19 pandemic, elements of Great Power Competition persist. In early March, Lily Kuo, a Hong Kong correspondent for the *Guardian*, detailed the Communist Party of China's (CPC) and Chinese state media's alternative narrative, which sowed seeds of doubt about COVID-19's origination in China.¹ The CPC, according to Kuo, seized on comments by Robert Redfield, the director of the US Centers for Disease Control and Prevention (CDC).² Exploiting Redfield's inconclusive language, Spokesperson and Deputy General of the Foreign Ministry's Information Department Lijian Zhao shared the video clip multiple times and speculated:

CDC was caught on the spot. When did patient zero begin in US? How many people are

infected? What are the names of the hospitals? It might be US army who brought the epidemic to Wuhan. Be transparent! Make public your data! US owe us an explanation!³

Shortly thereafter, the United States' political leadership, including President Donald Trump, modified its language to publicly call COVID-19 the Chinese virus. Jabin Botsford, staff photographer at the *Washington Post*, identified modifications by the President to shape the informational environment.⁴

The exchange between the CPC and American national security leadership is intrinsically linked to the ongoing competition between emergent (China) and existing (US) great powers. China is seizing the opportunity to lead the global response to COVID-19 as it seeks to become the preferred partner for the international community. The phrase "preferred partner" is the operative concept behind competition. In a shift from phase-based planning to

the conflict continuum, within the US Department of Defense (DOD) vernacular, there has been much ado about competition. How is it defined? What does it look like? What are the subsequent implications for how the DOD does business? The purpose of this paper is to (1) identify key characteristics

of Great Power Competition, (2) review the impacts of these characteristics on the military instrument of power, and (3) make recommendations for planners and intelligence organizations and professionals supporting the Joint Forces Commander (JFC).



Jabin Botsford ✓ @jabinbotsford · Mar 19

Close up of President @realDonaldTrump notes is seen where he crossed out "Corona" and replaced it with "Chinese" Virus as he speaks with his coronavirus task force today at the White House. #trump #trumpnotes



Figure 1. @jabinbotsford captured presidential information power.⁵

The Characteristics of Great Power Competition

Much has been said about competition since it was discussed by Secretary of Defense (Sec-Def) James Mattis in the lead-up to his publication of the National Defense Strategy (NDS) in 2018. The NDS informed an updated Joint Publication (JP) 3-0, which presented the concept of the Conflict Continuum (see Figure 2). Figure 2 clearly shows the interrelationship between national instruments

of power (IOP) across the continuum. Specifically, during cooperation and competition, military engagement, security cooperation, and deterrence serve to keep geopolitical relationships in the desired state of cooperation or competition. Crisis response and limited contingency operations serve as emergency actions to use IOPs to prevent escalation to destructive large-scale combat operations. Cooperation and competition are fundamentally about building and cultivating relationships.

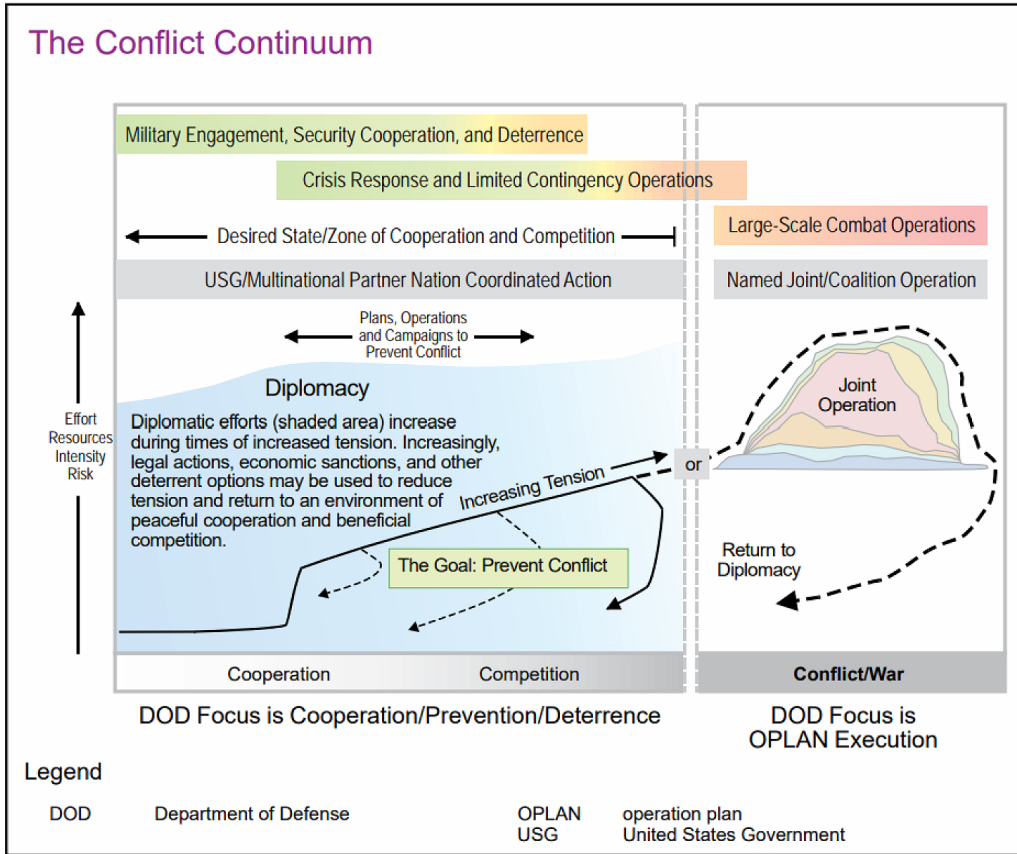


Figure 2. Conflict continuum.⁶

Between the fall of the Soviet Union (USSR) in 1991 and roughly 2012, the US existed in a unipolar international environment that offered it the opportunity to dictate the terms of most international relationships. It combined its comparative national power with a comprehensive set of strong alliances and international organizations, presenting unparalleled global leadership under the Bretton Woods liberal world order. In 1989, prior to the official fall of the USSR, Francis Fukuyama famously published his article called “The End of History?,” claiming that “The triumph of the West ... is evident first of all in

the total exhaustion of viable systematic alternatives to Western liberalism.”⁷

Absent any other choice for a preferred partner, non-powers were either a part of the US-led international system or existed outside of the system and therefore were at a comparative disadvantage. In 2018, Fukuyama published a new book, *Identify: The Demand for Dignity and the Politics of Resentment*. Louis Menand summarizes Fukuyama’s argument: that the “contemporary dissatisfactions” of “Vladimir Putin, Osama bin Laden, Xi Jinping” and even national movements like “Black Lives Matter” and “#MeToo”

were antitheses to the “global liberal world order” and as a result, “liberal democracy and free trade may actually be rather fragile achievements.”⁸

In the last decade, regional and global alternatives emerged. Iran leads proxy conflicts across the Middle East. Its leader and strategist was killed by a US strike this year.⁹ Russia exploited the proverbial ethnic domain in order to annex Crimea.¹⁰ China increased its global diplomatic and economic activities through the Belt Road Initiative (BRI).¹¹ In the 2018 NDS, Secretary Mattis referred to these actors as “revisionist powers and rogue regimes.”¹² The key take away is the idea of choice. To a certain extent, market dynamics have taken hold in the geopolitical environment. For the better part of the transitional period between the twentieth and twenty-first centuries, the US-led global world order was the only option. The first characteristic of Great Power Competition that we must bear in mind is the interplay between rational choice and market dynamics on the

geopolitical plane.

President Rodrigo Duterte of the Philippines provided, perhaps, the best commentary on geopolitical market dynamics and non-powers’ rational choice: “[The US creates] rules and norms for almost everyone, and some refuse to be bound by the same ... [The US and its allies] weaponize human rights oblivious to its damaging consequences.”¹³ Regardless of whether President Duterte’s perception of critical human rights is accurate, the implications for the geopolitical marketplace are clear. President Duterte now has a choice. His near neighbor, China, is closer than and, arguably, possesses comparative national power to the US. Further, China is now offering an alternative to the US world order. In July 2016, as part of a speech commemorating the ninety-fifth anniversary of the founding of the CPC, President Xi Jinping declared his nation’s “commitment to an independent foreign policy ... on the basis of the Five Principles of Peaceful Coexistence.”¹⁴

Xi Jinping’s Five Principles of Peaceful Coexistence

- Mutual respect for each other’s territorial integrity and sovereignty
- Mutual non-aggression
- Mutual non-interference in each other’s internal affairs
- Equality and cooperation for mutual benefit
- Peaceful coexistence

Figure 3. President Xi Jinping’s Five Principles for Peaceful Coexistence.¹⁵

Certainly, “mutual non-interference” resonates with President Duterte’s message above. This does not mean that President Duterte will immediately

align himself with China; however, it gives him leverage in negotiating with the US. The geopolitical marketplace forces the Great Powers into weaker

negotiating positions with strategically located nations.

Part of President Duterte’s and other leaders’ rational calculus is the comparative military power and its associated threat and implied national risk. Nowhere is this more evident than in Australia. A partner within the Five-Eyes intelligence alliance with the US, Canada, United Kingdom, and New Zealand, Australia faces a complex position in the Great Power Competition security environment. On the one hand, as Philip Citowicki argues, “Australia is acutely aware that supporting the fragile democracies of the Pacific requires greater cooperation with like-minded nations.”¹⁶ On the other hand, Tom Hanson suggests that, due to significant “Chinese capital investment” in key sectors “from port facilities to infant formula to commercial real estate to agriculture,” Australia may be at

risk of having “to choose between deepening its economic relationship with [China] and its longstanding alliance with the United States.”¹⁷ The truth is likely somewhere in between, but the shift toward a world shaped by Great Power Competition places the Australian government in a complex position. In these situations, traditional allies are more likely to come into geopolitical friction. When tensions rise, a decision is made regarding actions taken to protect national interests. Depending on the level of national interest, traditional allies may transition from cooperation to competition or conflict.

National interest was characterized by Donald Nuechterlein in his essay “National Interest and Foreign Policy: A Conceptual Framework for Analysis and Decision-Making” in the *British Journal of International Studies* in 1976 (Figure 4).

Level	Description
Survival	The very existence of a nation-state is in jeopardy as a result of overt military attack on its own territory or from the threat of attack if an enemy’s demands are rejected.
Vital	Serious harm will very likely result to the state unless strong measures, including the use of conventional military forces, are employed to counter an adverse action by another state or to deter it from undertaking a serious provocation.
Major	The political, economic and ideological wellbeing of the state may be adversely affected by events and trends in the international environment and thus requires corrective action in order to prevent them from becoming serious threats (vital issues).
Peripheral	The wellbeing of the state is not adversely affected by events or trends abroad, but the interests of private citizens and companies operating in other countries might be endangered.

Figure 4. Nuechterlein’s levels of national interest.

Nuechterlein’s construct suggests that the only justification for going to conflict is over survival or vital national interests. However, it is arguable that

for much of the period prior to the resurgence of Great Power Competition, much of the conflict that the US participated in was for major to peripheral na-

tional interests. For US decision-makers, the risk to the homeland and its forces did not meet the threshold that warranted a pause in action. This is not to criticize those decisions, but rather to highlight the calculus that a unipolar world affords a Great Power. This willingness to breach the threshold of conflict can be viewed alternatively as a decision-maker's band of tolerance. Amanda Donnelly details the band

of tolerance in relation to strategic response options (SRO) in her thesis at the School of Advanced Air and Space Studies. Based on Jeffrey Reilly's lectures from the Multi-Domain Operational Strategist program at Air University's Air Command and Staff College, the band of tolerance (Figure 5) represents the area of options within which the decision-maker is willing to accept SROs.¹⁸

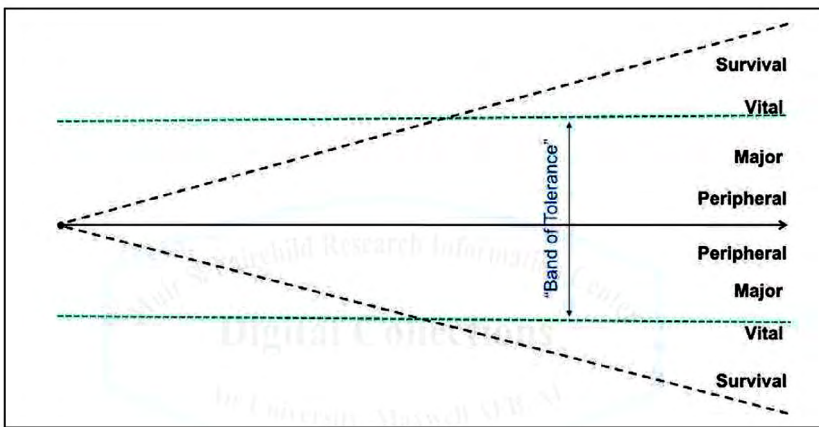


Figure 5. Band of tolerance.

More critical for the purposes of this paper is the impact of comparative national power on the band of tolerance for decision-makers. In short, as the comparative national power between two nations becomes higher and closer, the cost and therefore the risk become significantly higher. As risk rises, the band of tolerance shrinks until nations are unwilling to transition from competition to conflict for anything but the most vital national interests and survival. Therefore, whereas the US may be more willing to put pressure on President Duterte in a unipolar world to more fully comply with human rights, it

may jeopardize the national interests of a higher order in the era of Great Power Competition. The national interests remain, including peripheral interests, but the desire to proceed to destructive force at the risk of escalation reduces significantly.

It is the combination of the geopolitical marketplace and the rising risk's impact on the band of tolerance that produces the third key characteristic of Great Power Competition: gray zone tactics or warfare. In high-risk security environments, activities below the threshold of conflict naturally be-

come the priority mechanism. As Secretary Mattis laid out in the NDS:

Both revisionist powers and rogue regimes are competing across all dimensions of power. They have increased efforts short of armed conflict by expanding coercion to new fronts, violating principles of sovereignty, exploiting ambiguity, and deliberately blurring the lines between civil and military goals.¹⁹

Multiple actors employ gray zone tactics today. The US House Intel-

ligence Community summarized Robert Mueller's report on Russia's social media warfare.²⁰ In his article in *MIT's Technology Review*, Vince Beiser details the expanse of China's dredging operations, including both the South China Sea (SCS) and multiple BRI projects (see Figure 6).²¹ The Center of Strategic and International Studies' (CSIS) Asia Maritime Transparency Initiative (AMTI) monitors and evaluates Chinese Maritime Militia activities within the SCS in international or non-Chinese territorial waters.²²



Figure 6. The Wan Qing Sha dredging in the vicinity of Colombo, Sri Lanka.²³

In many of these cases, there is no clear breach of either President Putin's or President Xi's band of tolerance. Most importantly, it also does not cross the threshold for President Trump. Gray zone tactics account for the geopolitical marketplace and both decision-makers' and their opponents' risk calculus to achieve policy objectives without risk-

ing the transition to conflict. These concepts are by no means new in human history. Christopher Andrew and Vasili Mitrokhin published an excellent book, *The World was Going our Way: The KGB and the Battle for the Third World*, on the history of Soviet Union active measures across the globe during the Cold War. The introduction of their book

references Vladimir Lenin's fiery speech on the Russian Revolution in 1917. Lenin opined: "In the coming battles of the world revolution, this movement of the majority of the world's population, originally aimed at national liberation, will turn against capitalism and imperialism."²⁴

The Soviet Union may have fallen in 1991 but it was not the end of history. Great Power Competition is here. The American national security apparatus should remain cognizant of the characteristics of that global environment: (1) the world is a geopolitical marketplace and we now have competitors who offer alternatives to rational actors, (2) the mounting costs of any conflict reduces the likelihood of the transition to conflict but does not eliminate it, and (3) the predominate tactic is gray zone warfare.

Great Power Competitions Implications and National Security

In a unipolar world, the comparative strength of the US military and its allies is effectively insurmountable when faced with a conventional threat. Consider the emergence of the Islamic State in Iraq and Syria (ISIS). According to the Wilson Center's timeline of events, the transition from conventional offensives to asymmetric tactics is clear. In June 2014, ISIS employed conventional maneuvers in order to seize Mosul; however, the emergence of US strikes and Peshmerga-US cooperation necessitated ISIS's transition to asym-

metric tactics by the end of the year.²⁵ The US military advantage allowed the US national security apparatus to lean heavily on the military as the supported instrument. This orientation is manifest in the structure of the National Security Council.

Within IOPs, the DOD is the 800-pound gorilla, comprising three of the statutory seats compared to one each for diplomacy and economics.²⁶ Information is notably absent, although many would align the IOP to the President or Secretary of State. Nonetheless, it is clear why the national security apparatus is a threat-oriented culture. At the apex of global hegemony and a unipolar world, a national security strategy inherently seeks to maintain the status quo. As a result, any effort to revise the structure of the world order is viewed as a threat. This is not to be dismissive of the challenges that the CPC, the Putin regime, and other disruptive actors present. Rather, it serves as a frame of reference for US national security culture, its associated vulnerabilities, and where the military might shift its approach accounting for the characteristics of Great Power Competition.

A threat-oriented culture seeks to anticipate and prepare for conflict, as it should. However, a threat-oriented culture trends towards denouncing bad faith actors rather than offering a more attractive alternative. In comparison, a diplomacy-centric national security apparatus focuses on "build[ing] and sustaining[ing] relationships."²⁷ On the other hand, an economic-centric approach seeks to maximize economic

growth to “create wealth for Americans and our allies and partners.”²⁸ Both take a more positive rather than negative orientation towards potential partners.

An information-centric national security strategy is unclear but can be gleaned from the US National Security Strategy (NSS) published by the President in 2017. The NSS denounced “American competitors [who] weaponize information to attack the values and institutions that underpin free societies, while shielding themselves from outside information.”²⁹ By extrapolating the threat posed by malign actors within the information sphere, it is possible to consider an information-centric posture. It requires a coherent strategic narrative that is consistently supported by the actions of other IOPs.

Suppose the US national security strategy shifted towards an information-centric approach. Information-centric does not imply that diplomatic, economic, and military actions disappear from the toolkit, nor does it dismiss the concept of a threat. Rather, an information-centric national security strategy, first and foremost, considers how each of those actions support or detract from its strategic narrative.

Information-Centric National Security Strategy and the Military Instrument of Power

What does this mean for the DOD and, as a result, the military? The is no better modern example of the military sup-

porting an information-centric strategy than the strikes against Syria chemical warfare sites in 2018. Within minutes of executing the strikes, Secretary Mattis hosted a press conference where he invoked international norms and standards while offering CJCS General Dunford a chance to articulate the strike’s purpose:

The strike was not only a strong message to the regime that their actions were inexcusable, but it also inflicted maximum damage, without unnecessary risk to innocent civilians.³⁰

Further, in a show of solidarity, the French and British attachés were present and participated in the airstrikes. In short, leading the narrative rather than reacting is critical. Today, malign actors lead the narrative and the US national security apparatus reacts. The military must adjust its approach to this environment by shifting from system-centric warfare to message-centric warfare. This is especially evident in the Air Force, where the system-centric approach to warfare remains supreme.

During the Gulf War, John Warden first proved the application of Centers of Gravity (COG) analysis and the system-centric approach to warfare, referred to as Effects-Based Operations (EBO). Yet, ironically, the Gulf War is an excellent example of effective message-centric warfare. In fact, it sparked an after-action debate that is relevant today. It began with none other than NDS author and recent SecDef James

Mattis. As then-General Mattis, Commander of Joint Forces Command, he fired a shot across the bow of the Air Force's new sacred cow: EBO.³¹ To be fair to General Mattis, his argument against EBO was not necessarily that it was ineffective, but rather that it could not be overly applied. Within the article, General Mattis conceded that "Elements of [EBO's] concepts have proven useful in addressing 'closed systems,' such as targeting, where effects can be measured per the U.S. Air Force's deliberate analysis and targeting methods."³²

Against Iraq's Kari Integrated Air Defense System (IADS), John Warden's approach was wildly effective. Kari IADS was tailor-made for a scientific approach to EBO. As Michael Gordon and General Bernard Trainor describe it in *The General's War*, "Like spokes of a wagon wheel, the Intercept Operations Centers ... led to regional Sector Operations Centers (SOC)."³³ In theory, if you break the right nodes (critical elements), you destroy the system. However, in the conflict's undercurrent, "the first 48 hours of the Gulf War showed beyond a doubt that electronic warfare technologies could keep US servicemen safe from enemy fire by denying the enemy the use of his command, control, communications and intelligence."³⁴ Much like German strategic bombing enhanced the effectiveness of its ground offensive at Guernica during the Spanish Civil War, Electronic Warfare (EW) and Information Operations (IO) enhanced the effectiveness of air strikes against Kari IADS. The IO and EW campaigns during the Gulf War

were effective precisely because they were synchronized with the targeted strikes against system-critical nodes. John Warden's COG theory was proven correct. Yet, hidden in that lesson was the complementary role that military operations played in the broader strategic narrative.

Prior to the Gulf War, National Security Directive (NSD) 45, clearly stated the purpose of the effort: "This authorization is for the following purposes: to effect the immediate, complete and unconditional withdrawal of all Iraqi forces from Kuwait; to restore Kuwait's legitimate government; to protect the lives of American citizens abroad; and to promote the security and stability of the Persian Gulf."³⁵ President Bush achieved coherence in his message. On August 8, 1990, with clear language to both the American people but also to Saddam Hussein, President Bush restated the above principles.³⁶ He achieved consistency and clarity. The military actions from there, including air strikes, supported this message, albeit from the operational level.

This conflict is critically important in the context today. The message's coherence, clarity, and consistency remained paramount. Consistency also applied to the actions taken by the US military in support of that message. The pamphlets below were dropped in support of military action and clearly restated the message for Iraqi troops in order to circumvent Iraqi propaganda (Figure 7).³⁷

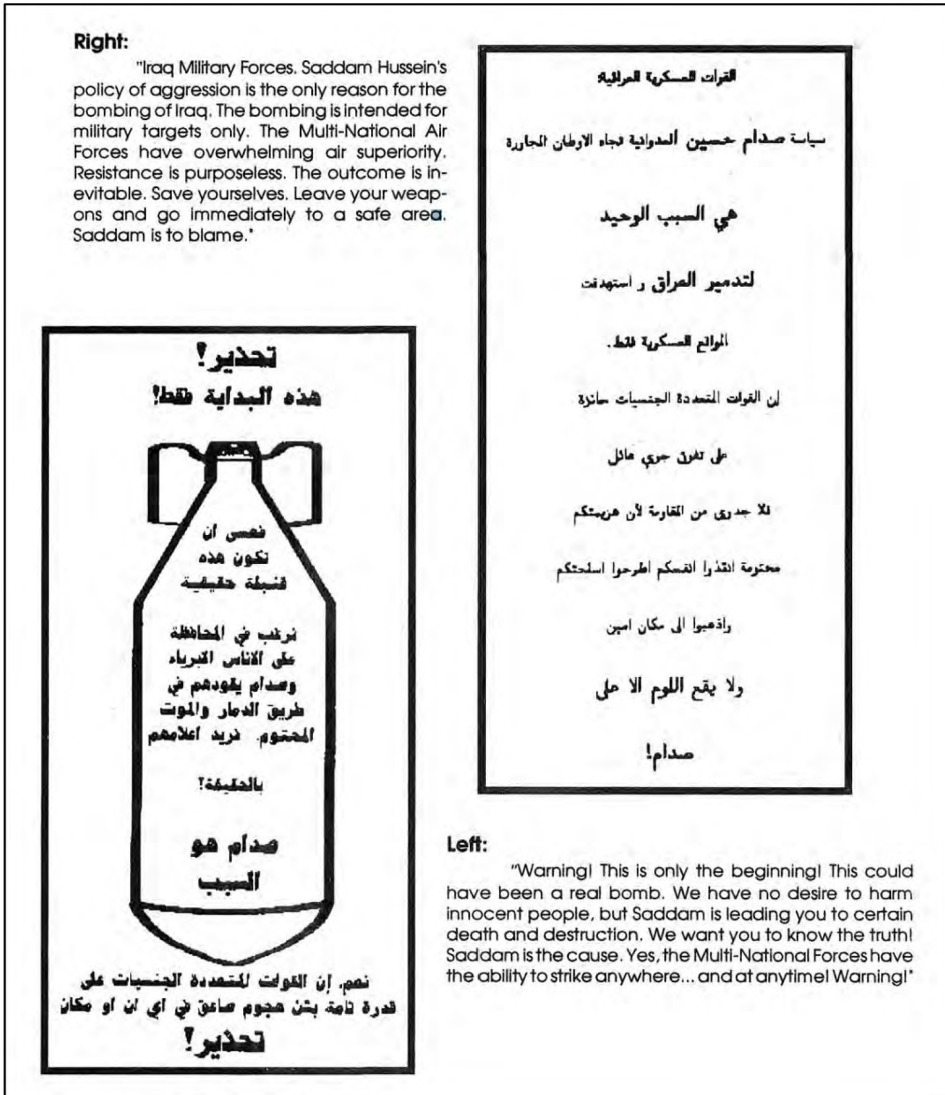


Figure 7. Leaflets from the Gulf War.³⁸

Military operations in the era of Great Power Competition must similarly support the strategic message by modernizing their approach to social media and other modern information dissemination mechanisms. The Internet Research Agency in Russia and China's recent surge on Twitter after the Hong Kong protests are evidence of the resurgent powers' understanding of this sphere.

For Russia and China, the Gulf War is a critical study and impacts both nations' military modernization efforts. In *Unrestricted Warfare*, Colonels Qiao Liang and Wang Xiangsui explore American military doctrine through the lens of Desert Storm, Somalia, and Bosnia in order to identify the future direction of warfare. Published in 1999, these military theorists identified the root strength of US military power as

not that of “individual systems” but the “systemization” or integration of the systems to afford information sharing and synchronization.³⁹

In summarizing Ronald R. Luman’s arguments regarding unrestricted warfare, the RAND Corporation suggests that “nation-states (and non-state) actors are now more likely to use any and all measures short of war available to achieve their strategic objectives.”⁴⁰ Colonels Qiao and Wang emphasize an emergent (in 1999) revolution, where weapons are less about “gunpowder” and more about “information.”⁴¹

Rather than “fight the fight with that fits ones weapons,” the Colonels argue the US “[built] the weapons to fight the fight,” potentially exposing the US to a fight they did not anticipate.⁴² By watching the US fight the same war across a decade with the same tactics and the same narrow view of war, they implied the need for a national security apparatus to fight a fight for which the US had not built its force. In that fight, the first blow may not be one of traditional military physical power, but rather “a single man-made stock-market crash, a single computer virus invasion, or a single rumor or scandal that results in a fluctuation in the enemy country’s exchange rates or exposes the leaders of an enemy country on the Internet.”⁴³ Today, China, Russia, Iran, and other actors practice the Colonels’ unrestricted warfare as gray zone tactics below the threshold of warfare.

By avoiding the strength and exploiting the weaknesses of military

IOP, China and Russia achieve policy objectives with little friction. Russia and China modernized its force to own the electromagnetic spectrum (EMS); accessing EMS is a precondition for communicating when projecting forces into theater.⁴⁴ They, and other actors, complemented these efforts by building advanced Anti-Access, Area Denial (A2AD) systems.⁴⁵ Further, Russia and Iran seek to follow China’s lead to close off their internet from the global community.⁴⁶ Thus, from an offensive approach, the typical US military transition to conflict is significantly more difficult than it was during Desert Storm. Military analysts like Colonels Qiao and Wang spent decades studying our approach and their policymakers listened. Ultimately, they developed a defensive strategy that exploits the greatest vulnerabilities in our way of war. In short, the US needs a different operational approach.

Message-centric operations are a potential methodological shift towards the US operational approach. It necessarily requires that, in the geopolitical marketplace, commanders re persistently having conversations with other decision-makers both through words and actions. Rather than an end-state, commanders instead present a clear, concise, and coherent strategic narrative that all subsequent actions must support. This operational approach more effectively aligns with Great Power Competition along the continuum where military engagement, security cooperation, deterrence, crisis response, and when necessary, limited contingency operations are the prima-

ry scope of military efforts. Rather than focusing on end-states, it asks several key questions. What do I mean to say? Who am I saying it to? Does the message say what I intend? How is it being received? Absent methodological testing, it is safe to hypothesize that this approach would more readily arm commanders with the ability to function in Great Power Competition to deal with the baseline question: was my message sent and was it received?

Consider the introduction and the narrative scuffle between the CPC and US national security leadership over COVID-19. In the context of unrestricted warfare, it is critical to the CPC to gain positioning within the global leadership race. Similarly, it is critical for the US to maintain its place as a global leader. The tit-for-tat messaging that took place was a subordinate argument to the broader fight. What was each nation's broader message? What other actions took place to complement the broader message? Who was the target audience for the messaging by the CPC or by US national security leadership?

This paper will not evaluate these questions pertaining to COVID-19. Instead, it shows how for military IOP in Great Power Competition, the message is, perhaps, more important than the ability to attrite adversarial forces to gain military advantage. China, Russia, and other actors studied the US military for decades and discovered vulnerabilities in its way of war. As a result, they have tailored their approach to geopolitical conflict by remaining be-

low the threshold of conflict through unrestricted warfare and gray zone tactics. Given the risk to forces upon transition to conflict, it is unlikely that there will be a transition from competition to conflict. As a result, it may be more advantageous for commanders to adopt a message-centric approach to operations when conducting military engagement, security cooperation, deterrence, crisis response, and, when necessary, limited contingency operations. If this is the approach that commanders take, the following sections suggest two evolutionary and one disruptive approach to the US operational approach, scoped specifically to the psychological domain. First, the paper discusses characteristics and implications of the psychological domain on narrative, and then provides three recommendations.

Message-Centric Operations and the Psychological Domain

In a previous article for the *Over-the-Horizon (OTH) Journal*, I laid out my perspective on the Air Force's approach to information warfare (IW) in the wake of the establishment of a new IW numbered Air Force. In it, I argue for doctrinal and organizational design elements to engage in a tactical information fight between two air component commanders.⁴⁷ Specifically, I employ a model of a command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) developed by the Research and Development (RAND) Corporation (See Figure 8.)

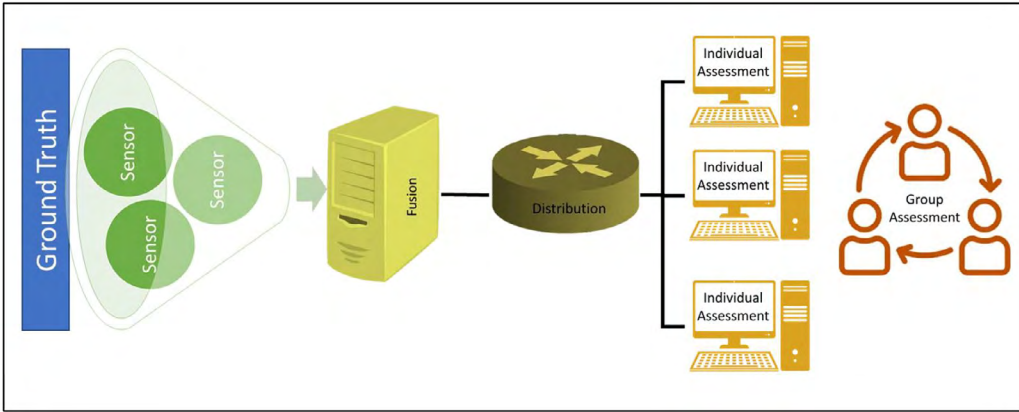


Figure 8. Author's depiction of RAND's C4ISR model.⁴⁸

I do not intend to rehash my arguments from that paper here. In this article, I leverage the same C4ISR model to focus on two specific steps: (1) individual assessment and (2) group assessment. RAND describes the steps as follows:

- Individual Assessment. Each user then attempts to interpret the [environment] he has received to achieve some level of realization of the battlespace.⁴⁹
- Group Assessment. The users then collaborate with each other in an attempt to improve their realization of ground truth in the battlespace. This report models the effectiveness of collaboration as a function of the skills of the users and the collaborative group as a whole but does not examine the [effects] of the network's communications tools on collaboration.⁵⁰

In order to effectively scope the conversation about message-centric warfare to the psychological domain, it is critical then to consider individual and group psychology. It is the span

across the individual's interpretation, the group's collaboration, and the decision-maker's action that the psychological domain occurs in two parts: first, cognitively, and second, behaviorally. The cognitive component is heavily dependent on attention, which shapes observation. Once an event gains attention, it is blurred by individual or group biases. These biases are derived from historical experience and shape reaction to the perception of the environment.

To affect an adversary's cognitive system, any message or action must first gain attention. In his book, *Consciousness and the Brain*, Stanislas Dehaene discusses the inner workings of the brain, specifically the relationship between unconscious and conscious thought. Through rigorous experimentation and research, Dehaene concludes that conscious perception is limited to a single focus, yet is triggered by an observable electrical pulse that broadcasts information across the brain.⁵¹ To summarize Dehaene: there is a trigger from unconscious observation to con-

scious observation, requiring whole brain analysis. In short, that trigger is attention. Attention, then, is a finite resource compared to the perpetual unconscious observation performed by the human observer. This resource is the primary avenue of approach for message-centric warfare. Peter Singer and Emerson Brooking, in *Like War*, detail the “key elements” that masters of social media warfare employ: “narra-

tive, emotion, authenticity, community, and inundation.”⁵² These elements are the essence of message-centric warfare. Mastering these elements to seize and retain attention were critical for ISIS recruiting and Russian disinformation campaigns during the 2016 US election. Table 1 shows how Singer and Brooking define the key elements and their key characteristics:

Table 1. The Characteristics of the Key Elements Social Media Warfare.⁵³

Element	Summarized Characteristics from <i>Like War</i>
<i>Narrative</i>	Enable individuals or large groups to turn complex environments into simple laws or principles for perceiving the world; consistent, simple, resonate with individual or group history; novelty by “subvert[ing]” a norm or expectation.
<i>Emotion</i>	“the stronger the emotions involved, the likelier something goes viral”; negative emotions spread faster and must be repeatedly evoked.
<i>Authenticity</i>	Establish and adhere to a brand; remain consistent even amid embarrassment or negative attention; use plain, common, relatable language
<i>Community</i>	People want to belong to something bigger than themselves; warmth; camaraderie; the idea matters less than connection; anti-isolation.
<i>Inundation</i>	Attention is a finite resource, it is possible to use up all the oxygen in the room; does not need to be direct action, may be indirect through proxies or unaffiliated advocates; data science and publicly available data may be exploited to more rapidly tailored attention-seeking messages.

The implication of Singer and Brooking’s elements is that a consistent, emotive narrative that authentically evokes the target audience’s shared cultural history is likely to outcompete other narratives in a finite attention environment. It may not necessarily shape behavior, but it can build a community around a shared perception of events that is reinforced by continual conditioning.

The relationship between consistency and conditioning in order to increase the probability of behavior is thoroughly explained by B.F. Skinner in *Science and Behavior*. At a basic level, a behavior is a reflex, which itself is response to a stimulus.⁵⁴ Conditioning simply replaces the stimulus to trigger a desired behavior.⁵⁵ Example stimuli include attention or approval, which

Skinner also calls reinforcers.⁵⁶ The dopamine hits and associated reinforcement that comes with social media activity is well-documented. These reinforcers can be negative (deprivation) or positive (reward).⁵⁷ Consistent stimuli therefore reinforce any narrative and associated perceptions of new events. Conversely, a consistent narrative may serve as its own stimulus when complemented by the attention or approval received via social media. This applies to the operational environment as well.

Consider unsafe maneuvers in the air and at sea by Russian forces against US and North Atlantic Treaty Organization (NATO) assets. In June 2019, Russia first conducted a dangerous maneuver against a US spy aircraft.⁵⁸ A day later, The US Navy's Seventh Fleet reported an unsafe maneuver by a Russian Destroyer against a US Cruiser.⁵⁹ Two months later in August, NATO criticized Russian aircraft for "act[ing] in an 'unsafe manner'" against "two Spanish F-18[s]."⁶⁰ These are not the only events over the last several years of similar Russian activities. The harassment appears banal outside of the associated fear and risk of miscalculation by the targeted aircrew or sailors. However, in the event that tensions escalate, NATO and US forces in Europe and the Middle East are also slowly being conditioned with seemingly benign stimuli that offer little reaction time if the expected behavior changes.

Referring back to RAND's C4ISR system, conditioning via persistent unsafe Russian maneuvers shapes the individual perception of operators

and intelligence analysts. Further, by conducting close encounters across multiple theaters, it reinforces the perception and desired behavior for the targeted group (US and NATO forces). Importantly, it does not guarantee that the same behavior will occur at a future moment. As Skinner explains, "a response ... cannot be predicted or controlled. We can only predict that similar responses will occur in the future."⁶¹ The probability that inaction by the pilot or sailor will occur increases with each reinforcing close encounter. However, conditioning does not guarantee that the stimulus will elicit the same response at the desired decisive moment.

Let's also evaluate Russia's narrative using Singer and Brooking's key elements. The close encounters are physical actions but support a consistent narrative: *foreign forces operating without permission in the vicinity of Russian interests will be placed into a high risk situation by skilled pilots and sailors.* The narrative resonates with President Putin's strategic narrative of a resurgent Novorossiia. Further, it evokes outrage within the US that gains attention. The lack of a tactical response by the US gives the appearance of a strong Russian military. Finally, it subverts the narrative that the US is untouchable by demonstrating the Russian military's aptitude. In summary, close encounters are successful because they complement the strategic narrative of the Putin administration, while staying below the threshold of conflict. Further, the conditioning is tactically effective, since it elicits the desired behavior while in-

creasing the probability that the behavior will occur at a decisive moment. In short, the events are strategic and tactical victories for Russian message-centric warfare within the psychological domain.

Recommendations

All is not lost. Yes, the US built a force based on the “war it wanted to fight.”⁶² However, there is opportunity to take two evolutionary and, potentially, one disruptive step to better posture the force for Great Power Competition. First, planners should invert the relationship between the JFC’s narrative and mission statement and adjust its operational objectives around that construct. Second, the JFC and his or her Joint Forces Air Component Commander (JFACC) should reallocate some analytic effort away from Warden-esque Target Systems Analysis (TSA) to relevant actor analysis and tailored message development. Finally, and most disruptively, the DOD should consider reshaping the American intelligence orientation away from secrecy and senior leaders toward transparency and the public interest.

The joint planning process has not fully internalized changes to the conflict continuum and remains focused on phases. Termination criteria remain the first requirement identified within operational design that “must be met before military operations can be concluded.”⁶³ The idea that military operations conclude is a fallacy. Later, in reference to the Commander’s Refined Planning Guidance, planners’

are authorized to operate without termination criteria but may have transitions instead.⁶⁴ Transition criteria likely works better for maneuvering across the continuum of conflict. However, joint doctrine remains focused on the idea of culmination. In the chapter on operational art and design, in the section on phasing, transitions are referred to as a linear concept that ultimately ends in the “[restoration of] the conditions necessary for long-term stability.”⁶⁵ There is no mention of a transition from conflict to competition or cooperation, let alone specifics related to transitioning to the associate military activities.

Much of JP 5-0, *Joint Planning*, is framed in establishing and completing tasks that result in the culmination of conflict and implicitly military activities post-conflict. This is clear within the planning guidance for the mission statement: “The joint force’s mission is the task or set of tasks, together with the purposes, that clearly indicates the action to be taken and the reason for doing so.”⁶⁶ To be clear, it is important to retain this approach in the event of crisis action planning. However, in Great Power Competition, where the message reigns supreme, it is more important to develop a strategic narrative that employs Singer and Brooking’s key elements. Consider the example of a mission statement in JP 5-0:

When directed, United States X Command, in concert with coalition partners, deters Country Y from coercing its neighbors and proliferating weapons of mass destruction in order to maintain security in the region.⁶⁷

The example mission statement, when evaluated as a narrative, is simple, coherent, and relatively consistent, especially in relation to national strategy and international laws and norms. However, it lacks emotive language, does not consider the shared cultural history of the coalition partners, and does not emphasize why the community matters. It lacks the ability to gain attention with its banal language. In short, the mission statement lacks the efficacy to be successful as strategic narrative. However, the critical takeaway is not that mission statements are flawed narratives and should be rewritten as strategic narratives. Mission statements and strategic narratives are different

and should be evaluated accordingly. However, a strategic narrative is more important during Great Power Competition. Therefore, any mission statements should be subsequently written to support the message. Today, the Joint Force plans in the opposite direction.

If the US military is to become message-centric and begin with a strategic narrative, it must consider new operational or tactical objectives to complement its existing toolkit within JP 3-0. In *Hostile Social Manipulation*, RAND studied the tactics and techniques employed by agents in social media and identified a set of nine common objectives. Figure 9 reframes RAND's objectives in the JFC's context:

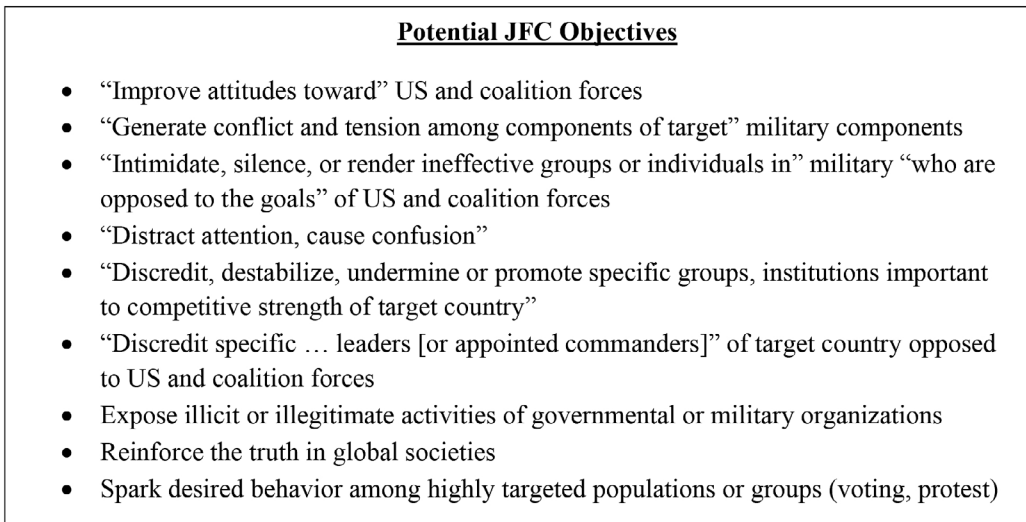


Figure 9. Derived from RAND's objectives of social manipulation campaigns.⁶⁸

In order to operate in support of the above objectives, some portion of the intelligence enterprise must reorient towards relevant actor analysis and tailored-message development. Referring back to then-General Mattis' argu-

ment against EBO: “It assumes a level of unachievable predictability [and] ... is too prescriptive and overengineered [by discounting] the human dimensions of war (for example, passion, imagination, willpower, and unpredictability).”⁶⁹ Con-

versely, General Mattis acknowledged the need to retain the ability to “[create] unity of action in employing nodal analysis as it relates to targeting.”⁷⁰ In short, do not force the same process on all scenarios. So, while the Warden approach to analysis against target systems like IADS must be retained, the Joint Force must consider complex systems like relevant actors.

If the primary weapon in message-centric warfare is the narrative, then intelligence analysts must partner with cultural subject matter experts, behavioral scientists, and public affairs specialists to understand the way the group’s attention will be earned, how the message will be received, and how it may or may not reinforce the desired behavior. Relevant actor analysis should consider trust relationships between individuals and within groups. How often do individuals communicate within the system? What are the means of communication? As early as 1995, George Stein recognized the value of emergent mass media technologies. He argued, “A major new factor in information war is the worldwide infosphere of television and broadcast news.”⁷¹ Today, a majority of person-to-person engagements, whether financial or social, occur through Weibo in China. Culturally, what are the relevant actor’s norms? In order to expose a leader’s illicit or illegitimate activities, it is critical to understand the way the community perceives those activities in the first place.

These and other questions must be answered by a team performing relevant actor analysis prior to considering any capabilities to achieve the op-

erational objective. Analysts must also approach the Joint Integrated Prioritized Target List inversely to the current model. Even in large-scale combat, due to the long lead-time to develop tailored messages, computer exploits, or waveforms, these capabilities should be considered prior to kinetic capabilities. However, in the case of competition, the tailored message for prioritized relevant actors should be considered before any potential actions are planned.

Once the analysis is complete, electronic warfare, information operations, or cyberspace operations offer potential means to shape the information environment favorably for the intended strategic narrative. Again, as Stein argued, “Information warfare at the strategic level is the ‘battle off the battlefield’ to shape the political context of the conflict.”⁷² This remains the case across the continuum of conflict today. To support the JFC’s strategic narrative, personnel must orient towards these relevant actors in coordination with Defense Attaché Offices to develop an operational design that ultimately supports the JFC’s message.

Finally, to truly approach the authenticity required for a strong strategic narrative, it is time for the DOD to consider an alternative approach to intelligence: one that focuses on transparency and public interest over secrecy and senior leaders. In late January 2020, General John Hyten, Vice Chairman of the Joint Chiefs of Staff, blasted the execution of the classification process within the Pentagon, lamenting rampant over-classification to the point of organizational harm.⁷³ In Decem-

ber 2019, Air Force Secretary Barbara Barrett testified to Congress regarding space programs that “You would have to be careful about what we declassify, but there is much more classified than what needs to be”; Representative Mike Rogers concurred.⁷⁴ Representative Rogers, Secretary Barrett, and General Hyten are leading in the right direction.

Intelligence classifications are predicated on protecting the sources and methods by which the information was gathered. To be clear, the US should not breach this contract with the intelligence community. Rather, a comparative study should be done to evaluate whether the general public can reasonably assume the technical means by which collection operations are executed. For example, if a private company possesses the capacity to provide an information-gathering service to the public, then it can be reasonably assumed that the government possesses similar capability or technical means. When the appropriate threshold is met and the information can be declassified, the DOD should take the next step and provide an open source repository for trusted media outlets. By focusing on declassifying as many sources of information as possible while not detracting from national security, the US government can employ transparency as a means to increase its authenticity while placing the general public closer to the ground truth.

To support the public further, the Joint Force can reorient many of its analysts towards a Bellingcat-style reporting, leveraging publicly available information. Bellingcat first burst onto

the scene in mid-2014 with its detailed analysis of public information, characterizing the downing of Malaysian Airlines Flight 17 by the Russian government. As Russia sought to deny the accusations, the Bellingcat team published report after report that ultimately exposed the truth.⁷⁵ Amid tit-for-tat exchanges between the Russian and US government that failed to come to a conclusion, the open source investigative team provided an alternative independent analysis backed by multiple sources for public consumption. The strategic narrative battle is not between senior leaders, but rather between multiple relevant actors with different cultural histories. Increasing transparency and focusing on delivering the truth to the public in coordination with like-minded liberal democracies would enhance the JFCs’ strategic narratives by increasing authenticity and discrediting our competitors by exposing their illicit gray zone tactics.

Conclusion

The United States does not currently possess the force or processes to fight in the psychological domain and deal with the primary tactics of its competitors in Great Power Competition. The American legacy strategy under a unipolar world to maintain the status quo as the global hegemon is untenable. Great Power Competition has three key characteristics: (1) the emergence of alternatives to the current world order creates a geopolitical marketplace for rational actors’ choice; (2) the comparative na-

tional power between Great Powers increases the global and national risk of large scale combat beyond the willingness of decision-makers to transition from competition to conflict; and (3) the preceding factors necessitate the employment of gray zone tactics for competitors to achieve national policy objectives without risking conflict.

The Joint Force must modify its operational approach in accordance with these characteristics. Great Powers studied the United States' way of war and developed a strategy and tactics that avoid US strengths and exploit its vulnerabilities. As a result, US operations across the continuum of conflict, specifically military engagement, security cooperation, deterrence, crisis response, and limited contingency operations must shift from a systems-centric approach that is effective on closed-systems like an Integrated Air Defense System. Instead, the Joint Force should adopt a message-centric approach. The strategic narrative should drive all subsequent actions and adhere to Singer's and Brookings's principles of social media warfare: *narrative, emotion, authenticity, community, and inundation*. At the tactical level, commanders should be cognizant of physical actions that simultaneously support a strategic narrative but prepare the psychological

domain for operations. For example, conditioning operations to shape the desired behavior prior to conflict.

The Joint Force can take two evolutionary and, potentially, one disruptive step toward Great Power Competition. First, it can adjust its current planning process by constructing a strategic narrative and designing the mission statement and its associated objectives to support the message. Among those objectives, joint planners should consider some identified by the RAND Corporation in its *Hostile Social Manipulation* study. Joint force narratives should be tailored for relevant actors. As a result, the Joint Force Commander requires personnel dedicated to relevant actor analysis and tailored message development. Finally, the Joint Force should critically evaluate its current intelligence sources and methods to determine what can be declassified to ultimately increase the amount of publicly available information to trusted media sources. By combining open source analysis of publicly available information supported by newly declassified sources and methods, the US would be better positioned to shape the global narrative via authenticity and transparency to counter the illicit gray zone warfare employed by its competitors.

Jeremiah Deibler holds a MA in Diplomacy from Norwich University and is currently completing his MA in Military Operational Art and Science at Air University within the Multidomain Operational Strategist concentration. He is an Intelligence Officer in the United States Air Force. Over his 11 years of service, Jeremiah developed

experience in national and theater ISR operations in support of ground, air, space, and cyberspace operations to include a deployment to Afghanistan and Qatar. After completing the Intelligence Weapons Instructor Course in June 2016, he served as the Chief of Weapons and Tactics for ISR for and from Cyberspace. Upon graduation from Air Command and Staff College in June 2020, Jeremiah will be assigned to the 460th Space Wing as the Senior Intelligence Officer.

Jeremiah.Deibler@gmail.com

Notes

- 1 Lily Kuo, "American Coronavirus: China Pushes Propaganda Casting Doubt on Virus Origin," *The Guardian*, March 12, 2020, <https://www.theguardian.com/world/2020/mar/12/conspiracy-theory-that-coronavirus-originated-in-us-gaining-traction-in-china>.
- 2 Ibid.
- 3 @zlj517. March 12, 2020. "CDC was caught on the spot. When did patient zero begin in US? How many people are infected? What are the names of the hospitals? It might be US army who brought the epidemic to Wuhan. Be transparent! Make public your data! US owe us an explanation!" [Twitter post]. <https://twitter.com/zlj517/status/1238111898828066823?s=20>.
- 4 @jabinbotsford. March 19, 2020. "Close up of @realDonaldTrump notes is seen where he crossed out "Corona" and replaced it with "Chinese" Virus as he speaks with his coronavirus task force today at the White House. #trump #trumpnotes." [Twitter post]. <https://twitter.com/jabinbotsford/status/1240701140141879298?s=20>.
- 5 Ibid.
- 6 Joint Publication 3-0, Joint Operations, October 22, 2018, VI-6.
- 7 Francis Fukuyama, "The End of History?" *The National Interest* 16 (Summer 1989): 3.
- 8 Louis Menand, "Francis Fukuyama Postpones The End of History", *The New Yorker*, August 27, 2018, <https://www.newyorker.com/magazine/2018/09/03/francis-fukuyama-postpones-the-end-of-history>.
- 9 Elena Moore, "Timeline: How the U.S. Came To Strike And Kill A Top Iranian General," *National Public Radio*, January 4, 2020, <https://www.npr.org/2020/01/04/793364307/timeline-how-the-u-s-came-to-strike-and-kill-a-top-iranian-general>.
- 10 Alan Yuhas and Raya Jalabi, "Ukraine Crisis: Why Russia Sees Crimea as its Naval

Stronghold,” *The Guardian*, March 7, 2014, <https://www.theguardian.com/world/2014/mar/07/ukraine-russia-crimea-naval-base-tatars-explainer>.

- 11 Andrew Chatzky and James McBride, “China’s Massive Belt and Road Initiative,” Council on Foreign Relations, January 28, 2020, <https://www.cfr.org/backgrounders/chinas-massive-belt-and-road-initiative>.
- 12 Office of the Secretary of Defense, *National Defense Strategy of the United States of America* (2018), 2.
- 13 Andreo Calonzo, “Duterte Wants Stronger Defense Ties with Russia, Criticizes US,” *Bloomberg News*, October 4, 2019, <https://www.bloomberg.com/news/articles/2019-10-04/duterte-wants-stronger-defense-ties-with-russia-criticizes-u-s>.
- 14 Xi Jinping, *The Governance of China II* (Beijing: Foreign Language Press, 2017), 42.
- 15 *Ibid.*
- 16 Philip Citowicki, “China’s Reach Tests the Pacific’s Fragile Island Democracies,” *Foreign Policy*, January 7, 2020, <https://foreignpolicy.com/2020/01/07/chinas-reach-tests-the-pacifics-fragile-island-democracies/>.
- 17 Tom Hanson, “Australia and China: A View from the US,” *Australian Strategic Policy Institute: The Strategist*, October 28, 2019, <https://www.aspistrategist.org.au/australia-and-china-a-view-from-the-us/>.
- 18 Amanda Donnelly, “Finding a Method for the Madness: A Comparative Analysis of Strategic Design Methodologies,” *School of Advanced Air and Space Studies, Air University*, June 2017, 58–60, <https://pdfs.semanticscholar.org/d482/99e559b8cdded6615a68958f639e4e7441f10.pdf>.
- 19 Office of the Secretary of Defense, *National Defense Strategy*.
- 20 United States House of Representatives, “Exposing Russia’s Effort to Sow Discord Online: The Internet Research Agency and Advertisements,” *Permanent Select Committee on Intelligence*, <https://intelligence.house.gov/social-media-content/>.
- 21 Vince Beiser, “Aboard the Giant Sand-Sucking Ships that China Uses to Reshape The World,” *MIT Technology Review*, December 19, 2018, <https://www.technologyreview.com/s/612597/aboard-the-giant-sand-sucking-ships-that-china-uses-to-reshape-the-world/>.
- 22 Center for Strategic and International Studies, “Still Under Pressure: Manila Versus The Militia,” *Asia Maritime Transparency Initiative*, April 16, 2019, <https://amti.csis.org/still-under-pressure-manila-versus-the-militia/>.
- 23 Beiser, “Aboard the Giant Sand-Sucking Ships.”
- 24 Christopher Andrew and Vasili Mitrokhin, *The World was Going our Way: The KGB and the Battle for the Third World* (New York: Basic Books, 2005), 1.

- 25 The Wilson Center, "Timeline: the Rise, Spread, and Fall of the Islamic State," October 28, 2019, <https://www.wilsoncenter.org/article/timeline-the-rise-spread-and-fall-the-islamic-state>.
- 26 The White House, "National Security Council," March 2, 2020, <https://www.whitehouse.gov/nsc/>.
- 27 Office of the President of the United States, National Security Strategy of the United States of America, December 2017, 33.
- 28 *Ibid.*, 34.
- 29 *Ibid.*
- 30 James Mattis and Joseph Dunford, "Briefing by Secretary Mattis on US Strikes in Syria," United States Department of Defense, April 13, 2018.
- 31 James N. Mattis, "USJFCOM: Commander's Guidance for Effects-Based Operations," Joint Forces Quarterly 51 (4th Quarter 2008): 105.
- 32 *Ibid.*, 106.
- 33 Michael R. Gordon and General Bernard E. Trainor, *The General's War* (New York: Little, Brown and Company: Hachette Book Group, 1995), 107.
- 34 Chris Morris, Janet Morris, and Thomas Baines, "Weapons of Mass Protection: Non-lethality, Information Warfare, and Airpower in the Age of Chaos," *Airpower Journal* (Spring 1995): 24.
- 35 George H.W. Bush, National Security Directive 54, January 15, 1991.
- 36 George H.W. Bush, Address on Iraq's Invasion of Kuwait – Operation Desert Shield, August 8, 1990, <https://www.americanrhetoric.com/speeches/georgehw bushkuwaitinvasion.htm>.
- 37 Leaflets of the Persian Gulf War (Fort Bragg, NC: 4th Psychological Operations Group [Airborne], 1991), <https://www.psywar.org/psywar/reproductions/LeafletsPersianGulfWar.pdf>, 2.
- 38 *Ibid.*
- 39 Qiao Liang and Wang Xiangsui, *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing House, 1999), 11–12.
- 40 Ben Connable, Jason H. Campbell, and Dan Madden, "Stretching and Exploiting Thresholds for High-Order War," RAND Corporation (2016), https://www.rand.org/content/dam/rand/pubs/research_reports/RR1000/RR1003/RAND_RR1003.pdf, 7.
- 41 Qiao and Wang, *Unrestricted Warfare*, 20.
- 42 *Ibid.*, 33.
- 43 *Ibid.*, 25.

- 44 Mark Powerleau, "Here's How Other Nations Measure up in Electronic Warfare," C4ISRNet, March 14, 2019, <https://www.c4isrnet.com/electronic-warfare/2019/03/14/heres-how-other-nations-measure-up-in-electronic-warfare/>.
- 45 Sebastien Roblin, "A2/AD: The Phrase that Terrifies the U.S. Military (And China and Russia Love It)," *The National Interest*, April 9, 2019, <https://nationalinterest.org/blog/buzz/a2ad-phrase-terrifies-us-military-and-china-and-russia-love-it-51597>.
- 46 Justin Sherman, "Russia and Iran Plan to Fundamentally Isolate the Internet," *Wired*, June 6, 2019, <https://www.wired.com/story/russia-and-iran-plan-to-fundamentally-isolate-the-internet/>.
- 47 Jeremiah Deibler, "Winning Wars of Cognition: Posturing the Air Force for the Tactical Information Fight," *Over the Horizon Journal*, February 10, 2020, <https://othjournal.com/2020/02/10/winning-wars-of-cognition-posturing-the-air-force-for-the-tactical-information-fight/>.
- 48 *Ibid.*
- 49 Walter Perry, David Signori, and John Boon, "Exploring Information Superiority: A Methodology for Measuring the Quality of information and Its Impact on Shared Awareness," RAND Corporation (2004), 10, https://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR1467.pdf.
- 50 *Ibid.*
- 51 Stanislas Dehaene, *Consciousness and the Brain: Deciphering How the Brain Codes our Thoughts* (New York: Penguin Books, 2014), 141–75.
- 52 Peter Singer and Emerson Brooking, *LikeWar: The Weaponization of Social Media* (New York: Houghton Mifflin Harcourt Publishing Company, 2019), 154.
- 53 *Ibid.*, 154–80.
- 54 B.F. Skinner, *Science and Behavior* (New York: The Free Press, 1953), 47.
- 55 *Ibid.*, 53.
- 56 *Ibid.*, 77–78.
- 57 *Ibid.*, 82–83.
- 58 "Russia Intercepts U.S. Spy Plane in 'Dangerous' Maneuver Off Syrian Coast," *Haaretz*, June 6, 2019, <https://www.haaretz.com/middle-east-news/russia-intercepts-u-s-spy-plane-in-dangerous-maneuver-off-syria-coast-1.7333886>.
- 59 Commander 7th Fleet Public Affairs, "Russian Navy Ship Maneuvers Unsafe, Unprofessional," US 7th Fleet, June 7, 2019, <https://www.c7f.navy.mil/Media/News/Display/Article/1869114/russian-navy-ship-maneuvers-unsafe-unprofessional/>.
- 60 Ryan Browne, "NATO Accuses Russian Jet of Conducting 'Unsafe' Maneuver During

Aerial Encounter,” CNN, August 15, 2019, <https://www.cnn.com/2019/08/14/politics/nato-russia-jets-unsafe/index.html>.”

61 BF Skinner, *Science and Behavior*, 64-65.

62 Qiao and Wang, 33.

63 Joint Publication 5-0, *Joint Operations*, June 16, 2017, IV-19.

64 *Ibid.*, V-19.

65 *Ibid.*, IV-41–IV-42.

66 *Ibid.*, V-4.

67 *Ibid.*, V-4.

68 Michael J. Mazarr et al., “Hostile Social Manipulation: Present Realities and Emerging Trends,” RAND Corporation (2019), 19, https://www.rand.org/pubs/research_reports/RR2713.html.

69 Mattis, “USJFCOM,” 106.

70 *Ibid.*, 107.

71 George Stein, “Information Warfare,” *Airpower Journal* (Spring 1995): 33.

72 *Ibid.*

73 Aaron Mehta, “The Military’s 2nd-Highest-Ranking Officer Wants to Change the Pentagon’s ‘Unbelievably Ridiculous’ Classification Process,” *Business Insider*, January 30, 2020, <https://www.businessinsider.com/hyten-wants-to-change-unbelievably-ridiculous-pentagon-classification-2020-1>.

74 Nathan Strout, “Barrett, Rogers Consider Declassifying Secretive Space Programs,” *DefenseNews*, December 7, 2019, <https://www.defensenews.com/smr/reagan-defense-forum/2019/12/08/barrett-rogers-plan-to-declassify-black-space-programs/>.

75 Bellingcat Investigative Team, “Posts Tagged: MH17,” *Bellingcat*, March 26, 2020, <https://www.bellingcat.com/tag/mh17/>.