



Strategic Multi-Layer Assessment (SMA)

Panel Discussion on the Gray Zone

in Support of USSOCOM

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This report represents the views and opinions of the participants. The report does not represent official USG policy or position.

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Overview

At the request of United States Special Operations Command (USSOCOM), the Strategic Multi-Layer Assessment (SMA) team has initiated an effort, titled *Gray Zone¹ Conflicts—Challenges and Opportunities—A Multi-Agency Deep Dive Assessment*, focused on assessing gray zone conflict. The overall objective of this SMA gray zone effort is to determine how the United States Government (USG) can identify, diagnose, and assess indirect strategies, as well as develop response options against, associated types of gray zone conflicts. In support of the *Gray Zone Conflicts—Challenges and Opportunities—A Multi-Agency Deep Dive Assessment* effort, the SMA team has brought together participants from the Commands, Joint Staff, OSD/AT&L, services, USG departments, IC, UK, OSD Minerva Program, CTTSO, national labs, universities, and industry to form a multi-disciplinary coalition. This panel discussion brought together multiple elements of that SMA coalition to present some of the work and key insights that have been produced in support of USSOCOM.

Panel members:

- CAPT Phil Kapusta (USSOCOM)
- Lt Gen (ret) Dr. Bob Elder (GMU)
- Mr. Mark Hoffman (Lockheed Martin Advanced Technology Laboratories)
- Mr. Mark Sisson (USSTRATCOM)
- Dr. John Stevenson (NSI)
- Dr. Nick Wright (University of Birmingham)
- Dr. Larry Kuznar (NSI)
- Dr. Randy Kluver (Texas A&M)
- Mr. Devin Ellis (University of Maryland ICONS)
- Dr. Robert Toguchi (USASOC)
- Dr. Belinda Bragg (NSI)
- Mr. Brad Morrison (University of British Columbia)

The panel discussion was broken into three sections, with each section having a specific area of focus to guide discussion.

- Types of gray zone indicators and warnings (I&W)
- Sources of gray zone indicators and warnings (I&W) and courses of action (COAs) available in the gray zone
- Implementation and required capabilities

Introduction (CAPT Phil Kapusta, USSOCOM)

The traditional American way of thinking about war and conflict resembles a game of football—there are two sides competing against each other, and one side distinctively wins while the other side distinctively loses. However, in reality, war and conflict does not always end up working out as smoothly and clearly-bound as a football game. At present, this point is seemingly more evident than ever—in our current operational space, it even feels as though Daesh has been playing an entirely different game. Thus, we need to start thinking about war and conflict with a new paradigm because our traditional way of thinking about war simply does not work for our current fight against Daesh.

¹ See Appendix A for the SMA team's definition of the gray zone.

Types of Gray Zone Indicators and Warnings (I&W)

Lt Gen (ret) Dr. Bob Elder (GMU)

As part of the SMA gray zone effort, Lt Gen (ret) Dr. Bob Elder and his team at GMU collaborated closely with two planning teams (the 217th Air Operations Group and the 608th Air Operations Center) as part of an endeavor to identify key gray zone indicators and warnings (I&W). The GMU team's collaboration with the planning teams also helped in identifying potential disturbances to stability, and appropriate course of action (COA) options for managing the resulting crises (e.g., reassuring partners, deterring competitors, and controlling escalation). These insights were then incorporated into GMU's timed influence net (TIN) models, which were used to identify I&W of escalatory competition during both periods of steady state competition and periods following a stability disturbance. One result from the TIN modelling effort stood out as particularly relevant: if a gray zone competitor has strategic or regional interests that conflict with those of the US, it is a clear source of tension, and thus a threat to stability

Discussion

Lt Gen (ret) Dr. Elder posed the following questions regarding gray zone I&W to panelists for discussion.

- *What "red" courses of action are operators trying to prevent or mitigate?*
- *What types of disturbances to the status quo would either threaten a gray zone actor or present them with an opportunity?*
- *What actions on the part of a regional actor (affecting behavioral motivations) might force a gray zone actor to respond in a way that is adverse to US interests?*
- *What types of activities might indicate a gray zone actor's desire to escalate a situation rather than work to restore stability?*

Dr. Kluver explained that his team at Texas A&M approaches uncovering I&W by monitoring and analyzing media narratives. Most notably, Dr. Kluver's team recently led an effort that focused on closely analyzing Russian and Chinese media to monitor for any potential shifts in geopolitical narratives.

Dr. Kuznar pointed out that NSI's discourse analyses use a similar methodology to that of the Texas A&M team, but the discourse analyses instead focus on analyzing leadership discourse. In its analysis of leadership discourse, NSI establishes a baseline for a specific leader's use of language, and then monitors for any linguistic shifts or variations from that baseline.

Shifting the discussion a bit, Mr. Ellis stated that there are ultimately two layers of things we want to prevent when operating in the gray zone: 1) the strategic objective of the adversary and 2) any actor attempts to slowly alter and/or erode international rules and norms.

Dr. Stevenson stressed that a central US objective in the gray zone is preventing circumstances from escalating beyond the level of ordinary competition; thus, the key types of gray zone I&W we need to look out for include attribution distancing, norms contention, and vulnerabilities to gray operations.

Dr. Wright argued that there are five multiples in the gray zone—1) multiple levels, 2) multiple domains and instruments of power, 3) multiple time frames, 4) multiple audiences, and 5) multiple interpretations—and we must remain aware of and monitor all of them.

Dr. Bragg contended that when thinking about gray zone I&W, it is important to remember that we are not necessarily talking specifically about tangible things—rather, we are talking more about conceptual things. This makes these kinds of problems quite complicated. Expounding further, Dr. Bragg emphasized that when thinking about things like gray zone I&W, it is essential to consider actors' domestic motivations and worldviews because, ultimately, if everyone is trying to play a different game, then nothing will work.

Dr. Toguchi emphasized the utility in incorporating forensics into analyses of past gray zone activity because doing so will help in identifying I&W that might have originally been missed.

Expanding on Dr. Toguchi's comment, Mr. Morrison noted that one way to forecast something is to first look back and retroactively identify the dates when events occurred, and then second look to see if any patterns can be identified in the time before those events.

Mr. Sisson agreed that there is value in gray zone I&W; however, he cautioned against becoming over reliant on I&W because he contended that we tend to do poorly when it comes to prediction. Mr. Sisson stressed that we live in a non-linear world with discontinuities, and since actors will continue to take advantage of those discontinuities, accurate prediction will remain a difficult feat.

Dr. Stevenson emphasized that gray zone challenges are, at base, fundamentally about communication. In the gray zone, actors intentionally self-limit to escalate disputes beyond ordinary competition while trying to keep them below militarized disputes. This is a delicate dance. Part of this dance is a consideration of how far to push the boundaries and how much to avoid claiming credit for to limit escalation dynamics. The other part of this dance is our responses. In a scenario where a gray zone aggressor initiates some sort of aggressive gray action against us, one response option could be for us to push back with some sort of aggression of our own. However, that is a choice. We can also take the binding power of norms more seriously and invite the competitor into a conversation (that, an active political process) about the norms and what counts as norms violations. Unfortunately, Dr. Stevenson contended, we do not seem to go with the conversation option enough; and, moreover, even if we did want to take the conversation route, it is not clear that the proper institutional mechanisms are even in place to do so. For example, where would Russia go if it wanted to have a conversation about changing norms? Ultimately, Dr. Stevenson stressed that communication is a huge component of the gray zone and, as such, we need to recognize that we do not always have to instinctually react to a contestation, because maybe we could try active political processes of engagement instead.

Mr. Ellis noted that a universal list of gray zone I&W would have little utility because not all gray zone actors operate in the same manner.

Dr. Bragg agreed with Mr. Ellis, and underscored the need to assess gray zone activity on two levels: 1) is the actor pursuing a gray zone strategy? and 2) what is the actual, specific gray zone activity that occurred? I&W could be very different depending on what level of assessment you are focusing on.

Dr. Kuznar noted that the issue of intent comes up repeatedly when thinking about the gray zone. Our adversaries are increasingly gaining new and improved ways to challenge us, so understanding the intent component is essential.

Lt (Gen) ret Dr. Elder agreed with Dr. Kuznar, and noted that in the work he and the GMU did in collaboration with the two planning teams, the planning teams found it helpful to assume the competitor's intent was "dangerous" when developing potential responses or shaping actions

Dr. Bragg expanded on the discussion about intent, noting that because gray zone actions are typically ambiguous and sometimes fall right along the thresholds of being gray or not gray, there is a clear risk of escalation if one side miscalculates in its assessment of the other's intent.

Sources of Gray Zone Indicators and Warnings (I&W) and Courses of Action (COAs) Available in the Gray Zone

Mr. Mark Hoffman (Lockheed Martin Advanced Technology Laboratories)

In an effort to better understand sources of gray zone I&W, Mr. Mark Hoffman and his team at the Lockheed Martin Advanced Technology Laboratories have functioned in a bridging role between the OSD Defense Science Board Summer Study on Constrained Military Operations (Gray Zones) and the SMA gray zone effort. Moreover, the Lockheed Martin Advanced Technology Laboratories team has also conducted work focused on: 1) collaborating the GMU to explore the automated extraction of gray zone activity events from news sources and 2) collaborating with UBC to explore the coding of leadership speeches for gray zone activities using three different approaches for comparison. The team's gray zone event history is currently available upon request for R&D purposes.

In support of these efforts, the Lockheed Martin Advanced Technology Laboratories team has endeavored to identify a set of potential gray zone activities over the past 20 years. Collecting this data is the first phase in what could be a valuable process for identifying gray zone I&W. A dataset of potential gray zone activities can be used to establish a baseline set of behaviors, which can then be used to identify potential anomalies (i.e., trends, discontinuities, patterns, etc.) from the baseline that might surface. By correlating these anomalies with known gray zone campaigns, one might be able to identify leading I&W for various gray zone campaign.

The Lockheed Martin Advanced Technology Laboratories team has uncovered three key relevant lessons learned from these endeavors.

- Intent is important for the gray zone. Event data such as W-ICEWS, GDELT, and Phoenix primarily express discrete facts without analysis as to their intent.
- Gray zone activities may be indirect/deceptive. Event data captures direct events, whereas the use of indirect (or proxy) actors is concealed.
- Gray zone activities can be more specific and complex than the CAMEO codes used in many event data sets.

Dr. Randy Kluver (Texas A&M)

To discover insights into I&W, Dr. Randy Kluver and his team at Texas A&M focus on media analysis. These media analyses pull data from a variety of media sources, all of which are triangulated with relation to the relevant government entity.

News media reflects worldviews. News media does not signal intent, and rarely reflects policy. However, analyzing news media does provide some predictive powers, because the media space is where policy is

typically explained, rationalized, etc. In its media analyses, the Texas A&M team pulls large amounts of data on both system level narratives and issue narratives.

The Texas A&M team has recently conducted media analyses focused on Russia and China. The efforts have produced many interesting findings, but a few stand out as particularly relevant.

- China generally likes the current international system and world order.
- The overwhelming narrative for China is the Chinese Dream.
- Russia does not like the current international system and world order.
- Chinese media puts overwhelming emphasis on viewing the US as a peer and ally.

Dr. Larry Kuznar (NSI)

To discover insights into I&W, Dr. Larry Kuznar and his team at NSI focus on discourse analysis. Language gives us a window into ideology and worldview. When using language, people are generally pretty transparent, even if/when they are trying not to be. Thus, we can learn a lot from language, and should continue to listen.

Dr. Kuznar and his team have recently conducted discourse analyses focused on China and Russia. The Chinese discourse analysis looked at Chinese leader language and Chinese gray zone activity over six-month intervals, and found a strong correlation between spikes in the use of certain linguistic indicators and spikes in concentrated gray zone activity. The Russian discourse analysis identified an interesting “blip and brag” linguistic pattern in Putin’s rhetoric. Several months in advance of a gray zone incident, Putin would increase his use of certain rhetorical themes (the “blip”). Then, Putin would largely remove all of these themes from his language for the period leading up to the gray zone activity. Once the gray zone activity occurred, Putin would once again increase his use of these rhetorical themes (the “brag”). These are just two examples of the types of insights that can be uncovered from analyzing language, but they illustrate that discourse analysis can provide unique insights into important I&W.

Mr. Brad Morrison (University of British Columbia)

To discover insights into I&W, Mr. Brad Morrison and his team at the University of British Columbia (UBC) focus on thematic content analysis, which accounts for interpretations of meaning. One of the central measures of thematic content analysis is integrative complexity (IC). IC is a measure of cognitive complexity and the structure of thinking.

Analyzing IC can yield interesting insights, particularly in relation to I&W. High cognitive complexity tends to be associated with flexibility, and taking into account other people’s decisions; while low cognitive complexity tends to be associated with low flexibility, and quicker decisions. Notably, complexity tends to decrease in leaders before black and white decisions. In addition to measuring IC, the UBC team has also developed measures for motive imagery, which scores things like achievement imagery, affiliation imagery, and power imagery.

The UBC team has recently conducted thematic content analyses focused on Russia leaders. The analyses found that Putin tends to have high IC and high achievement imagery, and security is his top value. The analyses also looked at Sergey Shoygu, Russia’s Minister of Defense, and found that his only value is security. Interestingly, during the Crimea decision, Shoygu’s IC dropped, while Putin’s stayed steady. This illustrates that Putin might be getting more involved in decision making—Putin is cool and collected, and Shoygu is more stern in his implementation of the mission.

Mr. Devin Ellis (University of Maryland ICONS)

To discover insights into I&W, Mr. Devin Ellis and his team at the University of Maryland ICONS focus on war gaming efforts. War gaming is valuable because it provides an opportunity to practice and prepare for low probability events that have high costs. However, war gaming efforts do face a significant challenge in the sense that it is sometimes difficult to take what is observed during a war game and then have full confidence that what happened in the game will be true in real life. Ultimately, war gaming efforts provide a unique opportunity to play out and prepare for a wide spectrum of events and consequences, but the methodological challenges that go hand-in-hand with war gaming still remain.

Mr. Ellis noted that the difficulty of doing gray zone I&W was really pointed out in the ICONS gaming efforts, because if you show up to a two day gray zone exercise where you know there is a Russia team, then you can be pretty much 100% certain that they are conducting gray zone activities at some point during that exercise. However, even under such conditions of certainty, blue players found it intensely difficult to sort the signal from the noise when it came to identifying the real moves being made against them.

Discussion

Dr. Stevenson asserted that developing COA options in the gray zone should begin with assessing two fundamental questions: 1) what options do we have available for operating in the gray zone? and 2) how can we ensure that we are taking a whole of government approach?

Mr. Sisson added that escalation control is an important aspect of gray zone planning and operation. Thinking about deterrence in a gray zone framework requires considering both the ability to punish and the risk of escalation. USSTRATCOM only has a certain lane in which it can operate, which can be frustrating when dealing with gray zone problems that require a whole-of-government approach.

In response to Mr. Sisson's point, Dr. Stevenson noted that NSI has created a Directory of Discoverable USG Information Assets (US-DiGIA). NSI's US-DiGIA catalogues the different entities of the USG with each of the entities' various expertise and information offerings.

Following on to Dr. Stevenson's comment, Mr. Hoffman noted that NSI's US-DiGIA catalog is great for planning and analysis, but wondered how it can help with identifying I&W. Unfortunately, Mr. Hoffman asserted, within the USG, the people who typically look at something like economic data typically are not also looking at something like national security data, which creates the clear silos and blind spots that research on the gray zone concept has shown to be so problematic.

Dr. Bragg emphasized similar concern regarding silos and blind spots within the USG, arguing that a whole of government approach is essential for success in the gray zone. Data is important, but data alone can only get us so far. Along with the data component, we also need a human component to help properly interpret that data. Ultimately, Dr. Bragg contended, to most effectively operate in the gray zone, we have to bring together data, tools, and humans into one collaborative system that capitalizes on each component's strengths for addressing the types of gray zone problems we face.

Lt Gen (ret) Elder pointed out that our adversaries in the gray zone understand that we have a huge fear of escalation. These adversaries typically do not share these same fears, which can put us at a disadvantage because our adversaries have more room to operate than we do.

Mr. Sisson noted that gray zone I&W are fundamentally reactive in nature, but it is important that we are also reactive.

Dr. Kluver added that media has accelerated the entire cycle, and puts significant pressure on policy makers to act.

Mr. Sisson contended that these types of problems might not be entirely new, but the processes and frameworks for handling them are certainly new and different. Given this, there might be certain discontinuities that we can capitalize on to give us an advantage over our adversaries.

Mr. Ellis noted that the most recent ICONS simulation in the Baltics found that we cannot use NATO without escalation—not even article IV. We need a new toolkit because conventional deterrence efforts do not work. Furthermore, the USG is not good at allowing individuals to make decisions. We need to push decision making down, especially inside the beltway.

Implementation and Required Capabilities

Dr. Bob Toguchi (USASOC)

Dr. Bob Toguchi moderated the implementation and required capabilities section of the panel discussion. Dr. Toguchi asked the panelists to discuss the types of data, skills, and technologies needed to implement courses of action (COAs) available in the gray zone. Dr. Toguchi also asked panelists to note how different users (e.g., USSOCOM, USSTRATCOM, USPACOM, etc.) differ in their needs and capabilities in the context of the gray zone.

Discussion

Dr. Kuznar noted that in order to do discourse analysis, thematic analysis, or integrative complexity, analysts will need access to transcripts of speeches of major decision makers in countries (or groups) of interest. The collection has to be sustained over time, and staff has to be trained to work with the data because conducting these kinds of analyses requires training and statistics abilities. Dr. Kuznar stressed that the skill set required for these analyses are very accessible. For instance, the University of British Columbia maintains an online training module for IC, and NSF sponsors workshops in content and thematic analysis that are accessible by analysts. Alternatively, there are a number of academic institutions and contractors that can provide these types of analyses, as was done in this SMA project.

Dr. Kluver noted that social media is a game changer. Media ecology exists, but we cannot capture it. So, we are losing capability and are not able to triangulate.

Mr. Ellis stated that we need to figure out how to combine human-driven input and models with artificial intelligence/computational modeling. Currently, the foundational science for this does not exist. Furthermore, if we invest in this capability, it has to remain available—we cannot jealously hide tools and not share them across the USG.

Mr. Morrison noted that there is a tension between data requirements and the capability to score human data.

Dr. Wright noted that we need to bring together the extensive existing knowledge on influence operations, rigorously evaluate it, and make it accessible to practitioners—just as they do in Evidence Based Medicine with medical knowledge.

Dr. Bragg concluded that the key point is that we have to identify what we want to know so that we can collect the right kind of data.

Closing Remarks

CAPT Kapusta and Dr. Cabayan thanked the panelists and participants for attending in the workshop.

Appendix A: Gray Zone Definitions

The **gray zone** is a conceptual space between peace and war, where activities are typically ambiguous or cloud attribution and exceed the threshold of ordinary competition, yet intentionally fall below the level of large-scale direct military conflict.

Gray zone activity is an adversary's purposeful use of single or multiple elements of power to achieve security objectives by way of activities that are typically ambiguous or cloud attribution, and exceed the threshold of ordinary competition, yet intentionally fall below the level of open warfare.

- In most cases, once significant, attributable coercive force has been used, the activities are no longer considered to be in the gray zone but have transitioned into the realm of traditional warfare.
- While gray zone activities may involve non-security domains and elements of national power, they are activities taken by an actor for the purpose of gaining some broadly defined security advantage over another.

Gray zone threats are actions of a state or non-state actor that challenge or violate international customs, norms, and laws for the purpose of pursuing one or more broadly defined national security interests without provoking direct military response.

- Gray zone threats can occur in three ways relative to international rules and norms, they can:
 1. challenge common understandings, conventions, and international norms while stopping short of clear violations of international law (e.g., much of China's use of the Chinese Coast Guard and Chinese Maritime Militia);
 2. employ violations of both international norms and laws in ways intended to avoid the penalties associated with legal violations (e.g., Russian activities in Crimea); or
 3. consist of states using violent extremist organizations (VEOs) and non-state actors as proxies in an effort to integrate elements of power to advance particular security interests.