

Over a Decade Later...What Now? What Next?

A Multi-Layer Assessment of Terrorism in its Current and Future Manifestation

Strategic Multi-Layer Assessment (SMA)

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List of Discussion Session Participants:

Mr. Gary Ackerman (START), Dr. John Arquilla (NPS), Dr. Victor Asal (SUNY-Albany), Maj David Blair (Harvard University), Mr. Randy Burkett (NPS), Dr. Bill Casebeer (DARPA), Dr. Steve Corman (Arizona State University), Dr. Martha Crenshaw (Stanford University), Dr. Bill Durodié (Royal Roads University, Canada), Ms. Laurie Fenstermacher (USAF), Mr. Dan Flynn (DNI/NIC), Dr. Heather Gregg (NPS), Dr. Tawfik Hamid (Potomac Institute for Policy Studies), Mr. Berto Jongman (Dutch MOD), Mr. Scott Kesterson (Spatial Terra), COL Patrick Mahaney (ASWG), Dr. David Mandel (DRDC), Dr. Clark McCauley (Bryn Mawr College), Dr. Rodrigo Nieto Gomez (NPS), CAPT Wayne Porter (NPS), Ms. Farhana Qazi (Booz Allen Hamilton), Dr. Maria Rasmussen (NPS), LTC Michael Richardson (ASWG), Dr. Fouzia Saeed (Mehergarh), Dr. John Sawyer (START), Dr. Kalev Sepp (NPS), Mr. Mubin Shaikh (Liverpool University), MSG Sohail Shaikh (ASWG), Dr. Valerie Sitterle (Georgia Tech), MAJ Jason Spitaletta (JHU/APL), Dr. Peter Suedfeld (University of British Columbia)

Joint Staff POC: LTC Matt Yandura

Interview Session Moderator: Dr. Allison Astorino-Courtois, NSI

International Voices Session Organizer: Ms. Laurie Fenstermacher, AFRL

Overall Organizer and Coordinator: Ms. Meg Egan, SRC

Editors: Dr. Hriar Cabayan (SMA), Dr. Allison Astorino-Courtois (NSI), LTC Matt Yandura (JS), Dr. Val Sitterle (Georgia Tech), Ms. Sarah Canna (NSI), and Mr. George Popp (NSI)

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“So America is at a crossroads. We must define the nature and scope of this struggle, or else it will define us. We have to be mindful of James Madison’s warning that ‘No nation could preserve its freedom in the midst of continual warfare.’ Neither I, nor any President, can promise the total defeat of terror. We will never erase the evil that lies in the hearts of some human beings, nor stamp out every danger to our open society. But what we can do—what we must do—is dismantle networks that pose a direct danger to us, and make it less likely for new groups to gain a foothold, all the while maintaining the freedoms and ideals that we defend. And to define that strategy, we have to make decisions based not on fear, but on hard-earned wisdom. That begins with understanding the current threat that we face.”

President Barack Obama (May 2013, NDU)

“...[W]e face a persistent terrorist threat that is diversifying along the shifts we are seeing in the political, social, and economic environment worldwide...We also see evolutions in the homegrown threat, driven in part by easy access to radicalizing content on the internet. These changes come against the backdrop of a diminishing al-Qa’ida core and a mix of affiliates that for the most part are more locally and regionally focused... And here at home, we confront adherents to al-Qa’ida’s ideology that are, for the most part, homegrown violent extremists...While this threat is not new, the availability of radicalizing material and instructions for carrying out attacks have made it more potent... To confront this more diverse threat, the United States has stepped up our counterterrorism responses at every turn. Now, more than a decade beyond 9/11, we have the opportunity to take stock and examine what we mean when we talk about ‘CT.’”

Lisa Monaco, Assistant to the President for Homeland Security and Counterterrorism (excerpt from remarks at the Council on Foreign Relations, 14 June 2013, New York City)

“The relentless advance of science and technology is making it possible for smaller and smaller groups to kill larger and larger numbers of people.”

Graham Allison, Director, Kennedy School, Belfer Center for Science & International Affairs, Harvard University

FOREWORD

I am pleased to write the foreword to this latest report titled “Over a Decade later...What Now? What Next? A Strategic Multi-Layer Assessment of Terrorism in its Current and Future Manifestation.” This report could not be more timely. On 23 May 2013, in his address at Fort McNair, President Obama said that the US Government must:

“...dismantle networks that pose a direct danger to us, and make it less likely for new groups to gain a foothold, all the while maintaining the freedoms and ideals that we defend...And to define that strategy, we have to make decisions based not on fear, but on hard-earned wisdom. That begins with understanding the current threat that we face.”

Though the observations and key findings presented here do not necessarily represent my views or those of the Joint Staff, I wholeheartedly endorse the interview research methodology of this study and the team that put it together. The initiative includes interviews with nearly 30 participants including scholars, military operators, media professionals, interagency practitioners, and key international voices, including, most notably, two former radicalized extremists. This report is intended to be more descriptive than prescriptive. It is meant to encourage healthy debate and discussion. It is also meant to challenge and affirm our facts and assumptions about terrorism, violent extremism, and our response to it. Most importantly, this report is a necessary step toward deepening our understanding of the current threats we face.

I hope you find this report useful.

A handwritten signature in black ink, appearing to read "M W Hewitt". The signature is stylized and cursive.

Michael W. Hewitt
RDML, USN
Deputy Director for Global Operations, J39

Introduction and Scope

This report is primarily an analytical product intended to provide a range of perspectives on terrorism and possible responses to it. Contributors to this report come from three primary groups: social science researchers, interagency analysts, and military operations officers. In essence, it is a marriage of contemporary social science theory, applied research, and hard-earned operational experience. The paper is limited in scope and is intended to challenge the reader to ask better, more relevant questions about terrorism. It aims to be “descriptive” *not* “prescriptive,” though a degree of implied bias may be evident in parts. The purpose of this paper is to accomplish the following:

- explore how scholars, practitioners, and operators delineate and frame “terrorism”¹ in both its current manifestation and as anticipated in the future; and
- seek to better refine and address the “disease” (preconditions, perceptions, and underlying drivers) and not just the “symptoms” (terrorist attacks) of terrorism.

The summarized insights reported below are based on comments made during multiple, semi-structured telephone interview sessions conducted between 06 May and 12 June 2013.² During the interviews, there was no attempt to reach consensus. Rather, emphasis was placed on eliciting a range of ideas and insights on terrorism and effective responses to it. As such, what is reported here is multi-perspective and non-categorical in approach. It serves primarily as a repository of a variety of views on the problem set rather than serving as a coherent blueprint. Interviewees are not quoted directly but are listed as contributors on the front cover of this report.

The ultimate aim of the paper is to contribute to the ongoing national dialogue on terrorism and perhaps even spark some new thinking around three ideas upon which there remains public debate:

- the merits of a whole-of-nation response to terrorism;
- the value of creating an inclusive national defense narrative that is clear, inclusive, and helpful for explaining to domestic and international audiences what the U.S. is fighting for
- what it means to define our terrorism response in accordance with our nation’s values

¹ Although there was not consensus among interviewees on a single definition of “terrorism,” in the following write-up, unless otherwise noted, we define terrorism broadly as “the use, or threatened use, of violence for political and/or ideological goals by non-state groups aimed at (non-combatant) victims who are selected for their symbolic or representative value as a means of instilling anxiety in, transmitting one or more messages to, and thereby manipulating the attitudes and behavior of a wider target audience or audiences.”

² See Appendices A and B for interview questions and interview notes, respectively. Appendices C and D list key insights from two previously published white papers relevant to this topic: “Topics in The Neurobiology of Aggression: Implications to Deterrence” (Feb 2013) and “Topics in Operational Considerations on Insights from Neurobiology on Influence and Extremism” (April 2013). To obtain copies of the notes or the white papers, please contact Sarah Canna at scanna@nsiteam.com.

Summary & Key Insights

- a. **Terrorism is not a singular category of behavior; describing distinct behaviors as if they were the same has obscured both the threat(s) and countering strategies.** The contexts, modes of, and motivations for modern terrorist behaviors are too diverse to consider as a single category of activity. Today, terrorism has many of the characteristics of an entrepreneurial, adaptive, and dynamic competition. Even al Qaeda (AQ) and its adherents do not necessarily represent a homogenous movement.

- b. **Terrorism is a tactic, not an existential threat in and of itself.**
 1. From an operational perspective, counterterrorism (CT) implies what we are fighting *against*, not what we are fighting *for*. This becomes problematic when the national strategy for dealing with terrorism is couched in such terms. The political objective, along with the fundamental American values that guide U.S. goals in world affairs, should be discussed and shared to those within the United States Government (USG), the U.S. population, and abroad to improve policy understanding and reduce uncertainty.
 2. Elevating CT from core special operations doctrinal activity to the level of national strategy may unwittingly constrain response options due to the narrow set of activities associated with CT itself. It may be time to consider a more appropriately named and comprehensive strategy that accounts for the full range of legitimate responses to terrorism and its drivers.
 3. Some have dubbed this a “war of narratives.” Yet, the complexity of terrorism has caused some to seek a simple description of the problem when this is, in fact, impossible. Terrorism is not a monolithic movement, and it should not be characterized as such.
 4. Nevertheless, during the past 10 years, some have applied reductionist logic to create shallow, bias-affirming descriptions of the phenomenon of terrorism that are not helpful in developing appropriate responses to terrorism. Similar to stereotyping, the problem with single-narrative descriptions is not that they are completely untrue, but that they are irresponsibly incomplete. Further, single-narrative descriptions of terrorism and violent extremism often lack necessary context and, therefore, contribute to misunderstandings that create fertile conditions for misinformed decision-making.
 5. Interviewees noted that there is no grand unifying theory of terrorism in the social sciences: there are no direct, consistent, and generalizable root sources of the use of terrorism as a tactic for redress of individual or group political, ethnic, or religious grievances. In other words, because of the diversity of contexts and motivations, there is no factor—whether on a neurobiological, cognitive, group, or social level—that explains all terrorist behaviors. On the other hand, many interviewees argued that it is possible to identify certain “risk factors” that are correlated with the propensity for terrorism-

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related behaviors (e.g., perceived zero-sum type threats to social identity, years living under violently repressive government, weak governments, economic stress, etc.).

6. Most interviewees did not view ideology in and of itself as a necessarily strong driver of terrorism. Ideology can, however, be opportunistically exploited or can provide frames for attaching meaning to objective and subjective experiences. It may also influence multiple dimensions of terrorist activities including group creation, overarching connectivity, and propagation.
 7. Some interviewees posited in terms of practicality, that communications focusing on determining target audience motivations as an approach toward achieving behavioral outcomes are the most tactically prudent and operationally relevant during military operations as they focus on mitigating or encouraging specific actions that can be observed and measured.
- c. A whole-of-nation terrorism response policy may offer new opportunities for domestic and international engagement.** Effective approaches to terrorism should consider domestic civil society, commercial, and non-profit involvement as necessary force multipliers.
- d. A convergence of available technologies and information imply a new generation of potential vulnerabilities and threats to the U.S.** The convergence of rapidly advancing scientific sectors (biotech, nanotech, energy, materials, etc.) combined with the availability of CBCT (Cyber-Based Communication Technology) ecosystem could produce an entirely new generation of threat capabilities. Technologies can be combined in innovative ways to produce damaging capabilities previously unseen and not envisioned by their original design. Disruptive and catastrophic technologies could both emerge and merge faster and more unpredictably than our ability to monitor and forecast them. Considering the lead-in quote by Graham Allison earlier in this document, these factors may create entirely new vulnerabilities that are exploited by terrorists in pursuit of their goals.
- e. Having a multi-framework assessment for domestic and international terrorism may help better understand the phenomenon and the range of drivers impacting this process.** Some homegrown terrorists do have clear motivations and may even follow instructions given to them by larger organizations. In other instances, domestic terrorists may not be able to express a well-developed, cogent ideology and often may have only tenuous connections, if any, to the parts of the world that they claim to be representing.

The following insights represent the (non-summarized) span of answers to questions and comments received from interviewees. They are organized roughly in accordance with the general interview questions listed in Appendix A.

Defining Terrorism and Terrorist Activities

- a. Achieving international consensus on what constitutes terrorism remains a challenge as states tend to define terrorism in ways most advantageous to them. The old aphorism “One person’s terrorist is another person’s freedom fighter,” embodies,” the difficulty of not only finding a common definition, but common understanding. However, most interviewees presented some version of the following definition:

"The use or threatened use of violence for political and/or ideological goals by non-state groups aimed at (non-combatant) victims, who are selected for their symbolic or representative value as a means of instilling anxiety in, transmitting one or more messages to, and thereby manipulating the attitudes and behaviors of a wider target audience or audiences."

In this context, terrorism is a three-part act: the first act is violence; the second is the framing, broadcasting, and interpretation of the violence by the perpetrators and their audiences; and the third is the array of responses to these interpretations. It is through their responses that different audiences advertise whether they are treating a particular event as a crime, an act of war, or an act of terror.

- b. Terrorism and violent extremism (VE)³ are not synonymous. VE is a broad, vague, and highly subjective and evaluative notion (i.e., what is considered to be extreme to one party might seem like a necessary response to another). VE is a way of thinking that uses violence to promote one’s views (political, religious, etc.). It can include terrorism and other forms of violence. VE prepares the mindset for a person to become a terrorist. While terrorism is a tactic, VE is a process of thinking that can ultimately lead to terrorism or other forms of violence.
- c. It is important to understand the difference between asymmetric warfare (AW) and counterterrorism (CT). AW seeks to exploit relative power between conflicting parties to gain advantage, which means in some cases using an opponent’s strength against them. Thus asymmetrical approaches does not necessarily spell easy victory for the stronger of the two sides if the weaker side can exploit the other side’s strength more effectively. Thus, variations in power will usually be correlated with variations in tactics.

³ Violent extremism (VE) is a way of thinking that can encompass various forms of violence. Asymmetric warfare is different from VE because it deals with the power balance between conflicting parties.

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- d. **Ideological dimension(s):** Most interviewees did not view ideology by itself as a necessarily strong driver of terrorism. However ideology does influence multiple dimensions of terrorist activities including group creation, overarching connectivity, and propagation. It is often
1. a facilitating property that encourages formation (the emergence of) new terror cells from a society when it combines with other environmental factors;
 2. a functional property that influences connectedness across multiple, heterogeneous terror cells as well as between such cells and societal groups not actively participating in terrorist action; and
 3. a common, unifying context that shapes and coordinates behaviors of both terror and societal groups without the need for any centralized control.

In each case, ideology can be a contributing factor or a tool intentionally appropriated to serve as an established backbone that serves more entrepreneurial terror goals.

- e. **Sociopsychological dimensions:** Interviewees noted that there is no grand unifying theory of terrorism in the social sciences. Ten years of concerted research effort has failed to identify a unified path to radicalization⁴ or a common root cause of terrorism.
1. Understanding incentive structures in addition to risk factors⁵ that shape behavior are key elements for assessing terrorist behavior. The social science research available today is able to correlate the aggregate propensity of terrorist behaviors with some underlying conditions.
 2. Radicalization may occur at both cognitive and behavioral levels and is likely to be shaped by emotional responses to perceived hostile forces that are themselves conceptualized within a social milieu. The decision-making processes of radicalized and radicalizing individuals are likewise affected by (social) cognition, emotions (such as anger, fear, and disgust), and moral intuitions. Understanding the human or cognitive dimension underlying the transition from early radicalization to VE is an important element in a comprehensive CT strategy.
 3. Non-radicalized support or passive acquiescence can significantly enable the spread and effectiveness of terror groups. The non-radicalized audience is, therefore, an equally vital group to understand and address in innovative information operation strategies for the future.

⁴ Radicalization refers to changes in beliefs, feelings, and actions toward increased support for one side of a political conflict. Radicalization of beliefs and feelings often occurs for a mass audience, whereas radicalization of action is relatively rare, especially for violent extremism and terrorism.

⁵ Risk factors are discussed in section 8.

Assess Terrorist Groups According to Their Business Model

- a. Whether small cells or larger enterprises, terror groups are entrepreneurial. When we define terror groups (regardless of their size) as entrepreneurial, we mean that they embody the characteristics that we in the West attribute to successful entrepreneurial spirit and action. Namely, as recently described by Forbes, they
 1. are dissatisfied with the present and have a vision of how things “should be;”
 2. can rapidly ascertain their advantages and optimize them;
 3. excel, often innovatively adapting their domestic and international communication efforts to bring others on board and articulating their vision;
 4. learn quickly, are flexible, and open to feedback from like-minded groups; and
 5. express persistence in executing plans.
- b. As such, terror groups tend to be to be highly adaptive, proactive, aggressively opportunistic, and frequently technically and tactically innovative. They generally act/change with far more alacrity than established institutions. By considering and assessing them in accord with their own business models, we may capture and better anticipate the changing nature of terror activities and their perpetrators more completely and intuitively. We define the “business model” of a terror group as “the means and methods embraced to support execution of the vision,” specifically, how they achieve their goals along all the entrepreneurial dimensions captured above.
- c. Terrorism also has the characteristics of an adaptive and dynamic competition. It is not homogenous, and we must show discipline in avoiding single-narrative descriptors of terrorists and the groups they claim to represent. The goal is to appreciate the complexity of terrorism and the ways terrorists behave as part of a violent enterprise. Some interviewees suggested that in order to combat it, the USG should be equally entrepreneurial and resilient.
- d. Terror groups may operate as enterprises (more centralized, hierarchical organizations) or franchises (largely independent, autonomously acting groups bound together however loosely by ideology). The form they take can be expected to be the one that will flourish in a given environment. As franchises, terror cells may be loosely connected to a higher order organization. Alternately, they may simply appropriate the “brand” and remain completely operationally autonomous.
- e. It is reasonable to expect that terror groups with these characteristics will eventually find a way to achieve their objectives as long as their motivating issues remain unaddressed. As such, they do pose a threat to developed democracies. They are much more of a threat to fragile and transitional states—especially those transitioning from authoritarianism to democracy—and, as such, a threat to us and our values. In this context, the ability to continually reassess how terrorists and their networks are adapting and evolving to a changing environment is very important.

- f. What the U.S. does or does not do is just as important as what the terrorists do, if not more so, given the asymmetric capabilities and impact of government actions. A key question that should inform every action against terrorists is, “Are we fighting the enemy’s strategy or their forces?”

Geopolitical Trends Will Impact the Evolution of Terrorism

- a. There are four significant trends likely to emerge as we move forward:
 - 1. **Demographic change:** The population of allied U.S. countries are growing older and increasing the demand for domestic social spending, making it more difficult to assist the U.S. in joint international ventures. With some exceptions, youth bulges are slowing down in the developing world.
 - 2. **Resource stress:** Globally, there is increased urbanization, a growing middle class, and a greater demand for resources and governance effective enough to deliver them. The rapid growth in urbanization, in particular, means that when natural or man-made disasters strike urban areas, they are more likely to be catastrophic in terms of population displacement and loss of life.
 - 3. **Further diffusion of power:** An equalization of power in the international system may make it more difficult to resolve international issues and lead to concerns about the fragmentation of the international system.
 - 4. **Individual empowerment:** Individual empowerment, together with weak government capacity, could fuel grievances by generating an environment in which dramatic and violent individual actions are easier to accomplish. An increased availability of precision strike weapons in the hand of individuals is, therefore, a growing concern.
- b. **Opportunistic quest for power by non-state actors:** A new world order was created in 1945-1946 directed in large part by Western states and ideas. We may be seeing a breakdown of this throughout the world as U.S. and Western values no longer have the same pull as they had in the past. As a result, the important question to understand is, what are we really up against?
- c. For a state, the cost of supporting, tolerating, or fomenting terrorism is that it risks becoming an international pariah. However, for some weak states, terrorism may be an attractive alternative. A state with weak conventional capabilities may see terrorism as a tool to influence their environment, go after enemies, or use as a deterrent. In some cases, strong states such as North Korea with strong conventional capabilities may also support terrorism.
- d. If future trends (such as youth bulges, resource constraints, growing middle classes, etc.) place pressures on states for better governance, it could create an environment in which populations rise up to force change. This could facilitate democratization in the future. Good governance and strong institutions coupled with capacity building (e.g., judicial systems, police, intelligence, and eradicating corruption) are key to avoiding bad outcomes.

e. Disruptive technologies and sociotechnological revolution

1. Cyber-Based Communication Technology (CBCT) advances have produced fundamental alterations in the temporal and spatial scales of communication and information sharing. These transform both individual and community (up to state and even trans-state) patterns of organization. CBCTs are increasingly pervasive, connecting other technological sectors and societies in new ways and on new time scales and exacerbating global competition for finite resources.
2. CBCT exhibits a complex, two-dimensional impact on societal structure and dynamic behaviors. It is both a means and an ecosystem spawning a global sociotechnical evolution.
3. Cyber-based and cyber-facilitated terrorism is a huge threat in the 21st Century. The cyber realm may be a direct target of attack (e.g., with severe and perhaps societally lethal economic or other infrastructure effects), or it may be a medium through which a mass attack is conducted. CBCT dramatically increases the reach of terror on the societal psyche on a never-before-realized scale. Terror acts are now “seen” globally immediately after or even during an attack. Such “fame” was not previously achievable so readily, which is a significant motivator of many lone wolf types and small terror cells.
4. A complex adaptive system (CAS) contains multiple, heterogeneous elements interacting with each other and the environment to create system behaviors and characteristics not found at the individual element level (i.e., emergence of new systems). The scale one is considering (e.g., a cell, a human, a society) determines what behaviors and characteristics one can observe. The CBCT ecosystem, our sociotechnical society, and terror cells are all CAS. Each has aspects of existence that are part of the other systems and the environment external to those systems.
5. Loosely connected autonomous cells may combine opportunistically via the CBCT ecosystem to conduct synergistic attacks with significant impact. The sheer extent of cyberspace and its transience greatly hinders our abilities to foresee such events. Groups whose ideologies would otherwise preclude them from collaborating may overcome their social barriers and even hybridize. Technological barriers are then easier to surmount.
6. The convergence of rapidly advancing scientific sectors (biotech, nanotech, energy, materials, etc.), together with the CBCT ecosystem, may produce an entirely new generation of threats. Technologies are being innovatively combined in different ways to produce damaging capabilities previously unforeseen and not envisioned by design. Disruptive and catastrophic technologies may emerge and merge faster and more unpredictably than our ability to monitor and forecast them.

Defense of U.S. Interests Requires a Whole-of-Government and Sometimes a Whole-of-Nation Approach

- a. There have been numerous productive interagency efforts to better comprehend and confront terrorism both domestically and abroad. Continued cooperation across the USG led by the National Counter Terrorism Center (NCTC) is still required despite the decrease in AQ and their affiliated movements' capabilities. This coordination needs to encompass not only the military and national, state, and local law enforcement but also health services, boards of education, and the private sector to address a continuing threat.
- b. An adaptive, multi-faceted threat requires an equally adaptive and multi-faceted response.
- c. Because both states and groups that pose threats to U.S. interests and because citizens are increasingly diverse, dispersed, networked, decentralized and adaptive, a single coordinated security strategy may be impractical. At the same time, any U.S. strategy on terrorism must consider the range of options available beyond the narrow portfolio of counterterror operations. Part of the strategy is to reach out to two categories of individuals: namely trusted intermediaries and subject matter experts (SMEs). The first group is valuable because of their street credibility. SMEs are vital strictly at the enforcement level.
- d. Just as it is understood that the best way to confront a network is with a network, a diverse and adaptive threat must be confronted with a diverse set of assets and expertise such as those that span the USG or, even better, the whole of U.S. society. This will include a component of strategic patience and public resilience in the event of violent attack.

Are Current U.S. CT Strategies Framed Appropriately for Current and Evolving Threats?

- a. CT strategy needs to explicitly deal with counter radicalization. Dealing with terrorism alone is like treating the symptoms and not the disease.
- b. CT refers to what we are fighting *against*, not what we are fighting *for*. The key values that guide U.S. goals in world affairs should be made clear to those within the USG, the U.S. population, and abroad.
 1. This will ensure the development of security strategy and guidance that is consistent across time and across agencies and that describes what it is trying to accomplish.
 2. A narrower perspective on CT as countering or defeating the activities of target groups once they have pursued terrorism is a reasonable starting point.

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3. CT could also be viewed more broadly as operations to reframe the context within which terrorist activities emerge such as countering narratives, promoting governance, working to ameliorate social inequities, etc. Pursuing both simultaneously can be challenging.
- c. What is the end state sought with CT? A strategy should establish measurable goals.
 1. Some interviewees suggested that the USG needs a full spectrum CT strategy that addresses the full scope of the terrorism equation. They argued that this CT strategy would seek to ameliorate the inputs that lead to terrorism such as environmental conditions, psychological and sociological preconditions, extremist narratives and mobilization structures, and transformative processes. It would also address the outputs of this equation by taking appropriate actions to deter, punish, and influence those actors who make the transition into terrorism. Perhaps of greatest import, it would also seek to address feedback loops, wherein the terrorist violence and responses to it create additional incentives to continue or escalate a terrorist campaign.
 2. In some cases, this means working with partner governments to address environmental factors. A flexible response policy that allows the U.S. to reserve the right to eliminate groups that threaten our national security interests is needed.
 - d. More emphasis can be put on addressing the conditions that allow anti-Western ideology to thrive.
 - e. We have to achieve congruence and continuity between domestic and foreign policy. Until we can show success of domestic policies, how can we hope to export that through soft power or any kind of power? We need to close the say/do gap by starting at home.
 - f. As part of U.S. CT strategy, the USG must consider enhancing American resilience to future attacks. Political resilience means a public that does not believe it can be 100% safe from terrorism, does not insist on blaming someone when a terrorist attack occurs, and does not insist on a bigger security state after each terrorist attack.
 - g. As part of U.S. CT strategy, the USG should consider options to enhance American resilience to future terrorist attacks. Political resilience means a public that does not believe it can be 100% safe from terrorism, does not insist on blaming someone when a terrorist attack occurs, and does not insist on a bigger security state after each terrorist attack.
 - h. Stepping on a hornet's nest: Sometimes U.S. intervention in a region unintentionally exacerbates existing tensions, drawing resistance and uniting people against an outside force.
 - i. Actions against terrorist groups have to be carefully thought through for unintended consequences. Actions can result in short term improvement but can have long-term downsides that have to be taken seriously.

- j. Assessing effectiveness:
 - 1. Since the USG has not properly framed the problem with respect to terrorism, it will be difficult to effectively measure the U.S. impact of CT efforts beyond short-term tactical actions.
 - 2. Establishing a system of tracking all USG counter-terrorism activity remains a challenge. Nevertheless, it is also key to maintaining faith with the American people.

Risk Factors, Contributing Causal Factors, or Accelerants

- a. There is no single cause of terrorism. There is no single cause that explains all terrorist behaviors whether on a neurobiological, cognitive, group, or social level. That said, there are risk factors that can be statistically correlated to terrorist activities. However, these tend to be so broad as to greatly over-predict potential threats to U.S. security. A better method than attempting to identify “root-causes” is a model that explains the gestation, growth, and dissemination of terrorist organizations. In that regard, there is a constellation of inputs across which transformation can occur.
 - 1. Much of what we need to understand is at the sociocognitive level. Risk factors include the proportion of military aged men (MAMs) in a population, lack of access to resources, emotional vulnerability, psychological proximity to violence, personal history of violent behavior and concomitant narratives, dissatisfaction with the status quo and with the effects of political activism, personal connection to a grievance, positive (or at least non-negative) view of violence, a perceived benefit of political violence, a social network that includes radicalized individuals, humiliation, and a resonant radical narrative, and a perceived threat to social identity coupled with psychological characteristics.
 - 2. At the group level, risk factors include the resources of a group (especially external funding), the increasing de-legitimization of peaceful rhetoric, increasing discontent with the status quo, and failed attempts to resolve issues via political processes.
 - 3. Organizational risk factors include de-legitimization of an out-group, resources, external support, perceived threat, a current state of conflict, and competition with other groups.
 - 4. Historically, most terrorism has not been directed against the U.S. It is optimistic to think that addressing grievances will end terrorism, but U.S. actions do affect others and may cause grievances. Other factors include globalization, the information revolution, and a culture of grievance. They may perceive our culture as a threat to their way of life. They try to answer the marching forward of westernization by looking back to the perfect past that only exists in mythology.

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- b. Academic research on oppression and social mobilizations suggests that violent social movements come about because of a lack of a legitimate political mechanism to express discontent. However, some mobilizing resources such as finances, narratives, justifying causes, and an overall motivating frame that is justice oriented are needed. There is an inverted-U shaped relationship between repressive governments and the likelihood of government repression. Extremely repressive regimes have sufficiently quelled their populace that they do not have to take direct actions to keep organizations under their thumb. Non-repressive regimes have neither the inclination nor the institutional structures necessary to engage in significant repressive actions. In the middle, there is enough repression to cause an organization to stand up, but the state does not have enough technology or skill to squash the nascent organization. This has been claimed to be validated empirically.
- c. The terrorist threat today is more like a spreading, dispersed social movement than a hierarchical organization; cells of radicalized individuals come together at will to conduct attacks. This social movement is fueled by a number of factors:
 - 1. terrorism is often the result of the failure of government to provide essential services or the result of the success of government oppression; and
 - 2. instability occurs when governments cannot adapt to key trends.
- d. While ideology is not always a causal factor, and is sometimes simply a rationalization, it can definitely be a contributing factor to the decision to engage in terrorism. In those instances when ideology is used as a rationalization for taking up violence, people generate or seek a story to justify why they are taking violent action. Islam, in that regard, is more their motif than their motive. In this sense, ideology plays a key role in reforming the process of thinking.
- e. Improving the rule of law will not by itself get rid of terrorism. Studies linking a lack of rule of law with terrorism find only weak correlations. In failing states where the rule of law is not well-established, non-state groups have an opening to take on the role of the state by providing justice and social stability. Yet terrorism has occurred often enough in strong Western states as well.
- f. We tend to think about the political science (or economic) rational actor perspective and see violence as a rational tactic. However, emotions play a key role. The fields of behavioral economics and neuroeconomics can contribute to the development of better CT strategies and tactics. From actor-specific (or tailored) deterrent models to personalized persuasion tactics, leveraging social, behavioral, neuroscience, and technical resources at our disposal will allow for greater strategic flexibility and tactical precision.

International Perspectives on Homegrown Terrorism

- a. The framework for looking at homegrown radicalization and terrorism needs to be different from that of foreign terrorism not least of all because we have a greater diversity from an ideological perspective of viable threats to U.S. interests.
 1. Some homegrown radicals do have clear motivations, and they appear to follow instructions given to them by larger organizations.
 2. In other instances, homegrown radicals may not be able to express a well-developed, cogent ideology and often may have only tenuous connections, if any, to the parts of the world that they claim to be representing or speaking on behalf of. In effect, both the political purpose and the engagement elements are notably lacking. In some of these cases, the tactic of terror becomes the end in itself. That is why many incidents come across as random and pointless, and one of the biggest risks then becomes our attempts to provide these with presumed meaning and direction.
- b. In many cases, Muslim youth are not being engaged in a sensible way in western societies because engagement processes are launched around questions that deal with religion, terrorism, or related matters. A better strategy may be to engage them on issues of education, jobs, the environment, and other everyday concerns.

Key Issues that Require Further Consideration

- a. What do we want the role of the U.S. to be in the future given these trends? Do we want to pull back or to lead the world into a new international order? Policymakers need to think about where we are heading given those trends in order to position the country to meet its strategic objectives.
- b. Anticipated geopolitical trends suggest that the USG should think differently about how it interacts with the world. If we do not have the economic capacity or the will to be the world's sole policeman, how do we plan for that role with limited resources? This issue calls for new ways of thinking about how to get the international system to work with us and our old and new allies.
- c. U.S. and global societies are evolving in large part owing to the sociotechnical confluence and rapid Cyber-Based Communication Technology advances. Should we consider that our concept of "national security" might need to be dynamic as well?
- d. "Resilience" is usually intended to mean "robust" in a security sense. Yet in ecosystems—and our global, sociotechnical society is an ecosystem—resilience typically means that a system is able to survive a disruption, though perhaps in a completely different state and balance than

before. What does this mean for our concept of “national security” and our international goals as a nation?

Key Theoretical Gaps Identified by Interviewees

- a. What causes some people to accept radical opinions? What leads radicalized individuals to take action (i.e., move from radicalization to mobilization)? We do not know why some people tacitly or actively support terrorists but never become one. CT strategy needs to focus on better understanding the behaviors and motivation that lead sympathizers and supporters to become terrorists.
- b. What is the relation between public opinion sympathizing with terrorism and terrorist attacks? For instance, if a USG intervention could next month halve the percentage of U.S. Muslims who justify suicide attacks in defense of Islam, would attempted jihadist attacks in the U.S. go up, down, or stay the same in the following six months?
- c. Can we anticipate or even influence how a terrorism threat will end? There are various ways in which terrorist groups give up violence; they may gain all or some objectives, may be physically destroyed, may be decapitated, and may evolve into crime or electoral politics. The USG needs to think through these potential outcomes in determining CT goals.
- d. Too little attention is paid to emotion as source of violence. We tend to assume that terrorists are rational actors and commit to violence as a rational tactic. However, there are obvious emotions involved in the radicalization process in which individuals join a terrorist group. There are also strong emotions, probably different emotions that keep an individual loyal to a terrorist group after joining. We need to understand how anger, shame, guilt, and humiliation play out in bringing individuals into a terrorist group and keeping them there and what emotions could be mobilized to reverse that process.
- e. Emotions are also important in public and government reactions to terrorism. We tend to assume that terrorists aim to terrorize, but recent research indicates that reactions to terrorism are mediated more by anger and humiliation than by fear. If we want a public that is resilient to terrorism, we urgently need to understand emotional reactions to terrorist attack.
- f. Research has found no useful profile for group-based terrorists, but it may be possible to find a useful profile of lone actor terrorists. Group-based terrorists are, on the average, normal personalities but lone actor terrorists may exhibit signs of mental disorder.
- g. In theory and in practice, how does counterinsurgency relate to counterterrorism? In particular, are there lessons for CT in FM3-24 U.S. Army/USMC Counterinsurgency Field Manual?
- h. We need a better approach for estimating the implications (second and third order effects) of our actions before we take them. This may include developing a better understanding of

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narratives and how our actions feed into mobilizing narratives. Polling and focus groups may be useful in vetting policy options.

- i. We need a better understanding of the narrative environment in which terrorists operate. Part of that is understanding how the environment operates as a system. We think of narratives as being one thing, but a narrative is a complex system of stories. We need a better idea of what the components of a system are, how they relate to each other, how instances of narratives are moving from place to place, and how they are used to persuade. This will give us 1) an understanding of which groups support which narratives and, therefore, which groups to target and 2) how our own actions play into narratives that extremist try to promote.
- j. We need more rigor in the suite of tools we use. For example, if we want to develop resilience against extremism and attack, we need to be able to assess the state of resilience and tailor interventions that will enable resilience to develop.
- k. We know a lot about terrorists, but we do not know about how their extended family may contribute to their motivations.

Appendix A: List of Interview Questions⁶

[Definition]

1. We typically define that class of activities that the U.S. is engaged in countering as “the use of violence by non-state groups to achieve political aims.” In your view, is this the proper way to conceive of this class of activities? Is there general consensus on this among academics, operators, practitioners, etc.?
 - a. Would you say that terrorism and violent extremism are synonymous?
 - b. Would you draw a distinction between jihadists, violent extremists, and those engaged in asymmetric warfare?

[Strategies]

2. Current U.S. National Counterterrorism strategy is articulated as “disrupting, dismantling, and eventually defeating al-Qa’ida and its affiliates and adherents to ensure the security of our citizens and interests [it focuses on] pressuring al-Qa’ida’s core while emphasizing the need to build foreign partnerships and capacity and to strengthen our resilience ... this Administration has made it clear that we are not at war with the tactic of terrorism or the religion of Islam. We are at war with a specific organization—al-Qa’ida.”

How would you grade U.S. CT efforts, i.e., how are we doing? Do you think the threat of terrorist attack is less now than it was, 10 years ago? In your view, is this current strategy framed appropriately for what you see as the current threat from terrorism/violent extremism? If so, will it remain appropriate for conditions 3-5 years into the future? 6-10 years?

3. Much of U.S. CT efforts have included the notion of “discrediting” AQ and/or extremist ideology. Do you see this as a worthwhile activity in countering terrorism/violent extremism or an infeasible distraction?
4. What broader message has the United States communicated to global publics through its words, deeds, and images regarding CT?
5. What does your research/experience suggest might be the most effective strategies for countering terrorism/violent extremism aimed at the U.S. and U.S. interests? What types of activities would this entail?
6. How should the U.S. National Strategic objective be defined in this area? For example, should the U.S. be concerned with politically motivated extremism whether it is violent or not? If yes, is this feasible as a security strategy? If no, why not?
7. Which strategies are likely to be the least effective for countering terrorism?
8. Which activities should the U.S. not pursue if the intent is to counter terrorism?

⁶ Note that not all questions were asked in each interview session and that some questions were tailored for particular interviewees.

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9. Where do you see the gaps in our understanding of terrorism/extremism and the ways to counter it?
10. What if anything would you add (or subtract) from the U.S. core principles—adhering to U.S. core values, building security partnerships, applying CT tools and capabilities appropriately, building a culture of resilience—upon which current CT strategy is based?

[Risk Factors]

11. We are interested in your views on the full range (e.g., political, economic, social, psychological, etc.) of both “risk factors” and contributing factors of terrorism/violent extremism.
 - a. What do you see/what has your research suggested as the “risk factors” of terrorism /violent extremism (e.g., presence of a repressive government; culture of violence)?
 - b. What do you see/what has your research suggested as the most important contributing factors associated with of terrorism /violent extremism (e.g., youth bulge)?
12. Specifically, how does access or the inability to access public goods like individual and public health, education, etc., contribute to terrorist activity and/or the emergence of violent extremism?
13. Specifically, how do threats to economic stability, for example resulting from natural disasters, drought, or disease, contribute to terrorist activity and/or the emergence of violent extremism?
14. Specifically, how does the rule of law—or failures of the rule of law—contribute to terrorist activity and/or the emergence of violent extremism?

[Adaptive Nature of Terrorism]

15. To what degree do you see terrorism against the U.S. as constantly adaptive (e.g., is it a strategic adaptation or tactical)? Is it predictable?
16. What are the key features that explain this adaptability (e.g., asymmetries, technological advance, lack of operational doctrine, etc.)?
17. What is not adaptable, i.e., what do you see as the constants (e.g., core grievance, dispersed structure)?

[Assessment]

18. How well do you believe we judge the effectiveness of U.S. and allied counter-terror efforts?
19. Given the multitude of potential confounding factors, is it possible to measure the effectiveness of our actions? If so, how should this be done?

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20. Can you suggest innovative or particularly effective means of gaining indicators of terrorist threats—either strategic or tactical? (For academics: In other words, is there one thing that you would hope someone is or exploring in this realm?)

21. Is there such a thing as “success” in the context of counter-terrorism? If so, can it be measured incrementally (i.e., other than by a dearth of terrorist attack)? Is it necessary, do you think, to posit a minimum acceptable level?

Appendix B: Interview Session Notes

(Provided separately, please contact Sarah Canna scanna@nsiteam.com to request a copy)

Appendix C: Key Relevant Insights from a Previously Published White Paper Entitled: Topics in the Neurobiology of Aggression: Implications for Deterrence (Feb 2013)⁷

- It is not possible to understand the biology of behavior without understanding the context in which that biology occurs as well as the society in which that individual dwells. This is true in our understanding of aggression; there is no highly accurate means of identifying individuals likely to commit an impulsive or planned violent act. *The context in which aggression and violence occur can be modified much more easily than identifying individuals likely to commit aggressive act; by manipulating context, society may reduce aggression by individuals indirectly.*
- Much aggression is motivated by conflict between in-groups and out-groups. An understanding of genetic and environmental factors can elucidate pathways toward aggression and begin to explain how various environmental factors such as media, propaganda, or informal mechanisms of narrative messaging can be used to manipulate the neurobiological mechanisms that inform the psychological architecture of susceptible individuals. *In that context, foreign policies that overtly impose governance or values alien to local cultures may constitute provocations to violence.*
- Within groups, punishment and reward cannot be understood outside the context of cooperation. Cooperation is stable when defectors can be identified, excluded, and/or punished, and when prospective cooperators can be identified, engaged, and rewarded through cooperative exchange. *Research indicates reward may function less effectively as a behavior-changing strategy, but may function more effectively as a behavior-sustaining strategy.*
- Punishment in the context of group conflict cannot be understood absent the evolutionary logic of warfare between groups in an ancestral environment that was “offense dominant.” The “secure retaliatory force” that nuclear strategists argue is necessary for equilibrium in the nuclear age is nothing but a euphemism for “guaranteed vengeance,” in which states promise a punishment that is greater than the benefits of striking first.
- States where the rule of law is weak can beget societies characterized by “culture of honor” traditions in which the *absence of capable and legitimate third-party enforcement and reputation for disproportionate retaliation/punishment becomes the most effective safeguard against personal violence.*
- *Deterrence as a concept may be a long-learned part of our psychology.* Because challenges, predators, or out-group threat have faced humans for millennia, analyzing the notion of

⁷ To request a copy of this report, please contact Sarah Canna at scanna@nsiteam.com.

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deterrence from the perspective of evolutionary models may prove helpful. Rational actors have an interest in settling issues with threats but without the use of violence. Vengeance is certain to be provoked by an attack; deterrence kicks in when the initiators cannot be absolutely sure that they will be successful.

Appendix D: Key Relevant Insights from a Previously Published White Paper Entitled: Topics in Operational Considerations on Insights from Neurobiology on Influence and Extremism (April 2013)⁸

- Modern information technology is empowering violent extremist organizations (VEOs) by providing cheap and anonymous forums to target large audiences. Advances in Cyber-based Communication Technology (CBCT) will revolutionize how DOD operates in cyberspace and will heighten challenges to Military Information Support Operations or MISO (formerly psychological operations or PSYOP). The next twenty years will see a paradigm shift in the fundamental character of the Internet that will revolutionize how people interact globally.
- Communication technologies are means, not ends. They shape social worlds by connecting people in distinct ways, but it is the social world itself that creates outcomes.
 - Deemphasizing the distinction between mass media and social media facilitates more fruitful exploration of the social implications of different means of communication. A four-way communication typology (i.e., speed, directionality, span, and configuration) allows exploration of the human terrain.
 - CBCT can blur the lines between physical reality and cyber-formed reality, which may differ in delivering catalysts for extremist action while potentially removing vital inhibitors.
- CBCT likely does not contribute to radicalization and mobilization to political extremism in a linear fashion. Rather, the various modes of CBCT interact with shaping factors (i.e., culture, values, genetic background, access to technology, etc.) and transition factors (i.e., activators, catalysts, inhibitors, and interventions) to produce psychological and behavioral outcomes.
- Only a very small subset of individuals becomes more radical in their thinking or mobilizes due to interactions with CBCT.
- The impact of CBCT on a person is dependent on the individual's motivation for using the medium.
- Bottom line: CBCT often provides isolated individuals the informational equivalent of an echo chamber through which they can actively or passively access information that is consistently biased toward already expressed preferences and, thus, reinforces and strengthens their existing worldviews and limits the probability of their encountering information that is potentially contradictory or disconfirming. Tailored search algorithms and the psychologically rewarding behavior of participating in "echo-chambers" accentuate these tendencies.

⁸ To request a copy of this report, please contact Sarah Canina at scanna@nsiteam.com.

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- Complex systems concepts provide theoretical frameworks and insights important to designing tailored counter violent extremist organizations (VEO) intervention strategies.
 - Neurobiological underpinnings, processes of socialization, and the constantly changing modern information environment help illuminate the causes for the bottom up emergence of VEOs. In so doing, they help suggest operational approaches to defeat them.
 - Socialization has always required communication. The rapid expansion in digital media dramatically increases the ways that social groups can form, organize, and plan for action.
 - Connectedness in the modern information environment tends to reinforce, not replace, basic human needs to connect with others in person.
 - Real complex systems do not resemble static structures to be collapsed; they are usually much closer to flexible, constantly respun spider webs.
 - Countering strategies should focus on the interaction of the physical, mental, and moral domains instead of physically focused, relatively static center of gravity concepts.
 - Without an understanding of how all three domains relate to one another dynamically, one may miss the right points of leverage and combinations of interventions that will produce the greatest synergetic effect to influence the direction and momentum of constantly evolving social systems.
 - Bottom line: A strategy based on a solid understanding of the dynamic linkages between all three social domains (physical, cognitive, and moral), coupled with solid comprehension of complexity concepts like bottom up emergence, is more likely to help us choose the right combinations of interventions to successfully derail radicalization before violent ideas become violent acts and before violence becomes part of the unquestionable core identity of the individual and the group.