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Briefing to the U.S. Defense Science Board on Countering Violent Extremism

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In general, the US is still woefully lacking in theory, conceptual means and practical methods to prevent or deter violent extremism at the sub-state level that is inimical to US interests. Filling the gap may be key to managing international conflict in the 21st century; for, even major state actors increasingly use sub-state proxies to advance antagonistic political and economic interests.

It may be important to underscore the ideological battle regarding extremism, which often represents a conflict of / quest for identity (especially modern Muslim governance and personhood). This seems to be getting worse, with sectarianism on the rise. Al-Qaeda as a social movement is no longer on the ropes. Extremist ideology is embedding in historic conflicts around the world, increasingly in sub-Saharan Africa and especially across North Africa and the Middle East where the future of the Arab revolutions and surrounding states are in deep doubt. Thus, the need to improve our efforts in the CVE realm has greater national security import.

We must act in ways different than before. We need to improve the understanding of policing and military to deter and interdict, but we also have go a mile further to prevent. The task is to substantially narrow the list of potential radicals, while improving our relationship with populations -- not through standard carrots and sticks approaches or information and propaganda campaigns, which often backfire, but through the care, generosity, humor, creativity and general spirit of Americans, including doctors, educators, entertainers, athletes and more.

Figuring out how to enlist the non-state actors in alliance with our interests is critical, including leveraging of diaspora communities, American companies and NGOs abroad, academics, and related communities of interest that reflect American values and interests (freedom of press, human rights, tolerance of minorities, and the like). The means by which we can influence will likely not come via control by USG programs. It is here that an academic network can serve as a key bridge and catalyst for the awareness and action needed, provided its insights are based on field-based knowledge of actual people and conditions rather than convenient studies of proxy variables and populations, or monitoring, mining and modeling of datasets amassed electronically without prior cultural insights into accuracy and relevance.

I. Deficiencies in theoretical framing, conceptual means, and practical methods regarding CVE

A. Devoted Actors are not just Rational Actors.

- At the level of strategic military, intelligence and academic theory, current analyses, models and positions are still almost entirely based on the post-WWII paradigm of rational actors seeking to advance realization of preferred goals that maximize benefits with minimum costs. However, a decade of field-based scientific research in world hotspots, including behavioral experiments and more recent neuroimaging, strongly suggest that the Rational Actor paradigm is insufficient.

- For example, successive national security assessments and quadrennial defense reviews have stressed that victory or gain against violent extremism is best advanced by ratcheting up material costs for the enemy to unsustainable levels. Yet, many leaders and enlistees of extremist groups, and even some political leaders to a measurable degree, are motivated by "Sacred Values" (as when land becomes "Holy Land") that drive actions in ways dissociated from costs and consequences, risks and rewards.
- Especially when such sacred values are embedded in "Fused Groups," consisting of tight-knit social networks of family, friends and fellow travelers forged through personal sacrifice to promote and defend these values, then a carrots and sticks approach usually backfires, intensifying willingness to sacrifice, kill and die. The empirical evidence from the field is persuasive (as opposed to statistical evidence, however mathematically significant, from large datasets structured by econometrics or other utility paradigms, proxy survey variables such as general attitudes towards violence, and involving proxy populations, such as Western students).

B. Understanding the values that drive actions is necessary and requires in-depth cultural knowledge that cannot be simply acquired through datasets and surveys, however seemingly comprehensive or statistically significant.

- Sacred Values are by and large culture-specific (although such culture-specific values often piggyback off devotion to one's own children and other close genetic family is near universal, and defense of religion and nation are very widespread). This implies that any effective strategy to understand and deal with such values (by leveraging them or offering competing values for devotion) must be culturally informed, but in a deep sense (by observing and participating in day-to-day life in the community) rather than superficially (through attitude surveys, perusal of local news media or internet chatter, and the like).
- To give just one example: Polls show that many people overwhelmingly favor both democracy and Islam as guidelines for national governance. Yet, in-depth field interviews and experiments show that for a significant portion of such people, democracy is simply equated with Islam in ways that are not consistent with Western notions of democracy. For example, for people who believe that Sharia is a sacred value (immune to tradeoffs social influence, discounting), elections are valuable only insofar as they advance that value. "Democracy is only a tool of Islam" is a refrain among leaders of the Muslim Brotherhood, Hamas, many Arab Springers, and members of militia with whom our research groups have repeatedly interacted.

C. Understanding and altering pathways to violent extremism requires historical knowledge of how actual networks form and evolve over time, and field-based knowledge of actual environments. Only models built from such data will be reliable.

- The path to violent extremism always involves a timeline. People who join the path mostly follow a normal distribution: there are few truly brilliant actors and few true psychopaths and sociopaths (although there are some). Sometimes the path to violent extremism can take years, and sometimes a few months, weeks or even days (especially if channeled by family and friends).
- Current formal models do not capture even basic understanding of how such natural networks initially form, much less evolve. Modeling in this domain is nearly all *a priori* and of little real-world relevance.
- Strategies of intervention and influence must be not only sensitive to the cultural setting, but also to where targets happen to be along the path to violent extremism.
- For example, once people "lock into" sacred values in a fused group, then most influence and intervention approaches fail or even backfire. The only relatively complete successes we have seen at bringing people back from such a state of fusion with their group and its values is either to break apart the social network in which the person is embedded or, better, provide strong alternate networks and values that are close to the values that engaged the person (non-militant Salafī groups are often best poised to make this happen).

- One indication of the importance of social networks is the fact that nearly all Muslim immigrants or descendants who join a militant Muslim group in a US prison, as opposed to a European prison, no longer associates with such a group upon leaving prison. (The NYPD refers to this as “Prislam.”) This is because scant social support exists for militant groups in US Muslim communities (apart from some particular cases, such as Somalis lifted from the subtropics and relocated within miles of the offices of HHS relocation subcontractors in Minnesota or Arizona). Regardless of foreign policy, and owing to the social history and fabric of the US, Muslim immigrants are thoroughly part of the American mainstream within a generation. (The American Dream basically works for them). By contrast, second and even third generation Muslim immigrants in Europe tend to be socially, economically, and politically marginalized. Accordingly, there is greater space for a “counterculture” of extremism outside of prison. Though, this could come to happen in communities in the US depending upon the policies of our refugee resettlement programs.
- Al-Qaeda, like other revolutionary groups, was initially formed and led by fairly well-educated and well-off individuals. Ever since the 19th-century anarchists, science education in engineering and medical studies has been a frequent criterion of leadership for these groups because such studies demonstrate savoir-faire and potential for personal and costly sacrifice through long-term commitment to a course of study that requires delayed gratification.
- Over time, however, enlistment into such groups increasingly tends to involve less advantaged individuals. Following 9/11, those who have enlisted in violent jihad increasingly come from marginalized communities, especially volunteers who come from the Western diaspora. On average, they are less educated and less well-off than the previous generation. They are mostly young adults in transitional stages in their lives: immigrants, students, between jobs or girlfriends, having left their biological family’s home and seeking a sense of personal worth and significance with their close peers.

D. Promotion of moderation, democracy, education, and religion are problematic; these require a much more nuanced approach than hitherto proposed and practiced.

- Many who engage on the path to violent extremism are idealists driven by a sense of moral outrage that resonates with their personal life (for example, anger at the perceived humiliation of their immigrant parents and peers resonates with perceived oppression of Muslims in other places). Theirs is a quest for heroic adventure in a great cause that carries high esteem in the eyes of their peers and, by extension, with the larger community that they believe they represent.
- The success of the US gov’t in blocking large-scale financial transfers to extremist groups and their friends has compelled these groups to further collaborate with the criminal underworld to provide arms and logistical support. Increasingly, petty criminal collaborators are joining jihadi actions, and even willing to sacrifice their lives for their new reference community and its greater cause. Thus, even those who may have initially chosen a criminal life because of “opportunity costs” frequently become immune to considerations of material advantages and disadvantages associated with their career choice once they join the jihad.
- Exposure to “moderate Islam” and alternative interpretations of Quran, offers of jobs and other material compensation, social and peer pressure from outside the primary reference group, pointing out that indiscriminate violence hurts innocent people, and other commonsense approaches generally do not work with value-driven, group-fused individuals. These are tactics inspired by work with petty criminals and troubled youth in Western countries, and of only limited relevance to extremist groups abroad.
- Culturally-relevant action heroes and ideals can be attractive alternatives – and I stress ‘action’ here. Unfortunately, there is little evidence that US intelligence, military and policymaking has the local knowledge or awareness of what to promote in a local context. For example, in Morocco dubious evaluation measures for the success of US-sponsored local governance programs stressed the number of “youth houses” (*Dar al-*

Shabab, maisons de jeunesse) built with USAID support. Within the youth houses, some would surf jihadi websites but many more would engage in chatter using an ersatz language invented by the young people themselves, which they called “Franglish” (an amalgam of French, English, Spanish and Arabic). Franglish conversations spanned young people’s interests: school, jobs, girls, politics, and so on. Rather than promote this spontaneous development with new ideas and opportunities, the order came to shut it down.

- Historically, democracy is not very successful at adjudicating across confessional boundaries. (Those boundaries were dismantled over the course of centuries in the West, but not elsewhere except in places like post WWII Japan). And, as signaled above, democracy can be selectively used or discarded as a mere “tool” in an agenda driven by other, deeper values. In any event, development of democracy requires a long-term, sustained commitment among youth that incorporates local cultural values, not just abstract ideas that are the precipitate of centuries of Western thinking and development.
- Education, like religion, can bolster or buffer against violent extremism, depending on other relevant personal and cultural factors. Thus, we find that traditional religious education is generally a negative predictor of supporting or involvement with violent extremism, whereas a more fundamentalist education among “born again” youth with little traditional religious training is a positive predictor. And we find that secular education – especially science education – can enhance engagement violent extremism among those already religiously devoted. Religious and science education can important channels for furthering less confrontational ideas, but not as a uniform policy or curriculum.

E. Technological prowess in monitoring and mining data for security challenges is no substitute for knowledge of how people actually think and interact. Without this knowledge, such technology can be wasteful and misleading no matter how sophisticated.

- After talking to British and US national security folk over the last few years it seems clear that there is precious little cultural knowledge of people on the ground. Intel is increasingly technology-based in almost direct proportion to decreasing knowledge of real people and their social networks, and of the values that drive people into these networks and empower them (from the vantage of those in it) as seemingly invulnerable “brotherhoods.”
- To try to get around this problem, our analysts and academics are focusing on facebook, skype, instagram, twitter and other social media. But you'd have to be about the dumbest terrorist in the world these days to rely on, or even regularly use, such media. Websites and postings are also mostly a waste: much blather and boasting and meaningless junk.
- Jihadis rely on one another because of shared experience that creates trust. They often call themselves “the Alumni” (Afghan Alumni, Syrian Alumni, etc.). Their internal hierarchies, to the extent these quasi-leaderless groups have them, are often in terms of which “class” or group they belong (the oldest veterans in a particular hotspot being those with the greatest respect (except for the Taliban, because we've knocked off the older guys, leaving the younger and more vicious ones in control and increasingly disrespectful of the older veterans who are still left). They do use hidden chat rooms, which they change and can take down very fast. They can usually tell within minutes if someone speaks “their language” (often phrases or words that only those with shared experience recognize), and they take down the sites after anything consequent is decided upon and then go silent, often for months (no communication whatsoever). The USG and other intel groups have only occasional snapshots of these goings and comings. This speaks, again, for deep understanding of local language and culture.
- In following the rapidly changing jihadi web sites and chat rooms, one might want to look into the research on how the Chinese manage to stay one step ahead of the censors. They change their language from “yesterday's train crash” to “Harmony Express” to “that event”, and so on. Perhaps the methods the Chinese censors use (including volunteer monitors) could be used to track jihadi talk.

- Key to understanding and managing the involvement of cyberwarfare and cybersecurity in this area is not just expertise in hardware and software, but in “wetware,” the proclivities and biases of human social cognition that can bypass or overcome (even if inadvertently) the most sophisticated technologies available. Robert Axelrod at the University of Michigan and Ross Anderson at Cambridge University are world-class sources for such understanding, with long experience in defense-related issues.

II. Proposals to improve our handle on CVE and to deal with evolving threats.

A. Proposals for improving culturally-relevant use of technology, policing, and military.

So how do we really acquire this kind of people-based cultural knowledge, and then intelligently interface it with the marvelous technology we do have (and which, without knowledge of real people and their cultural milieu, mostly analyzes and produces spaghetti)?

1. **Re-establish Foreign Area Centers, with an added focus on trans- and cross- area groups, movements, ideologies and populations.** One thing the US can do is refund Foreign Area Centers (including trans- and cross-area movements and populations) at universities in order to promote expertise to draw on, as well as to increase, the flow of students (especially Masters level) who learn both the language and culture of an area. This used to be under the National Defense Education Act.
2. **Devise networks of “human sensors.”** Perhaps the easiest way to improve understanding of evolving threats is by engaging open and existing sources to devise networks of "human sensors" in key sectors, geographies, conflicts, and groups to understand better on a real-time basis the evolution of trends/ideas, leadership, and potential threats or flashpoints. Existing sources of data already exist: from insurance brokers and immigration lawyers to port authorities and bankers, who see trends unfolding, and monitor and quantify them for their own purposes; to diaspora communities which are often in close/better touch with the development, nuance, and effects of overseas events and conflicts. In this regard, can we think differently or more creatively about what "markers" of instability or threat exists and can be monitored? The “Trusted Information Network” formed by the Center for Strategic and International Studies could be a starting point.
3. **Create a Strategic Policing Initiative.** The CIA can't go into neighborhoods at all (for all sorts of reasons, as I found out after being in the hotspot neighborhoods abroad with former CIA), and probably shouldn't (for all sorts of reasons). So here's an idea that I've been talking over with the Deputy Commissioner of Strategic Initiatives at NYPD. Apart from fictional Mayberry, the NYPD has the best community policing and community-based intel I know of (the Turkish police are also good, but the power struggle between Erdogan and Gulen has caused havoc within the ranks of senior police, many of whom are Gulen sympathizers).

Why not enlist business leaders and professionals (some of whom are already part of the new private enterprise RANE security network) to help fund an "International Strategic Police Initiative" spearheaded by the NYPD that brings in rising mid-level police and related professionals from all over the world for strategic training in theory as well as in community policing and intel? The program can be somewhat modeled after the US military war colleges, which have provided the military benefit for decades. Such a program could further relationships of our law enforcement with other law enforcement officials the world over and provide a stronger network for prevention and defeat of emerging radical threats. Appropriate strategic training could establish the right ethos for appropriate behavior, while training in theory (for example, why traditional military doctrines based on material cost-benefit, risk-reward strategies are not likely to work against these particular threats) could help better focus appropriate actions and resources. John Jay College of Criminal Justice in New York may be a good place to start because it already has such an incipient network.

4. **Provide cultural and psychological training in social mediation and cultural management to our military.** Our military continues to be trained and rewarded primarily as operators and combat organizers, but they are not as adequately trained for the political and cultural missions they are increasingly tasked with in regard to

CVE, including: preventing radicalization (especially among youth in the next generation), countering radicalization (for example, by de-coupling the Qaeda movement from the local and cultural grievances and national movements that Qaeda tries to co-opt), and de-radicalizing those already engaged along a path to violence. (Although a "public health" approach to radicalization would be hard to legally implement in the USA, it has been part of the apparent success of the de-radicalization program initiated abroad by General Douglas Stone in Iraqi prisons, which gives families and communities responsibility for keeping former detainees out of trouble).

B. Proposals to directly engage populations with soft power initiatives that *do not* rely on attempts at propaganda and information control. (Attempts at information management are mostly ineffective and often backfire among populations not already disposed to the ideas proffered – unlike, say, the Eastern European populations under Soviet rule).

5. **Minimize overt military involvement and rethink government-to-government aid.**

Human Terrain teams failed to engage larger academic community – undermining credibility. Little of intellectual or practical value from them has been retained by the larger academic community, and their activity (associated with uniformed, arm intervention, however benign in intent) has only increased the hostility of major scholars and scholarly associations to working with the US military. According to members of the HT teams that we have interviewed, whereas HT teams may have influenced operational procedures in theater, Impact on overall intervention strategy is highly questionable.

The post-WWII paradigm of foreign aid does not work well in unstable regions where local populations do not trust the government. Most funds are funneled not to people in need, but into a patronage system of foreign government cronies and colluding agencies.

6. **Engage America's creative, productive and efficient non-governmental groups. These include faith-based organizations, universities, entertainment media, and small businesses,** which may be better help to finance, explore, and establish local initiatives by working with various youth councils, tribal elements, religious organizations, merchants, and women's groups in support of organic movements for a more inclusive and tolerant government. Aid programs often target economic development through education or Job programs, but do little to develop entrepreneurial capacity amongst job seekers at the grass-roots level as well as pro-entrepreneurial policies by national and local governments.

Political groups and militia rely on some form of popular support. It is essential that we consider new programs that go toward increasing our soft power. This is not done with existing aid programs, generally. For example, the ARTIS Center for Health and Medicine is working to establish a rotation for doctors in medical school to complete one of their eight rotations in crisis medicine (conflict and disaster areas). The aim is to create something similar to Doctors without Borders but with a longer presence, deeper appreciation of local conditions, and broader awareness and use of local knowledge and customs. The idea is motivated, in part, by our observations following the 2004 tsunami in Indonesia's Aceh region and the 2005 earthquake in Pakistan's Azad Kashmir that this kind of assistance, without propaganda or fanfare, is what is most likely to turn hostile populations into potential friends (U.S. humanitarian assistance, which appeared to be spontaneous and propaganda-free, significantly increased support for the U.S and opposition to Al-Qaeda and its ilk among the entire Indonesian population). The Cuban government, for example, has consistently used this sort of assistance to great effect (including in Azad Kashmir, where the local population remembers the Cubans as heroes).

7. **Revise the Arcane and Hidebound Legal Requirements of Human Subjects Research.** Perhaps most important for acquiring and leveraging relevant knowledge is allowing people to get knowledge in the field.

DoD's MINERVA and MURI programs have managed to successfully enlist high quality academics in more productive and acceptable ways; however, these programs are severely hampered by US government legal requirements concerning human subjects. Until now the universities, and even more so

the research agencies of the Department of Defense (AFOSR, ONR, ARO), have treated all human subjects as if they were American college students who should not be exposed to potentially disrespectful or hostile environments, even if only by way of words used in hypothetical scenarios. How in the world, though, are you going to get reliable information about uncomfortable situations – and political violence and terrorism are certainly uncomfortable -- if the aim is not to have anyone of interest consider things remotely uncomfortable?

In addition, at least some principal DoD research funding agencies demand host country authorization for any study. This is even demanded of friendly governments, which usually refuse giving government authorization because they don't think they should interfere with research from their own universities or ours. In our own country, such a requirement would be considered an authoritarian imposition of government upon intellectual inquiry.

The existing human subjects approach one of risk management: trading off optimal research to lower risk to DoD reputation. All DoD research agencies require signed consent forms acknowledging DoD sponsorship of the research (perceived by DoD to reduce risk of being labeled intelligence gathering operations). But what jihadi, or even supporter, in his or her right mind would ever sign such a thing? (Possible harm to researcher is not a consideration in according human-subjects approval, only the possibility of legal recourse by a subject against the organization sponsoring the research). Moreover, research actually shows that even for members of the general populations of countries such as Egypt, signing a consent form that mentions DoD significantly decreases the reliability of responses. We need a more realistic approach to risk management on human subjects. A thorough review is in order.

G. Summary. Countering violent extremism will not be won on the battlefield alone. Before we put our police, armed forces and civilian populations in harm's way, it is incumbent to arrest the wave of radicalization and destabilization that fuels the armed struggle. This wave shows no signs of subsiding. To the contrary, thousands of foreign fighters ([8000-10000](#) from about 60 world nations) by recent estimates are flocking just to join the fight in Syria. The situation in Iraq is worse (in terms of violence) than it was in 2006 (before the surge). From Western Europe, whose citizens do not need visas to enter the US, 1200-1500 volunteers have come to Syria. The foreign veterans are likely to return to the countries of origin with the halo of heroes and contribute to further radicalization. And from the swelling streams of unwelcome refugees pushing on Europe's doors, more of the marginalized will merge into a resentful counterculture susceptible to violent extremism.

We know that societal instability is increasing worldwide with formerly autocratic societies unraveling, and in many cases, no new stable order developing. This instability is fertile ground for a host of new radical forces to emerge that are inimical to US values and interests. Extremist groups such as ISIS, AQAP and AQIM and AQ have territorial pretensions that are constantly threatening to destabilize geopolitically sensitive regions. The ever-widening scope Sunni-Shi'a wars threaten to engulf most of the Middle East and beyond in a spiraling cycle of political violence and social dislocation. Iraq's Anbar Province is now the eastern flank for the Syrian war. Lebanon's Beqa valley alone has over 60,000 refugees with little effective government control. There, al-Qaeda associates, like al-Nusra, are omnipresent and political assassinations as well as atrocities against civilians occur daily among the various Syrian refugee groups. As the head of the UK's National Security Stabilisation Unit put it: "if we haven't a clue how to stabilize one valley, how can we hope to manage the fallout from the world's most unstable region?"

The region is presently not only the world's most unstable, it also the region least likely to be able to control proliferation and use of weapons of mass destruction (which extremist groups are eager to get their hands on). Since WWII, all state-sponsored uses of chemical weapons and all but one violation of the NPT have been by Middle Eastern countries (North Korea is the only other violator of the NPT, having supplied nuclear bomb related materials to the Middle East violators).

Proxy wars between nation states will fuel new groups committed to violent ideologies (Sunni/Shia or even non-religious groups) and the affected states themselves will serve as the organizer actors behind disparate groups or networks throughout the world. We're seeing this play out in the Syrian context (and will likely play

out again in Afghanistan post 2014), and it's worth asking whether the emerging proxy battles will accelerate new forms or manifestations of violent extremism (just as we saw emerge from the mujahedin fight against the Soviets).

Problems of of radicalization and political and social destabilization leading to violent extremism are severe, threatening societies around the globe. These are social science problems in their very essence. Technological widgets cannot do the job of socially sensitive thinkers in creating alliances, leveraging non military advantages, reading intentions, building trust, changing opinions, managing perceptions, and empathizing (though not necessarily sympathizing) with others so as to understand, and change, what moves them to do what they do.

Social science can critically inform us about issues of identity and ideology that also remain central to the question of CVE -- how do individuals define themselves, organize, and attempt to recruit and mobilize others? In the post Arab revolutionary context, what does the political environment in particular countries do to violent ideologies and programs -- does it give them new life and political outlet or does it marginalize or defuse them? How can political competition in this environment be used to undermine violent extremist ideologies -- especially those with global aspirations? In addition, what does competition within political Islam look like moving forward, and how can conflicts within/between competing groups be used to our advantage?

Social science insight into the problem of individual and group mobilization is also critical to CVE and to comprehension of what will become of the political aspirations that drove the Arab revolutions. Who and what can animate and organize the forces that hit the streets or that decide to turn violent? How do new technologies affect the formation of group mobilization and disintegration -- and can such technologies amplify a leader to coalesce and organize disparate groups and individuals? What constrains the emergence of global leaders of disparate, but related radical networks?

Yet, for reasons of intellectual and physical convenience, coupled with tan out-of-touch legalistic approach to human subjects, there is very little field-based study and knowledge, including from academics. Instead billions of dollars of research monies have been given over to mining large-scale databases from comfortable offices and labs, using theories and methods derived from Western standards (such as utility theories and econometrics) with proxy variables and proxy populations (attitudes and expressed willingness towards violence among people not involved in real action groups).

DoD's MINERVA and MURI programs, which are run through DoD's academically-oriented research agencies (AFOSR, ARO, ONR), have managed to successfully enlist high quality academics in more productive and acceptable ways; however, these programs are severely hampered government legal requirements concerning human subjects. The bottom line is that a very significant increase in the amount of resources deployed for field-based empirical research would go a long way to improve our collective cultural understanding to reduce threats from violent extremism across the globe.

To translate relevant social science into meaningful policies and specific programs a great deal more needs to be done, especially in the field. This requires, at a minimum, changing academia's research culture of convenience and the government's legalistic approach to human subjects research.

In brief, the US needs to get back into the business of language and cultural training on a significant level, and into the field. This is what my colleagues and I from the academic and policy worlds are trying to do at ARTIS Research, but this cannot be done exclusively from outside government or without government changes.