

SMA Reach-back

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Question (R2 QL1): Have sentiments changed since the December 2014 polling? Have recent IO efforts in Mosul influenced these sentiments? What other means can we use to influence?

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Executive Summary

Author: **Dr. Ian McCulloh**

Data suggests that sentiment toward DA'ESH¹ has changed since the December 2014 polling conducted by USCENTCOM. The SMA team cannot adequately assess recent IO efforts in Mosul due to lack of clarity on programs conducted, their specific objectives, and an understanding of the associated assessment plan. A limited assessment of DA'ESH online propaganda and impacts of US Government (USG) and coalition efforts to restrict this propaganda is provided. Insights for future influence operations are recommended.

USCENTCOM understanding of the population on the ground is significantly hampered by a lack of continued polling and survey research in critical areas of strategic significance. It is clearly possible to conduct this type of research throughout DA'ESH controlled territory as well as other non-permissive environments with proper risk mitigation measures in place. While polling in these environments is dangerous and should not be left to inexperienced staff officers to plan and manage, it provides critical insights for effective operations in the Gray Zone. The first and foremost recommendation in this report is for the Commander, USCENTCOM to personally intervene to obtain the necessary authorities and resources for on-the-ground polling in areas of strategic importance.

Dr. Munqith Dagher of IIACSS, a polling and research firm in the Middle East, has provided independently funded data collected in Mosul between the December 2014 poll and March 2016. These data show that general popular support for DA'ESH increased through December of 2015 and then dropped sharply. As of March 2016, popular support for DA'ESH in Mosul had nearly returned to pre-invasion levels. The SMA could not identify more recent data to support objective assessment.

Atmospherics from IIACSS pollsters indicate that the decline in popular support to DA'ESH is primarily due to increased harsh treatment of the local population by DA'ESH in response to fears of locals providing active support to the Government of Iraq (GoI) and the coalition. They also cite deteriorating economic conditions as a result of low oil prices, closed borders, and economic sanctions against DA'ESH.

DA'ESH's internet presence has changed over the last year. Their focus has shifted from highlighting positive messages of "Life in the Caliphate" to messages of battle statistics and a narrative that losses on the ground do not translate into the elimination of the Caliphate. It is the opinion of the authors that this shift in narrative is less effective for DA'ESH securing popular support, but may be more effective at reducing military defection and maintaining a source of foreign fighters for their ground campaign.

The USG campaign to remove DA'ESH cyber personas from the internet (e.g. Twitter suppression) may make it more difficult for potential recruits to find, however, it makes it equally difficult to collect information on the DA'ESH narrative, priorities, objectives, and lines of persuasion. Given DA'ESH guidance to members to limit individual accounts suggests that they may be attempting to limit their online footprint as a matter of strategy and not in

¹ DA'ESH is also referred to as "The Islamic State", "Islamic State in the Levant", "Islamic State in Al-Sham", or by the acronyms IS, ISIL, ISIS. This organization will be referred to as DA'ESH throughout this report.

response to online information operations activities by the USG. Increased restrictions on the internet has resulted in on-the-ground distribution of offline media (CDs, DVDs, etc). There is insufficient data to understand the nature or effectiveness of these materials. It is the opinion of this author that USCENTCOM should pursue a more sophisticated campaign of operational preparation of the environment (OPE) to support a wider range of options for military engagement and foreign policy.

An assessment of individuals who have joined, defected, or provide tacit support to DA'ESH reveal two major reasons for support: governance and ideology. People throughout Iraq seek economic prosperity free from sectarian prejudice. They seek an equitable distribution of government services. The coalition must be prepared to fill the governance vacuum with micro-economic development programs, restore oil revenues, and most importantly ensure that non-local sectarian militias do not take control of former DA'ESH occupied areas. Governance will be more successful if it is decentralized at the local level. As a matter of ideology, Iraqis culturally value dignity and family. Fears of reprisal, treatment of civilians, and the inappropriate use of Islam are cultural levers that can quickly turn the population away from reconstruction efforts. The coalition must prioritize efforts to create checks and balances that monitor and prevent corruption and reprisals.

Although not included in this report, Johns Hopkins University and University of California Los Angeles recently conducted social neuroscience experimentation in Amman, Jordan. One of the findings was that Jordanians and Iraqis in the study resented the use of Islam in persuasive messaging. They also found that the use of Islam provided a more effective influence channel. The coalition must be very careful in whether they use Islam and how they use Islam in any information operations activities. While Islam can provide an effective line of persuasion, it may also develop resentment toward the messenger. It is the opinion of the authors that messaging involving Islam should be left to Muslim non-governmental organizations.

The remainder of this report is organized into four chapters. The first chapter provides on-the-ground data for popular sentiment in Mosul since 2014. The second chapter provides an assessment of DA'ESH propaganda online. The third chapter offers recommendations for future operations in Iraq. Biographies of contributors are provided. These authors can be contacted through the DDGO.

1. Recent polling

Author: Dr. Munqith Dagher and Dr. Ian McCulloh

IIACSS is a population research company that conducts regular polling throughout Iraq and other countries in the region. They have done the majority of Iraq polling work for the US Department of State and USCENTCOM. Although the US Government has not permitted US funded polling in opposition held areas, IIACSS has graciously provided results collected from projects funded by other customers.

IIACSS conducted 120 face-to-face interviews in Mosul in December 2015 and March 2016. The poll uses respondent-driven sampling (snowball) for safety and security reasons. Figure 1 shows responses to the question, "Thinking about life in general, is it better or worse today than eighteen months ago?" Through years of research conducted by the Special Projects

Operations Center (SPOC)², this question was found to be the best predictor of strategic success/failure for operations aiming to influence the Iraqi population to support US objective and reject Al-Qaeda in Iraq.

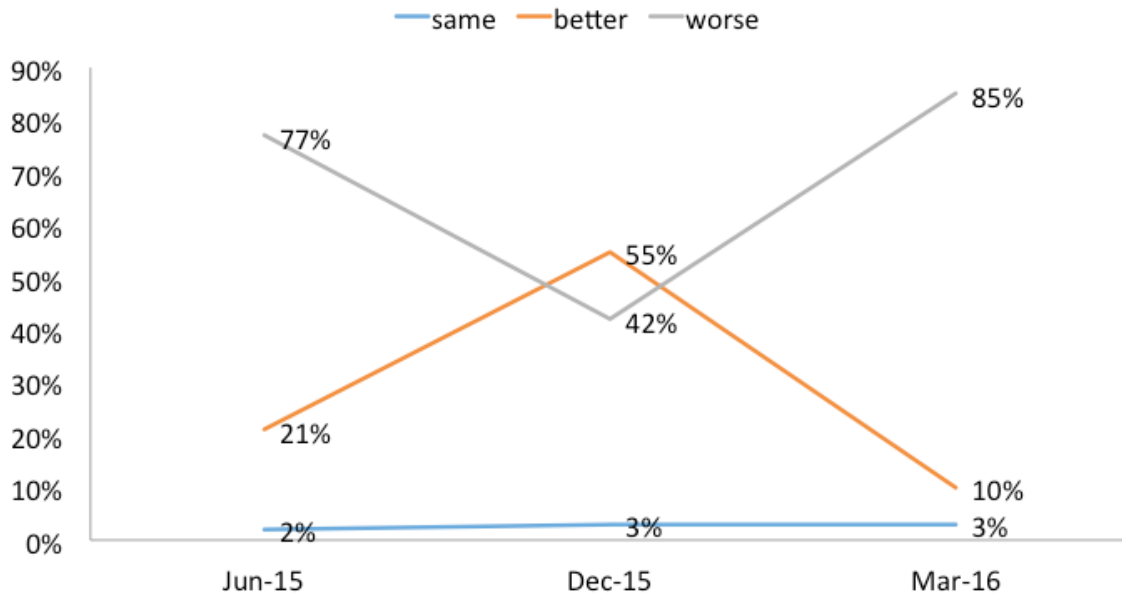


Figure 1. “Thinking about life in general, is it better or worse today than eighteen months ago?”

It is difficult to draw clear conclusions for the population sentiment for or against US interests. Had territorial control been under US or GoI control, we could conclude that the change in sentiment from December 2015 to March 2016 was in the coalition favor. Give the losses on the ground for DA’ESH, it could be that the population holds a negative opinion of the return of GoI control in areas of Iraq.

Other data suggests that popular support for DA’ESH is in deed dropping. Another polling question asked in Mosul is, “In your opinion, to what extent does DA’ESH represent the views and interests of people like you?” The data show that people increasingly identified with DA’ESH as an organization from the time of their invasion through December 2015, however, that has significantly fallen between 2015 and March of 2016.

² The SPOC was the largest and most successful psychological operations campaign conducted by the U.S.A. since WWII. It was a data-driven operation consisting of multiple lines of effort in support of Multi-National Force Iraq and US Force Iraq.

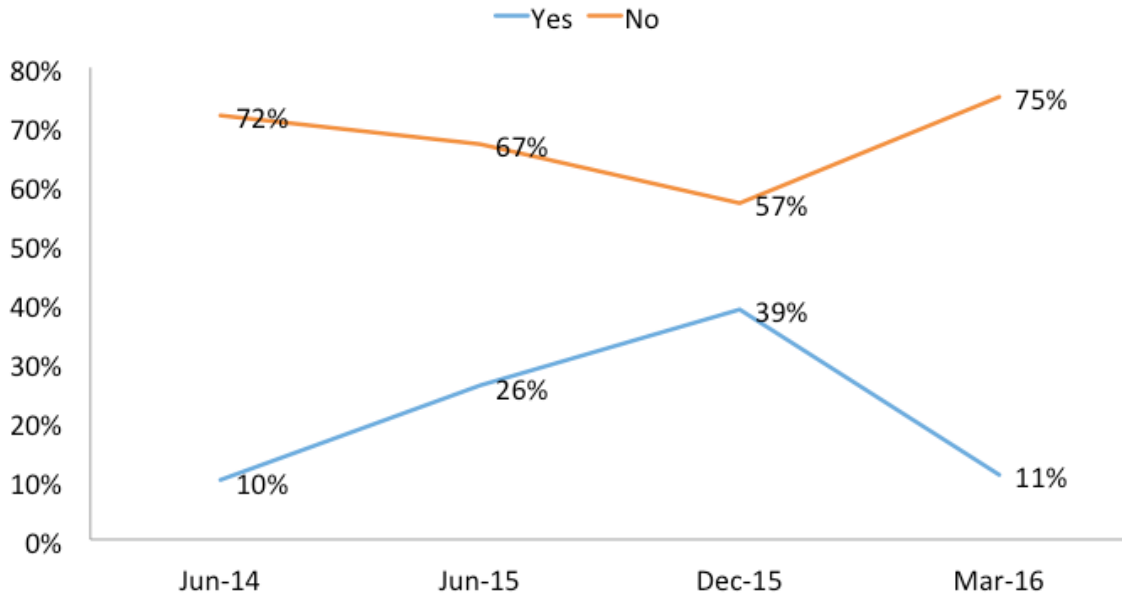


Figure 2. “In your opinion, to what extent does DA’ESH represent the views and interests of people like you?”

It is difficult to attach causation to the downturn in popular support. Atmospherics on the ground in Iraq indicate that DA’ESH was running out of money and resources. There are many potential reasons for this ranging from effective global sanctions, close monitoring of borders to limit oil smuggling, and the sharp drop in oil prices during this time. The loss of DA’ESH resources has resulted in a decreased ability for DA’ESH to provide the same level of services and subsidies that it provided between June 2014 and December 2015. DA’ESH has also become more violent toward the local people, accusing many of being agents of the US or GoI, as coalition attacks increased in frequency and effectiveness. It is the opinion of Iraqi pollsters living in the region that the two statistics are a result of DA’ESH’s increasingly harsh treatment of the local population more than anything else.

An October 2016 poll in the newly freed areas from DA’ESH in Anbar showed optimistic attitudes about the future among the people living there with high expectations about the future. This attitude is expected in Mosul following DA’ESH defeat, as it has been in all cities freed from DA’ESH in the last year. This means that the population is focused on the future and not the past. Strategic communications messaging should focus on the future as a main theme, since it resonates with the population and counter’s the DA’ESH narrative that focuses on the past.

While popular support for DA’ESH in Iraq never reached a majority and is now dropping, it is important to recognize some of the key conditions that allowed the legitimate government to deteriorate so quickly. Popular expectations were high for their economy, civil infrastructure, and social opportunity. These expectations were not met and conditions declined sharply following the withdrawal of US forces in 2011. Concerns over government corruption and sectarian mistreatment of Sunnis by Shi’a were consistently reported in US DoS and USCENCOM polling between 2012 through 2014 to include polling conducted during the DA’ESH invasion of Mosul. DA’ESH was able to rapidly gain popular support by

addressing these long-held grievances more rapidly than the coalition or GoI had been able to do.

Sending positive messages via mass coordinated communication can help in the current battle in Mosul. It is important to convince people that there will not be any revenge actions in the city following the defeat of DA'ESH. They must believe that new (non-local) militias will not enter and control the city. The level of civil infrastructure and economic opportunity must be maintained or improved. Popular expectations must not exceed the GoI's ability to deliver.

The post-DA'ESH era will be critical for Iraq's long-term stability. Corruption and the lack of trust in local leaders are a principal reason for the relative ease of DA'ESH occupation. The former local leaders lack legitimacy and must not be allowed to return to power. Civil military operations and Department of State partners must focus on developing new trusted leaders at the local level.

2. Da'esh Media Propaganda

Author: **Aymenn Jawad Al-Tamimi**

Means of reception of DA'ESH propaganda

On the macro level (e.g. outside CJOA), audiences are primarily receiving DA'ESH propaganda via the Internet, consisting of dozens of items of official propaganda on a daily basis such as videos, photo series, magazine publications, a radio broadcast, books and pamphlets- all alongside output from supportive but unofficial media outlets like al-Battar media and al-Nusra al-Maqdisia. Prior to late summer 2014, this meant prolific use of open access social media platforms, in particular Twitter, where DA'ESH operated multiple official accounts for central media outlets like al-Itisam and the media offices for their various declared 'provinces' (wilayas) within Iraq and Syria. Since being kicked off Twitter though, DA'ESH has tried various other means to aggregate information. Sometimes, this has involved the setting up of websites that feature the group's media releases, such as Isdarat ('issues/releases') and Akhbar al-Muslimeen ('News of the Muslims', a website that claims to be officially 'independent') and 'Come to Success News.' Though able to operate with a degree of impunity at first, these sites too have been increasingly shut down over the period 2015-2016, such that the web addresses to locate them now can be very complicated if they exist at all.

The present trend has been to migrate to the more closed platform of Telegram, where channels aggregating DA'ESH propaganda were initially able to operate with total impunity until the Paris attacks, when pressure came on the platform to take action. While DA'ESH propaganda accounts are now increasingly being deleted, aggregate channels, which are normally accessed via finding 'invite links' that expire after a limited amount of time, normally create multiple copies of themselves in a bid to remain one step ahead of deletion. That said, certain DA'ESH propaganda accounts and supporters do remain persistent in trying to open accounts on Twitter and other more open platforms.

Alongside the trend in deletions has been the disappearance of most social media accounts operated by individual members, which was an important means for sympathetic audiences on the macro level to establish personal connections and either join the ranks of DA'ESH within Iraq and Syria or perhaps plot to conduct attacks in home countries. Alongside action against these accounts on social media, DA'ESH has issued at least two internal communiques warning members against operating individual accounts on social media: General Governing Committee directives no. 8 and no. 94, the latter essentially being a repeat of the former's contents after reports of continued violations of directive no. 8.

Looking more specifically at the content on the macro level, one can distinguish general themes in the propaganda and also messages aimed at a particular demographic. The former has varied over time alongside the fortunes of DA'ESH: that is, at the height of DA'ESH's success, the messaging gave big weight to advertising the supposed success of the statehood project of DA'ESH. This would mean photo and video releases, for example, which display normal daily life under the Caliphate as well as the functioning of DA'ESH's various bureaucratic departments on the ground within Iraq and Syria in particular. Over time though, as the statehood model has increasingly faced challenges and suffered territorial losses, the propaganda has increasingly become military in nature, providing daily updates from the frontlines and producing infographics with battle statistics. That is not to say that propaganda advertising life under the Caliphate and governance does not exist anymore, only that it is much less prominent. Increasingly on the macro level perhaps, one could say that the messaging is being directed more at those who already are sympathetic to the

organization, as recruitment to come to Iraq and Syria has also been made logistically difficult and DA'ESH tries to explain how its losses do not translate to the end of the Caliphate project.

Particular demographics were also targeted on the macro level in the form of media campaigns. This concept was alluded to in an internal text called Principles in the Administration of the Islamic State, a position paper discussing organization of media and other aspects of the DA'ESH project. These media campaigns typically involve the production of multiple videos over a short time period from the organization's various provincial media offices all revolving around messages to people in a particular place. Target locations have included Somalia, the Maghreb and the Palestinian territories. A specific agenda is normally apparent in each campaign: for example, in the case of Somalia, the aim was to secure as many allegiance pledges as possible, gearing up for the defection of Abdiqader Ma'mun from al-Shabaab, Somalia's al-Qa'ida affiliate. Since al-Shabaab had not openly spoken out against DA'ESH (though internally prior to the Caliphate declaration, it seems efforts had been made to ban circulation of DA'ESH propaganda material among al-Shabaab members), the language of the video campaign was very conciliatory in the spirit of 'brotherhood', emphasizing that not pledging allegiance to the Caliphate is a missed opportunity. In contrast, the messaging to the Maghreb was more open in attacking al-Qaeda in the Islamic Maghreb.

On the micro level (i.e. within DA'ESH-controlled territories in Iraq and Syria), the online propaganda is distributed in multiple forms on the ground to the local populations: this includes broadcasting of video releases at designated *nuqtat ilamia* (media points), distribution of pamphlets, books, CDs, DVDs and newsletters on the street and at designated offices, and the radio broadcasting. However, there is also plenty of propaganda not available online that is disseminated on the ground to the local population, permeating most aspects of life through the extensive bureaucracy. For instance, the Diwan al-Da'wa wa al-Masajid (Da'wa and Mosques Department) organizes Friday sermon themes in the mosques, and has distributed multiple pamphlets not published online. The department also helps organize 'Shari'i courses' (dawrat shari'ia) to reinforce ideological indoctrination, issuing certificates for those who complete such courses. In a similar vein, the school curricula has been revamped with the publication by the Diwan al-Ta'aleem (Education Department) of a new set of textbooks for children. In part, these textbooks act as a platform for DA'ESH propaganda through normalizing DA'ESH concepts of jihad, warfare and an Islamic way of life (e.g. English language education discussing the prohibition on smoking, math problems involving weaponry etc.).

Considering the increasing restrictions on Internet access within DA'ESH territory in Iraq and Syria, whereby attempts have been made to restrict private Internet access and monitor Internet use as far as possible short of being able to develop the necessary technology, distribution and dissemination of DA'ESH propaganda material on the ground must be considered the primary means of reception for the micro-level audience, rather than online broadcasting.

An internal text discussing Da'wa: external vs. internal

The DA'ESH strategist and dissenter Abu al-Faruq al-Masri, who was based in Raqqa but has since been disappeared by the organization's security apparatus following a critical pamphlet he disseminated earlier last year, wrote a text (subsequently banned) called al-Manhaj al-Sayasi wa al-Tandhimi lil-Dawlat al-Islamiya ('The political and organizational program for the Islamic State'), which contains a specific section on da'wa (outreach

work/proselytization) that is of interest here, as da'wa is an integral concept of DA'ESH propaganda outreach.

Abu al-Faruq al-Masri makes a similar distinction to what we have considered here regarding the distinction between the macro and micro level audiences. He distinguishes 'internal da'wa' and 'external da'wa': the former he defines as directed towards the audiences of Arab and Muslim countries. This da'wa, he says, must aim to 'show the strength of the Islamic State and that it is capable today of protecting the Muslims, gathering their banner together, and ridding them of the bonds of humiliation and tyrannical rule that have stripped them of their religious and human rights. External da'wa he defines as directed at "the idolaters", in particular those residing in places like Europe, U.S. and Russia. This da'wa, he says, is directed to show that the Islamic State is a "powerful rival state and not sects in conflict that appeal to the West for rule to resolve their issues and disagreements." He adds that this da'wa must also be intended to show that the religion of Islam is great, because the citizen of those countries will not convert to a religion seen as weak. The aim should be to create media noise that attracts attention.

The da'wa here must therefore rely on "a media da'wa office independent from the media of the wilayas [provinces of DA'ESH], with media production centers overseen by "specialists in the Majlis al-Shura [consultation council that advises DA'ESH leader Baghdadi] and the office of the distant provinces [provinces outside Iraq and Syria]." Design and production in this case is to be delegated to those who came to the Caliphate from Europe and America, utilizing media production in their languages. Of course, the most obvious reflection of this approach is the al-Hayat Media center that was set up primarily to disseminate propaganda in English, French and other non-Arabic languages.

Abu al-Faruq al-Masri says that the messaging in this case should focus on the injustice and evils of the Western governing systems, highlighting for example the Islamic State's disregard for skin color/ethnicity and borders as opposed to historical racism in Western societies. In addition, he suggests highlighting the gold dinar currency as something that protects the wealth of its citizens rather than being beholden to the monopolies of international currencies and banks.

The relevant pages of the text are produced below.

بمنسب عالية، وهذا الدعوة تكون بظهور قوة الدولة الإسلامية والتي هي قدرة اليوم على حماية المسلمين وجمع رايهم وتخليصهم من عقود الظل والحكم الإستبدادي الذي جردهم من حقوقهم الدينية والدنيوية.

وإن الدولة الإسلامية هي جامع المسلمين اليوم على اختلاف ألوانهم وجنسياتهم التي فرقهم حسب اللون والعرق.

وإن المنهج هو منهج واحد وإن الدين هو التمام وواجب وليس مصلحة ومعطية كما فعل الإخوان المسلمون.

٢ - الدعوة الخارجية :

وهي الدعوة الموجهة للمشرىين صوماً أو من يقصد بهم اليوم " أوروبا - أمريكا - روسيا" وهذه الدول التي تحكم العالم.

فالدعوة فيها توجه نحو اظهار الدولة الإسلامية كدولة قوية منفسية وليست طوائف متفرقة متنازعة تحكمم الى الغرب لحل قضاياها وخلقها.

كما يقصد من الدعوة فيها الى اظهار عزة الإسلام لا هوانه، فلهذا في تلك الدول لا يقبل أن يخلف في دين ضعيف لاجميه أحد ولا يرفع رايه أحد بل ينظر الى الدين من طرق مختلفة عن المسلمين، فيهتم بداية بالقوة والنزعة وتاريخ هذا الدين وإنجازاته إن صمغ التعبير، فلا بد هنا من أحداث ضيقة للدولة الإسلامية تلتفت للنظر اليها والى الدين الإسلامي الصحيح.

وإن الدعوة التي لا تقوم على اظهار عزة المسلمين هي دعوة باطلة، فكيف لدعوة الى دين الإسلام أن تنبذ الخلافة الإسلامية وتكتم المجاهدين وتصفهم بـ " التطرف" والد " إرهاب" وتدعو المجتمع الغربي الى عدم اعتماد الدولة الإسلامية منهجاً سليماً في الإسلام.

ومن ثم إن نتائج الدعوة الى الله يجب أن تفضي بالنهاية الى تنفيذ أوامر الله وأحكام كتابه والتي تتمثل في الحكم بشرعية الله والامر بالمعروف والنهي عن المنكر والعيش بدولة إسلامية تكفل حقوق الجميع حسب الكتاب والسنة.

فالدعوة الى الله يجب أن تنتهي بالخلافة الإسلامية وهو نزوة الدعوة الى الله، فالدعوة في عهد النبي أفضت الى قيام الدولة الإسلامية والتي بدأت تنتشر الدين الإسلامي بالدعوة والقوة، وكان أن أخذت الدعوة الى الله شكلاً جديداً بعد إقامة الدولة الإسلامية ، حيث أقيمت وفود العرب والعجم الى النبي تخلع عنها فوب الشرك وتلبس فوب الإيمان وتبليغ النبي على السمع والطاعة.

واجب الدولة الإسلامية تجاه الدعوة :

ياخذ الإعلام اليوم نصف الدعوة الى الله وهي الدعوة الداخلية والخارجية :

١ - الدعوة الداخلية :

هي الدعوة الموجهة الى المسلمين أو كما تعرفون عنها اليوم " الدول العربية ورابطة الدول الإسلامية" وهي الدول التي ينتشر فيها الإسلام

اشكاليهم، فلا ابيض ولا اسود كما فعل طواغيت أمريكا الذين جطوا البشر طليقت متفوتة في الحقوق حسب ألوانهم.

وبين الإعلام الدعوي أن لا حدود في دولة الإسلام فالأرض كلها لله وحده ولا فرق بين مسلم عربي أو أوربي أو أمريكي أو حتى افريقي فكلهم اخوة في الله وجميعهم أمام الشريعة متساون.

كما يتطرق الإعلام في هذا على حرص الإسلام والخلافة على أموال المسلمين من الضياع أو التلغف، حيث تترس الدولة الإسلامية في التمكن مشروع صنك الدينار الذهبي الذي لا تلتقي قيمته بمكس أوراقهم للتقنية التي يصيح المرء عدهم على ثروة ويمسى مقلداً ، كما أن قوانين البنوك والإفلاسات والرهب كل ذلك يحق الأموال عجلأ أم آجلاً، بينما تحفظ الدولة أموال رعاياها في قيمتها وزكاتها.

وهذا ما فعلته الدولة الإسلامية وما نصحت به مجلس الشورى ومكتب الولايات البعيدة ، هي أن تهتم الدولة في سيرها في البداية لأحداث ثقلة نوعية وتكثيف الجهد على لغب الإنباه اليها وجعلها قضية عالمية.

فبهذا يلتفتون الى منهج الدولة ومسيرها وليس الى دعوات المرجنة والمهاندنين الذين يدعون فقط لتطبيق أحكام الطهارة والصلاة والصوم، دون أن يذكروا عن هذا الدين جوهره وأوتاده وتاريخه الحافل ومسيره الصالحين الصحيحة التي مزجت بين الدعوة والتراحم والقوة والعزة لنصرة الدين.

وبفضل الله ستمشهد تحولاً كبيراً في دول الغرب وثقله نوعية في تواجد المسلمين هناك بحيث يكونون العنصر المؤثر والصالح للتاريخ والذي يحول أوروبا وأمريكا من الدعوة السريّة وتحت اشراف مخابراتهم الى الدعوة الإسلامية التي ترعاها دولة الخلافة.

وتعتمد الدعوة هنا بشكل مطلق على الإعلام الذي يجب أن يكون في مكتب اعلامي دعوي مستقل عن اعلام الولايات، ويكون في مراكز اعلامية ومؤسسات إنتاج خاصة يشرف عليها اخصائيين في مجلس الشورى ومكتب الولايات البعيدة، ويكون عمدة التصميم والإنتاج فيها لرعايا الخلافة ممن أتوا من أوروبا وأمريكا، حيث يكون الإعلام بلغاتهم شتى

ويركز الإعلام هنا على مساوئ الحكم العظماني والرأسمالية الأوربية والأمريكية والضراب والقوانين الظلمة، كما يبين منهج الدولة الإسلامية في الحكم والعدل أمام القضاء والمساواة بين المسلمين على اختلاف

3. Neutralizing DA'ESH and Preventing a Governance Vacuum Author: Sheila Young

Neutralizing the immediate threat from DA'ESH by clearing territory alone will only have a temporary impact on stability in Iraq and Syria because the extremist's center of gravity is less territorial than it is ideological. Root causes for people from the region to join DA'ESH include promises of improved living conditions, a gained sense of belonging, marriage, or to gain a deeper understanding of Islam. Root causes for their defections are due to failed realization of those promises and distaste for the brutalities against fellow Arabs. People

provide passive support to DA'ESH as a result of ideology as well as governance (e.g., the provision of services such as water, electricity, health, and education in local communities). While the current strategy to diminish DA'ESH is to reduce or eliminate its territorial control, that strategy alone will not effectively address ideology and governance. DA'ESH has already proven in Iraq that it can rebound from territorial losses. Therefore, diminishing the desire of people to join DA'ESH, or to passively support it, will require several interventions, including: improved governance; a safe and secure environment to provide governance services; Muslim-led counter messaging through the media that shows DA'ESH atrocities and tempers radical religious rhetoric; and, economic development opportunities. Civilian and military decision makers need to understand these issues in order to reduce the likelihood a group such as DA'ESH will regain strength in the future.

The DA'ESH Center of Gravity

DA'ESH is distinct from other extremist groups in several ways: its success in mobilizing a diverse group of Muslims from a broad spectrum of society, self-recognition that they need the will of the people to maintain control and attract recruits, and the ability to spread its ideology rapidly.³ The group's ideology calls for them to: maintain control of the territory of the caliphate to experience 'pure' Islam; expand territory; ensure unfettered authority over the population; and, win an apocalyptic war against Western countries.⁴ Several scholars contend that the DA'ESH center of gravity is the territory that it holds. This possession allows DA'ESH to demonstrate its ability to govern, to maintain a captive audience to spread its ideology and train fighters, and to obtain a reasonable amount of revenue to continue to operate.⁵ The group has such strong convictions about the need to defend the territory of the declared caliphate that it is willing to fight other Islamic groups to maintain that control.⁶ In addition to its ideological platform, DA'ESH is also representing its self-declared caliphate as a land of plenty where recruits can come to join the fight, live in peace, and find a mate. This vision appeals to many foreign recruits as well.⁷ Ultimately, denying DA'ESH of territory without addressing governance and ideology will only provide temporary gains by reducing the group's attractiveness to potential recruits. The group could still reestablish itself in another governance-poor area.

The sheer size of DA'ESH, if estimates are to be believed, is cause for concern both in terms of neutralizing its threat in the region as well as in how to manage the estimated tens of thousands of foreign fighters. One estimate shows that the size of DA'ESH once reached from between 35,000 and 70,000, with foreign fighters reaching 25,000-30,000.⁸ Governing the

³ On the issue of ISIS and their vision of governance, see Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, www.ctc.usma.edu, West Point, NY, Dec 2014, p. 66.

⁴ Cafarella, Jennifer, Gambhir, Harleen, and Zimmerman, Katherine, *U.S. Grand Strategy: Destroying ISIS and Al Qaeda, Jabhat al-Nusra and ISIS: Sources of Strength*, Institute for the Study of War, American Enterprise Institute, Feb 2016, pp. 9 and 12.

⁵ Cafarella, Jennifer, Gambhir, Harleen, and Zimmerman, Katherine, *U.S. Grand Strategy: Destroying ISIS and Al Qaeda, Jabhat al-Nusra and ISIS: Sources of Strength*, p. 142.

⁶ Cafarella, Jennifer, Gambhir, Harleen, and Zimmerman, Katherine, *U.S. Grand Strategy: Destroying ISIS and Al Qaeda, Jabhat al-Nusra and ISIS: Sources of Strength*, p. 16

⁷ Bergen, Peter, *Jihad 2.0: Social Media in the Next Evolution of Terrorist Recruitment*, Testimony for the U.S. Senate Committee on Homeland Security and Governmental Affairs, May 7, 2015, p. 7.

⁸ Speckhard, Anne and Yayla, Ahmed, *Eyewitness Accounts from Recent Defectors from Islamic State: Why They Joined, What They Saw, Why They Quit*, Perspectives on Terrorism, Vol 9, Issue 6, Dec 2015, p. 96.

communities in which they reside is a key factor in maintaining needed public support; DA'ESH recognizes this.⁹ The group learned from past challenges in Iraq and adapted to the current situation by trying to win favor or at least passive support, of the local population.¹⁰ DA'ESH understands the governance element of its organization so well that it actively recruits from professions that it needs in order to support its governance requirements. In an attempt to utilize personnel in the best possible way, DA'ESH actively tries to match skill sets of recruits to the needs of its organization. Those recruits with needed governance skills are used for general governance or administrative positions, while others are used as active fighters.¹¹ In 2014, Al-Baghdadi, the former DA'ESH leader, made a general appeal for foreign fighters with skills in needed areas such as public administration, judiciary, medicine, engineering, among other areas.¹² DA'ESH has proven its ability to rebound from a previous territorial loss in Iraq, rebuild its numbers, and to gain more territory in another area by improving its ability to govern. Territorial loss alone is not the group's center of gravity.

Motivation of an DA'ESH Recruit

In 2015, several Arab DA'ESH defectors, mainly from Syria, were interviewed about what motivated them to join and to defect. Factors for joining included the promise of: a paying job – in many cases paying more than they had for jobs prior to DA'ESH; food and basic necessities in addition to the salary; marriage; and, a deeper understanding of Islam. A report in 2016 found that some of the reasons cited by young Syrians of why they join radical organizations include: a degradation of their educational system; a lack of economic opportunities; and, experiences of violence.¹³ Another report from 2015 found that foreign fighters who left DA'ESH stated their reasons for joining were: the promise of marriage, a large salary, nicer living quarters than the Syrian cadres, and female slaves.¹⁴

The local defectors (i.e., Arab Sunni defectors from Syria and Iraq) also noted that if they refused to join DA'ESH, they were denied all of that and even allowed to starve.¹⁵ Another study of several dozen DA'ESH defectors released in 2015 identified three main reasons that people joined the group: to assist their Arab (Sunni) brothers fight the Assad regime against perceived genocide; to have the opportunity to experience pure Islamic living, a duty of all Muslims; and, for personal or material reasons such as food, obtaining luxury items such as

⁹ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, www.ctc.usma.edu, West Point, NY, Dec 2014, p. 66.

¹⁰ Byman, Daniel, *Understanding the Islamic State: A Review Essay*, *International Security*, Vol 40, No 4, Spring 2016, p. 133.

¹¹ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, www.ctc.usma.edu, West Point, NY, Dec 2014, p. 74-75.

¹² Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, p. 75.

¹³ Tonnessen, Truls Hallberg, *Destroying the Islamic State Hydra: Lessons Learned from the Fall of its Predecessor*, Countering Terrorism Center, West Point, New York, August 2016, p. 5 footnote.

¹⁴ Speckhard, Anne and Yayla, Ahmed, *Eyewitness Accounts from Recent Defectors from Islamic State: Why They Joined, What They Saw, Why They Quit*, *Perspectives on Terrorism*, Vol 9, Issue 6, Dec 2015, p. 111.

¹⁵ Speckhard, Anne and Yayla, Ahmed, *Eyewitness Accounts from Recent Defectors from Islamic State: Why They Joined, What They Saw, Why They Quit*, p. 102.

cars and houses, to fight, and for brotherhood (i.e., a sense of belonging to a greater cause).¹⁶ Those same defectors gave several reasons for defecting; the most prominent reason given was that there was too much fighting against other Arab (Sunni) groups such as Al-Nusra* and not enough defense of Muslims in general against the Assad regime. Other reasons given for defecting included: the sheer brutality with which Sunni Arab civilians were treated (they did not object as much to brutality of non-Sunni Arabs); the ad hoc mistreatment or favoritism of DA'ESH followers from some DA'ESH commanders; and, the living conditions (e.g., lack of electricity, water, or limited food) did not live up to the standards of foreign fighters; or, they were not deployed in positions where they could experience what they perceived as the glory of fighting.¹⁷

All of these reasons for joining and defecting the group have roots in governance and ideology, not territory. While coalition forces may be able to defeat DA'ESH militarily, it will not be able to win the war on ideology through a demonstration of military might alone. Ideology must be countered with ideology, and supported by the provision of services and sound governance structures. Failure to address governance structures can result in a governance vacuum, which will cause that vacuum to be filled by other groups.¹⁸ There are other groups in the region ready to step into DA'ESH' place, including but not limited to, al-Nusra, whose primary goal is to support the Syrian rebel resistance against the Assad regime.¹⁹ The military can provide the safe and secure environment in the region for local authorities to immediately begin to restore and oversee management of services of the population, but the key to taming radical views is to address ideology and governance.

The Expansion and Contraction of Ideology

Addressing the root causes of why people support extremist organizations – whether they participate actively or support them passively – is crucial to preventing the ideology of these groups from taking hold in the future. While DA'ESH has had successes in using the media to highlight its governance successes, the media can and should be used to diminish it as well by airing footage of the destruction left in DA'ESH' wake and interviews of defectors. Social media and regular media outlets are only tools in the war on ideology. Not all ideology is radical and radicalization does not occur overnight or as a result of a single event. It occurs, instead, over a period of time as a result of triggers that impact an individual's experiences in society.²⁰ The environment in which someone lives influences how an individual interprets these triggers by either reinforcing or rationalizing negative connotations associated with the

¹⁶ Neumann, Peter R., *Victims, Perpetrators, Assets: The Narratives of Islamic State Defectors*, the International Centre for the Study of Radicalisation and Political Violence, London, 2015, p. 9.

* Al-Nusra refers to another Sunni group with alleged ties to Al-Qaeda, Jabhat al-Nusra. One source reported that Jabhat al-Nusra changed its name in July 2016 to Jabhat Fatah al-Sham and broke its formal affiliation to Al Qaeda. Source: Al-Tamini, Aymenn, *Al-Qaeda Uncoupling: Jabhat Al-Nusra's rebranding as Jabhat Fatah Al-Sham*, CTC Sentinel, West Point, New York, August 2016, p. 16.

¹⁷ Neumann, Peter R., *Victims, Perpetrators, Assets: The Narratives of Islamic State Defectors*, p. 10-11.

¹⁸ Muggah, Robert and O'Donnell, Chris, *Next Generation Disarmament, Demobilization, and Reintegration*, Stability: International Journal of Security and Development, 4(1): 30, DOI: <http://dx.doi.org/10.5334/sta.fs>, 2015, p. 5.

¹⁹ Speckhard, Anne and Yayla, Ahmed, *Eyewitness Accounts from Recent Defectors from Islamic State: Why They Joined, What They Saw, Why They Quit*, p. 96.

²⁰ Air Force Research Laboratory, various authors, *Countering Violent Extremism: Scientific Methods and Strategies*, <https://publicintelligence.net/arl-countering-violent-extremism/>, revised on July 2015, p. 7.

triggers.²¹ Some speculate that foreign fighters are likely to remain mobile and seek other radical organizations within which to work.²² In other words, if there is no alternative for foreign fighters (i.e., nothing to temper their radicalization and motivation), such as reintegration in the societies of their countries of origin, they would likely seek to affiliate themselves with another group in another fragile state.

The media plays a key role in encouraging the spread of ideology. Even prior to DA'ESH declaring a caliphate in northern Iraq and Syria, the Islamic State of Iraq established a network of media outlets.²³ Social media outlets not only play a significant role in spreading DA'ESH ideology, they also are the principle methods of recruitment to DA'ESH and to al-Nusra.²⁴ DA'ESH has used written materials as well as photos and video on social media to get out its message that it provides governance services to the local population. In northern Iraq, for example, DA'ESH revealed photos of its cadres repairing electricity systems, distributing food aid, and providing 'normal' policing services to the local communities.²⁵ This projected image of the provision of stability and a safe governance structure has achieved a couple of goals: the attraction of more fighters from outside of the region and the ability to maintain control and passive support of the local population.²⁶ Messaging, or content and source of the message, must be credible. Words must match actions on the ground and the source of those words must be from a reliable source, in order for the new ideas to take root in the general population.²⁷

In 2014, coalition air strikes in Mosul and Raqqa disrupted the provision of electricity and influx of food causing prices to increase. The local population complained of lack of services more than they complained of the brutalities of DA'ESH' governance tactics.²⁸ In fact, DA'ESH also published photos of beheadings and public floggings, actions that outrage the West, but which many inside the DA'ESH area of control agree are part of sharia law and allowable forms of governance.²⁹ DA'ESH understands what the local population wants, i.e., the provision of services and stability, and for now, the population turns a blind eye away from brutalities of rule. Denying these services as a means to get the local population to turn away

²¹ Christmann, Kris, *Preventing Religious Radicalization and Violent Extremism: A Systematic Review of the Research Evidence*, Youth Justice Board of the UK, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/396030/preventing-violent-extremism-systematic-review.pdf, accessed on Nov 11, 2016, 2012, pp. 19-21.

²² Tonnessen, Truls Hallberg, *Destroying the Islamic State Hydra: Lessons Learned from the Fall of its Predecessor*, Countering Terrorism Center, West Point, New York, August 2016, p. 5

²³ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, p. 47.

²⁴ Bergen, Peter, *Jihad 2.0: Social Media in the Next Evolution of Terrorist Recruitment*, Testimony for the U.S. Senate Committee on Homeland Security and Governmental Affairs, May 7, 2015, pp. 4-5.

²⁵ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, pp. 67-68.

²⁶ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, pp. 69.

²⁷ Air Force Research Laboratory, various authors, *Countering Violent Extremism: Scientific Methods and Strategies*, <https://publicintelligence.net/arl-countering-violent-extremism/>, revised on July 2015, p. 5.

²⁸ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, pp. 69.

²⁹ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, pp. 70.

from the DA'ESH might work to some extent in the short run, but that tactic also runs the real risk of starving the local population thereby reinforcing an DA'ESH message of the need for an apocalyptic war against the West.

Ideology can be manipulated in several ways such as the provision of opportunities, denial of benefits or rewards, and punishment.³⁰ By denying DA'ESH the opportunity to manipulate the general public, they are being denied a source of power of their ideology. Denial of territory is important to denying DA'ESH the opportunity to manipulate the general public, however, denial of territory alone will not end the DA'ESH behavior. They could find another fragile state within which to operate or the ideology could continue to flourish through social media absent physical territory until territory is available. In order for sustainment of military territorial gains, ideology and governance must be addressed.

Military power alone will not sustainably end violent extremism and radical ideology. Depending on the circumstances, foreign military may not be seen as a credible source of information. Military power, combined with governance, in order for both the denial of opportunity and reduction of support to DA'ESH to take hold, is key to starting to build credibility with the local population. The longevity of development refers to sustainability, which is measured in the long-term. It is not uncommon in the development world to encourage short-term and medium-term gains in order to demonstrate legitimacy of actions.³¹ This is where the military and development professionals need to work together to design activities, which need to be led by local authorities, to address the provision of government services in areas formerly controlled by extremists.

To erode DA'ESH support from within, the less radical fighters should be provided with an alternative to remaining with the group.³² Credible messaging coming from DA'ESH defectors of the dDa'eshlusion of the original DA'ESH promises could help to dissuade people from joining. In addition, as a means of convincing additional current fighters to defect, there needs to be a place for them to go, whether to return to their original countries of origin or another location. In addition, disarmament, demobilization, and reintegration processes have proven successes under certain circumstances. Further, an exit strategy for fighters who are not part of the DA'ESH inner circle may not be successful unless the local population is convinced that some kind of reparation has been paid for their crimes against the general population. For example, the FARC in Columbia failed to receive support for a peace deal from the general population because they deemed that reparations for perceived atrocities were not enough.³³ Deeper analysis of the effectiveness of disarmament, demobilization, and reintegration programs and what would appease the general population in Iraq and Syria in order to aid the reintegration process is a topic of future research.

³⁰ Air Force Research Laboratory, various authors, *Countering Violent Extremism: Scientific Methods and Strategies*, pp. 192-193.

³¹ Everington, Alexis, *Prevention of Violent Extremism: What Are the People Saying?*, International Advisory Services, found in Air Force Research Laboratory, various authors, *Countering Violent Extremism: Scientific Methods and Strategies*, <https://publicintelligence.net/arl-countering-violent-extremism/>, revised on July 2015, p. 82.

³² Tonnessen, Truls Hallberg, *Destroying the Islamic State Hydra: Lessons Learned from the Fall of its Predecessor*, Countering Terrorism Center, West Point, New York, August 2016, p. 4.

³³ Quintana, Ana, *The Columbia-FARC Peace Deal: Why it Failed and how the US can Support a Responsible Renegotiation*, <http://www.heritage.org/research/reports/2016/10/the-colombianfarc-peace-deal-why-it-failed-and-how-the-us-can-support-a-responsible-renegotiation>, Oct 26, 2016.

Another method to address radical ideology is through religion. Though religion was not listed as the first reason to join DA'ESH, it remained among one of several reasons. The idea to use religion as a platform to address perceived social justices has been around for centuries.³⁴ To maintain credibility, the message of a more peaceful interpretation of Islam needs to come from within the Muslim community.³⁵

Filling the Governance Vacuum

Once enough members of DA'ESH are neutralized from Mosul and Raqqa, a governance vacuum will ensue.³⁶ DA'ESH learned from its experience in Iraq that governance is a key factor to maintaining authority. In the territory it controls, DA'ESH is taking more care to work with the local communities to set up governance systems.³⁷ There are several governance challenges to the provision of services in Mosul and Raqqa including, but not limited to: identifying who among Iraqi and Syrian Governments will provide those services right away; addressing disarmament, demobilization, and reintegration of former combatants from the region; ensuring no other illicit groups (e.g., Al-Nusra in Syria, Shia militias in Iraq members of the opposition in Syria, Kurdish rebels, among others) fill the vacuum; appeasing Turkish, Iranian, and Syrian Governments that their interests in the region will be addressed; and, identifying what to do with surviving former foreign fighters. There are rumors among former fighters of abuses against Sunnis from the Kurdish and Shia militias that have caused some to passively accept DA'ESH in their communities.³⁸ The general population in those areas also needs to be comforted that some form of stability will be ensured.

Summary

The solutions to addressing radical ideology of DA'ESH and neutralizing the threat of the organization lie in a series of interventions with roots in military interventions to build the secure environment and in development interventions to ensure rapid and sustainable rooting of governance. Four issues must be addressed to provide stability and reduce the possible resurgence of DA'ESH in Syria and northern Iraq: stable governance with provision of services, the safety and security to operate those services, economic development opportunities in the region so people will not need to see a group such as DA'ESH to provide monetary support, and Muslim-led efforts to address extreme, radical religious ideology. Timing is a factor – in order to gain and maintain support of the population, the security of the environment and perceived provision of services need to occur as soon as possible when the immediate security threat is neutralized.³⁹ DA'ESH, Al-Qaeda, and Al-Nusra call for an

³⁴ Radicalizing Reformation, <http://www.radicalizing-reformation.com/index.php/en/about-radicalizing-reformation.html> accessed on Nov 12, 2016

³⁵ Hamid Tawfik, *A Strategic Plan to Defeat Radical Islam*, Potomac Institute for Policy Studies, found in Air Force Research Laboratory, various authors, *Countering Violent Extremism: Scientific Methods and Strategies*, <https://publicintelligence.net/arl-countering-violent-extremism/>, revised on July 2015, p. 72-75

³⁶ Muggah, Robert and O'Donnell, Chris, *Next Generation Disarmament, Demobilization, and Reintegration*, *Stability: International Journal of Security and Development*, 4(1): 30, DOI: <http://dx.doi.org/10.5334/sta.fs>, 2015, p. 7.

³⁷ Al-Ubaydi, Muhammad, Lahoud, Nelly, Milton, Daniel, and Price, Bryan, *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, p. 74-75.

³⁸ Tonnessen, Truls Hallberg, *Destroying the Islamic State Hydra: Lessons Learned from the Fall of its Predecessor*, p. 3.

³⁹ Tonnessen, Truls Hallberg, *Destroying the Islamic State Hydra: Lessons Learned from the Fall of its Predecessor*, p. 4.

end to Western influence in the region.⁴⁰ Therefore it is crucial that Muslim organizations remain in the lead of efforts to provide security, stability, and the provision of services in the region.

⁴⁰ Cafarella, Jennifer, Gambhir, Harleen, and Zimmerman, Katherine, *U.S. Grand Strategy: Destroying ISIS and Al Qaeda, Jabhat al-Nusra and ISIS: Sources of Strength*, pp. 12 and 17.

Biographies

Dr. Ian McCulloh Biography



Ian McCulloh holds joint appointments as a Parson's Fellow in the Bloomberg School of Public health, a Senior Lecturer in the Whiting School of Engineering and as chief scientist in the Cyber Warfare Systems Group of the Applied Physics Lab, at Johns Hopkins University. His current research is focused on strategic influence in online networks and understanding the cognitive dimension of the information environment. He is the author of "Social Network Analysis with Applications" (Wiley: 2013), "Networks Over Time" (Oxford: forthcoming) and has published 40 peer-reviewed papers, primarily in the area of social network analysis. He retired as a Lieutenant Colonel from the US Army after 20 years of service in special operations, counter-improvised explosive device (C-IED) forensics and targeting, and weapons of mass destruction (WMD) defense. He founded the West Point Network Science Center and created the Army's Advanced Network Analysis and Targeting (ANAT) program. In his most recent military assignments as a strategist, he led interdisciplinary PhD teams at Special Operations Command Central

(SOCCENT) and Central Command (CENTCOM) to conduct social science research in 15 countries across the Middle East and Central Asia to included denied areas, which he used to inform data-driven strategy for countering extremism and irregular warfare, as well as empirically assess the effectiveness of military operations. He holds a Ph.D. and M.S from Carnegie Mellon University's School of Computer Science, an M.S. in Industrial Engineering, and M.S. in Applied Statistics from the Florida State University, and a B.S. in Industrial Engineering from the University of Washington. He is married with four children and a granddaughter.

Dr. Munqith Dagher



Dr. Munqith Dagher conducted Iraq's first-ever public opinion poll and since that time has been responsible for conducting over 1.5 Million interviews for a range of agencies and topics. Munqith established IIACSS in 2003 while he was a Professor of Public Administration/Strategic Management at Baghdad University. He has managed more than 300 public opinion projects and various market research projects. He has lectured widely and published several articles and books in different countries around the world.

Recently, and since ISIL took over Mosul on June 2014, Munqith has dedicated most of his time to studying the reasons behind the sudden uprising of this terrorist organization and how to defeat it. For this reason, he has run three rounds of quantitative and qualitative research in Iraq. Munqith published the some of these results in the Washington post and gave number of talks and presentations in the most well known think tanks in the world, such as the Center for Strategic and International Studies (CSIS) in Washington and King's College in London.

Munqith holds a Ph.D. in Public Administration from the University of Baghdad, College of Administration and Economics, Master degree in Human resources and Master degree in war sciences. He was professor of public administration and strategic management in Baghdad, Basrah and the National Defense Universities. Munqith has also finished the course in principles of marketing research at the University of Georgia, USA.

On June 16th 2015, Munqith was awarded the Ginny Valentine Badge of Courage, on behalf of the Research Liberation Front, for Bravery in keeping the research alive in multiple conflict zones.

Aymenn Jawad Al-Tamimi

Aymenn Jawad Al-Tamimi is a research fellow at the Middle East Forum, a U.S.-based think-tank. His work primarily focuses on Iraq and Syria, including an archive project of hundreds of Islamic State internal documents. His work has been published in Jihadology, Syria Comment, The Daily Beast and the BBC, among other outlets. For his insights, he has been quoted in a range of international media outlets, including the New York Times, the Washington Post, the Guardian, AFP, Associated Press, El Mundo, Le Monde and other outlets. His website is <http://www.aymennjawad.org>

Sheila Young Biography

Ms. Young is a career Foreign Service Officer with over 14 years of experience with USAID in



designing and implementing development and humanitarian aid activities in Latin America, Asia, the Middle East, Eastern Europe, and Africa. Most notably is her programming leadership on the U.S. Government's response to the Asia Tsunami of 2004, support for the stand-up of the anti-money laundering unit for the Government of Azerbaijan, the design of the USAID close-out strategy from Iraq, and the design of over \$1 billion in foreign assistance in Mozambique. Ms. Young served as an Energy Specialist to the Government of Indonesia on energy efficiency in power generation from 1996-2002, through the US Department of Energy. Prior to that, she worked with USAID in Washington to design energy activities throughout the world, including the first energy activities in support of the

New Independent States, following the breakup of the Soviet Union. She was also a Marketing and Agreement Specialist with the US Department of Agriculture, and an Agriculture Extension Agent in Mauritania, West Africa, with the US Peace Corps. She holds a BA from Hope College with concentrations in philosophy, political science, music, and a MS from George Mason University in environmental science and policy.