

Question (QL5): What are the predominant and secondary means by which both large (macro-globally outside the CJOA, such as European, North African and Arabian Peninsula) and more targeted (micro- such as ISIL-held Iraq) audiences receive ISIL propaganda?

Executive Summary - Dr. Allison Astorino-Courtois, NSI

The contributors to this Quick Look demonstrate clearly the breadth and diversity of the ISIL media and communication

juggernaut identifying a wide variety of targeted audiences, media forms and distribution mediums for both local and global audiences. These are summarized in the graphic on page 3 below.

Smartphones are game-changers; the predominant distribution medium globally and locally

There was general acknowledgement among the experts that wide-spread, public access to smartphones has been both a game-changer for both the distribution <u>and</u> production of propaganda materials. Smart devices with web access were also cited by many as the predominant medium by which both global and local audiences receive ISIL propaganda and the catalyst for the fading of former distinctions between means used to communicate with "macro" versus "micro" audiences. Even ISIL messages primarily intended for local audiences (e.g., weekly newsletters) do not stay local; they are digitized and may be found on the internet and thus are available globally.

Chris Meserole a fellow at the Brookings Institution argues that ISIL communicators have benefitted from two particular capabilities that smart devices put in the hands of users: 1) easy access to impactful video and other visual content has enabled ISIL to transmit highly emotive and pertinent content in near real-time; and 2) users' ability to produce and distribute their own quality images has altered the processes of recruitment and identity formation by making them more interactive: group members who formerly would have been information consumers only, now can readily add their voices to the group narrative by serving as information producers as well.¹

Cyber platforms are critical but consider Twitter and YouTube as starting points

Although Twitter, and YouTube are still the most commonly used platforms, and especially Twitter can be used for specifically-targeted, micro audiences, Gina Ligon who leads a research team at the University of Nebraska Omaha cautions that ISIL's cyber footprint extends well beyond these "conventional" platforms which should be considered "mere starting points for its multi-faceted, complex cyber profile." (See the Ligon *et al* below for ranks of the top cyber domains ISIL used between August 2015 and August 2016.)

¹ It is important to note that although there is clearly increased local agency regarding production of ISIL communications, the teams from the University of Nebraska (Ligon et al), UNC-Chapel Hill (Dauber and Robinson) as well as Adam Azoff (Tesla Government) and Jacob Olidort (Washington Institute) find substantial evidence of centralized ISIL strategic control of message content. However, once content is approved, a good argument can be made that dissemination of ISIL messages and even video production is localized and decentralized. The result is a complex and "robust cyber presence."

Breaking News

Web Monitoring Team at University of Nebraska Omaha (UNO) - Indication of Modification to ISIL Messaging Capability

Last week (09/29/16) the UNO team discovered indication of ISIL moving to **ZeroNet** "in place of traditional platforms (e.g., Telegram) for peer-to-peer messaging that is robust to DDOS attack/other counter measures." Ansar Al-Khilafah announced its ZeroNet Edition as a "permanent backup and uncensorable version of this site ... [which] cannot be deleted as it is hosted by everyone who visits it..." According to Dr. Gina Ligon (UNO), use of ZeroNet "solves a lot of problems for Da'esh."

Static or moving images - key to evoking emotion -- characterize all forms of ISIL propaganda

The most distinctive characteristic of ISIL propaganda is its high quality visual content which are easier to distribute than large texts. It is also easier to evoke emotion with an image than with text. Arguably, the most prolific and widely-distributed propaganda are ISIL's colorful print and digital magazines (e.g., *Dabiq, Rumiyah* in English, *Constantinople* in Turkish *Fatihin* in Malay, etc.) It is well known that ISIL videos are extremely pervasive and an important form of ISIL messaging. However, multiple experts noted that the sophistication and production value of today's videos are a far cry from the 2014-era recordings of beheadings that horrified the world.

Not everything is digitized: solely local propaganda forms and mediums

Audiences both in and outside ISIL controlled areas and those outside the region receive ISIL propaganda products. However, there are some mediums and forms of propaganda which can only be delivered in areas in which ISIL maintains strict control of information and in which it can operate more overtly. For example, ISIL has printed ISIL education materials and changed school curricula in its areas, it holds competitions and events to recruit young people, and polices strict adherence to shar'ia law (hisba). It is in this context that Alexis Everington (Madison-Springfield) argues, one of the most impactful forms of ISIL messaging remains its visible actions (of course, the perceived actions of Iraqi government forces, Assad forces, etc. and the US/West are likely equally, if indirectly, impactful). Second in importance are "media engagement centers such as screens depicting ISIL videos as well as mobile media trucks." Outside ISIL controlled areas, NDU Professor of International Security Studies Hassan Abbas, cites "the word of mouth" including "gossip in traditional tea/food places" as still the primary means by which local audiences receive ISIL propaganda, and many experts agree that the content is "largely influenced by religious leadership."

What happens next?

Finally, Adam Azoff of Tesla Government offers a caution regarding what happens when ISIL-trained, foreign media operators are pushed out of all ISIL-held areas: as these fighters relocate we should be prepared for the possibility that they would "continue their 'cyber jihad' abroad and develop underground media cells to continue messaging their propaganda. Though it will be more difficult to send out as large a volume of high-quality releases, it is not likely that ISIL will return to the amateurish and locally-focused media operations of 2011."

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SMA REACH BACK QL 5 SUMMARY: ISIL Propaganda Audiences, Forms and Mediums



Audiences

Adherents **Prospective recruits** Students Current fighters Kids (next-gen jihadis)

Forms

commentaries* Religious/jihadi manuals and Visible actions (e.g., executions) Magazines in multiple languages*

Non ISIL-produced indirect means on Sunni; media sensationalism) (e.g., public perception of West's war

Videos*

Mediums

and pamphlets* Multi-lingual published monographs Cyber media (YouTube, Twitter, languages Telegram, Vkontakte) in multiple

Available and ISIL-produced Smartphone apps Visible actions (e.g., executions)



LOCAL NON-ISIL CONTROL

Audiences

Students population Prospective recruits Kids (next-gen jihadis) Youth culture Non-ISIL controlled local Adherents

Forms

Visible actions (e.g., executions) and students Textbooks and recordings for kids commentaries* Religious/jihadi manuals and Magazines in multiple languages*

Mediums

Telegram, Vkontakte) in multiple Cyber media (YouTube, Twitter, languages

and pamphlets* Multi-lingual published monographs

Smartphone apps Visible actions (e.g., executions) Gossip and word-of-mouth Available and ISIL-produced

ISIL-produced smartphone apps*

ndirect means



LOCAL UNDER ISIL CONTROL

*also available online

Audiences

Adherents **Current Fighters Prospective recruits** population ISIL controlled local Kids (next-gen jihadis) Students

Religious/jihadi manuals and

Weekly newsletters*

Forms

Youth culture and students Textbooks and recordings for kids commentaries* Visible actions (e.g., executions) Instructional pamphlets for fighters

Competitions and Events ISIL-produced smartphone apps* Indirect means

Indirect means

Mediums

Smartphone apps controlled areas Mobile media trucks Video screens at media engagement Available and ISIL-produced Word-of-mouth Visible actions (e.g., executions) ISIL controls social and e-media in

Da'esh Cyber Domains from August 2015 – August 2016

Gina Scott Ligon, Ph.D., Doug Derrick, Ph.D., Sam Church, and Michael Logan, M.A.
University of Nebraska Omaha

Related Publication: Ideological Rationality: The Cyber Profile of Daesh (available on request and in press at *Dynamics of Asymmetric Conflict Journal*)

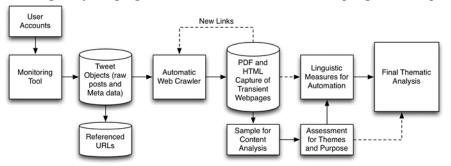
Daesh is the most prolific violent extremist group on social media, but their cyber footprint is much more complex than researchers of solely mainstream services such as Twitter imply. Their cyber profile involves pushing content into open infrastructures to disseminate information, such as ideological messages, propaganda, and training instructions. To date, much of the research on Daesh communication has focused on what is publicly available through speeches and videos released by al Hayat Media and Daesh Twitter users (Ingram, 2014; Veilleuz-Lepage, 2014; Zelin, 2015). A notable exception is the important monograph from Saltman and Winter (2014), where the authors identified complex cyber capabilities such as 1) centralized propaganda, 2) global dissemination of threats, 3) custom app development, and 4) decentralized messaging. Given acknowledgement of Daesh's prolific use of a variety of Internet Communication Technology (ICT), it follows that each aspect they use plays a role in sharing the story Daesh wishes to convey.

An organization's online presence plays a significant role in communicating with a global audience (Ligon, Derrick, & Harms, 2015). In regards to Daesh and its messaging campaigns, popular platforms of more conventional ICT—like Twitter or Facebook—are mere starting points for its multi-faceted, complex cyber profile. Thus, the purpose of this effort is to better understand the nature of the cyber channels and domains most used in the messaging of Daesh, particularly as it manifests through social media connected transient web pages to an English-speaking audience. The organization's end goal vis-à-vis their online marketing campaign is complex and is used to "attract potential recruits, raise money, promote the image of the organization, or just spread fear among its enemies" (Barrett, 2014: 53). While there is some evidence that a centralized authority approves messaging prior to it being disseminated via more conventional channels (e.g., Dabiq, Al-Hayat Media), the cyber footprint of Daesh is more complex. This overall strategic effort is reportedly overseen by a skilled media council (Lister, 2014). However, the deployment and dissemination of Daesh messages is arguably decentralized once content is generated, resulting in a robust cyber presence.

While the Daesh strategic and tactical cyber profiles are unquestionably unprecedented (Zelin, 2015), questions remain as to what we can glean about the organization from its messaging. The dataset used for assessing Daesh's online presence was unique to this project and comprised of 4.5 million tweets and 16,000 attached transient webpage articles posted by Daesh followers, members, and sympathizers. The research methodology and subsequent data analysis provides insight into the messaging dynamics of Daesh. We conclude the study with a discussion of limitations of our method, implications of our findings, and recommendations for future research.

Method

We collected this data by developing a custom program that follows the method outlined in figure 1 (Derrick et al, 2016). First, our program utilized the Twitter API to follow and log tweets posted by the hacktivist group Anonymous. For the present effort we did not evaluate the "Tweets," but used them as launching points to the open architectures where richer content is housed. During much of this collection, Anonymous posted Daesh members' Twitter handles approximately one every two minutes since August 2014. As stated previously, the goal is to understand the strategic messaging from the deployment of messages by large grassroots followers. Thus, our program compressed a list of Daesh-



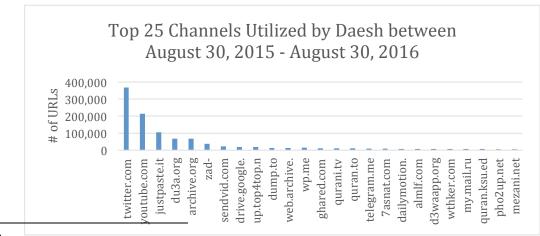
affiliated accounts identified in the posted content. From that list, our system utilized the Twitter API to download a sample of the latest tweets from each Daeshaffiliated account.

Figure 1. Method for Capturing Transient Webpages

Tweets were sorted into

various components (e.g., web addresses and links, hashtags, mentions) to be analyzed. Our software searched for links within tweets referencing anonymous posting services for open content-publishing transient webpages (e.g., JustPaste.it, dump.to). Next, our software automatically crawled to the referenced webpage and captured both PDF and HTML versions of the actual transient webpages. From these pages, the program identified any links to other transient webpages/open architectures in the online posting. The software continued to download and analyze the content until all possible transient links had been found and captured. To date, this process has produced over 4,500,000 tweets, 1,589,623 URLs, and 16,000 transient web pages.²

Results



² This is the Social Media for Influence and Radicalization (SMIR) Dataset (Church, 2016).

We ranked the top domains used by Daesh between August 2015 and September 2016. Results indicated that Twitter, identified as the "jumping off point" for much of the persuasive content we find on non-indexed, transient webpages, is the most oft used. However, a variety of other types of domains are also used by Daesh to disseminate messaging, as indicated in Tables 1 and 2.3

Table 1. Rank Order Daesh Communication Channels 2015-2016

Rank	Domain	f	%
1	twitter.com	368,652	23.19%
3	youtube.com	213,092	13.41%
2	justpaste.it	105,802	6.66%
4	du3a.org	67,380	4.24%
5	archive.org	67,298	4.23%
6	zad-muslim.com	36,519	2.30%
7	sendvid.com	22,776	1.43%
8	drive.google.com	19,143	1.20%
11	up.top4top.net	18,965	1.19%
9	dump.to	13,394	0.84%
10	web.archive.org	12,904	0.81%
21	wp.me	14,280	0.90%
12	ghared.com	11,496	0.72%
13	qurani.tv	10,811	0.68%
14	quran.to	10,638	0.67%
15	telegram.me	8,726	0.55%
16	7asnat.com	8,624	0.54%
17	dailymotion.com	7,970	0.50%
18	almlf.com	7,958	0.50%
19	d3waapp.org	7,774	0.49%
20	wthker.com	7,067	0.44%
22	my.mail.ru	6,850	0.43%
23	quran.ksu.edu.sa	6,774	0.43%
24	pho2up.net	6,000	0.38%
25	mezani.net	5,712	0.36%
		1,066,605	67.10%

Number of total URLs in SMIR: 1,589,623

 $^{^{\}rm 3}$ A more detailed analysis of monthly usage could be conducted upon request.

How ISIL's Audiences Receive Propaganda

Jacob Olidort, Ph.D.

Soref Fellow, The Washington Institute for Near East Policy

ISIL disseminates its propaganda to both large and more targeted audiences, tailoring content, language and even format to both the different audiences and its own priorities. The most widely known and broadest is its propaganda magazines, most famously the English-language *Dabiq* as well as the new magazine *Rumiyah*, and the less frequently published Russian-language *Istok*, French-language *Dar al-Islam*, Turkish language *Constantinople*, and Malay-language *al-Fatihin*. These magazines, along with videos in these and other languages (including Mandarin, German, Spanish and others), are the most widely distributed and commonly known of the group's propaganda materials, which are released through social media and Telegram. Typically, these publications are aimed at audiences who communicate in those languages, and would often tailor the messaging to fit where those audiences may be. So, for example, they are targeting mainstream American Muslim leaders in the English-language *Dabiq*, citing sexual promiscuity and homosexuality as debauchery in the French-language *Dar al-Islam*, and the like.

Beside this macro level, the group has various targeted types of propaganda and outreach to its prospective support base. For example, media reporting has revealed that ISIL

operatives engage via Twitter directly with estranged individuals in the West, checking in on them regularly and moving them to gradually join ISIL's cause. The group also uses and develops mobile apps to disseminate its propaganda, such as its Arabic alphabet and Islamic chants apps for children.

Within ISIL's territory (and perhaps beyond, as these are also available online), the group releases a weekly newsletter reporting on its territorial progress, citing casualties and costs incurred on both ISIL's side and those of the counter-ISIL coalition, and featuring articles covering special interest topics (women who joined ISIL, obituaries of ideologies, etc.). This is also likely the area in which the aforementioned mobile phone apps are mostly used.

Finally, ISIL has a prolific publication industry – likely both circulated within ISIL controlled territory and online, as these have been digitized. While little information can be confirmed about ISIL's publishing house Maktabat al-Himma ("Zeal Press") based on open sources, my recent

"ISIL's publishing house Maktabat al-Himma ("Zeal Press") ... possibly affiliated with ISIL's Research and Fatwa-Issuing Committee, has a number of sub-divisions: research and scholarly studies (for longer manuals of religious guidance and commentaries), "Whispers in the ear of the fighter" (pamphlets for its fighters), and its series of textbooks (released in October 2015)."

report – the first systematic review of the nearly 150 Arabic language books and pamphlets produced through this vehicle since June 2014^4 – offers a number of observations about its

⁴ Jacob Olidort, *Inside the Caliphate's Classroom: Textbooks, Guidance Literature and Indoctrination Methods of the Islamic State* (Washington, D.C.: The Washington Institute for Near East Policy, 2016),

http://www.washingtoninstitute.org/policy-analysis/view/inside-the-caliphates-classroom; See also idem, "The Islamic State's 'Homo Jihadus,'" *Lawfare*, 18 September 2016, http://www.washingtoninstitute.org/policy-analysis/view/the-islamic-states-homo-jihadus

operations and organizational structure, as well as conjecture about location. The publishing house, possibly affiliated with ISIL's Research and Fatwa-Issuing Committee, has a number of sub-divisions: research and scholarly studies (for longer manuals of religious guidance and commentaries), "Whispers in the ear of the fighter" (pamphlets for its fighters), and its series of textbooks (released in October 2015). Many of these publications bear the imprimatur of the publishing house and have introductory remarks from the editorial board, occasionally signed by the "head of the editorial board." Given the deep concern for controlling ideas, it is reasonable to suspect that this chain of command may report to senior levels of ISIL leadership. If accurate, based on this assumption one can also suspect that the publishing house – if it does exist as a physical entity – is based in or around Raqqa (if ISIL leadership is based there), or, at the very least, maintains direct and regular lines of communication with ISIL leadership.

In terms of content (discussed in depth in the aforementioned report), these publications vary widely and appear regularly. Over the last few months, as the group continued to face challenges on the battlefield it published about one commentary on theology per month. Their **commentaries** are largely editions of works by Muhammad ibn 'Abd al-Wahhab (d. 1792), the "founding father" of Saudi Arabia's religious tradition (Wahhabism), with the aim of validating ISIL's claim that Saudi Arabia has betrayed its Islamic roots. In addition, the group has published manuals on prayer, fasting, charity, slavery; shorter pamphlets on aspects of the group's jihadist priorities and its control of Islam (this includes topics such as men's beard length, martyrdom, loyalty to ISIL rather than to national identity, and the woman's head covering); and its textbooks. The latter include not only books on Salafi/Wahhabi principles of law and theology, but also textbooks on mathematics, geography, history, literature, computer programming and physical fitness - all of which interweave ISIL's violence and religious intolerance into the kind of basic knowledge and skills they instill in children. Examples of this include a recent 80-page book of exercises to teach children how to write the letters of the Arabic alphabet, which include images of the ISIL flag and guns in between chapters. Another example is physical fitness – which includes not only chapters on exercises and stretches, but also those on how to identify, load, assemble and fire various weapons. All told the book publishing industry – which continues as the group loses territory (suggesting ISIL leadership's continued investment in this area) - reflects the most coherent and systematic presentation of what it seeks to give over to what it calls "a new jihadi generation," that the group hopes will outlive its current territorial pursuits.

Recommendation

Once books are published it is of course difficult to stop their dissemination. However, the U.S. government can significantly disrupt these activities by going after the media (and the channels) rather than the message directly. This includes targeting the publishing house's base of operations, interdicting where its payload is distributed and how it is received, and helping fill infrastructure and education gaps within ISIL controlled territory as the group withdraws from its strongholds. Pending U.S. government resources, there may even be opportunities for sowing anxiety into the ideological message of the group by engaging in a coordinated and consistent counter-propaganda campaign in which imitation ISIL propaganda could be disseminated – further causing distrust both internally within the ranks of ISIL leadership as well as between it and prospective recruits.

Comments on How Audiences Receive ISIL propaganda

Hassan Abbas

Professor of International Security Studies and Chair of Regional and Analytical Studies College of International Security Affairs, National Defense University

In the directly controlled ISIL areas, ISIL's propaganda machine influences all mediums of communication - social and electronic (where functioning) and especially through mosques. However, in the Sunni majority areas (not under ISIL control), ISIL propaganda happens primarily by word of mouth including gossip. To add, the international marketing of ISIL is largely being conducted via social media and ISIL magazine Dabiq. Within Iraq, however, my travels from Baghdad towards Samara (2015-2016) convinced me that local Sunnis had not even heard about Dabiq magazine. For them tribal and local networks are the source of all news - both political and ISIL related.

Comments on How Audiences Receive ISIL propaganda

Alexis Everington Madison-Springfield, Inc.

It is important to note that propaganda does not cause extremism, it catalyzes already existing propensities. As such, it is the fuel added to the fire but not the fire itself. With this understanding the following brief observations can be made.

In-country audiences are most impacted by visible actions taken by ISIL (e.g. those in Raqqa see the executions that take place). In second place are media engagement centers such as screens depicting ISIL videos as well as mobile media trucks. In third place is religious messaging at mosques and other religious centers and events. Fourthly there are posters and leaflets that disseminate pro-ISIL messages. Finally, there are competitions and events held to recruit the youth.

Out-of-country audiences are largely reliant on face-to-face communication with an individual that introduces and/or grooms them, as well as supportive material (typically videos and chats online). In a few cases, individuals are also given reading material by the 'groomer'. Finally, it should be noted that some communication contributes to the pro-ISIL effort, even indirectly. For example, the perception that the international community was doing nothing to help Sunnis oppressed by the Assad regime, drew concerned foreign fighters to their ranks. Likewise, media sensationalist coverage of 'terrorism' can convince those seeking notoriety that joining ISIL is one way to achieve it.

Comments on Video Propaganda

Cori E. Dauber, Professor of Communication Mark D. Robinson, Director, Multimedia Labs University of North Carolina at Chapel Hill

The primary means by which propaganda is distributed, both inside and outside the CJOA, is visual, though distribution networks, obviously, are different. Most powerfully, and of most particular interest are the moving images (video) that are employed. Last year ISIL began

representing its videos as being the products of a newly decentralized system, with multiple Wiliyats having their own production centers, but it should be noted that there is a centralized visual aesthetic. It is possible that there is centralized control and it is possible that this is an artifact of each of these centers having been started by members of a single original core team all of whom originally worked and were trained together, but either way there is a definite and identifiable "look" to these materials. Most obviously, line-up the opening graphics introducing each of the Wiliyats and [you will see that] there is no question this is the case.

There is a very conscious harnessing of technical, compositional elements of video production for rhetorical, persuasive purposes. To a trained eye this is done so consistently, and in such a sophisticated way, that there is no doubt it is being done with intent. Lighting, editing, camera angles, special effects, all are being incorporated in very savvy ways.

Direct appeals are being made to a universal, trans-national youth culture. No matter what country they are from, young people today watch, to an extent, the same movies, and play the same video games. ISIL videos do not just mimic First Person Shooter games, they copy specific scenes with such accuracy that young people who play these games can

"There is a very conscious harnessing of technical, compositional elements of video production for rhetorical, persuasive purposes. ...ISIL videos do not just mimic First Person Shooter games, they copy specific scenes..."

immediately identify the specific scene from the specific game. Lining up the scene from the [ISIL] video against the scene from the game there can be no doubt of the intent to pull from the game. By the same token, they use memes associated with Marvel Superhero comics and

"... in the visual realm a focus solely on ISIL products is a mistake, that despite the fact that ISIL was initially a generation ahead of other [terrorist] groups, several groups have been gaining ground almost by the month."

movies and now, in fact, have in at least one case simply ripped a CGI image straight from one of these films. (In the video made to celebrate last November's Paris attacks, the central image, repeated several times, is a digital image of the Eiffel Tower, bombed, collapsing into the Seine. They did not render this themselves, they ripped it from *G.I. Joe, Rise of the Cobra*, which grossed more than \$300 million worldwide.)

On a general note, we have been warning for some time that in the visual realm a focus solely on ISIL products is a mistake, that despite the fact that ISIL was initially a generation ahead of other [terrorist] groups, several have

been gaining ground almost by the month. We believe there are several who have now caught up, if inconsistently so. This is extremely dangerous for the United States and our allies.⁵

 $^{^5}$ See for example "The Wind of Rage," from Harakat al Sham al Islamiyyah, http://jihadology.net/2016/09/10/new-video-message-from-%e1%b8%a5arakat-a%e1%b8%a5rar-al-sham-al-islamiyyah-the-wind-of-rage/ or "Story of the Life of Abu Basir al Hindi," from Jabhat al Nusrah, http://jihadology.net/2016/03/25/new-video-message-from-jabhat-al-nu%E1%B9%A3rah-story-of-the-life-of-abu-basir-al-hindi/

Comments on How Audiences Receive ISIL propaganda

Chris Meserole Brookings Institution

I would define the smartphone as the primary means of global dissemination of propaganda, with the secondary means being content-specific apps such as Telegram (for operational or targeted information) or even Twitter (for general information, though less so now).

I would also push back a bit against the question. We continue to view propaganda as something that is "received." However, I would argue ISIL is to AQ what Snapchat is to CNN: they figured out that if the medium is the message, then the smartphone's "message" was as much about what you produced as what you consumed. I don't think it's a coincidence that AQ adopted a "whitelabeling" strategy at the same time that smartphones gained global adoption. Their brand and operational structure were built in and optimized for a global media environment that was push only, and

"...Without the video the attack was pointless; and without the smartphone, they could not easily make and disseminate the video. The point of the attacks was to participate in the propaganda even more than it was to achieve political ends.."

thus had to de-emphasize the brand once it was clear they could not adapt to new patterns of propaganda consumption. By contrast, ISIL had the advantage of spinning up its media operations at the same time that the smartphone reached global scale. As a result they were able to optimize their message and strategy for global participation. Note that many of the attackers this summer produced smartphone videos beforehand. Without the video the attack was pointless; and without the smartphone, they could not easily make and disseminate the video. The point of the attacks was to participate in the propaganda even more than it was to achieve political ends. Obviously there are many other factors that have contributed to ISIL's success. But among analysts I think the form factor of the propaganda itself has gone underappreciated.

Comments on How Audiences Receive ISIL propaganda

Neil F. Johnson

Professor, Physics Department, University of Miami, FL

Our analysis of online media shows that the social media platform VKontakte (VK.com < Caution-http://vk.com >)6 has been a predominant means by which propaganda in this region, and for this cause, has not only been shared, but most importantly also discussed and through which aggressive jihadi (and anti-U.S.) narratives develop. VKontakte online groups provide a much richer and more powerful environment for developing narratives and exchanging propaganda and operational details than other social media like Twitter, where individuals tend to be follow other individuals and the amount of text is limited. Members of these online VKontakte groups interchange ideas, propaganda, operational

⁶ VKontakte is a copy of Facebook which is very popular in the geographical region of interest. Like Facebook, it allows 'communities/groups' to be set up by an administrator, and then pull in members online.

manuals, videos etc. and can do so even with a cellphone simply because VKontakte (like Facebook) has a mobile app, and so links to group updates can be shared through texts and Twitter through most phones. The groups can also pull in new members that way. The advantage pf these online groups for them is that, just as on Facebook, members of an online group can manipulate their footprint online, making themselves 'invisible' using the public/secret setting in the settings online, and also they can change their names, operate multiple languages, and also — if in danger of being

"... online groups provide a much richer and more powerful environment for developing narratives and exchanging propaganda and operational details than other social media like Twitter ...

shut down by moderators — they then can jump to other groups with different ID's, and they simply alert their members to this. So they remain essentially intact.

Over the 2015 period in which we studied them, we found approximately 200 of these online groups involving just over 100,000 members that were actively discussing and propagating pro-ISIS propaganda, including videos, PDF files etc. They range in size from 10 to several thousands. In 2016, this number has started falling slowly, but we are unsure if this is because they are becoming smarter in avoiding detection or because some are migrating to other media. For example, we have learned that on Telegram, they have started forming 'super-users' which are a kind of 'lite' equivalent of these VKontakte groups — but with the more limited tools that Telegram offers compared to VKnotakte. We believe Telegram is fully encrypted meaning that it is more secretive for them — but in the end they want to attract new members so it is in their interests to keep a presence on a platform like VKontakte.

VKontakte is a dominant social media platform in the area of and has more than 350 million users worldwide — though a majority are in the area of interest in the question and so the dominant languages in these groups tends to be Russian and Arabic. Its headquarters are in Russia and it is a company, like Facebook. Interestingly, we found that members of these online VKontakte groups sometimes denote themselves as 'fighters' (in Russian or Arabic) and they seem to attract a lot of people around them online when they do so. From what they post, there is reason to believe that they are telling the truth when they say they are fighters on the ground.

So VKontakte is an ideal site for them — it is multilingual, but predominantly Russian which targets students etc. and hence potential recruits in that entire area, and has the flexibility to be a virtual meeting place for exchanging and discussing ideas and potential events, in a way that something more 'lite' like Twitter does not. Also given the penetration of the Internet and availability on smartphones, it is readily available. Our current research shows that, perhaps importantly, there are 2 broad classes of VKontakte groups — those that are stimulated primarily by news events and those that are (for want of a better word) spiritual. Some individuals online pass through many of these groups, as if they are looking for something, while others go in and sit more or less indefinitely in one (until it is shutdown which often happens, in which case they then jump to another). We are currently analyzing these individual user pathways in detail.

So in summary, whereas others have focused on Twitter, the important point we feel is that VKontakte (or something like it, akin to Facebook) provides a very flexible medium through

which they can actually develop capability and intent, as opposed to simply reporting activity and exchanging short slogans and soundbites.

ISIL Propaganda

David B. Des Roches⁷

Near East South Asia Center for Strategic Studies (NESA), National Defense University

ISIL's reach and ability to attract recruits and inspire/direct action around the world is a

"ISIL's ability to leverage new technology has caught the rest of the world flatfooted." disturbing development. It is not, however, unique. A major trait of ISIL's rise is its adroit use of new media – particularly internet based wide spread media sites and various instant messaging / communications platforms – to attract, inspire and direct recruits to its cause.

ISIL is not the first ideological movement to globally inspire decentralized and undirected acts of violence. The anarchist movement of the late 1800s –early 1900s claimed this distinction, together with the credit for the assassination of several European rulers and an American president. What sets ISIL apart is the use of social media to develop and spread its propaganda. As with any effective propaganda method, the diffusion of propaganda varies depending upon the audience. This paper will examine several ISIL audiences and discuss the propaganda methods used to identify, inspire and direct them.

Key Characteristics of ISIL Propaganda

ISIL's ability to leverage new technology has caught the rest of the world flat-footed. ISIL has proven to be a nimble organization which has adapted to and applied technology long before the governments who oppose it. The following are the major characteristics of ISIL propaganda's leveraging of new media.

- 1. Slick production values. ISIL publication and videos are produced using new, relatively cheap software which allows production values similar to large scale commercial magazines and network film production. One recent ISIL execution video feature multiple camera angles, smooth editing, professional sound, flawless lighting and a clearly edited sequencing which allowed for aesthetic stage management. *Dabiq* is laid out and has the same graphic style as a commercial magazine popular among young men such as *Maxim*.
- Relatively impressive Islamic scholarship. While Western media makes much of the lack of knowledge of individual ISIL fighters and recruits, the written product produced by ISIL is of high caliber and generally cites the most highly regarded hadith verses.
- 3. Use of targeted languages. When ISIL wants to reach people in France, they get a native French speaker, often with a recognizable accent. Same thing for other

 $^{^7}$ David Des Roches generally posts copies of both Dabiq and Inspire as they appear. His Twitter account is @dbdesroches

languages. Al-Qaeda often used ponderous translations: ISIL literally speaks to its audience in their own language with their own accent.

- 4. Rapid response. By using digital production for both videos and magazines, ISIL is able to rapidly respond to events and capitalize on them. Al-Qaeda would generally refer to events in taped messages released months or years after the event; ISIL will release videos or feature their "martyrs" in print within days or weeks.
- 5. Micro targeting. ISIL use of Twitter, Kik and other social media allows them to propagate messages and themes to discreet audiences many of whom are self-identified instantly and with tailored messages.

Socializing with the Enemy: Insights into how ISIL targets their propaganda, at home and abroad

Adam Azoff Tesla Government Inc.

This paper attempts to qualitatively and quantitatively assess how the Islamic State in Iraq and the Levant (ISIL) targets its propaganda toward local and foreign audiences (outside of the Combined Joint Operations Area [Iraq and Syria]; or CJOA). It builds on past studies examining ISIL's propaganda, media strategy, and dissemination networks, as well as challenges facing counter-messaging efforts.⁸

By examining two weeks (9/13/16 to 9/27/16) worth of ISIL media output, this report provides insight on the types of media, central themes, and target audiences of the group's propaganda. Perhaps not surprisingly, this sample illustrates that ISIL is still capable of launching coordinated media campaigns and producing content that relates events on the ground. The group's propaganda continues to be grounded in the realities of developments on the battlefield, the territories they control, and in international politics. ¹⁰

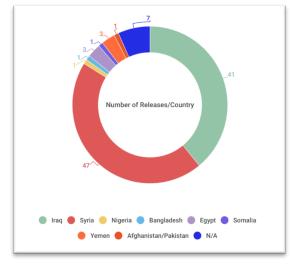
⁸ See Aaron Zelin (2015) *Picture Or It Didn't Happen: A Snapshot of the Islamic State's Official Media Output* and Charlie Winter (2015) *The Virtual 'Caliphate': Understanding Islamic State's Propaganda Strategy* for more comprehensive studies of ISIL propaganda output.

⁹ This paper does not contend to have collected all of ISIL's media releases during this time span; however, by following an official account ("Abu-Muhammad", @abo_m) over the course of two weeks, it was possible to collect a sizable sample. This account is one of ISIL's official Twitter dissemination accounts, often taken down (sometimes within hours) and recreated at a slightly different handle (e.g., @abu_m_498 at the start of the study, @abo_m_544 by 9/27). The sample does not include non-visual posts, such as written statements, which are less common. It also does not include battlefield updates from the ISIL-affiliated A'maq News Agency, which is widely considered an unofficial distributor of propaganda related to developments on the ground. While in future studies it would be beneficial to follow multiple official ISIL accounts on Twitter, the sample presented below helps paint a picture of the breadth of content types, themes, and target audiences essential to its overall strategy.

 $^{^{\}rm 10}\,\text{See}$ MEMRI JTTM report Understanding The ISIS Media Apparatus: Distribution Networks and Practices, February 19, 2016

Over the course of the two week time period, 105 official media releases were collected,

produced primarily by ISIL's "Waliyah" media offices. Like in past studies that examined ISIL's social media output, the group's offices in Iraq (41 media releases) and Syria (47 media releases) were able to publish many more posts than its affiliates combined (10 total outside of CJOA). The greater output from media offices in the CJOA, and the slightly higher rate in Syria, is understandable as the group enjoys more advanced content creation capabilities and likely a much higher flow of unedited footage and images sent to media offices from areas under its control.



In a way, all of ISIL's propaganda is utopian. In products depicting military operations,

everything seems to be moving in a positive direction. Even after an intentional, "tactical" retreat from an area, it is not uncommon to see posts of positive developments on another front. Much literature on the topic to date notes that ISIL's media productions are more diverse than the violent videos that grabbed headlines in 2014. This sample reaffirms that much of the group's output was not primarily military (48 releases). In fact, 51% of the collected posts depicted less violent governance, Da'wa (Islamic education/teachings), Hisba (religious policing), Martyrdom (parsing recently killed fighters), or other general posts about life in the "Caliphate."

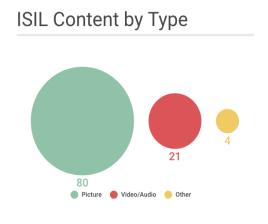
The types of content produced ranged from images to videos, newsletters, magazines, an audio file, and a children's book. The breadth of products the group disseminates through its global network of online supporters indicates ISIL continues to operate a sophisticated media apparatus. Most frequently, the group issues pictures or picture stories and videos, which are easier to process and distribute than larger reports, newsletters, and books.¹¹

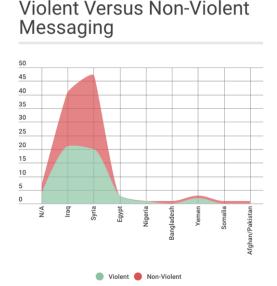
Events occurring during this paper's time frame helped shape the sentiment of the posts that were collected. Early on in the collection period, there could have been an unusually high volume of positive, non-violent releases due to the proximity of Eid celebrations, where the group's various media offices clearly conducted a campaign depicting the "atmosphere" of areas under its control. As battles intensified in Shirqat there was an uptick of military-related releases highlighting attacks in the area. During this timeframe, there was also what appeared to be a continuation of the "caravan of martyrs" campaign—a series of pictures and captions praising recently killed ISIL fighters.

Primary vs. Secondary Means of Propaganda Distribution

¹¹ See Charlie Winter, ISIS' offline propaganda strategy, March 31, 2016

Audiences both inside and outside of ISIL's areas of control receive ISIL media propaganda products, albeit through different distribution mechanisms. Within the CJOA, ISIL is able to conduct Hisba activities, broadcast local





radio programs, provide Friday sermons, develop school curricula, and employ other measures to propagate their ideology to the populace under their control. ISIL's media products, which have been successful to some extent in radicalizing foreign recipients, are also put to use in the local context. While enacting limitations on access to outside information, including punishing even suspected users of social media, ISIL has set up viewing booths and distribution centers for populations under their control to view their media network's products.

Outside of Iraq and Syria, where ISIL must operate covertly, the group's *predominant* means of broadcasting its propaganda is online. Though ISIL has networks of supporters all over the world, these supporters must remain discreet, which limits in-person interaction. ISIL must thus rely on its online support base (known as "Knights of the Uploading") to spread its message to the 1.4 billion Muslims in the world.

Conclusions

Regardless of the language or target audience of a given media release, all official media is standardized and consistent to the central themes and quality of the group. ISIL does not concern itself like Al Qaeda, with the public opinion of the Muslim world at large, or, as William McCants of the Brookings Institution eloquently stated, "The Islamic State doesn't give a damn about building broad support among the Muslim masses." As ISIL is defeated militarily, its ability to produce a centralized message and high-quality product will be complicated. While much attention is given to the threat posed by ISIL fighters returning to countries outside of the CJOA, it is not clear what might become of ISIL's media apparatus if the group loses control of the self-proclaimed Caliphate's territories. Inevitably, as ISIL foreign fighters increasingly attempt to return to their areas of origin, there is the potential that ISIL members that took part in media operations will continue their "cyber jihad" abroad and develop underground media cells to continue messaging their propaganda. Though it will be more difficult to send out as large a volume of high-quality releases, it is not likely that ISIL will return to the amateurish and locally-focused media operations of 2011. ISIL's propaganda represents a stark increase in quality and quantity from other

extremist groups. Even the group's own output has increased in volume and quality over time, despite setbacks on the battlefield. This threat should thus not be underestimated.

Comments on ISIL propaganda

Zana K. Gulmohamad
PhD Candidate in the Politics Department at the University of Sheffield

There are various ways and methods that ISIL utilizes to spread their propaganda. Each method targets a segment of a society and/or person differently. The broad perceptions

"...the personality, the background, environment, life condition, and ideology (e.g. Salafi Jihadism) are all factors that affect to what extent the propaganda is having an impact ..."

about the propaganda aims in Iraq are that spreading fear and domination/power/authority, demoralizes the anti-IS forces and distances the locals from the federal government in Baghdad as they show the Shias as apostates or renegades "Rawafidh" and this increases their recruit numbers.

The extremely strict rules in ISIL held areas have deprived the communities of updated news and awareness of the developments. Therefore, the

mainstream information and media is through ISIL's media channels including Radio (Al-Bayan). Although ISIL banned satellite television receivers some people secretly have them. ¹² Internet is provided and possessed by ISIL and the locals are unable to access it. ISIL closed all cyber cafes. ¹³ ISIL banned the Internet for several reasons; one of those is stopping the anti-IS locals from contacting anti-IS coalition forces. However, some locals use covert ways to access it and expose ISIL's brutality.

Another means adopted to disseminate their propaganda and ideology is by changing the education system in IS held areas by printing new books and curriculums in schools and universities. In the universities they closed down many departments and faculties. Meanwhile, inside ISIL held areas, mosques and assembly areas that people are forced to attend are also a way to spread propaganda. Some mosques and Islamic schools are fertile grounds for recruiting more locals outside IS held areas in Iraq.

Their brainwashing and recruitment policy toward children (child solders) has been systematic. Besides printed leaflets, magazine and small books, using the internet has been one of the most active strategies of ISIL to lure teenagers. This has had a great effect on recruitment across the globe.

 $^{^{12}}$ Heavy. (2016). Retrieved from: http://heavy.com/news/2016/06/new-isis-islamic-state-daesh-news-pictures-videos-and-let-the-believers-be-cautious-regarding-the-prevention-of-the-satellite-dish-and-its-destruction-full-uncensored-youtube-video-mp4-download/

¹³ Hawramy, F. (2016). Retrieved from:https://www.theguardian.com/world/2015/dec/09/life-under-isis-raqqa-mosul-giant-prison-syria-iraq

¹⁴ Gulmohamad, Z. (2014). "The Islamic State most effective wars are waged online". *The National*. Retrieved from: http://www.thenational.ae/opinion/comment/the-islamic-states-most-effective-wars-are-waged-online

Those possessing a combination of the following factors have been targeted and have proved to be a fertile recruitment ground inside and outside IS held areas in Iraq: Former members of radical Sunni Islamic factions or militants, extremely conservative Muslims, those with no or very poor income, and those discontent with the Shia-led government in Baghdad. The aforementioned groups are more vulnerable and receptive to IS's propaganda machine. The author believes the personality, the background and environment, life condition, and ideology (e.g. Salafi Jihadism) are all factors that affect to what extent the propaganda is having an impact to be part of the ISIL or pledge allegiance (baiya).

Comments on ISIL propaganda

Gary Warner, Director
Center for Emerging Technology Investigations Forensics & Security
The University of Alabama at Birmingham

Most of the recruiting tactics of ISIL these days focus on quickly moving the person of interest into a more secure communications environment. "First touches" are still often on Twitter, Facebook, or (as the attached report shows) Google Plus, which is steadily gaining in popularity. But as soon as someone is considered to be "determined" they are approached and helped to discover the more secure methods of communicating. Often these will be some of the hundreds of Telegram channels being used, but just as often it will be via the installation of a custom app.

For propaganda distribution, the main sites are "Isdarat" and "Amaq Agency", however these sites find themselves under constant attack. For this reason, "bookmark" sites are established throughout the community that allow one to quickly reacquire the "site-of-the-day" location of these sites of fresh news and inspirational documents and videos. As an example, by visiting a bookmark site, such as "alahzabblog (dot) wordpress (dot) com", we find the following are "today's" locations for distribution: Isdarat is currently at "frjsz5489 (dot) ga."¹⁵

The site is mostly current, with yesterday's Al Hayat video at the top left, and the featured "selected 10" with hotlinks to each video showing in the main frame. However, the "Rumiyah" issue being displayed in the left sidescroll is still issue #1, so they don't have a link to the newest issue #2 here. The site is protected via Reverse proxy routed through CloudFlare. Isdarat also maintains links to all of the Amaq Agency news announcements - twenty pages worth going back to mid-2014. There have been possibly more than 100, isdarat websites. The URLs for most of the high-bandwidth videos are actually posted as unpublished "Google Drive" videos, so once the Google Drive location is known, this can also be used for re-acquisition. Isdarat also has the "Translation section" where English language media from Al-Battar Media Foundation, Al-Furqan, Al-Hayat, and specialty pubs such as Dabiq may be found. (The most recent English video is yesterday's video from Media Gezira State). The Isdarat archive is currently about 39,800 pieces of media.

The multilingual headlines with their distinctive blue layout are commonly shared on Twitter, but each of these is actually the still title frame of a video. While they can all be found on the

¹⁵ Amaq Agency news site is currently at "agnamaq (dot) ml" -- but this site isn't needed when you have the Amaq app installed on your phone or workstation.

Isdarat page, they are also available through the Amaq app, available for Android, Windows, or jail-broken iPhone. Once the app is installed, it "auto-magically" finds the current data source location to stream video to your phone. It also provides a convenient way to tweet the news headlines directly from the app.

The daily news podcast of Al-Bayan radio is currently at "al-bayan-radio (dot) co (dot) uk". This also changes regularly, but can be easily reacquired through the use of bookmark sites. Many jihadi forums have banner ads that have the ability to refresh to connect to the current location as well. Lastly, ISIS often uses "dark web" or TOR or .onion pages. In order to know when the .onion page changes, they provide a "subscribe" feature which notifies by email of the new location. The current "dark web" propaganda site is: ou7zytv3h2yaosqq (dot) onion. The dot onion site changes whenever they feel compromised. It is usually slightly more current than the "isdarat" site. As with the Isdarat sites, such media is hosted externally. In the case of the .onion site, through a series of Cloud-flare reverse proxied sites. The current host being: ou7zytv3h2yaosq (dot) dabiqservehttpcom (dot) cf/32779. (Which is really in Belfast at IOMart Hosting through a reseller called ABPNI Computer Solutions.)

These sites actually use quite good op-sec when they are set up. The Bengali ISIL site, an example of a regional propaganda distribution website, (currently at attamkin dot co dot uk) was purchased via the Bullet Proof Hosting company "HostSailor". The last two al-Bayan radio station addresses were both on the same IP in Panama (though that was masked by CloudFlare). That box was purchased, likely with Bitcoin, from the site "offshoreracks dot com" which may be in Miami, Florida. The actual server is in Panama in an Offshoreracks data center.

Author Biographies



Dr. Gina Ligon

Dr. Gina Ligon is an Associate Professor of Management and Collaboration Science at the University of Nebraska at Omaha. She received her PhD in Industrial and Organizational Psychology with a Minor in Measurement and Statistics from the University of Oklahoma. She is a member of the National Consortium of Studies of Terrorism and Responses to Terrorism (START). Since arriving at UNO, she has been awarded over \$2,000,000 in security-related grants and

contracts. She currently is the Principal Investigator on a grant from Department of Homeland Security (DHS) examining the leadership and performance of transnational Violent Extremist Organizations (VEOs,) and is the originator of the *Leadership of the Extreme and Dangerous for Innovative Results* (LEADIR) database. Her research interests include violent ideological groups, expertise and leadership development, and collaboration management. Dr. Ligon has worked with DoD agencies on markers of violent ideological groups, leadership assessment, organizational innovation, and succession planning for scientific positions. Prior to joining UNO, she was a faculty member at Villanova University in the Department of Psychology. She also worked in St. Louis as a management consultant

with the firm Psychological Associates. She has published over 50 peer-reviewed publications in the areas of leadership, innovation, and violent groups.



Adam Azoff

Adam Azoff is an international security specialist with over six years of academic and work experience in the Middle East. As a Team Lead at Tesla Government, Inc., Adam manages a USG platform that supports the informational requirements of USG personnel in the CENTCOM area of

responsibility. Since 2014, he has responded to over 200 RFIs, providing tailored research focused on the Iraq problem-set. Adam has an M.A. in International Security and Diplomacy Studies from Tel Aviv University and B.A. in Socio-Cultural Anthropology from the University of Arizona.



Zana K. Gulmohamad

Zana Gulmohamad is a PhD Candidate in Politics at the University of Sheffield. Research title "Iraq's foreign policy post-Saddam". Research Fellow at the Center of Peace and Human Security at the American University of Kurdistan. Former senior security analyst for the Kurdistan

Regional Government of Iraq for six years. Graduate Teaching Assistant for Introduction to Security Studies & Comparing Modern Polities in the Politics Department at the University of Sheffield, the UK. Pieces of Zana's research have been published in various platforms such as the Jamestown Foundation, the National, Middle East Online, Open Democracy, Global Security Studies, and Your Middle East.



Alexis Everington

Alexis Everington is the Director of Research for Madison Springfield, Inc. His qualifications include 15 years program management experience leading large scale, cross-functional, multi-national research & analytical programs in challenging environments including Iraq, Libya, Mexico, Syria and Yemen. Alexis advised both the Libyan opposition government during the Libyan revolution of 2011 and its immediate aftermath and most recently, the Syrian

opposition military. He has also helped train several other foreign militaries and has taught at the NATO School. In addition, Alexis developed the Target Audience Analysis methodology that is currently employed across the US national security community and has been applied most recently in Afghanistan, Jordan, and Lebanon. His educational credentials include a Master of Arts from Oxford University in European and Middle Eastern Studies and his language skills include a fluency in Arabic, Spanish, French and Italian as well as a proficiency in Mandarin. Alexis is currently leading large-scale qualitative and quantitative primary research studies in Libya, Pakistan, Syria and Yemen.



Dr. Allison Astorino-Courtois

Dr. Allison Astorino-Courtois is Executive Vice President at NSI, Inc. She has also served as co-chair of a National Academy of Sciences study on Strategic Deterrence Military Capabilities in the 21st Century, and as a primary author on a study of the Defense and Protection of US Space Assets. Dr. Astorino-Courtois has served as technical lead on a variety of rapid turn-around, Joint Staff-directed

Strategic Multi-layer Assessment (SMA) projects in support of US forces and Combatant Commands. These include assessments of key drivers of political, economic and social instability and areas of resilience in South Asia; development of a methodology for conducting provincial assessments for the ISAF Joint Command; production of a "rich contextual understanding" (RCU) to supplement intelligence reporting for the ISAF J2 and Commander; and projects for USSTRATCOM on deterrence assessment methods.

Previously, Dr. Astorino-Courtois was a Senior Analyst at SAIC (2004-2007) where she served as a STRATCOM liaison to U.S. and international academic and business communities. Prior to SAIC, Dr. Astorino-Courtois was a tenured Associate Professor of International Relations at Texas A&M University in College Station, TX (1994-2003) where her research focused on the cognitive aspects of foreign policy decision making. She has received a number of academic grants and awards and has published articles in multiple peer-reviewed journals. She has also taught at Creighton University and as a visiting instructor at the U.S. Military Academy at West Point. Dr. Astorino-Courtois earned her Ph.D. in International Relations and MA in and Research Methods from New York University. Her BA is in political science from Boston College. Finally, Dr. Astorino-Courtois also has the distinction of having been awarded both a US Navy Meritorious Service Award and a US Army Commander's Award.



David Des Roches

David B. Des Roches is Associate Professor at the Near East South Asia Center for Strategic Studies (NESA) at National Defense University, where he specializes in countries of the Arabian Peninsula, Gulf Cooperation Council Regional Security, Border Security, Weapons Transfers, Missile Defense, Counterinsurgency, terrorism and emerging trends.

He joined NESA in 2011 after serving the Office of the Secretary of Defense for Policy in numerous positions, including as Director of the Gulf and Arabian Peninsula, the DoD liaison to the Department of Homeland Security, the Senior Country Director for Pakistan, the NATO Operations Director, the Deputy Director for Peacekeeping, and the spokesman for the Defense Security Cooperation Agency. Prior to that, he served in the White House Office of National Drug Control Policy as an International Law Enforcement Analyst and Special Assistant for Strategy.

He retired as a Colonel from a 30 year career in the active and reserve Army, serving on the Joint Staff, US Special Operations Command staff, and in conventional and special operations troop units deployed throughout the Middle East, Europe and in Afghanistan. He is a Ranger and a master parachutist with over 100 jumps. He also holds the parachutist badges of Canada, the United Kingdom and Germany. His final post was as the Deputy Commander of the US Army Center of Military History.

Professor Des Roches is the author of numerous articles on Gulf security, is the editor of *The Arms Trade, Military Services and the Security Market in the Gulf: Trends and Implications* (Berlin: Gerlach, 2016), the theme editor of Oxford Journal of Gulf Studies Spring 2016 special issue on security (http://www.nesa-center.org/wp-content/uploads/2016/02/gulf_affairs_spring_2016_full_issue.pdf), and the author of the chapter on the Gulf weapons market in the 2016 Gulf Yearbook, the definitive Arabic language resource on Gulf studies (http://grc.net/data/contents/uploads/infopdf/Gulf-Year_3291.pdf).

Professor Des Roches holds advanced degrees from the University of London School of Oriental and African Studies and Kings College London, which he attended as a British Marshall Scholar. He also holds an advanced degree from the U.S. Army War College, and a bachelor of science degree from the United States Military Academy, West Point.

Professor Des Roches is a regular commentator on regional affairs on various Arabic language television networks including al-Hurra, RT Arabic, and al-Mayadeen, and on radio networks such as the Voice of America.

Dr. Cori E. Dauber

Dr. Cori E. Dauber is Professor of Communication at the University of North Carolina at Chapel Hill, where she is also a Research Fellow at the Triangle Institute for Security Studies (TISS.) She is co-editor of *Visual Propaganda and Extremism in the Online Environment*, (US Army War College Press, 2014) and the author of *You Tube War: Fighting in a World of Cameras in Every Cell Phone, Photoshop on Every Computer*, (US Army War College Press, 2010.) She has been the Visiting Research Professor at the Strategic Studies Institute of the US Army War College. Her research focus is the communication strategies of terrorist groups, with a particular focus on their use of visual imagery. Her work has been published in journals such as *Military Review, Small Wars Journal*, and *Rhetoric and Public Affairs*, and she has presented her research to the Canadian Forces College, the John Kennedy School for Special Warfare, the Foreign Policy Research Institute, and the Near East South Asia Center for Strategic Studies of the National Defense University among others. Dr. Dauber holds a PhD and BS from Northwestern University, and an MA from Chapel Hill, all in Communication Studies.

Mark Robinson

Mark Robinson is the Director of the Multimedia Laboratory of the University of North Carolina at Chapel Hill. He holds an MA in Communication Studies, with a focus on media and internet technologies, and a BFA in Studio Art, both from Chapel Hill. He has developed and taught a number of courses on media and media technology, which engage with audio and visual communication and their consumption and processing, thus integrating cultural, technical and psychological systems analysis in order to understand the relationship of meaning within culture. As a maker of multimedia: software, hardware, video, audio, robotics, electronic interface, web application and delivery, he has employed technology and research in order to understand the technical aspects of what is seen and heard as well as the artistic and scientific approaches to ascertain the potential of such media including, message, effectiveness, strategy and tactical use.



Jacob Olidort

Dr. Jacob Olidort is a Soref Fellow at the Washington Institute for Near East Policy, where he focuses on Salafism and Islamist groups in the Middle East, and is an adjunct professor at the Elliott School of International Affairs at George Washington University. He received his BA in Middle Eastern Studies from Brandeis University, his AM in Near Eastern Languages and Civilizations from Harvard University, and his MA and Ph.D. in Near Eastern Studies from Princeton University, where his work focused on the intersection between Islamic law, theology and

modern politics. Dr. Olidort has spent nearly two years inthe Middle East, including a Fulbright Scholarship in the UAE and field work on Salafism in Jordan. He has given presentations and has consulted on Salafism and on countering violent extremism to audiences in academia, government and policy. His writings have appeared in Foreign Affairs, the Washington Post, Lawfare, and War on the Rocks.



Hassan Abbas

Hassan Abbas is Professor of International Security Studies and Chair of the Department of Regional and Analytical Studies at National Defense University's College of International Security Affairs (CISA). He is also currently a Senior Advisor at Asia Society.

He remained a Senior Advisor at the Belfer Center for Science and International Affairs at the Kennedy School of Government, Harvard University (2009-2011), after having been a Research Fellow at the Center from 2005-2009. He was the Distinguished Quaid-i-Azam Chair Professor at Columbia University before joining CISA and has previously held fellowships at Harvard Law School and Asia Society in New York.

He regularly appears as an analyst on media including CNN, ABC, BBC, C-Span, Al Jazeera and GEO TV (Pakistan). His opinion pieces and research articles have been published in various leading international newspapers and academic publications. His latest book titled *The Taliban Revival: Violence and Extremism on the Pakistan-Afghanistan Frontier* (Yale University Press, 2014) was profiled on *The Daily Show with Jon Stewart* in August 2014. Abbas' earlier well acclaimed book *Pakistan's Drift into Extremism: Allah, the Army and America's War on Terror* (M E Sharpe, 2004) remains on bestseller lists in Pakistan and India. He also runs WATANDOST, a blog on Pakistan and its neighbors' related affairs. His other publications include an Asia Society report titled *Stabilizing Pakistan Through Police Reform* (2012) and *Pakistan 2020: A Vision for Building a Better Future* (Asia Society, 2011).



Neil Johnson

Neil Johnson heads up a new inter-disciplinary research group in Complexity at University of Miami (Physics Dept.) looking at collective behavior and emergent properties in a wide range of real-world Complex Systems: from physical, biological and medical domains through to social and financial domains. The common feature which makes Complex Systems so hard to understand, and yet so fascinating to study, is that they all contain many interacting

objects, with strong feedback from both inside and outside the system, and are typically far from equilibrium and exhibit extreme behaviors. Neil's research group is involved with interdisciplinary projects across multiple other departments and schools within the University of Miami, and other institutions both within U.S. and globally, e.g. Universidad de Los Andes in Bogota, Colombia.

Prior to coming to UM in 2007, Neil was Professor of Physics at Oxford University, having joined the faculty in 1992. He did his BA/MA at Cambridge University and his PhD at Harvard University as a Kennedy Scholar. He has published more than 200 research articles in international journals, and has published two books: "Financial Market Complexity" (Oxford University Press, 2003) and "Simply Complexity: A Clear Guide to Complexity

Theory" (Oneworld Publishing, 2009). He also wrote and presented the Royal Institution Lectures in 1999 on BBC television, comprising five 1-hour lectures on "Arrows of Time".

He is joint Series Editor for the book series "Complex Systems and Inter- disciplinary Science" by World Scientific Press, and is the Physics Section Editor for the journal "Advances in Complex Systems". He is Associate Editor for "Journal of Economic Interaction and Coordination", and is an Editorial Board member of "Journal of Computational Science". He previously served as an editor of "International Journal of Theoretical and Applied Finance". He co-founded and co-directed CABDyN (Complex Agent-Based Dynamical Systems) which is Oxford University's interdisciplinary research center in Complexity Science, until leaving for Miami. He also co-directed Oxford University's interdisciplinary research center in financial complexity (OCCF).

Gary Warner

Gary Warner is the Director of Research in Computer Forensics at UAB. Since arriving at UAB in 2007, Warner has created and taught a variety of classes in Computer Science and Justice Sciences related to Cyber Security and Computer Forensics. More than 150 students have worked as employees or volunteers in the UAB Computer Forensics Research Lab, which was established in March of 2010, serving the community by assisting in investigations for many companies and law enforcement agencies. In 2012, inventions and patents from the lab were licensed to create Malcovery Security, a local cyber intelligence company with more than 20 employees. Malcovery was acquired in October 2015 by PhishMe where Warner now serves as Chief Threat Scientist. In 2013, the UAB lab doubled in size with the creation of the Facebook Suite, largely funded by a generous contribution from Facebook in response to our assistance in fighting cybercrime.

Warner has been recognized for his efforts with many rewards, including the MAAWG J.D. Falk Award in 2013, the NCFTA Cybercrime Fighter Award, the IC3.gov Partnership Award, and has received the Microsoft MVP in Enterprise Security six times. Involved in cyber security since 1989, he began his career helping large organizations connect securely to the Internet for the first time. He has worked as an IT Director for a local publicly-traded utility, and has served as a Task Force Officer for the FBI Cybercrimes Task Force. With regards to Critical Infrastructure Protection, he founded the Birmingham InfraGard chapter, and has served on the national boards of the FBI's InfraGard program and DHS's Energy ISAC.

Chris Meserole

Chris Meserole researches modern religious conflict and is a pre-doctoral fellow in Foreign Policy at the Brookings Institution. Chris graduated from Harvard with highest honors and has an M.Div. from Yale Divinity School, where he also completed Yale's Middle Eastern Studies program. He has traveled extensively throughout the Middle East and sub-Saharan Africa, and contributed to the Huffington Post since its launch. Chris is currently completing a PhD in political science at the University of Maryland