Drag and Drop Insurgency: The Application of Social Media in Insurgent Environments

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ABSTRACT

Traditional theory of command and control facilitates a commander’s ability to direct subordinates to accomplish a predetermined task, or respond to a new stimulus. In order to have an effective system, units must establish communication networks, a system for accountability, a hierarchy or organization, financial resources, and a capacity for planning and conduction of kinetic operations. Social media -- to include Facebook, Twitter, FourSquare, and Instagram -- have grown significantly in the past decade. With the development of mobile technologies, peer-to-peer connectivity has increased, which allows individuals to promote information globally in near real-time. When used as a command and control system, social media has proven to be a viable option for a very low cost of entry. In conjunction with the prevalence of social media, conditions such as a restriction of free press, a limited telecommunication infrastructure, and an established volatile demographic, all create a recipe for social media to be not only the go-to platform, but the only option for a command and control structure.

A final criterion in a social media revolution is the concept of a “digital jihad”. People can contribute their expertise from anywhere in the world: editing or creating videos, publishing websites, establishing donation pages, and managing online social profiles like Twitter and YouTube. Anyone with technical skill and access to an internet connection can participate in the jihad with a continually decreasing cost of entry. Social media enables three large benefits to emerging insurgent groups: propaganda and recruitment, revenue stream generation, and command and control for mobilization purposes. In addition to analyzing the use of social media as a command and control structure by both the Arab Spring and ISIS, this paper will also address why, when the conditions above are met, social media is drag-and-drop option for command and control.
Introduction

At its core, communication is the passing of information from one entity to another. It is the basis for which we integrate as a society, coming together to collectively thrive within our environment. The lowest level of communication is on a peer-to-peer basis. There is no collective dissemination, no broadcasting, but merely a transmission of information from one human to the next. Implementation of an alphabet and the development of paper and writing utensils bridged the gap between having a physical meeting and delivering a message. Letters could be sent hundreds of miles in any direction which paved the way for books, newspapers, and journals to give people access to information concerning things outside of their immediate vicinity.

Advancements in technology enabled the expansion of these directed information sources, with radio revolutionizing the way that humans and machines alike communicate. Development of vacuum tube technology in the decade leading up to World War II helped to bolster the nation’s communication infrastructure. In turn, this created a paradigm for an increasingly mobilized society “that could be motivated to achieve broad national purposes”\(^1\). The introduction of transistors allowed for electronics to become smaller, more efficient, and more capable. Television and live broadcasting brought news and world affairs to the living room. Information was still passed by word of mouth, only the mouth was getting bigger.

The development of the internet and the subsequent rise of social media has fundamentally changed information distribution into a hive-mind collective, breaking down the information ghettos that prevented the spread of knowledge and ideas. Social media platforms

\(^1\) Chandler, Alfred D. A Nation Transformed by Information: How Information Has Shaped the United States from Colonial times to the Present.
have combined peer-to-peer communication and news broadcasting to generate a constantly updating feed rife with personal proclamation, social activism, and distributed world news stemming from sources worldwide. An intrinsic trait of social media is that contribution is voluntary but open to all. With zero cost for content production, articles, photos, videos, or promotions, users can maintain a constant stream of information flowing to anyone who is willing to receive it. Mobile technology and wireless internet connections have had an astounding effect on the proliferation and completeness of social media information. Users can upload text, images, and sound -- a full spectrum broadcast -- in real time, and it is available to everyone.

The DIMEFIL (Diplomatic, Information, Military, Economic, Financial, Intelligence, Law Enforcement) model is a well established analytical tool for categorizing and measuring the elements of state power. However, a nation’s relative ability to reach into or influence the virtual portion of the information needs to be further developed. Instead of merely relying on and regulating a top-down information broadcast, it is critical to understand that individuals can wield the same distribution power as the state. Through the model, individual attribution is lost for the sake of the success of the state as a whole. Now that individuals can brandish the same power of information on their own, it enables them to fall away into anonymity, and allows the message to reach a critical momentum under its own power.

Look back to Paul Revere: we remember the name over 200 years later because he acted on behalf of the emerging American state, rising above the shadows of the cloak-and-dagger operations he had been a part of. If the American Revolution had failed, he would have been among the first to be hunted down as a traitor to the crown.
Now consider reality if Paul Revere had a Twitter account. Upon receiving the news of the British landing, he could have pushed this information under the guise of a proxy username, such as @MidnightRider, keeping his personal identity unknown. Utilizing the trend name “#TheBritishAreComing”, Paul Revere as an individual could have faded out of the public light, while allowing his message to expand instantly down the coast.

In a modern context, analysts would be hard-pressed to identify the individual who initiated the Arab Spring movement. Due to the volatile nature of their endeavor, wielding anonymity was invaluable to those whose aim it was to coalesce an immediately massive democratic movement. When dissecting insurgency group’s C2 structures in the modern age, this concept of individuals wielding state communication power must not be overlooked. In the case of ISIS, this concept holds true in propaganda, recruiting, and funding applications.\(^2\) While the Islamic State’s foundational beliefs are pushed from the institution, the spread can be attributed to many individuals acting on their behalf.

**Section I - Social Media and Potential for Command and Control Mechanism**

Regardless of the complexity of an organizational structure, the critical elements of a functioning command and control system remain the same: there is a commander and his subordinates, and there must be a constant cyclic flow of communication up and down the chain of command, whether that command is hierarchical or decentralized. The primary method for this continual stream in social media is the concept of a “newsfeed.” By subscribing to certain avenues of information, an individual can filter through stories, images, personal opinion and updates, along with broadcasts by organizations or notable figures they deem important.

\(^2\) Di Giovanni, Janine, Leah Goodman, and Damien Sharkov. "How Does ISIS Fund Its Reign of Terror?" Newsweek
Selective inclusion into particular transmission streams guarantees the creator of that stream that their information is consistently reaching people who choose to hear it. This gives a reasonable metric on which to base followership and influence.

It is also important to consider the weight and influence that each entity carries through their message. A presidential address, though infrequent, garners a massive audience on every occasion. The broadcast is high-profile. Whether or not citizens align with the policies of the commander in chief, they tune into their television and streaming sources. Marshall McLuhan’s iconic 1967 paradox “the medium is the message,” holds true in modern context. The president’s power to monopolize an evening of television broadcasting is a manifestation of his executive power. In doing so, he maintains an image of superiority, as people tune in to hear the voice of a nation. Social media removes this bias, allowing people to choose from what and of whom they want to listen to. Individuals engaging in social networking can choose to follow whomever in order to customize their information stream to their preferences.

The unique aspect of the social media construct is the standardized representation of all persons and organizations. On Twitter, users can choose to subscribe to their best friend’s tweets in the exact same way they would follow the president’s; their representation in the user’s feed is entirely identical. Through this equal opportunity, individuals can interact with important figures and organizations in the same way they would with friends, instilling a sense of trust and a willingness to listen.

Creating this two-way communication stream with social media can enable user-generated content to bolster the reach of an organization. Before the printing press, the Catholic Church held firm control on the interpretation of the Bible. The Church was the only western organization who could author and manufacture books for distribution, and as such, the volume
of books was limited, and those who could read them even more so – you likely had more books than people who could read them. The creation of the printing press, however, changed the distribution of information forever. Privately owned businesses now had the power to print books and distribute them for a profit. Although it decentralized the Church’s grasp on the distribution of the Bible, the leap in volume of circulating books helped to give smaller churches validity and authority with help from interested political and economic benefactors, helping Christianity plant its roots deeply throughout Europe. As Friedel writes, “what printing did for exploration and religion, it did for every other element of Western culture: it captured information and made its dissemination surer and easier.”

There is no broadcasting monopoly anymore. People live in a constant state of download; social media affords us the ability to constantly be aware and connected to news and events that people deem worth reading. If anyone wants an idea to get out, it will. The art of spreading information no longer bases itself in creative newspaper headlines or an accomplished news anchor speaking on primetime TV. Instead, an individual can create extreme content, and use its shock-factor to attract a large audience.

This is a digital manifestation of force multiplication. A traditional concept of warfare, force multiplication simply implies an advantage to the group that can mass a larger force when engaged in combat. However, as warfare advanced, so did the complexity of the power that a force could deliver with technological enhancement. The Battle of Britain, an air engagement between the Royal Air Force and the German Luftwaffe, is an iconic example of force concentration due to its novel use of RADAR. Britain’s entire air defense system centered around the information provided by RADAR and the associated C2 to direct limited resources in a coordinated campaign, allowing efficient deployment of fighter planes to combat the incoming

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3 Friedel, Robert D. A Culture of Improvement: Technology and the Western Millennium.
German bombers. Consider now, instead of a RADAR system for enemy airplanes, a RADAR system for people and ideologies. Social media, particularly Twitter, has built-in functionality ("hashtags" and trends) to pinpoint popular sentiment and rally users around a central idea. The ability to rally and exploit this following at a time advantageous for the perpetuator of an ideal is fundamentally force multiplication.

Before the rise of social media, how did people come together to assemble in protest, support, or to raise awareness within a community? Individuals with an idea had to identify an organization willing to help, spread their ideas to a group within that organization using leaflets, posters, and loudspeakers, and then hope that people were moved enough to spread the same idea on their own. Initiating a grassroots movement took a lot of legwork, and if the group did not reach a critical mass, the idea was lost without a voice to carry the movement forward. Thus assembly was limited to larger, further-reaching ideas that capitalized on political or societal imbalance, or established organizations that had the ability to push their ideas on local and national news outlets.

Social media again offers a level playing field. Small movements can create big waves online, as messages and ideologies are delivered instantly in a format that is easy for people of all demographics to digest and share. Assembly is no longer limited to a physical gathering as social media allows people to group and share ideas in a common space, despite their physical location. Bringing people together across the world for a common idea is the crux of the new insurgency command and control construct. All insurgencies require a place of sanctuary and a place to mass. Social media allows for those to occur online, safe from kinetic attack or intervention on an organized physical meeting.
Applications of this construct of peer-to-peer command and control to modern initiatives have proven highly effective given a certain demographic, environmental, and political climate. Social media, whether accessed by personal computer or mobile device, is unique in that it does not require any additional infrastructure to remain active. Television and radio both require broadcasting stations, and specialized receivers to allow users to get the information in the end state. This does not apply to social networking sites, which are free to use and require no more than an internet connection to join. In the Middle East and North Africa, smartphone and tablet ownership has approached 61%, helping to drive the purveyance of internet connectivity on mobile platforms in the future. A highly sanitized and biased state news source as a lone purveyor of information can drive people towards internet-based information sources, of which social media is a popular choice for its accompanying sharing capabilities. A final condition that contributes to the success of a social media driven initiative is a demographic that encourages extreme action and mob-mentality. These conditions, alongside the peer-to-peer communication capability that social media offers, create a perfect storm that can elevate popular idea into an instantly global movement for all to see and share.

Section II - Arab Spring Case Study

Ignited by the self-immolation of a Tunisian street vendor in December 2010, the Arab Spring was a new form of revolution, accelerated through a novel use of social media tools, particularly Twitter. The movement spread rapidly through Northern Africa and quickly spilled into the Middle East, with protests erupting in Oman, Yemen, Syria, and Egypt in the following weeks. In early January, the Tunisian government was effectively overthrown, and a week later,

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thousands gathered in protest in Tahrir Square in Cairo, Egypt. Fueled by a young, motivated population armed with an internet connection and social networking engines, the Arab Spring revolutionized not only a large portion of the Middle Eastern political climate, but also the way in which ideas were spread to bring communities together under a common cause.\textsuperscript{5,6} Regardless of the underlying political motivations that allowed them to mass physically, they were still connected and able to mass in a virtual domain through social media.

The regions affected by the Arab Spring and the resulting revolutionary movements all exhibited a set of societal indicators that, in hindsight, made these movements inevitable. A significant factor is the average age of the populations in these areas. According to the US Census Bureau, the median age of all countries affected by political revolutions during the Arab Spring was 24 or under.\textsuperscript{7} Other factors include an increase in an educated youth, high unemployment rates, rapid urbanization, and rising food costs.\textsuperscript{8} A recipe for unrest, the young majority of these regions quickly accelerated the political dissatisfaction into a full-fledged revolution, making use of social media tools as one of the primary means of communicating the idea.

With an overwhelmingly young population in these countries, the gravitation towards social media as a primary means of political debate and organization makes sense. In 2010 worldwide, nearly 90\% of all people aged 18-24 actively used social networks.\textsuperscript{9} Furthermore, youths dominated the usership of social media on mobile devices, with nearly 65\% of mobile users engaging peers through social media on their phones and tablets. With this connectivity, the unrest in Tunisia and Egypt became viral, and quickly spread into neighboring countries. In

\textsuperscript{5} "Timeline of the Arab Spring."
\textsuperscript{6} "Arab Spring: A Research & Study Guide "الربيع العربي: Home." Cornell University
\textsuperscript{7} Bowyer, Jerry. "Youth In Revolt: The Demographics Behind Middle Eastern Uprisings." Forbes
\textsuperscript{8} "Arab Spring: Demographics in a Region in Transition."
\textsuperscript{9} "Social Networking Fact Sheet." Pew Research Centers Internet American Life Project RSS.
the region around those hotbeds, concerned citizens were writing and posting over 2,200 tweets daily concerning the social unrest. In the days leading up to then-President Mubarak’s resignation, tweets voicing political opinions in Egypt increased exponentially, from 2,000 to 230,000 tweets daily. To combat this overwhelming flow of information, governments with little ability to regulate social media specifically resorted to disabling all internet and telecommunication infrastructure, driving more protesters to the streets to raise their voices offline.

The massive online response to the movements of the Arab Spring did in fact affect political change in many countries. In Egypt, both the president and prime minister resigned after 3 months of continued democratic discussion online, as well as protests in Tahrir Square. At the end of the summer, rebel groups in Libya overtook the capital city of Tripoli with help from Western military intervention, effectively ending Muammar Gaddafi’s reign by force. In 2012, Egypt held a democratic election, which after a second runoff vote, elected Mohamed Morsi as president. Shortly after his election, protesters organized yet again through Facebook and Twitter in response to the new constitution, which was passed with very little support of the Egyptian people. A military coup ensued, spurred on by a new wave of protests in Tahrir Square on the anniversary of Morsi’s first election. Although these significant political upheavals were in direct response to the distribution and discussion of democratic ideology through social media, it is important to realize that the perpetuators of the Arab Spring movement did not achieve their full potential in using social media as a command and control system to effect lasting, organized change.

Twitter and Facebook offered an online sanctuary to those who wanted to spread a series of revolutionary ideals, allowing people the opportunity to disseminate political dissatisfaction

10 “New Study Quantifies Use of Social Media in Arab Spring,” UW Today
without fear of reprisal. In the case of the Arab Spring, this was novel in its aggregation of unrest to effect political change. However, the following section will illustrate how the Arab Spring was merely the first step in the development of social media as a legitimate command and control structure.

Section III - The Use of Social Media and the Rise of the Islamic State

The Arab Spring proved the effectiveness of social media as a mass-mobilizer. However, the Islamic State took this concept one step further: they were able to transition from peer-to-peer communication to an organization-to-individual model. In doing so, they have effectively created a model of influence we call the “digital jihad”. This offers an alternative option to physically participating in a holy war.\(^1\) Students, professors, and professionals can contribute their expertise from anywhere in the world; they accomplish this through editing or creating photos and videos, websites and donation pages, or managing Twitter or YouTube accounts. Anyone with internet access and the technical skills can participate in the jihad with a decreasing cost of entry.

To supply the momentum and growing support for a regime, its foundation must be rooted in recruitment. Often a byproduct of heavy propaganda distribution, recruitment can also take a directed, formulated approach to accumulating followers. Organizers can distribute a message tailored specifically for recruitment as opposed to general propaganda utilizing a medium that is most likely to yield a response from the target demographic. As with the Arab Spring, the ISIS target audience is young men and women, which makes social media an ideal

\(^1\) "Anwar Al-Awlaki’s 44 Ways of Supporting Jihad."
method to distribute recruitment messages globally. Social media offers the ability to have a tailored message sent to the masses.

One of the clearest examples of social media recruitment is through accounts run by three Muslim women: Umm Ubaydah, Umm Haritha, and Umm Layth. Using accounts on Twitter and Tumblr, these women are able to reach out to those hopeful to join the Islamic State in the Middle East. Surprisingly many women, including Umm Haritha, are western immigrants who have responded to the call, contributing to the Digital Jihad through reaching out to other women. This not only continues the recruitment cycle, but also makes her wife and mother to the “next generation of mujahids.”

These pages also clearly illustrate what women need in order to successfully make the pilgrimage to Syria through Turkey. The outreach to women from within the Islamic State is a unique approach; women are typically not able to participate in any jihadist activities besides managing the home and marrying a jihadi. Umm Ubaydah comments, “being a mujahids [sic] wife, I wish I could describe the feeling, it’s beautiful”. She is perceived as leading a jihad feminist movement to mobilize as many participants as possible, all hosted on free-to-use, popular social media networks. While this recruiting is very effective for its target demographic, it is built on the foundation of the propaganda machine run by the Islamic State.

It used to be there was a necessity for a massive propaganda complex in order to push an extremist message. But now, the calculative mind of Joseph Goebbels is obsolete in formulating a successful propaganda campaign. Development and distribution can be effectively user driven through social networking. Maintaining their anonymity, users worldwide can contribute through generating media and sharing existing videos and messages on their profiles. This exponentially

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12 "Meet the Female Recruiters of ISIS." Daily Intelligencer.
13 @Al_Khanssaa, 6APR2014, Twitter
increases size of the online audience, all at no cost to the organization in both manpower and finances. An additional benefit of social media in this capacity is the consistent trend for striking content to be shared, regardless of a user’s opinion on the content. News broadcasts usually spotlight the inherently wrong and abnormal because it is attention grabbing; the same is reflected in social media.

For example, the beheading of James Foley was brutal and graphic, and gave the Islamic State immediate validity as a globally-aggressive movement. The video, released on Twitter, is an example of “modern media artifacts being used to medieval ends.” Extreme messages are inherently attractive; even if people don’t support the message, they still talk about it, thereby enhancing viewership. The anonymity maintained by the black-clad, knife-wielding jihadi in the viral videos is akin to the online profiles dedicated to the distribution of ISIS propaganda.

Until recently, Shami Witness (@shamiwitness) was at the forefront of the Islamic State’s propaganda machine. The Twitter profile has over 17,000 followers, both in the Middle East and western countries. With such a large follower base, Shami Witness’ 129,000 tweets have been viewed and shared countless times, allowing messages, photos, and videos supporting ISIS to spread worldwide. Acting as a hub for communication, Shami Witness would promote other accounts of foreign fighters, often corresponding with British jihadis supporting the Islamic State abroad and in-country. Despite the magnitude of the online profile, the critical characteristic of Shami Witness is not the large followership, but actual identity of the user behind the account.

Through an investigation run by a British media outlet, the true identity of the user was revealed to be a wealthy business executive from Bangalruu, India. Mehdi, as he is referred to, said in an interview that he would have liked to make a physical contribution to ISIS by joining

the fight in Iraq and Syria, but he could not abandon his familial responsibilities. Still seeking to contribute to the cause, Mehdi created the account as a way to participate in jihad without making the journey, while maintaining his job and daily life in India [Unmasked article]. The anonymity offered in social media makes opportunities like this more attractive to foreign actors hoping to participate in a growing, extreme movement.

The final application that social media offers is a means for financial backing. The rise of Bitcoin as an online currency (and its popularity among black-market traders) has offered insurgency groups with a unique method by which to transfer and acquire funds anonymously. Social media helps to popularize this payment system\(^{15}\), yet although widely used, it does not offer the same legitimate purchasing power as cash or credit cards. Therefore, social funding sites like GoFundMe and PayPal may serve as a laundering service for insurgent groups to turn Bitcoins into liquid assets.

A conceptual example in case of the Islamic State could be the selling of looted goods from overtaken cities through black market trading posts on the Dark Web for Bitcoins. Although the majority of their wealth is generated through captured oil fields, this is still a possible means of squeezing every cent out of their exploits. Given the anonymity offered through Dark Web services like the Silk Road, it is not difficult to purchase stolen credit card and banking information with the online currency. From this point, siphoning small amounts of money from thousands of corrupted accounts through “donations” to GoFundMe sites or similar social funding platforms could effectively launder the black market currency into usable capital.

**Conclusion - ‘Drag and Drop’ Potential for Social Media as a C2 System**

\(^{15}\) "Bitcoin-Money-Laundering-12-4-2014-01." SlideShare
The Islamic State and the Arab Spring both give validation to the volatile nature of movements that are largely coordinated through social media platforms. The young demographic that dominates the Middle East region helped to proliferate the use of Twitter and similar social networks to spread the ideals the people endorsed. The purpose of this paper was to illustrate the built-in capacity of social media to serve as a command and control structure, and to show that it is easily applied to any fledgling organization.

Traditionally in social structures, when a small group or entity has an extremist idea, the natural barriers to mass communications isolate its ability to assemble a mass of supporters. Lone-wolf actors, without the aid of modern communications, would have fewer means to disseminate their ideas or aggrandize their actions. “Drag and drop” implies versatility both in change of location and implementation. Social media offers these same assurances by its native use on a wide spread of existing communication platforms and extreme ease of use.

This novel concept brings with it some significant implications. As observed in the case of the Islamic State, a relatively small, unknown, and unfunded organization was able to fill a void of power extremely quickly as the first viral insurgency. This rapid ascension to power was facilitated through the exploitation of existing technology (and acceptance of new developments therein) and a willing demographic. Social media feeds upon virality - with very little overhead and flashy facade, there was no need to deeply understand the ideology behind the movement. Users simply latched on to the content, spreading a message with no effort on part of the organization. The establishment of a working, theologically based caliphate (as ISIS plans to carry out) was traditionally a long, arduous campaign spanning generations. Social media has offered an easy way out - a low-cost alternative both in human and financial capital, paving the way for other grassroots movements to rise in a similar manner.
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