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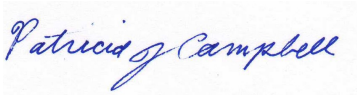
Editorial Welcome

Global Security and Intelligence Studies aims to publish high-quality and original research on contemporary security and intelligence issues. The journal is committed to methodological pluralism, and seeks to help bridge the gap between scholars and practitioners engaged in security and intelligence issues by publishing rigorous original research, book reviews, and occasional think pieces that are relevant to both communities. We will, on occasion, also seek to publish special issues on timely intelligence and security topics, and welcome proposals that fit with the scope and aims of the journal. The journal actively encourages both former and current intelligence and security practitioners to participate in important scholarly and policy debates, and invites them to contribute their research to the journal. We believe, moreover, that the open-access format of the journal is instrumental in our efforts to achieve these goals, as it significantly broadens the readership base of the journal, and allows those who do not have official institutional affiliations to stay informed about, and contribute to these debates. As a result, we hope that the journal will become a vibrant forum for informed, reasoned, and relevant debate on the most important intelligence and security issues of our time.

We believe that the articles that appear in this inaugural issue firmly achieve all of the goals set out above. In *The Future of Unmanned Aerial Vehicles*, Lt. Col. Mike Fowler engages the current debate about the future adoption of such systems by modern military organizations. Contrary to much of the conventional wisdom on this topic, Lt. Col. Fowler argues that the adoption of UAV's may not be as universal as many scholars and analysts predict. In *Business as Usual: The Egyptian-U.S. Intelligence Relationship*, Michele Black and Osamah Alhenaki focus their attention on the intelligence relationship between the United States and Egypt, and assess the impact of the Arab Spring, and subsequent events in Egypt on the nature of this relationship. In doing so, they trace the historical relationship between the US intelligence community, and its Egyptian counterparts, to offer valuable insights into the potential evolution of this relationship. James Hess and Curt Friedel's study, entitled *Applying a Critical Thinking Framework to Improve Intelligence Analysis*, assesses the effectiveness of the application of a new analytical framework in improving intelligence analysis. The study uses insights derived from historical case studies *and* observations from West Point cadets who were taught the use of this analytical framework. Finally, David Kriebel's article on *Anthropological theory and Intelligence* offers a wide-ranging discussion of anthropological theories and their utility for intelligence analysis.

Starting a new journal is a long and intensive process. The editorial team would like to thank Paul Rich and Daniel Gutierrez-Sandoval of the Policy Studies Organization (PSO) for their support and assistance during the process, and to extend its gratitude to our peer reviewers and to the editorial board for its support and input.

On behalf of the editorial team,



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The Future of Unmanned Aerial Vehicles

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Predictions of widespread adoption of UAVs for every airpower task are over-zealous. This article uses innovation theory to critically analyze the likely future of UAVs using a framework of expected benefits and costs of adoption across core air force missions: air superiority; intelligence, surveillance, and reconnaissance (ISR); rapid global mobility; global strike; and command and control (C2). While UAVs will certainly take on an expanded role in warfare, predictions of universal military adoption of UAVs are over-zealous because they fail to incorporate the total costs associated with adoption of new technology for a large organization.

Key Words: *UAV, Drones, Military Innovation*

Contemporary projections of massive unmanned aerial vehicle (UAV) proliferation have become commonplace, with some extreme forecasts of a gloomy Armageddon of a world run by robots (Kreps and Zenko 2014). These predictions of widespread adoption of UAVs for all military and law enforcement tasks portend a dynamic shift in the very character of war. Yet, these predictions tend to be oversimplistic, ignoring the major obstacles to widespread adoption. This article uses innovation theory to critically analyze the likely future of UAVs using a framework of expected benefits and costs of adoption across core air force missions: air superiority; intelligence, surveillance, and reconnaissance (ISR); rapid global mobility; global strike; and command and control (C2) (Rogers 2003, 233). While UAVs will certainly take on an expanded role in warfare, predictions of universal military adoption of UAVs are overzealous because they fail to incorporate the total costs associated with adoption of new technology for a large organization.

In February 2014, a conference at The Pentagon brought together academics, defense contractors, and military practitioners to discuss the future of small UAVs. Many of the attendees had an untempered enthusiasm for the future of UAVs. On the commercial side, their thoughts paralleled Lev Grossman's predictions for UAVs: "Police departments will use them to study crime scenes. Farmers will use them to

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[*] The views expressed in this article are those of the author and do not reflect the official policy or position of the United States Air Force, the Department of Defense, or the U.S. Government.

watch their fields. Builders will use them to survey construction sites. Hollywood will use them to make movies" (Grossman 2013). These commercial predictions largely focus on technological early adopters who will use UAVs simply because they exist and are economically feasible. Economic feasibility was largely driven by forecasts, like Grossman's, that 50 dollars and a smartphone will buy you a complete UAV system. However, the economic feasibility argument relies on the presumptive logic that because a technology is (or will be) developed and could fulfill a function, it will be an effective and efficient tool for that function.

On the military side, economic feasibility propelled debates on the potential for widespread adoption of UAVs. Interestingly, there was a divergence between policy-centric forecasters and the mainstream scholarly discourse. Policy forecasters focused on the adoption of UAVs for additional tasks while the academic community analyzed the proliferation across countries. For example, defense forecasters argue that miniature UAVs will be used to "swarm" the enemy in order to defeat complex networks such as an adversary's air defense system (Scharre 2014). United States Air Force (USAF) policy projects that UAVs will eventually conduct every core airpower mission including command and control, airlift, air refueling, aeromedical evacuation, search and rescue, air and missile defense, and electronic warfare (USAF 2014, 49). There is little scholarly debate on whether or not these missions are appropriate for a UAV. Instead, the current scholarly debates about the future of UAVs are fixated on the potential proliferation of armed UAVs to additional countries.[1] To an extent, this fixation is driven by ethical and legal concerns that are largely not applicable to unarmed UAVs .

This study begins by applying military innovation theories to the development of UAVs. After a brief review of current UAV capabilities and limitations, the core of the study is an analysis of the potential use of UAVs for future missions including air to air; intelligence, surveillance, and reconnaissance (ISR); mobility; strike; and command and control (C2). While the analysis for potential future use is valid for all UAV programs across the globe, it is most applicable to the USAF since it has the most developed and best funded program and will, therefore, most likely be the first to test future concepts.

Innovation Theory and UAVs

Military innovation theory provides a framework to empirically analyze the potential adoption of UAVs for additional missions or by additional military forces. The framework starts with the identification of key factors that enable or constrain the adoption of military technologies (Schwartz 1996, 101-102). Despite the advantages of military innovations, they are not automatically adopted by other organizations or militaries. Organizational adoption is constrained partly by finances

[1] See, for example, Franke (2015); Joshi and Stein (2013); Horowitz and Fuhrmann (2014) and Kreps and Zenko (2014).

and partly by organizational culture (Horowitz 2010, 3-5). Organizations must adapt their doctrine and get leadership buy-in. Military leadership has a significant impact on technology adaptation because leaders influence promotions and can protect junior officer innovators (Rosen 1991, 21). General McMaster criticizes that many military leaders are overly fixated upon UAVs and the "widely accepted yet fundamentally flawed conception of future war: the belief that surveillance, communications and information technologies would deliver 'dominant battlespace knowledge'" (McMaster 2008, 21). Some leaders may be influenced by the desire for prestige and maintaining the appearance of being on the leading edge of technology (Horowitz and Fuhrmann 2014). Of course, military innovation is not only controlled by military leadership. Civilian overseers can also impose adaptation to overcome the conservative influences of military tradition (Posen 1984, 224-226). It was only after the success of the Central Intelligence Agency's armed UAVs that the Air Force decided to adopt the innovation (Ehrhard 2010). Arguably, the innovation leader is more likely to be effective if they can effectively articulate the strategic necessity of technology (Goldman and Ross 2003, 374). UAV advantages such as long loiter time and low political risk make them ideal to counter terrorism and for sensitive missions such as patrolling disputed territory. The reduced political risk enables countries to consider military options that were not feasible with other weapons systems (Byman 2013).

Financially, military innovations are often far more complex than they may at first appear. Cost models that focus exclusively on the cost of the unit and the control device are inadequate. While this may be a suitable cost model for the hobbyist, it is not sufficient for military operations since it does not account for related overhead and operating costs. For large organizations, adoption of a new technology has cost implications, both monetary and man-hours, across the spectrum of DOTMLPF (Doctrine, Organization, Training, Materials, Leadership, Personnel, and Facilities). Technology adaptation typically drives requirements for new organizational policies, safety procedures, training for pilots and maintainers, logistics (fuel and spare parts), maintenance, scheduling, supervision, and facilities (for storage). If the UAV is replacing a helicopter or other type of manned aircraft, then the change in overhead costs is minimized. But, if the UAV is replacing a function currently performed by personnel on the ground, the overhead costs could become a serious obstacle to technological adoption. For ground operations that might be more effective from the air (for instance, due to the field of view, point of view, or speed), resource limitation is often the inhibiting factor in the use of manned aircraft.

In the zero-sum budget world of the Department of Defense, adoption of new technology involves additional risk because the cost must be offset by another program. Unlike the corporate world, the military cannot offset the additional costs of technology adoption by using the new tool to create a new revenue stream. Therefore, increasing costs are scrutinized because the zero-growth budget requires the identification of cost offsets, a difficult and often politically charged process. To put the potential benefits and costs of future UAVs into context, this article will first review the existing benefits and costs of UAVs relative to manned aircraft.

Contemporary UAVs

Early UAVs had limited benefits. Regular combat use for UAVs, primarily for ISR, began in the 1960s. Initial datalinks, inadequate precision navigation, line-of-sight range limitations, and susceptibility to electronic warfare jamming limited the usefulness of early UAVs (Ehrhard 2010). The primary benefit of early UAVs was reduced risk to personnel in a high-threat air defense environment. In an ironic foreshadowing of the future, the U.S. Air Force largely abandoned its UAV programs after the Vietnam War since they were not suitable for conventional warfare in Central Europe against the Soviet Union (Ehrhard 2010, 45). It was assessed that the mobile surface-to-air missiles of the Soviet would make short work of UAVs over the Fulda Gap. Modern-day UAVs began in the mid-1990s with the MQ-1 Predator.

The contemporary UAV performs a variety of combat missions that tend to fall into one of the two categories: support to ground forces or participation in the joint targeting process. UAV support to ground forces includes close air support (CAS) for troops in contact, route reconnaissance, security overwatch, communications relay, and support for counter-battery fire. For targeting, UAVs are especially useful for target development, target clearance (to minimize collateral damage), and battle damage assessment (BDA). However, none of these missions are unique to UAVs. Each can be accomplished by manned aircraft. In fact, even the UAVs dual role as ISR and attack platform is also available in a manned aircraft version. Yet, the demand from the combatant commanders for UAVs far outstrips supply.

Current UAVs have a variety of competitive advantages that make them more desirable for certain missions or operations than their manned aircraft counterparts. UAVs have a smaller logistics footprint. UAVs can operate out of austere locations or navy destroyers. Smaller, less capable UAVs can be carried in a backpack. Compared with most other ISR platforms, UAVs are less observable, and have superior on-station time. Compared with strike aircraft, UAVs provide superior target discrimination, less potential for collateral damage, and reduced risk to the aircrew. This makes UAVs ideal for unconventional missions such as counter-terrorism, counter-insurgency, or other missions with a negligible air threat.

Of course, current versions of UAVs have a variety of disadvantages. They tend to have lower thresholds for adverse weather, a smaller field of view, and lack defensive countermeasures. These weaknesses make UAVs a suboptimal platform for high-risk missions, broad area surveillance, or operations in anything other than a low-threat environment. Ironically, current UAVs are not significantly cheaper than their manned counterparts. The MQ-9 and the U-28 have similar purchase, maintenance, and operating costs. UAV cost advantages are primarily limited to small, short-range, unarmed UAVs such as the Ravens, which have no equivalent manned counterpart. Over time, the increasing costs and production times to create survivable manned aircraft will increase the comparative cost advantage of UAVs.

From an incremental innovation standpoint, the most likely near-term advances in UAVs will begin by decreasing the existing disadvantages and increasing

the advantages. Considering that the U.S. Air Force is the primary provider of UAVs to the joint commander, this study will approach the costs and benefits of UAV innovation through an Air Force core missions framework: air superiority; intelligence, surveillance, and reconnaissance (ISR); rapid global mobility; global strike; and command and control (C2).

Air-to-Air Combat UAVs

Today's UAV plays essentially no role in air superiority. From an aircraft design perspective, UAVs have the potential to be far superior air-to-air fighters than a manned aircraft. Optimization of manned fighter maneuverability is limited by the weight needed to support a human: life support systems, an ejection seat, the control interface, and backup systems. Moreover, high maneuverability fighters have a limiter on maximum G-forces to prevent the pilot from blacking out. The design of the UAV is not constrained by these limitations. However, to conduct air-to-air missions, new UAV designs would need to make significant upgrades in radar, weapons, and defensive countermeasures. If the UAV could be made inexpensively and en masse, perhaps the defensive countermeasures could be overlooked. To dogfight in a visual engagement, major improvements in pilot field-of-view would be necessary. The most significant challenge for a design with these additional capabilities would be meeting the challenge for additional bandwidth.

While the bandwidth challenge could be overcome with fully autonomous UAVs, near-term adoption of fully autonomous UAVs for lethal combat missions is unlikely in the near term due to concerns over ethics, the quality of target discrimination, and Air Force cultural resistance. Air-to-air target discrimination is technically feasible (Byrnes 2014, 48-75). It is far less complex than air-to-ground target discrimination. Even so, to negate ethical and target discrimination concerns, the actual decision to destroy a target could be reserved for a command center such as the Combined Air Operations Center (CAOC) or Airborne Warning and Control System (AWACS). The autonomous UAV would simply be responsible for executing the attack mission given to it by the command center. From a target discrimination perspective, this is not significantly different from a fighter firing a long-range missile beyond visual range after AWACS declares a target hostile and authorizes engagement.

The proliferation of mass numbers of UAVs necessitates adoption of increasingly semiautonomous UAVs for noncomplex flight operations. Defense companies are working on UAVs with multi-day loiter times. These exponential increases in loiter times will require an increasing reliance on semiautonomous navigation. However, automating the mission and the sensor operator will be a far more difficult challenge. Semiautonomous flight operations will enable a single pilot to control multiple aircraft. UAVs spend a considerable amount of time transiting to/from and orbiting over the target. These simple maneuvers can easily be executed by current autopilot technology. Of course, such an implementation would limit the flexibility and responsiveness of the UAVs.

Advanced ISR UAVs

Along with additional loiter times, new UAVs will carry multiple sensors increasing the load for sensor operators. One DARPA project claims to use more than 300 mini-sensors to create 65 video feeds. While this is an incredible increase in capability, these developments will entail significant costs in manpower and bandwidth. Adoption of this technology will naturally lead to additional emphasis on automated sensor operations. A semiautomated UAV could certainly conduct a significant portion of preplanned and ad-hoc ISR collection including still imagery photographs, communications intelligence, electronic intelligence, and some specialized measuring and signals intelligence. Programming a UAV to track mobile targets using full motion video would certainly be more complex, but is in the realm of the possible.

Arguably, the proliferation of small, inexpensive UAVs could lead to the adoption of UAVs to do other functions such as tactical weather forecasting, base security, and nuclear, biological, and chemical detection. While expanding situational awareness for these tasks, this expansion creates additional DOTMLPF development in order to avoid overloading the existing UAV system. On the technology side, improved communications will be necessary to handle the additional bandwidth requirements. On the personnel side, semiautomated intelligence processing, data storage, and video search capabilities will be necessary for the intelligence community, which is already overwhelmed with data from existing sources. The military R&D community continues to explore methods to automate the intelligence fusion process. While automated systems helped with data integration and visualization, the heavy lifting of intelligence fusion is still dependent on the gray matter. Meanwhile, this proliferation of many UAVs presents an opportunity to create extended networks. UAVs could act as sensor and relay nodes for air-to-air surveillance, air-to-ground surveillance, electronic surveillance, and communications.

Mobility, Strike, and Command: A Mixed Bag for Future UAV Missions

To make an adoption of a massive fleet of small UAVs feasible, new UAVs will need to be logistics conscious. The concept of a single pilot flying multiple UAVs is one method to reduce the logistical burden. More importantly, the UAVs will need to reduce their footprint downrange. Perhaps this will involve maintenance robots using a three-dimensional printer for spare parts. On the other hand, UAVs may be part of the logistics solution. Using UAVs to haul cargo is a relatively simple venture as long as the aircraft can be made reliable enough to minimize risk of losing the cargo. A proven safety record would also likely lead to adoption for UAVs for air-to-air refueling. Fully autonomous mobility aircraft are intriguing because they represent tremendous manpower savings. Besides, UAV transports would be especially useful for high-risk cargo delivery missions such as airdrops near enemy forces and firefighting. In Afghanistan, the Marine Corps used

an experimental UAV helicopter to transport goods in areas that involved high risk for helicopter take off and landings. Using a UAV to transport personnel is possible, but less likely. A wide-body UAV used for transport negates many of the traditional advantages of UAVs. The wide body will not have the reduced logistics footprint or low observable capability. If there are personnel in the back, then reduced risk to aircrew becomes an irrelevant advantage. The safety record would need to be formidable before safety concerns became secondary to the incremental manpower savings.

On the opposite extreme, the fully automated air-to-ground strike UAV is a far less likely innovation. Of course, many countries already have fully automated weapons to use against fixed targets or ships; we call them cruise missiles and ballistic missiles. But, these weapons are not good at target discrimination. These weapons certainly have their uses. In cases where the potential for collateral damage is extremely low (e.g., a remote building or a ship on the open ocean) or cases in which collateral damage is a tertiary concern, weapons with limited target discrimination capabilities will continue to be employed. To expand the potential target set of autonomous UAVs, significant effort will need to be made to enable target discrimination logic that is typically derived from subjective judgments.

For most UAV strike targets, the current process in the Air Operations Center involves a detailed cross-check between the Battlefield Control Detachment (to deconflict with friendly ground forces), the Special Operations Liaison Element (to deconflict with Special Operations Forces), lawyer (to ensure the target meets Law of Armed Conflict requirements), targeteer (to estimate anticipated collateral damage, and match preferred weapons to target type and desired effects), airspace deconfliction (to clear path from aircraft to target), and the offensive duty officer (to assign the target to an aircraft). Much of this coordination involves subjective judgments that will be difficult to automate. Alternatively, it may be possible to partially automate the process, flagging issues that require subjective interpretation by a human operator.

In the interim, a more likely innovation would be an *Ender's Game* style virtual control center. In Orson Scott Card's book and movie, the main character, Ender, controls a fleet of spaceships from his 360-degree virtual command center. While not unmanned, the spaceships followed Ender's commands to the letter. Technology is certainly within reach today to enable a single person to control a fleet of UAVs. In this case, the UAV follows pre-programmed logic for specific tasks but still involves a human-in-the-loop to provide subjective decision making such as strike decisions. This type of innovation would be a useful method to take advantage of the decreasing cost of UAVs. Lots of UAVs controlled from a minimal number of command centers would "bring mass back to the fight" in an era of dramatically rising aircraft per unit costs (Scharre 2014, 6).

Improving UAV Survivability

For many of the UAV missions discussed above, a major factor in potential adoption will be overcoming the aircraft survivability challenge. While the development of defensive countermeasures such as a jamming pod and a flare dispenser are plausible, the addition of the extra weight and expense runs counter to the inherent cost savings of using UAVs. Therefore, current efforts focus on one of the three methods: stealth, mass, and miniaturization. Stealth is certainly proven technology. But, the high cost of stealth will limit this option for widespread adoption. While the technology is already proven, reliance on high-priced UAVs will leave the fleet lacking in sufficient quantity to meet operational demands. There just will not be enough to go around.

A swarm is one method to improve UAV access in an advanced air defense environment. If UAVs were cheap enough, it would enable the creation of mini-UAV "swarms." Advanced software algorithms already exist which will enable groups of UAVs to fly cooperatively. Swarm theory is reminiscent of classic airpower theorist Gulio Douhet's argument that aerial defense is inefficient due to the dispersion of resources to cover the variety of potential routes and targets (Douhet 1983, 15-19). A swarm "complicates an adversary's targeting problem and allows graceful degradation of combat power as assets are attrited" (Scharre 2014, 6). The development of a swarm provides lots of possibilities for offensive use. An inexpensive UAV kamikaze would be useful for nearly any type of lethal mission. Swarms would also present a complex challenge for adversary air defenses simply due to overwhelming numbers or act as cheap decoys designed to absorb surface-to-air missiles (Ehrhard 2010, 25). Moreover, the high-quantity, low-cost swarm makes some attrition acceptable.

Instead of expensive methods to make large aircraft stealthy, platforms can attain reduced observability through miniaturization. The invention of nano UAVs opened a new path for low observability without expensive radar-evading technology. To get the full functionality of nano UAVs, they need to be capable of beyond-line-of-sight (BLOS) operations and operate inside buildings. Unfortunately, this tends to require increased power for range and communications that grow the UAV beyond the nano size. An alternative to BLOS is dropping the nano UAVs from a mother ship such as a C-17. Unfortunately, without a stealth mother ship the concept is limited to operations where the adversary has limited air defense capabilities.

Advances in nanotechnology also birthed the feasibility of bio-drones. When a University of Colorado Boulder professor brought the concept up at a recent conference, the inherent advantages were not obvious. Considering that animal rights groups convinced the U.S. Army to stop using pigs to teach combat trauma first aid, it seemed unlikely that the military would turn animals into UAVs. Since the technology requires some type of brain control, the cruelty involved seems unlikely to meet the military necessity threshold.

But, there is some room for innovation here. A dolphin is more agile and faster than any remote control submarine. The Navy uses dolphins to help detect

underwater booby traps and mines. Putting a GoPro-like camera on one of these dolphins is a simple solution. However, this lesson does not seem to transfer to the ground or air domain. There seems to be no advantage to putting a small camera on a trained pigeon. Regardless, implementing some type of brain control of a dolphin or bird seems to cross some sort of ethical red line.

Interestingly, humans seem to have less empathy for insects. A company called Backyard Brain developed RoboRoach which uses neuroscience to attempt to control the movements of a live roach. Insect drones could be the ultimate clandestine ISR, becoming the proverbial "fly on the wall" to watch and listen to the adversary. But, the fact that an insect can be controlled by remote control does not necessarily make it a good candidate for a UAV. The major technological challenge will be solving the power problem for the mini camera and the two-way communication packages that will enable the roach to go BLOS. Moreover, the insect will still need to eat and rest.

To mitigate the challenges of biological functions, technology is already starting to create man-made insect UAVs. The Harvard Monolithic Bee and Robugtix's Spider are but two early examples that suggest that the development of a realistic looking robot insect can be used as a UAV. Besides, a robot insect may be able to overcome the power limitation. Ideally, a robot insect can harvest energy from the environment such as solar or wind. For high-power needs, the robot can plug into power lines or electrical outlets.

One drawback of any nano UAV will be its survivability in an electronic warfare (EW) environment. Two key factors in EW are power and distance. The nano UAV will have problems with both. It is designed to be extremely close to the adversary and far from the friendly communications node. Its small size will inherently limit its total power to transmit clearly through enemy jamming. Even with advancements in technology, the nano UAV is likely to be at a comparative disadvantage relative to the adversary's EW system. This suggests that nano UAV will be most appropriate for environments in which there is a low threat of electronic attack. This suggests that stealth or swarms are the more likely answers for access against an advanced air defense system.

As UAVs continue to proliferate, there will be increased demand to reduce the command and control burden of UAVs. A major effort underway in this arena is detect and avoid technology in order to help reduce the probability of a midair collision. While this technology will improve safety at congested military bases, it will also be a boon to help the job of the Federal Aviation Administration to define rules to enable UAVs and manned aircraft to share the same airspace. One of the likely side effects of the military's research efforts on UAV detect and avoid technology will be increased domestic use of UAVs by law enforcement entities such as the Federal Bureau of Investigation, Border Patrol, Secret Service, Coast Guard and local law enforcement.

Conclusion

The evolution of UAVs will be exciting to watch. Advances in technology present a multitude of options for innovation of UAVs for military operations. Yet, just because a UAV can do a function does not mean that it will be adopted for that function. Many of the advances in UAV technology require additional advances in power, communications, electronic protection, and/or miniaturization to make them fully functional in an operational environment. This is a dramatic increase in expense that most militaries are unlikely to take until costs are significantly reduced. Those countries that do invest in state-of-the-art UAVs will have difficulties producing them in quantities desired by the warfighter.

Increases in automation are likely to enable the proliferation of more vehicles without requiring additional manpower. Fully automated UAVs, though, are likely to be limited to combat support roles, not the employment of lethal force. Even with advancements in radar, target discrimination, weapons, and defensive countermeasure, the decision to employ lethal force is not likely to be delegated to the automated platform. While an automated UAV may employ lethal force, it will be at the direction of a manned command and control platform.

Advancements in UAVs to survive in advanced air defense and electronic warfare environments face significant challenges. New UAV technologies such as nanotechnology and neuroscience will thrive in the irregular warfare environment, but are a long way from use in a conventional war. Reduced observability and a small forward footprint will enable more and more countries to engage in low priority, low visibility missions that they would normally assign to another instrument of national power such as diplomacy or economic manipulation. Efforts to make UAVs survivable in a high air defense threat environment via the creation of UAV swarms or large fleets of stealth UAVs increase the cost exponentially. There are perhaps a half dozen countries in the world that could afford such a venture. However, it would require serious tradeoffs in other military equipment, which is not likely in the near future.

The corresponding overhead costs in training for pilots, sensor operators and maintainers, fuel and spare parts, maintenance, and communications are not cheaper than manned alternatives. Advances in ISR will increase manpower costs as each additional sensor will require additional processing and exploitation capacity. Alternatively, the future is likely to see a proliferation of low-cost, non-survivable, small UAVs. These small UAVs have a much small cost footprint since there is no communications cost. Perhaps most important is the low manpower cost: a single individual acts as pilot, sensor operator, maintainer, launch and recovery, and as transporter. The use of these small UAVs will continue to expand into nontraditional ISR missions, irregular warfare, and disputed territory monitoring.

The large UAV's advantages in loiter time and target discrimination give it tremendous advantages over manned aircraft for some mission sets. Fully autonomous air-to-air and air-to-ground combat UAVs are unlikely. More likely is

a semiautonomous system in which a man-in-the-loop system provides the decision making for multiple armed UAVs. But, for the most part, the UAV will continue to be a niche player. While that niche will expand over time, the manpower and infrastructure costs associated with UAVs will prevent it from becoming the universal replacement to all manned military aircraft missions. Over the long term, many of these costs could become negligible: inexpensive bandwidth and stealth materials and designs; significant improvements in semiautomation software to exponentially increase the productivity of pilots and intelligence analysts; and major improvements in power and electronic protection for small UAVs. In the meantime, militaries will continue to integrate their UAVs to work interactively with their manned aircraft.

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Business As Usual: The Egyptian–U.S. Intelligence Relationship

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The aim of this article is to address the question of the future of Egyptian–US intelligence relations through an examination of history and an analysis of the present time. We empirically show that Egypt, while under the leadership of al-Sisi, will return to a 'Mubarak-era intelligence-sharing relationship' with the United States. We argue that the events leading up to today, with a short break under the leadership of Morsi, have proven that Egypt and the United States share similar interest in regards to intelligence. Finally, this article discusses the challenges and opportunities regarding the future relationship between Egypt and the US intelligence agencies in context with the newly elected Egyptian President, Abdul Fattah al-Sisi. Despite the changes and challenges, it is our conclusion that Egypt and the United States will return back to their intelligence-sharing relationship, in a "business as usual" manner.

***Keywords**: Abdul Fattah al-Sisi, Extraordinary Rendition, Intelligence Sharing, Foreign Intelligence Agencies, Egyptian Intelligence*

Before 2011, it would have been unimaginable to think that Egypt would "oust" its President, Muhammad Hosni Mubarak, and "democratically" elect two new leaders. These recent events, commonly associated with the Arab Spring, have not only affected Egypt's domestic stability, but have also altered its international relationships, specifically with the United States. On the basis of these events and newly elected leaders, there were initial concerns that the relationship between Egypt and the United States, particularly in the area of intelligence, would be negatively affected.

Egypt has been a key political partner with the United States since 1922, and defense cooperation between the two countries has included intelligence sharing since 1942 ("US Relations with Egypt" 2014; Sirrs 2010). This relationship has been particularly due to Egypt being known for its legacy in intelligence and serving as mentor to most developing Arab intelligence establishments (Sirrs 2010, 1; Murphy 1991).

Intelligence is the key to every country's national security and its policymakers. In its broadest meaning, it refers to any kind of information that meets the stated or understood needs of policymakers and has been collected, processed, and narrowed

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to meet those needs" (Lowenthal 2008, 2). For purposes such as avoiding strategic surprise and providing long-term expertise on critical issues, countries consider their intelligence agencies among the most important assets within their governments.

However, Arab countries view intelligence a little differently than the United States, and rely heavily on their intelligence and security establishment mainly for "coup-proofing," regime security, and preserving the status quo. Their main goal, even more important than preventing or conducting foreign espionage, is to avoid coups and keep their current rulers in power (Sirrs 2010, 1).

Ironically, and "given the centrality of the security apparatus to the Arab regime stability," it is "surprising that so little has been written about the *Mukhabarat* [intelligence agency] in any Arab state. Much more has been written about the intelligence agencies of the United States, United Kingdom, Russia, France, Israel, China, and Germany than the individual Arab services" (Ignatius 2013). This gap in knowledge hinders our ability to understand the impact of events such as the Arab Spring, as well as provide policy recommendations regarding U.S. interests in the region.

As new leadership takes hold in Egypt, there are still many questions we need to ask, such as: "Will the Egyptian intelligence community continue to partner with the United States?" and "Will the relationship with the United States be the same as before, or experience a dramatic change now that Abdel Fattah el-Sisi has been elected president?"

The aim of this article is to address these questions through the examination of the Egyptian-U.S. intelligence relationship throughout history. We empirically show that Egypt, while under the leadership of el-Sisi, will return to a "Mubarak-era intelligence-sharing relationship" with the United States. We argue that the events leading up to today, with a short break under the leadership of Morsi, have proven that Egypt and the United States share similar interest in regard to intelligence. Therefore the intelligence relationship will continue as it did before under Mubarak, and be "business as usual."

We support this argument through the literature that has discussed similar situations in the past, particularly in regard to intelligence sharing, alliance building, and restructuring based on regime change (Olson 1971; Walsh 2007; Morrow 1991; Siverson and Starr 1994). The theories we have uncovered to support our argument explain that countries share intelligence because of similar interests, and both Egypt and the United States may benefit by creating an intelligence-sharing relationship based on those similar interests (Olson 1971; Walsh 2007).

Next, the intelligence they share will only be on "specific topics and sources where the participant states' interests are most closely aligned" (Walsh 2007). This means that not all intelligence-sharing relationships will share every aspect of their national security, but rather those areas where their interests most closely align. This is based on the benefit each gains from the particular subject, as well as the fear that one of the members could defect from the intelligence relationship based on a change in government or policy (Walsh 2007). The fear of defection or change in the intelligence-sharing relationship is naturally a large concern for countries because

they share sensitive assets, capabilities, and resources (Walsh 2007).

Finally, we specifically highlight the impact of regime change on an intelligence-sharing relationship, finding support that regime change does in fact alter this relationship (Morrow 1991). It is argued that if one of the participants in the relationship experiences a significant regime change in which policies or interests change, a shift or defection in the intelligence-sharing agreement can be expected (Morrow 1991). Likewise, we can expect the reverse to be true when there is an additional change in leadership that returns like-minded leaders and original policies to their historical status. In this case, the relationship can return back to the previous relationship.

We took these theories and applied them to the case of the Egyptian and U.S. intelligence-sharing relationship, finding empirical evidence supporting our claim that this relationship does, in fact, contain similar interests—historically (under Mubarak) and currently (under el-Sisi). On the basis of our historical case study, we demonstrate that Egypt and the United States had under Mubarak, and still have under el-Sisi, similar interests in the category of security that warrant an intelligence-sharing relationship. These security interests can be broken down into two subcategories: (1) stability in the region and (2) countering terrorism (also known as Islamic fundamentalism) (Olson 1971; Walsh 2007). We demonstrate that these similar interests brought the two countries closer together and served as the foundation of the intelligence relationship. These interests are also what brought the relationship back together under el-Sisi (Walsh 2007).

To support these claims, we present the historical intelligence relationship of Egypt and the United States, specifically identifying the security factors we note above and showing how they contribute to intelligence cooperation. To perform this task, the article is organized into two sections: (1) evolution of intelligence relationship and (2) present and future challenges. The first section provides the background necessary to understand the political and historical context of the Egyptian–U.S. intelligence relationship, and how this relationship has shown to strengthen throughout the years based on interests. We focus on the key historical events that show those mutual interests and benefits between Egypt and the United States. The events that specifically highlight those mutual interests and benefits include President Anwar Sadat's assassination, which resulted in Mubarak taking over the presidency, the Egyptian–Israeli peace agreements, the Afghan War, the First Gulf War, the terrorist attacks on 9/11, and the Second Gulf War.

The second section of this article focuses on the present state of the intelligence agency, which was significantly impacted during the Arab Spring and the overthrow of Mubarak. This demonstrates that if regime change impacts previously agreed to benefits and interests, a shift or defection in the intelligence sharing can be expected (Walsh 2007). Additionally, we examine the future status and challenges between the United States and Egypt now that el-Sisi has been elected president. Finally, we discuss why we perceive that the intelligence relationship has returned to its historical status and that el-Sisi will continue to share intelligence with the United States in a "business as usual" manner.

Evolution of Intelligence Relationship

The Egyptian intelligence service is the oldest-running Arab intelligence agency, and started even before the British colonization in 1882. When Britain officially occupied Egypt, it found a weak intelligence system in desperate need of reform (Sharp 2014). The inherited intelligence system was basically a secret police that investigated antiregime conspiracies and monitored foreigners. Its sources were limited, and it consisted of a number of plainclothes policemen, informant networks, and anonymous boxes where citizens could place petitions for the release of prisoners, denounce neighbors, and report on antigovernment plots (Sirrs 2010). At the end of the nineteenth century, Egyptian intelligence lacked sufficient resources and centralized management to handle the emerging internal threats to the government (Sirrs 2010, 7).

After the assassination of Prime Minister Boutros Ghali in 1910, Britain realized that the Egyptian secret police was in need of radical change. Subsequently, the British amalgamated the secret police networks into one Central Special Office. Following this consolidation, the British continued to work with the Egyptians over the next few years to implement improvements and structural modifications (Sirrs 2010, 8). It wasn't until 1942 that the Egyptian–U.S. intelligence relations started. In 1942, the U.S. Office for Strategic Services (OSS) established an office in Cairo with responsibility for intelligence collection, counterintelligence, and analysis (Sirrs 2010, 23).

In October 1981, Vice President Muhammad Hosni Mubarak came to power after the assassination of President Anwar Sadat. President Mubarak, Egypt's fourth president and its longest-serving ruler after Muhammad Ali Pasha, was Egypt's president and chief military commander for almost 30 years from 1981 until 2011. Following the war, Sadat groomed Mubarak as his successor by giving him assignment in his ruling party and eventually making him the vice president. During his time as vice president in the 1970s, Mubarak was charged with coordinating Egypt's intelligence community, which gave him tremendous experience in intelligence that was useful to him during the successes in his presidency.

Throughout his reign, Mubarak helped develop the Egyptian intelligence community, which was built around three agencies with unique missions and responsibilities: the Egyptian General Intelligence Service, State Security Investigations Service, and Egyptian Homeland Security. **The Egyptian General Intelligence Service** (EGIS) was created in March 1954 by a Republican decree from President Gamal Abdel Nasser and is still active. This intelligence agency is considered the most important intelligence service due to its foreign liaison ties, size, technical sophistication, and history (Sirrs 2010, 43). It also distinguishes itself as a covert action player and a collector of foreign intelligence, with historically known responsibilities for developing and executing important foreign policies toward multiple key issues such as the relationship with Sudan and the Israeli–Palestinian conflict (Sirrs 2010, 44).

Competing with the EGIS is another of Nasser's creations, the **State Security Investigations Servic**e (SSIS), which is directly tied to the Ministry of Interior. SSIS enjoys the distinction of being the oldest intelligence service in Egypt (Caroz 1978). Roughly equivalent to the United States' Federal Bureau of Investigation (FBI), the

SSIS is largely focused on domestic issues where it has the responsibility for internal security, counterterrorism, and counterintelligence. Under Egypt's emergency law, the SSIS has wide-ranging powers of surveillance and detention. It is often linked to torture allegations by human rights organizations. However, on March 15, 2011, due to its failure in countering the Arab Spring revolution, the SSIS was replaced by a new organization under the new name of **Egyptian Homeland Security** (EHS) and it is still tied to the Ministry of Interior ("Egypt Dissolves Notorious Internal Security Agency" 2011). After the military coup of 2013 and the overthrow of the newly elected Muslim Brotherhood government, nearly one hundred of the sacked senior officers of SSIS during Muhammad Morsi's time in power, returned to work under EHS (El Deeb 2014).

Finally, and currently rising in influence and power after the military coup of 2013, is the Military Intelligence Department (MID). Before the Arab Spring, and with no significant military threats in sight, the MID used to be largely overshadowed by EGIS and SSIS as they battled religious extremism at home and abroad. However, following the latest military coup and the failure of EGIS and SSIS to preserve the status quo of Mubarak's regime, the MID seems to be taking over the intelligence community. It is also the organization fundamentally responsible for monitoring the loyalty of the armed forces. The current president of Egypt and the former head of the Supreme Council of the Armed Forces, Abdel Fattah el-Sisi, formerly served as the director of MID between 2010 and 2012 when he allegedly orchestrated a coup against the newly elected President Muhammad Morsi ("Mukhbarat el-Khabeya" 2011).

Since Sadat's assassination, these three agencies have constituted the core of Egypt's intelligence community. In fact, one of Mubarak's priorities after becoming president was to have the secret police investigate the loyalty of the armed forces, and focus Egypt's intelligence on the murder of Sadat. Initially, Mubarak's leadership feared a larger military conspiracy and immediately imposed a state of emergency. Mubarak was doubtful of MID's reliability, and allowed the Ministry of Interior, the Republican Guards, and the SSIS to play an important role in the days after the assassination to ensure presidential security.

When Sadat was assassinated, the United States' Central Intelligence Agency (CIA) was surprised, as well as concerned. Specifically, it was concerned that Mubarak would cut ties and blame it for not properly training Sadat's bodyguards (Woodward 1987, 168). The CIA immediately sent a team to Cairo to assist in the investigation, ensure the confidence of the new president, maintain the good relationship with the Egyptian intelligence, and ensure the flow of weapons to the Afghan Mujahideen. Additionally, the CIA reaffirmed its commitment to help Mubarak's Egypt neutralize threats from Libya, Syria, Iran, and Palestine (Sirrs 2010, 152).

It was during this time that mutual interests between Egypt and the United States come to the forefront to cultivate an intelligence-sharing relationship. Prior to Mubarak's reign, there was little information to show why there was an Egyptian–U.S. intelligence-sharing relationship. When Mubarak took over rule after Sadat's assassination, there was an increase on the U.S. side to provide capabilities and expertise to help specifically with stability in the region and to counter-terrorism.

Those capabilities included the United States providing Egypt with unmanned aerial vehicles (UAV), and both the jet-powered Teledyne Ryan Aeronautical Model 324 Scarab and Developmental Sciences Corporation's R4E-50 Skyeye UAV systems which it used on the Libyan and Sudanese borders to monitor and counter any military movements or weapon smugglings (Nordeen and Nicolle 1996, 330). Egypt also acquired two EC-130 electronic intelligence/countermeasures aircraft (ELINT/ECM) and four Beech Guardrail ELINT platforms, which significantly advanced Egypt's airborne electronic intelligence capabilities (Nordeen and Nicolle 1996, 330). Egypt's intelligence also acquired other surveillance technologies during the 1980s such as video cameras and enhanced telephone-tapping capabilities.

A number of significant international events specifically concerned with security interests also occurred during this developing relationship under the rule of Mubarak that helped shape the relationship between Egypt and the United States: four wars followed by a peace treaty with Israel (1948, 1956, 1967, 1973, and 1979), two wars in Afghanistan (1980s and 2001), the 9/11 attacks, two Gulf Wars (1990 and 2003), and the Arab Spring. The following section of this article will focus on the two countries' support to each other.

Israeli Peace Treaty

Starting with Israel, it is important to discuss the Egyptian–Israeli interaction because it is strongly linked to the Egypt–U.S. intelligence relationship. After years of wars, from 1948 until the 1970s, and months of negotiations, Egypt and Israel signed the 1979 peace treaty. This followed the 1978 Camp David Accords, which was negotiated by the United States. The treaty, which made Egypt the first Arab state to recognize Israel, included mutual recognition, cessation of the state of war, normalization of relations, and the complete withdrawal by Israel from the Sinai Peninsula. The agreement also provided for the free passage of Israeli ships through the Suez Canal and the Egyptian demilitarization of Sinai (Sharp 2014).

It was in 1979, through the help of the treaty, where Egypt under Sadat but later reinforced by Mubarak, Israel, and the United States began to align security interests. The two countries realized that working together through mutual support on security issues could assist in achieving their own internal interests, which was outlined in the treaty as "Economic and Trade Relations, Cultural Relations, Freedom of Movement, Cooperation for Development and Good Neighborly Relations, and Transportation and Telecommunications" (Peace Treaty between Israel and Egypt 1979).

As part of the agreement, the United States began to provide economic and military aid to Egypt, and political backing for its subsequent governments. Additionally, a significant amount of the military aid from the United States is spent on Egyptian intelligence services (Sharp 2014, 18).

"U.S. policy makers have routinely justified aid to Egypt as an investment in regional stability, built primarily on long-running cooperation with the Egyptian military and on sustaining the March 1979 Egyptian–Israeli peace treaty. Successive U.S. Administrations have publicly characterized Egypt's government as generally influencing

developments in the Middle East in line with U.S. interests" (Sharp 2014, 18).

The Israel–Egyptian relationship and treaty acted as leverage for the United States to provide military aid to Egypt and to ensure the alignment of interests . Essentially, the treaty was not simply an agreement between Israel–Egypt, but also with the United States, which included their interest within the region. However, after Mubarak's downfall and the takeover of Morsi, Egypt's interests dramatically changed. The treaty was not supported by Morsi, which we will present evidence and argue later, and changed the relationship between both Israel and Egypt, causing concern within the United States.

Afghanistan

The Afghan–Soviet War was another contributing factor that assisted in strengthening the intelligence-sharing relationship between Egypt and the United States, and it was a critical issue for their mutual interests. Unlike his predecessors, Mubarak was more cautious in dealing with the Mujahideen, but more flexible when dealing with the United States. The Afghan–Soviet conflict served two purposes for Mubarak: (1) cash from the United States and Saudi Arabia flowed into the Egyptian weapon industry and (2) the war was a convenient way to get rid of Islamic extremists who challenged their regime and was also a shared interest with the United States that led to more cooperation in intelligence between the two countries. However, the 1980s were a critical developmental phase in the history of Islamic jihadist movements when they gained valuable experience in Afghan guerilla warfare (Sirrs 2010, 154).

The Arab fighters eventually returned to Egypt as a militant opposition to the regime, or were welcomed by the neighboring country of Sudan that started to pose a serious threat to Mubarak's regime. Egypt's security apparatus was focused on fighting these internal threats during the late 1980s and the 1990s. By the mid-1990s, Mubarak's government started to take the upper hand because of SSIS' brutal interrogation tactics, torture, intimidation, and success in recruiting informants and arresting key militant leaders. This step was also in line with U.S. interests in the region (Sirrs 2010, 154).

The First Gulf War

When Iraq invaded Kuwait in August 1990, Egypt and its allies faced new challenges and threats that could have reshaped the region. Egyptian intelligence confronted those challenges by collecting and analyzing intelligence on Iraq's leadership, military, and opposition as well as monitoring pro-Iraq Palestinian activists. The U.S.–Egyptian liaison channels were extremely busy during the war, passing assessments and exchanging critical intelligence as Egypt officially joined the coalition of forces to liberate Kuwait ("Egypt's Involvement in the Gulf War 91"

Egyptian intelligence also contributed to the coalition by working closely with the Saudi intelligence agency. It also worked with the United States' National Security

Agency (NSA) to intercept intelligence communication from Iraq whereby security interests of both Egypt and the United States benefited (Sirrs 2010).

Due to its contributions during the war, Egypt's intelligence was recognized by the Arab world as the best and most useful intelligence agency in the region. Subsequently, Egypt's intelligence kept strong relationship with its partner Arab intelligence services. They continued to exchange analysis, information, and intelligence of mutual interest after the war. Egypt also helped other countries develop their intelligence services. For instance, it was reported that the Egyptian intelligence was training its Kuwaiti counterpart in interrogation and torture (Murphy 1991).

9/11 Attacks

Mubarak claims that the Egyptian intelligence services passed warnings on to the CIA and other U.S. intelligence services about al-Qaeda's intentions to attack the United States before 9/11 (Tyler and MacFarquhar 2002). President George W. Bush and the CIA claimed that they did not receive any detailed, specific warnings on the attacks (Sirrs 2010, 179).

Indeed, the 9/11 attacks were a warning of how Islamic militants were growing globally. But 9/11 also gave EGIS the opportunity to build on its intelligence relationship with the United States. The U.S.–Egyptian intelligence relationship was taken to a new level following the attacks. After the United States announced its War on Terror, Egyptian intelligence gained greater access to U.S. intelligence and analytical training, the CIA's extensive hub of international contacts, and surveillance technology. Subsequently, Egypt became one of more than 100 world intelligence agencies whose primary goal was to destroy al-Qaeda's network (Rudner 2004).

In 2002, the U.S. Chairman of the Joint Chiefs of Staff praised Egypt for sharing intelligence on the al-Qaeda terror network. As General Richard Myers said after a meeting with Hosni Mubarak, "We could not ask for more from the Egyptian government. They have supported us in essentially every way we've asked and we've also shared with them what we have in terms of intelligence" ("U.S. Pleased with Egyptian Intelligence-Sharing" 2002).

Second Gulf War

In Egypt, as in all Arab states, the period of the U.S. military campaign against Iraq saw government efforts to contain popular anger at the war in a climate already highly charged by events in Israel and Palestine. "Put in a highly uncomfortable position by its relationship with the United States, the regime responded by strengthening its antiwar message and, at times, joining the opposition's demonstrations." (International Crisis Group 2003, 4). Therefore, for the first time, Egypt was in a tough position on whether or not to support its long-term intelligence ally, the United States.

According to an interview with President Mubarak in 2003, he said that Iraqi forces fighting U.S. and British troops were "guarding Iraq's lands and defending its national honor and nobility in the conflict." He also said the war would cause a "great

tragedy (and) destroy a deep-rooted culture and people." In addition, he stated, "Egypt's position has been and still is clear in rejecting ... the military option and rejecting participation in military action of the coalition forces against brotherly Iraq" ("Mubarak warns of '100 bin Ladens'" 2003).

There can be little doubt that the regime was genuinely against the war, but it was caught in a bind. As they declared their opposition to the war, while remaining committed to maintaining their intelligence-sharing relationship with the United States, President Mubarak and his government repeatedly warned Washington against prioritizing Iraq over the Palestinian issue. He called for the conflict to be managed under the auspices of the United Nations. He also asserted on state television on March 27, 2003 that Egypt was not providing assistance to the U.S.-led coalition (International Crisis Group 2003).

Lastly, a figure that deserves mentioning due to his contribution toward strengthening the Egyptian and U.S. relationship during this time and throughout these events is Omar Suleiman. His authority over the intelligence agencies was during the key historical events presented above, and he was identified as being the one who established close relations with the CIA, especially in the issues related to terrorism and Islamic extremism. During his time as a lead intelligence leader, Egypt was considered a "black hole" where terrorists could be rendered for interrogation and torture. According to a number of reports, joint EGIS–CIA rendition started with Tal`at Fu'ad Qassim in 1995 and did not end until recently. In a public hearing before the National Commission on Terrorist Attacks Upon the United States, CIA Director George Tenet has said that his organization took part in more than 80 renditions before September 11, 2001 (National Commission on Terrorist Attacks upon the United States 2004). According to Human Rights Watch, press accounts suggest that the United States has flown 100–150 suspects to foreign countries, many of them to Egypt, since September 11 (Human Rights Watch 2005, 4). SSIS also cooperated with the CIA on the same issues; cooperation included many areas other than rendition programs including intelligence exchange and training. According to former U.S. Ambassador to Cairo Edward Walker, the CIA trained an Egyptian Special Forces unit in counterterrorism until the program was shut down in 1998 (Grey 2007, 141).

These historical events outlined above demonstrate that Egypt and the United States shared intelligence based on their similar interests regarding stability in the region and countering terrorism. However, when change occurred to Egypt's leadership during the Arab Spring, this impacted the intelligence-sharing relationship between Egypt and the United States.

Present and Future Challenges

In December 2010, mass antigovernment protests began in Tunisia and spread across the Middle East. By February 2011, revolutions occurred in Tunisia and Egypt, while Libya and Syria experienced their own civil wars. Other Arab countries also faced protests that varied in size but did not end up with successful revolutions nor did they have civil wars.

For Egypt, the Arab Spring produced what is called the January 25 Revolution, a diverse movement of demonstrations, marches, nonviolent civil resistance, and labor strikes. Millions of Egyptian citizens from a variety of socioeconomic and religious backgrounds demanded the overthrow of the regime of President Mubarak. There were also important Islamic, liberal, anticapitalist, nationalist, and feminist undercurrents of the revolution. Violent clashes between security forces and protesters resulted in at least 846 people killed and 100,000 injured ("Egypt: Cairo's Tahrir Square Fills with Protesters" 2011).

The primary demand from protesters was the end of Mubarak's 30-year presidency; however, some of the causes of the demonstrations included police brutality, prolonged state of emergency laws, and lack of free elections and freedom of speech, government corruption, high unemployment, food price inflation, poverty, and low wages. Additionally, some specific complaints had to do with Egyptian intelligence agencies free reign against anyone perceived to be the government's opposition (Sharp 2014).

Following the failure of Mubarak's regime and intelligence services to overcome the conflict, Mubarak dissolved his government and appointed former head of the EGIS Omar Suleiman as vice president in an attempt to quell dissent. Later, and in a response to pressure, Mubarak announced he had not intended to seek reelection in September. Mubarak's presidency ended after 18 days of demonstrations during the 2011 Arab Spring Revolution. On February 11, 2011 Vice President Suleiman announced that Mubarak had resigned and transferred his power to the Supreme Council of the Armed Forces.

On March 5, 2011 protesters raided SSIS buildings across Egypt, including the headquarters in Alexandria and the main national headquarters in Cairo. Protesters stated they raided the buildings to secure documents they believed to show various crimes committed by the intelligence agency against the people of Egypt during Mubarak's rule ("Egypt Security Building Stormed" 2011).

On March 15, 2011 the Ministry of Interior announced the dissolution of SSIS and the arrest of its leader under suspicion of ordering the killings of demonstrators. The service was then replaced by EHS. Mubarak and both of his sons were later detained for questioning about allegations of corruption and abuse of power. In August 2011, Mubarak was tried in court on charges of negligence for not giving orders to stop the killing of peaceful protestors during the revolution; he later was sentenced to life imprisonment.

A 2012 presidential election was held in Egypt in two rounds, the first on May 23 and 24, and the second on June 16 and 17. The elections resulted in a win for the Muslim Brotherhood's second candidate, Muhammad Morsi, which was the first victory of an Islamist as head of state in the Arab world. After Morsi took office, his supporting party, the Muslim Brotherhood, said it needed to review all previous international arrangements by the previous regime, stating "We weren't party to the peace treaty [referring to the issue of Israel], it was signed away from the Egyptian people and thus the people must have its say" (Khoury 2012). In fact, the Muslim Brotherhood explained that it was not required to recognize nor cooperate

with Israel (Khoury 2012). It classified Israel as an "occupying entity" and stated it would not "allow anyone of our members to meet with an Israeli" (Khoury 2012) These comments signify that Morsi and the Muslim Brotherhood had no intention of working with current policies that incorporated Israel into the new government, which was a milestone of the U.S.–Egyptian agreements. These actions started the move of changing interests from what they were prior to Morsi (i.e., stability in the region, countering terrorism) to interests more in line with the Muslim Brotherhood. Specifically, Morsi met with Hamas' chief Khaled Meshal shortly after his election and discussed how Egypt could bypass an Israeli blockade in order to deliver them gas and petroleum ("Hamas Chief Meets Egypt's Morsi in Cairo, Hails 'New Era'" 2012). These new interests directly went against the U.S. position, within the treaty, since the United States had classified Hamas as a terrorist organization (National Counterterrorism Center).

In addition, the regime change and presidential election of the Muslim Brotherhood's Morsi did not improve the U.S.–Egyptian intelligence relationship, as the other events have shown. It created many challenges for the two countries as they tried to move forward together. For example, according to former CIA officer Michael Scheuer, "the help we were getting from the Egyptian intelligence service … has dried up—either because of resentment at our governments stabbing their political leaders in the back, or because those who worked for the services have taken off in fear of being incarcerated or worse" (Higgins 2011). In an interview with the *Guardian*, Scheuer said that "the amount of work that has devolved on U.S. and British services is enormous, and the result is blindness in our ability to watch what's going on among militants." Scheuer explained that this, during Egypt's revolution and regime change, was "an intelligence disaster for the United States and for Britain, and other European services" (Higgins 2011).

After years of peace, the 2011 regime change in Egypt led to fears in Israel about the future of the March 1979 Egypt–Israel Peace Treaty. For the first time since Mubarak, the treaty and the Egypt–Israel relationship could be seen as in jeopardy.

Morsi, however, only lasted a little over a year because he was ousted in a military coup in July 2013. He was taken under custody by the military, and el-Sisi (who at that time was in charge of the Egyptian Armed Forces) announced that Adly Mansour would be the interim leader until a new Constitution could be created and presidential election could take place (Hughesa and Hunter 2013). A few months after the coup, an Egyptian court ordered Mubarak's release due to the lack of legal grounds for his detention and he later was put under house arrest.

Shortly after Morsi was arrested, el-Sisi announced his run for the presidency, running on the platform of regional security and counter-terrorism (Abaza 2014) On June 3, 2013 Abdel Fattah el-Sisi was elected president, signaling that the Muslim Brotherhood administration under Morsi had ended and been replaced with Mubarak-like governance. Many of the policies and interests that had been in place under Mubarak had been changed by Morsi, but when el-Sisi won the election, he returned them to the way they had existed during the Mubarak era. For example, during el-Sisi's

speech to the United Nations after being elected president he specifically stated that "countries should coordinate and cooperate to confront extremist forces and the crisis of terrorism facing the region" (U.N. General Assembly 2014).

Additionally, Abdel Fattah el-Sisi told Israeli officials that the peace treaty with Israel "is an important commitment that can be relied and built upon in order to serve both countries' interests." el-Sisi also said that this was the time to "create the right atmosphere to solve the Palestinian issue and work to spread peace in the entire Middle East, so the nations of the region could live better" (Al-Sisi: Egypt is Commited [sic] to Peace with Israel" 2014).

Furthermore, Egypt had banned the Islamic group of Hamas, which posed a major security threat to the United States and Israel. As previously mentioned, Morsi reversed this policy, allowing discussion to commence with Hamas under his presidency. After the 2013 coups, this policy was immediately reversed and Hamas (along with the Muslim Brotherhood) was redesignated a terrorist organization ("Egypt Court Bans Palestinian Hamas Group" 2014). Moreover, under Mubarak and now under el-Sisi, Egypt has promised and worked to stop weapons smuggling into the Gaza Strip and its de facto Hamas government. In recent years, the United States may have been facilitating Israeli–Egyptian cooperation on the smuggling issue. "Reportedly, Israel may be more willing to renegotiate a 2005 MOU [Memorandum of Understanding] with Egypt to expand the number of Egyptian BGF [Boarder Guard Forces] from 750 to between 1,500 and 2,200 men. Reports also indicate that Israeli–Egyptian intelligence sharing has increased" (Zanotti et al. 2009, 20).

el-Sisi, whose main campaign message was to fight for Egypt's homeland security against terrorism, has followed in Mubarak's footsteps to fight against Islamic militant movements in Sinai and the Gaza border. Many military missions against "terrorism" in Sinai have been reported after el-Sisi assumed office. During the first months of his presidency, the Egyptian army destroyed a significant number of Gaza tunnels and stood firm on the issue during the July–August 2014 Israeli–Palestinian conflict (Masi 2014) el-Sisi returned Egypt's interests back to pre-Morsi rule to "stability in the region" and "countering terrorism," which fall back in line with the United States' interests.

On the basis of these events and policy reversals, it is clear that Egypt has returned back to Mubarak-era policies, putting them back in line with U.S. interests. However, it is important to note that even though interests under el-Sisi have returned to Mubarak-era interests, there are additional challenges facing the Egyptian and U.S. relationship in the context of the new Egyptian president. Pulling from el-Sisi's previous schoolwork completed at the U.S. Army War College on "Democracy in the Middle East," his writings give us an insight into his thoughts on an overall Egyptian–U.S. relationship (not limited to intelligence). el-Sisi claims that the United States has always put its own interests first and, "as a result, is under constant pressure to satisfy multiple country agendas that may not coincide with the needs or the wants of the Middle Eastern people" (el-Sisi 2006). el-Sisi has questioned the U.S.' motives, claiming that the "U.S. has supported nondemocratic regimes and some regimes that

were not necessarily well respected in the Middle East. As a result, many in the Middle East question the motives of the United States and her desire to establish democracy in the Middle East now" (el-Sisi 2006).

el-Sisi claims that the United States has known about autocratic leaders that "claim" they are in favor of democratic reforms, but resist relinquishing control, and the United States has done little to challenge them if it serves U.S. interests. Instead, el-Sisi insists "for democracy to be successful in the Middle East, it must reflect Middle Eastern interests and not United States' interests only" (el-Sisi 2006). He challenges whether the United States is ready to accept "Middle East democracy" that could contend with Western interests or may not be in line with Western policies (el-Sisi 2006).

Additionally, we have seen el-Sisi challenges U.S. influence within Egypt through recent actions regarding the two administrations. Specifically, during the interim government and after the 2013 military coups, the United States was calling for less harsh punishment on anti-coups or pro-Morsi protesters and for more democratic reforms. Egypt politely "ignored" its calls and pressed ahead with its initial plans and roadmap, not buckling under the pressure of the United States or the international community. Furthermore, the United States has also used previously agreed upon military aid to Egypt as a way to try to influence its democratic roadmap. It was not until June 2014 that the United States finally unlocked the promised military aid, backing President el-Sisi's role in the country ("U.S. Unlocks Military Aid to Egypt, Backing President Sisi" 2014). This delay in arms delivery from the United States angered the Egyptian government, sparking Egypt entering into military trading discussions with Russia (Michael 2013).

In addition to these challenges, some internal Egyptian intelligence agency adjustments may be incorporated as el-Sisi governs Egypt. Specifically, two of the three intelligence agencies have survived after Mubarak. One agency, the SSIS, blamed for the failure in the Arab Spring period, was replaced by EHS, a new homeland security agency. More reforms are expected to happen in the near future, but the full picture of what the largest and most prestigious Arab intelligence services will look like remains unpredictable due to the current complicated political situation in the country. However, since this agency failed to prevent the fall of the regime during the Arab Spring, one should expect some radical changes and reforms within the intelligence community in Egypt after the dust settles from the election. Another expected move would be the rise of importance and role for the MID, being closer to the military and a viable alternative to the failing EGIS and SSIS.

In sum, el-Sisi may have returned Egypt's interests and policies back to Mubarka-era rule, which places Egypt's interests back in line with the United States, and, based on past narrative and recent actions, we can conclude that el-Sisi knows and understands the importance of the Egyptian–U.S. diplomatic relationship. He also knows there is a large gap between U.S. policy and reality within the Middle East, however, meaning that democracy within the Middle East will not develop exactly as the United States plans or orders. Instead, as expressed by el-Sisi himself, the U.S.

footprint in the Middle East may be less influential than during Mubarak's reign, and more on Egyptian terms during el-Sisi's reign. This would include all aspects of the Egyptian–U.S. relationship, especially defense and intelligence.

Findings and Conclusions

Questions remain, however, on whether the Egyptian intelligence community will continue to partner with the United States, and if that relationship will be different now under the direction of el-Sisi. The answer to both of these questions is "Yes." Yes, it will continue, and yes, there may be some slight challenges as both countries move forward with their intelligence relationship.

Our historical analysis confirms that under Mubarak's regime, Egypt partnered with the United States based on these interests: stability in the region and countering terrorism. Through our historical analysis, we found that both countries identified that they would benefit from each other by partnering in these aspects.[74] Furthermore, our case study supports the theory that when there is a significant regime change in which the new leadership may alter the importance of previous interests, a shift or defection in the intelligence-sharing agreement can be expected.[75] This is supported by the Arab Spring events that took place in Egypt, causing Mubarak to be deposed and Morsi to be elected as the new president in 2012. Our case study shows that due to the significant change in policy implemented by Morsi, there was a significant lull in intelligence-sharing activity with the United States. The policies implemented by Morsi, which focused on supporting Muslim Brotherhood interests in much of the Arab world, were counter to the previous interests that provided the basis of the Egyptian–U.S. intelligence relationship, which, therefore, altered the previously agreed terms and policies of the intelligence-sharing relationship previously agreed to by Egypt and the United States.

However, Morsi's rule and policies were short lived, and another significant change in leadership was implemented in Egypt in 2013 by a military coup d'état and eventual presidential election of el-Sisi. Our case study shows that this additional new shift in Egyptian leadership returned the original interests of "stability in the region" and "countering terrorism" back to the forefront. Due to the shift in policy and interests returning back to their historical status (if not the same, close to), the Egyptian and U.S. intelligence-sharing relationship will reverted to its original agreement. However, based on recent actions and past narrative by el-Sisi, this relationship may alter the terms of the original agreement, perhaps ensuring that all of Egypt's interests are represented—even the terms of intelligence. Granted, many of el-Sisi's comments center more on democratic and political influence, but these topics may trickle over into the defense and intelligence relationships.

In sum, it is our conclusion that Egypt and the United States will return to the Mubarak-era intelligence-sharing relationship while under el-Sisi. We argue that the events leading up to today have proven that Egypt and the United States will return back to their intelligence relationship as they did before the Arab Spring and Egyptian

Revolution, but acknowledging that there will be challenges along the way. That being said, we argue that the United States will always play a major role in Egyptian intelligence as long as the countries share mutual interests. The long and enduring history of the intelligence relationship between the two shows that there can continue to be mutual interests and benefits, allowing them to return to a "business as usual" intelligence sharing manner.

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Applying a Critical Thinking Framework to Improve Intelligence Analysis

James Hess[A] & Curtis Friedel[B]

This study examined an intelligence analysis framework built using specific cognitive critical thinking skills. The framework demonstrated that intelligence analysis did improve, specifically with the novice analysts that participated, and there was demonstrated specificity in the respondents' analyses. A panel of experts provided insight and content assurance that demonstrated the intelligence analysis and products produced were valuable for use at the tactical level. Finally, this study examined successful historical counterinsurgencies in relation to the analytical framework utilized in order to understand how this analysis leads to operational success.

***Keywords**: analysis, counterinsurgency, critical thinking, and operational environment*

Background

The intelligence community is responsible for providing competent analysis and assessments pertaining to the many significant geopolitical situations that affect or may potentially affect the nation's interests. The intelligence community has always experienced challenges living up to that charge, and while it may merely be a case of the nature of the profession, there are always lessons to learn and processes that may improve analytical processes. Critical thinking is a cognitive process that may be able to provide that improvement to analytical processes; when an analytical framework is built by applying these cognitive skills, the analytical effort may become more focused and meaningful.

While many intelligence analysts may believe they are thinking critically about the information they are receiving, in reality not many analysts are formally trained in applying critical thinking skills. The critical thinking process provides a framework for the analyst to ensure assessments are thorough and reasonably objective in nature. Moreover, by applying a critical thinking framework to intelligence analysis, it is possible to incorporate critical thinking into a domain-specific methodology instead of providing instruction in critical thinking with the hope of it transferring into the analyst's assessments. Critical thinking in itself will not provide that perfect assessment, but it

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may ensure the analyst has objectively valued his or her holdings while maintaining all pertinent and potential alternatives. Therefore, an analyst who applies critical thinking will ensure that biases will not dictate what the information means, and will determine the value of competing alternatives in order to mitigate rash judgments. Applying critical thinking to intelligence analysis is not only paramount for the quality of the analysis, but in today's unconventional environments, it is more important than ever. We are currently involved in counterinsurgency (COIN) operations in Iraq and Afghanistan, and the combating of terrorist or counterterrorism operations may become routine missions for the U.S. Army. As such, it is imperative that we modify our analytical procedures to face these challenges.

Conceptual Framework

Introduction

Since this study focused on the Critical Thinking applied to Intelligence Analysis Process (CTIAP) written by Dr. Curt Friedel and myself, as the primary researcher (Hess and Friedel 2008), I will discuss this first. The CTIAP was the conceptual framework examined for the course of this study. The CTIAP utilizes Dr. Peter Facione's research that produced a definition and specific cognitive skills necessary for effective critical thinking (Facione 2010), and applies it to the U.S. Army's intelligence analysis process found in FM 2-01.3 Intelligence Preparation of the Battlefield (IPB). Facione's six cognitive skills were interpretation, analysis, evaluation, inference, explanation, and self-regulation (Facione 2010, 5).

There are two predominate schools of thought pertaining to critical thinking: Facione (2010) and Paul and Elder (2002). Facione's research has focused on the critical thinking aspects applied domain specifically, while Paul and Elder's focus was more toward critical thinking as a standalone cognitive ability that generally improves thinking. I chose Facione's research as the basis for both the CTIAP (Hess and Friedel 2008) and for this study since I consider intelligence analysis a unique domain because it is tailored to the specific mission in which it may be utilized. For instance, intelligence analysis may take on a different role in conventional warfare that it takes in a COIN or counterterrorism operation.

CTIAP Discussed and Defined

The CTIAP was developed through an application of Facione's (2010) six cognitive skills to the steps of IPB. The following section discusses the six cognitive steps and how they might be applied to the intelligence process.

Interpretation was defined as the ability "…to comprehend and express the meaning or significance of a wide variety of experiences, situations, data, events, judgments, conventions, beliefs, rules, procedures, or criteria" (Facione 2010, 5). In other words, the analyst must understand the context of information being evaluated, which could be rooted in culture, religious ideology, political gain, or various other

nuances that could shape its meaning. The meaningfulness of the information may be categorized by its importance within these different domains or categorized by its meaning to different group stakeholders. Besides, the analyst must honestly consider personal experiences when evaluating information. Here alone the analyst can find tremendous amounts of bias or other superseding variables that affect how value is assigned to the information.

The cognitive skill *analysis* was defined as the ability "…to identify the intended and actual inferential relationships among statements, questions, concepts, descriptions, or other forms of representation intended to express belief, judgment, experiences, reasons, information, or opinions" (Facione 2010, 5). How the information relates to other holdings is one of the key aspects of analysis. The ability to study the parts separately (distinguishing facts from opinions and assumptions) and then holistically (forming arguments from facts, opinions, and assumptions) may be challenging to say the least, but this is the cornerstone of analysis. This definition, while short in words, is long in ideals. Constantly questioning or judging the information is a Herculean effort that cannot be taken lightly. Nor can it be something that we take for granted. Again, the analyst must understand how biases can affect the way they look at the information and apply it to a larger situation.

Evaluation as a critical thinking skill was defined as the ability "…to assess the credibility of statements or other representations which are accounts or descriptions of a person's perception, experience, situation, judgment, belief, or opinion; and to assess the logical strength of the actual or intended inferential relationships among statements, descriptions, questions or other forms of representation" (Facione 2010, 5). While evaluation may sound similar in wording to interpretation and analysis, it must be noted that the phrase "assess the credibility" should focus one to assess the source of the evidence with respect to the authority and expertise of the individual. Moreover, consider the logical strength of the information with regard to timeliness, implications, and other variables determined by the situation. Again, removing one's biases is paramount, but not a given. It should also be noted that it may be impossible to remove all of our biases, so an analyst must constantly struggle to mitigate them. Further, when this critical thinking framework is applied to intelligence analysis we will see techniques that can assist with removing biases in order to form stronger judgments.

Inference was "…to identify and secure elements needed to draw reasonable conclusions; to form conjectures and hypotheses; to consider relevant information and to deduce the consequences flowing from data, statements, principles, evidence, judgments, beliefs, opinions, concepts, descriptions, questions, or other forms of representation" (Facione 2010). In exhibiting this skill, the analyst determines what to conclude from the collective information. Developing initial hypotheses in order to test them in an unbiased and pertinent manner is where the analyst should be focusing his or her efforts. It is challenging and detail-oriented work, but important for the analyst to ensure that they let the information speak for itself and consider multiple options specific to the problem or situation that exists.

Explanation was defined as "…being able to present in a cogent and coherent way the results of one's reasoning. This means to be able to give someone a full look

at the big picture: both 'to state and to justify that reasoning in terms of evidential, conceptual, methodological, criteriological, and contextual considerations upon which one's results were based; and to present one's reasoning in the form of cogent arguments'" (Facione 2010, 6). For the intelligence analyst, the skill of explanation is used to present conclusions and assessments that are specific to the mission assigned. Providing explanation of the analysis of a situation that is not relevant or cogent to the larger task may be completely counterproductive. In addition, the employment of a strong explanation may ensure that the analyst is not providing an assessment that is vague or more "strategic" than applicable to a particular mission.

Lastly, *self-regulation* was to "…self-consciously monitor one's cognitive activities, the elements used in those activities, and the resulted educed, particularly by applying skills in analysis, and evaluation to one's own inferential judgments with a view toward questioning, confirming, validating, or correcting either one's reasoning or one's results" (Facione 2010, 7). Self-regulation may perhaps be the most crucial cognitive skill for the intelligence analyst. It is common for initial reports in the field to be unclear and usually far from accurate; these routinely contribute to the "fog of war". Therefore, it is imperative for the analyst to acquire a final and complete report, as well as update on all products and assessments resulting from incomplete reports. As in the aforementioned discussion of each critical thinking skill, self-regulation may be applied with each skill throughout the critical thinking process. By doing so, the information gleaned by each skill is questioned, confirmed, and validated. Self-regulation is the step in which the analyst needs to ensure that various personal biases are removed as much as possible. Being aware of one's biases is paramount to ensuring their presence is reduced.

The CTIAP method applies each of the six cognitive skills defined by Facione and determines how they affect each step of the IPB process (Facione 2010). According to FM 2-01.3, there are four steps in the IPB process: (1) define the operational environment, (2) describe environmental effects on operations, (3) evaluate the threat, and (4) determine threat courses of action.

The analyst begins the IPB process by utilizing a framework that is built using the operational variables of political, military, economic, social, infrastructure, and information (PMESII) and the urban terrain analysis variables of areas, structures, capabilities, organizations, peoples, and events (ASCOPE). Of note, an analyst may, and should, substitute these variables based on mission requirements. All information will be organized within this framework.

Next, the analyst will determine how he or she will evaluate information. This should be a 1–5 point scale that weighs the value of the source of information, as well as providing criteria to upgrade or downgrade the value based on data confirmed through other reporting. The intent of this analysis of the reporting and the value of the data are to enable the analyst to prioritize targets and threat intent.

The organization of the reporting through the framework may enable the analyst to determine whether he or she has sufficient collection. Through this analysis, the analyst may need to reprioritize collection strategies as well as evaluate the relationship between the variables of the framework.

Research Question

To test the Critical Thinking applied to Intelligence Analysis Process (CTIAP) in this context, the following research question was posed: Can a domain-specific application of critical thinking to intelligence analysis provide a holistic, comprehensive, and unbiased assessment that is pertinent to decision makers? I note that at the tactical level, decision makers are typically commanders.

To answer the research question, grounded theory was utilized in this study. Grounded theory was used to evaluate the products and assessments produced by a group of cadets at the United States Military Academy by comparing them with historical counterinsurgencies.

Methods

Research Design

This research was conducted utilizing grounded theory. I began by examining the effectiveness of the domain-specific application of critical thinking to intelligence analysis through a case-based scenario. Furthermore, I examined some commonalities of historical counterinsurgencies that contributed to success. The dependent variable for this research was the effectiveness of the analysis conducted by cadets at the United States Military Academy at West Point using a critical thinking-based model applied to intelligence analysis. The study examined a group of cadets at the United States Military Academy at West Point that had been taught intelligence analysis with the Critical Thinking Intelligence Analysis Process (CTIAP) (Hess and Friedel 2008). The study also examined historical counterinsurgencies to determine why a domain-specific application of critical thinking is important, and how the CTIAP may improve the objectivity, completeness, and applicability of intelligence analysis through semi-structured interviews.

This study was conducted utilizing a qualitative research approach instead of a quantitative approach. I chose qualitative because it was better suited to explore and understand how and why something works in a real-world situation. Qualitative research is more interpretive in nature, and provides more depth and understanding of the interconnectedness of the variables rather than attempt to control or isolate them. Moreover, quantitative research is more systematic, typically mathematically or statistically based, and provides validity that may be generalized to a larger population. Given this, my research question was not quantitative in nature, but rather more in line with the definitions of qualitative research (Merriam 2009; Miles and Huberman 1994; Rossman and Rallis 2003; Yin 2009).

I chose to utilize historical counterinsurgencies because they are well suited for studying real-life situations that involve processes and details that are suitable for understanding the attributes of successful counterinsurgencies (Yin 2009; Merriam 2009). According to the U.S. Army's Counterinsurgency Field Manual (FM) 3-24, intelligence is an essential part of any COIN operation, hence an important

consideration in the evaluation of the CTIAP. Therefore, the grounded theory approach best suited the overall objectives of this study. The design included historical studies as previously mentioned. The data analysis was conducted with the use of grounded theory, where "the researcher begins with a[n] interview…and compares it with another incident…" (Merriam 2009, 199-200). By analyzing the details of the interviews, I used a critical thinking framework to examine the context of the factors that contributed to successful historical counterinsurgencies.

Data Analysis

To fully understand the depth of the data collected in interviews, I evaluated the cadets' responses and products through five major themes: (1) understanding the operational environment, (2) familiarization with the threat groups present in the case-based scenario, (3) details and completeness with the threat courses of action, (4) comprehensive target list, and (5) ease and comfort of using CTIAP.

The findings of my study were arranged by the five themes mentioned. For each theme, I further broke down the respondents' answers specific to each point. All the subsections were organized using the following format: an explanation of how that specific subsection builds to a holistic assessment; the cadets' responses that provide details on how the CTIAP ensured their products and analysis were comprehensive; and a summation for each subsection where I explain how the cadets' answers based on the CTIAP ensured that they remained as objective and unbiased as possible.

Finally, in order to explain how well critical thinking encourages holistic, comprehensive, and unbiased assessment of intelligence analysis, I presented a case-based scenario to 26 participants (after data saturation, I used the products from five of the cadets, completely randomized) trained to use the CTIAP, and then conducted interviews with the cadets to answer my research question. I then presented the products resulting from the participants' analysis to a panel of experts consisting of five colonels, all of whom were previous brigade commanders (all but one were from a combat arms branch, the remaining one was military intelligence). After their review, I conducted independent interviews with the colonels that have served in a capacity to provide insight and potential critiques to the study. Finally, I conducted a review of historical counterinsurgencies in order to provide a theoretical underpinning regarding successful counterinsurgencies. These comprise the four major sections under which I present the data: (1) cadets' responses pertaining to using the CTIAP in the case-based scenario, (2) panel of experts' responses of the cadets' products and analysis, (3) historical counterinsurgencies providing insight into the effectiveness of the CTIAP, and (4) review of cadets' products and analyses based on historical counterinsurgencies.

Findings

Introduction

My restated research question for this study is: Can a domain-specific application of critical thinking to intelligence analysis provide a holistic, comprehensive, and unbiased assessment that is pertinent to decision makers?

Summary of Findings

The cadets and the panel of experts agreed that the operational environment interface that created an analysis of both PMESII and ASCOPE variables was the single most important aspect of the CTIAP that focused analysis in a comprehensive, holistic, and unbiased manner. The interface ensured that the cadets' analyses focused on the aspects of the operational environment that are essential for mission success. The products produced based on the interface were pertinent and relevant for operational use, as the panel of experts attested numerous times.

Examining Historical Counterinsurgencies

Grounded theory was utilized to provide insight into why the CTIAP provides a comprehensive, holistic, and unbiased assessment, and two historical counterinsurgencies were examined: the Philippine-American War and British Malaya. As the operational environment proved to be the most important basis for the analysis conducted with the CTIAP, my analysis of these two conflicts likewise focused on the operational environment. Specifically, I examined how the counterinsurgent forces' focus on influencing the operational environment contributed to the successful outcomes of these counterinsurgencies.

Both conflicts, the Philippine-American War and British Malaya, were examples of a conventional army that deployed to suppress an insurgency. Both conflicts also demonstrated how traditional military powers deployed against belligerents alone had little to no success against an insurgency. Further, both conflicts illustrate that when military power is applied against an entire operational environment, the chance for success improves dramatically.

Philippine-American War

The Philippine-American War, 1899–1902, began when the United States annexed the Philippines after the United States' victory over Spain in the Spanish-American War. Armed revolutionaries fought for Filipino independence. The United States initially sent a small contingent of 5,000 soldiers to secure the island in 1898; the Filipinos met this action with resentment and frustration. By February 1899, armed conflict broke out between the Filipino revolutionaries and the United States.

Initially, the United States conducted military action in the Philippines in a very conventional manner, but quickly moved to a COIN operation under the leadership of Major General Elwell Otis. Major General Otis did not effectively integrate all subordinate efforts, which allowed subordinate commanders to wage the counterinsurgent fight in their own manner. After limited success in fighting the Filipino insurgents, the U.S. Army transitioned to a more robust COIN based way of conducting warfare. Brigadier General Arthur McArthur refocused the strategy to not only fight the insurgents, but also improve the overall environment for the population. One of the main strategies used during the Philippine-American War in the revised COIN phase was the creation of zones of protection. The zones of protection were areas that the U.S. Army established to separate average citizens from the insurgents. While this strategy had its critics, overall it proved successful and was a significant COIN effort that helped realize the eventual end of the war in favor of United States.

The Operational Environment in the Philippine-American War

The successful conclusion of the Philippine-American War is a demonstration of leveraging the operational environment to achieve the objectives of the military mission. U.S. forces recognized the need to focus on improving the operational environment as a whole, and benefitted accordingly.

Brigadier General Samuel B. M. Young initially was not a supporter of providing for the greater good of the society. He mentioned in September 1900 that "…what was required were 'the remedial measures that proved successful with the Apaches'" (Linn 2000, 211). In other words, Young wanted a harsh campaign against insurgents and civilians alike. However, by the March of 1901, Young realized the benefit of focusing on improving the operational environment that affected both insurgent and civilian, when "…he had established 203 schools serving 10,714 students…there was a strong element of enlightened self-interest…" (Linn 2000, 258).

Young did not stop with building schools; he focused his efforts on rebuilding the entire civil structure, his operational environment. "Young and his brilliant chief of staff, Major John G. Balance, embarked on a comprehensive effort to build roads and schools, establish financial solvency, and bring order and good government to the population" (Linn 2000, 261). It seems clear that Young truly began to grasp that insurgents thrive due to a lack of effective legitimate governance. By focusing on building or maintaining societal norms for the populace at large, the operational environment benefits favorably toward the counterinsurgents as the insurgents lose the ability to manipulate the people.

To note, reconstruction efforts not only helped the operational environment, but supported the counterinsurgent military effort as well. "Major Carter P. Johnson urged the construction of roads, both because they were 'productive to the civilization of the country' and because they would allow troops to move rapidly" (Linn 2000, 263). When counterinsurgent forces improve the operational environment in which they are conducting operations, the operations also improve as freedom of movement

improves; this is true in both physical as well as civil improvements. "Americans could not force the guerrillas into battle, but…through the capture of lists of contributors, [they were able] to dismantle the guerrillas' supply organization" (Linn 2000, 265).

Ultimately, the U.S. Army was able to effectively fight and destroy the Filipino insurgents through the various COIN operations they conducted. The insurgents began to run out of safe havens, and they were unable to maintain logistical bases either. After less than a year of implementing the various actions toward improving the operational environment, in November 1901, " …the Americans' counteroffensive was in full swing as district commanders pursued the guerrillas into previously inaccessible area" (Linn 2000, 273). Filipino President and strongman Emilio Aguinaldo was captured in April 1902, six months after full implementation of this COIN strategy, effectively ending the Philippine-American War.

Summary of the Philippine-American War

The Philippine-American War provides great insight into how an effective COIN strategy can defeat an insurgency. The strategy that the U.S. Army employed, while we would consider some of the methods harsh by today's standards, were focused and enabled a succinct method to separate guerrillas from noncombatants. The strategy also improved the operational environment for the benefit of the counterinsurgents, and ultimately strangled the insurgents and their ability to fight.

One valuable lesson learned from studying the Philippine-American War and American strategy lies in how effective strategy can have dual uses. This duality within the strategy of denying the insurgents their ability to conduct operations while improving the counterinsurgents' freedom of movement was no small detail. This lesson was not only important to understand, but also highlighted how imperative it may be to deny the operational environment to the insurgents. Insurgents and terrorists alike exploit the weaknesses within the operational environment, and the most effective strategies address that aspect and focus on combating and/or denying the insurgents' or terrorists' ability to utilize the operational environment in their favor.

British Malaya

The British Malaya conflict, also known as the Malayan Emergency, grew out of post-WW II economic collapse in Malaya. Britain, which had strategic interests in Malaya as it was its primary source of tin and rubber, soon found itself in the middle of an uprising due to the economic unrest. Britain responded in 1948 by sending 13 battalions under the command of Sir General Harold Briggs in order to suppress the uprising that adopted the communist ideology.

The conflict lasted for 12 years, 1948–1960, with British and Malayan forces eventually defeating the communist insurgents. Initially Sir General Briggs imposed a COIN doctrine that Britain used during the Boer Wars, where they created guarded camps or "New Villages" in order to separate the insurgents from the populace.

Unfortunately, Briggs' COIN strategy effectively ended there, as he did little to improve the operational environment and used the British forces in a very conventional manner. The British conducted large movements-to-contact in order to engage the insurgent forces in the jungles of Malaya. They found very little success, as the insurgents simply avoided the loud and cumbersome effort. In 1951 and 1952, Britain realized that it was making little progress, and as a result, Britain reviewed its strategy, replaced the commander, and began to implement a holistic COIN strategy.

The Operational Environment in British Malaya

After the first three years of the conflict, the British strategy was essentially one of conventional forces fighting conventionally. However, British commanders realized that they needed a change in strategy, and this can be best summarized by David Lloyd Owen's remarks: "' They [British Soldiers] were flogging the jungle with enormous sweeps and that kind of thing, which is completely useless in this sort of war, and wasting a tremendous amount of effort'" (Nagl 2005, 80).

In 1952, Britain selected a new commander of the British conflict in Malaya, General Sir Gerald Templer. Interestingly, amongst his experienced commanding traditional combat arms units, Templer also served as the Director of Military Intelligence on the Imperial General Staff of the Eastern Command just prior to taking command of British forces in Malaya. Templer approached the job with an understanding that insurgents, or combatants, had to be removed from the civilian populace if the British COIN operation would succeed.

One of Templer's first directives was to "impose a twenty-two hour daily curfew…" (Nagl 2005, 89), as well as inform the civil leaders that insurgent or terrorist attacks must stop. Shortly after this directive and a message to the civil leaders, information was supplied that led to "…arrests of some forty Communist supporters…" (Nagl 2005, 89). Templer understood that he must include the operational environment in his strategy if the Malayan Communist insurgents were to be defeated. His efforts had immediate impact on the Communist forces, and he began to form trusting relationships with the local populations through these efforts.

Templer furthered his strategy by incorporating essentially a general order for his subordinates. Templer appeared to understand that the conduct of all soldiers has strategic impact in a COIN. Templer's directive was important and rather simple: "(1) Get the priorities right. (2) Get the instructions right. (3) Get the organization right. (4) Get the right people into the organization. (5) Get the right spirit into the people. (6) Leave them to get on with it" (Nagl 2005, 90).

It is rather apparent that Templer understood sound COIN concepts. He successfully separated combatants from the populace, was hard but fair with the local leaders, and insisted on imparting effective standards for his subordinates. "Perhaps Templer's greatest contribution to the conduct of the COIN campaign was his ability to coordinate all of the efforts – social, political, economic, police, and military to move Malaya forward…" (Nagl 2005, 100). Templer understood that the operational

environment was his center of gravity and his actions reflected this as well. "'Military force cannot change opinion. It can only create a framework in which economic reform and good government can take effect'" (Nagl 2005, 101).

Summary of British Malaya

Similar to the Philippine-American War, British Malaya was a conflict that demonstrated the following key points: conventional forces need to be cognizant of their role and strategy when fighting an insurgency and normal conventional operations are not sufficient when fighting a COIN. Separating the combatants from the larger population is effective, although a substantial effort in itself. Counterinsurgent forces focusing on improving the operational environment for the population, while denying the insurgents the ability to manipulate it for their purpose, are essential: it facilitates the ability to employ lethal COIN operations.

Britain's efforts in Malaya were successful due to the realization that it needed to change from a conventional to a COIN -based effort. General Sir Gerald Templer brought a rich set of experiences to the conflict, and was able to understand that insurgencies are fought differently than normal army operations. He employed the key points mentioned when conducting COIN operations, and was successful in defeating the communist insurgents. Britain's efforts reflect a tremendous success story in which Malaya was ultimately able to realize independence and form Malaysia.

Summary of Historical Counterinsurgencies

Both historical examples of successful counterinsurgencies reflect the use of conventional military forces and their ability to transform into an effective COIN force. These examples demonstrate that the composition of military forces was not necessarily the key to defeat an insurgency, but rather the strategy used in employing the military forces needed to be sound.

Both examples also demonstrate how military strategy needed to evolve to combat an insurgency. When the strategy did evolve, the counterinsurgent forces were very effective against the insurgents. In addition, both counterinsurgencies demonstrate how important it is to focus a COIN strategy by leveraging the operational environment. The operational environment was necessary to both insurgents and counterinsurgents, and the main effort or the center of gravity of the conflict lies in controlling it.

Interestingly, both examples demonstrate the value of separating the insurgents from the populace. While both examples separated the insurgents by building what were effectively concentration camps, this strategy is obviously rather extreme. While this extreme implementation of concentration camps worked, means that are more humane can be found in current operations in Iraq or Afghanistan, where Coalition Forces live and work amongst the population. Regardless of the method, denying the insurgents the ability to manipulate while safeguarding the population is the lesson learned from these examples.

How the Cadets' Responses Relate to the Historical Counterinsurgencies

To demonstrate how the cadets' responses relate to the historical counterinsurgencies, I examined them in the context of the three major lessons learned through the examination of the Philippine-American War and British Malaya. These three lessons include: (1) Conventional forces need to be cognizant of their role and strategy when fighting an insurgency; normal conventional operations are not sufficient when fighting a COIN. (2) Separating the combatants from the larger population is effective, although a substantial effort in itself. (3) Counterinsurgent forces focusing on improving the operational environment for the population while denying the insurgents the ability to manipulate it for their purpose is essential; it facilitates the ability to employ lethal COIN operations.

Conventional Forces Need to be Cognizant of Their Role and Strategy when Fighting an Insurgency; Normal Conventional Operations are not Sufficient when Fighting a COIN

The cadets did recognize the difference between conducting operations in a COIN environment versus a traditional force-on-force conventional battlefield. The PMESII–ASCOPE interface was the first definitive understanding that the COIN environment was different. In a traditional force-on-force environment, the cadets would have produced a product that highlighted where formations of armor and infantry could and could not go on the battlefield. The PMESII–ASCOPE interface highlights the unique operations of an urban battlefield. While a traditional force-on-force battlefield can exist in an urban environment, the usage of PMESII is certainly more applicable to the COIN environment than the traditional force on force. The cadets fully recognized this aspect, as they all made mention that the PMESII–ASCOPE interface provided them a clear understanding of the environment within which the insurgents operate.

The cadets also demonstrated an understanding that conventional military forces will not typically be engaged in significant force-on-force fighting with insurgents. This resonated in the interviews, as the cadets appeared to value the data highlighted through their PMESII–ASCOPE interface, which they routinely referred to when approaching both collection and targeting efforts.

Separating the Combatants from the Larger Population is Effective, Although a Substantial Effort in Itself

A major point highlighted in both historical counterinsurgencies was the separating of the insurgents or combatants from the larger populace. It was important to point out that the way counterinsurgencies were conducted in both the Philippines and Malaya was not likely the way it would ever be conducted again. In both conflicts, the separation of insurgents from the populace was conducted in a rather brutal manner, and while it was ultimately effective, it was completely contrary to the manner

in which most Western militaries conduct themselves today. Furthermore, with the tremendous explosion of media coverage on today's battlefield, the harsh methods of yesterday have little chance of being viewed as an acceptable part of modern strategy.

In my interviews, the cadets did understand that they still needed to find a way to separate or identify the insurgents for successful deliberate operations to be conducted. This is one of the intelligence field's greatest challenges in the modern COIN environment. These types of surgical operations need to have tremendous fidelity and trust in the information that drives subsequent missions. The cadets commented that the CTIAP does indeed provide strategies to assist in separating the insurgents through both the PMESII–ASCOPE interface, and the evaluative method of qualifying reporting can assist in that process.

Counterinsurgent Forces Focusing on Improving the Operational Environment for the Population, while Denying the Insurgents the Ability to Manipulate it for Their Purpose is Essential; it Facilitates the Ability to Employ Lethal COIN Operations

An important axiom in COIN operations worthy of discussing was the battle for the hearts and minds of the population. There were certain to be significant areas of concern that affected the populace, or the insurgent forces would not have been able to find willing recruits. Truly, the counterinsurgent forces were conducting operations in order to combat the insurgency's ability to manipulate the population for their own cause.

The cadets also readily understood this issue, as they conducted their analysis and highlighted the significant issues within the operational environment that had the largest impact on improving the overall welfare of the population. Furthermore, they nominated targets that could deteriorate the insurgent's ability to influence the population.

Summary of How the Cadets' Responses Relate to the Historical Counterinsurgencies

The cadets demonstrated through both their responses in the interviews and the products they produced during the case-based scenario that they understood how the CTIAP affects the insurgent's ability to conduct operations in a COIN environment. They demonstrated a certain understanding that conventional military forces need to focus on improving the operational environment rather than on conducting large force-on-force engagements. In addition, they understood that there really was not a specific conventional operation that, if conducted, would defeat an insurgency. Rather it was a larger effort of removing the insurgents from the population, denying their ability to manipulate the operational environment, and improving the welfare of the populace.

Separating insurgents from the populace has been challenging in today's environment. This calls for clarity of analysis, focused collection, and meaningful targeting that incorporates both lethal and nonlethal capabilities in a united effort to

improve the operational environment. The CTIAP provides ways to identify potential insurgents and criteriologically evaluate reporting in a manner that can not only lead to better targeting, but also deny the insurgent's logistical efforts.

Finally, the most significant aspect of a COIN is removing the causes of the insurgency. Improving the operational environment in a manner that provides for the populace-at-large denies the insurgents the ability to recruit, and ultimately affects the insurgents' motivation and goals. Removing the insurgents' ability to manipulate the population is an important effort that simultaneously improves the operational environment. In these examples, there was a natural inverse relationship between the insurgents' goals and the counterinsurgents' efforts when battling for the hearts and minds of the people.

The Panel of Experts' Responses Relating to How the CTIAP was Effective in Counterinsurgencies as Related to Historical Counterinsurgencies

The panel of experts provided insight as to how the CTIAP would be effective in counterinsurgencies. I will highlight and discuss these insights in relation to the historical counterinsurgencies previously discussed. The three major themes that arose from the panel of experts (all of whom seemed to agree on the issues) were: (1) the PMESII–ASCOPE interface helps ensure intelligence analysts are focused on the operational environment and its impacts on the insurgents, (2) integrated targeting, lethal and nonlethal, ensures that all aspects of the warfighting functions are focused toward improving the operational environment, and (3) the focus of the CTIAP needs to be applied at the right level of command.

The PMESII–ASCOPE Interface Helps Ensure Intelligence Analysts are Focused on the Operational Environment and its Impacts on the Insurgents

All of the members of the panel of experts were in complete agreement that the single largest contribution of the CTIAP was the PMESII–ASCOPE interface. All respondents felt that the interface ensured that the cadets' analysis originated with and maintained an understanding of the operational environment. They further went on to explain that the unit commander should be providing direction that synchronizes the goals of accomplishing the assigned mission, which in turn should allow the intelligence analysts the ability to maintain their focus while analyzing the operational environment. They all felt that the PMESII–ASCOPE interface was the best product that they have seen to date that helped ensure that intelligence effort was focused along these lines.

The one area that the panel of experts expressed concern with was that the intelligence analyst must constantly update their information in the PMESII–ASCOPE interface, as the COIN battlefield is fluid and dynamic. This was an area that many of the panel members felt that intelligence analysts frequently dismiss when they are busy and challenged by the daily rigors of combat.

Integrated Targeting, Lethal and Nonlethal, Ensures all Aspects of the Warfighting Functions are Focused Toward Improving the Operational Environment

A common theme expressed by all the members of the panel of experts was that units frequently fail to integrate lethal and nonlethal targeting into the larger objectives of the unit. One member described his experiences relating to this concern, "…the targeting meeting had all the typical lethal fire members present almost daily, while the nonlethal effort met once a week in the far corners of the headquarters without key members of the staff". All the members described similar situations, and few related any positive experiences when discussing their experiences with integrated lethal and nonlethal efforts. This was an extremely important finding, as one of the key functions of the CTIAP was to enable lethal and nonlethal targeting integration into operations.

The Focus of the CTIAP Needs to be Applied at the Right Level of Command

One of the key aspects of the CTIAP was that lethal and nonlethal targets should be executed as simultaneously as possible; in fact, many lethal targets should have nonlethal operations built into them in order to maximize the impact of the operational environment. During my first interview with one of the panel of experts, the member stated that in his opinion the CTIAP requires a significant force to execute properly. While we discussed what this strength requirement would be, he stated that he felt a battalion could conduct up to three targets given their personnel authorizations, but to fully realize the value of the CTIAP a brigade-sized unit would be more suitable.

I added this as a question for the remaining interviews with the panel of experts, and all agreed that a brigade did seem to be the most appropriate level for full implementation of the CTIAP, but that a battalion or even lower-sized unit still could focus on utilizing the process. Furthermore, one of the members mentioned that it is rare for a battalion to conduct more than three operations in one day anyway, or that a company would conduct more than one a day. Therefore, while the CTIAP seems to fit best with a brigade or larger unit, this did not seem to be an issue that the panel felt would hinder its implementation at any echelon.

Summary of the Panel of Experts' Responses Relating to How the CTIAP is Effective in Counterinsurgencies

The panel of experts' responses relating to how the CTIAP is effective in a COIN environment is reflected in both of the historical COIN examples. The PMESII–ASCOPE interface provides the counterinsurgent forces the ability to separate the insurgents from the population by identifying key nodes that are essential to the insurgents that can be influenced by the counterinsurgents. Another example shown in the historical counterinsurgencies was that the insurgents need the local populace for logistical support, and denying those resources leads to desperation by the insurgents that the counterinsurgent forces can leverage to engage the insurgent.

The integration of lethal and nonlethal targeting was very clearly demonstrated. The building of infrastructure that provides benefits to the local populace was an example of how counterinsurgent forces can gain the trust of the people, which leads to intelligence gathered from grateful citizens that do not want the violence that accompanies insurgencies. Many targets also contain both lethal and nonlethal implications to the operations that are conducted executing the targets. As the British Malayan conflict demonstrated, insurgents can also hold key or high ranking positions in the community. If a targeted insurgent is also a key member of society, then the counterinsurgent forces need to identify someone to fill the vacated licit role of the targeted insurgent.

A key insight provided by the panel of experts was the identification of the right unit echelon at which the CTIAP could be fully integrated. The panel of experts unanimously agreed that the brigade was the lowest level that has the personnel to execute all targets near simultaneously. This is an important aspect, as previously discussed with targeting; there could be multiple actions that would require specialized skills found at the brigade level and above. For instance, a civil affairs section is typically found at the brigade level and above, and when a unit is targeting an insurgent like one that was previously used as an example, the civil affairs section can assist the unit commander in identifying the prospective candidates.

Summary of the Findings

This study has demonstrated that a critical thinking-based framework can improve intelligence analysis in order to provide holistic, comprehensive, and unbiased assessments. Specifically, the CTIAP is the process that was utilized by a group of five cadets from the United States Military Academy at West Point who conducted analysis of a case-based scenario and produced the corresponding products. Semistructured interviews were conducted with the cadets, the products were presented to a panel of experts, and then subsequent semi-structured interviews were conducted with that same panel. What all of the interviews specifically expressed was that the CTIAP did indeed improve intelligence analysis in a holistic, comprehensive, and unbiased manner.

The cadets unanimously agreed that the CTIAP provided an organized and meaningful way to understand the operational environment, conduct predictive analysis, and build specific and integrated lethal and nonlethal targets. The panel of experts reflected the same opinion that the CTIAP was a tremendous improvement over current doctrinal processes, and they routinely mentioned that the products the cadets produced reflected the work of a very seasoned intelligence analyst.

The study of successful historical counterinsurgencies further provided tremendous insight into how the CTIAP works. The historical counterinsurgencies highlighted how the operational environment is a key factor for the counterinsurgent forces to control in order to defeat the insurgents, and separating the insurgents from the populace is essential. The separation of insurgents from the rest of the population

can be achieved through controlling the operational environment, and incorporating a dynamic and comprehensive targeting strategy that attacks both lethally and nonlethally.

The study revealed five major themes from the products the cadets produced and from the individual interviews I conducted with them. These themes are reflected in the interviews with the panel of experts, and are pertinent to the research question: how does a domain-specific application of critical thinking to intelligence analysis provide a holistic, comprehensive, and unbiased assessment that is pertinent to decision makers? The five major themes are: (1) understanding the operational environment, (2) familiarization with the threat groups present in the case-based scenario, (3) details and completeness with the threat courses of action, (4) comprehensive target list, and (5) ease and comfort of using CTIAP.

Three major lessons were identified through the study of the historical counterinsurgencies, which led to success in both conflicts. The strategy was more important than the composition of forces; in fact, both conflicts showcased that conventional military forces could effectively fight an insurgency. The operational environment is the center of gravity for both the insurgents and counterinsurgent forces. Finally, insurgents need to be separated from the population in order to be defeated.

Conclusions

Finding 1 and Conclusion 1: Understanding the Operational Environment

The cadets were able to build specific and detailed analysis of the operational environment through the PMESII–ASCOPE interface. They provided products that demonstrated specificity and understanding of the complex battlefield of the COIN or counterterrorism environment. The panel of experts agreed that the cadets' products were produced to a high level of proficiency and detail, and that it was perhaps the most valuable product produced.

Ernst and Monroe (2006) examined how the environment affects critical thinking skills and dispositions, and found that critical thinking skills can indeed be cultivated by incorporating environmental considerations into instruction. The CTIAP provided a means of incorporating specific environmental considerations, and with a case-based scenario, reinforced those critical thinking skills. The products, as well as the responses in the interviews of both the cadets and panel of experts, confirmed that these critical thinking skills could be honed and applied in a domain-specific manner.

Finding 2 and Conclusion 2: Familiarization with the Threat Groups

The cadets demonstrated the ability to organize and understand the threat groups present in the case-based scenario. The products, as well as the interviews

conducted, demonstrated a thorough understanding of the tactics that the insurgents utilize. The panel of experts also responded very favorably to the cadets' products, and felt that the cadets presented the threat as if they were seasoned analysts.

A study conducted by Sungur and Tekkaya (2006) found that problem-based learning enabled students to perform at high-order thinking levels. This was definitely found to be true in this study, as the cadets were able to correlate the information produced from their PMESII–ASCOPE interface into detailed products that demonstrated how the insurgents conduct operations. This is extremely valuable if an analyst is to effectively utilize data and transform it into actionable intelligence.

Finding 3 and Conclusion 3: Details and Completeness with the Threat Courses of Action

The major findings for the details and completeness with the threat courses of action were being reflected in the products and responses in the interviews with the cadets. The cadets had developed a holistic evaluation of the operational environment and threat models of the insurgents, and produced courses of action they expected the insurgents to conduct. They also established criteria in order to identify objectives and potential areas on which they would need to focus collection. The panel of experts agreed that the cadets had provided considerable detail and useful information on the insurgents' targeting and potential collection efforts to confirm or deny these indicators.

The study conducted by Schumm et al. (2006) that was conducted at the U.S. Army Command and General Staff College found that students benefited from collaborative exercises, Socratic questioning, and domain-specific applications of critical thinking skills. The cadets' products and responses agree with the findings, as in the instruction Socratic questioning was utilized and there was considerable collaboration as vignettes were discussed during the instruction. The CTIAP reaffirmed domain-specific application of critical thinking skills, and by the time the cadets were preparing threat courses of action, they were leveraging information that was built upon layers of data that was produced through the CTIAP process.

Finding 4 and Conclusion 4: Comprehensive Target List

The cadets produced comprehensive targeting lists that prioritized and organized lethal and nonlethal targets. This was extremely important, as the targets developed become operations that have a direct impact on the overall success or failure of the mission. The cadets' targets were specific to whom or what they believed had specific impact on the insurgents' objectives. The panel of experts agreed that the targeting methodology was useful, and the recommended targets were worthwhile. The cadets also recognized the importance of reviewing the successes and/or failures of targeting and those impacts on the mission objectives.

A study conducted by Facione (1998) found that effective critical thinking instruction motivates as well as incorporates critical thinking skills. The targeting

strategy and responses of the cadets demonstrated that they were indeed motivated in learning the CTIAP as well as participating in the case-based scenario. All five cadets were willing participants, and recognized that they were learning advanced skills for their experience level and level of responsibility. The cadets and the panel of experts all recognized that targeting is one of the most important aspects of the CTIAP and operations in general, and they spent considerable time understanding and incorporating the value of both lethal and nonlethal targeting.

Finding 5 and Conclusion 5: Ease and Comfort of using the CTIAP

The cadets reported in the interviews that they felt the CTIAP was relatively easy to learn and utilize during the case-based scenario. The cadets responded that the CTIAP was organized and was very sensible in its approach to conduct intelligence analysis. The cadets were novices when it came to intelligence analysis, and they had very limited training in intelligence as a whole compared with an intelligence analyst that has 10 or more years of experience. Interestingly, the panel of experts made comments that they felt that they were looking at products produced by analysts with years of experience, and in some cases, they liked the cadets' products better than anything seen before.

A study of nursing students and their dispositions toward critical thinking skills conducted by Colucciello (1997) utilized Facione's Delphi Study (1990) to develop a framework for domain-specific application of critical thinking skills. Colucciello identified critical thinking skills, through individual assessments and evaluations could be improved. Colucciello's research, along with Facione's (1998) research on motivation in critical thinking instruction, demonstrated how students not only develop critical thinking skills, but they can be improved, assessed, and provide motivation through domain-specific application of cognitive skills that are built into usable frameworks. The cadets' products and interviews demonstrated significant motivation, comparable to the level of a seasoned analyst.

Finding 6 and Conclusion 6: Strategy Focus on Insurgents (or Terrorists)

Both the Philippine-American War and British Malaya demonstrated how important it was to develop an effective strategy to fight an insurgency. In both historical examples, conventional forces were organized and utilized to fight an insurgency. The strategy was tailored to fight the insurgents in relation to their objectives, and the conventional forces were utilized in a manner consistent with the goals of the strategy. The conventional forces were not necessarily trained and organized to fight an insurgency, but as the right commanders ensured the appropriate strategy was communicated, the counterinsurgent forces became very effective in denying the insurgents the ability to achieve their goals.

In Schadlow's (2010) study of organizing the political terrain, she argues that military forces need to incorporate effective efforts when fighting insurgents. She

further argues that political and economic factors need to be incorporated into the military effort, but recognizes that military forces need to adapt in order to deny insurgents their goals and objectives. Schadlow's arguments were very important and were reflected in both historical examples, and reaffirmed the necessity to develop a sound COIN strategy with the forces available to them.

Finding 7 and Conclusion 7: The Operational Environment is the Center of Gravity

Both historical examples highlight the importance of the operational environment, and confirm that it is the center of gravity to the success of the insurgents. In both examples, the counterinsurgent forces denied the insurgents their ability to target governmental functions (after an effective strategy was in place), and other areas that supported the insurgents' goals. By focusing on the operational environment, the insurgents lost their ability to manipulate the situation that affected both the populace and the government, as counterinsurgent forces denied the insurgents' freedom of movement and ability to continue disrupting necessary goods and services. Members of the panel of experts pointed out that the strategy was immensely important, and even to the detail of indicating at what echelon the CTIAP should be implemented. The consensus was that the CTIAP could be implemented partially at all echelons, but for full implementation, it would need to be at the brigade and higher levels.

Henry Nuzum (2010) argued this same point when he examined the Vietnam War. He found that intelligence analysts need to understand and leverage the operational environment in their analysis, and then the goals of the insurgents become clearer. The historical examples agree with Nuzum's argument, as the operational environment is indeed the center of gravity, and the analysis should focus on ways to deny or influence the insurgents' objectives.

Finding 8 and Conclusion 8: Separate the Insurgents from the Populace

Perhaps the most important finding in both historical counterinsurgencies was the separation of insurgents from the population in contributing to the successful war efforts. In both examples, after the insurgents were physically separated from the populace the counterinsurgent forces were able to effectively find and ultimately defeat them. It was also important to note that the manner in which the insurgents were separated would not necessarily be readily embraced today, but the lesson remains: the insurgents need to be separated from the population.

Both Schadlow's (2010) and Nuzum's (2010) research argue the importance of leveraging factors of the operational environment to combat an insurgency. As previously noted, their arguments were sound, but they can also provide an intelligence analyst the ability to find indicators of insurgent activity. The CTIAP specifically focuses on establishing criteria in reporting in order to assess the quality of information based on sources of data. This may prove effective for an intelligence analyst in recognizing the insurgents' objectives and focusing collection on those indicators. The separation of

insurgents from the populace can be found in aspects of the operational environment that need attention and constant deliberation in order to build and recognize those indicators.

The cadets were able to identify these lessons in their conduct of the analysis produced in the case-based scenario. Their focus on the operational environment demonstrated that they recognized that influencing the PMESII and ASCOPE factors in the counterinsurgent forces' favor provided those forces a marked advantage. Further, the cadets built their objectives and enemy templates through areas within the operational environment that the insurgents would attempt to control, influence, or manipulate based on their modus operandi.

The cadets were also able to focus on arguably the most important aspect learned from the study of historical counterinsurgencies: separating the insurgents from the populace. The assessments produced provided various techniques that could either physically separate the insurgents from the populace, or potentially highlight indicators that could be collected in order to separate the insurgents. Through the separation of the insurgents, the intelligence analyst gains a position of advantage, as precision targeting is naturally more effective as it maintains a separation from the populace at large. Finally, the separation of insurgents from the populace allows a greater ability for the counterinsurgent force to apply both lethal and nonlethal targeting operations more effectively, and allows a more coherent way to assess achievement.

The CTIAP, an analytical framework built from the six critical thinking cognitive skills identified through Dr. Facione's Dephi Study (2010), provided the cadets the ability to incorporate critical thinking skills into a holistic, comprehensive, and unbiased assessment that could be useful to decision makers. The CTIAP effectively incorporated the operational environment into a single product that can be used to focus counterinsurgent strategies that have demonstrated success in historical studies. A panel of experts received the products of the analysts with great praise, and acknowledged that the CTIAP was a significant improvement in the conduct of intelligence analysis. Finally, all of these aspects demonstrate that effective COIN is fought over the operational environment where the insurgents and their goals can be combated both lethally and nonlethally.

Recommendations

There are many recommendations that I could focus on in order to continue both improving the CTIAP or encouraging effective ways to build critical thinking frameworks that may benefit intelligence analysis. There are two areas that I recognized over the course of my study that probably need the most attention: the proper echelon where the CTIAP could be fully integrated into real-world application and assessment of the CTIAP, and conventional warfare aspects that could be improved through the CTIAP or a similar model.

One issue that arose during my interviews with the panel of experts was the echelon in which the CTIAP should be implemented for full effect. The echelon issue

arose during my very first interview with a member of the panel of experts, and was addressed during my second interview. I quickly added it as a discussion in the last three interviews. All five members of the panel felt that this issue needed further exploration. In addition, all five also felt that they believed the brigade level would probably be the lowest level for full implementation. They did believe that the battalion level could implement the CTIAP, but for full implementation, where all targets could effectively be influenced by all aspects of military capabilities (lethal and nonlethal), brigade was the lowest level that could accomplish that feat.

The second area that needs additional research is the CTIAP's usefulness and potential when applying the process to a conventional force-on-force scenario. The CTIAP was specifically built for application in either a COIN or a counterterrorism environment. The specific build of the PMESII–ASCOPE interface to define the operational environment would not apply to a conventional scenario. There may be methodologies for the conventional environment, but that would indeed require additional research, testing, and evaluation. I believe it would be important to conduct an evaluation of the CTIAP or another critical thinking-based process that could provide holistic, comprehensive, and unbiased assessments in a conventional environment.

I speculate that one area needing special attention in the conventional environment may be the aspect of time. In a conventional environment, events on the battlefield may be fluid and rapid, with little time to second-guess or spend considerable amount of time trying to determine what a specific indicator might mean. Further, there may also be little time to evaluate conducting one operation over another. Regardless, incorporating critical thinking skills has shown to be effective in the CTIAP. For military intelligence instructors, a framework incorporating critical thinking skills in a domain-specific manner applied to the conventional environment may prove to be a worthwhile and valuable way to train intelligence analysts. This additional research would be important, and may result in saving lives.

An additional consideration needs mention, and that is the study of historical counterinsurgencies. This study examined two successful counterinsurgencies in order to understand factors that could lead to understanding the value of the CTIAP. Additional studies should be conducted that examine unsuccessful counterinsurgencies in order to identify the lessons that could be incorporated for future counterinsurgencies.

If future intelligence analysts utilize the CTIAP, they should consider a few issues prior to initiating their analysis. First, the CTIAP was built for COIN or counterterrorism operations. If an intelligence analyst finds himself or herself in a conventional war or peacekeeping operation, that analyst should understand that the CTIAP might not provide the level of detail as it does for a COIN or counterterrorism environment. Another issue for an intelligence analyst to consider is that the CTIAP is flexible. The process may need to be modified for a specific mission, and the analyst needs to understand the value of defining the operational environment prior to building insurgent or terrorist templates. The CTIAP may prove to be a worthy process to focus operations, which may result in increased effectiveness.

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Anthropological Theory and Intelligence

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This article is a review of anthropological theory that may be of use in intelligence analysis. After addressing the perspectives of both anthropologists and intelligence professionals, it surveys a range of humanistic, scientific and hybrid paradigms, and concludes with a sample of applications of anthropological theory to topics of intelligence and security interest. While noting the limitations of social science and the fact that many theoretical paradigms have potential utility in the intelligence arena, the author proposes that scientifically-minded theories offer, by and large, better prospects for aiding analysts than much recent theory favoring interpretive, postmodern, and critical perspectives.

Keywords: *anthropology, intelligence, analysis, culture, theory*

Over the past decade, there has been a surge in interest among intelligence and security professionals in using anthropological expertise to achieve military and political objectives. "Cultural competence" deriving from ethnographic research has been particularly prized as a means of gaining the trust of indigenes, who in turn may be induced to provide intelligence on enemy plans, movements, and dispositions of forces, or even recruited as auxiliary fighters themselves. Cultural competence is equally essential in the context of nation-building or humanitarian efforts. Such competence is created by the acquisition of social facts, ranging from how to conduct polite conversation to detailed knowledge of political hierarchies. Much has been written on why and how military intelligence operators should develop cultural competence, while comparatively little has been done to address the nature of anthropological theory and its role in intelligence work. And yet, only theory provides the tools needed to explain why social groups behave as they do. For instance, it might be helpful to know under what conditions small-scale armed conflict in a society is likely to turn into civil war and under what conditions it simply functions as a "pressure valve" to maintain social order. Theory can help provide that understanding.

This article will begin by presenting perspectives from the worlds of academic anthropology and intelligence. It then moves into a discussion of culture followed by a review of various anthropological perspectives of potential relevance to intelligence and a sample of cases in which theory has been applied to problems of intelligence interest. It wraps up with a few thoughts on the interaction of anthropology and the work of intelligence. Throughout, I draw on my experience from both worlds.

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The View from Anthropology

In reviewing the body of anthropological theory as it applies to intelligence, several points must be made. First, despite the increasing level of mathematical and methodological sophistication in the work of scientifically minded anthropologists, the present era is not a particularly rich one for scientific theorizing in cultural anthropology, mostly because of the pervasive and long-standing influence of postmodernism. For the postmodern anthropologist, science is one way of knowing among many, culturally conditioned and fraught with all sorts of political biases and constraints. A scientific report becomes a "text," a "fiction" to be analyzed, rather than a source of objective knowledge about the world. So while some see this "post-paradigmatic" era as potentially a rich one for theorizing (Knauft 2006), it is not a rich one for science.

At the same time, there is broad agreement in the discipline that anthropologists should be advocates for the people they study. Such a stance automatically limits any scientific investigation, but has a particularly strong effect on research intended to inform policymakers. This ethical point has been thrown into high relief in the wake of the military deployment of anthropologists to Afghanistan and Iraq (Kelly et al. 2010; Price 2010; Gonzalez 2010). Such advocacy, linked as it is to a moral agenda, also has a vitiating effect on scientific inquiry. As cognitive anthropologist D'Andrade notes:

> A large and growing number of American anthropologists appear to believe that the moral agenda of anthropology should take priority over the scientific agenda. An even larger number appear to believe that the scientific agenda of anthropology is in deservedly bad repute because of its association with oppression. "Science" has become a bad word in anthropology. Can we at least hold onto "objectivity?" (D'Andrade 1995, 408).

Moreover, the 2012 Code of Ethics adopted by the American Anthropological Association, the largest professional organization for anthropologists in the United States, contains language that, if followed, would significantly restrict anthropological work undertaken in the service of intelligence collection. Under the principle of "Do No Harm," the Code states:

> A primary ethical obligation shared by anthropologists is to do no harm. It is imperative that, before any anthropological work be undertaken…each researcher think through the possible ways that the research might cause harm. Among the most serious harms that anthropologists should seek to avoid are harm to dignity, and to bodily and material well-being, especially when research is conducted among vulnerable populations. Anthropologists should not only avoid causing direct and immediate harm, but also should weigh carefully the potential consequences and inadvertent impacts of their work. When it conflicts with other responsibilities, this primary obligation

> can supersede the goal of seeking new knowledge and can lead to decisions to not undertake or to discontinue a project ("Principles of Professional Responsibility: Do No Harm" 2012).

Even more targeted toward intelligence work is the Code's stance on transparency:

> Researchers who mislead participants about the nature of the research and/or its sponsors; who omit significant information that might bear on a participant's decision to engage in the research; or who otherwise engage in clandestine or secretive research that manipulates or deceives research participants about the sponsorship, purpose, goals or implications of the research, do not satisfy ethical requirements for openness, honesty, transparency and fully informed consent. Compartmented research by design will not allow the anthropologist to know the full scope or purpose of a project; it is therefore ethically problematic, since by definition the anthropologist cannot communicate transparently with participants, nor ensure fully informed consent.
>
> Anthropologists have an ethical obligation to consider the potential impact of both their research and the communication or dissemination of the results of their research ("Principles of Professional Responsibility: Be Open and Honest Regarding Your Work" 2012).

Such epistemological and ethical constraints make anthropology a difficult resource for intelligence professionals to use. This was not so in the past, when anthropologists were more likely to consider themselves to be scientists and conducted their research accordingly. Lacking extensive experience with counterinsurgency and its effects, they were also less likely to find ethical problems in rendering assistance to the military and security apparatus. Since the objective of this article is to educate intelligence professionals on the uses of anthropological theory, the question of ethics, centering as it does on the welfare of the subjects of ethnographic research, is rendered moot. However, the epistemological piece must be addressed.

The fact is that a good deal of the theory discussed here cannot be considered cutting edge by the standards of academic anthropology. Much of the focus will be on theory that originated a century ago, but is both amenable to scientific testing and applicable to intelligence work. Nonscientific or antiscientific postmodern, interpretive, and "critical" paradigms, which comprise much recent anthropological theory, are given a much briefer treatment. While the influence of such "humanistic" theories on the discipline in the past 40 years has been profound, there have been influential anthropologists, such as Gellner (1992), D'Andrade (1995), Kuznar (2008), and Lett (1997) who have argued powerfully against postmodernism and the primacy of advocacy and for a rationalism that permits science to proceed.

The View from the Intelligence Community

The attitudes, expectations, and needs of intelligence professionals must be considered. A quick review of the literature suggests that military intelligence units and military schools and training centers have shown more overt interest in anthropological insight than national agencies, although the CIA has sponsored anthropological work on intelligence analysis (Johnston 2005). However, as noted above, the military services are chiefly concerned with acquiring valuable "cultural intelligence" and fostering "cross-cultural competence" ("3C") that will transform military personnel into culturally savvy sensors and ambassadors, able to function effectively in any cultural milieu. Mahir Ibrahimov, Cultural and Foreign Language Advisor at Fort Sill, defines 3C as "a set of knowledge, skills and attributes that enables Soldiers to adapt effectively in any environment" (Ibrahimov 2011, 20). An Army instructor and former military intelligence member views it more simply as "essentially...teaching the now-forgotten *people skills*. These important skills are communication, rapport building, and negotiations, to name a few" (Aube 2011, 15, italics here). While anthropologists have been involved in 3C training, its origins lie not in anthropology, but in the cross-cultural communication studies with its emphasis on business and management (Willis-Grider 2011, 5). From the start, 3C was undertaken with pragmatic results in mind, whether garnering more international business or helping U.S. forces win hearts and minds.

The same instructor, while favoring "a marriage of theory and practice" (Aube 2011, 16), warns that "the purpose of 3C education and training … is to enhance the Soldier's ability to effectively perform his/her job and return home safely. Bogged down with theory, this can be almost impossible." Some senior officers have echoed this concern about the relevance of theory to the warfighter. While the phrase "bogged down" seems uncharitable, it is essentially correct that theory has little to do with collecting actionable intelligence or planning military operations. Basic theoretical concepts such as "culture," "kinship," "ritual," and so forth may be useful, but only insofar as they guide practice. However, a better knowledge of anthropological theory on the part of analysts would improve many analytic products, especially those aimed at providing cultural intelligence. An experienced intelligence officer who wished to remain anonymous agreed. Citing varying corporate cultures in the Intelligence Community (IC), he believed that the agencies most receptive to anthropological theory would be the CIA and State Department.

While cultural differences factored into his opinion—these agencies being the least military in the IC, and also the only organizations that mention anthropology as a desirable major for prospective officers—there is also a difference in terms of product. Unlike discipline-specific agencies such as NSA and NGA, these agencies produce and disseminate finished intelligence product deriving from multiple sources. While analytical product deriving solely from SIGINT, GEOINT, HUMINT, or other disciplines may require every bit as much analytical acumen as finished intelligence, most product based on a single collection source is briefer and more time sensitive than a finished report. For instance, it does not require any theoretical background at all to

report that at 1020Z on September 26, 2014 two probable Tu-95 (BEAR) bombers were on the ground at Eastern Zenda Air Base. Anthropological theory is most useful when the analyst has the need to interpret culturally relevant information and the leisure to do so. Such is most likely to be the case with longer and more complex reports, which tend to be all-source products.

Anthropology and Culture

One of the unique strengths of anthropology is its integrative perspective, combining insights from a range of scientific and humanistic fields. Franz Boas, the trained physicist who founded modern American anthropology, conceived of anthropology as comprising "four fields:" biological (or physical) anthropology, archaeology, sociocultural (or cultural or social) anthropology, and linguistics. This typology still holds today. These four fields cannot be neatly separated from each other. While there are graduate programs that focus on only one field (most often sociocultural anthropology), most anthropologists are exposed to all four fields in the course of their training, in the belief that the best anthropological explanations incorporate all aspects of what it means to be human.

Of these four fields, the one that is of the most obvious utility in intelligence work is sociocultural anthropology, and therefore that shall be the focus of this article. However, the great majority of sociocultural anthropologists recognize that biology, psychology, history, and language must be considered in an analysis of society and culture.

Before surveying various theoretical approaches, it is appropriate to address the fundamental anthropological concept known as "culture." Many people, including a number of intelligence professionals and even some anthropologists, speak of culture as if it were something with an objective reality, existing "out there," to be leveraged as a resource in military or intelligence operations and analysis. In much of the nineteenth and early twentieth centuries American anthropology and European sociology, culture was spoken of as synonymous with society, a practice noted (and argued against) by Kroeber and Parsons (1958). The fact is culture is a theoretical construct created by anthropologists, other social scientists, and philosophers as an organizing framework for understanding beliefs and behavior shared by a social group. Culture, as most cultural anthropologists construe it, cannot be observed, only inferred.

Nor is there a universally agreed-upon definition of culture. There are popular definitions, to be sure, such as Tylor's frequently cited "that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society" (Tylor 1871), but popularity may be based on factors other than evidential support or professional acceptance. These include tradition, acceptance of personal authority, ease of understanding, and widespread dissemination through textbook publishers. Definitions in the natural science are much more easily contained, since they may be subject to experimental testing. For instance, we no longer define biological evolution as the result of passing on acquired characteristics or the sun as the luminous body that revolves around the

Earth. But in sociocultural anthropology, theoretical tools, including definitions, are rarely discarded. Thus, we have nineteenth century definitions of culture, such as Tylor's, continuing to be used.

However, two key elements are common to all anthropological understandings of culture: it is learned and shared. A person is not born with culture—it must be taught by parents, siblings, extended family, friends, and social institutions. Nor can a person be said to have a private culture. Of course, there are idiosyncratic beliefs and behaviors, but these cannot be said to be that person's culture, though they may be shaped by cultural influences. Most would also agree that culture is internalized. That is, cultural beliefs and behaviors do not derive from conscious compliance with a code, but from acceptance of a worldview. Sociologist Peter Berger referred to culture as a "taken-for-granted reality" (1967), and it can constrain personal action as much as gravity.

One area of potential confusion with respect to intelligence professionals is the use of terms such as "cultural" and "cross-cultural," which are often used interchangeably. In fact, the two terms are in opposition. A cultural trait is limited to a particular social group, not distributed throughout humankind, and a cultural analysis is limited to that group. To the extent that a belief or behavior is cultural, it is not universal. By contrast, cross-cultural analysis is concerned with cultural universals, such as marriage or warfare, which exist in all cultures, though in diverse forms. A cross-cultural analysis is comparative, not contextual. Borrowing from linguistics, anthropologist Kenneth Pike coined the terms "etic" (from phonetic, concerned with units of sound) and "emic" (from phonemic, concerned with the smallest units of meaning) to refer to cross-cultural and cultural analysis, respectively. An emic analysis seeks to understand meaning from an insider perspective, whereas an etic analysis seeks to make valid generalizations using data derived from a number of cultures. Most view an etic analysis as being more scientific than an emic one, but also more removed from the people being studied.

Finally, analyses of culture are typically divided into those that are synchronic (at the same time, with a focus on stasis and maintenance) and diachronic (with a focus on change through time). Traditionally, most ethnographies were synchronic, meant to portray a society at a single point in time, and written in the "ethnographic present." For instance, some may say in describing Yanomami society, "The Yanomami are small-scale horticulturists who use traditional hand tools and live in scattered settlements isolated from the rest of Brazilian society," when in fact many young Yanomami have been to school, learned Portuguese, and have a grasp of twenty-first century technology (Petronzio 2014). However, since the 1960s there has been increasing focus on culture change, rather than static description.

A Review of Theoretical Paradigms of Potential Relevance to Intelligence Work

Historically, a number of key paradigms have shaped theorizing about culture, and there have been a number of typological systems proposed for grouping these paradigms. Here, we will group them into three broad categories:

humanistic and scientific, roughly corresponding to emic and etic modes of analysis, and a hybrid category occupied by paradigms such as British symbolic anthropology, French structuralism, and Bourdieu's "theory of practice." These three paradigmatic categories are not of equal value for the intelligence analyst. It is argued here that the various scientific and hybrid paradigms represent the way forward in the application of anthropological theory to intelligence work. As a result, more attention will be paid to this category. However, because of the humanistic perspective's powerful influence on the discipline, some discussion seemed to be in order.

A fourth category, "critical theory," might have been included, but this approach is not so much a body of theory as a program for the deployment of theory. Originating in the late 1930s with Marxists disenchanted with the logical positivism of scientific approaches and the rigidity of orthodox Marxist doctrine, critical theory (as the name suggests) aims to critique social and cultural forms rather than simply understand them. It includes engaged theory, feminist theory, critical race theory, LGBT theory, and other categories of scholarship centering on groups seen as undervalued in academic discourse. Critical theory pursues advocacy and denies the possibility of unbiased understanding. While many anthropologists today favor such a critical approach, it is difficult to see how it can be of use to the intelligence analyst seeking to understand the world as it is, not as it should be.

Some important theoretical paradigms with powerful implications for intelligence work are excluded here, because they are not specific to anthropology and belong to other social science fields. These include various psychological paradigms, especially those belonging to social psychology; the sociology of Talcott Parsons (whose wide-ranging theoretical work, although touching on anthropological issues, never became an important influence in anthropology); event history analysis; and the various economic, political science, and international relations paradigms.

One major omission which some may find puzzling is culture-and-personality, pioneered by Ruth Benedict, Margaret Mead, Abram Kardiner, Clyde Kluckhohn, and other eminent anthropologists, and actually used in the service of the United States during World War II. I wrestled with including this paradigm for some time. However, the reasons for its omission are twofold. First, this paradigm was dismissed for a long time as cultural determinism and stereotyping, treating cultures as if they could be psychoanalyzed as people and treating people as if their personalities were largely a reflection of those cultures, and that each culture produced a particular "modal personality." Owing to the perception that this approach could lead to inaccurate stereotyping and even racial prejudice, it was largely discarded in the postwar period. Related to this concern is the U.S. military's post-9/11 use—some would say misuse—of *The Arab Mind*, by anthropologist Raphael Patai, a 1973 text that worked within this paradigm, and that has been implicated in the abuse of prisoners at Abu Ghraib. This text contains sweeping generalizations about an eclectic collection of Middle Eastern and North African peoples going under the collective label "Arab," and yet, it was used in the cultural training of U.S. military personnel within the last decade. The potential for such "national character studies" to become unscientific compendia of prejudices that can lead to bad policy and inaccurate intelligence is too great to recommend this

approach. That being said, there is evidence that culture does indeed impact personality, but it derives more from current research in cultural psychology than the culture-and-personality school of anthropology. There are a few serious anthropologists, notably Richard Shweder, producing thought-provoking work along these lines, though they are as likely (or more likely) to publish their work in psychology journals than in anthropological ones. Therefore, while it is important to mention this potentially valuable paradigm here, it is left to the psychologists to explore it further.

It should also be noted that many anthropologists believe that the very notion of theoretical paradigms is not relevant, and that anthropologists today pick and choose among them in carrying out their research in a post-paradigmatic era (Knauft 2006). This is probably true. However, the purpose of this article is to elucidate various theoretical perspectives that might be helpful to intelligence professionals, not the way in which anthropologists use them.

This brings up a final point: audience. This article is written for intelligence professionals and others who may have some knowledge of anthropology, not professional anthropologists. As noted earlier, the selection of theoretical paradigms is not representative of anthropology today, and the description of each theoretical approach is of necessity brief. Some might question the adequacy of such a cursory treatment. However, this is a problem for any anthropologist seeking to go beyond his narrow specialty and map the broad contours of anthropological theory. Those favoring an advocacy or a postmodern approach might point out that intelligence personnel need to hear the criticisms of their practices. While intelligence personnel would certainly welcome criticism that promises to improve intelligence practices, much anthropological criticism of intelligence practices seems aimed at questioning the ethics of intelligence practices or even the very existence of a secret intelligence establishment, not making those practices more effective.

Humanistic Paradigms

Three of the most influential humanistic theoretical paradigms are historical particularism, interpretivism, and postmodernism. The first two of these were developed in the United States, the last in France. In the past 40 years, European, especially French, thinkers from the disciplines of philosophy, semiotics, sociology, and the relatively new field of "cultural studies" have dominated theory in humanistic anthropology. Humanistic, as opposed to scientific, paradigms have the following characteristics in common:

- an emic perspective, with the objective being to see the world as those one is studying see it,
- a focus on meaning,
- a relativistic stance that is skeptical of generalizations,
- an emphasis on qualitative methods and analysis,
- a rejection of reductionism and a skepticism concerning science.

Relativism has a long history in American anthropology. It was advanced by Franz Boas, widely acknowledged as the Father of American Academic Anthropology, as a corrective to the overly broad theories of cultural evolution prevalent at the turn of the twentieth century. Boas's *historical particularism* held that there were no universal evolutionary stages, and that each culture developed according to its own circumstances. Anthropologists must neither suggest that a primitive culture (to use the obsolete term common in Boas's time) represents an earlier stage of one's own, nor that some cultures are more "advanced" than others. Rather, cultures were simply to be seen as different. To create an accurate picture of any given culture, therefore required a suspension of one's own cultural prejudices—ethnocentrism—and the ability to evaluate a culture by its own values. This stance is referred to as "cultural relativism." It does not mean that all cultures are equal or that researchers must shed their own values. But it does mean that our own moral or ethical standards must be set aside if we want to understand the culture we are studying. The task of the anthropologist is therefore primarily descriptive.

Particularism by its rejection of generalizations yields no explanation that could be testable cross-culturally. It arose as a reaction against bad evolutionary (and racist) science, but did not offer any scientific framework to replace it. That said, cultural relativism as a methodological pose offers a corrective against the natural ethnocentrism all of us feel, especially when confronted with a culture different from our own. For an operations officer, possessing a cultural relativist point of view is essential. Analysts, too, must be able to set cultural prejudices aside in order to provide a faithful analysis of cultural intelligence and to understand the dynamics behind decision-making in target countries.

Interpretivism lies in this Boasian descriptive tradition, with its emphasis on context rather than comparison. It may even be considered a refinement of particularism. The first task of an ethnographer as Geertz saw it was to provide "thick description," or a high degree of context for any behaviors he observed. Interpretive theory is more akin to literary than scientific theory, in that it views culture as a text that must be understood and analyzed to discover meaning. The objective is to understand and experience a given culture as a native would, and find meanings embedded in the text of life histories and shared experiences. Much depends on the skill of the ethnographer in conveying his or her experiences to readers. Geertz himself was an excellent writer, and so his descriptions of Balinese ritual are particularly vivid.

Most would consider interpretivism to be nonscientific. However, Geertz believed that what he was doing was a form of science: "Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretative one in search of meaning" (Geertz 1973). In this interpretive science, a great deal depends on the ability of the researcher to discern meaning by a careful reading of cultural symbols—again, like literary criticism. The researcher becomes the instrument through which data is acquired.

In many ways, interpretivism also fits the situation of the intelligence analyst. Most intelligence professionals are probably accustomed to this sort of analysis and

reporting of data. That is, they use their experience and "cultural" (target) knowledge to make sense of raw intelligence and to guide future collection. Faced with a need to make sense of what is happening, the analyst sifts through large quantities of information to produce a thick description that will accurately portray meaning and intent. If the analyst is talented and has spent many years at his target, he may gradually acquire an emic perspective that will allow him to read what he sees correctly, with the eyes of the native. A knowledge of the relevant languages will facilitate this process, especially since the IC nearly always has target languages taught by native speakers. Indeed, interpretation is the "bottom line" for an analyst, the "so what" that a policymaker is seeking. An interpretive reading, like the product of any emic analysis, is validated not through experiment or correlation, but by native informants. As one TRADOC instructor and curriculum developer notes, because of this, an emic analysis of cultural intelligence can be hard to validate (Morrison 2006, 54). However, the reality is that some intelligence analysts are themselves natives of the target culture, placing them in a much better position to evaluate cultural information, reach valid conclusions, and assess the validity of fellow nonnative analysts.

Why, then, isn't interpretivism the way forward? It is not that the IC is devoid of competent interpreters of cultural intelligence. Rather, interpretive theory is the issue. This sort of theory is not a coherent and testable explanatory system, but an ad-hoc explication of meaning. Interpretive approaches are not scientific because they depend on subjective analyses and "thick description." An interpretive analyst, whether an anthropologist or an intelligence officer, is a sort of subject matter expert. His or her insights, while perhaps quite accurate, are not as readily transferable as a knowledge of, say, Newton's theory of gravitation. Once taught the theory and its equations, anyone can recognize gravity and measure it. One does not need to possess Newton's particular talents and insights. But the respected interpreter of cultural intelligence—the old hand who has worked on a target for 20 years and speaks the language fluently—is much harder to replace. The master's apprentice may understand the master's craft and techniques, but the products he or she produces will likely not be up to the master's standards. It takes time, as well as talent, to grow an effective interpretive analyst.

Postmodernism is a radical form of relativism and interpretivism that originated in France and the United States in the 1970s. Although it has obvious connections to Geertz's work, particularly the notion of culture-as-text, French intellectuals such as Roland Barthes, Jacques Derrida, and especially Michel Foucault have been particularly influential in its development as a philosophical movement and its importation into anthropology. Paul Rabinow, an American anthropologist who studied in France and worked with Foucault, has also played a major role in editing and expanding on Foucault's thought. As particularism began as a reaction against evolutionism, postmodernism began as a reaction against structuralism (see below) and neo-Marxism. Postmodernism's central insight is that all knowledge and all conceptions of truth are constructed in order to legitimate the existing system of power relations.

Postmodernism goes beyond Marx's well-known notion that religion is the "opium of the people," serving to keep the masses from throwing off their chains in world revolution. Rather, from the postmodernist view, all knowledge, including

knowledge claimed by religion, science, history, ethics, morality, and so forth is socially constructed. Therefore, what we know about society also must be part of a false narrative, and so must be deconstructed. That process requires the Western researcher to engage in reflexive ethnography before attempting to understand "the other," and critique the cultural hegemony of Western ideas such as truth, love, freedom, progress, and science. Since science itself is viewed as a product of culture and power relations, postmodernism is not only nonscientific, but antiscientific. At the moment, it is also quite influential in the discipline, though it has also provoked a reaction from those critics who favor a scientific approach (see D'Andrade 1995; Gellner 1992; Kuznar 2008; Lett 1997). Some of its critics also suggest its relativism is false and actually masks ethnocentrism, judging other beliefs and practices in terms of its own Western-derived philosophy. Other than critical theory, with which it is often combined, the postmodernist paradigm is probably the least useful to the intelligence professional. This is despite the fact that there are a number of postmodern analyses of intelligence and security services and arrangements in terms of surveillance, crime, and punishment.

Scientific Paradigms

Up to the 1950s, few would have denied that anthropology was a science. Even the Boasians considered what they were doing to be a form of science, laying the empirical and philosophical groundwork needed to dismiss the bad science of the evolutionists. But since that time the view of anthropology as one of the humanities has been in the ascendancy. The best that scientifically oriented anthropologists can hope for is the compromise embodied in the well-worn description of the discipline as "the most humanistic of the sciences and the most scientific of the humanities."

The term "science" has a variety of meanings in our culture. Some would restrict the term to the natural sciences, others would include some or all of the social or behavioral sciences. In the Middle Ages, science referred simply to a body of authoritative knowledge, so that mathematics, theology, and moral philosophy were considered sciences. "Science" in this article is to refer to any discipline that seeks to explain observed phenomena in terms of testable theories. A scientific theory, therefore, is one that is, at least potentially, testable. Much leeway is granted by the term "potentially," but it is necessary leeway. Anthropology is not a fully developed science, with well-established protocols and usages based on experiment. As seen concerning the concept of culture, there is not even a universally agreed-upon technical vocabulary. What distinguishes these paradigms from the humanistic ones is their framing as scientific concepts, and the commitment of their theorists to ever-increasing scientific rigor. Anthropology will almost certainly never reach the rigor of physics and chemistry, and probably not even biology, the natural science with which it has the greatest affinity. But these paradigms offer the greatest prospect of theoretical advance.

One cautionary note: that a paradigm or theory may be labeled scientific does not necessarily mean that its conclusions will always be truer or yield better results

than nonscientific theory. One of the reasons for the humanistic turn in anthropology after the 1950s was a concern that difficulties in assessing the validity of theoretical constructs or the reliability of data collection and analysis were insurmountable, and that anthropologists may be reflecting their own cultural biases and categories, rather than native ones. Relativism itself was a reaction to the false and racist generalizations of nineteenth-century anthropology inspired by Darwin's theory of evolution. When faced with bad science or pseudoscience, a careful and empathetic interpretation based on thick description may indeed be superior to false conclusions delivered by scientific methods.

The scientific paradigms considered here are:

- an evolutionist paradigm that views society and culture as changing through interaction with the natural and social environment;
- a structural-functionalist paradigm that views society as an organism maintained by social structures performing social functions—influenced by Durkheim;
- a conflict paradigm that emphasizes the role of social structure and culture in maintaining power relations and serving the interests of elites—influenced by Marx;
- a social-networking paradigm that locates social structure in social interactions, leading to the formation of networks that can be analyzed mathematically;
- a systems approach, related to networking and with affinities to structural-functionalism, that analyzes culture as an adaptive system comprised of regulatory mechanisms;
- a functionalist paradigm that views culture as a means of meeting emotional and physiological needs;
- a cognitive-linguistic paradigm that looks for structure in the formal rules of cultural grammar and provides a means of linking culture and cognition.

These paradigms can be further classified as sociological, psychological, and evolutionist/cultural ecological. Structuralism, symbolic anthropology, social constructionism, and Weberian social science might be considered scientific as well, but because of their connections with the "webs of significance" approach of interpretivism, these have been listed under the "Hybrid" section. Systems theory, too, has affinities with interpretivism and even postmodernism, but because of its relationship with mathematics, technology, and biology it is classified as a scientific paradigm. Owing to the plethora of such paradigms, each will be discussed in broad outline below, with more details provided in the following section.

Evolutionist paradigms: The earliest attempts at scientific explanation in anthropology focused on cultural change and were energized by Darwin's theory of biological evolution. The initial focus was on stage theories, inspired by the progression of various geological eras. In his book *Ancient Society*, American anthropologist Lewis

Henry Morgan theorized that there were three universal stages through which all societies progress—savagery, barbarism, and civilization—each characterized by differences in food production, technology, and family structures. Besides Morgan, there were other evolutionist theories, such as Edward Tylor's typology of religions, with animism (the belief that all things have a soul) leading to polytheism, which gave way to monotheism. While it does not appear that the originators of these schemes consciously sought to legitimate Western colonialism, such stage theories tended to do so, since Western culture invariably was located in the highest, most progressive stage.

Karl Marx and Friedrich Engels were influenced by Morgan's theory, which informed their materialist conception of history. Like Morgan, Marx and Engels believed in progressive evolution founded on technological innovation. In Marx's scheme, ancient societies run on slavery and ruled by absolute monarchs backed by religion evolved into feudal ones dominated by lords who held tenure over land worked by serfs that, in turn, evolved into modern, bourgeois society run by capitalists employing workers. Each stage had its own mode of production and its own dynamic of exploitation. The final stage, communism, which eliminated exploitation, would be brought about by a workers revolution and a temporary dictatorship of the working class. Morgan's, Tylor's, and Marx's evolutionary schemes are called "unilinear evolution" because they posit one universal line of change through time. They tend to be progressive in nature. The latest form of unilinear evolution was that of American neo-Marxist anthropologist Leslie White, who proposed to measure a society's progress in terms of its energy capture. His theory is known as the "thermodynamic theory of cultural evolution."

Early unilinear evolutionism frequently went hand in hand with ethnocentrism and racism, leading to its rejection by the relativists who considered it unscientific, and for a time evolutionism all but disappeared from anthropology departments in the United States. Later theories, such as White's, were also rejected as too simplistic and not accounting for cultural variation. However, it is undeniable that societies change through time. As a result, new multilinear theories of cultural evolution appeared. One of these, *cultural ecology*, was pioneered by Julian Steward, a cultural anthropologist with ties to archaeology. Cultural ecology focuses on cultural adaptation to particular physical and biological environments. The physical environment does not determine culture change, but it does significantly affect it, just as natural selection affects the form of specific biological adaptations. Later forms of cultural ecology included cultural environments, as well as physical ones, as shaping cultural evolution. Systems theory (see below) began to be used to create cultural ecological explanations. The focus became the interaction of physical, biological, and cultural elements to create nondeterministic explanations in place of straight line cause and effect.

Evolutionism, because of its emphasis on culture change, is probably not of much use to intelligence analysts. This is particularly true of unilinear evolutionary theory. However, understanding how cultures adapt to their environments as both coevolve can potentially help assess pressures on societies that may lead to upheavals, whether in the form of economic dislocations, disease, famine, or warfare, or simply adaptive innovations—political, social, or technological—that help societies persist.

In addition, at least one political scientist has borrowed the evolutionary paradigm (in the form of sociobiology) to help explain war and conflict, and attempt to strengthen support for the "realist" theory of international relations (Thayer 2000).

Sociological paradigms: Due to anthropology's concern with social groups and its extensive intellectual roots in common with sociology, most of the approaches relevant to intelligence work fall under the category of sociological theory. This theoretical orientation suggests that the focus of attention for social scientists should be humans in groups, rather than as isolated individuals. It has its roots in the writings of philosophers such as Karl Marx and Auguste Comte, who argued that a social science must follow the rules of natural science, and infer general laws from empirical observations of human behavior. French sociologist Emile Durkheim, whose work was particularly influential in British social anthropology, endorsed and refined this positivist orientation into a sociological method that led to the structural-functionalist approach to society. Marx's work became the inspiration for a conflict approach, stressing the role of culture in maintaining the position of elites against the interests of lower classes. However, both Marx and Durkheim focused attention on "society," rather than "culture."

Durkheim's contemporaries Max Weber and Georg Simmel, skeptical of positivistic approaches to the study of intelligent agents, developed a perspective that denied the possibility of formulating laws of human behavior similar to the laws governing the behavior of natural phenomena. However, their work, which emphasized the role of interaction among individuals in groups, continues to be influential in anthropology, and Simmel is credited today as the inspiration for social network analysis (Marin and Weilman 2010). Weber's work is discussed separately in the "hybrid" section. Sociological paradigms addressed here include structural-functionalism, conflict theory, systems theory, and social network theory.

Structural-functionalism is most associated with the work of scientifically oriented Durkheimian social anthropologist A.R. Radcliffe-Brown, whose theoretical position was refined, elaborated, and sometimes challenged by mid-twentieth-century British social anthropologists such as E.E. Evans-Pritchard, Meyer Fortes, Raymond Firth, Mary Douglas, Max Gluckman, Edmund Leach, and Victor Turner. It is also known as simply "functionalism," but the longer term is used here to differentiate it from Malinowski's theory of need satisfaction, also called "functionalism." Structural-functionalist theory is focused not on culture, but on society. There is an anti-psychological bent to it in that the individual is of far less importance than groups, and personal attributes are themselves products of social factors such as class, ethnicity, and social networks. Culture, if spoken of at all, is an epiphenomenon of social or economic relations. Its key analytical concepts are social structure, social norms, values, morals, exchange, and ritual.

Durkheim's notion of social solidarity gave rise to structural-functionalism's view of society as an organism composed of interdependent parts or structures. These social structures are relatively permanent arrangements of persons into groups that serve to maintain society. Radcliffe-Brown contrasted structure with social organization, or arrangements of activities allotted to various persons and groups (Radcliffe-Brown

1958/2010, 196-198). Structural-functionalist theory is aimed at explaining social stability; therefore, its models concern mechanisms that create stability, such as norms, laws, morals, and values. How social stratification and legitimate political authority are maintained are key concerns of a structural-functionalist analysis.

One powerful source of stability is religion; indeed, Durkheim considered a society's gods or totems to be representations of the society itself (Durkheim 1915). Religious rituals and totems (collective representations of the sacred) operate to reinforce social order. Such rituals may regulate social relationships and reinforce markers of status via ceremonies of transition from one state to another. These "rites of passage" may be performed to mark puberty (transition to adulthood and its rights and responsibilities), initiate new members into voluntary associations, regulate marriage and reproduction, and bury the dead (often ensuring the spirit of the deceased has passed safely to the afterlife and will not trouble the living). These will be discussed further in the section dealing with symbolic anthropology.

Structural-functionalism has been criticized and discarded by many anthropologists because of its supposed glossing over or explaining away conflict in societies. Such critics were generally proponents of some form of *conflict theory* whose influences almost always go back to Karl Marx. Marx is a theorist whose work is often misunderstood. He is associated with political revolutions carried out putatively to establish communism, but for Marx such a revolution was merely the capstone of a larger and earlier social revolution. He considered all states —even the dictatorship of the proletariat—to be evil, but desired the latter as a necessary means of crushing the bourgeois and capitalist exploiters of the working class (Tucker 1969, 86-88). The ultimate communist society would not be a Stalinist or Maoist dictatorship, but a stateless one made possible by a revolution in human nature. His "Marxism" is not so much an ideology (though it has become one) but an eschatological program whose end state was something not much different from the Christian ideal of the Kingdom of God on earth—though, of course, lacking God.

All conflict theory, whether explicitly Marxist or not, contends that all states exist to serve the interests of certain groups and oppress other groups. States exercise coercive power over the governed. Unlike structural-functionalists, whose emphasis is on the maintenance of society, conflict theorists are interested in social change, which occurs through competition among groups, whether these be based on class, caste, socioeconomic status, ethnicity, gender, sexual preference, religion, or some other marker of difference. Competition ranges from the use of social advantage to gain scarce resources to open warfare.

Concern about the validity of causal associations asserted by both conflict and structural-functional theories led to a search for a more adequate theory that was not so deterministic. This "new method of doing science," systems theory, was inspired by general systems theory in biology and cybernetics in engineering and information theory. It was brought into anthropology during the 1940s by British social anthropologist and philosopher Gregory Bateson. While other scientific approaches tend toward reductionism, system theory has a holistic perspective emphasizing context. Using a similar organismic metaphor as structural-functionalism, a perspective

in which Bateson was trained, it views culture as a system of interacting elements that act to maintain homeostasis by means of negative feedback loops. There is no simple unilinear cause and effect in such a system—all changes affect the system as a whole. Rather, one speaks of changes of state. It is an ecological model, suitable to analyzing how systems adapt to environmental stresses, and how changes in one element affect other elements and the whole. Positive feedback, or deviation-amplifying loops, can cause dramatic changes. At least in principle, systems theory promises to explain a number of political and economic phenomena of interest to intelligence analysts. However, because of its holism, systems theory in anthropology is difficult to use if one wishes to make testable predictions, and systems explanations are frequently post hoc.

Yet, one early variant of the systems approach is more amenable to use by intelligence analysts, and a common-sense version of this approach is probably already being used. This is Wallace's notion of "revitalization movements" in which an entire cultural system is transformed by those who share that culture (Wallace 1956). In this theoretical construct, informed by psychology and based on ethnohistorical work on the movement headed by Seneca prophet Handsome Lake, people become aware that their culture is dysfunctional and consciously embark on a program of innovation and renewal. Weber's concept of charismatic leadership plays into this formulation, as does the concept of rites of passage, though in this case the passage is effected by the entire cultural system, not simply by an individual. In most cases, the dysfunction occurs, as in the case of the Seneca, after contact with another cultural system. This model resonates with some of the struggles being waged right now within the Islamic world and Russia, and any society which may have suffered from the encroachments of globalization.

Related to systems theory is s*ocial network analysis* or SNA. While SNA is derived from mathematics, it also has connections with anthropology, psychology, and sociology, and is grounded in empirical data, namely the number of connections between individuals. The idea of a "social network" was actually introduced by an anthropologist, John Barnes, in his 1954 work on Norwegian fishermen, and it has remained a topic of interest to anthropologists since that time. This is not surprising, given anthropology's early emphasis on kinship relations, which form a basic type of social network. However, the theory upon which SNA is based is not anthropological or sociological, but mathematical. Specifically, it is an outgrowth of graph theory. But while sociologists Marin and Weilman (2010, 18) acknowledge that SNA is not a theory, they do consider it "a perspective or a paradigm … (that) takes as its starting point the premise that social life is created primarily and most importantly by relations and the patterns they form". One of the most important contributions anthropology can make to SNA is in looking at those higher level patterns and keeping a focus on the whole system, rather than on isolated nodes. Ethnographic knowledge may help determine the extent of a social network, as well as the meaning of connections between nodes and various flows.

SNA assumed prominence during the Global War on Terror. Owing to its emphasis on connections relative to specific groups and individuals, and its quantitative methods, SNA is especially promising when attempting to analyze the impact of emergent, informal, and formal networks, and determine their extent. It offers a way to quantify and chart the influence of specific actors, and embed their actions in relationships. Like other systems approaches, social network analysis locates causation in the social structure (Marin and Weilman 2010, 4). SNA can identify key actors (nodes) within a network by examining the number and type of connections they have with other actors. Various types of exchanges, or "flows," can take place between nodes. Marin and Welman note that these may be resources, information, or influence. Ties between nodes may be strong (such as between close family members or friends) or weak (such as between clients or distant colleagues). There is evidence that weak ties may actually be more important than strong ones in granting access to information and power (Ressler 2006, 1). SNA has already become a very important tool in the intelligence analyst's toolbox.

Psychological paradigms: Psychological paradigms attempt to explain how culture and the individual are related to one another. As a result, psychological paradigms have a great interest in the concept of mind as an object of analysis. While relating mind and culture seems a natural research avenue for anthropology, the use of psychological concepts in anthropology was controversial when they were first introduced, for two reasons. First, there was the widespread belief that explanation in social science must derive from social factors, not innate, individual ones. The individual was either unimportant, as the structural-functionalists believed, or a tabula rasa the contents of which were written by society, as Marxists and relativists believed. Part of the relativist concern was that culture might be subordinated to biology or other innate features, evoking the racialism of the evolutionary theorists. A second concern had to do with the state of psychology at the time. Those who sought to import psychological theory into anthropology tended to rely on the work of psychoanalysts, especially Freud and his students, rather than the more empirically grounded work of the behaviorists. Psychoanalytic explanations tended to be very hard to falsify.

In the 1930s British social anthropologist Bronislaw Malinowski, who, like Boas, had his training in the physical sciences and placed great emphasis on careful fieldwork, devised a psychologically based theory now known as *functionalism*. Malinowski's earlier functionalism was sociologically based and bore resemblances to Radcliffe-Brown's structural-functionalism. This new formulation tied social institutions not to the maintenance of society, but to the satisfaction of individual needs. He classified needs as physiological (reproduction, food, shelter), culturally derived, and instrumental (economics, social control, education, and political organization). Needs were satisfied by direct responses, which then gave rise to cultural needs. Cultural and instrumental responses were reinforced through satisfaction of needs and transformed into drives(Goldschmidt 1996, 510). While Malinowski's fieldwork methods continue to be esteemed, his functionalism has not received much attention since the 1970s. However, a need-satisfaction analysis, if not the full-blown theory,

could have potential value in intelligence work aimed at understanding motivations. That said, theories from psychology, particularly social psychology, may account for motivation better than an appeal to cultural need satisfaction. Any contribution from anthropology must take account of the extensive experimental work done in support of theories in that discipline.

Malinowski's ethnographic emphasis on gaining an insider perspective on a given culture and indigenous (emic) categories, rather than his psychological theory, combined with the work of Benjamin Whorf (of the Sapir–Whorf Hypothesis, which holds that semantics influence thought and cultural categories), led to the development in the United States of *ethnoscience*. The anthropologist most responsible for introducing this paradigm into anthropological theory was the linguistically trained Ward Goodenough. He defined culture as:

> …(W)hatever it is one has to know or believe in order to operate in a manner acceptable to its members. Culture is not a material phenomenon; it does not consist of things, behavior, or emotions. It is rather an organization of these things. It is the form of things that people have in mind, their models for perceiving, relating, and otherwise interpreting them (Goodenough 1957, 167).

Culture, in this view, is neither a way of life, a mechanism to satisfy and generate needs, nor a system to maintain homeostasis. It is a set of rules that comprise mental models. These rules may be explicit or implicit, observed by the researcher and deduced by him/her, but they are completely emic. They apply within the culture and make sense to members of that society. These rules can be elucidated and analyzed by examining linguistic structures and comparing them to cultural beliefs and behavior, a method known as "componential analysis." In this method, the semantic content of words is taken as an indicator of cultural meaning—how people structure their world and life experience. Within a specific area the object is to find the minimum number of features needed to distinguish one term from another.

In kinship, for instance, if Joe speaks of his "mother" he is using that word to distinguish both gender and generation (one generation earlier), but if he speaks of his "sister" he is only distinguishing "gender"—she is the same generation as Joe and has the same mother and father." If Joe speaks of his "brother" he is speaking of someone with the same gender, generation, mother, and father. While there is no society that does not distinguish gender and generation, there are cultures—those that practice unilineal descent—in which the term for father carries differential meanings. In patrilineal societies, reckoning descent through the male line, "father" carries family authority. However, in matrilineal descent, "father" denotes a less authoritative (and more informal) figure than in patrilineal ones; the male with authority is the mother's brother. There can also be different types of cousins. In bilateral societies, such as ours, the same kinship term refers to one's father's sister's or father's brother's (or mother's sister's or mother's brother's) child. All are cousins—what Americans would call "first

cousins." Americans distinguish cousins by relationship distance in time and space—first cousin, first cousin once removed, second cousin, and so forth. But in unilineal (patrilineal or matrilineal) descent groups, the child of an opposite sex sibling of one's parent (mother's brother or father's sister) is denoted by a different linguistic term (what anthropologists call "cross-cousin"), from the child of a parent's same-sex sibling (known as a "parallel cousin").

Kinship terms carry differential rights and obligations, many of which center around marriage. Goodenough, in his landmark paper on status and role, expanded his linguistically informed analytic techniques to rights and obligations accruing to certain social positions, and the use (and breach) of such cultural expectations. He was able to devise a behaviorally based quantitative scale for measuring intensity of emotional states, based on to what extent duties were observed and rights respected (Goodenough 1965). Such analytical techniques offer promise to the intelligence analyst, particularly one who is well versed in the language of his or her target, because it provides a way of gaining an insider perspective that can yield testable insights and can be compared with other insider perspectives from other cultures. This seems to be the essence of cultural intelligence.

Despite its promise, ethnoscience has not become the main line of anthropological theory, perhaps because of the strong turn toward humanistic perspectives in the late 1960s. However, it gave rise to the subfield of *cognitive anthropology*, which emerged in the 1980s and 1990s in the wake of the cognitive revolution in psychology. Like ethnoscience, cognitive anthropological theory is concerned with the relationship of mind and culture, and the construction and maintenance of mental models. Borrowing from psychology the idea of a schema, or a mental pattern for organizing and making sense of the world, cognitive anthropologists have expanded on the concept to include cultural models, cognitive schemas that are intersubjectively shared. According to Roy D'Andrade, one of the founders of the field, a schema is intersubjectively shared when everyone in a social group knows it, everyone knows that everyone knows it, and everyone knows that everyone knows that everyone knows it (D'Andrade 1987).

Humans develop schemas for everything we perceive. Cognitive psychologists have determined that humans can hold about seven, plus or minus two, pieces of information in memory at any given time. Schemas help us to overcome this limitation by functioning as mental shortcuts or heuristics. When these pieces of information are themselves schemas, we can deal with much larger volumes of information. Schemas become more elaborate with experience, but also serve to exclude certain information. For instance, we may have a simple schema for "chair" that we apply to lawn chairs, rocking chairs, armchairs, and thrones. We develop subordinate schemas for these subtypes of chair. When faced with a stool or a sofa, we must decide whether it matches our schema or belongs to a different, but related category. We may discover that chairs, sofas, and stools (and mats and pews) all belong to a higher order schema, perhaps "seats." This reveals the hierarchical nature of schemas and also their heuristic function. Cultural models share in this hierarchical arrangement, with the highest level of cultural model being worldview.

Understanding the cultural models members of a society use to organize experience has clear implications for both cultural competence and the intelligence analysis. In a sense, these models are their tools for analyzing us. A knowledge of them can tell us how various behaviors, verbal and nonverbal, will be interpreted. To map and describe cultural models, cognitive anthropologists use structured interviews or survey questionnaires to measure agreement with certain propositions. An example of this procedure is found in D'Andrade's elucidation of the "folk model of the mind" in the United States (D'Andrade 1987). Analysts without direct access to informants may create such models based on intercepts, debriefs, or other intelligence sources involving verbal communication, and test them retrospectively by searching on other such sources. As with schemas, there is a wide range of cultural models. There are models of illness, morality, warfare, terrorism, religion, leadership, democracy, and Americans. Many such models would be of interest to policymakers, diplomats, and military commanders.

Hybrid Paradigms

The survey of anthropological theory concludes with five approaches that have one foot in the scientific domain and one in the humanistic one. All have their roots in sociology, but four have significant connections to psychology as well. The remaining perspective, Bourdieu's "theory of practice," has connections to a wide range of fields.

The first of these, *structuralism*, like ethnoscience and cognitive anthropology, is heavily influenced by structural linguistics. However, structuralism is also tied closely to the interpretive, and even postmodern, school, due to its reliance on literary texts and emphasis on narrative. Its founder, French anthropologist Claude Levi-Strauss, like Goodenough, began his analysis by looking at kinship terms. However, unlike Goodenough, who wanted to create emic analyses of specific cultures using quantifiable variables that could be compared cross-culturally, Levi-Strauss was interested in finding universal cultural patterns of meaning that regulated mental activity. The "structure" that interested him was not the social structure of structural-functionalism, but the structure of the human mind, which does not vary from culture to culture. The same structure can underlie apparently diverse social systems, beliefs, and practices. To use a literary metaphor, a structural analysis would compare the musicals *Oliver!* and *Annie* and conclude they were both instances of the same text.

Levi-Strauss and his followers thought they could detect such universal structures by delving deep into the ethnographic record to find the most basic commonalities possible—the smallest units of meaning, analogous to the concept of phoneme pioneered by the linguist Ferdinand de Saussure. Myths proved especially good fodder for this kind of analysis. These sacred stories can be compared cross-culturally by comparing their corresponding smallest units of meaning—what Levi-Strauss called "mythemes." Examining the ethnographic record and drawing on the structural linguistic concept of "minimal pairs" of contrasting phonemes, structuralists

discerned a structure of binary oppositions of such units of meaning—male/female, dark/light, living/dead, raw/cooked, marriageable/taboo, and so forth—which he believed were characteristic features of human thought. These symbolic oppositions could be resolved or reconciled through the mediation of a third term. However, such a third term, which often represented an imposition of the sacred or supernatural, could also be threatening.

Structuralism's heyday was in the 1960s and 1970s, but it faded in the 1980s under assault from postmodernism (a number of leading proponents of which had been structuralists), and also from its lack of verifiability. While Levi-Straus believed his work to be scientific because of its careful placement and measurement of corresponding terms, it relies greatly on the experience of the analyst. In that and in its mining of myths for clues to human mental life, structuralism bears a resemblance to Freudian psychoanalysis. A structuralist analysis can become a sort of systematized interpretivism. But at its most rigorous, it also bears a resemblance to ethnoscience and cognitive anthropology.

Sharing structuralism's concern with myth and symbol is *symbolic anthropology*, which has also been called a British version of Geertzian interpretivism (Lett 1997). However, the founders of symbolic anthropology (here, we will focus on Victor Turner) were trained in the sociological paradigm of structural-functionalism. Turner, who is well known for his ritual studies, identified symbols as the "molecules of ritual" that are manipulated and enacted in ritual performance. Multiple meanings are condensed in the symbol, so that we might say that a symbol has a heuristic function. Symbols polarize meaning into an ideological and sensory pole—they mobilize ideology by engaging the senses, in order to renew the social order.

An important division in an analysis of ritual is between rites of passage and rites of intensification. As noted above in the discussion of structural-functionalism, rites of passage mark (and regulate) changes of status with ceremonies surrounding puberty, graduation, marriage, childbirth, and other important life events. Rites of intensification are group oriented and mobilize support for social institutions. Both serve to maintain social order. Turner (1969) focused most of his attention on rites of passage, developing Arnold van Gennep's (1965) three-stage model of separation (preliminal phase), transition (liminal phase), and reincorporation (postliminal phase). He paid particular attention to the "liminal" (threshold) phase, where transition actually takes place, into the concept of "liminoid" social groups and phenomena.

Turner spoke of liminal and liminoid both as "betwixt and between" states. The initiate going through a rite of passage is, in the liminal phase, neither his old state (Van Gennep also used the term "world") nor yet his new one. The initiate's status is ambiguous, anomalous, and, to that extent, powerful and threatening, much as the mediating term can be in one of structuralism's binary oppositions. In the rite of passage, the status is resolved, but in liminoid phenomena, the ambiguity remains. Turner uses the terms "structure" to refer to social structure and "antistructure" to refer to liminal and liminoid phenomena that are outside of, and challenging to,

the social order. Liminoid groups include artistic communities, countercultures, certain new religious movements, and any other group that exists in tension with the dominant culture. Such groups are characterized by what Turner called communitas, a state in which everyone is equal, there are no fixed statuses, and there is a high degree of intimacy among members. Boundaries are low or nonexistent in liminoid groups, so that the antistructure they exhibit with respect to society is present in interpersonal relations. The self in such communities is a social self, and individuality is diminished. This provides a great deal of in-group solidarity.

The concepts of rites of passage, liminality, and liminoid groups are of potential use to intelligence analysts, particularly if a target organization is isolated from some dominant culture, subordinates individual will to the collective, and is actively engaged in recruitment. When they join such groups, individuals are frequently in a "betwixt and between" state, having found their existing pattern of social relations no longer adequate. Thinking about these concepts may provide insight into recruitment practices—or conversion experiences—and help assess their likelihood of success. Much of this terrain has already been worked over by social psychology, but Turner's work can help provide context and improve analytical judgments.

Social structure is also a means of structuring reality. *Social constructionism*, a theoretical paradigm first articulated fully by Peter Berger and Thomas Luckmann in their1966 book *The Social Construction of Reality*, and elaborated by Berger in *The Sacred Canopy* (1967), holds that culture represents not just a set of rules, but the reality that we all experience, constructed in order to survive in a hostile world. Noting that humans are unfinished creatures and, unlike other animals, helpless at birth, Berger notes that culture fills the gaps left by biology. It is what makes us human. But beyond that, culture is a "world" that we inhabit, possessing a "taken-for-granted reality" that shapes and constrains our lives. This reality is maintained by our everyday conversation and other interactions, as well as by "plausibility structures" — social institutions such as schools, churches, and governments that reinforce cultural roles, norms, and beliefs. Culture and humans stand in a reciprocal relation to each other—we externalize what is within us, we objectify it as a world, and that world in turn is internalized to create ourselves. As Berger says, "Man creates a self within a world" (1967).

Nearly everyone would agree that the social self is constrained by the statuses we occupy and the roles we play. We, in essence, obey certain cultural rules. But constructivist theory obliterates the distinction between us and the rules we follow. Rather than obeying rules as an external imposition, we embody them. That is, we don't exist apart from those rules. Our humanity is constructed by society, through culture. This, interestingly, is identical to the position of Marxism. We are not simply biological entities, the product of a series of genetic accidents. We are created by our culture.

This notion is intriguing, but it's hard to see how this approach could be of help to an intelligence professional, except as a reminder of the powerful effects of culture in shaping perception, personality, and worldview. The sole exception is the concept

of plausibility structures, those sources of social authority that maintain the reality. Identifying such features of a group or society would assist in forwarding U.S. policy, whether by undermining a perceived reality in which the United States is viewed as a negative force or strengthening one that holds that the United States is a friend and that our values are to be emulated.

The final two theoretical paradigms are hardly paradigms at all, but a sampling of the theoretical insights of two men. The first of these is Max Weber, a political economist of enormous intellectual breadth who (along with Durkheim and possibly Marx) founded modern sociology. His approach is referred to here simply as *Weberian social science*, because it is impossible to place his ideas into one overarching category. He was a substantivist in economics, was the inspiration for symbolic interactionism in sociology, and in his skepticism about reductionism, also connects with the interpretivists. He coined the term "webs of significance" that energized both Geertz and the constructionists. Weber's most important theoretical contributions to anthropology, at least in this author's opinion, are his theories relating to religion (and its relationship to the economy), political leadership, and the development and function of bureaucracies. For the purposes of this article, which is aimed at identifying approaches that are potentially useful for intelligence analysis, we will focus on his work on leadership, especially charisma, and bureaucracy, related to each other through the concept of "rationalization."

Weber identified three kinds of leaders: charismatic (governing a family or religious cult), traditional domination (feudal lordship), and legal domination (law and bureaucracy in the modern state). He noted that charismatic leadership is, by its nature, unstable, because it depends on personal characteristics. To create a more stable political structure, charisma becomes "rationalized" so that, for instance, an outstanding leader may be seen as passing his gifts to his children. Personal power becomes hereditary authority. But the charismatic leader's teachings, as well, are rationalized, so that they become embodied in laws and principles. Eventually societies evolve into a mode of "legal domination," characterized by a high degree of rationalization, embodied in bureaucracies. The trend in this evolutionary scheme is for increased rationalization and impersonalization, with decisions made by reference to laws and established procedures. While this frees subjects/citizens from the caprice of rulers, it also allows less and less space for individual freedom. Behavior is bounded by rules that people cannot escape, making for, as Weber lamented, an "iron cage" of rationality.

This model seems readily applicable to societies in the developing world confronted with Westernization, and therefore of interest to intelligence analysts. The response can vary from acceptance and assimilation to rejection and revolution. But even in instances in which diverse bands, tribes, and chiefdoms, thrown together into an arbitrarily (from their perspective) defined colony to be subjected to Western rules reinforced by Western education, have been granted self-rule by policy or revolution, the indigenous rulers still govern according to some form of the bureaucratic model. Even with the reemergence of a charismatic leader, that leader—who may

represent only one traditional ethnicity among many—must rely on the rationalized, bureaucratic machine left before by the colonial power. Exploring these development issues using the theoretical framework devised by Weber can only lead to better understanding of such phenomena, and therefore better analytic judgment.

Last is the similarly cross-cutting work of French social scientist and left-wing activist Pierre Bourdieu, who has been extremely influential in contemporary anthropology. Bourdieu is probably best known for his *theory of practice*, which might be considered a sociology of culture itself. A concept of this theoretical paradigm is "habitus," a system of "dispositions" or "second nature," produced by historical events or, as Bourdieu described it, "history turned into nature" (Bourdieu 1977, 410). A habitus is a "durably installed generative principle of regulated improvisations" (p. 409), or a structure produced by other structures, and possessing in itself the potential to structure practices and representations (p. 407). "Habitus" evokes "culture" as viewed by the constructionists, but also a means of passing on or "reproducing" culture. In that, it resembles the classical concept of socialization, but is not a rule-learning process. Rather, habitus is embodied and hence observable in terms of behavior. It may be helpful to imagine it in terms of "habit"—habitus is the set of principles that shape our habitual behavior, our "second nature," our practices. Habitus is an "immanent law … laid down in each agent by his earliest upbringing" (p. 411).

Agency is a central part of Bourdieu's theoretical focus. Some other sociological theories, notably structural-functionalism and various Marxist-influenced approaches, minimize the role of individual agency in social life, viewing social factors such as class and collective representations as primary objects of analysis. By contrast, Bourdieu believed social reproduction of structure and objective meaning was carried on, and most importantly, embodied in individuals. But his notion of agency is not as cut and dry as the notion of agency held by rational choice theory, which he opposed. For Bourdieu, social agents operated not by calculation, but by a "sense of the game" that is that agent's habitus.

Agents move and act within a social universe consisting of a number of social "fields" (such as "science," "art," "economy," "religion," and so forth), each constructed and distinguished by certain properties and each able to provide the agent with force or power. Fields are autonomous from the larger social structure, and through the actions of agents, may become more complex. Agents, for their part, develop certain mannerisms, opinions, tastes, and so forth, and the interaction (via practice) shapes each agent's habitus. Interaction with these fields endows the agent with a certain "capital," a term Bourdieu used to refer not merely to economic capital, but to any resource, typical of a field, that can be deployed by an agent. The key forms of capital are symbolic capital (deriving from honor or prestige), social capital (deriving from one's social relationships), and cultural capital (deriving from competencies, skills, and qualifications that enhance the agent's cultural authority).

While much of his work has affinities to postmodernism, Bourdieu believed that objectivity was possible, given certain historical circumstances, and held

that science was able to operate with such objectivity. However, he also cautioned investigators against their own biases, some of which derived from "doxa," or a taken-for-granted reality that tends to favor dominant social arrangements in a given field. To combat biases, he urged reflexivity or continual awareness of the investigator's own internalized structures.

Bourdieu's perspective can assist analysts both in gaining a practical sense of how people interact in a reciprocal manner with their social environments, remedying the reductionism typical of structural-functionalist and conflict theory. For instance, an analyst seeking to understand the forces that have shaped the personality of a leader or the motives of a suicide bomber might try to see the world through the habitus of that individual. The notion of various kinds of capital seems to be a particularly intuitive concept and one that seems applicable to a wide variety of situations in which the analyst wishes to examine the relative influence of an actor operating within a certain social universe. Finally, Bourdieu's work dovetails well with both ethnoscience/cognitive anthropology in its emphasis on cultural distinctions and fields with various rule sets, and social network analysis, which can provide quantitative measures of social capital.

Applying Anthropological Theory to Intelligence Work

In science the best theory is the one that best fits the data and the predictions of which best survive empirical testing. But the objective here is to find the theoretical paradigm that is most useful to practitioners. The analyst (or operator) does not care about adherence to a particular paradigm. She is more likely to value such intellectual tools for their practical usefulness, namely in developing cultural intelligence that is as accurate and, if possible, predictive as possible. In many cases, combining various theoretical paradigms may be the most fruitful alternative—which, as noted above, is what most anthropologists actually do.

It is difficult to find examples in the literature of the application of anthropological theory to intelligence work. When intelligence and security is mentioned it is either to condemn or at least problematize the participation of anthropologists in intelligence or police work, or to apply anthropological insight to the operations of police or security agencies (Bajc 2007; Innes, Fielding, and Cope 2005). The latter is more useful, since many nations of interest to U.S. policymakers have security services that our own intelligence agencies would like to understand. That said, there are plenty of writings by anthropologists of potential interest to intelligence analysts, but these tend to be either descriptive ethnographies or statistical associations, with minimal theory (Shahrani 2002) or else use the theory and methods of other disciplines, such as sociology, psychology, or political science, more than anthropology (Shahrani 2002; Ember and Ember 1994).

However, some illustrative examples do exist. A sampling of these is presented below, grouped by theoretical paradigm.

Structural-Functionalism: Maintaining Social Order

Sometimes social order is reinforced in apparent chaos. Max Gluckman's structural-functionalist analysis of what he termed "rituals of rebellion" in the Zulu and Swazi kingdoms of southeast Africa suggested that the periodic overturning of established hierarchies, in which the powerful are brought low and the humble exalted, serve as a means to reinforce, rather than challenge, the social order. For instance, in the *incwala* festival in Swaziland the king was publicly insulted, women were raised over men, and the young exercised authority over the elders. The rituals functioned to release tension in society through a socially endorsed, cyclical pressure valve, and prevented real rebellion (Gluckman 1954). While the *incwala* is often rendered in English as "first-fruits" festival, the official Swaziland tourist website notes that it is really "about cleansing and renewal and—above all—celebrating kingship" (thekingdomofswaziland.com). This accords with Gluckman's view that every such rebellion is really "a fight in defense of royalty and kingship" (1963, 130).

Gluckman also examined a Zulu fertility festival related to the Zulu Princess of Heaven, in which gender boundaries and roles were transgressed. Women and girls assumed tasks typically allotted to men. They also ran naked and sang obscene songs while males hid. He found similar festivals in other southeast African cultures in which women—usually considered an inferior sex in such cultures—assumed the dominant position, humiliating and in some instances, actually attacking men. He theorized that these female rebellions reinforced the social order by allowing girls and women to escape and then return to it once the festival ceased. Their behavior may also have reinforced perceptions of females as requiring subordination.

Other researchers extended Gluckman's thesis. Robert Dirks found that annual rituals of rebellion, or "rituals of conflict" as he called them, were present worldwide and associated with the elevation of the community over the individual, tight controls on individual liberty, and a sudden infusion of food energy (Dirks 1988). This theory accounts for similar inversions of status and authority occurring at Carnival and even at Christmas in Renaissance England. Susanne Schroter (2004), while not a structural-functionalist, has adapted Gluckman's thesis to other societies as well, finding that sometimes (e.g., Melanesian cargo cults) the ritual aspects were secondary to the rebellion, which really was aimed at overturning authority; sometimes (e.g., the Dayak of Indonesia) a ritualized rebellion can make use of real violence to assert ethnicity against an alien government; and sometimes (e.g., Western youth culture), a ritual of rebellion can be a rite of passage.

The youth culture example cited above illustrates another important aspect of structural-functionalist theory: the regulation of social relationships via markers of status and ceremonies of transition from one state to another. These "rites of passage" channel young or low status people into higher status positions, fostering identification with authority figures. Paired with these are "rites of intensification," which are communal, rather than individual. These remind the community of the fundamental beliefs of society, and foster allegiance to the society and those who exercise authority

within it. An example from American society would be Independence Day festivities or religious holidays.

Clearly, understanding how systems sustain themselves and order is reinforced would assist an intelligence analyst or operator in evaluating information or observations before him. Conflict among tribal groups, for instance, may be long standing and cyclical, and may not represent some novel response to new situations. Indeed, displays of aggression—and even real aggression—may be highly stereotyped and ritualistic. Theories such as Gluckman's, refined and corrected by other researchers, can help place upheavals in context and discern the purpose and consequences of political uprisings.

Conflict Theory: Interests and Identification

The conflict theorist looks for associations between variables relating to group identity, economic or political structure, and competition or armed conflict. For instance, one study of armed conflict and the state found that in state societies, an emphasis on military glory is significantly related to killing noncombatants, killing more enemy combatants, torture during warfare, and destruction of enemy resources in external war. In non-state societies, there are no significant relationships between military glory and atrocities (Ember, Adem, and Skoggard 2013, 46). This finding supports the theory that states encourage such violence by linking it with a psychological incentive.

Conflict theory also holds that internal warfare, such as feuding, civil war, or revolutionary war, arises from tensions between groups that become unmanageable. The genocide in Rwanda, in which Hutus were encouraged to murder Tutsis and their Hutu collaborators, arose from a long-standing sense that the Tutsis were a privileged class who had helped the colonial power oppress the Hutus. An intelligence professional can use insights from conflict theory to seek out fault lines within and among societies that may be used, with other variables, to predict armed conflict or guide psychological operations.

Much conflict theory has been concerned with the interests of the parties involved, particularly focusing on competition over scarce resources. This view is inspired by an evolutionary paradigm and the physical environment often plays an important role in structuring the conflict. However, social anthropologist Günther Schlee has taken a different tack, examining not interests, but the parties involved: namely, who is fighting and how do they draw the line between friend and foe? (Schlee 2004). He attempted to synthesize two theoretical approaches to this issue of group identification, economic cost–benefit analysis (gain versus risk) and a social structural and cognitive representational model (social identity of group members). The issue centers on recruitment and shifting alliances: how and why people decide to take sides in a conflict, an issue of great importance to all parts of the IC, especially in the context of international and militarized terrorism.

A key concept for Schlee is the size of competing groups, which depends on

rules of inclusion and exclusion, the values members attach to various dimensions of social identity (language, religion, descent, and so forth), and the costs and benefits of expanding alliances. An important and often overlooked point has to do with ethnicity and clan—clans can overlap ethnic lines. He applied his ideas to two types of warfare: genocide (rare, but easy to model in purely conceptual and mathematical terms) and a series of wars or raids, with focus on tensions between winners and losers following armed conflict. He examines cases from East Africa (the Rendille, Gabra, and Somali), but also includes examples from New Guinea (the Tauade and Manambu) and Northern Pakistan (the Swat Pukhtuns) to illustrate the complexity of the interplay of economic and social identity factors.

For instance, segmentary lineages, which among the Somali can serve as a means of mobilizing allies of closely related segments, serve the opposite function among the Pukhtuns, where rivalry over land is high among neighboring (and closely related) lineage segments (Schlee 2004, 146). Thus, Somali warlords favor local allies, while Pukhtuns prefer distant ones. The interaction of clan and ethnicity is illustrated in an example involving the Rendille, a small exclusive pastoralist society reluctant to accept strangers. Schlee cites a case in which members of the Elemo clan, whose ancestors had been Gabra 200 years ago, but was now (1992) Rendille, successfully sought refuge with their Gabra clan brothers when the Gabra attacked the Rendille. Yet the existence of Elemo among the Rendille did not prevent clan members from attacking the Rendille in the first place.

Symbolic Anthropology: Liminality and Security Services

Victor Turner's work on rites of passage is of interest to intelligence professionals in two arenas: the recruitment of members of armed and subversive groups, including terrorist groups, and also the "meta-ritual" enacted by security services to minimize uncertainty and control public spaces during an important political event. The role of ritual in mobilizing commitment has sometimes been said to be due to the content of religious belief. While evocative myths and symbols play an important role, these do not have to be religious. And as Sosis and Alcorta (2008) note, the process of enacting rituals itself fosters commitment among initiates. Commitment is created by removing potential members from their previous social networks and status and role sets and placing them in a place in which none of that matters anymore. Under conditions of ambiguity, uncertainty, and communitas with other initiates, they are prepared to receive new statuses and new certainties. This process occurs in secret societies, reeducation camps, religious groups often termed cults, and in certain revolutionary or terrorist groups.

A more novel approach to liminality can be seen in Vida Bajc's concept of the security meta-ritual (2007). Drawing on Mark Salter's work on the post-9/11 efforts of governments to introduce new rites of passage at airports in order to contain terrorist threats and eliminate uncertainty in public spaces, Bajc extends Salter's theory to focus not on the ritual process of separating insiders from outsiders, but on the public

space such rituals create. Such public spaces are transformed into liminal spaces as Turner defines them. Although these spaces reduce uncertainty in one sense, they increase it in another by disrupting normal (preliminal) social relations without creating a new system of relations. Those caught in the security zone are "betwixt and between," unsure how to behave, unable to rely on their established knowledge of social norms, and kept ignorant of events by secrecy. The example Bajc uses is the 2005 inauguration by President George W. Bush in Washington, DC. "Real Washington," as Bajc puts it, is transformed to "inaugural Washington," a purified space created by the establishment of fences and checkpoints. Surveillance procedures eliminate or reduce personal privacy. The people who come to inauguration, like initiates (or pilgrims), are all treated the same, leveling statuses so that all are equal—another characteristic of liminal spaces. It is a meta-ritual because it is the process that allows the public ritual itself—the inauguration—to take place.

The ways in which states protect their leaders and public rituals, and structure security arrangements, are of obvious interest to intelligence professionals. But the logic behind it, the notion that there are rites of passage, helps gain insight into the thought processes of senior security officers, as well as the behavior and emotional state of publics subjected to such rites.

Cultural Systems and Individual Psychology: Revitalization Movements

Wallace's paradigm of the revitalization movement seems a natural tool for the intelligence analyst seeking to understand revolutionary groups and their base of support; yet scholars whose work touches on this area—mostly political scientists of one sort or another—have been slow to use this tool, most likely because they are unaware of it. In 2005, however, political scientist Bradley Whitsel used Wallace's framework to describe domestic extremist groups, focusing on the right-wing anti-statist West Virginia Mountaineer Militia, but also the white supremacist group The Order and the left-wing terrorist group the Weathermen. Whitsel's work is more descriptive than analysis, and it gives too much focus to the idea of an extremist mindset, thereby importing an essentialism that does not comport with Wallace's general model. However, it is valuable in raising some salient points of Wallace's construct and encouraging use of the construct in analyzing similar movements.

Wallace himself extended the revitalization movement concept into another area of interest for intelligence analysts, namely international development (Wallace 1967/2008). Returning to his original ethnohistorical material, he noted that the revitalization movement began after Quaker missionaries began working with the Seneca. Their objective was not to convert the Seneca to Christianity, but to teach them technical skills that would enable them to be effective farmers and citizens, and encourage sobriety, one of the central tenets of the Handsome Lake movement. Speaking of a "revitalization process," Wallace made the point that the "technical movement" (development) would succeed best in an environment in which it

understood and respected native revitalization movements. For instance, attaching "strings" to aid would undermine a revitalizing process that sought to renovate the indigenous self-image and create a "new man," provoking resistance to the development effort. Many indigenous revitalization movements (e.g., Melanesian cargo cults, the Native American Ghost Dance, the Taiping Rebellion in China) are in opposition to development processes. Successful development must draw its energy from the revitalization movement itself, even if the sponsors of development dislike the direction of revitalization. In terms of U.S. policy, this suggests a de-emphasis on ideological similarity may be required in order to achieve mutual self-interests.

Social Network Analysis

While SNA as it is known today is relatively new, as Department of Homeland Security official Steve Ressler points out in his concise summary of the potential for SNA in intelligence work, its precursor, link analysis, has been in use for decades. For example, in the 1960s a CIA officer in Thailand was able to trace a clandestine network of communist organizations using a standard anthropological research tool, the unstructured interview (Ressler 2006, 6). Link analysis has also been used in SIGINT; Ressler notes that traffic analysis, the study of message externals such as addressees and gatekeepers that has been used since World War II, is a form of link analysis (Ressler 2006, 6).

With the appearance in 1991 of an article by former mathematician and British police officer Malcolm Sparrow on using SNA to produce criminal intelligence, social network theory has been more rigorously and explicitly linked to both anthropology and intelligence analysis. According to Koschade (2006, 4), there have been a number of attempts to harness SNA for intelligence networks, ranging from tracking illegal networks in industry to examining organized crime networks to analyzing networks in the government of Iran. There have also been Koschade's own social network analyses of the southeast Asian terrorist group Jemaah Islamiya, which in 2002 detonated three bombs on the Indonesian island of Bali, killing 202 people, mostly Australian, Indonesian, and British (Koschade 2006) and an Aum Shinrikyo cell that conducted gas attacks in Australia (Koschade 2005). The Human Terrain System, which has recruited and deployed anthropologists—to the condemnation of many in the discipline—emphasizes SNA. There have been many other uses of SNA in the IC and by scholars working in this area. These include Marc Sageman's *Understanding Terror Networks* (2004) and its follow-on work *Leaderless Jihad* (2008), in which its author, a forensic psychiatrist and former CIA operations officer, shows how SNA may be used to identify key clusters of activity that denote networks of grassroots terrorists. He argues that al-Qaeda central is a less important threat than leaderless networks of self-declared jihadists—a position at odds with that of many terrorism experts (Hoffman 2008). SNA is a cornerstone of IBM's data management, analysis, and presentation package "The Analyst's Notebook." CIA lists familiarity with this software package as a desirable skill among potential CIA hires (www.cia.gov).

Other Perspectives

I believe that some other key theoretical perspectives from anthropology, particularly ethnoscience and its related subfield of cognitive anthropology, which lack published connections with intelligence and security problems, will prove valuable to analysts in the future. These paradigms can provide testable data that lead to valid conclusions, and yet grant access to an insider perspective. Linguistic data, which is of maximum use in an ethnoscientific, cognitive, or structural analysis, is the sort of data most likely to be acquired through SIGINT intercepts or HUMINT. In fact, it may be possible, when analyzing intercepts, to create a parallel data stream that would forward messages to an analytic team dedicated to componential analysis, with the aim of elucidating the relevant cultural rules and the logical structure of thought used by speakers of the language being targeted.

Concluding Thoughts

This review article has been an attempt to provide intelligence professionals with an overview of theory in anthropology that could potentially be of use in intelligence work, particularly intelligence analysis. It is neither exhaustive nor in-depth. The choice of theoretical paradigms was made on the basis of my estimate of value in intelligence work. Others may disagree. But regardless, the selection cannot be said to represent the current state of theory in anthropology. Many colleagues might view the paradigms presented as a Cook's tour of the history of anthropology, of little relevance to the present. But in social science, more than in natural science, newer is not necessarily better. Anthropology is not physics, in which classical mechanics are improved by the addition of relativity and then superseded by quantum mechanics. There is no agreement that Levi-Strauss is superior to Durkheim. Old explanations may be used and explored for many decades, or get discarded for reasons of fashion as much as adequacy in accounting for the data. Natural science marches forward, while we stagger like a drunk walking a line. And then postmodernism appears and the question arises: should we—or can we—even try to walk at all? As Rob Johnston, an anthropologist who has performed ethnographic work studying the culture of CIA, puts it:

> The basic sciences that underpin intelligence are not physical sciences. It is difficult to measure what is meant by "progress" in the human sciences. The human sciences are considerably more multivariate than the physical sciences and it is much more difficult to control those variables.
>
> There are numerous domains from which intelligence may borrow. Organizational behavior is better understood today than ever before. Problem solving and decision making have been researched since the 1920s. Structural anthropology addresses many of the acculturation and identity issues that affect individual behavior. Cognitive scientists are

> building models that can be tested in experimental conditions and used for developing new tools and techniques. Sociology and social theory have much to offer in studying social networks and communication (Johnston 2008).

At the same time, in intelligence and security work, theory can be a bad word—after all, what the commander or policymaker needs to know is the news, what is happening now and what is likely to happen in the future. Facts and accurate predictions matter, not theories. Yet, any prediction, whether in science or intelligence, is based on a theory. An analyst always works with a theory—a set of propositions that make sense of the world—in mind, even if that theory is implicit. The better the theory, the better the predictions. A knowledge of theoretical paradigms that scores of researchers have found useful—their basic propositions, applications, and limitations—cannot help, but improve the quality of cultural intelligence, and even intelligence generally.

Analysts like to talk about their work as "art" or "tradecraft." And in my experience, most analysts have been interpreters: they use their analytic judgment, akin to clinical judgment, to make the best interpretation they can, given the facts at hand. An experienced analyst could be a great asset. But he or she may also have years of experience in honing biases and drawing incorrect conclusions. And even if we grant that an experienced analyst is generally a good one, what about the new one? A knowledge of anthropological theory would arm that new analyst with the tools he/she needs to make connections and draw valid conclusions that will make for a better intelligence product. As Johnston—who has also used the medical analogy—notes:

> Intelligence analysis is art and tradecraft. There are specific tools and techniques to help perform the tasks, but, in the end, it is left to individuals to use their best judgment in making decisions. This is not to say that science is not a part of intelligence analysis. Science is born of organized knowledge, and organizing knowledge requires effort and time. The work on this taxonomy is intended to help that process by sparking discussion, identifying areas where research exists, and ought to be incorporated into the organizational knowledge of intelligence, and identifying areas where not enough research has been performed (2008).

Finally, all of us, anthropologists and intelligence personnel alike, must be careful not to make all behavior cultural. Culture is learned and shared among members of a social group, but there are many social influences that are not specifically cultural. For instance, I may be a Christian in the United States or in Korea, and my Christianity will influence my behavior in both places. But Christianity per se, while taking different forms in different cultures, is transcultural. I doubt that most people, upon reflection, would consider that all Christians in the world represent a social group. On the other hand, I may have grown up with certain family traditions, beliefs, behaviors, and other peculiarities. I say "davenport" where others where I grew up refer to the same piece of furniture as a "sofa," because that is the word my family uses. Now the use of that word

by my family may have been cultural at one time, but it is not for me. We may think of such inherited verbal behavior as vaguely cultural because it is learned and shared by a social group, but I doubt many would think of a family as having a "culture" or that there are as many cultures as there are families. So we must be careful about assigning proper importance to culture in any given situation. And again, we must always be aware that our notion of culture, even our own, is itself a construct through which we organize our perceptions of how people live.

The future of anthropology in intelligence work is uncertain, not least because of prevailing attitudes within academic anthropology. It may be hard for the average non-anthropologist to understand the magnitude of that obstacle. Some anthropologists who have worked in the intelligence or security fields have tried to argue that if anthropologists fail to provide guidance to security professionals, those professionals will turn to others less qualified and less ethical than we are. This smug appeal to critical colleagues as an enlightened in-group of fellow progressives has not been persuasive. On the other side, some of us have overpromised on what anthropology can deliver to the security mission.

All of that being said, it is my belief that anthropological method and theory can contribute to creating intelligence that is empirically grounded and theoretically sound. Intelligence analysis, as Johnston (2008) has noted, is not yet a science, but it must develop scientific rigor if we are to produce reliable and valid reports and estimates for policymakers. To do that, the analyst must develop a body of theory deriving from the various human sciences, including anthropology. Some of the theory I have selected may prove fruitful in this effort and some may prove of limited scientific or analytic utility. There are also many promising theoretical perspectives from outside anthropology, especially social psychology and statistics, some of which I have mentioned. A number of these are already in use by analysts. In any case, it is my hope that this modest survey will add to the discussion on the uses of anthropological theory in intelligence and will spark more detailed contributions in the future.

Notes

[1] The Code is an ethical framework, but unenforceable by AAA, since there are no licensing requirements to practice anthropology.

[2] A recent article in the New York Times noted the distinction between scientists and advocates in its treatment of the controversy surrounding Napoleon Chagnon's classic work on the Yanamamo. The AAA posted on its website a rebuttal of the notion that anthropology had turned away from science. However, my observations of a number of AAA Annual Meetings suggest that advocacy exercises primacy in the organization, and likely in the discipline as a whole.

[3] It seemed fitting that his recommendation was based on a cultural analysis, however ad hoc.

[4] Behaviors may be observed, but the set of all behaviors, public and private, of members of a social group cannot be said to be culture, or else culture becomes a superfluous term empty of significance. And "material culture" (the artifacts produced and used by members of a social group) may also be observed, but few would limit culture to those material objects.

[5] That may due to a variety of epistemological, social, and political factors, all of which revolve around the fact that anthropology's objects of study talk back to the researchers. Those definitions that have been dismissed (such as racial classifications) tend to have strong ties with biology and hence are treated more like natural than social science definitions. Humans and social groups are, in fact, object and subject at the same time, and as such, resist reductionist theorizing and verification techniques. Owing to this, social science can never have the authority of the natural sciences with respect to its objects of analysis. Lacking such authority to dismiss or accept most definitions, old definitions linger, and we are free to choose whatever one best suits our needs at the time. If science is likened to natural selection, we might say that such definitions (and theoretical approaches) survive because they are not subject to the kind of selective pressure concepts natural science must endure.

[6] Adapted from James Lett's 1997 interpretive/rationalist classification scheme. The change in terminology is to allow for inclusion of humanistic perspectives not ordinarily called "interpretive" (such as historical particularism and postmodernism) and to avoid the sense that anything not scientific is non-rational. A notable exception to the emic/etic division is ethnoscience.

[7] There are many exceptions, notably the 2005 CIA-sponsored ethnography *Analytic Culture in the U.S. Intelligence Community* by anthropologist Rob Johnston.

[8] The U.S. Army Training and Doctrine Command.

[9] There are a number of postmodernist analyses of intelligence and security services, and surveillance arrangements, but none that could conceivably be applied to assist in intelligence collection or analysis.

[10] The source of this quote is disputed. Some attribute it to Eric Wolf, others to A.L. Kroeber, and still others suggest the source is unknown.

[11] It is tempting to include the culture-and-personality paradigm, which indeed has been used in the "national character" studies sponsored by the War Department during World War II. However, the notion that cultures have personalities as people do, susceptible to psychoanalysis, is without empirical basis, and could foster stereotyping that interferes with real insight.

[12] It should be noted that Radcliffe-Brown rejected the idea of "-isms" in anthropology, including structural-functionalism, as inappropriate labels for a science (Barnard 2000, 77-78).

[13] By "state" is meant the governing political organization of any complex society, ancient or modern; that is, a society with a complex division of labor, not a post-Westphalian nation-state.

[14] Not to be confused with a more recent application of the term, which is simply an indigenous practice or body of knowledge preserved by tradition and tested by experience. This new meaning is nearly identical to the old term "primitive science."

[15] There is frequently a taboo against marrying parallel, but not cross, cousins. An exception is in countries with unilineal descent that became Islamized; in such cases it became legitimate for a man to marry a father's brother's daughter.

[16] The correct plural is "schemata." Both forms of the word appear in the literature, but I have chosen to use "schemas" here because it accords with English vernacular usage.

[17] Camel-herding nomads living on the Ethiopia–Kenya border.

[18] Also known as Pathans, Pashtuns, or Pushtuns. Here, I employ Schlee's spelling.

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Review of *Torture: A Sociology of Violence and Human Rights*

Hajjar, Lisa. *Torture: A Sociology of Violence and Human Rights*. Taylor & Francis, Routledge Press. 2013. ISBN: 978-0-415-51806-2. 83 pages. $10.40.

Lisa Hajjar's *Torture: A Sociology of Violence and Human Rights* (2013) is an addition to the Routledge series "Framing 21st Century Social Issues." The objective of the series is to use central tenets of sociology to probe contemporary social problems, and to that end this book makes a certain contribution. Often considered "taboo," too controversial or ugly for conversation, torture is a practice both abhorrent and pervasive. For that reason alone it demands attention in works such as this. Hajjar offers us an accessible, introductory-level examination of historical and contemporary uses of torture, the discourse surrounding its use, and recent U.S. policy evolution. This book is useful for those looking for an introduction to the topic of torture and likely a worthwhile addition to an undergraduate classroom; though, some careful consideration ought be given to additional readings to supplement Hajjar's treatment of human rights more generally.

Hajjar opens her work looking at the evolution of U.S. discourse regarding torture since 9/11. In doing so, she highlights changes in news coverage, popular opinion, punditry, and even entertainment plots. In this first chapter, Hajjar skillfully reviews the policy changes introduced by the Bush Administration along with the shifts in interrogation practices as a means to understand the ways in which, and the reasons for which, "we are *still* talking about torture" (p. 13). The reader is also introduced to a variety of concepts central to the torture debate, including the "ticking time bomb" scenario, consequentialism, deontology, and "torture lite" (pp. 3-4). Events Hajjar notes as central to the course of U.S. debate include the Abu Ghraib prison photographs and the "torture memos." Thus from this important chapter, the reader understands not only the general landscape of popular discourse in the United States regarding torture, but also the events and environment that prompted shifts in opinion.

The second and third chapters introduce the reader to the historical and contemporary uses of, or justifications for, torture. The second chapter looks at the ways in which the utilization of torture ebbed and flowed through religious conflicts and the shifting conceptualization of the state. The third chapter traces the way in which the practice traveled through Cold War politics. Hajjar pays particular attention to the use of the "national security doctrine" in justifying certain efforts against perceived enemies, including torture. One of the strengths of the chapter is the discussion of how and when different types of regimes torture. Hajjar looks briefly at some of the more predictable and well-known authoritarian cases, including Argentina and Chile. She then importantly turns to democratic states, looking specifically at Great Britain in Northern Ireland and Israel in the occupied Palestinian territories.

While Hajjar's strength clearly lies in the specific topic of torture, in the fourth chapter she pans the lens out a bit to take a broader look at the concept of "rights," within which she has (rightly, of course) situated her discussion of torture. In introducing her reader to this concept of "rights," however, Hajjar takes what I interpret to be a "legal positivist" approach (Goodhart 2013, 17) without introducing the reader to alternative conceptualizations, and despite a seeming contradiction with some of her earlier statements about torture. I will explore this in a bit more depth below.

The post-Cold War human rights regime is explored briefly in chapter five, particularly as it relates to the evolution of international accountability. Here, the reader is introduced to the international tribunals for Yugoslavia and Rwanda, the International Criminal Court (ICC), as well as the "Pinochet Precedent" and Universal Jurisdiction. The author also provides a litany of potential ramifications created by these precedents for select former Bush Administration officials. It is a short chapter, but recognizes an important trend toward international accountability.

Hajjar makes what will likely be her most lasting contribution to the reader, perhaps particularly for the "newcomer" to the debate on torture, in her debunking of the myth of torture. In chapter six, she first looks at the lasting impact of torture on its victims, then turns to specifically address the question of whether torture "works." Discussing two specific cases of individuals held in U.S. custody and "questioned" with the so-called "harsh interrogation" techniques, and citing additional sources on the question of torture's utility for the United States more generally, Hajjar argues that actionable intelligence was not garnered via torture. She furthermore suggests that the practice did not mitigate threats to the United States, and actually created challenges for the country. For those interested in intelligence gathering techniques, this chapter, if brief, is of particular relevance.

Hajjar is clearly an authority on the topic of torture. Her discussion of the U.S. use of torture during the "War on Terror" is insightful if succinct. Yet in discussing "rights" more broadly, the book could benefit from a bit more depth. Hajjar defines rights as "legal entitlements that are created through laws" (p. 33). She later refers to the "creation of human rights" (pp. 38; 44) as a post-World War II event. This reflects (though it is not said overtly) a "legal positivist" perspective, where rights do not exist sans written law (Goodhart 2013, 17; Shestack 2007, 23-24). This perspective is viewed as problematic by some human rights scholars, myself included, partly because it obfuscates the advocacy for or the claiming of rights in the absence of law (Goodhart 2013, 17); scholars not of this school differentiate between human *rights* as inherently belonging to individuals and human rights *guarantees* as provided by a state or international regime (Goodhart 2013, 17; also Donnelly 2013, 20). Additionally, faced with a positivism perspective, one is left to ask: did regimes which tortured or committed genocide prior to the codification of legal prohibitions violate human rights? Or was slavery not a human rights violation while legal? For those who define "rights" as inherent to each human being, the answer is of course yes, those regimes violated rights, if not laws. As Jack Donnelly rightly notes, "Human rights

is the language of victims and the dispossessed. Human rights claims usually seek to alter legal or political practices" (2013, 20).

Not everyone agrees with this perspective on rights, of course. Yet it is important to note that Hajjar does not introduce this conceptualization of rights, nor any other alternative perspective. Furthermore, her treatment of torture in places outside of chapter four seems to contradict her definition of rights. For instance, in the Preface the author argues that "[e]very person on earth has the right not to be tortured under all circumstances. You don't have to be a good person to have this right; you just have to be a person" (p. xi). Note the lack of any reference to law. Here, the reader might presume that Hajjar is asserting that there is *no* condition or exception for the right not to be tortured, yet later she introduces the role of law in creating (versus guaranteeing) rights.

For an introductory course in human rights, the chapters devoted to torture would be useful and constructive additions to a syllabus. However, instruction on human rights as a concept and as a field of study would likely have to include a more holistic, inclusive text in order to compensate for the narrow presentation in chapter four.

Despite this shortcoming, Hajjar succeeds in bringing the evaluation of torture from the cloudy corner of uninformed assumptions, challenging popular assertions that "it works" or that there is some "not quite torture" means of torturing. *Torture: A Sociology of Violence and Human Rights* is appropriate for an undergraduate audience. The text benefits from a solid balance between accessibility and using the language of the debate (defined and explained where appropriate). It is brief, yet covers a great deal of ground at an introductory level. For those looking for an introduction to the subject of torture, particularly in the post-9/11 U.S. context, this (with some supplemental materials for chapter four) will fit the bill.

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Review of *The Future of Intelligence: Challenges in the Twenty-First Century*

Isabelle Duyvesteyn, Ben de Jong, and Joop van Reijn. *The Future of Intelligence: Challenges in the Twenty-First Century*. Routledge. 2014. ISBN: 978-0-415-66328-1. 165 pages.

Intelligence studies in the twenty-first century is quickly evolving from an amalgamation of prior thought and practice into a collusion of technology, knowledge management, and ethical probing. Not only are new questions being asked, new threats being presented, and emerging global disruptors being examined in a more dynamic security context, but practitioners within various iterations of the global intelligence community are beginning to explore a realm of novel options newly placed before them. The contributors to *The Future of Intelligence: Challenges in the 21st Century* seem to be rooted in parsing how the current threatscape differs from the bipolar struggle of the Cold War that their respective foundations were forged under. Perhaps the biggest question treated in this volume is one not directly posed by all the contributors collectively, although possibly in common consent. In an environment of increased intricacy that trends at an ever-quickening pace, have the threats become too blurred due to complexity—one to which there is no current solution?

What are the new security threats and do they also provide new opportunities? Does the development of technology (including social media) help or hinder the intelligence services? Is it possible to speak of a new intelligence revolution? To what extent do new developments require intelligence sharing, not only nationally but also internationally? And, as Michael Kowalski states in the Foreword, "last but not least: Do these developments pose new judicial and ethical challenges"? (p. xiv). Through a well-researched series of chapters from preeminent scholars and practitioners within the varying fields of intelligence studies, these central questions are adapted and explored. The chapters are broken into a mixture of forward thinking narratives that rely on the expertise and experience of the authors, coupled with pointed analysis on past missteps and an analysis of the organic evolution that has taken place within their respective fields.

To investigate this further, consider the discussion in *Threat, Challenges and Opportunities*, a chapter where Sir David Ormand notes that "Governments ideally need to be prepared to act as dangers begin to become clear, but preferably *before* the dangers become present. This task of helping to improve decision making through reducing ignorance is of course the very purpose of intelligence" (p. 21). The question paradigm then evolves to what are we solving for and is it relevant? Are we still fundamentally solving pre-9/11 problems? Most of the authors would say that the problem is *not* that we have *enough* information. Perhaps it hinges on the fact that the intelligence community is not reacting quickly enough. Observation and orientation are two crucial components that at times could be more salient in the various points

of view put forth in the text. Intelligence practitioners observe well, but do we draw the orientation to the decision makers or make the decision makers orient to the observations? A common thread in the post-9/11 threat environment is that we have reoriented to a shared proximate reality. Complexity lies in the response and the threat combined. This is where the contributors evoke a needed shift in orienting decision makers prior to an event. The history of intelligence is replete with how well practitioners observe. However, if the role of intelligence is not creating space for the insertion of decision makers to present opportunities before the threats occur, then in an open intelligence loop—predictions become useless.

This begs the question—are we too myopic on monitoring intent? None of the authors are saying that clairvoyance is an option. It's all value based, so when the path of intent and method cross for an adversarial force—where does intelligence monitor intent and provide potential solutions that are part of the attack landscape? This is part of a demand gap articulated by Monica den Boer framed in a discussion on intelligence-led policing. She states with regard to priority setting and decision-making spaces that "the lack of an effective response culminated in a demand gap: high volumes of crime persisted despite numerous law enforcement interventions" (p. 114). In a few short paragraphs, a potential model emerges—being proactive and innovative along respective lines of performance allows observation, orientation, and then *calibration*.

Reminiscence of intelligence theory and practice during the Cold War era is prominent in the variables of many of the contributors. Additionally, since the decision-making space that is necessary for proper orientation is part of a proposed paradigm shift, this volume could benefit from an analysis that combines both. For example, how did Valdimir Putin rise to where he is today given his background in intelligence? Essentially, does he understand how to leverage information as a decision maker? This could be historically framed with various examples seen predominantly in the European theater under the theory that greater is the fall thereof of people who manage their way up to complexity and then find that their confidence is inadequate for the task at hand.

The confluence analyses presented in *The Future of Intelligence* is much needed, well presented, and comes at a critical juncture for intelligence practitioners and theorists. It is a relevant and impeccable book for any academic collection. Collectively, the authors offer a strong line of reasoning regarding the needed change and proposed adaptation within the intelligence community.

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Review of *Drone Warfare: Killing by Remote Control*

Medea Benjamin. *Drone Warfare: Killing by Remote Control*. New York and London: Verso, , first published by New York and London: OR Books . 2013 (first published in 2012). ISBN: 9781781680773 1781680779. 246 pages. $16.95.

At first glance, Medea Banjamin's book, *Drone Warfare: Killing by Remote Control*, appears to be a well-researched, even comprehensive study of the modern use of unmanned aerial vehicles (UAVs) or remotely piloted aircraft (RPA). However, a critical review of her work shows that the author's political worldview drives both her research and her conclusions, impacting both her book's merit and its contribution to the growing body of literature on the topic of drone warfare. At a time when drones are constantly in the headlines—whether for their role in modern warfare or for their potential to expedite the shipping of online orders—Benjamin attempts to shape the discussion of their use with no aim of contributing to the disciplines of intelligence or national security.

Rather than achieving the goal she sets for herself in the introduction, "…[to promote] international dialogue about the direction, ethics, and legality of high-tech warfare (Benjamin 2013, 9)," Benjamin's work merely satisfies her agenda as set forth in her conclusion. In an effort to resist "…the normalization of drones as a military and law enforcement tool," Benjamin puts drones, their operators, and their developers squarely in her crosshairs (Benjamin 2013, 219). To this outspoken antiwar activist, drones are as inhumane as cluster bombs and land mines are their operators are murderers and their targets are victims (Benjamin 2013, 10).

Like the authors of *Living Under Drones* (a joint study by Stanford and New York University law schools of the impact of drones on Waziristan near the border of Afghanistan and Pakistan), Benjamin argues that even the dull drone of unmanned aircraft terrorizes innocent civilians. Her position fails to consider what that same noise might mean for would-be victims of genocide pleading for liberation from ruthless terrorists like those comprising the Islamic State of Iraq and the Levant (ISIL). She opens chapter one by vindicating the failed Times Square bomber, Faisal Shahzad, who cited U.S. drone strikes as his motivation (Benjamin 2013, 12). After laying out a brief, but interesting history of drone usage, Benjamin closes that chapter bemused by the irony of a vehicle designed to help fight terrorism functioning, instead, as a powerful recruiting tool for terrorists (Benjamin 2013, 29).

Throughout the book, Benjamin paints the picture of the modern use of drones much as Picasso depicted the Spanish Civil War in *Guernica*. Both portray the horrors that befell hapless human targets at the hands of technologically advanced aggressors. The weeping mother clinging tightly to her dying child at the close of chapter five is an especially poignant parallel between this painting and Benjamin's book (Benjamin 2013, 124). But while Picasso's black-and-white rendering of the

subject matter is tragically poetic, Benjamin's use of imagery to discredit drones is simply tragic.

Far from a masterpiece, *Drone Warfare* is a classic example of research bias that runs the gamut of scholarly sins. More than 25 percent of Benjamin's citations come from five sources—the *Guardian*, the *Los Angeles Times*, the *New York Times*, the *Washington Post*, and Wikipedia—and only studies portraying the use of drones in a negative light round out her list of referenced studies. She even concludes chapter six, "Murder by Drones: Is It Legal?" with a quote from satirist Stephen Colbert to sum up an argument that focuses more on the legality of the Global War on Terrorism (GWOT) than on that of drones themselves (Benjamin 2013, 148).

Throughout the book, Benjamin's blog-like prose is rife with political barbs and questionable conclusions. She states as fact that former President George Bush (she does not specify which) and Vice President Dick Cheney are war criminals (Benjamin 2013, 171). And she concludes, after failing to obtain information for her book from a single source (the Veterans Affairs National Center for Post Traumatic Stress Disorder), that "there is no official governmental expert who can speak about it" (Benjamin 2013, 99). Her conclusion not only discounts the availability of resiliency counselors and psychologists throughout the armed forces, but also is too premature to account for recent studies that find drone operators are less likely to suffer from PTSD than military members returning from deployments and combat aircraft pilots (Otto and Webber 2013; Chappelle et al. 2014). Benjamin liberally spackles personal opinion into any gap left between easily retrievable information and that which requires a library card or security clearance to access. Finally, rather than provide context to the reader for referenced interview excerpts, Benjamin wantonly misrepresents the intent of those interviewed in keeping with her alarmist portrayal of drone use.

For example, in chapter four, Benjamin recounts a Spiegel Online interview with Major Bryan Callahan in which he describes the challenges of remotely piloting drones in general. He responds, in particular, to the question: "is it not difficult to switch back and forth from war to civilian life everyday" (Pitzke 2010)? Benjamin prefaces Callahan's response on the importance of compartmentalization in her own words, "When it comes to witnessing murder…" (Benjamin 2013, 91). At no point in the 675 word interview does Callahan suggest that his work is illegal or shameful. On the contrary, he is decidedly defensive of the interviewer's final question concerning the parallel between drone-based warfare and video games—hence the subtitle of the article "It is Not a Video Game" (Pitzke 2010). That Benjamin refuses to acknowledge Callahan's position elsewhere in the book when discussing the risk of a "…'Playstation' mentality to killing" (Benjamin 2013, 86) is but one indication of the author's bias. Her diction provides another, less-subtle example.

Consistent with her framing of "robotic warfare" as the sinister brainchild of the military–industrial complex, Benjamin inserts disparaging descriptors when quoting statements made by executives and government officials to describe drones. The CEO of General Atomics, James Blue, does not share that his company benefits

from political capital—he "boasts" this observation (Benjamin 2013, 34). Managing editor of Jane's Missiles and Rockets likewise "gushe[es]" when describing the more capable variant of the Hellfire missile (Benjamin 2013, 44). And the Iranian government "gleefully" announc[es] its development of a long-range surveillance drone (Benjamin 2013, 52). Had Benjamin conducted the interviews herself, one might expect these judgments to have come from her own estimation of the interviewee's countenance. As it happens, the first two quotes come from external interviews, while the third lacks a citation—making it difficult to say how, exactly, Benjamin gauges the level of enthusiasm that she finds between the lines of quoted text.

Although *Drone Warfare* spends a disproportionate amount of time decrying the use of drones, the book does occasionally contribute to the current debate. For instance, Benjamin claims that the kill-capture program in general lacks adequate government oversight and that CIA involvement in lethal strikes violates international law. She also questions the blurred line that exists between International Humanitarian Law and the Law of Armed Conflict (LOAC), although she fails to reference either directly. Stripped of bias, Benjamin's arguments comprise an important insight: both United States and international regulations have failed to keep pace with technology—a point of concern that transcends any personal position on the morality of war.

In the two years since Benjamin first published *Drone Warfare*, U.S. troop commitments in warzones have been on a decline even as the popularity and practical use of drones have grown. Once low-hanging fruit for antiwar activists, the U.S. involvement in Iraq went from substantial to virtually nonexistent—only recently returning to the fore of public consciousness as terrorist group ISIL filled the security vacuum and began committing humanitarian atrocities throughout much of Iraq. All the while, drones, their developers and their operators were gaining invaluable experience in the name of national security that postured each to accommodate the recent request of the Iraqi government to turn back an evil greater than war itself.

Benjamin's recent outburst at a Senate hearing to authorize the U.S expansion of support to counter the ISIL threat in Iraq and Syria supports a single insight about *Drone Warfare* that belies its stated intent. *Drone Warfare* is not a comprehensive look into the morality and legality of "robotic warfare" as its jacket indicates. Rather, it is an opinion on the morality of war itself that benefits from the salience of drones but does little to improve the related literature.

While the vast majority of humans will agree that peace is favorable to war, among dissenters are bands of terrorists intent on achieving their political ends by any means necessary as ISIL has so vividly demonstrated in recent months. The proliferation of drones in modern warfare is a testament to their promise to stop these terrorists and to safeguard humanity, not proof of conspiracy. While there are many moral and legal issues to sort out regarding the use of drones domestically and abroad, Benjamin's book is a poor introduction to them. Instead, it serves to discredit the efforts of the proud men and women who work around the clock to protect the very human rights she has made it her life's work to ensure. Men and women who work tirelessly to design and employ technology that is more accurate,

more capable, and less prone to collateral damage. Men and women who, with drones, helped liberate ethnic minorities on a mountain in Sinjar and facilitate the delivery of humanitarian aid to those besieged in Amerli, Iraq. And yes, men and women who sometimes target terrorists kinetically—after much deliberation, according to strict rules designed to mitigate casualties, and at the behest of sovereign states.

While the imperfection of man and machine makes all joint endeavors likewise imperfect, generations of antiwar activists before her no doubt would have killed to have been on Benjamin's side of history.

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Review of *Emergency Presidential Power: From the Drafting of the Constitution to the War on Terror*

Edelson, Chris. *Emergency Presidential Power: From the Drafting of the Constitution to the War on Terror*. Madison: The University of Wisconsin Press. 2013. ISBN: 978-0-299-29530-1. pp. vii-xv, 3-273; notes, pp. 275-340; index, pp. 341-359.

In the foreword to this book, the author states that he wrote it because he could not find a suitable textbook for a new class he was teaching about emergency presidential powers and the war on terror. In doing so, he has produced a useful, balanced, and insightful discussion of the growing independence of the executive, and the implications the evolution of this increasing assertiveness has had on American foreign and domestic policy, particularly in the ongoing battle against international and domestic terrorism. Instructors offering classes in terrorism and counterterrorism, public policy and administration, or constitutional law and the presidency, among others, may want to give this volume serious consideration for use in their courses.

In the opening chapter the author offers a brief discussion on those provisions within the Constitution that deal with the issue of emergency presidential power, concluding that there is no specific article that authorizes the president to act unilaterally in times of crisis. Nonetheless, presidents have done so and each has offered justifications for his actions. This, the author notes, raises important questions particularly in regard to how the executive has defended his actions. Why does this matter? Professor Edelson notes that ultimately presidents must persuade others of the legitimacy of their actions, and, in doing so, they may establish precedents for future presidential decisions.

The next three chapters of the book discuss the early processes by which presidents such as Washington, John Adams, Polk, and Lincoln defended their right to assert emergency executive powers. Following these, the author provides an analysis of *Ex Parte Milligan*, noting the apparent rejection of implied emergency presidential powers by the Supreme Court. However, the author points out that the decision was rendered after the Civil War had ended and passions had cooled, and that the Court "…seemed to embrace the fiction that the Union was saved without any resort to implied presidential emergency power" (59). Professor Edelson notes that it can be argued that Lincoln's actions, along with retroactive congressional approval of them, created a precedent for emergency presidential authority.

The four chapters that follow trace the continuing evolution of emergency presidential power through World War II, the Youngstown Steel Seizure case, and Watergate. The author demonstrates how the Youngstown case and Watergate led to Supreme Court decisions that rejected presidential reliance on inherent powers and Nixon's grab for unlimited presidential power, noting, however, that not everyone agreed with the Court's viewpoint.

The last half of the book focuses on the issues that have arisen since 9/11 in regard to the conduct of the War on Terror and the degree to which the executive can act unilaterally. Of particular interest is the discussion of the unitary executive theory—the idea that all executive authority resides with the president alone and that the other branches of the government have no right to interfere with presidential actions arising from the use of those powers. Originating in the minority report regarding the Iran–Contra affair, the author notes that this was the justification used by the George W. Bush administration to support the expansion of presidential power it claimed were necessary to defend the nation after the terrorist attack of September 11, 2001.

However, the author continues, this point of view raises several constitutional issues, not least of which is the setting aside of the system of checks and balances as envisioned by the founders. Noting the extraconstitutional aspect of inherent powers, he states that such powers "…exist outside of and are not limited by the Constitution" (127). Moreover, the unitary executive view raises a number of questions ranging from whether or not such a view is justified within the text of the Constitution to the implications such a theory has for a constitutional form of government.

From this point forward, the author discusses the issues that have been raised by the War on Terror: detaining and trying alleged terrorists, the use of torture, warrantless wiretapping, the use of detention and military commissions, state secrets privilege, the targeted killing of Americans who have joined terrorist organizations, and the decision of the Obama administration to take military intervention in Libya. Relying mainly on primary documents, including court decisions and memoranda from the Office of Legal Council (OLC), Professor Edelson carefully dissects each issue, presenting the arguments for each side, critiquing them, and offering additional questions for consideration.

The author notes the ambiguities inherent both in interpreting the Constitution and in defining terms such as "hostilities;" both those who support expanding emergency presidential powers and those who wish to rein them in to utilize these ambiguities to support their arguments as they try to justify their points of view. The complexities of each of these issues are presented clearly and concisely, and in a manner that allows the reader to decide which opinion has the most merit. Rather than argue for a specific side, Professor Edelson offers an assessment of the arguments for and against inherent presidential power and presents questions that can be used for classroom discussion or for personal reflection.

Although the author intended the book for a classroom setting, it is a work that should draw the attention of scholars and the interested public. As a textbook, there are some aspects that instructors might find problematic. Questions about interpretations of the constitutionality of emergency presidential powers are spread throughout each chapter, rather than presented at the end of them. Readers, students in particular, might have found it more beneficial to include a synopsis of the major points and the questions about interpretations of the issues discussed at the end of each chapter.

The book also ends rather abruptly with questions about the Obama administration's interpretation of the War Powers Resolution of 1973. Readers may find the lack of a conclusion that summarizes the main points of the book to be unsatisfying. Students and instructors in particular may have benefited from a concluding chapter that not only provides a review of the book's arguments, but also its significant discussion points.

However, the book's strengths offset these concerns. This is a well-researched volume that makes excellent use of primary documents in formulating its discussion of what has become, in light of present and recent events, an area of concern, not only for constitutional scholars, but also for those involved in protecting the nation's security and the general public. Extended citations of court decisions, presidential commentaries, and other documents, along with secondary sources, supported by careful analysis and deconstruction of the arguments presented in them, give readers the opportunity to reach a considered opinion regarding the use of emergency power by the nation's chief executive and the justifications for its use. Practitioners in the intelligence and security communities will find much to consider as they digest the analyses offered in this volume. The questions raised by the author merit careful consideration by intelligence and national security professionals, scholars, and students, as well as the general public, especially with the rise of the Islamic State and other events that have taken place since the book's publication.

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Review of *Killing by Remote Control: The Ethics of an Unmanned Military*

Strawser, Bradley Jay, ed. *Killing by Remote Control: The Ethics of an Unmanned Military.* Oxford: Oxford University Press. 2013. ISBN: 978-0-19-992612-1. 296 pages.

As the use of drones in warfare has been popularized in the last decade, it has also raised increasing ethical questions regarding their use. *Killing by Remote Control: The Ethics of an Unmanned Military* is precisely about the ethical implications of killing by using remotely controlled weapons. This volume edited by Bradley Jay Strawser compiles and problematizes selected ethical challenges related to the use of killer robots.

A priori, some chapters could be interpreted as being apologetic of the use of killer drones without much criticism toward some countries' foreign policy. Rebecca J. Johnson's chapter "The Wizard of Oz Goes to War: Unmanned Systems in Counterinsurgency," with its "policy guidance" style, is the best example. Nonetheless, overall, the book successfully achieves its purpose: to sort out the main current moral debates surrounding unmanned weaponry in a more critical and specific way, so as to move away from "the nascent and thorny ethical concerns, in laundry list fashion" (Strawser 2013, 4).

The volume is structured in three parts, conforming to a standard configuration composed of a theoretical section, followed by the analysis of practical cases, and by future prospects as a concluding section. The first part setting the theoretical framework of the book— "Just War Theory and the Permissibility to Kill by Remote Control"—is probably the most overlooked. The focus is exclusively put on the suitability of the traditional Just War Theory versus the need to understand remote killing in the light of new norms and concepts that could depict a different reality underlying the use of drones. Despite the will to find out whether drones constitute a paradigmatic change, no particular conceptual suggestion is envisaged—namely in Asa Kasher and Avery Plaw's joint chapter "Distinguishing Drones: An Exchange." Besides, the issue of "justification" is put at the core of the theoretical reflection on the ethics of using unmanned weaponry, having Michael Walzer's *Just and Unjust Wars: A Moral Argument with Historical Illustrations* as its main reference.

Furthermore, in "Just War Theory and Remote Military Technology: A Primer," Matthew W. Hallgarth often seems to outweigh the objectivity required in a theoretical discussion. Namely, he presents his claims under the form of an influential chorus that repetitively suggests that "[m]oral responsibility applies to moral agents" (p. 37) and not to tools, and also that robots "are not evil in themselves" (pp. 37-39). Despite their formulation, these core ideas end up echoing throughout many other chapters in the book, and actually represent its most recurring message: human agency still comes first in the development, implementation, and use of unmanned weaponry, and should be taken as the fundamental focus of any ethical consideration.

One may conclude from this theoretical part that, although unmanned military vehicles are new in technical terms as a method of killing, they do not minimize the importance of justification under just war tradition. In other words, they may be new-shaped tools, but the same old moral precepts should apply.

The second and most substantive part of the volume approaches the current implementation of unmanned weaponry. Each chapter illustrates a specific practical aspect of drone employment, such as targeted killing, the warrior moral code of the operators, humanitarian military intervention, the proportionality of predation, counterinsurgency, and the asymmetry of warfare. Notwithstanding their diversity, every chapter raises awareness of the idea that human agency and moral deliberation cannot be dismissed in any equation involving the use of unmanned weaponry. This part indeed shows a general concern over the alienation that may occur if one loses awareness that human decisions and acts do have consequences, even when they materialize through machines. And so, each contribution in this part of the volume can be interpreted as the expression of that concern on different levels.

For instance, in "Drones and Targeted Killing: Angels or Assassins?" David Whetham discusses the historical evolution of targeted killing. He thus offers a well-documented and illustrated piece, with several geographical and institutional examples that explore the actual meaning of drones for the existing rules and practice of warfare. Through a historical approach, Whetham's chapter helps expand ideas on how unmanned weaponry has enabled targeted killing at a broader level of international politics.

Robert Sparrow's "War without Virtue?" focuses on the personal level, through the moral values of drone operators. His psychological, behavioral, and anthropological approach toward using unmanned weaponry specifically applies to the most agential dimensions of the issue. The distant robot control thus confronts traditional martial virtues such as courage, loyalty, honor, and mercy. Sparrow thereby addresses the recurrent concern underlying the use of unmanned weaponry: that is, the ease of attaining the operators' "faculty of judgment" (p. 85).

Another example is Uwe Steinhoff's highlight of the more structural level of unmanned weaponry. His chapter entitled "Killing Them Safely: Extreme Asymmetry and Its Discontents" is one of the most critical and mordant contributions to the volume. In it, he very confidently sustains there is no "special problem" with killing by remote control, as he justly juxtaposes to it the "general problem with generating extreme military superiority" (p. 179), of which automated and remote weapons are part. The author recalls the outdated and fundamentally asymmetrical position of the non-Westerners in war:

> [t]he use of UAV's is the latest incarnation of aerial warfare, a type of warfare whose history consists, for the most part, in white people more or less symmetrically bombing each other but *also*, and this is important, in white people […] asymmetrically and criminally […] bombing black or yellow or brown ones […] without much regard for civilians. Those black, yellow, or

> brown people might therefore have a somewhat different perspective on the alleged advantages of warfare by drones (p. 206).

Part three, regarding the future prospects of unmanned weaponry, contains two innovative contributions that contrast with the approaches of part two, in that they suggest that the future of killer drones does not need to be a perpetuation of present inaccuracies and misevaluations. In "Engineering, Ethics, and Industry: The Moral Challenges of Lethal Autonomy," George R. Lucas Jr. pragmatically attempts to clear the ethical landscape by critically denouncing the analytical uselessness of the current ethical and legal debate. He says it is marked by rhetoric, and by the "anthropomorphic, romantic nonsense attached to robotics in the popular minds" (p. 219). In turn, this conventional morality—termed "folk morality"—compromises the ethical analysis of the use of real military robots, through its rationalistic, ahistorical, and antipsychological bias. By considering that there is no need for machines to behave ethically, since they essentially have to be *safe and reliable* in their functioning, Lucas Jr. relocates the very focus of the ethical inquiry to the issue of fundamental agency and to the creation of the robots.

Throughout the book, with no exception, each author outlines the topic in considerable detail, and presents carefully structured arguments that are constantly balanced in the light of eventual counterclaims. Most chapters develop methodically tested arguments by following the rules of semiotics, even if they sometimes end up being too dense to be fluently absorbed by readers who are not familiar with this specific field of philosophy. By dedicating each chapter to a different case scenario of drone employment, with differentiated treatments, the volume effectively escapes the enumerative style it wishes to surpass, and avoids plain generalizations of what the ethical implications of killer robots are. There is also a careful commitment to maintain the dialog between the chapters through responsive arguments. Occasionally, though, this dialog may seem too extreme, namely when it takes the form of direct attacks; these sound like interpersonal competition between authors, and unfortunately eclipses the overall interest of the book.

Globally, *Killing by Remote Control* offers important insights on a broad level of moral topics, as it engages with serious aspects of killing by remote control that needed to be discussed and thoroughly exposed in methodologically coherent and structured analyses. This volume presents the reader with an interdisciplinary discussion of the moral dilemmas underlying unmanned weaponry. As such, it might be of interest to students and scholars researching on the subject who come from different academic backgrounds (International Relations, Security Studies, Intelligence Studies) and also to practitioners or even future drone operators. It offers no major innovation in terms of content, concepts, or theory; themes such as radical asymmetry, legality, the warrior ethos, or the case of Pakistan have already been exposed in other works on the same subject (see, e.g., *Armed Drones and the Ethics of War: Military Virtue in a Post-Heroic Age* by Christian Enemark (2013)). The book should rather be seen as a novelty in terms of the way it presents and develops those topics, namely for the way

ideas are methodologically organized, reasoned, and defended. Ethical reflections on the relationship between the humans and technology for warfare will always be necessary. Yet, other dimensions underlying the issue of unmanned weaponry, such as power, politics, and economics, among others, should not be dismissed, at the risk of inspiring a certain naiveté regarding such a sensitive issue.

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Review of *The Ethics of Intelligence: A New Framework (Studies in Intelligence Series)*

The Ethics of Intelligence: A New Framework (Studies in Intelligence Series), First Edition. New York: Routledge Taylor & Francis Group. 2014. ISBN: 978-0-415-82104-9. 204 pages.

The Ethics of Intelligence by Ross W. Bellaby provides a launching point for philosophical and ethical debate regarding intelligence practices in the collection phase of the intelligence cycle using methods in electronic (ELINT), human (HUMINT), and imagery (IMINT) means to develop intelligence in the name of national security. The central question revolves around when and *if* intelligence operations, specifically collection activities, should be conducted and at what acceptable level of harm they should they be permitted. Ross W. Bellaby, Ph.D. is a lecturer of International Relations in the Political Science Department at the University of Sheffield and posits the intelligence profession should develop and recognize a systematic ethical review, much in the same vein as the military does to determine kinetic and non-kinetic force during combat operations. Just War principles are based on proportionality of harm weighed against the benefits achieved to guide the practice of warfare, but in this instance, Bellaby considers the practice of intelligence operations. *The Ethics of Intelligence* is a suitable book for all levels of intelligence professionals and students, from novices developing critical thinking for decision-making purposes to seasoned officers as a reminder to replenish the perishable skills of considering the ethics of intelligence activities.

As a means to measure and substantiate the moral dilemmas in the proportionality between harm and the greater good, Bellaby relates the levels of harm as a structure he calls the Ladder of Escalation. This ladder moves from levels one through six, each rung of the ladder bringing a greater degree of harm to a target during an intelligence collection effort: from the mild such as betrayal and distrust to the extreme such as death or mutilation. To determine the rung on which an activity should be placed, one must define what constitutes a "just target" versus an "unjust target" for exploitation. For example, the use of known government officials in their overt capacity is considered level 1: by position, those individuals should expect to be targeted. In contrast, a private citizen recorded in their own domicile is unjust because they have a reasonable expectation of privacy and protection in that particular setting.

The Just War principles serve as a comparison to the Just Intelligence principles based on the belief that individuals have, at a certain level, an innate right to privacy and freedom from extreme levels of harm to maintain free will. At what point does the harm to a collection target or method outweigh the greater good produced for national security? At what point is the harm too great to produce benefits for national security, and if the collection efforts reach that level, who is ultimately responsible?

A thoughtful examination of the methods used to collect also aids in determining where the example will be placed on the Ladder of Escalation. These range from CCTV footage in a public place and voluntary "walk-in" recruits at the lowest level of harm, whereas physical, emotional, and psychological torture is unacceptable in all circumstances for both reliability of information and human morality and ethical conscience; this serves no purpose and therefore ranks at the highest level of harm. Bellaby provides real-life accounts of the examples to explain why the examples deserve the placement they are given.

The backdrop of the book is a review of basic human needs and how psychology plays a role in decisions to conduct activities that produce some level of harm and suspension of free will against another human being in the name of national security. In light of alleged atrocities in Guantanamo Bay, Abu Ghraib, and the abuse of agency powers to monitor U.S. person activities at home and abroad, *The Ethics of Intelligence* encourages the reader to think critically about the role intelligence plays in national security as well as ponder where the limitations of its use should reside in strategic and operational level decisions. Despite technological advances and the evolutionary threat environment, ethical decision-making skills will always be applicable for intelligence professionals. *The Ethics of Intelligence* should be a recommended reading for all levels of intelligence-related curriculum.

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