The Drone Wars: Uncovering the Dynamics and Scope of United States Drone Strikes

by

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Class of 2013

A thesis submitted to the
faculty of Wesleyan University
in partial fulfillment of the requirements for the
Degree of Bachelor of Arts
with Departmental Honors in Government

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Key Terms

Drone: A conversational term for an unmanned aerial vehicle (UAV). A UAV is an aircraft, which is operated remotely by an operator on the ground.

Hunter-Killer Drone: A conversational term for Unmanned Combat Arial Vehicles. A Hunter-Killer drone is a pilotless aircraft, which is equipped with weaponry, generally hellfire missiles that can be launched by a remote operator. This thesis will generally refer to hunter-killer drones simply as drones.

Predator Drone: The most common hunter-killer drone employed by the CIA and US military.

Reaper Drone: The second most common type of hunter-killer drone employed by the CIA and US military. The Reaper drone is larger and technologically more advanced than the Predator drone.

Hellfire Missile: An air to surface missile with precision strike capabilities. The hellfire missile can be used in a variety of scenarios. Most hunter-killer drones are equipped with hellfire missiles.

CIA: Central Intelligence Agency, which is responsible for orchestrating and running a large portion of the drone programs in Pakistan and Yemen. The CIA is responsible for collecting intelligence and orchestrating the strikes.

JSOC: Joint Strike Operations Command is a component of the larger US Special Operations Command (USSOC). The JSOC is responsible for developing and conducting special operations missions. Though the CIA runs the majority of the drone program, the JSOC has been involved in the drone programs in Pakistan and Yemen collecting intelligence, and coordinating and conducting strikes.

AQAP: Al-Qaeda in the Arabian Peninsula, AQAP, as it is currently constituted, was formed in 2009 when Al-Qaeda affiliates in Saudi Arabia and Yemen joined together. While AQAP officially began operations in 2009, the term has been used retroactively to describe Al-Qaeda affiliated groups in Yemen. AQAP has orchestrated a variety of terrorist attacks including the failed Christmas day bombing in 2009 as well as the successful attack on the USS Cole in 2002.[1]

TBIJ: The Bureau of Investigative Journalism is a United Kingdom based organization, which has compiled a full dataset of all identified United States drone strikes in Pakistan and Yemen. This raw data used in this thesis was obtained from TBIJ's database.

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[1] Jonathan Masters, "Al-Qaeda in the Arabian Peninsula (AQAP)," (New York: Council on Foreign Relations, 2012).

<u>Acknowledgements</u>

Chapter One: Introduction

After the attacks of September 11th 2001, the United States launched a global

War on Terror to eradicate the organizations responsible for orchestrating attacks on

Americans at home and abroad. On September 18th 2001, Congress overwhelmingly

passed the Authorization for Use of Military Force (AUMF) giving the President of

the United States authorization, "to use all necessary and appropriate force against

those nations, organizations, or persons he determines planned, authorized,

committed, or aided the terrorist attacks that occurred on September 11, 2001, or

harbored such organizations or persons, in order to prevent any future acts of

international terrorism against the United States by such nations, organizations or

persons." The AUMF has proven to be one of the most consequential pieces of

foreign policy legislation passed since September 11th 2001 and has given the

executive branch immense freedom to conduct operations against suspected terrorists

overseas.

As the most dominant superpower in what is still largely a unipolar world, the

United States has used all manner of counterterrorism tactics from full-scale ground

war in Afghanistan, to Special Forces operations, and airstrikes. In the past four

years, strikes from Unmanned Arial Vehicles (UAVs), or drones as they are popularly

known, have become the hallmark of the Obama administration's counterterrorism

operations. Technically a covert program, the United States has used drones operated

both by the CIA and the military to eliminate terrorist suspects and affiliated targets

in Afghanistan, Iraq, Pakistan, Yemen, Somalia, and Libya. While the United States uses drones in strictly military contexts in Iraq and Afghanistan, the CIA has also used drones extensively in Pakistan and Yemen to eliminate terrorist suspects who may pose a threat to United States interests.

Drones are used in two separate ways. First, in Iraq and Afghanistan, drones are used as a supplementary military tactic. Drone strikes are used in concert with airstrikes and ground troops to eliminate enemy targets and accomplish strategic objectives. Though surveillance remains the primary role of drones in battlefield combat, strikes are carried out on about 3% of sorties and are conducted and authorized by United States Army or Air Force officers.[2] The second and dominant use of the drone program is run by the CIA and is used to conduct counterterrorism options through targeted killing. In general, high-ranking CIA officers authorize strikes on terrorist suspects who have been identified as threats by the CIA and Pentagon. Ultimately, if a target is of high enough value or if there are complicating circumstances, for instance if a terrorist is spotted but he is with his family, the president has the final authority to authorize a drone strike. This thesis explores the targeted-killing program run largely by the CIA and seeks to provide greater understanding of the strategies that drive the variation in timing and target level of these types of drone strikes.

Since 2008, when Barack Obama was sworn in as President of the United States, the drone program has rapidly become a hallmark of the United States' counterterrorism policy and a staple front-page headline. The increase in strikes in a

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[2] David Alexander, "U.S. Air Force Stops Reporting Data on Afghanistan Drone Strikes," *Reuters*, March 10 2013.

variety of jurisdictions, most drastically in Pakistan and Yemen which are both outside traditional war zones, begs the question of why have we seen this monumental increase in drone strikes and who are the targets of these drone strikes? As with any emerging warfare or counterterrorism tactic, there are a variety of reasons for the decisions to use drone technology in Pakistan and Yemen.

Drones are an attractive tool for US decision-makers for several reasons. First drones are inexpensive. Second, because drones are unmanned, they raise no immediate risks of US troop casualties and can target terrorists in places unreachable by US troops. Third, because drones can conduct surveillance of potential targets before opting to fire, they have the capacity to minimize collateral damage. However, these explanations offered by popular literature fail to account for the timing of the increase in drone strikes. Drones are not a brand-new technology; rather we have seen a drastic increase in their use since 2008, a fact not accounted for by the standard explanations for drone increase. Furthermore, traditional explanations for the increase in drone strikes do not provide a detailed breakdown of the nature of drone strike targets as they have increased over time.

Central Assertions of the Thesis

Through data analysis and evaluation of available qualitative sources, this thesis seeks to provide a quantitative link between United States casualties in Afghanistan and drone strikes in Pakistan. I argue that much of the drone program in Pakistan is based on reactions to the war in Afghanistan, specifically a reaction to months in which there are high numbers of United States casualties. Further, I argue that negative public opinion regarding American casualties and the conflict in

Afghanistan combined with the enduring necessity of persistent counterterrorism operations has contributed to the increase in drone strikes in Pakistan.

In the case of Yemen, I argue through my analysis of target selection that the United States has deviated from its stated policy of targeted assassination of high-value targets. Instead of pursuing a policy of strict targeted assassination, the United States has targeted a variety of low-value targets a pattern that is consistent with a traditional warfare rather than a counterterrorism operation. I have conducted a nuanced breakdown of the increase in drone strikes in Yemen and conclude that the United States has targeted low-value targets as a response to upheaval and territorial gains made by al-Qaeda during particularly tumultuous periods in Yemen.

Significance of the Thesis

As evidenced by the recent controversy over CIA director John Brennan's nomination, daily coverage in major newspapers, and legal debate, drones are quickly becoming one of the most controversial, consequential, and defining foreign policies of the Obama Administration. However, the drone program remains covert and relatively little new scholarly research has been conducted regarding the workings of the drone program. To date, most scholarly literature has focused on legal study and debate regarding international law and human rights. Scholars remain divided on the legality of the program for a variety of different reasons.[3] Other scholarly literature has focused on the human aspect of the drone program, namely the effects of drone

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[3] For example see: Ryan Vogel, "Drone Warfare and the Law of Armed Conflict," *Denver Journal of International Law and Policy* 39, no. 1 (2011); Mary Ellen O'Connell, "Unlawful Killing with Combat Drones: A Case Study of Pakistan, 2004-2009," *Notre Dame Legal Studies*, no. 09 (2009); Kenneth Anderson, "Targeted Killing in U.S. Counterterrorism Strategy and Law," in *Series on Counterterrorism and American Statutory Law* (Washington, DC: Brookings Institution, Georgetown University Law Center, Hoover Institution, 2009); Committee on Oversight and Government Reform, *Rise of the Drones: Unmanned Systems and the Future of War*, 2nd, March 23 2010.

strikes on local populations. Scholars have also investigated the United States' claims that drone strikes do not cause a high number of civilian casualties.[4] However, there is a lack of literature that fully investigates the diverse reasons behind the United States' increasing reliance on drone strikes.

Regardless of its legality, the drone program is here to stay. Certainly, human concerns are relevant for any study of violence (and especially relevant to legality), but these studies fail to dissect the driving forces behind drone operation. This thesis is largely unique in its use of data to determine, in real terms, who the United States is killing and why.

Finally, because the drone program is covert, the government does not release official data on the program. For this reason, I rely on drone strike data aggregated primarily by journalists. Other scholars have used data from similar sources, yet to my knowledge, this thesis represents the first aggregation, coding and analysis of strike data as it corresponds to American casualties or target rank. Though not comprehensive by any means, this study seeks to explicate, using data, some of the driving factors behind the drone program and the fluctuation in strikes and target selection. A better understanding of the drivers of the policy will benefit scholars and policy makers alike as the debate over the direction and scope of the program continues.

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[4] For example see: Chantal Grut, "Counting Drone Strike Deaths," (New York: Columbia Law School, 2012); Stephan Sonnenberg James Carvallaro, Sarah Knuckey, "Living under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan," (International Human Rights and Conflict Resolution Clinic (Stanford Law School) and Global Justice Clinic (NYU School of Law), 2012).

A Brief History of Drones and the Drone Program

While their use as killing machines has exploded only in the past few years, drones are not particularly new technology. As they exist today, drones grew out of a project begun in the 1980s, which sought to create long-endurance reconnaissance UAVs. Developed by a small firm called Leading Systems, the Amber I became the first modern drone. Though the Army did not utilize it, in fact all the planes were confined to storage after Leading Systems failed to win a larger contract, the Amber I was used to design the GNAT 750.[5] In the early 1990s, the GNAT 750 spurred the development of the Predator drone, the most recognizable of today's hunter-killer drones. The new Predator drones were first deployed by the CIA and the Air Force as a surveillance tool during Clinton Era conflicts in Bosnia and Kosovo. In 2000, Predator drones were employed in the hunt for Osama Bin Laden who was successfully spotted. However the sighting amounted to nothing, as the unarmed drones could not orchestrate a strike.

After 9/11, the military quickly became interested in drone technology for use against insurgents first in Afghanistan and later in Iraq. The drones were armed in the aftermath of the Bin Laden sighting when officials at the CIA, including then director George Tenet, demanded they have the ability to "promptly respond to future sightings of high-value targets."[6] Essentially, the Air Force simply attached Hellfire missiles to the Predator and thus the hunter-killer drone was born. Initially viewed as

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[5] Stephen Trimble, "A History of Predator for the Ultimate Insider," in *The DEW Line*, ed. Stephen Trimble (2011).

[6] David Axe, "Brennan: A Man and His Drones " *Reuters*, February 6th 2013.

a rather shaky flying machine, the Predator drone was embraced quickly by the armed forces.

Drones exist in all shapes and sizes. The smallest are barely larger than paper airplanes and are launched by hand providing real-time surveillance to army units on the ground. The focus of this thesis is on hunter-killer drones, those drones capable of launching hellfire missiles at ground based targets. The first hellfire missile was fired the first night of the Afghan War, from the parking lot of the CIA in Langley as a result of a direct order from General Tommy Franks the commander of US forces in Afghanistan. As drones continued to develop, two main types of hunter-killer drones have emerged, the Predator and Reaper. True to their destructive names, both carry hellfire missiles capable of destroying a wide range of targets. Both the Predator and Reaper have the ability to conduct surveillance for an extended period of time before launching deadly strikes. These two types drones have been primarily responsible for the increase in strikes.

Structure of the Thesis

To restate, two related research questions motivate this thesis: What leads to increases in drone strikes and who are the targets of drone strikes? I first hypothesize that increased costs of war, specifically American casualties, leads to increases in drone strikes. Second, I present a more tentative hypothesis regarding the level of drone strike targets. It is often assumed that drone strike assassination attempts primarily target high-profile individuals, but I expect to see drones strikes also target low-profile individuals. Specifically, I expect drone strikes to target low-level

insurgents in addition to high-level insurgents especially under circumstances of drone technological familiarity, capacity, and changed strategic goals.

In Chapter One, I have provided an introduction to the drone program and presented my central assertions. In Chapter Two, I draw on related research and casualty aversion theory to develop my cost theory of drone strike increases, answering the question: Why do we see increased drone strikes in Pakistan? Chapter Three provides an empirical test of the cost theory of drone strike increase in Pakistan using drone strike, American casualty, and public opinion data. Chapter Three seeks to explain not only the general upward increase of drone strikes, but also account for month-by-month variations in the number of strikes. Drawing on American casualty data in Afghanistan and Pakistani drone strikes, I find strong evidence supporting my expectation that increased costs of traditional warfare (American casualties) does indeed lead to subsequent increases in drone strikes. In Chapter Four I begin to explore the question of targeted killing and target selection and discuss the theory behind targeted killing and target selection. Because of the novelty of this topic, this chapter primarily presents a series of relatively original expectations regarding the scope, or profile level, of drone strike targets. And while really no research exists on the level of drone strike targets, this chapter also explores the basis logic behind target selection of targeted killing to help provide some background for my expectations. Chapter Five follows with an empirical test of target level expansion in Yemen. I present data on the target level of drone strikes in Yemen and find evidence that number of drone strikes on low-level targets is actually quite comparable to the number of strikes on high-level targets. I then investigate a surge in strikes on low-

level targets and find that the United States has used drones in Yemen for both targeted killings as well as to conduct more traditional warfare in support of the Yemeni government. Finally, I conclude in Chapter Six with a discussion of the limitations inherent in this thesis, the policy implications of my findings, and ideas for future research.

Chapter Two: What Leads to Increases in Drone Strikes?

This chapter provides the theoretical support for my first hypothesis: that increased costs of war in Afghanistan, specifically American casualties, have led to an increased reliance on drone strikes in Pakistan. Since the beginning of the Global War on Terror in 2001, war costs have risen almost continually. For the purpose of this thesis, war costs are defined as a measure of human costs, particularly American casualties. As war costs in Afghanistan increase, I expect to see a durable policy change from use of ground troops to an increased reliance on drone strikes as a preferred method of conducting war in locales related to the conflict. Put simply, more American casualties should lead to more drone strikes.

This chapter encompasses a review of several distinct but related theories in order to argue that as war costs rise, but policy goals remain static, new strategies–in this case drone strikes–will emerge. First, I will lay out the case, echoing the one made by the United States government, for drones as a low cost mechanism for the conduct of war. Second, I will present the two factors I argue are largely responsible for the increase in strikes in Pakistan, casualties and public opinion about the war. I concur with the consensus literature, that public opinion has bearing on foreign policy decision making, particularly on the use of force. Third, I will build upon casualty aversion theory to argue that public opinion has contributed to the Obama Administration's increasing reliance on drone strikes.

Goals of US National Security

This chapter and corresponding literature is based on the principal assumption that the United States seeks to achieve the basic national security goals articulated in the 2010 *National Security Strategy*–chiefly that US military policy remains one of countering threats and eliminating terrorists across the globe. The 2010 *National Security Strategy* aptly summarizes these goals and provides a base for policy analysis:

> Going forward, there should be no doubt: the United States of America will continue to underwrite global security—through our commitments to allies, partners, and institutions; our focus on defeating al-Qa'ida and its affiliates in Afghanistan, Pakistan, and around the globe; and our determination to deter aggression and prevent the proliferation of the world's most dangerous weapons.[7]

These goals read remarkably similarly to those put forth in the 2006 and 2002 *National Security Strategies*. In 2006, then President Bush's National Security Strategy also emphasized the need to defeat terrorism:

> From the beginning, the War on Terror has been both a battle of arms and a battle of ideas – a fight against the terrorists and against their murderous ideology. In the short run, the fight involves using military force and other instruments of national power to kill or capture the terrorists, deny them safe haven or control of any nation; prevent them from gaining access to WMD; and cut off their sources of support.[8]

In short, the goals of the United States in respect to defeating terrorism have largely stayed the same since the War on Terror began in 2001. However, domestic politics and international politics have changed drastically in the past decade. These changes, from public opinion and war, to the recession and fiscal crisis of 2008 have

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[7] *"National Security Strategy," (Washignton, DC: The White House, 2010).*
[8] *"National Security Strategy," (Washington, DC: The White House, 2006).*

necessarily changed the way that America conducts war and counterterrorism

operations. One of the principal changes in the conduct of warfare has been

technological–especially the development of drones. This literature review seeks to

explain some of the reasons drones have become a catchall solution to the United

States' need to retain an aggressive counterterrorism strategy while balancing

monetary, human, and public costs of war.

The Costs of Drones

While their status as a transcendent weapon can be debated, there is no doubt

that drones have provided the United States with an unprecedented capacity to engage

in targeted killing at almost anytime, almost anywhere. Previously dangerous tactical

missions or bombing raids can now be executed by remote control from the comfort

and safety of Langley, VA. Though scholars have debated the legality under

international law, the drone program has been accepted by the political establishment

and has grown continually since its inception in 2002.[9] Even in the 2012 presidential

election, one marked with stark policy differences between the candidates, drone use

was not only accepted, but also advocated by the presidential candidates of both

political parties. While 2012 GOP challenger Mitt Romney rarely conceded any

points to President Obama, in the final presidential debate, he praised the presidential

drone program saying "I support that entirely and feel the president was right to up

the usage of that [drone] technology and believe that we should continue to use it to

continue to go after the people who represent a threat to this nation and to our

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[9] For the official view see: Harold Koh, "The Obama Administration and International Law,"
(Washington, DC2010). For other legal opinions see note 3.

friends."[10] Governor Romney's short statement essentially embodies the positive views of the American political establishment in regards to the drone program and is especially revealing given the rarity of any issue's depoliticization in American political discourse. The American public has also proved receptive to drones with 82% of Americans approving of drone use against "suspects overseas" in a February, 2012 poll.[11] Given the agreement of two vastly different presidential candidates and overwhelming public support, drones seem to be quickly becoming a hallmark of American coercive diplomacy against terrorism.

So when might we expect to see an increase in the use of drones? The conventional answer holds that drones are low-cost, effective, and they allow the United States to eliminate its enemies with little to no risk to civilians or US forces. Therefore, as the costs of conflict increases, drones should be increasingly relied upon because they are both low-cost and effective substitutes for traditional warfare. Particularly interesting is the public's tolerance and support for combating terrorism and the simultaneous decline in public approval regarding the protracted struggle in Iraq and Afghanistan due to the rising costs of the conflicts. In these cases, I expect the increased costs of the conflicts but constant demand for action to lead the administration to turn to drones as a less costly, but still effective strategy designed to further the War on Terror. I now proceed to argue that drones are indeed low cost alternatives to traditional warfare.

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[10] "Transcript of the Third Presidential Debate," *The New York Times*, October 22 2012.
[11] "ABC News/Washington Post Poll ", *Washington Post*, February 2012.

Monetary Costs of Drones

The monetary cost for physical drones is quite low. Fiscally, operating a drone

is significantly less expensive than alternative methods of conducting aerial strikes

(or for that matter ground operations) including fighter jets, bombers, or cruise

missiles fired from marine ships. In terms of equipment costs, a single Predator drone

costs a mere $4.5 million compared to a new F-22 fighter jet, which boasts a hefty

price tag of $420 million dollars.[12] Even the much larger and more technologically

advanced Reaper drone has a comparatively low cost of $37 million dollars.[13] Put

simply, for the cost of one fighter jet, the United States can purchase 93 Predator

drones or 11 Reapers. Considering the United States entire hunter-killer drone fleet

has fewer than 250 drones, the physical hardware costs almost nothing compared to

more traditional means of aerial bombardment.

In addition to the actual materiel, costs associated with the training and

deployment of soldiers and pilots are much reduced for drone operation. Drones use

less fuel and require less space to take off and land. Unlike fighter pilots, who have to

undergo years of training and are almost always officers, military drone pilots are

often lower-grade or enlisted officers or civilian members of the CIA who can operate

drones out of Langley, Virginia or a standing military base at minimal cost.

Furthermore, unmanned systems are unconstrained by the human abilities of their

operators. Drones can stay in the air for days and endure G-forces that would

incapacitate a pilot. While smaller battlefield reconnaissance drones are often

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[12] P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century* (New York: Penguin Press, 2009), 33.
[13] "Program Acquisition Costs by Weapon System," (Washington, DC: Office of the Under-Secretary of Defense, 2012), 2.

abandoned during firefights, Predator and Reaper drones have almost a perfect track record of returning to base and are much more cost effective for use in attacking operations than putting in tactical special forces teams or using traditional fighter aircraft.

As was the case in the 1990s after the Cold War, in the aftermath of the Iraq War, the US military is again in the process of downsizing. After falling rapidly after the Cold War, US defense spending climbed above 5% of GDP after 9/11 mostly due to the wars in Iraq and Afghanistan. Total funding for overseas contingency operations also dramatically increased in the wake of 9/11, again mostly due to the wars in Iraq and Afghanistan. In total, according to Brown University's Watson Institute, the United States had spent or promised almost $4 trillion dollars on the conflicts in Iraq, Afghanistan and other operations related to the War on Terror.[14]

As the US deficit has risen and budgets have been slashed, there has been much debate about downsizing the military and scaling back global commitments to save money. The rising costs of traditional war have fostered calls to change the way the US conducts war.[15] After spiking in 2009-2010, defense spending as a percentage of Gross Domestic Product has begun to decline at a rather dramatic rate. Taking into account President Obama's proposed budget, defense spending is expected to further decline to the 3.7% of GDP that it was in 2000.[16]

Given the vast amount of money spent on the wars in Iraq and Afghanistan, the recent recession, virulent debate on the national debt, and the Obama

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[14] Neta Crawford and Catherine Lutz, "Costs of War " Watson Institute.
[15] Joseph Stiglitz Linda Bilmes, "The Iraq War Will Cost U.S. $3 Trillion and Much More," *Washington Post*, March 9 2008.
[16] *Dinah Walker, "Trends in U.S. Military Spending," (New York: Council on Foreign Relations, 2012).*

administration's desire to scale back military spending while still pursuing the aggressive goals outlined in the *National Security Strategy*, something has to be done to cut military spending. One of the chief ways to reduce spending in any field is through investment in cheaper technology. Policy makers know they must cut monetary costs, and drones are much cheaper than traditional means of making war. In purely fiscal terms, drones may mean that the US can have their cake and eat it too–maintain a global security presence while still cutting down on expenditures. Though I will not quantitatively test this hypothesis, monetary cost factors into the argument that as war costs (in this case monetary) go up there should be a noticeable increase in drone strikes.

Casualties

Most often, the greatest cost of war comes in the form of human costs. From an American policy makers' (and most often the American public's) perspective, these human costs are represented by American troop casualties. Because of growing public disenchantment with American casualties and low-tolerance for conventional war, the replacement of traditional strategy with low-cost drone strikes allows policy makers the use of force to achieve strategic policy and security goals while tempering public opinion. In the following section I evaluate the literature on public opinion and casualties in order to validate the argument that as casualty costs go up there will be an increase in the use of drone strikes for the purpose of preserving American troops, reflecting a shift, motivated in part by public opinion, against traditional methods of conducting war.

Public Opinion and Foreign Policy

The public is not often thought of as an influential actor in the foreign policy (as opposed to domestic policy) decision making process. However, a growing body of literature disagrees. The public may be unsophisticated and perhaps generally unaware of foreign policy issues, but in some cases the public can actively shape foreign policy. Though the public often holds basic views of foreign relations, this does not make them irrational.[17] Instead, the public will often rely on latent beliefs and opinions when responding to questions about foreign policy.[18] Though public opinion rarely becomes the driving force behind foreign policy formation, Powlik and Katz argue that policy makers discount policy that would generate negative public opinion.[19] In their literature review of public opinion and foreign policy, Powlik and Katz suggest, "that the public is rational and 'pretty prudent' with regard to foreign policy, but is not particularly well informed or concerned about foreign policy issues."[20] Furthermore, Powlik and Katz conclude, "contemporary foreign policy officials largely assume that trying to sustain a policy in the face of ongoing public opposition is both impractical and politically unwise."[21] Strong public opposition to policy will generally deter politicians from pursuing unfavorable policies. While public opposition generally does not manifest itself in minor foreign policy decisions such as trade agreements or treaties, the public will become involved in major decisions most often the conduct of war.

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[17] Eric Smith, *The Unchanging American Voter* (Berkeley: University of California Press, 1989).
[18] V. O. Key, *Public Opinion and American Democracy*, Second ed. (New York: Knopf, 1964).
[19] Philip Powlick and Andrew Katz, "Defining the American Public Opinion/Foreign Policy Nexus," *Mershon International Studies Review* 42, no. 1 (1998).
[20] Ibid.: 52.
[21] Ibid.: 53.

Public opinion, as it relates to policymaking, has four distinct components: salience, stability, intensity, and direction.[22] For the public to influence policy, the issue must be salient for both the public and policy makers. Of additional relevance to policy-makers is the fact that often people will vote for or against a presidential candidate based on their views of foreign policy.[23] Like any issue, the salience of foreign policy fluctuates, but issues of national security tend to be more salient and therefore incite a public opinion and policy response.

Foreign policy can quickly become salient in cases of attack, warfare, or international incident. To borrow Nassim Taleb's term, a "black swan event," one that cannot have been reasonably predicted or anticipated, greatly increases public responsiveness to any event.[24] Though an example of domestic policy, the public's reaction to the government's response to Hurricane Katrina demonstrates this phenomenon. Before Hurricane Katrina, reform of FEMA was not a salient political issue. In the aftermath of Katrina, the Bush administration's mishandling of the situation caused his approval numbers to fall and led directly to changes in emergency response policy.[25] In the aftermath of 9/11, as expected resulting from an attack of 9/11's magnitude, the American public had a clear response which lead to a

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[22] Kenneth Goldstein John Coleman, William Howell, *Understanding American Politics and Government* (New York: Longman, 2011).222

[23] John Sullivan John Aldirch, Eugene Borgida, "Foreign Affairs and Issue Voting: Do Presidential Candidates Waltz before a Blind Audience?," *American Political Science Review* (1989).

[24] Jonathan Stevenson, "Pragmatic Counter-Terrorism," 43, no. 4 (2001).

[25] Karen Tindall Paul Hart, Christer Brown, "Crisis Leadership of the Bush Presidency: Advisory Capacity and Presidential Performace in the Acute Stages of the 9/11 and Katrina Crises," *Presidential Studies Quarterly* 39, no. 3 (2009).

much higher rate of tolerance for policies (such as the reduction of civil liberties) that they previously would never have permitted.[26]

As a direct threat to national security, terrorist attacks have galvanized the public and required a coherent policy response from elected officials. For example the Lockerbie bombing, the Oklahoma City Bombings, and Osama Bin Laden's 1993 attack on the World Trade Center placed counterterrorism policy in the public eye, adding an actor, the public, to the decision making process.[27] Largely because of their high visibility, terrorist attacks thrust counterterrorism policy into the spotlight and the public, in addition to the traditional actors in the executive branch, legislature, and interest groups, began to play an even more prominent role in influencing foreign policy.[28]

Not only does the government become more responsive to public opinion in the wake of a terrorist attack, the public also adopts more radical views regarding appropriate government action often advocating for or supporting aggressive military action.[29] Particularly relevant to the use of drone strikes to achieve counterterrorism goals, Huddy argues that the perception of threat "leads to support for punitive action against threatening groups" and direct military action against those foreign threats.[30] Even without the threat of war, Americans tend to support realist, *realpolitik* policies

[26] Brigitte Nacos, *Terrorism and Counterterrorism: Understanding Threats and Responses in the Post-9/11 World*, 4th ed. (New York: Pearson, 2011).

[27] Martha Crenshaw, "Counterterrorism Policy and Political Process," *Studies in Conflict & Terrorism* 24.5(2001).

[28] Ibid.

[29] Stanley Feldman Leonie Huddy, Charles Taber, Gallya Lahav, "Threat, Anxiety, and Support of Antiterrorism Policies," *American Journal of Political Science* 49, no. 3 (2005).

[30] Ibid.: 594.

in international relations and the use of force.[31] In response to terrorism, the public

clearly plays a significant role influencing policy makers' next actions and though

generally "peace is a central and ordinarily [the] consensual goal" when dealing with

exogenous terrorist threats the public largely prefers aggressive action.[32]

Though not specific to drone warfare, the above literature demonstrates

several relevant concepts about the public and their response to terrorism. In the

aftermath of the terrorist attacks on 9/11, a policy response was necessary. What

followed was the War on Terror, consistent both with the geopolitical realities and

literature suggesting the public mandate on the use of force. However, largely due to

the incursion of large numbers of American casualties (discussed in the proceeding

sections) the public has soured on many operations of the War on Terror. That being

said, the literature above suggests the public will be quite favorable to drone strikes.

Drones satisfy the public's desire to counter terrorist threats with force, while

simultaneously representing a distinct, and less costly, solution to warfare.

The Attitudes of the Public Toward The War on Terror

According to the literature outlined above, public opinion plays an important

role in foreign policy decision making, particularly decision making pertaining to the

combat of terrorist threats. Of particular relevance to the discussion on drone use is

public opinion and the War on Terror. The attacks of 9/11 spurred a spike in public

opinion polling on the topic of terrorism and the War on Terror allowing these public

opinion trends and attitudes to be well identified and documented. At the outset of the

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[31] Daniel Drezner, "The Realist Tradition in American Public Opinion," *Perspectives on Politics* 6, no.
1 (2008).
[32] John Aldirch, "Foreign Affairs and Issue Voting: Do Presidential Candidates Waltz before a Blind
Audience?," 127.

conflict in 2002 as many as 88% of Americans believed, according to an

ABC/Washington post poll, the "U.S. campaign against terrorism" was going well.[33]

However, by 2007, before the start of the expanded drone program only 54% of

Americans still believed the campaign against terrorism was going well. This

question only engages the generic "campaign against terrorism." When public

opinion is extended to evaluations of the entire conflict, the decline in support is

particularly telling. In September of 2002, 75% of Americans were satisfied with the

way the War on Terror (distinct from the conflicts in Iraq and Afghanistan) was

going. By August of 2007, that number had dropped to just 39%. In every measure,

support of the specific wars in Iraq and Afghanistan as well as the more generic War

on Terror had declined dramatically.

In terms of salience, terrorism still remains an issue Americans are concerned

about. A principal way to track the mood of the nation comes through "most

important issue questions." Though terrorism has not been the top concern for

Americans since 2001, in 2011, 69% of Americans were at least somewhat concerned

that there would be another terrorist attack and multiple polls showed Americans

were still greatly worried about terrorism, even if they did not feel it was the most

important issue facing the nation. [34] Americans' concerns about terrorism have

fluctuated with time, but have proven remarkably durable. In over a decade of public

opinion research since 9/11, Americans are still concerned about terrorism, making

terrorism a salient, durable issue.

As described earlier in this chapter, US foreign policy strategy and US

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[33] Karlyn Bowman, "Attitudes Towards the War on Terror and the War in Afghanistan: A Ten-Year Review," (Washington, DC: American Enterprise Institute, 2011).
[34] Ibid.

security strategy is still largely focused around combating the threat of terrorism.

Drones also are largely rhetorically couched in terms of fighting terrorists or

insurgents, generally members of al-Qaeda that pose a threat to the United States.

Given Huddy's argument that the public demands response to terrorism and the fact

that terrorism, particularly the War on Terror, remains a salient issue, it follows

logically that military response to terrorism is still largely sanctioned by the public.[35]

However, for many reasons, including the large causality costs incurred by American

troops fighting overseas, the American public has soured on war and become war

weary.[36] In essence, the US government and the public both have an interest in

conducting military actions against potential terrorist threats but no longer can afford

to put American troops in harm's way for an extended period of time, therefore

making drones a very attractive policy option when casualty costs rise in a prolonged

conflict.

Casualty Aversion Theory and Drone Strikes

The increase in drone strikes combined with a drawdown in traditional US

forces abroad and cuts in military spending could indicate a strategic shift in the

manner in which war is conducted. Like on counterterrorism, the public has a much

greater effect on the conduct of war than it would on generic foreign policy decisions

such as treaties or trade agreements. This is largely due to the fact that war is a highly

salient issue that receives a great deal of media coverage. That said, the public

generally does not get involved in the conduct of war until causality numbers increase

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[35] Leonie Huddy, "Threat, Anxiety, and Support of Antiterrorism Policies."
[36] Bob Secter, "Survey Paints Picture of War-Weary America," *The Chicago Tribune*, October 16 2012.

to a point where the war suddenly becomes, to the public, intolerable. Known as casualty aversion theory, the theory suggests that when American troop casualties reach a certain threshold public support for war begins to decrease dramatically.[37] Based on Vietnam, Mueller's work has laid the groundwork for well over a generation of research on the inverse correlation between war casualties and public support for war operations that can now help to explain the recent upswing in drone warfare.

Building off of Mueller, other scholars have added additional necessary conditions for the public to influence the conduct of war. For instance, the public is much more likely to tolerate wars where they feel the United States is using a proportionate measure of force and the justification for hostilities is based on high moral standing.[38] Others have argued that there may be no actual threshold for casualties but the public is most sensitive to marginal casualties in a conflict.[39] Variations notwithstanding, the central consensus remains that the public's perception of war and violent action is highly correlated to war casualties.

Though casualties are a primary determinant in public support for or opposition to war operations, it is not the only determinant. In addition to casualties, scholars often point to the public's perception of moral standing and likelihood of success when evaluating war. Casualties are almost always a concern, but as Gelpi and Larson have argued, the public is able to conduct a fairly complex cost benefit analysis–in which casualties play a role–in determining whether or not to support an

[37] John E. Mueller, *War, Presidents, and Public Opinion* (New York: Wiley 1973).
[38] Eric V. Larson, *Casualties and Consensus : The Historical Role of Casualties in Domestic Support for U.S. Military Operations* (Santa Monica, CA: RAND 1996).
[39] Scott Sigmund Gartner and Gary M. Segura, "War, Casualties, and Public Opinion," *The Journal of Conflict Resolution* 42, no. 3 (1998).

armed conflict.[40] For starters, the public takes into account the moral and perceived

necessity of the war before passing judgment. If the conflict is viewed as immoral or

unnecessary, the public is significantly less likely to tolerate high casualties. Second,

the public also considers likelihood of success when evaluating a conflict. For

example, in the case of the Iraq War, fluctuation of public approval (at least until

2005) could be traced not only to casualty numbers, but also to changing views of

potential success and morality.[41] If as in the case of the Gulf War, the public views a

conflict as necessary and the principles at stake of high importance, they are much

more likely to tolerate high numbers of casualties.[42] Expanding on this view, scholars

have argued the public is not reactionary, but instead, considers both the moral

justification of war as well as the chances of its success all in relation to its costs.[43]

This view takes into account both elite and media justification for a conflict, cost-

benefit analysis, as well as a war's success rate.

   As the United States spent more and more money and casualties mounted in

Iraq and Afghanistan, public opinion against the war began to turn. Especially in Iraq,

almost every negative public opinion factor was present. As casualties mounted, the

public notions of morals and success became less important and the public began to

hold the President accountable for what was increasingly viewed as a failed policy

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[40] Peter Feaver Christopher Gelpi, Jason Reifler, "Success Matters: Casualty Sensitivity and the War in Iraq," *International Security* 30, no. 3 (2006); ———, *Paying the Human Costs of War: American Public Opinion and Casualties in Military Conflict* (Princeton: Princeton University Press, 2009); Christopher Gelpi, "Performing on Cue? The Formation of Public Opinion toward War," *Journal of Conflict Resolution* 54, no. 1 (2010).
[41] Christopher Gelpi, "Success Matters: Casualty Sensitivity and the War in Iraq."
[42] Larson, *Casualties and Consensus : The Historical Role of Casualties in Domestic Support for U.S. Military Operations*.
[43] Christopher Gelpi, *Paying the Human Costs of War: American Public Opinion and Casualties in Military Conflict*.

operation.[44] As Iraq ceased to be seen by the public as a legitimate war of protection and self-defense, and as human costs continued to rise, the public quickly became disenchanted with the war effort. The erosion of public support for the Iraq war may have had the additional effect of limiting the capacity of the president to engage in what Freedman calls "offensive liberal wars" and instead forces him to pursue a policy more similar to containment in the future conduct of war.[45] The public is much more likely to accept casualties in a just war and as soon as the Iraq War became otherwise, public approval dropped dramatically.[46] The effect of the public on foreign policy was demonstrated in the 2006-midterm elections as foreign policy, particularly the wars in Iraq and Afghanistan, became centerpiece policy and the electorate demanded a change.

If the legacies of Iraq and Afghanistan have hindered a president's ability to conduct war and more generally have simply limited the number of troops he can commit to conflict, then it becomes fairly clear how drones become an attractive policy option. If drones are not only low cost and effective as the government claims, but also do not engage the public because of a lack of American casualties, then drones become an ideal substitute for troops in fighting the war on terror, especially in times when military strategies are constrained due to high public scrutiny and high casualty rates.

The two bodies of literature discussed above suggest that the public can be influential in foreign policy decision making and the public is attuned to the costs of

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[44] Paul Brewer Erik Voeten, "Public Opinion, the War in Iraq, and Presidential Accountability," *Journal of Conflict Resolution* 50, no. 6 (2006).
[45] Lawrence Freedman, "Iraq, Liberal Wars, and Illiberal Containment," *Survival* 48, no. 4 (2006).
[46] Christopher Gelpi, "Success Matters: Casualty Sensitivity and the War in Iraq."

war. Though not the sole driving factor, as casualties have increased, public disenchantment with current US military policy has also increased which I expect has led to an overall increase in drone usage.

Specifically, I expect these increased costs, both monetary and human, will correspond with a marked increase in drone use, particularly in the case of Pakistan, as it is attached in many ways to the conflict in Afghanistan. More specifically, I expect that drone use will correspond to American casualties on a month-by-month basis. Therefore, American casualties in Afghanistan, not only explain an increased use of drones, but explain fluctuations over time of drone use. The following chapter provides an empirical test of my assumption that drone strikes in Pakistan are linked to fluctuations in American casualties in Afghanistan.

Chapter Three: Drone Strikes in Pakistan as a Response to Costly Conflict in Afghanistan

Since the war in Afghanistan began in 2001, Pakistan has been an integral part of the conflict despite maintaining an often-tenuous relationship with the United States. Pakistan joined the United States as an ally in the War on Terror in 2001 after facing considerable pressure from President George W. Bush. Since joining the United States in the War on Terror, Pakistan has provided the US with tactical support and staging grounds for military assault in Afghanistan.

Furthermore, because of the porous nature of the Afghan-Pakistan border and lack of government control in the Federally Administered Tribal Region (FATA), the conflict in Afghanistan has spread to Pakistan. Taliban and Al-Qaeda fighters maintain hideouts and bases in the lawless regions of Pakistan, which they use to attack both Pakistani and American targets. In order to address the issue of militants in Pakistan, the US has conducted assaults into Pakistani territory using ground and air forces. Increasingly, drone strikes have become the modus operandi for strikes inside Pakistan, replacing conventional air strikes or ground assaults. Though often decried by the Pakistan government, top Pakistani military leaders have given implicit consent to the drone program.[47] Furthermore, the drones are often flown from a base inside Pakistan further pointing to the Pakistani government's complicity in the

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[47] Chris Allbritton, "Pakistan Army Chief Sought More Drone Coverage in '08: Wikileaks," *Reuters*, May 20 2011; David Ignatius, "A Quiet Deal with Pakistan," *Washington Post*, Novermber 4 2008.

program.[4849] Though there is proof of a tacit agreement, the virulent anti-drone public

rhetoric of Pakistan's government, in particular President Zardari, has made the drone

program somewhat controversial from an international relations standpoint. Since

President Obama assumed office in 2008, there has been a marked increase in drone

strikes in Pakistan. Before the President took office in 2008, there had been a total of

12 drone strikes in Pakistan. In 2008 alone the US carried out 38 strikes with the

number increasing to 55 in 2009, peaking at 128 in 2010, before dropping off slightly

with 75 and 42 strikes in 2011 and 2012 respectively. The drone program in Pakistan

is considerably larger than the program in Yemen or Somalia, making Pakistan the

epicenter of drone strikes.[50]

As seen in figure 3.1, a graph showing the raw number of drone strikes in

Pakistan over time, there has been variation in drone strikes since the inception of the

program in 2001, with an overall increase of strikes since 2008. The standard

government justification for strikes in Pakistan–that drones are a low-cost, and

effective at eliminating terrorist and insurgent threats–seems to have a good deal of

validity. Certainly in the mountainous areas of Pakistan, principally Waziristan, this

holds true. Even ignoring the issue of Pakistani sovereignty, ground raids into

insurgent strongholds are dangerous as the unfamiliar terrain holds numerous dangers

for ground forces. Bombing raids are also imprecise and run the risk of devastating

civilian areas. Therefore for the FATA region, drones seem to be a silver bullet for

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[48]Justin Fishel Jennifer Grifin, "Official Confirms U.S. Using Pakistan Base to Launch Attacks," *Foxnews.com*, February 19 2009.
[49] Praveen Swami, "In Secret Deal, ISI Allows U.S. Drone War to Resume," *The Hindo*, February 25 2012.
[50] These numbers were compiled by the author using a dataset obtained from The Bureau of Investigative Journalism. An expanded discussion of my methodology appears in the methodology section of Chapter Three.

warfare. However, just because drones seem to be an intuitive strategy, this alone does not account for their marked increase and subsequent fluctuation after 2008. In this chapter, I will provide empirical evidence supporting my theory that the increase in drone strikes in Pakistan is related principally to American casualties in Afghanistan and, by association, American public opinion concerning the war. In other words, I will show that as the costs of war increase (increased American casualties in Afghanistan and decreased American support for the war), we see subsequent increases in the less traditional and lower-cost alternative of drone strikes. Specifically, this theory accounts for more precise fluctuations in number of drones strikes in any given month pursuant to associated costs. Thus, we see drone strikes are used as a means to maintain high levels of warfare even when the costs of warfare are rising.

Figure 3.1: Yearly Number of Drone Strikes in Pakistan, 2004-2012
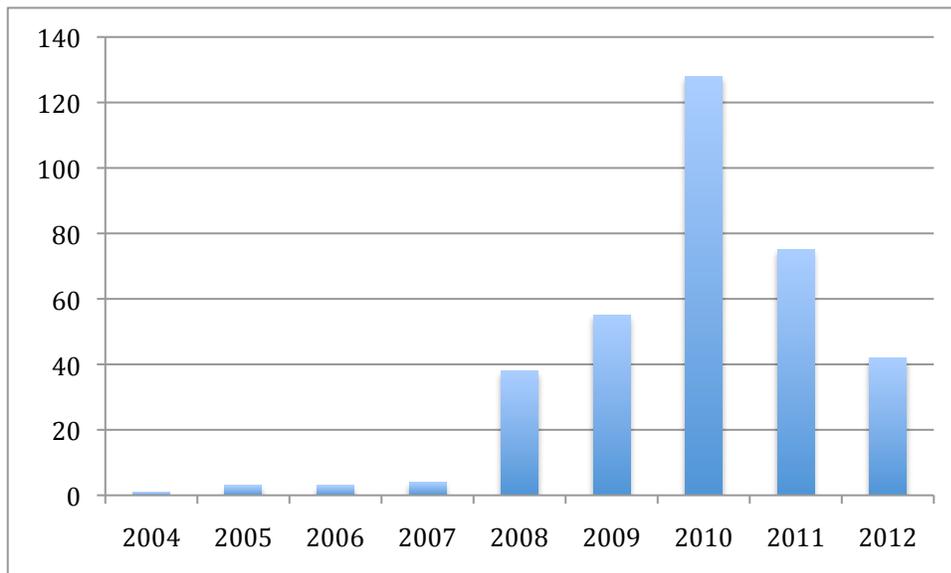
Source: Compiled by author from drone strike data obtained from The Bureau of Investigative Journalism.

I argue the number of American casualties incurred in Afghanistan in a given month should lead to an increase in the number of drone strikes in Pakistan in the subsequent month. I expect this relationship to hold true for two reasons. First, assuming casualty numbers are related to public opinion regarding a conflict (see Chapter Two for a complete discussion of the theory and related literature), policy makers will rely on drone strikes as a low-casualty alternative to potentially costly missions in order to ensure public approval of a conflict stays at acceptable levels. Second, a principal goal of American policy makers in a conflict is to minimize casualties whenever possible. Therefore when casualty numbers are high, policy makers will seek, within the goals and constraints of a conflict, to minimize casualties. Thus in the case of Pakistan this results in an increased reliance on drone strikes.

Chapter Outline

I opened this chapter with a brief introduction to the US relationship with Pakistan given the War on Terror. I noted the increase in drone strikes in Pakistan and offered a theory grounded in costs of warfare to help explain this phenomenon. Next, I will test the assumption that casualties have clear public opinion costs—that increases in American casualties depress the public's support for the Afghanistan War. I will then discuss my data collection and methodology and present the model I use to test my basic hypothesis, namely that increases in American casualties lead to more drone strikes. Following a description of my data, I will lay out my findings and provide discussion. Finally, I will consider alternative explanations for the increase in drone strikes.

As discussed previously, the basic argument for the increased use of drones, especially in the FATA regions of Pakistan, holds that as costs mount, traditional use of ground troops is shunned leaving drone strikes as an attractive, low cost policy option. In order to test my argument that higher levels of casualties in Afghanistan result in more drone strikes in Pakistan, I employed several tests using a fairly simple model.

First, I will test the assumption that casualties are costly, not just in terms of human life, but in terms of public support for the War in Afghanistan. As discussed in the literature review, public opinion on conflict can limit policy makers' abilities to continue a conflict in the manner they would like therefore forcing them to take public discontent into consideration when making strategic decisions. I will consider public opinion and casualty data to show public opposition about the war in Afghanistan is related to the increasing number of casualties sustained by American combat troops in Afghanistan.

Second, I will justify my claim that American casualties in Afghanistan should influence drone strikes in Pakistan with a qualitative discussion of the conflict and several maps demonstrating that in the border region between Pakistan and Afghanistan, traditional international borders are essentially meaningless because of the nature of the conflict and combatants. Third, I will examine a large database of casualties and drone strikes to demonstrate that higher casualties in one month do in fact result in an increase in drone strikes in the month following. Using bivariate regression and scatter plots, I will demonstrate the association between high casualty months and high drone strike months. In addition to this empirical analysis, I will

provide a qualitative analysis including newspaper reports, military documents, and other sources to further illustrate the point that drone strikes, particularly in Pakistan, are a less costly alternative to traditional methods of waging war and are likely related to casualty numbers. Finally, I will discuss alternative explanations for drone strike increases and then provide a conclusion.

Testing the Assumption: Are Casualties Costly?

Basic casualty aversion theory, discussed in detail in Chapter Two, suggests that as casualties rise, and perhaps reach a certain threshold, the American public will become disenchanted with a conflict and demand a change in policy. Though the theory is widely accepted, a simple test of the assumption when applied to the conflict in Afghanistan follows.

I set out to determine if public opinion against the war in Afghanistan at time T (T=1 month) was related to American casualties at time T-1. The decision to lag the casualty variable by one month is straightforward. For the most part, public opinion is reactionary. For the public to fully grasp an accumulation of casualties in a given month it takes time, however, given too much time the public memory will fade. Therefore, I argue that a lag of one month is the appropriate time to fully gauge public awareness of casualty numbers in a conflict such as Afghanistan.

My analysis uses casualty numbers obtained from *icasualties.org*, a casualty aggregator that includes data on US and coalition casualties in Afghanistan. To gauge public opinion about the war in Afghanistan, I used one straightforward polling question. Between the years 2006 and 2012 CNN/ORC asked Americans "Do you favor or oppose the US war in Afghanistan" 32 times. The CNN/ORC poll is a large

(n≈1000), well-regarded survey and the structure of the question as a direct favor/oppose makes the analysis of a relationship straightforward.[51] As Figure 3.2 shows, there is a clear positive correlation between casualty numbers at time (t-1 month) and public opposition to the war at time t, with T corresponding to month.

Figure 3.2: Public Opinion and US Casualties in Afghanistan, 2006-2012
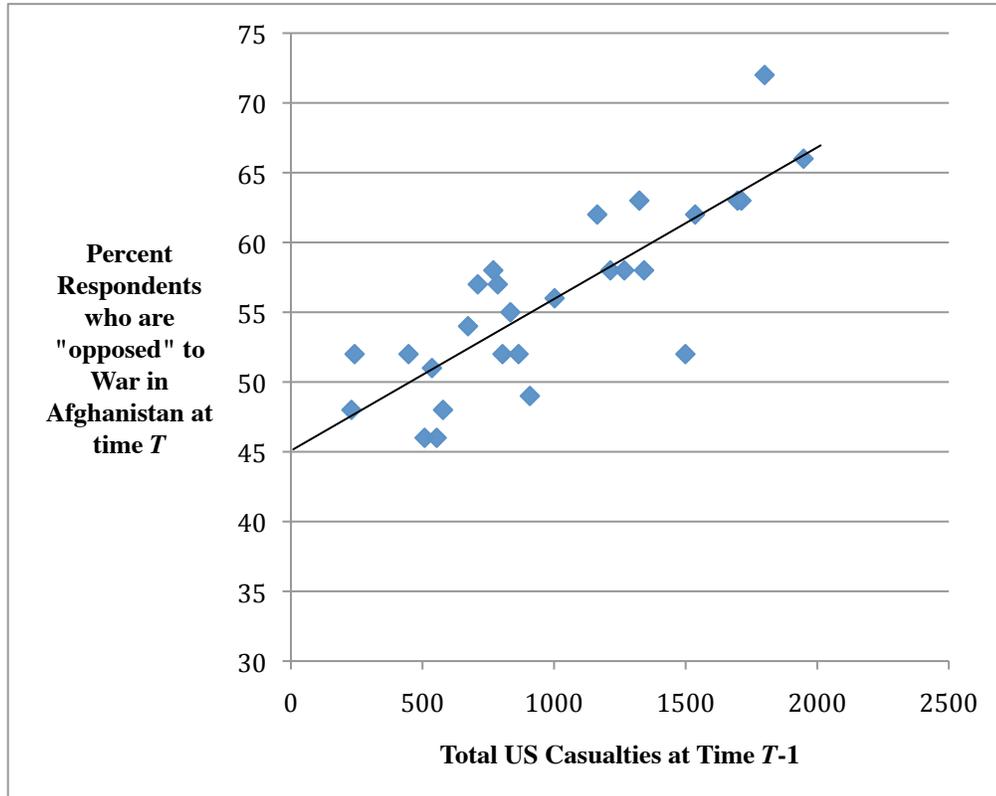
Source: Compiled by author. American troop casualty data in Afghanistan was obtained from *icasualties.org*. Public opinion data for the question "Do you favor or oppose the US war in Afghanistan?" was obtained from the 2006-2012 CNN/ORC.

The figure and analysis, combined with an extensive review of the literature, strongly suggests that casualties and public opinion on war policy are related and casualties are costly to policy makers. This relationship, shown briefly here and suggested by the literature holds true for the war in Afghanistan.

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[51] "CNN/ORC Poll," (The IPoll Database at The Roper Center).

Given a more complete dataset, this thesis would track drone strikes in Afghanistan, as those are the most directly related to the war in Afghanistan. However, given that Afghanistan, unlike Pakistan, is a war zone in the traditional sense, the drone programs in the two regions are quite different. For one, the drone program in Afghanistan is run by the United States Joint Special Operations Command (JSOC), as part of the ongoing military operations in the country. The drones are used for a variety of purposes, including targeted killing. However, because of Afghanistan's nature as a combat zone, the drone program is simply a military tactic rather than a covert program run by the CIA. Furthermore, data is not readily available as the US does not release the details of its drone operations and the data-gathering methods used by drone strike aggregators (discussed in the next section) and others are not effective in a war zone. Though the drone program in Afghanistan is fundamentally different than that in Pakistan the two seek to achieve similar aims.

Though technically international borders distinguish Afghanistan and Pakistan, the border region of Pakistan is still very much a part of the conflict in Afghanistan. The FATA area, which includes Waziristan, is a lawless area, home to insurgents that are able to attack NATO convoys, Pakistani targets and US targets in Afghanistan.[52] This fact makes the FATA area a de facto part of the Afghanistan conflict and certainly a major security concern for US and coalition forces. This lawless region directly borders Afghanistan and has long been used as a staging ground and hideout for militants. Given the fluidity of the conflict, –there has been much documented

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[52] Mian Ridge, "Pakistan Weak and Militancy Surges," *The Christian Science Monitor*, August 18 2008.

spillover into Pakistan–measuring strikes in Pakistan as they are related to casualties in Afghanistan, while imperfect, is a logical test of my argument. I have included several figures and maps, which serve to elucidate the fluid nature of the conflict as well as the geography of the conflict below.

Figure 3.3 shows the location of all 330 recorded drone strikes in Pakistan. The vast majority of strikes are concentrated in the mostly lawless border region between Pakistan and Afghanistan. Figure 3.4 displays the number of coalition casualties by province in Afghanistan, again demonstrating that a majority of the fighting occurs in the border region. Though Khandahar and Helmand have seen the heaviest fighting, the border provinces of Paktika, Zabol, and Ghazni have seen their fair share of combat. While not a perfect comparison, the fluid nature of the Afghan-Pakistan border combined with the location of both heavy fighting and a majority of drone strikes make the analysis of drone strikes in Pakistan with casualties in Afghanistan valid.

Figure 3.3: Drone Attacks in Pakistan, 2001-2012

Source: Simon Rogers. "Drone Attacks in Pakistan Mapped." *The Guardian*, August 2, 2012. [53]

Figure 3.4: US Coalition Fatalities by Province in Afghanistan, 2001-2011

Source: icasualties.org

[53] Simon Rogers, "Drone Attacks in Pakistan Mapped," *The Guardian*, August 2 2012.

Data and Methodology

Because the United States does not release specific data for each drone strike there is no official tally of drone strikes or targets killed. Until recently, the United States refused to acknowledge the drone program and it remains classified and covert. While the government does not release any official data, several drone strike aggregators, operated principally by international journalists, have sought to track and catalogue all American drone strikes in Pakistan and Yemen (as well as Somalia). The three most cited and reliable drone aggregators are The Bureau of Investigative Journalism, The New America Foundation, and The Long War Project. Each aggregator seeks to identify every US drone strike, its location, target, and number of casualties both combatant and civilian. I will be using the data compiled by The Bureau of Investigative Journalism for several reasons. First, their data seems to be the most complete, easiest to access and best cited. Furthermore, Columbia Law School, in a comprehensive project looking at civilian casualties resulting from drone strikes, found when all three aggregator's sources were independently examined by Columbia researchers their findings most closely matched those of TBIJ. TBIJ also reports that they are in contact with an unnamed US counterterrorism official who is able on some level to provide insight into casualty numbers and drone strikes. Additionally, Chris Woods the lead correspondent and manager of the drone database along with Jack Serle were kind enough to exchange emails with me about their methodology, dataset and even provided me with an extended version of their raw dataset for my use. I have referenced the New American Foundation and the Long

War Project when instructive but due to of the reasons outlined above the drone data contained in my analysis comes principally from the TBIJ.

Pakistan Data

I hypothesize that drone strikes in Pakistan are correlated to American casualty numbers and therefore American public opinion about the war in Afghanistan. Again in the case of casualties and drone strikes, it makes sense to lag casualties as time T-1 (T again being months) with drone strikes at time T. If indeed the number of drone strikes are linked to casualty numbers, then it follows that drones would be somewhat of a reactionary policy pursued when casualty numbers in Afghanistan were too high making ground troops an unfeasible option for pursuing combatants in the border regions of Afghanistan and Pakistan.

Table 3.1: US Military Casualties in Afghanistan and US Drone Strikes in Pakistan

	Coefficient (Standard Error)
Number of U.S Casualties$_{(t-1)}$	0.093** (0.315)
Constant	3.230** (1.031)
N	58
Adjusted R-squared	0.119

Notes: Estimates were obtained from an Ordinary Least Squares (OLS) regression. The unit of time (t) is month. The dependent variable is number of drone strikes conducted by the U.S. in Pakistan in month t. * $p<0.05$, ** $p<0.01$, *** $p<0.001$

When running a bivariate regression between casualty numbers and drone strikes the results, as presented in Table 3.1, were somewhat as expected. When the model is run across the full time period of data, I find a significant and positive relationship between casualties at time (t-1) and drone strikes at time (t). The p-value corresponding with the regression is 0.005 making the relationship a statically significant one. This regression does suggest with a good deal of confidence that in the absences of moderating or confounding variables (of which there certainly are some as I will discuss later in the chapter) a high number casualties in a month will predict a high level of drone strikes in the proceeding month.

Even more interesting than the positive relationship between casualty numbers and drone strikes is the coefficient of .092. This coefficient suggests that for every US casualty in Afghanistan in a month there is an additional .09 in drone strikes predicted to occur in the following month. Expanding the data to get meaningful numbers, the data suggests that for every ten additional casualties incurred by US troops, the CIA will conduct an additional drone strike.

These regression results fit my theory quite nicely. After 2008, the United States has averaged just under six drone strikes per month and just under 28 casualties a month. If we use these averages as baselines, and consider that ten US casualties equals one additional US drone strike it becomes readily apparent that high casualty months will precede high drone strike months. For example, June/July 2012 represents almost a perfectly average month. June saw 26 American casualties and July responded with 6 drone strikes. April/May of 2011 demonstrates that approximately ten additional casualties will lead to one additional drone strike in the

proceeding month. In April of 2011 the US incurred 46 casualties, exactly 20 more than average. May of 2011 saw nine drone strikes, which was three more than average. In a month with 20 additional casualties we would expect just two additional strikes, however this month provides a decent proof that the results of the regression are not completely off. Further looking at specific pairs of months seems again to show the regression is largely consistent.   November/December 2010 represents a good example of an expected high casualty, high strike month. In November 2010 the US suffered 53 casualties just under double the amount of casualties for an average month. In December, the US responded with 16 drone strikes. Though not the exact increase in strikes relative to casualties that the model would predict, the presence of high casualty and high strike months is reassuring to the consistency of the model. In order to visually demonstrate this pattern, Table 3.2 displays the months discussed in the chapter.

Table 3.2: Examples of Months with Expected Casualties and Drone Activity in Pakistan

Month	US Casualties	Drone Strikes
November/December 2010	53	16
April/May 2011	46	9
June/July 2012	26	6

Source: Complied by author using data obtained from *TBIJ*

Though simple, the results do show that there is a positive relationship between casualties and drone strikes in the subsequent month. In the following sections I will provide qualitative support for this relationship between casualties and

strikes as well as the linking increased drone strikes and casualties to public opinion data.

Qualitative Analysis: Casualties and Public Opinion

My regression seems to suggest a positive relationship between casualty numbers and drone strikes. Based on my previous assumption that casualties and public opinion are linked this section serves to provide a qualitative overview of public opinion pertaining to Afghanistan furthering the argument that while an indirect relationship, public opinion and drone strikes are in some ways linked.

Previous scholarly research clearly suggests that the public has a limited tolerance for casualties in a general sense. When entering a conflict, American expectations about appropriate casualty numbers are different on a case-by-case basis but certainly the American public has some threshold for what it will accept. For instance, the 2006-midterm elections where Democrats trounced Republicans and picked up 31 seats in the House of Representatives and six seats in the Senate were largely seen as a referendum on the Iraq War.[54] Americans were fed up with what was seen as failed foreign policy championed by an unpopular president, at least partially because of high casualty numbers. True, Iraq is not the same conflict as Afghanistan. For one, by 2006, Iraq had become largely a partisan war with Republicans continuing to support the war while Democrats consistently opposed it. Opposition to Iraq also hinged on more than just casualties. The absence of Weapons of Mass Destruction and an overarching feeling that Americans had been somehow duped by the Bush Administration's claims contributed to discontent with the war policy.

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[54] Ronald Brownstein, "Will Iraq Sink the GOP? Unhappiness with the War Cost Republicans in '06 and Now They Must Face It Again In '08," *Los Angeles Times*, September 16 2007.

Though the elections in 2006 did not prove to be a referendum on Afghanistan, just a few years later the public began to become increasingly disenchanted with the war in Afghanistan. Writing after the transition of leadership from General McChrystal to General Petraeus in 2010, Brad Knickerbocker, a correspondent for *The Christian Science Monitor*, wrote that Americans approved of the transition in leadership but by and large "after nine years and with mounting US casualties support for the war itself is waning."[55] American support for the war in Afghanistan has declined as casualties have increased an Americans have become more war weary.

Qualitative Analysis: Casualties and Drone Strikes

My argument that the increase in drone strikes in Pakistan is in some ways a response to increased casualty numbers in Afghanistan is confirmed and strengthened by existing qualitative sources–particularly newspaper articles and statements by military commanders. These qualitative sources suggest, matching my quantitative analysis, that when casualties rise, American policy makers will increasingly turn to drones in order to refrain from incurring more (therefore relying on drones) for both selfish public opinion motivated reasons as well as the desire to protect American troops in dangerous times.

For example, in September of 2010, the CIA launched 23 drone strikes in Pakistan, a clearly atypical month at that point. The 23 strikes in 2010 were the most strikes in a single month by over ten strikes and came after a three-month period in which US casualties were quite high, in fact the highest three-month and single month

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[55] Brad Knickerbocker, "Quagmire? Nine Years on, Americans Grow Weary of War in Afghanistan," *The Chirstian Science Monitor*, June 26 2010.

total in the history of the conflict. The *New York Times* picked up on this trend of

using drone strikes as a response to increasing casualties in a September 2010 article

noting, "This expanded air campaign comes as top officials are racing to stem the rise

of American casualties before the Obama administration's comprehensive review of

its Afghanistan strategy set for December."[56] Later in the article the reporters note the

use of drone strikes instead of traditional methods such as cross-border raids in order

to achieve certain goals writing, "'Petraeus wants to turn up the heat on the safe

havens', said one senior administration official, explaining the sharp increase in drone

strikes."[57] The authors further note that the next heaviest month for drone strikes was

in "January [2010], when the C.I.A. carried out 11 strikes after a suicide bomber

killed seven agency operatives at a remote base in eastern Afghanistan."[58] Though the

policy of increased drone strikes during higher casualty periods is portrayed as

reactionary to certain events, reporters Mark Mazzetti and Eric Schmitt point out an

obvious link between casualty numbers and drone strikes numbers.

Given the combination of quantitative and qualitative evidence, it is apparent

that there is a positive, causal relationship between American casualty numbers in

Afghanistan and drone strikes in Pakistan. However, it would be naïve to believe that

in international politics and conflict, simple bivariate analysis can explain the nuances

of conflict. In the following section I will explain additional variables that help

account for the rise in drone strikes and their correlation with casualty numbers. Each

alternative explanation elucidates reasons for the general increase in the drone

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[56] Mark Mazzetti and Eric Schmitt, "C.I.A Steps up Drone Attacks on Taliban in Pakistan," *The New York Times*, September 27 2010.
[57] Ibid.
[58] Ibid.

program and most likely plays some role into policy maker decision making. However, I argue that American casualties are the most important variable and alternative explanations generally fail to explain month-by-month fluctuation in strikes.

Alternative Explanations

Drones as a Stabilizing Force

A chief goal of the invasion of Afghanistan was to install a democratically elected government capable of broadcasting power so that Afghanistan would cease to be a terrorist safe haven. The war was thought of as the only way to achieve these goals, and US forces were expected to stay and stabilize the country during a transition period. However, as United States troops to begin to withdraw, partially due to casualties incurred, the US needs to continue to help stabilize Afghanistan without relying on heavy troop presence. The proposed drawdown in troops, culminating in a complete withdrawal in 2014, has multiple consequences for drone strikes. First, the drawdown directly signals a decreased US presence in the region even as the region is far from stable. As a way to signal to insurgents and al-Qaeda operatives that even the though the United States is drawing down its traditional forces, the US will continue to defend its interest in the region; consequently Obama has stepped up drone strikes in 2013 after a slight decline in strikes since 2010. Seth Jones, a counterterrorism expert at the RAND Corporation, argues that this new increase "may be a signal to groups that include not just al-Qaeda that the U.S. will

still present a threat."[59] Though this data analysis principally deals with past strikes during the heat of conflict, certainly an alternative explanation especially for the very recent increase in strikes can be chalked up the desire to send a message that the US will continue to defend its interests in the region.

Drones as Retaliation

A related explanation for the increase in drone strikes and even their variation between months holds that drone strikes in Pakistan may be used as retaliation against larger insurgent networks. Insurgents in Pakistan may not be directly linked to the conflict in Afghanistan yet they are still part of greater al-Qaeda and Taliban networks coordinating attacks on US, Afghani, and Pakistani targets. Though some of the insurgents in Pakistan may not be directly causing United States casualties, they are still part of a network whose goal is to attack the United States. Unable to always combat the direct perpetrators of attacks in Afghanistan, policy makers may use the strikes as a general retaliation.

While the theory exists, it does not explain the increase or variance in drone strikes corresponding to high casualty months. In his opening statement at his confirmation hearing, John Brennan vehemently denied that drones were ever used as retaliation, claiming "nothing could not be further from the truth." [60] Given Brennan's statement, even before he had received any questions from the committee, combined with a lack of popular news coverage arguing that drones are used as retaliation make the retaliation hypothesis unsubstantiated. Finally, people who might feel the

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[59] Greg Miller, "Pakistan Sees Major Rise In CIA Drone Strikes since Year's Start," *The Washington Post*, January 11 2013.
[60] Select Committee on Intelligence, *Open Hearing on the Nomination of John O. Brennan to Be Director of the Central Intelligence Agency*, February 7th 2013 2012, 56.

psychological need for retaliation exist as separate group from those actually making decisions to launch drone strikes.

Fund Allocation

Though long an available and attractive technology, funding for drones has only increased in recent years, perhaps leading to their surge in use. By the mid 1980s, various firms had the technology and material to produce unmanned aircraft capable of similar strikes as today's drones. For example, in 1985, an article in the *Los Angeles Times* drew attention to a new market for unmanned aircraft writing, "John N. Simon, who follows Northrop for Seidler Amdec Securities in Los Angeles, said competition will be tough in the unmanned reconnaissance business, 'There are lots of big guns in there,' he said. 'Everyone in the industry has been talking about unmanned planes for years. But now it looks like something serious might happen.'"[61] Simon proved to be right, just in the wrong decade; almost thirty years later, drones are big business with large corporations fighting for government contracts. An alternative line of argumentation for the increase holds that the increased use of drones is simply driven by their increased funding and production. Especially when considering the current state of the US defense budget and general economic health, it makes sense that drone technology, simply as a way to cut costs, is being invested in by the United States government. In 2007, just before the great increase in drone strikes in Pakistan, the Pentagon budget included $1.7 billion for the development and production of unmanned aircraft, a number that had almost tripled to over $4 billion

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[61] Alan Goldstein, "Northrop Wagers on More Use of Spy Drones," *Los Angeles Times*, October 1 1985

dollars by 2010.[6263] However, drone development is not just limited to the Pentagon. In 2010, the CIA was reportedly spending over $1 billion of its own on drone development, while Congress was giving out hundreds of millions of dollars in earmarks for drone development from big name contractors like Boeing, Lockheed Martin, and Northrop Grumman.[64] Essentially right before the Pakistani drone boom, various government agencies were allocating more and more money for the development of UAVs. The increased funding has lead to more and better physical aircraft, perhaps in some ways driving their use in combat situations.

In an age where large defense budgets are coming under increased scrutiny as the big ground wars wind down in Iraq and Afghanistan, drones have become an attractive option simply because of cost. However, the potential for drone development existed long before the 2000s. Consequently, the increased funding for drones is likely a product of increased demand –not the other way around.

CIA/Military/Presidential Leadership

The media covering John Brennan's confirmation hearing often referred to him as the "top architect" of the drone program for his role in expanding it during his time as President Obama's chief counterterrorism advisor.[65] Recently confirmed as director of the CIA, Brennan's orchestration of the drone program was likely a driving force behind Obama's decision to nominate him to head the CIA.

[62] W.J. Hennigan, "Military Seeks Lethal Arms in a Tiny Package; to Cut Costs and Collateral Damage, Firms Put Focus on Mini-'Smart Bombs' and Pint-Size Drones. ," *Los Angeles Times*, May 31 2011.

[63] Johnathan Karp, "One Small Step for Drones; Legendary 'Skunk Works' Helps Lockheed Martin Jump into Unmanned-Plane Market," *Wall Street Journal*, February 7 2006.

[64] W.J. Hennigan, "Combat by Camera; Drones Are Creating a Buzz; Development of Unmanned Aircraft Is Revitalizing the Southland Aerospace Industry as Billions of Federal Dollars Pour in Annually.," *Los Angeles Times*, September 12 2010.

[65] Ashley Killough Kevin Liptak, "Brennan Confirmed for CIA after Drone Delay," *CNN.com*, March 7 2013.

Essentially, many of the major players in the formulation of drone policy are still in power. President Obama, who oversaw the increase in strikes, was reelected in 2012 in an election that did not focus on foreign policy issues. Brennan has moved from national security advisor to director of the CIA. In addition to civilian leadership, upper echelons of military leadership have been favorable towards the use of drones. Former JSOC commander Admiral William McRaven, who served from mid-2008 until August of 2011, has been a champion of special operations capabilities and shifting US capabilities to respond to asymmetric threats posed by terrorist groups. McRaven was promoted to lead the entire US Special Operations Command in August of 2011, just after the drone campaign in Yemen was fully underway.

Besides Brennan, leaders of the CIA have been wholly supportive of the drone program. As mentioned earlier, George Tenet's demand that drones have the capability to "respond to sightings of high-value targets" led drones to be armed in the first place.[66] The first CIA director under President Obama, General Michael Hayden, also supported drone strikes arguing that strikes in Pakistan were an effective tool in the fight against al-Qaeda.[67] The subsequent director of the CIA, Leon Panetta was further instrumental in orchestrating and implementing the drone program. During his tenure at the CIA Panetta authorized every strike, leading an campaign against al-Qaeda and insurgents termed as "aggressive."[68]

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[66] Axe, "Brennan: A Man and His Drones ".
[67] Greg Miller, "Departing CIA Chief Defends Interrogations; 'These Techniques Worked,' He Says of the Controversial Methods That His Successor Is Expected to Rein In," *Los Angeles Times*, January 16 2009.
[68] Joby Warrick Peter Finn, "Under Panetta, a More Aggressive CIA; Increased Drone Strikes Earn Agency Director Praise but Also Criticism," *The Washington Post*, March 21 2010.

The defense apparatus under President Obama, particularly the directors of the CIA, have by and large been quite favorable to the use of drones to conduct counterterrorism operations. Individuals, especially the leaders of major government departments such as the CIA, often have leeway in running their departments and in this case advocating for and developing a strategy for the use of drones strikes to combat terrorism. The President and CIA leadership's position on drones likely accounts for some of their expanded use since 2008, but again fails to explain the nuances and fluctuations in the program.

Conclusion

The drone program in Pakistan has clearly expanded with the number of strikes growing rapidly until 2010 before somewhat leveling off, consistent with declining American casualties. While many of the alternate explanations help account for the general increase in drone strikes and expansion of the drone program, they do not account for month-to-month fluctuations in drone strikes. Development and funding of drone technology, a defense apparatus that encourages their use, and the necessity of combating militants even after a drawdown in traditional ground forces all likely help account for the general increase in drones. However, these explanations fail to fully explain fluctuation in drone strikes leaving American casualties in Afghanistan as the most import factor behind drone use in Pakistan.

Given the available data, it is clear that there is a strong statistical relationship between casualties in Afghanistan and the number of strikes in Pakistan. My regressions show that in addition to a positive relationship between Afghan casualties

and drone strikes, every ten additional casualties in Afghanistan will result in an additional drone strike in Pakistan the following month.

Given the porous Afghanistan-Pakistan border, there is a spillover effect from the conflict in Afghanistan into Pakistan. Therefore, it makes sense that drone strikes are used in Pakistan as a response to violence and casualties in Afghanistan.

Though the number of drone strikes has declined since their high point in 2010, corresponding with an overall decrease in American casualties in Afghanistan, drones remain a constant presence in the FATA of Pakistan. As the conflict in Afghanistan winds down, it seems likely that the drone program will decrease in scope, adopting a policy more closely tied in with counterterrorism strategy rather than one that is related to warfare. It would seem prudent that the United States, instead of continuing a reactionary policy, would continue the drone program but only to eliminate high-value targets—i.e., engage solely in targeted killing. In subsequent years, I expect the number of drone strikes to continue to diminish as American troops withdraw and American casualties continue to decrease. Certainly, the security threat in Pakistan remains high. However, as US troops pull out of Afghanistan the nature of the threat from Pakistani al-Qaeda and Taliban is changing. Instead of being able to directly attack US targets on a small scale, the threat from al-Qaeda in Pakistan will include a desire to conduct another large-scale attack as well as destabilize local governments. The United States could embrace a policy of targeted killing, eliminating high-level threats. As the next two chapters will discuss, targeted killing has been employed to combat al-Qaeda in the Arabian Peninsula's activity in Yemen. Further research, like the analysis I have conducted in Chapter

Five regarding Yemen, could elucidate current target selection in Pakistan. However, given my theory that casualties are connected to drone strikes, a cursory evaluation of the data, and qualitative sources (especially Grut's *Living Under Drones)* both high and low-level targets are being killed in the FATA, consistent with a doctrine of war.[69]

The strategy of switching, in Pakistan, to a targeted-killing program, similar to the one (at least in rhetoric) operated in Yemen has several advantages. First, without troops in Afghanistan, there is little need to continue with a large drone footprint. The residents of Waziristan constantly live under drones and their presence has engendered a great deal of hatred for the United States. Drone strikes, while targeted in nature often cause collateral damage, including the deaths of civilians.[70] Finally, conflict with the Pakistani government over the drone program could prove to be a significant stumbling block in the US-Pakistan relationship, one that will increasingly be important even after the United States withdraws ground troops from Afghanistan. While limiting drone strikes to high-value targets would not alleviate these issues with drone strikes, it could offer a happy medium. Eliminating high-level targets would achieve some major US security goals while potentially limiting collateral damage and international disputes. Certainly targeted killing has many issues, however I suggest that as troops withdraw from Afghanistan, we should expect to see drone strikes decline in Pakistan, likely only targeting high-value individuals, which in my opinion would constitute sounds policy.

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[69] Grut, "Counting Drone Strike Deaths."
[70] Ibid.

The following chapters tackle many of the issues and logic behind targeted killing as counterterrorism strategy, using Yemen, the principal locale in which targeted killing by drones is the chief counterterrorism strategy.

Chapter Four: Who are the Targets of Drone Strikes?

Introduction

According to current CIA director John Brennan, the United States holds itself

to a "rigorous standards and process of review…when considering and authorizing

strikes against a specific member of al-Qaeda."[71] Brennan's defense and explication

of the drone policy was predicated on the premise that targets outside of the war zone

in Afghanistan were carefully selected due to their relative strategic importance. In

other words, Brennan's statement confirmed that the drones are engaged in targeted

killing-not all out war. Targeted killing is defined as a premeditated assassination of

an individual outside of a traditional war zone. The first drone strike in Yemen

(conducted in 2002 before Brennan's time as a Whitehouse official) seems to be a

model of a successful targeted assassination. The strike killed Abu Ali al-Harithi, the

mastermind behind the 2000 USS Cole bombing and a high-value target. However,

since the drone program began in earnest in May of 2011, there have been over 89

drone strikes in Yemen. Many of these strikes, instead of targeting al-Qaeda senior

leadership, have come against lower ranking leaders, training camps, or just generic

"militants". This thesis offers several hypotheses in order to explain the

preponderance of low-level strikes.

The literature on drone strikes in general is quite limited given their only

recent increase in use and their even more recent entrance into academic, political,

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[71] John Brennan, "The Effiacy and Ethics of U.S. Counterterrorism Strategy" (Washington, DC, April 30 2012).

and popular discourse. Furthermore, the literature on targeted killing is mixed and inconclusive and tends to focus on their use by the Israeli security apparatus. Certainly, it does not account for the expansion of a targeting killing program to a broad ambiguous policy of covert killings. There are several reasons for this gap in literature. First, the drone program as it exists now is a fairly new program. Though strikes have increased since 2008, only recently have scholars begun to study the strikes and their impacts. Second, the drone program is technically covert and was not even officially acknowledged until 2010. The covert nature of the program means that a great deal of data and documents are highly classified making study of the program difficult. Many of the policy makers who have orchestrated the drone program are still in power–and still running the program. Finally, drones have become a hot-button issue only in recent months focusing on debate regarding the killing of American born cleric Anwar al-Awlaki in September of 2011. These various limitations have largely restricted the literature on drone strikes in general. Therefore, in the following chapter, I will propose some of my own theories combined with analysis of the existing literature on drones and targeted killing to begin building some basic expectations regarding target selection and drone strikes.

Most of the literature on targeting killing (and for that matter drone strikes) focuses on questions of legality, efficacy, and morality. There is a decided lack of literature explicating the potential increase in the scope of targets. In my analysis of the Yemen strike data, I will offer several explanations for why I expect the United States has deterred from its stated policy of targeted assassination of high-value targets. First, a common familiarity (or "trigger happy") hypothesis suggests as the

Obama Administration has drastically increased drone use, the tactic has simply become more familiar to policy makers leading them to employ it more often on both high-level and low-level targets. Second, changes on the ground or in the goals of the game lead targeting killing and drone use to become a preferred method of warfare in which all levels of insurgents are targeted as distinct from counterterrorism in which high-level insurgents are primarily targeted.

As recently as Gulf War, targeted killing of opposition leaders was considered a misstep likely to erode coalition support for the war.[72] However, the "expansive and nebulous definition of the 'War on Terror'" has created an opportunity for the US to redefine the international norms against targeted killings embracing them as a policy tool.[73] Thomas, Machon, Cullen, and others note the increased use of targeted killing as a new strategy in the US' counter terror efforts.[74] Particularly significant for current United States policy, many of the studies examining targeted killing including Machon and Cullen have come out of US military graduate schools in the mid-2000s, further indicating the support for and probable expansion of targeted killings.[75] Demonstrated by both facts on the ground and increased attention in the literature, targeted killing has emerged as a counterterrorism tactic. With the rise in the use and acceptance of drones for targeted killing, the question of who is targeted remains unanswered. Do drone strikes target high profile and specific individuals, or are they

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[72] Ward Thomas, "The New Age of Assassination," *SAIS Review* 25, no. 1 (2005).
[73] Ibid.: 33.
[74] Matthew Machon, "Targeted Killing as an Element of U.S. Foreign Policy in the War on Terror" (School of Advanced Military Studies United States Army Command and General Staff College, 2006).
Peter Cullen, "Role of Targeted Killing in the Campaign against Terror," in *Strategy Research Project* (U.S. Army War College, 2007).
[75] Machon, "Targeted Killing as an Element of U.S. Foreign Policy in the War on Terror"; Cullen, "Role of Targeted Killing in the Campaign against Terror."

used more broadly against targets of high and low level?

The changing nature of warfare, counterinsurgency and asymmetric conflict likely plays a significant role in the escalation of drone strikes. Often, targeted assassination, particularly by drones, is the only policy option available for eliminating a specific target. The large-scale, troop heavy wars in Iraq and Afghanistan seem to be a relic as articulated by former Secretary of Defense Robert Gates, "The United States is unlikely to repeat another Iraq or Afghanistan – that is, forced regime change followed by nation building under fire – anytime soon."[76] However, as stated earlier, the shift away from traditional warfare methods does not change the need for the United States to maintain a global reach to combat terrorism. Increasingly, both the United States and other Western powers are relying on Special Forces operations to conduct counterterrorism operations.[77]

However, even with an increased reliance on Special Forces, the conduct of counterterrorism tied to high-value targets, especially in remote locales such as Yemen, leaves policy makers with an essentially dichotomous choice between targeted assassination by drone or inaction. A line of argumentation holds that policy makers often prefer action over inaction and view targeted assassination as a relatively low-risk policy. Given the remote, removed nature of drones, with strikes posing no risk to American lives and the continuing need to combat terrorism broadly, it may be easier to order a drone strike on a lower-level target especially when presented as a choice between a simple strike, inaction, or sending American

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[76] Robert Gates, "A Balanced Strategy Reprogramming the Pentagon for a New Age," *Foreign Affairs* (2009).

[77] Eric Olson, "A Balanced Approach to Irregular Warfare," *The Journal of International Secuirty Affairs* 16(2009).

troops into a hostile environment, where the United States does not have jurisdiction. Therefore, using data on drone strikes in Yemen, I first expect to see evidence that the United States has deterred from its stated policy of targeted assassination of high-value targets. While I expect drone strikes in Yemen to involve high-level targets, I also expect to see a substantial amount of drone strikes on low-level targets. In fact, I find evidence that there is an almost equivalent targeting of high and low level targets.

Second, I expect that overtime as familiarity with drone technology increases, the scope, or level, of targeted killing by drones will expand in Yemen. Specifically, in the earlier period of the Yemeni conflict when there was less familiarity with the drone technology, there should be more high-level individuals targeted than low-level individuals, but in later periods as familiarity increases, the number of low-level targets should be greater than the number of high-level targets. I expect to see this positive relationship between drone technological familiarity and the level of targeted killings for several reasons. For starters, new tactics, such as the use of drones, require some time to operationalize. Initial strikes, because of their novelty especially in Yemen, seem likely to have undergone further scrutiny and required stricter authorization. Furthermore, without strong intelligence gathering and support of the Yemeni government intelligence may have existed principally on high-level targets. Finally, as more and more high-level targets are eliminated, lower-level targets become the most significant individuals. Therefore, as the period of conflict extends, I expect to find an increase in low-level targeting.

Additionally, AQAP is seen as one of the growing threats to US security and

therefore, targeted killing may be used to stunt recruitment of new members. A principal feature of drones is their power of intimidation. Drones emit an audible whine and residents of areas where they are flown report knowing of their existence. Since most drones are used for reconnaissance and surveillance, drones are often a continual presence in regions of Yemen and Pakistan only occasionally launching Hellfire missiles. Residents in the FATA area of Pakistan report being constantly frightened by the presence of US drones overhead.[78] Targeted killing is known to force organizations underground and stunt their operating capabilities as leaders fear for their safety. The mere presence of drones may serve as an additional deterrent to terrorist activity as the drones are perceived as ever present and often ever watching.[79] If policy makers believe the assassination of lower-level targets serves as a strong deterrent to future AQAP recruitment this could help explain the presence of low-level strikes. A constant drone presences combined with assassination of low-level targets could discourage potential militants from ever joining the organization, limiting AQAP's recruiting power and influence.

A third possible theory to explain low-level strikes could be that an increase in intelligence gathering combined with continued assassination of top leaders has led to an increase in the scope of target selection. AQAP is not as large, influential or expansive as al-Qaeda in Pakistan. If the United States has succeeded in killing top-brass but is still receiving actionable intelligence, policy operators may "go for the throat" and begin targeting lower-level leaders in order to continually cripple leadership succession.

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[78] Grut, "Counting Drone Strike Deaths."
[79] Ibid.

Other factors than familiarity may also serve to explain the increase. Certainly, not every new warfare technology has produced a boom in violence. Conditions on the ground and the changing nature of the situation in Yemen (or another location) may necessitate increase in strikes. If terrorist or insurgent groups threaten a local government, Western powers, as is often the case, may choose to intervene. Given preference for non-troop heavy policy options, drones may be used as a warfare tactic in addition to or instead of troop support. For example, in early 2013, French troops were sent to assist the Malian government in pushing back al-Qaeda linked insurgents. Given their request for US surveillance via drones, it follows that if the French had the capabilities it seems likely they would consider strikes against lower-level targets as a warfare tactic. For instance, in the case of the Libyan civil war, there was no real thought of using American troops. Instead, airpower, including drones, provided tactical support to the rebels. Similarly, as I will argue in the case of Yemen, the United States feared that AQAP was gaining a foothold amid chaos, which caused American policy makers to increase drone use against lower-level targets to cripple the organization. When the perceived threat from AQAP is high it would be logical that the US would employ drones against less senior members in order to cripple, in the short term, organizational manpower. More broadly, as the scope of conflict increases, I expect to see the scope of targeted killings (the amount of low-level targeted killings) to also increase.

Targeted Killing, Target Selection the Logic Behind the Strikes

Is Targeted Killing an Effective Counter-Terrorism Strategy?

To better understand US drone strike policy in Yemen, this section will

explicate the US logic behind the use of drone strikes for targeted assassination. Though targeting killing efficacy is not the focus of this thesis, when discussing target selection in Yemen and identifying targets as high or low value it is important to provide a basic understanding of the literature as it relates to what constitutes targeted killing as well as a cursory evaluation of its effectiveness. My expectation that the US will engage in low-level targeting in addition to high-level targeting is based on the assumption that targeted killing is actually an effective strategy in the conduct of warfare or counterterrorism. I would only expect to see non-trivial amounts of drone strikes against low-level targets, if targeted killings are in themselves deemed as useful. However, while the following review of research regarding the effectiveness of targeted killing suggests it should be an effective strategy for US policy makers, the findings are still relatively inconclusive and further research is needed to truly validate this assumption.

The Argument for Targeting Killing

Assassination and targeted killings are certainly not new strategies in the conduct of warfare or counterterrorism. In recent history, targeted killing has been embraced as a counterinsurgency tactic by a variety of world governments from the United States in Vietnam to the United Kingdom in Ireland. Currently, the Israeli counterterrorism apparatus employs the most studied targeted assassination program. The basic theory behind targeted killing when pursued by any actor, but specifically a state seeking to combat terrorism, holds that targeted killing maims an organization, especially a non-state actor's capabilities in numerous ways. Supporters of the tactic claim that the killing of operatives with special skills, charisma, or leadership

capabilities undermines a terrorist organization's operational capacity by maiming professionalism, operational capabilities and will to carryout attacks. Constant removal of top leadership leaves an organization disorganized and in shambles. If top-level leaders are continually taken out, it leaves the organization more concerned with replacing fallen leadership than planning and carrying out new attacks.

Scholars have largely used case study evidence to back up these claims. For example, Stephen David points to the Israeli killing of Palestinian Islamic Jihad head, Fathi Shikaki in Malta in October 1995 as evidence of successful policy. David argues, because "no competent successor emerged to replace Shikaki [this produced] disarray in Islamic Jihad. The organization limped along for several years, unable to mount any serious attacks against Israeli interests."[80] Clearly this operation represents the ideal case for targeted killing. The target was of high value and his assassination was successful in impeding the strength of an organization deemed to pose a direct threat to Israeli security. David, though supportive of the tactic overall, concedes that that the 1996 assassination of Yahya Ayyash, a Palestinian bomb-maker in Gaza with a booby-trapped cell-phone, "unleashed four suicide bus bombings in the next two months, killing more than fifty Israelis."[81] Other Israeli killings have been met with retribution, for example the assassination of Ahmad Thabet, a high-ranking member of Fatah, accused of orchestrating attacks on Israelis, triggered violent retribution by Palestinians against Israelis in the name of Thabet.[82] Though case study evaluation of targeted killing is flawed for its snapshot nature in a long running conflict, the Second

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[80] Stephen David, "Fatal Choices: Israel's Policy of Targeted Killing," *Mideast Security and Policy Studies* 51(2002).
[81] Ibid.: 4.
[82] Rachel Tecott, "Israeli Counterterrorism Decision-Making: The Causes and Costs of a-Strategic Incoherence" (Undergraduate, Wesleyan, 2011), 36.

Intifada represents the most complete study of targeted killing as a counterterrorism tactic.

The Case Against Targeted Killing

Critics of targeted killing claim that it is ineffective, applied incoherently and serves to incite retaliatory violence. In addition, critics argue that constant attacks on a populace serve to embitter the population degrading any chance for lasting peace. Fighting an asymmetric conflict against various non-state terrorist actors, the United States has increasingly employed targeted killing as a chief counterterrorism tactic. Especially during the Obama administration, the preferred method for targeted killings of terrorist leaders and insurgents has been through the use of drones.

Critics of targeted killing and drone strikes point to several factors that influence their inefficacy. The most frequent criticism is that targeted assassinations, in particular drone strikes, engender hatred and distrust in local communities thus in crude terms, creating more terrorists than are killed.[83] A similar line of argumentation holds that while reprisals for strikes may not be directed against US forces, insurgents will respond by attacking local government targets indirectly causing instability and hindering long-term US interests in the region.[84] This criticism holds more validity when non-combatants are killed. Especially in the largely ungovernable tribal areas of Pakistan and Yemen cooperation between locals and US officials can be essential for conducting intelligence operations. If targeted assassinations, particularly through drone strikes, enrage the local populace, the populace will be unlikely to provide the

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[83] Cullen, "Role of Targeted Killing in the Campaign against Terror."; Grut, "Counting Drone Strike Deaths."

[84] Andrew Olney, "Lethal Targeting Abroad : Exploring Long-Term Effectiveness of Armed Drone Strikes in Overseas Contingency Operations" (Georgetown University 2012).

US with tactical or informational support and may even actively support al-Qaeda or other insurgents fighting against the US. Additionally, there is also a constructivist argument against the use of targeted killing, which holds that that the War on Terror is essentially a battle of ideas and therefore targeting individuals will make little or no difference in the overall conflict and instead weaken international support for US foreign policy and counterterrorism. [85]

The United States Case

The US case, especially in 2013, is much different than the Israeli case. The Israeli population is affected by Palestinian terrorism partially because of proximity. It is much harder for a radical jihadist in Yemen to carry out an attack on US civilians than it is for Hamas to launch rockets into Israeli territory. Especially as the US has pulled troops out of Iraq and Afghanistan, US policy has focused less on waging war in Iraq and Afghanistan but rather "waging a global campaign against Al-Qaeda and it's terrorist affiliates… to disrupt, dismantle, and defeat Al-Qaeda and its affiliates" in order to "protect our homeland."[86] Because of the removed nature of US forces, fear of typical reprisal strikes in the form of suicide bombings or attacks on US personnel are becoming less relevant when making decisions about targeted assassination. Consequently, because targeted killing should have fewer immediate costs for the United States, there should be fewer constraints involved and a greater probability that the US will expand drone strikes to target both low-level and high-level individuals.

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[85] Cullen, "Role of Targeted Killing in the Campaign against Terror."
[86] "*National Security Strategy*."

In the United States case, because US goals are focused on long-term prevention of attacks and dismantling of al-Qaeda, a wider range of targeting killing (not just killings of important figures) may be more effective-though likely even harder to measure in terms of efficacy. In Afghanistan for example, Alex Wilner argues through a study of targeted killing of Taliban members that:

> Findings suggest that the eliminations degraded Taliban professionalism, diminished the group's success rates, influenced their selection of targets, and weakened morale. These findings speak to the efficacy of targeted killings in counterterrorism and counterinsurgency.[87]

Other scholars of the US case echo Wilner's argument using qualitative evidence finding targeting killing disrupts normal operations enough to be deemed effective.[88] Scholarly attention has focused more on high profile targeted killings such as the 2002 killing of Abu Ali al-Harithi, the Yemeni mastermind behind the attacks on the USS Cole. Because terrorists are largely unable to strike US forces it is almost impossible to measure whether targeted killings actually work. Morehouse studies general terrorist activity in Pakistan in the years 2004-2009 in relation to US drone strikes in the area to argue that there is little correlation between US drone strikes and terrorist activities. Morehouse considers a wide variety of insurgent attacks primarily against Pakistani targets as a test of the efficacy of targeted killing.[89] Though an interesting method of evaluating targeted killing, the methodology is flawed. Pakistan is an incredibly volatile country. It is impossible to ascribe a terrorist attack against non-US personnel as retaliation for US action. Using largely the same dataset and

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[87] Alex Wilner, "Targeted Killings in Afghanistan: Measuring Coercion and Deterrence in Counterterrorism and Counterinsurgency," *Studies in Conflict & Terrorism* 33, no. 4 (2010): 307.
[88] Cullen, "Role of Targeted Killing in the Campaign against Terror."
[89] Matthew Morehouse, "Hellfire and Grey Drones: An Empirical Examination of the Effectiveness of Targeted Killings" (University of Nebraska-Lincoln 2011).

similar methodology, Olney finds that there is an increase in attacks against local governments in response to US drone strikes. However, as even he admits, "without further evaluation of more variables, including domestic military operations, recruitment levels, and other political factors, it is difficult to conclude that drone strikes are solely responsible for the increased militant attacks on host nations."[90]

Evidence from both the US case and the Israeli case, suggests that studying the efficacy of targeted killing is difficult at best. The limited scholarship on the issue is inconclusive and further study, involving a mixed methodological approach is necessary to draw conclusions about the efficacy of targeted killing in both the US and Israeli cases.

Regardless of the limits of scholarship on the efficacy of targeted killing, the United States has embraced the policy. The United States has carried out their targeted killing program primarily with airstrikes, many involving Predator or Reaper drones. In order to evaluate the scope and direction of the US drone program, the drone program in Yemen makes an ideal case study. Yemen, unlike Pakistan, is isolated from the war in Afghanistan. Targets in Yemen have little to no tactical value as far as the war is concerned. Rather, the strikes in Yemen are almost purely aimed at eliminating al-Qaeda in the Arabian Peninsula operatives who are labeled as a threat to the United States. Furthermore, the accessibility and reliability of the data in Yemen makes analysis of target selection possible and able to yield interesting results.

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[90] Olney, "Lethal Targeting Abroad : Exploring Long-Term Effectiveness of Armed Drone Strikes in Overseas Contingency Operations", iv.

Chapter Five: Low-Level Targeting in Yemen

Drones are increasingly becoming tools for broad counterterrorism, chiefly through targeted assassination, in various locales around the globe. Legal justification for drone strikes stipulates that under the AUMF, the President and CIA have the authority to go after members of al-Qaeda or other terrorist organizations who pose a direct threat to United States security.[91] Legal justification further stipulates that countries in which drones are used for targeted assassination must be unable (or unwilling) to effectively address a terrorist threat. Though still technically a covert program, the CIA and JSOC have conducted drone strikes in Yemen and Somalia in operations distinct from the program in Afghanistan or even Pakistan. Other than Pakistan, the CIA and JSOC have authorized the second-most strikes in Yemen authorizing approximately 89 drone strikes since 2011.

Yemen is by and large a failed state, ravaged by civil war, insurgency, and lawlessness. Though Yemen was reunited in a 1994 civil war, ethnic, socioeconomic, and political problems have continued to plague the country making it a haven for al-Qaeda in the Arabian Peninsula. AQAP became a global terrorist force in 2009 after al-Qaeda linked militants in Saudi Arabia and Yemen joined together to coordinate attacks.[92] The ability of AQAP to operate in tribal areas outside of the already limited control of the Yemeni government has given them the ability to plan and operate high profile attacks. AQAP is responsible for plots including the Christmas Day bomber, a 2009 plot to explosive packages on a cargo plane plot and the suicide attack on

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[91] Koh, "The Obama Administration and International Law."

[92] Michael Schoder Samuel Lindo, Tyler Jones, "Al Qaeda in the Arabian Peninsula," in *Homeland Secuirty & Counterterrorism Program*, ed. Thomas Sanderson Rick Nelson (Washington, DC: Center for Strategic & International Studies, 2011).

Yemen's Unity Day parade in May 2012. These attacks and the broad organizational

capacity for terror has lead FBI Assistant Director Mark Giouliano to call AQAP "the

most serious threat to the US homeland today."[93]

The situation and growing influence of AQAP, particularly in Yemen, poses a

grave threat to the United States. In the most recent National Security Strategy an

entire section was devoted to explicating the threat posed by AQAP, highlighting

both the gravity of the threat as well as its relevance to United States security:

> The United States faces a sustained threat from Yemen-based AQAP, which
> has shown the intent and capability to plan attacks against the U.S. Homeland
> and U.S. partners. Yemen is struggling to contain AQAP amidst an
> unprecedented confluence of security, political, and economic challenges.
> Yemen's instability has direct implications for the United States. Even as we
> work to support Yemen's stability and the aspirations of the Yemeni people,
> the defeat of AQAP will remain our top priority in the region, and we will
> continue to leverage and strengthen our partnerships to achieve this end.[94]

The threat posed by AQAP is both real and recognized by US security

officials. However, the US has limited proactive options for limiting AQAP's reach

and ability to conduct terrorist attacks against the United States and US targets. The

Yemeni government is barely able to control Sana'a, its capital, and faces

socioeconomic and political crises while various insurgency groups battle the

government. Essentially, the Yemeni government has no police powers leaving them

unable to control AQAP operations. The failure of the Yemeni government to

counteract the operations of AQAP, combined with the real danger of the terrorist

organization, has lead the United States counterterrorism apparatus to act to eliminate

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[93]Mark F. Giuliano, "Speech by Mark F. Giuliano " (paper presented at the The Washington Institute for Near East Policy Stein Program on Counterterrorism and Intelligence, Washington, DC, April 14 2011).
[94] "National Security Strategy."

the threat. However, given the nature of the threat and Yemen itself actionable policy

initiatives are limited. For a host of reasons the United States would be remiss to send

in ground troops or Special Forces teams to Yemen to root out AQAP cells. For one,

after the wars in Iraq and Afghanistan public opinion has generally not favored

intervention using ground troops to in conflict. For instance, in response to the

conflicts in Syria and Libya ground troops have rarely even been discussed as a

legitimate policy option. Furthermore the potential for a "black hawk down" type

disaster where media images of captured soldiers terrify the American public and

decrease their support for missions involving ground troops and intervention in

general makes ground operations untenable.[95] Other less dynamic forms of strikes

including airstrikes and cruise missile strikes have been utilized with varying levels of

successes. While precise, once launched, cruise missiles cannot change their path and

create a massive explosion when they hit their target. They also must be launched

from a reasonable distance, in the case of Yemen, generally from a warship or

submarine anchored in the Gulf of Aden. Similar problems arise when using

airstrikes for targeted assassination. While pilots may have the opportunity to briefly

assess their targets before striking they must make split second decisions without a

clear view of the ground. Also similar to cruise missiles, traditional airstrikes

generally cause massive damage to their targets. Both methods of strikes have been

used with varying success in Yemen but in the past two years, drones have

increasingly become the preferred option for conducting strikes. The unique

landscape, toothless Yemeni government, and need to strike at AQAP targets make

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[95] Cori Dauber, "Image as Argument: The Impact of Mogadishu on U.S. Military Intervention," *Armed Forces & Society* 27, no. 2 (2001).

drones an incredibly attractive policy option. Perhaps most essentially in the case of the targeted assassination, drones are able to survey a potential target for many hours before launching a strike. This gives a drone operator operating in a remote base the ability to confirm his target and ensure that the target could be eliminated with as little collateral damage as possible.

Chapter Structure

In this chapter I have offered an introduction to the geopolitical situation in Yemen and offered some explanation for the expansion of the drone program. In the following sections, I will provide a more detailed account of the drone program in Yemen focusing on target selection. I will offer a brief description of my data and methodology where it differs from Chapter Three. I will provide compelling evidence drawing on my own data and available qualitative sources that the United States strikes high and low-level targets at a similar frequency rate. I will then offer several explanations for the sustained level of low-level targeting including arguments that claim that familiarity and increased capabilities led to the surges in low-level targets. I will also investigate strategic and substantive concerns, chiefly that the changing goals of the geopolitical game and nature and intensity of conflict have led to low-level targeting.

Data/Methodology

In order to conduct a target analysis of drone strikes in Yemen, I again relied on the data from The Bureau of Investigative Journalism chronicling the strikes in Yemen. The strength of TBIJ's data set is mostly outlined in the preceding chapter on Pakistan and TBIJ uses the same methodology when tracking strikes in Yemen.

Unlike drone strikes in Pakistan, which have also been chronicled by the New America Project and The Long War Journal, TBIJ has the most complete data set pertaining to strikes in Yemen. It is worth mentioning that while TBIJ's basic methods for collecting data on drone strikes in Yemen is the same as the methods used in Pakistan there are several differences, namely the fact that the Yemeni government takes credit for many of the US drone strikes. TBIJ has developed some unique and in this author's opinion quite ingenious methods to distinguish actual Yemeni strikes from US airstrikes and drone strikes.

Given the necessity of maintaining the cover nature of the US drone program in Yemen, the Yemeni government often claims responsibility for attacks occurring within its borders. Though the Yemeni Air Force claims responsibility for many US strikes, the Yemeni government and Air Force have very limited capabilities. For instance, the Yemeni Air Force lacks the capability to fly night missions or conduct precision strikes largely due to the fact that the Air Force is rife with corruption and uses a mix of antiquated Cold War era Soviet and American fighter jets.[96] A recent RAND report confirmed TBIJ's assertion that the Yemeni military is in complete disarray, largely incompetent, and incapable of carrying out precision airstrikes of any kind.[97] Further confirming US drone activity in Yemen, in a cable obtained by WikiLeaks between US General David Patreaus and the former President of Yemen, Ali Abdullah Saleh, is quoted as saying "We'll continue saying the bombs are ours,

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[96] Jack Serle, "Yemen's 'Barely Functional' Air Force Points to Us Involvement in Strikes," *The Bureau of Investigative Jounralism*, March 29 2012.
[97] Bryce Loidolt Barak Salmoni, Madeleine Wells, "Regime and Periphery in Northern Yemen: The Huthi Phenomenon," (Santa Monica, CA: RAND Corporation, 2010).

not yours".[98] Therefore, TBIJ, in my opinion, is completely justified, in characterizing all strikes that look and smell like US strikes as US strikes–even if they are claimed by the Yemeni government.

I exchanged emails with Chris Woods and Jack Serle, two editors directly responsible for the drone-tracking project at TBIJ. Mr. Woods and Mr. Serle confirmed the Yemeni Air Force's limited technical capability and expanded on their tracking methodology mentioning that TBIJ also had sources on the ground who could often confirm if a strike was conducted by the United States or the Yemeni Air Force. A final issue that makes tracking strikes in Yemen more difficult is the presence of US F-15 Eagle tactical fighter jets. Often it can be difficult to ascertain if a strike occurred from a US drone or US aircraft. Using their media and ground based sources TBIJ makes a determination if a strike was a confirmed drone or a "possible" drone strike. For the purposes of this thesis I have classified all "possible" strikes as drone strikes.

While TBIJ's data contains a variety of information about known drone strikes in Yemen, they do not coherently classify the targets by their position in al-Qaeda. When possible, TBIJ describes the outcome of the strike and cites newspaper articles, al-Qaeda reports, and Yemeni and US sources to determine the outcome of a strike. Using TBIJ's database as well as their sources I was able to evaluate and code strike targets corresponding to their rank in AQAP or other militant organization. First, in order to simplify my analysis and ensure consistency, I used a binary code to rank targets. If a target was judged to be a "low-value" target he was assigned a code

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[98] "General Petarus' Meeting with Saleh on Security Assistance, AQAP Strikes," (Sanaa, Yemen: Wikileaks, 2010).

of "0". If the target was judged to be "high-value" he was assigned a code of "1".[99] In order to determine if targets were high or low value, I employed several methods. Targets were classified as high-value if they met one of several criteria. First, if the targets were known by name or an alias, they were almost always considered high-value targets. News reports and even al-Qaeda press releases only refer to those killed by name when a name was available. In most cases targets' names were only known if the target actually had some role in leadership. However, TBIJ's inability to name particular targets did not preclude targets from being classified as high-value. Unnamed targets were classified as high-value if they were called "leaders" or "senior militants" by TBIJ or one of the various news sources that reported on the strike. Only those targets who remained nameless or who were classified only as "militants" "AQAP members" or had a similar non descript title distinction I coded as low-level targets.

My coding rational was fairly straightforward; if even just one news source classified a target as occupying a leadership role that could make him a potential threat to US interests the target was classified as high-value. If no justification other than the allegation that the target was a potential militant was given I classified him as a low-value target as a standard militant. It is worth noting I coded the targets by strike. For instance, if a strike killed six "militants" and one "senior AQAP leader" the strike would be coded as a "1" because of the presence of a high-value target. Drone strikes are frequently conducted on vehicles or residences. High-value targets are rarely alone; rather, they usually travel in entourages comprised of lower-level

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[99] I use the pronoun "he" because all targets of drone strikes, consistent with membership in al-Qaeda is male.

militants. Consequently strikes targeting high-value individuals often end up

eliminating low-level targets. However, a strike that only killed six "militants" would

be classified as "0" because no high-level targets were killed. Looking at overall

militant deaths, low-level target deaths are much higher due to the fact that there are

simply more low-level militants and strikes that kill high-level militants, often kill

their nearby subordinates. I adopted a fairly broad definition of high-value targets in

order to ensure that those targets I classified as low-level were truly low-level

militants who were very far removed from leadership and likely would not appear on

any agency's "kill-list" or even radar.

The first drone strike in Yemen occurred in October of 2002 and killed Abu

Ali al-Harethi the mastermind behind the devastating USS Cole bombing which

killed 17 American service members. The strike was widely reported and recognized

as a US Predator Drone strike and became an ideal case for targeted drone strikes in

the early years of the program. The strike represented an ideal case for several

reasons. First, al-Harethi as the mastermind of one of the most visible pre-9/11 terror

strikes was a clear high-value target, and at the time was "one of the top dozen or so

Qaeda figures in the world".[100] The manner in which al-Harethi was killed was also

emblematic of a successfully executed drone strike. "The decision to approve the

missile launch was made by 'very senior officials' below the level of the president

who had been closely monitoring the surveillance of Mr. Harethi and his associates...

They [the CIA] were seeking an opportunity to kill Mr. Harethi in a setting that would

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[100] Judith Miller James Risen, "C.I.A Is Reported to Kill a Leader of Qaeda in Yemen," *New York Times*, November 5 2002.

minimize the chance of unintentional casualties".[101] All in all, the al-Harethi strike was a great success. The United States was able to eliminate a man who posed a direct threat to US interests, use novel technology successfully, and conduct a clean strike, killing only the intended target and his entourage of militants.

The al-Harethi strike and rhetoric surrounding the drone program, particularly in Yemen, could give many Americans the impression that only high-level al-Qaeda leaders are being targeted for assassination by drone strikes. The theory behind targeted assassination does not seem to suggest a great benefit from killing low-level militants and in fact suggests killing low-level targets may hinder US interests by engendering anti-American sentiment. Low-level militants are merely a cog in the machine, often young men, who have little to no capability to carry out attacks on US interests without substantive leadership. Furthermore, targeted assassination has the grave potential to incite virulent local hatred of the United States, a hatred that is all together amplified when strikes are carried out against lower level fighters, men who often are not seen as terrorists by the local community.[102] Understandably, local populations are more vehemently anti-drone when civilians are killed as part of a strike. Retired General Stanley McChrystal the former commander of United States troops in Afghanistan argues, "They [drones] are hated on a visceral level, even by people who've never seen one or seen the effects of one" and that the use of drones

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[101] David Sanger, *Confront and Conceal: Obama's Secret Wars and Surprising Use of American Power* (New York: Crown Publishing Group 2012).
[102] James Carvallaro, "Living under Drones: Death, Injury, and Trauma to Civilians from Us Drone Practices in Pakistan."

exacerbates a "perception of American arrogance that says, 'Well we can fly where we want, we can shoot where we want, because we can.'"[103]

It follows then, that strikes would only be used on high-level or high-value targets. However this is not the case in Pakistan, where outcry in 2011 over the knowledge that the "CIA has been targeting lower-level fighters after tracking their activities and movements" sparked CIA directive directives specifying that only high-value targets should be killed.[104] The directives in Pakistan were also aimed at calming the strained US-Pakistani relationship as Pakistani officials objected to strikes where the CIA would use drones to target a high number of lower-level militants. Again, though rhetoric remained in favor of high-value "personality strikes", the reality was according to CIA officials that "the agency has the leeway to carry out large-scale strikes and hasn't been formally directed to go after only higher-value targets and avoid foot soldiers."[105] Perhaps in the context of Pakistan, given its location close to Afghanistan where low-level fighters are much more likely to be able to strike at United States interests, the targeting of lower-level fights in legitimate. However, in Yemen this should not be the case.

Model and Results

Expectations and Hypothesis

Particularly in the case of Yemen, where killing large groups of low-level insurgents does not seem to serve a tangible tactical or strategic purpose– given its

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[103] David Alexander, "Stanley McChrystal on Drones: Retired General Cautions against Overuse of 'Hated' Strikes," 2013.
[104] Siobhan Gorman Adam Entous, Matthew Rosenberg, "Drone Attacks Split U.S. Officials," *The Wall Street Jounral*, June 4 2011.
[105] Ibid.

distance from standing US troops–when analyzing drone targets we should expect to see a much higher proportion of high-level strikes as opposed to low-level strikes. In fact, this is not the case. Figure 5.1 plots drone strikes over time, using May 2011 (when the program began in earnest) as a starting point. Though the 2002 strike that killed USS Cole bombing mastermind, Abu ali al-Harethi, was technically the first drone strike in Yemen, the strike was somewhat of an outlier as the program did begin in full force until May of 2011. Given the program's stated goal of eliminating AQAP leaders we would expect to see a relatively steady increase in high-level strikes, perhaps with some peaks and valleys accounting for differing external and internal political developments, with a relatively consistent small number of low-level strikes. Before my data analysis, I hypothesized that as the drone program expanded there would be a higher proportion of low-level targets killed likely because of familiarity with the technology and capabilities. Though familiarity is not entirely the cause behind the targeting of low-level militants, there was a surge in the targeting of low-level militants after the drone program was well established. While we have seen a steady, almost linear increase in high-level strikes early in the program, low-level strikes were present at the same degree as high-level strikes and have increased at a relatively similar rate, with a large spike between March and June of 2012. Therefore, although familiarly may be one factor driving the increase in low-level strikes it is not the chief force; rather, as I will show, the intensity of conflict on the ground in Yemen drives low-level targeting. I will discuss the potential reasons behind this large increase later in this chapter.

Are Low-Level Targets Being Killed?

Based on the data from TBIJ and my analysis of target selection, the United States has deterred from its stated policy of targeted assassination of high-value targets. Based on my data, the CIA and JSOC have conducted 42 strikes on targets considered "higher-level" compared to 47 strikes against "lower-level" targets. Essentially there is a one to one ratio of high to low-level strikes. For every strike against a higher-level target I have found that there are 1.1 strikes against low-level targets. Figure 5.1 demonstrates the one to one relationship of low and high level strikes. Both the red line (low-level targets) and green line (high-level targets) increase at largely the same rate and display the relationship.

Particularly interesting is that low-level and high-level strikes have increased at a relatively consistent rate (as the one: one strike ratio would suggest) except for a period in early 2011. Figure 5.2 one demonstrates this trend clearly. The blue dots represent low-level strikes, the red high-level strikes. The strikes are plotted over time with the y-axis as the cumulative number of strikes. Both lines increase at about the same rate until March of 2012 when the number of low-level strikes increases dramatically.

Figure 5.1: Drone Strike Experience and Target-Level Tallies
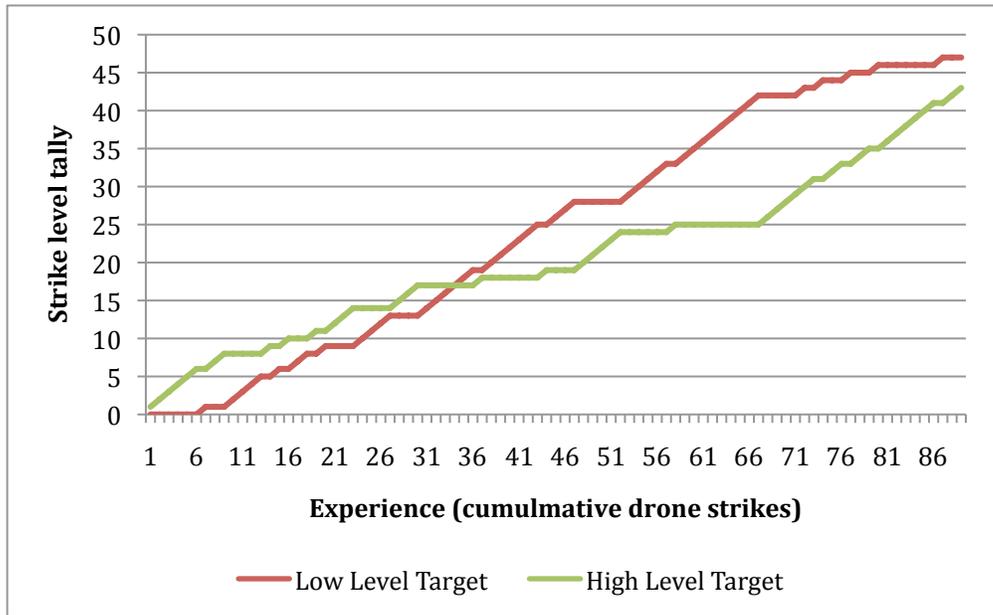
Source: Compiled from a dataset created by author using data from *The Bureau of Investigative Journalism*.

Figure 5.2: Running Tally of Low and High Level Targets in Yemen, 2011-2012

Source: Compiled from a dataset created by author using data from *The Bureau of Investigative Journalism*.
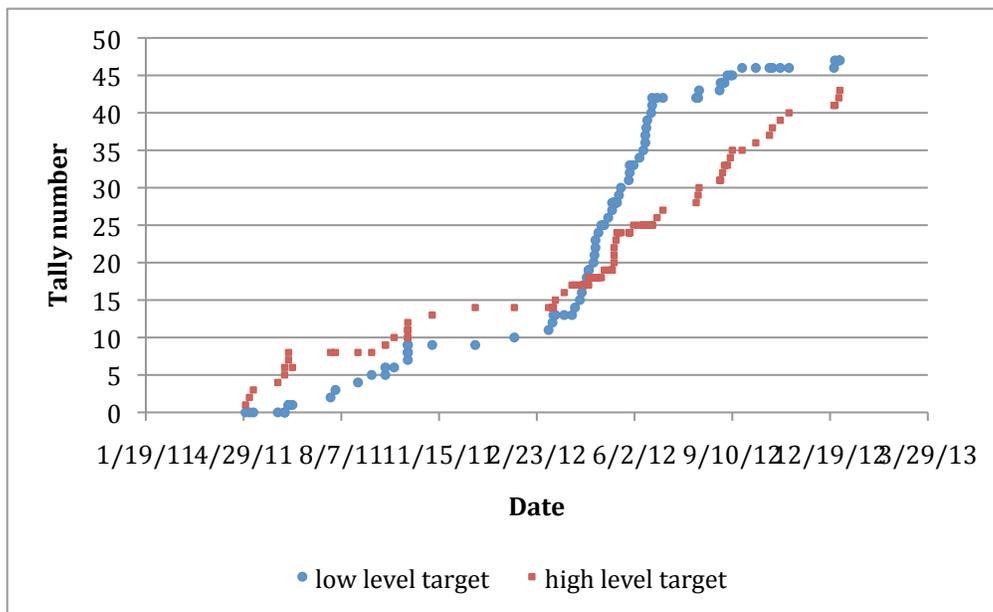
Other qualitative sources support my findings that low-level strikes are being conducted quite frequently. In his recent February, 2013 confirmation hearing to become the director of the CIA, John Brennan was asked often about the drone program, its goals, and particularly the review process for determining strike targets. Brennan reiterated, though implicitly, the position that strikes should focus on higher level targets answer in response to Senator Diane Feinstine's question about authorization protocol:

> The President has insisted that any actions we take will be legally grounded, will be thoroughly anchored in intelligence, will have the appropriate review process, approval process, before any action is contemplated, including those actions that might involve the use of lethal force.[106]

Though he doesn't come out and directly say it, Brennan clearly implies by describing the authorization process that the strikes are meant for higher-level targets. Furthermore, when authorizing the continued expansion of the program in early 2012, President Obama reportedly instructed officials in the CIA and JSOC that in order to conduct a strike, "the CIA and JSOC must determine that their militant activities are significant enough to warrant treating them as so-called high-value targets or that they are plotting against U.S. and Western interests."[107] Though Brennan is leaving himself the space to conduct the program as he sees fit, the strikes are clearly intended for higher-level targets. Given the rhetoric one would expect almost every strike to be a high-level target and the ratio of high: low level targets to be significantly greater than 1:1.

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[106] *Open Hearing on the Nomination of John O. Brennan to Be Director of the Central Intelligence Agency.*
[107] Siobhan Gorman Adam Entous, Julian Barnes, "U.S. Relaxes Drone Rules--Obama Gives CIA, Military Greater Leeway in Use against Militants in Yemen," *Wall Street Journal*, April 26 2012.

These assertions of frequent low-level strikes are reported on by the media and confirmed by upper level US military leaders. For example according to *The New York Times*:

> A review of strikes there so far suggests that the Obama administration has embraced a broader definition of what constitutes a terrorism threat that warrants a lethal response… A growing number of attacks have been aimed at lower-level figures who are suspected of having links to terrorism operatives but are seen mainly as leaders of factions focused on gaining territory in Yemen's internal struggle.[108]

Furthermore, according to top United States officials:

> Several former top military and intelligence officials — including Stanley A. McChrystal, the retired general who led the Joint Special Operations Command, which has responsibility for the military's drone strikes, and Michael V. Hayden, the former C.I.A. director — have raised concerns that the drone wars in Pakistan and Yemen are increasingly targeting low-level militants who do not pose a direct threat to the United States".[109]

It is clear that low-level fighters are being targeted. The question becomes why are these low-level strikes becoming more prevalent and more specifically why there was a dramatic upswing in low-level strikes in the spring of 2011. In the following sections I will offer several explanations for the consistent increase in low-level strikes followed by a possible explanation for the drastic increase in low-level strikes.

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[108] Greg Miller, "Increase in Drone Strikes in Yemen Raises Questions," *The Washington Post*, March 1 2012.
[109] Mark Mazzetti Robert Worth, Scott Shane, "Drone Strikes' Risks to Get Rare Moment in the Public Eye," *The New York Times*, February 5 2013.

Why Do We See Low-Level Strikes?

As Figure 5.1 demonstrates there has been a decided increase in both high-level and low-level drone strikes in Yemen While the expansion of the drone program and continued hunt for AQAP leaders explains the overall increase, the drastic increase in low-level strikes is unexpected, especially in the period from February to June of 2012. In this section I will offer several explanations using the qualitative and quantitative evidence to explain low-level targeting in general as well as the specific uptick in low-level strikes.

The Familiarity Hypothesis

Perhaps the increase in low-level targeting in Yemen can be tied to a growing familiarity with drone technology. Any new technology or tactic takes some time to figure out and perfect. Though used in locations tied to traditional war, the drone program in Yemen represented the first use of drone strikes outside of traditional combat zones. It would follow that both US policy makers and drone operators would need some time to familiarize themselves with the situation in Yemen, overcome political hurdles, and collect actionable intelligence. Given the hurdles to conducting successful drone strikes, I would expect that in the beginning of the program, targets would generally be high-level as strikes would be meticulously planned and vetted to ensure they operated smoothly. However, once policy makers, intelligence officers, and drone operators became comfortable with the use of drone strikes and gained a greater understanding of the situation in Yemen, familiarly could lead to increase in strikes not only of high-level targets but also of low-level targets.

However, the familiarity hypothesis fails to explain all of the low-level strikes in Yemen. If the hypothesis that as drone strike experience increases, target level decreases is correct, we would expect to see a lower average target level as drone strike experience increased. While the data does somewhat fit with my chief expectation (as drone strike experience increases, low-level targets will be killed more frequently) the results are not entirely conclusive. Instead of the expected linear relationship, the data shows a non-linear relationship between experience and drone strikes. Calculating the average target level over different to levels of drone strike experience elucidates these findings. Figure 5.3 displays the average target level over three time periods (low, moderate, and high experience) each corresponding to approximately 30 strikes. The average target level was calculated using my binary target codes of either "0" or "1" corresponding to the target value. Though the average target was generally fairly high (0.56) during the period of low drone strike experience, strikes during the moderate period were almost exclusively aimed at lower-level targets, with an average target level of just 0.27. The period of high experience mirrors that of the low-experience period with an average target level of 0.59. This intermediate level of strike experience represents the substantial uptick in low-level strikes shown in Figure 5.2. If the familiarity hypothesis was correct, we would expect to see a skewed right distribution, rather than almost equivalent average target levels for low and high experience ranges with a severe drop in the average target level during the moderate experience period.

Further illustrating the point that drone experience does not have a clear linear relationship with target level is figure 5.4. Figure 5.4 shows average target level over

a five strike period, offering a closer look at the fluctuations in target level. Figure 5.4 shows that while average target level wavers somewhat, the average target level is relatively consistent. Again, it is clear that during the moderate period of drone strike experience, the average target level was low–consistent with my findings of increased low-level targeting during early 2012. These figures seem to largely disprove the initial familiarity hypothesis, as there is no shift over time from high-level to low-level targets. However, the figures again demonstrate that there even as strike experience increase there a somewhat equivalent amount of low and high-level targeted killings in Yemen suggesting familiarity may lead to increased overall strikes regardless of target level.

Figure 5.3: Target Level and Strike Experience/Familiarity in Yemen
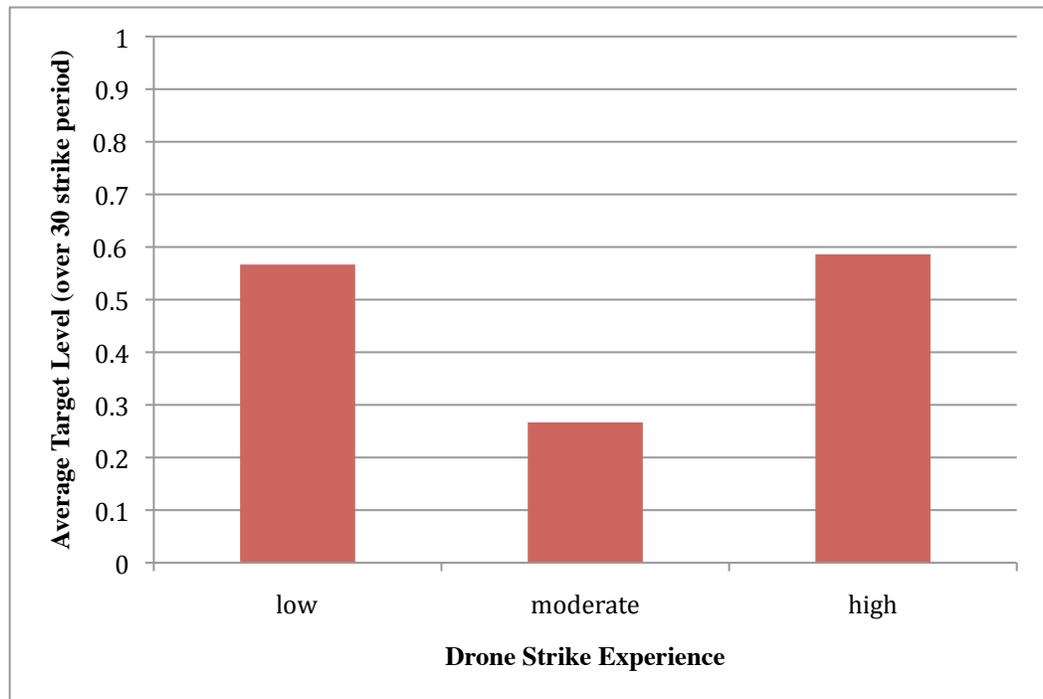
Source: Compiled from a dataset created by author using data from *The Bureau of Investigative Journalism*.

Figure 5.4: Experience and Target Level in Yemen
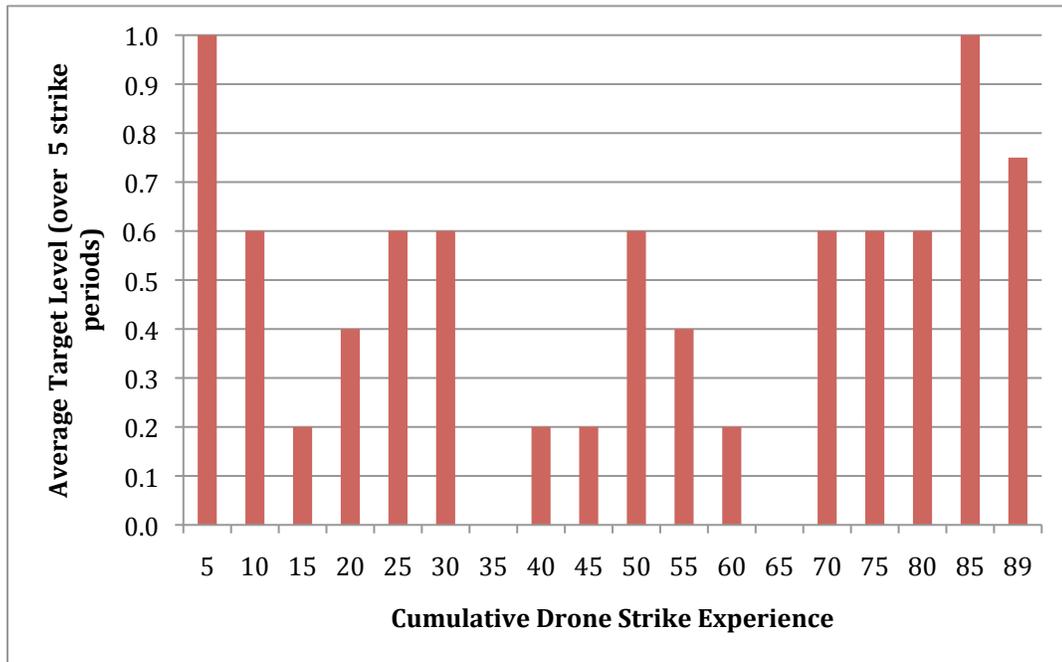
Source: Compiled from a dataset created by author using data from *The Bureau of Investigative Journalism*.

Funding/Capabilities

An alternative structural hypothesis for the consistent level of low-level targeting focuses on the physical expansion of the drone program, namely the freedom of the CIA to physically purchase drones and expand the program. As was discussed in Chapter Three funding for drones has increased dramatically in years leading up to the expansion of the drone program. The increased funding for the drone program has also been accompanied by increased operational capacity in other ways perhaps explaining the increase in low-level strikes.

The expansion of the Camp Lemonnier base in Djibouti offers perhaps the best example of the expansion of the program into Yemen and the Horn of Africa. Camp Lemonnier is the only counterterrorism base of its kind. Though already a large base, in August of 2012 Congress allocated $1.4 billion to the expansion of the base with provisions designed to increase the base's capability for drones.[110] Camp Lemonnier had been a drone base well before the proposed expansion; in fact the drone that killed al-Harethi in 2002 was launched from Lemonnier. However after the threat from AQAP increased in the wake of the failed airline bombings in 2010 an additional eight predator drones were dispatched to the base in order to fly missions over Yemen.[111]

Far from just expanding the current base in Djibouti, the Obama Administration has allocated funds to develop a network of drone bases around Africa. About a dozen secret bases have sprung up since 2007, generally run out of small installations at African military bases or airports.[112] Additionally, bases in the Seychelles and Bookhara, Burkina Faso have been expanded to allow for increased drone operation. Further bases, including one in Ethiopia have been planned in order to extend the reach of the JSOC and the drone program.[113]

It is worth noting that not all drone bases fly armed Predators and Reapers. Though perhaps not true for much longer, not all the drones are armed, many instead are simply used for general surveillance. However, as evidenced by the base in the

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[110] Craig Whitlock, "Remote U.S. Base at Core of Secret Operations," *The Washington Post*, October 25 2012.
[111] Ibid.
[112] ———, "U.S. Expands Secret Intelligence Operations in Africa," *The Washington Post*, June 13 2012.
[113] Ibid.

Seychelles this trend many be shifting. Initially, in large part to reassure the Seychellois about the drone base that was constructed in 2009, US officials stated the base would only operate surveillance drones and would be used solely to monitor pirate activity off the coast of the islands. However, cables obtained by WikiLeaks have shown that just two years after the construction of the Seychelles base, the JSOC is operating hunter-killer drones, equipped with hellfire missiles over Somalia.[114] The shift from reconnaissance to potential target elimination coincides with the larger shift in policy regarding drone use.

Furthermore, the CIA has broadened its capability in the Arabian Peninsula and Africa in various ways other than its use of increased funds. Since September 11th 2001, the agency has quadrupled in personnel size giving it increased capacity and human resources to devote to counterterrorism operations around the globe.[115] For example, the CIA recently created a special counterterrorism division to deal specifically with Yemen. Attempting to mirror the Pakistan-Afghanistan Department, which has been responsible for the drone and counterterrorism program in Pakistan and Afghanistan, the CIA has created a similar division for Somalia and Yemen. The division has become largely responsible for collecting the intelligence and conducting the CIA's drone strikes in Yemen and has overseen the broad expansion of the drone program and construction of drone bases.

Both the CIA and JSOC have increased their capacity to conduct strikes both in the Arabian Peninsula and North Africa. Money for actual drone development,

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[114] Greg Miller Craig Whitlock, "U.S. Assembling Secret Drone Bases in Africa, Arabian Peninsula, Officials Say," *The Washington Post*, September 20 2011.
[115] Julie Tate Greg Miller, "CIA Shifts Focus to Killing Targets," *The Washington Post*, September 1 2011.

manpower, and infrastructure development have all increased rapidly over the course

of the past decade and likely will continue to rise as drones remain one of the United

State's hallmark counterterrorism programs. It seems likely that increased capabilities

have lead to increased strikes. However, when evaluating increased funding for a

unique military program such as the drone program, a chicken and egg scenario

emerges. Is increased funding responsible for more drone attacks or is the nature of

the emerging asymmetric threat to United States security driving Congress and the

Pentagon to increase drone funding? In this case, it seems that both the perceived

success of the drone program as well as the unique threats posed by AQAP have

motivated the increase in funding. As drones continue to be viewed as successful,

funding will continue pouring in, likely facilitating additional strikes. However, it was

the initial emergence of the threat that led funding to be allocated in the first place.

Therefore, while funding certainly plays a part in the increased number of strikes, it

does not account for the preponderance of low-level strikes or the overall growth of

the drone program in Yemen.

Drones as Warfare and the Steep Increase in Low-Level Targets

It is likely that capabilities and increased tolerance for killing low-level targets

may account for some of the baseline low-level target elimination however it

certainly does not explain the surge in low-level targets that was not reflected in high-

level targets during the spring of 2012. The meteoric rise in low-level drone strikes in

the early portion of 2012 resulted from the security pressures faced by the US and the

lack of alternative warfare options to contain the growing territorial authority of

AQAP. In other words, the US used drones strikes as warfare to indirectly combat

terrorism through regime stabilization. To understand the source for the surge in low-level drone targets conducted by the US in the spring of 2012, a detailed examination of the dynamics of US involvement in Yemen and the political context of Yemen must be considered.

Though not always close, relations between the United States and Yemen's long time president Ali Abdullah-Saleh had strengthened in the 21st century. Analysts point to President Saleh's embrace of the "War on Terror" as a play to bring the United States closer into the fold and into President Saleh camp. Partially owing to this new relationship, in the early 2000s, with US assistance and funds, Yemen developed a Coast Guard and received a great deal of monetary aid.[116] However, towards the end of the decade, as President Abdullah Saleh's government weakened in large part as a result of internal conflict in the country including the Houthi rebellion, al-Qaeda became stronger. Though initially AQAP's attacks focused on destabilizing the Yemeni government, their danger to the United States became apparent after the failed Christmas Day bombing in 2009. On Christmas Day 2009, a Nigerian born man, Umar Farouk Abdulmutallab, attempted to detonate plastic explosive on a flight from Amsterdam bound for Detroit. The plot was orchestrated by Anwar al-Awlaki, an American cleric who had risen to a leadership position within AQAP in Yemen. Partially for his role in orchestrating the failed attack, al-Awlaki was killed in a drone strike four months later, a strike that sparked outrage as al-Awlaki was technically an American citizen. After the failed Christmas Day bombing in 2009, US focus in Yemen continued to shift to combating terrorism and

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[116] Jeremy Sharp, "Yemen: Background and US Relations," in *CRS Report for Congress* (Washington, DC: Congressional Research Service, 2010).

AQAP as President Obama continued to increase military aid and humanitarian aid. In 2012, the administration provided $346 million in bilateral aid, the most ever given to Yemen. This aid included a great deal of military aid to help the Yemeni government combat terrorism.[117] Though US aid was greatly increased in Yemen, the government was rapidly falling apart.

Yemen has long been plagued by poor economic conditions and widespread corruption. Like many other strongmen in the region, Ali Abdullah Saleh had surrounded himself with close family members and allies. Saleh's family members controlled top branches of the military and government and it was widely assumed that a close relative would step in after Saleh's 30 plus year reign of power was over. Multiple insurgencies, including increased al-Qaeda activity, further plagued the beleaguered government whose reach never fully extended into the tribal areas.

After the beginning of revolution in Tunisia against longtime president Zine El Abidine Ben Ali and the protests in Egypt against Hossni Mubarak, the Arab Spring spread to Yemen. Beginning on January 27th 2011, a series of protests broke out in Yemen against Saleh, his corrupt government, and plan to cede power to his son. By the spring, the protests had spread across the country and had becoming increasingly violent. In June, frustration spilled over and protestors attacked the presidential palace sending Saleh to seek treatment in Saudi Arabia and leaving Vice President Abd Rabbuh Mansur Hadi as acting president. Given Saleh's hard-line, often violent response to the protestors, even his traditional allies the United States and Saudi Arabia called for the dictator to step down. Finally, in February of 2012,

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[117] Ibid.

exactly the time the increase in low-level drone strikes began, elections were held in

which Hadi won. Tellingly, on the day Hadi was sworn in, al-Qaeda attacked a

government post in the port of Mukalla killing 21 government troops. As a signal of

things to come, Hadi called the fight against al-Qeada "a national and religious

duty."[118]

During the protests, both high and low level strikes increased at a relatively

stable and comparable rate. However, just after the power transition, strikes, both low

and high-level, but especially low-level increased drastically. A major increase in

low-level targeting, in the context of a power transition and broader power struggle in

an failed state viewed by US counterterrorism officials as a haven for terrorist

operatives-confirms the expansion of the drone program from targeted killing to

overall warfare. Beginning in February 2012, the United States began using drones

not just as targeted killing tools but as warfare to counter AQAP and stabilize the

Yemeni regime–a policy with drastic future implications for the drone program.

During the Yemeni revolution of 2011, al-Qaeda linked insurgents used the

discord and government preoccupation with suppression to seize large portions of

territory in the Abyan and Zinjibar provinces even going as far as to declare the

Islamic Emirate of Abyan.[119] Despite the fact that according to Yemeni political

analyst Abdul Ghani al-Iryani, al-Qaeda is "not well-equipped enough to take over

these towns in a direct battle with Yemen's security forces…without a security

presence in these areas, al-Qaeda will make gains."[120] As discussed previously,

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[118] Laura Kasinof, "Yemen Swears in New President to the Sound of Applause and Violence," *The New York Times*, February 25 2012.
[119] Iona Craig, "Amid Region's Unrest, al-Qaeda Makes Inroads in Yemen," *USA Today*, April 1 2011.
[120] Quoted in Ibid.

Yemeni security forces lack even basic capabilities and technology to retain control over territory. Especially given security forces' concentration on putting down unrest in the capital, the only area totally under government control, al-Qaeda and other insurgent groups were able to take over many of the friendly tribal areas further entrenching themselves in those region.

Viewed through the lens of counterterrorism, the 2011 revolution in Yemen was devastating to US interests for several reasons. First, President Saleh was a somewhat reliable ally in the War on Terror and was able to keep some control over the country. Second, the possibility of a totally failed state left open the possibility for al-Qaeda to take control of large swaths of territory, set up training grounds, and plan attacks unmolested.

The increase in low-level drone strikes corresponds to an increase in militant activity occurring after the transition of power from Saleh to his vice-president Hadi. After February 2012, when no strikes occurred, the US began the blitz of strikes that accounts for the increase. Not coincidentally, late February and March saw a period of increased insurgent violence. In a span of just days in early March, insurgents launched deadly attacks including a March 5th battle, which left between 35-80 Yemeni troops dead.[121] Just days later, the United States launched a massive three-day drone offensive that killed as many as 55 militants. One day's strikes did kill several militant leaders (leading this strike to be excluded from the low-level increase) however the offensive was largely a response to the violence against Yemeni troops in the aftermath of the government transition.

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[121]Jeffrey Fleishman Zaid al-Alayaa, "Militants Kill 35 Yemeni Soldiers: Fighters Have Stepped up Their Attacks since the New President's Threats to Crush Them," *Los Angeles Times*, March 5 2012; Miller, "Increase in Drone Strikes in Yemen Raises Questions."

Fighting again reached a climax in early April when insurgents attacked a military checkpoint in Southern Yemen, killing 20 Yemeni soldiers before waging a full-scale battle for the city of Lawdar, located in the militant stronghold of southern Abyan province.[122] The battle for Lawdar began on April 9th, 2012 with heavy fighting lasting for several days in April and claiming the lives of well over 100 militants along with a large number of Yemeni forces.[123] Again, just after the increased violence, US drones stepped up activity in the region with a variety of deadly strikes. Between the beginning of the battle on April 9th through the heavy fighting during the month of April, the United States conducted 12 drone strikes, ten of which struck solely low-level targets. The 12 strikes, exclusively conducted in the Abyan region, killed up to 91 suspected militants, an incredibly high death toll for targeting killing operations.

As expected, news sources began to pick up on the increase in low-level targeting short after the campaign began. As the *Washington Post's* chief drone writer, Greg Miller, wrote evaluating the situation, "A growing number of attacks have been aimed at lower-level figures who are suspected of having links to terrorism operatives but are seen mainly as leaders of factions focused on gaining territory in Yemen's internal struggle."[124] The targets killed during this three-month high strike period were suspected of having links to al-Qaeda. However, these targets, more often than not, were threat to Yemeni security and were not necessarily planning or capable of orchestrating attacks on the United States.

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[122] Mohammed Mukhashaf, "Qaeda-Linked Militants Kill at Least 20 Yemeni Soldiers," *Reuters*, March 31 2012.
[123] "World Briefing Yemen: Military Says 165 Militants Killed," *Los Angeles Times*, April 12 2012.
[124] Miller, "Increase in Drone Strikes in Yemen Raises Questions."

Essentially, using drones, the United States is conducting war on behalf of the Yemeni government. Despite official rhetoric, the program has expanded from targeted counterterrorism operations. Just like his predecessor Saleh, President Hadi has welcomed the US use of drones in the war against al-Qaeda calling drone technology, "more advanced than the human brain."[125] According to President Hadi, he authorizes every drone strike conducted in the country and has become "regarded by Obama administration officials as one of the United States' staunchest counterterrorism allies."[126]

Unsurprisingly, Hadi is enthusiastic about the drone strikes targeting AQAP fighters who are seeking to overthrow his government. Stretched to their limit, Yemeni forces may not be have been able to hold onto territorial control in Southern Yemen without aid, via drone strikes, from the United States. While high-level strikes may achieve a variety of longer term US security goals, strikes against AQAP, specifically low-level strikes are in the immediate interest of President Hadi as he seeks to retain power in an unstable country. As many aspiring strongman, particularly in the Middle East have found, the United States can be a good ally when trying to consolidate power through violence.

Conclusion

The United States has a direct interest in assuring the Yemeni state retains control over its territory. A totally failed state would likely create a situation similar to Taliban controlled Afghanistan where terrorists could operate freely. However, the

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[125] Greg Miller, "Yemen's Leader Says He Approves All Drone Strikes," *The Washington Post*, September 30 2012.
[126] Ibid.

CIA and JSOC's use of drone strikes have vastly diverged from the official rhetoric of using strikes as tools against high-value targets. Rather, the drones in Yemen are used both for targeted assassination and traditional warfare in support of a foreign government. The use of drones as warfare has a great deal of similarity with the Pakistan case and the desire to avoid American casualties. The US has little desire to get sucked into another quagmire of a regional conflict using ground troops. Instead, the US prefers to conduct war from above.

The use of drones as warfare, as opposed to just targeted assassination operations is problematic on several levels. Using drones as warfare tools to support embattled foreign governments raises the potential for the US to get drawn into conflicts across the globe. Already, drones have been used to support rebel armies in Libya and to support French troops in Mali. As the program and physical number of drones increases it does not seem farfetched that the United States might expand the program to a growing number of locales around the globe.

Second, according to General McChrystal drones are "hated on a visceral level, even by people who've never seen one or seen the effects of one."[127] Incurring local ill will in exchange for elimination of a major terrorist threat seems worth the tradeoff. However, using a hated tool to prop up a struggling government is a policy question that encompasses a variety of tricky trade-offs for US policy makers.

Strike analysis in Yemen has lead to several conclusions. First, despite official White House directives to the contrary, low-level targets are being killed at an

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[127] David Alexander, "Stanley McChrystal on Drones: Retired General Cautions against Overuse of 'Hated' Stikres," *Reuters*, January 7 2013.

alarmingly high rate of almost 1:1.[128] Second, the increase in low-level targeting is not directly related to increased familiarity with drone technology or physical expansion of the program, leading me to reject my initial hypothesis. Instead, a large portion of low-level targeting, particularly during the spring 2012 increase, is related to the intensity of conflict on the ground. In the case of low-level targets, drones are used as a warfare tactic.

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[128] Siobhan Gorman Adam Entous, Julian Barnes, "US Relaxes Drone Rules--Obama Gives CIA, Military Greater Leeway in Use against Militants in Yemen," *The Wall Street Journal*, April 26 2012.

Chapter Six: Conclusion

This thesis makes two central assertions regarding the nature of drone strike programs in Pakistan and Yemen. In Pakistan, drone strikes are connected with American casualties in Afghanistan for two reasons. First and foremost, American policy makers and military leaders have an inherent desire to limit American casualties and protect American lives in combat. The pilotless nature of drone strikes means that at least in the short-term, there is almost no risk to American lives in eliminating targets. Second, this thesis argues that the American public has soured on traditional conduct of war largely because of high numbers of casualties incurred by American troops in Iraq and Afghanistan. However, the challenges posed by terrorism that led the United States to become embroiled in Afghanistan remain pertinent to United States security interests today. This need for continued counterterrorism operations, the lack of American tolerance for casualties, combined with the high monetary cost of traditional warfare, leaves drones as a particularly attractive policy option. Particularly at their highest incidence of use in Pakistan, the need to balance war tactics and counterterrorism meant that higher-casualty months in Afghanistan were followed by months in which there was a higher level of drone strikes.

The second major assertion in this thesis deals with the use of drones for targeted killing in Yemen. Instead of the expected use of drones for high-level assassinations only, I show drones have been used against both high and low level

targets at almost equal rates in Yemen. Furthermore, after analyzing a drastic increase in low-level targets I argue the drone program in Yemen has been used both for targeted assassination as well as tactical warfare support to prop up the embattled Yemeni government. Increased drone strikes on low-level targets coincided with expanded AQAP action and aggressive territorial expansion. Because the Yemeni government was unable to maintain its monopoly on violence and control its territory, the United States used drone strikes to eliminate low-level soldiers who were fighting for AQAP. While low-level soldiers do not pose a threat to the United States, they do pose a threat to the Yemeni government. Essentially, US tactical support via drone strikes aided Yemen in their war against AQAP in addition to the standard counterterrorism policy of targeted assassination.

Study Limitations

As with any study, there are several limitations to the analysis presented in this work. First, my claims hinge on the use of unconfirmed and perhaps incomplete drone strike data. Certainly, TBIJ and the other drone strike aggregators I have relied on use rigorous methodology and are generally quite reliable. However, without official data there is a limit to TBIJ's work. It is likely that there are some drone strikes the United States has managed to keep covert and further some that have been incorrectly categorized as US drone strikes, as opposed to airstrikes or local government action. Particularly in the case of target analysis, without the official release of targets there is the potential for error. However, given that TBIJ's methodology is rigorous, I feel confident basing my analysis off of their work. It is likely there have been some errors or incorrect categorizations, however, if they are

few and randomly distributed as I expect, they should not significantly influence my substantive findings.

In the case of my analysis of Pakistan, while I consider a number of qualitative variables, my regression linking casualties and drone strikes is bivariate and therefore prone to oversimplification. Like almost any issue in political science, it is possible that I have omitted crucial variables that would account for the appeared correlation. That being said, it is often impossible to know every variable to include or how to quantitatively include variables such as presidential policy preference for a new policy without another president with which to compare. Particularly in this case, with limited data on a covert program, I was greatly restricted in my potential regressions. For instance, it would have been quite useful and informative to study how casualties in Afghanistan influenced drone strikes in Afghanistan, instead of using Pakistan as a proxy. However, in this case the data was simply unavailable.

Finally, as noted previously the study is somewhat limited based on the drone program's newness. With few official statements or data, combined with a lack of scholarly analysis, this work largely stands on its own. A vast majority of my qualitative evidence was gathered from news reports, which while reliable lacks the rigor of scholarly research. Further scholarly research and data analysis combined with some official statements would be beneficial to add to this analysis.

Policy Implications

With the war in Afghanistan winding down and troops scheduled to be completely withdrawn by 2014, the nature of the drone program in Pakistan will likely shift to one more similar to the one in Yemen, exclusively concerned with

targeted killings, rather than as tactical warfare support.[129] With the absence of troop-heavy conflicts, drones will either be substituted for warfare or continue to be used in a targeted killing capacity.

If the Yemen case and recent developments in Libya and Mali are any indication it appears that the Obama administration plans on both using drones instead of traditional warfare and to conduct Clinton–style coercive diplomacy. There is a very real possibility that the new drone technology will lead the United States to become involved in a variety of low-level conflicts across the globe. The relatively low costs of drones may be translated into a relatively low cost of international involvement, an equation I argue is faulty. Simply because drones are low cost does make the consequences of United States involvement in foreign conflicts also low cost. Drones may lower costs to becoming involved in conflict but they do not eliminate them. Regional or intrastate conflicts can be messy and difficult to resolve. Certainly the experience of the United States in Afghanistan and Iraq has proven that installing democratic regimes can be incredibly difficult and treacherous. Even in the case of a fairly successful and removed intervention such as the one Libya, potential pitfalls remain. As evidenced by the reticence of Western powers to become involved in the Syrian revolution even against a particularly brutal and repressive dictator, international intervention is far from cut and dry. I worry that the ease of drone strikes may lead United States leaders to become prematurely involved in international conflicts, without proper international support and assessment of a situation.

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[129] Jake Tapper, "Obama Announces 34,000 Troops to Come Home," *CNN.com*, February 13 2013.

Further problems exist with the use of drones, even as they are currently utilized. As do many forms of coercive violence against a terrorist group imbedded in local populations, drones have the potential to engender hatred for the US. The United States is often reviled in parts of the world, especially in the near-east and Arabian Peninsula. Encouraging pro-US sentiment even in remote communities should be a goal of US foreign policy. Pro-US sentiment among local communities is important both in counterterrorism operations as well in promoting democracy abroad. US policy should not be entirely dictated by the sentiment of communities in Yemen however if drones are truly hated on a "visceral" level as General McChrystal claims, then their use, especially in future locales, should be closely evaluated to ensure strategic prudence.

The United States must also carefully consider how to approach drone proliferation. Though the United States is currently the only country to control hunter-killer drones, other countries have acquired and use drone technology. It seems only a matter of time before another country, Western or otherwise, develops their own version of a Predator drone. Because drones are easily detected and shot down by a modern air force, the threat is not that a hostile foreign power could attack the United States. However, if numerous international players, with potentially conflicting interests begin intervening in various conflicts around the globe it could create a great amount of international tension.

Policy Suggestions

I believe that a firmly codified and publicized set of conditions for drone strikes could help prevent unnecessary strikes, reduce collateral damage, and limit

unnecessary or counterproductive United States involvement in global conflict. Further, codifying the strike process would ensure that the drone program is subject to appropriate oversight and the individuals who are killed are done so for legitimate national security reasons. Finally, as the United States is both a pioneer in the use of drones and a world superpower, a US system for strike authorization would likely influence other countries that develop drones. The United States would be able to influence drone use of foreign powers if it developed a legitimate process for authorizing strikes.

There is a clear need for secrecy when conducting defense operations. The mechanics behind drone strikes should remain largely covert. However, as Senator Diane Feinstein suggested in John Brennan's confirmation hearing, some type of court or review system would go a long way to increasing transparency and the assurance that "drone strikes are carried out in a manner consistent with our values."[130] Given the recent controversy over the killing of American born cleric Anwar al-Awlaki and the drone program in general, a review court would be a practical and effective solution to eliminate controversy and ensure the drone program is operated effectively and ethically.

The White House has already begun steps to "institutionalize" the drone program most prominently proposing to shift the CIA's drone program to the Department of Defense.[131] This process seeks to set clear rules and guidelines for the drone program. By shifting the program to the Department of Defense, the Obama administration would consolidate the parallel drone programs operated by the CIA

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[130] *Open Hearing on the Nomination of John O. Brennan to Be Director of the Central Intelligence Agency*, 7.
[131] Daniel Klaidman, "No More Drones for CIA," *The Daily Beast*, March 19 2013.

and JSOC and create a standard procedure for authorizing and conducting drone strikes. Though the CIA would retain a role, the military would command all lethal operations under title 10 of US Code, which governs military operations.[132] I believe, if executed correctly, the consolidation and institutionalization of the drone program under the Department of Defense will serve to alleviate many of shortcomings created by the drone program.

Future Research

Given the relative recent development of the drone program there is a great deal of opportunity for future research. There are three main avenues for further research that could elucidate and guide the drone program moving forward. First, though it has proved quite difficult, assessing the efficacy of targeted killings in general to deter and hinder terrorist activity is essential to formulating effective policy. As discussed in the literature review, few authors have studied targeted killing by the United States and their limited results have been far from definitive. Though methodologically quite difficult, a comprehensive study of targeted killings would serve to inform US policy makers how and when to most effectively use targeted killings. Expanding then on the effectiveness of targeted killings, as aided by the recent collection of drone strike data, scholars and policy makers must work to determine the effectiveness of drone strikes in particular. Granted, it may be unfeasible to draw definitive conclusions about the effectiveness of drone strikes on countering terrorism, especially long term, but the opportunity for exciting study and some conclusions could greatly inform policy makers and military leaders.

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[132] Ibid.

Additionally, drone strike effectiveness must be evaluated in terms of local attitudes towards drones in order to ensure drones are not counterproductive to long-term US security goals.

Aside from the question of effectiveness, further research could extend the question I posed in Yemen –who is the US killing and why– to Pakistan. The data on specific strikes is less conclusive than it is in Yemen due to several factors. News sources, the principal way the drone aggregators such as TBIJ collect strike data are severely limited in Waziristan. Additionally, the Pakistani military also conducts strikes on suspected militants in the FATA region. Because the Pakistani Air Force is a modern air force, it can be difficult to ascertain if the United States or the Pakistani government conducted a specific strike. That being said, data is available. Cross referencing Pakistan strike data between all three major drone strike aggregators combined with interviews with US officials, journalists, and local officials in Pakistan could provide a clearer picture of the targets of the drone program in Pakistan. Especially as United States troops leave Afghanistan it will be important to determine the scope and target selection, both past and present, in Pakistan.

Finally, a variety of human concerns regarding the drone program should be fully researched and recognized both in order to employ drones effectively but also to ensure that drone strikes are conducted ethically and in a morally responsible manner. Though more precise than airstrikes or cruise missiles, drones can cause considerable civilian casualties and collateral damage. The United States government claims that drone strikes cause relatively few civilian casualties however research done by the Columbia School of Law, Stanford and NYU Schools of Law, TBIJ, and other

sources point to a seemingly high rate of civilian casualties. In order to truly understand the human impact of drone strikes, research regarding civilian casualties must continue and be taken into account by United States policy makers.

The question of civilian attitudes and deaths from drone strikes also has practical implications for their effectiveness. If drones are universally hated, creating virulent anti-US sentiment, the United States may be on some level endangering its present and future security. Hatred for the US resulting from drone strikes may make civilians on the ground reluctant to work with the United States in any capacity both because of personal hatred, actual fear of being struck by a drone, or because of the fear of retaliation from others in the community.[133] The desire to discourage anti-US sentiment should not be the driving force behind policy, however, the United States must be careful not to create ill will or drive people to radicalize in volatile areas already rife with terrorist groups.

Finally, the human impact on the drone operators themselves presents an opportunity both for political science and psychological study. A criticism of the drone program holds that the removed nature of the operator creates a video game mentality where soldiers are becoming increasingly removed from the battlefield and the targets they are killing. The removed nature of drone strike operators has implications both for their behavior when selecting a target as well as the effect on drone operator's personal psyches well worth analyzing.

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[133] Haq Nawaz Khan Karin Brulliard, "Pakistanis Tie Slayings to Surge in U.S. Strikes," *Washington Post*, December 24 2010.

Conclusion and Final Thoughts

When you look at the technology of drones, it's a gamechanger in war. It's something along the level of the introduction of gunpowder or the steam engine or the airplane. By that I mean it gives you a series of capabilities that we didn't imagine we'd have a generation ago, but also it's giving us a series of dilemmas that we also didn't imagine we'd be having a generation ago. And they're dilemmas that are political, strategic, tactical, all the way down to ethical and legal.[134] –P.W. Singer

Drones are truly a revolutionary war tactic. The capability to monitor and strike a target from anywhere in the world, without putting US troops in danger, is remarkable. However, in a changing geopolitical world drones remain just one of many tools available to policy makers to combat terrorism. In my opinion the program will be most successful when used strictly to target high-value individuals who pose a direct threat to United States security. Terrorism still presents a grave threat to the United States, a threat that will not disappear, and drones represent an attractive tool to combat threats across the globe.

The United States must develop coherent strategy for drone use. Drones are not a silver bullet to combating terrorism but used wisely can be a great asset in United States counterterrorism operations. As drone development continues the United States government must continue to engage the "dilemmas" of drone use.

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[134] "A Discussion About Drones," in *The Charlie Rose Show* (United States: PBS, 2013).

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