

PERCEPTIONS OF THREAT IN THE 21<sup>st</sup> CENTURY

A Thesis

By

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## ABSTRACT

Perceptions of Threat in the 21<sup>st</sup> Century

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The goal of this work is to explain the US's continued disregard for the threat of low-tech attacks like those of 9/11. This work shows that misperceptions of threat within the US have led to an inability to adapt to the changing nature of warfare in the 21<sup>st</sup> century. This is done by examining data found in the Global Terrorism Database as well as defense spending, which supports the hypothesis that the US places more emphasis on high-tech threats even though low-tech threats are more deadly in terrorist attacks. This work shows that existing perceptions of threat and security within the US are outdated and ineffective, and that new norms of threat perception are needed.

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## CHAPTER 1

### **Introduction**

Defense spending is an important issue in the United States. A severe economic decline as well as two foreign wars and a continued terrorist threat all serve to make the large sums earmarked for defense a controversial topic. When the defense budgets are examined, there is a clear emphasis placed on defense against conventional threats to the country; big weapon systems and anti-ballistic missile defense systems dominate the budget (Trajtenberg). However, the only attacks on US soil since World War II occurred as a result of terrorist action, not an action by a state with a conventional military or ballistic missiles. Even the literature on terrorist threats to the US is replete with warnings of nuclear, biological, chemical, and other high-tech threats; yet the most successful and deadly terrorist attack against the US was carried out by a handful of individual with box-cutters (Global Terrorism Database). What is to account for the US's inability to adapt to this new form of threat? Why, in face of overwhelming precedent, does the US continue to fight the wars of the past? A review of relevant literature in the field, while yielding pertinent information, reveals a lack of empirical analysis of this issue. The purpose of this work is to fill that gap, and provide an empirical and reasoned analysis of the constructed nature of US defense policy. My hypothesis is that the US, due to a technocentric perception of threat, deems high-tech threats of greater importance than low-tech threats. Further, this perception of threat is institutionalized by the static nature of defense budgeting, which is focused on high-tech

conventional threats to national security despite the recent trend of terrorist actions against the US and threats to individual security. The null hypothesis is that high-tech threats are in fact more of a threat to the US, in which case current paradigms in spending are justified.

This work begins by outlining and defining key concepts and terms. This chapter provides valuable background information as well as illustrates the need for statistical analysis within the body of literature. The next chapter consists of an overview of current US paradigms of spending, threat, technology, and realism. A quantitative analysis of terrorist threat follows. This threat analysis explores whether or not there is a valid challenge to the established constructed defense policy mindset: Is there a dichotomy between the types of threat that the U.S. claims to face and the types of threat that the U.S. has actually encountered? Does the U.S. emphasize some forms of threat more than others? Does the rhetoric of defense match defense spending? Do rhetoric and spending compliment actual threats encountered? The final section presents the conclusion reached from the statistical findings and argues that (1) the rhetoric of the US government and the spending of the government are at odds with the threats met and (2) the origin of the contradictions between genuine threats and funded programs arise from the entrenched nature of US ideology and neo-realist paradigms. The thesis advocates an alternative approach to defense policy that better reflects the realities of insecurity and threat in the 21<sup>st</sup> century. Such an alternative approach would more accurately assess the threats of today and tomorrow.

## CHAPTER 2

### **Key Concepts and Terms**

Before analyzing funding and threats, a brief overview of essential concepts and terms is needed. The dominant paradigms are discussed; additionally terms employed by both the US government and this work are clarified. This sets a stage for the arguments presented. Furthermore, this provides context for the empirical data and findings, as well as frames the normative conclusion of the work.

### **Realism**

Currently, the dominant paradigm guiding foreign policy analysis is realism. Given the dominance of realism, it is crucial to articulate its main elements. Realist thinkers and policy makers have long held to the belief that the anarchic state of the international system as well as the barbarous actions that anarchy forces on states is natural and unimpeachable. It is this state that causes nations to cement a vision of security, and threats to that security, into their psyche.

The idea of an international system structured through anarchy, in which power ensures survival, forms the basis of realist thought and can provide insight to the nature of US views of security and threat. Notable scholars among realist thinkers include Waltz, Walt, Greico, and Mearsheimer; the works of these authors have come to define international politics for many in politics. Those who work in think tanks and serve as advisors typically draw upon



the main tenants of realist theories. For instance, Waltz's "The Anarchic Structure and World Politics" is a look into the anarchic nature of the international system, and defines anarchy as a system, in which unitary actors play to their best advantage in a zero-sum format. Walt extends and adds detail to this idea in his "Alliances: Balancing and Bandwagoning." As the title suggests, this work explains the need for balancing or bandwagoning when a state is faced with a threat, and how balancing accrues a higher standing for a state, making it preferable when considering relative gains among allies. Greico defines the issue of gains in "Anarchy and the Limits of Cooperation" (2003); he states that realism more clearly represents the international system because of the relative gains format of that system. Key to Greico's argument is the idea that gains for one actor are losses for another in the dog eat dog world of international politics. Greico's disdain for the atomistic actors of liberalism prompts him to state the importance of relative gains in the international system, as an ally one year may be next year's enemy.

### **US Foreign Policy**

There have been many great works regarding the role of Ideology in US foreign policy. William Appleman Williams wrote what many consider to be the greatest work on the topic, *The Tragedy of American Diplomacy*. His work focuses on the history of foreign policy within the United States, and the key role that ideology played in it. First, there is the ideology associated with notions of American exceptionalism. Second, there is the capitalist ideology that motivates government action. In Williams's opinion, the belief that the US has been a anti-imperialist state are misguided at best. According to Williams, from the Monroe Doctrine onward, the US has geared its foreign policy process to enlarging its economic capabilities in a realist zero-sum type format, in effect

building an empire. Williams also argued that the altruistic endeavors carried out by the United States were little more than veneers to expand existing markets or open new ones; in short expanding democracy went conspicuously hand in hand with exporting US goods.

Michael Hunt's work *Ideology and US Foreign Policy* sees US ideology as the primary motivator of US policy abroad. Ideology, which Hunt defines as "an interrelated set of convictions or assumptions that reduces the complexities of a particular slice of reality to easily comprehensible terms and suggests appropriate ways of dealing with that reality" is his key to understanding US actions (xi). Hunt's definition is the one which this work bases any discussion of ideology on. Hunt takes an in-depth and historical approach to examining US policy. Hunt believes that the US has a nationalist idea of greatness, which must be continually stressed and supported through its foreign policy; that the US has a strict hegemony of races that shaped its perceptions of the abilities and intentions of others; and the US has an almost phobic aversion to social revolutions abroad. Hunt believes these three norms in the elites of the United States government have, and continue to, shape its foreign policy.

William Walker's work *National Security and Core Values in American History* is similar to the work of Williams and Hunt, in that he synthesizes the dual motivations of economic expansion and ideology into what he describes as American core values. Walker states that "this book asks whether the demands of national security undermine the integrity of liberty and weaken, perhaps irreparably, the values associated with it" (ix). While engaging in wonderfully detailed analysis, Walker also attempts to add a normative component to the work. While many other authors have attempted similar

normative speculation on US foreign policy, Walker's use of Williams' models as well as others, in combination with the contemporary nature of the work, (first published in 2009, Walker's book includes many of the issues so critical to the US foreign policy today) makes his view ideal for the timeline of this work. Walker quoted Charles Beard in his conclusion, "The Supreme interest of the United States is the creation and maintenance of a high standard of life for all its people and the ways of industry conducive to the promotion of individual and social virtues within the frame of national security" (293). While Walker condemns US foreign policy for the same reasons as Beard, (and for the same reasons that inspired such fear in Williams) he makes a compelling case for the intrinsic nature of those policy decisions, that the core values of the United States are so ingrained that to divorce them from US policy would be impossible.

The realist interpretation of policy within Washington focuses on the all-encompassing need of states to engage in self-perpetuating foreign policy, policy that ensures security, and puts all other concerns second. This realist bent to US foreign policy plays an important role to the ideas of threat and security which form the US's perspective in international relations. This role will be examined and critiqued later in the work.

### **Human Security**

This realist concern with national security, which has been inviolate for so long, has recently come under fire as innovations in communication and technology have allowed an unfiltered look into the daily lives of individuals. This shift, which is in and of itself worthy of long discussion elsewhere, makes a cornerstone of the argument of this work.

Many people have become dissatisfied with the *status quo* idea of security when confronted with security issues of a different kind; rape, famine, climate change, ethnic conflict, intra-state warfare, and human rights (or their lack), are all security issues which realism has no place for. They are, however, becoming more and more apparent to the citizens of the world as states are no longer able to confine the world to simple ideas of “us” and “them.” This has prompted a call for a new idea of security, one in which the individual rather than the state is the focus. This new security, called collective security or human security holds the key to many of the problems facing the world today, and possibly the answer to the questions posed by this work

An important shift in the concept of security occurred in 1994 with United Nations Human Development Report (UNHDR). This report “introduces a new concept of human security, which equates security with people rather than territories, with development rather than arms. It examines both the national and the global concerns of human security.” The report focuses on six main characteristics of human security;

- Investing in human development, not in arms;
- Engaging policy makers to address the emerging peace dividend;
- Giving the United Nations a clear mandate to promote and sustain development;
- Enlarging the concept of development cooperation so that it includes all flows, not just aid;
- Agreeing that 20% of national budgets and 20% of foreign aid be used for human development; and
- Establishing an Economic Security Council.

This shift from established views of state security is ideal when viewing the security threat posed by terrorism.

A 2005 UN panel on collective security is also useful in seeing the new perspective of security in the world. Anne-Marie Slaughter in her article “Security, Solidarity, and Sovereignty: The Grand Themes of UN Reform” seeks to outline this lengthy panel and provides interesting insight into the new theme of collective security. “The panel focuses equally on the military and nonmilitary dimensions of collective security, turning first to the ‘challenge of prevention,’ then to the use of force...the high-level panel offers an blueprint for profound change, through nothing less than a reconceptualization of security, solidarity, and even sovereignty” (619). It states that state security should be subordinate to human security, a profound shift from previous thoughts on this topic. It also seeks to redefine solidarity, encouraging a feeling of community between human beings rather than citizens of specific nations or states. The redefinition of sovereignty may be the most controversial of all, as it seeks to make states responsible to the international community for the safety and wellbeing of their citizens. The foundation of the report, and of collective security, states Slaughter, is “Collective Security means Collective Responsibility” (631).

There has also been recent inquiry into the impact of a lack of human security on promoting terrorism. Rhonda Callaway and Julie Harrelson-Stephens sought to explore the relationship between human rights conditions and terrorist activity in their article “Toward a Theory of Terrorism: Human Security as a determinate of Terrorism.” They found that “it is the denial of security rights that is the necessary condition for terrorism” (679). Their case study of Northern Ireland argues that state violations of civil, political

and security rights lead to conditions in which terrorism is likely. Out of the three, they found that state violations of security rights, specifically through state sponsored terrorism, are the most necessary for the creation of terrorism. The authors state that “it is only when the government engages in state terror that the appeal of terrorism moves toward wide spread support” (698).

Another vital work is *New and Old Wars* by Mary Kaldor. Kaldor sought to examine the conflict in Bosnia as a critical case of what she terms “new war.” New war, as opposed to old war (conventional conflicts such as WWII), is one that has evolved since the end of the Cold War and is strongly influenced by identity politics. Identity politics, by which Kaldor means “the claim to power on the basis of a particular identity – be it national, clan, religious, or linguistic” are central to the concept of new war, and replace many of the former realist notions of power that have formed the locus of conflict in the past (7). These new wars are often low-intensity conflicts that more resemble guerilla warfare or terrorism than the traditional conflicts of the past. This is an important facet of the reconceptualization of threat and security that this work is attempting to prove necessary. As the US and its allies find themselves involved in more and more “new wars,” the outdated methods of security which focus on conventional forms of threat that were so prominent in the Cold War will become more and more ineffective, and in fact come to hinder security in the US rather than ensure it.

### **Constructivism**

A key part of the argument in this work is that the way in which the US views threat and security is in large part constructed from the recent Cold War, and not so recent

World Wars. The foundation of this reasoning is well established; many notable authors have sought to examine what political elites have long held inherent or natural to the world of international politics. What is lacking is an application of this reasoning to current US defense policy, specifically in regard to the War on Terror and this new era of warfare. To this end, a brief overview of seminal constructivist thinkers will aid in this endeavor.

Alexander Wendt explains the way in which many of our ideas about international politics are formed. His work *Social Theory of International Politics* (1999) offers a basis for constructivist theory. Wendt states that everything we do or think in regards to international politics is a result of ideas. Ideas such as power, identity, and interest are all important parts of the international system. These ideas then coalesce into structures, which Wendt calls a codified set of beliefs. Wendt believes that individual's beliefs are codified by the state into structures, which then form the basis for state identity. Those states then act in the international system according to that identity. This forms the basis for Wendt's article *Anarchy is What States Make of It*. This article is Wendt's theory applied to the international structure of anarchy. Wendt states that "A fundamental principal of constructivist social theory is that people act toward objects, including other actors, on the basis of the meanings that the objects have for them." When applied to anarchy, this statement suggests that actors react based on preconceived notions and identities, rather than the absolute truths which most believe to be an inherent part of the system. Wendt quotes Peter Berger and Thomas Lickmann's definition of reification as important in our understanding of constructivist theory; "[It] is the apprehension of the products of human activity *as if* they were something else than human products-such as

facts of nature, results of cosmic laws or manifestations of divine will. Reification implies that man is capable of forgetting his own authorship of the human world, and further, that the dialectic between man, the producer, and his products are lost to consciousness” (Wendt 79). It is this idea that man cannot see his own part in the creation of anarchy and its identity that Wendt argues forms the basis of the way man reacts to anarchy.

These constructivist ideas are also seen in Katzenstein’s work *The Culture of National Security* (1996) which, as the title suggests, takes a constructivist look at the way in which nations define their security. Katzenstein suggests that interests are constructed through interaction, and that following the end of the Cold War, issues dealing with norms, identities and cultures are becoming more salient, while traditional Cold War notions of security are becoming less so. Katzenstein states that the new issues deal with ethnic conflict, civil wars, economic competitiveness, and will become more important as the years go on. He also states that the failure of realists and liberals alike to predict or explain the peaceful end of the Cold War show how traditional notions and assumptions of security during the Cold War are outdated and in need of revision (524).

Katzenstein along with Ronald Jepperson and Alexander Wendt in the article “Norms, Identity, and Culture in National Security” argues that “the security environments in which states are embedded are an important part cultural and institutional, rather than just material...[and] cultural environments affect not only the incentives for different kinds of state behavior but also the basic character of states-what we call state ‘identity’” (Jepperson, Wendt, and Katzenstein 33). This, the authors continue, is the basis of the



contention constructivists have with both neo-liberals and neo-realists, who believe that actor properties are essential to the actors, rather than contingent upon them.

In the past, the US has perceived and responded to threats to security from a realist perspective with reliance on traditional military responses. Recently, a new trend has arisen in which those traditional views of threat and security have been challenged. Human security presents an alternative approach to security perception, while constructivist thought allows an alternative approach to mainstream realist policy. This work makes use of constructivist theory to emancipate policy from the bonds of realism, and allow for an individual focused perception of security which is better able to combat the threats of the 21<sup>st</sup> century. To do this a rigorous quantitative examination of threat will be used to identify the practical nature of conflict today. These factors combined will create a new and innovative picture of threat and security today.

### **21<sup>st</sup> Century Conflict**

Recently scholars and some few policy makers around the world have recognized the limitations of traditional power politics and sought a new theory with which to help understand and interpret the unique challenges of the 21<sup>st</sup> century. Mary Kaldor again makes an appearance as she seeks to understand the way in which conflict has evolved since the end of the Cold War. Kaldor conducted a case study on the war in Bosnia-Herzegovina during the mid-nineties. She uses this case because of the unique circumstances involved. While this war shared many of the characteristics of others that have taken place since the end of the Cold War, it is exceptional in that it captured the attention of the whole world, which helps the author in making her case of

cosmopolitanism. The atypical nature of the war up to that point made it a crucial and deviant case. Yet, as we have observed of the wars since then, particularly in Iraq and Afghanistan, the cosmopolitan attention received by the war in Bosnia-Herzegovina has since become prototypical as the world community exhibits increasing involvement in new wars.

Kaldor believes there is a clash between the new war reality and the old war mentality of government officials. She believes that wars will continue to be those of the new war style, and that further research into old war style weapons and tactics will be fruitless in the post-modern era of warfare. Kaldor believes that these new wars are arising from the erosion of the autonomy of the state, which in turn leads to an erosion of the monopoly of organized violence by the state (2007).

These new wars are different from the conventional modern war by their goals, methods of making war, and how they are financed. The goals are those of identity politics rather than the geo-political or ideological goals of old wars. The methods of new wars are those of guerilla war and counterinsurgency. No longer are wars a series of decisive battles to control an area, territory is now captured and maintained by political means. Large battles are avoided, and winning hearts and minds is the true measure of victory. Kaldor states that another key factor of new war methods are the casualty figures; she says that in modern wars “the ratio of military to civilian casualties was 8:1” new wars have reversed that trend, with “a ratio of military to civilian casualties approximately 1:8” (9). Organization has also affected methods, as there is a decline in the typical hierarchical military structures of old wars, replaced by a horizontal system of warlords, mercenaries, police forces, criminals, and regular armies.

Kaldor believes that this new understanding of war will allow for a successful way of combating it; that to fight the guerilla tactics and terrorism often found in new wars, a new cosmopolitan approach is required. Cosmopolitanism is, as Kaldor confesses, somewhat of a utopian ideal. She believes that the international community, working in harmony and under an aegis of legitimacy, is the only way that new wars can be successfully fought. This is to mean that unilateral action by any country is doomed to fail. Terrorism particularly is susceptible to this approach, in Kaldor's view, as it feeds of the disadvantaged and alienated people of the global community. Kaldor states that the international community, "implying a cohesive group of governments acting through international organizations, entered into everyday usage" is the new agent that must combat these threats (119). Kaldor continues, saying that the key to combating the violence of new wars is to reconstruct legitimacy, both of the governments themselves, and the international community's involvement in the conflicts. What this means is that intervention by the international community must be altruistic, by focusing on the protection of human rights, and punishing those who violate them. Any sort of gain on the side of the international community could be seen to de-legitimize their endeavors.

Kaldor states that her main goal in defining the differences between old and new wars is to "change the prevailing perceptions of war, especially among policy makers" (3). She states that a new sense of cosmopolitanism is the answer to the new war problem, rather than reliance on traditional or conventional unilateral attitudes towards warfare. Kaldor gives the example of the Revolution in Military Affairs, which is an ongoing project by the US to un-man war and increase its precision and lethality. The goal is to keep US casualties to a minimum while using information technology as well as

precision weapons to attack targets and minimizing collateral damage. This Revolution in Military Affairs has been a resounding failure in dealing with the insurgencies in Afghanistan and Iraq. High-tech weapons and satellite technology have done little to end a conflict that is political in nature. While Kaldor is one among many who seeks to correct the failed policies of old war thinkers, her contribution stands out due to its clear findings of a demarcation between old wars and new.

## CHAPTER 3

### US Spending

Spending regimes in the US have been extensively examined. I believe spending holds the key to understanding both goals and motives. Manuel Trajtenberg, in his work *Defense R&D in the Anti-Terrorist Era*, gives a model of spending which helps simplify the vast amounts of money which the US spends on defense. Trajtenberg points to the staggering disparity in spending between the US and the next five countries in terms of defense R&D budgeting. As Table 1 shows, the US spends over ten times the amount of the next closest country, which happens to be an ally (Trajtenberg 12).

**Table 1** Defense R&D Stocks for G8 Countries

Defense R&D stock as of 2000	15% Depreciation	5% Depreciation
USA	197.23	301.64
United Kingdom	18.21	28.03
France	17.81	28.69
Japan	9.96	14.78
Germany	9.18	13.47
Russia	7.14	11.06

(In billions of constant 1998 \$ US)

**Table 2** Distribution of Defense R&D 2001-2003 (%)

Category	FY 2001	FY 2002	FY 2003
Big Weapon Systems	30.40%	28.81%	30.59%
Miscellaneous	34.23%	33.93%	31.93%
Ballistic Missile Defense	12.61%	17.03%	15.18%
Intelligence	8.35%	8.17%	9.95%
Anti-Terrorism	2.13%	8.18%	3.09%
Not Classified	12.72%	9.87%	9.26%

Trajtenberg also finds that the bulk of US funding in the area goes to what he terms big weapon systems. Table 2 reveals the main categories of defense spending. Notably, a relatively small amount of funding goes towards intelligence and anti-terrorism. It is important to note that the apportionment of funding did not drastically change as a result of 9/11. This shows how even in the event of changing threats, budgeting remains static.

Spending regimes are typified by the case of Iraq. Joseph Stiglitz and Linda Blimes' work *The Three Trillion Dollar War* chronicles the spending and consequences of the US's war in Iraq. The war in Iraq in 2008 has exceeded in price the twelve year war in Vietnam and is double the cost of the war in Korea. In addition to strict monetary costs, one must also consider the more abstract costs of political capitol the US has accrued since the war began. Stiglitz and Blimes write that "the United States is viewed as the greatest threat to global peace - even greater than Iran and North Korea." (5). While political capitol abroad is undoubtedly important, it is monetary costs documented by Stiglitz and Blimes that are of interest here. As their work shows us, spending is increasing, even as the scale of US wars decreases.

This attitude to spending can also be seen in the way spending regimes reflect foreign policy. John Mearsheimer's work makes for a good jump off point into realist perspectives in this area of US policy. Mearsheimer's work "Why We Will Soon Miss the Cold War" focuses on the stability of the bi-polar Cold War system, and how with the loss of that structure the world will find itself in an increasingly unstable and anarchic situation. Terrorism and revolution have been sweeping the Middle East, and tension between rivals has escalated (Japan-North Korea; Pakistan-India, and possibly US-China). The result of this, according to Mearsheimer, will be a situation in which relative security will decrease, leading to more conflict (1990).

While Mearsheimer argued that instability and war would become, if not commonplace, at least more prevalent, Jean-Paul Azam and Veronique Thelen offer an interesting alternative to the great power use of military force against periphery countries. Azam and Thelen's work "Foreign Aid Versus Military Intervention in the War on Terror" follows the use of aid or, conversely, military action in the War of Terror. What the authors found through quantitative analysis is that direct investment through foreign aid reduces the number of terrorist attacks from recipient countries, while direct military intervention increases terrorist attacks. There are caveats for these findings, such as how that foreign aid is invested (foreign aid invested into education and counter-terrorism by the recipient country has the greatest terrorist threat reducing power) and the nature and goals of a military intervention (2010). This offers a counter argument to the traditional realist disregard for soft power and its use in promoting security.

In light of the findings of Azam and Thelen, two articles make a compelling case for the distribution of US aid funding; "Which Autocracies Get More Foreign Aid?" and

“Changing Aid Regimes” by Galymzhan Kirbassov and Robert Fleck and Christopher Kilby, respectively. Kirbassov argues that the US uses its foreign aid allocations to promote stability among strategic allies, without regard to other factors. This focus on Huntington-esque stability allows the US to maintain relations (and alliances) with stable governments, keeping policies and situations static and more manageable than the fluid and dynamic policies that would be essential in the event of a revolutionary movement. Modern Middle-East revolutions show the efficacy of this argument, especially that of Egypt, a long time US ally but in the grips of a pro-democracy movement that toppled the US backed regime. This could also be an even greater concern should a pro-democracy movement arise in Saudi Arabia. This then brings the Fleck and Kilby article into a better light. Fleck and Kilby argue that aid regimes in the War on Terror have resulted in a drop in aid to countries that have the greatest need, in favor of countries that have become allies or potential allies in the War on Terror. Fleck and Kirby’s time series analysis encompasses the past thirty five years of US foreign aid, and paints a useful picture as to the main concerns of the US in this age of terror

### **Types of Threat**

During the Cold War, the world held its breath as the two superpowers and their allies squared off in preparation for what many assumed was inevitable conflict. A metaphorical clock was created, which acted as a timer until the doomsday that would occur should these two titans ever clash. However, counter to the predictions of many, the Cold War ended without direct bloodshed between the two superpowers. Afterwards, the US stood alone as the sole super power in the world, prompting a slew of predictions for this unprecedented phenomenon. Scholars predicted every possible outcome from an



end of history to a clash of civilizations. But the truth has been somewhat less clear than scholars have predicted. Threats to great nations today come not in the form of intercontinental ballistic missiles or mechanized divisions, but in small groups of motivated individuals, often times fighting with nothing more than rifles, blades, and homemade explosives. Even the US, with its superpower status, is not immune. The events of 9/11 rocked the world, as the greatest military power in the world was humbled by an organization operating out of barely habitable camps in the insignificant country of Afghanistan. How is it possible that a country that spent over 300 billion dollars on defense could be attacked so successfully and with such surprise? The answer lies in the way the US identifies and prepares for threat. The US defense spending, according to Trajtenberg, follows "...the logic of the cold war, of the arms race..." (6) This left the US ill prepared to deal with the emerging threats of the new millennium. Trajtenberg finds that the bulk of US funding in the area goes to what he terms big weapon systems. These weapon systems include jet fighters, bombers, aircraft carriers, missiles, and submarines. (6) Other programs also take up significant resources as well. Notable in his research is the relatively small amount of funding that goes towards intelligence and anti-terrorism, which were only 11% in 2011.

To simply refer to "terrorism" is somewhat of an oversimplification. Terrorism can come in as many forms as conventional threats can. Many authors focus on the various high-tech and highly destructive possible forms of terrorist attack. Nuclear, biological, chemical, and radiological attacks have, due the incredibly high potential casualties they could inflict, been the focus of many scholars. However, as O'Neil has shown, the threat may not be as real as many suspect. Jackson and Frelinger's work does an admirable job

of differentiating and categorizing the different methods of attack. Jackson and Frelinger used similar methods to those found in this work. They analyze terrorist weapon capabilities based on technology as well as by their flexibility and appropriateness for different targets (25). Similar to my own findings, they have shown that terrorist more often use lower-tech weapons, mainly because of the versatility of those weapons. This is telling as the results were similar, though from to different source databases. In addition to the versatility of these low tech weapons are their relative abundance, especially when compared to the more complex and expensive high-tech weaponry. In light of this, it should be clear that the vast majority of terrorist attacks that occur are those which use low-tech weaponry (98,000, according to the GTDB, as opposed to 95 high-tech attacks). With these numbers in mind, one must consider the current dichotomy of terrorist threats to the US, and how that dichotomy arose.

### **Dichotomy of Perception**

Now that the various threats to the US have been examined, the next step is to understand how the US views threat. Wendt states that “A fundamental principal of constructivist social theory is that people act toward objects, including other actors, on the basis of the meanings that the objects have for them” (79). What the US has failed to do is adapt their meanings based on changes within the world system; they focus only on preconceived notions and identities, while ignoring the constantly evolving and dynamic nature of the world. The concept of reification is crucial to this idea. US policy makers have become so enamored with the status quo that they are, so far, incapable of seeing their own hand within that status quo, and treat it as if it were an inviolable and inherent

part of the system. Constructivists would argue that the status quo is present and consistent only because of the constant efforts of those same leaders in supporting it.

The threats against which the US currently guards itself are no longer the most likely to occur. Terrorism, or as Kaldor put it, new war, is now the method with which conflicts are carried out. It is unreasonable to imagine a carrier fleet from China escorting thousands of troopships to the shore of California to invade, and while the threat of nuclear terrorism is possible, the threat of low-tech terror is present and proven.

Katzenstein suggests that interests are constructed through interaction, and that following the end of the Cold War, issues dealing with norms, identities, and cultures are becoming more salient, while traditional Cold War notions of security are becoming less so (Katzenstein 1996). However, this saliency has been in large part ignored by US policy makers, due to the static and unresponsive nature of US policymakers themselves. These actors' ideas are based on notions of identity and ideology that form the marrow of the US worldview. The constructed identity and ideology are based on "an interrelated set of convictions or assumptions that reduces the complexities of a particular slice of reality to easily comprehensible terms and suggests appropriate ways of dealing with that reality" (xi). While reducing a frightening and complex world to easily manageable pieces seems attractive in a limited sense, it breeds an unresponsive and stagnant policy set that hinders rather than helps. US policy makers have rendered down the complex and dynamic international system into a structured anarchy which, while it may have been relevant or even innovative at one point, is past the point of usefulness.

Realists have long held that anarchy is inherent in the international system, and that survival in that system requires an almost chess like series of action and response to ensure survival. Maximization of relative power ensures security, allowing states to perpetuate themselves. This idea, which is espoused by many noteworthy scholars including Waltz, Mearsheimer, Walt, and Jervis, is no longer able to cope with the vagaries of new war and an expanding view of security. While this has been the realist identity which the US, as well as many other countries, has set for itself over the years, the problem arises when it no longer is seen as a mantle that can be removed or adapted when appropriate, but as an epidermis that is organic to the state itself.

Terrorism has been a threat for years, yet was largely overlooked as a true threat to US security by policy makers prior to the events of 9/11. If there is something that the US can learn from that tragedy, it is that it cannot ever assume that it knows what its enemies are thinking. US policy makers must constantly adapt their notions of threat to encompass the changing nature of conflict. It is a common axiom in the military that commanders always prepare to fight the previous war; this resulted in defeat for the French in WWII, for the US in Vietnam, for the Soviets in Afghanistan, and likely for the US in Iraq and Afghanistan as well. The US needs to embrace an adaptive and responsive foreign policy that takes into account the evolving nature of the international system, and at the same time adjust its response set to one that best insures security based on the nature of the threat. As the old saying goes, when your only tool is a hammer, every problem looks like a nail. This begins to get at the reason why Constructivism will play such a crucial role in future studies of international relations; the constructivists are the only ones asking if the hammer the US is currently holding is really the best tool for

the task. What is needed is to, if not get rid of the hammers, at least reduce the number (and the percent of the budget that is reserved for them) and bring in a more versatile set of tools and the people with the knowledge to use them.

## CHAPTER 4

### **Empirical Analysis**

This chapter will examine the data of terror attacks within the Global Terrorism Database. This is done by using the existing tables on defense spending discussed in the previous chapter showing the allocation of funding, with analysis of trends in the efficacy of various forms of attack. The work hypothesizes that US spending on defense does not accurately represent the threats the US faces in the 21<sup>st</sup> century, in that the attacks which inflict the most casualties are not those to which the US is preparing itself to face.

### **Methods**

The goal of the quantitative portion of this work was to analyze the data found in the Global Terrorism Database to explore the relationship between security and threat in the post-Cold War era. The US defense R&D budget (both the total spent and the allocation of spending) is used as a proxy for how the US identifies threat. R&D was used rather than annual budgeting because annual budgets fluctuate more than long-term investments in R&D, making them more prone to vagaries of limited public opinion and short-term changes in policy. R&D on the other hand reflects the long term goals of the nation with regard to defense, and therefore better illustrates overall paradigms. Other variables are operationalized using both the Global Terrorism Database and my own coding which will be explained in the data section of the work.

## Data

Most variables used in this work can be found in the codebook for the Global Terrorism Database, as well as operationalization of those variables. Those that were created specifically for this work will be defined as they are presented. This database was chosen for a couple of reasons; first, it was the largest collection of data on the subject of terrorism to date with over 98,000 cases from 1970 to 2008. Second, it used clear and logical variables without ideological bias, allowing for rigorous testing.

The variables used without alteration from the GTDB were a dummy variable for success, weapon type, and casualties inflicted in the attack. The variable for success requires some explanation of the coding. The GTDB describes success not as achievement of the political goals of the attack, but that the attack itself was carried out successfully. For example, a car bomb in Iraq meant to dissuade US troop presence may be considered a success if detonated, even though the US maintained a troop presence after the explosion. Weapon type is coded as the type of weapon or weapons used in the attack. The casualties' variable is simply the number of casualties that occur from an attack, including the perpetrator. All of these variables and their coding are explained in greater detail in the GTDB.

In addition to the variables found within the GTDB, some variables were recoded in order to facilitate the specific type of research conducted. Weapon type was recoded into two categories; high- and low-tech weapons. The high-tech category included Nuclear, Biological, Chemical, and Radiological weapons, while the low-tech category included melee, incendiary, conventional firearms, and conventional explosives. I also recoded

the low-tech weapons into an ordinal scale based on the level of technology used in each one. The ranking was, from highest to lowest; explosives, firearms, incendiaries, melee. The reason other higher-tech forms were excluded from the variable were issues with the *P*-value in the regression equation. Even though there were almost one hundred cases of nuclear, biological, chemical, or radiological attacks, when compared to the total 98,000 cases, those hundred cases were not statistically significant. For this reason, an ordinal ranking of technological level could only include weapon types in which there were enough cases in the database.

I chose casualties as the proxy by which I measure my dependent variable of threat. I did this because it shows the actual number of people killed, rather than the potential, which I believe is responsible for the skewing of the technocentric threat system currently in place in the US. This quantitative section was included to help operationalize threat by showing the actual destruction caused in various forms of attack. Terrorist attacks were used because actual conventional threats to the US have been virtually non-existent since the end of the Cold War. US military hegemony has insured an asymmetrical battlefield that forces belligerents to assume irregular and non-conventional tactics, such as terrorism, in any effort to combat that hegemony.

## **Results**

The mean for the casualties' variable in all attacks was 2.32 per attack. The median was zero, and the standard deviation was 8.4. The range in the casualties' variable was zero to 1,382. The first three quartiles of the casualties' variable were made up of zero



casualty attacks; all attacks which inflicted casualties occurred in the fourth (75%) quartile. This is due to the large number of attacks in which no casualties were inflicted.

Next, the ordinal ranking of weapon sophistication was regressed with casualties. This regression showed a coefficient of  $-.866$ , with a  $P$ -value of  $.000$ . This strong negative correlation shows that as the technology level of the weapon used *decreases*, casualties inflicted by the weapon will *increase*. All data output can be found in the appendix of the work. An explanation of how these findings fit into the overall hypothesis will follow.

An attempt was made to regress high- and low-tech attacks with the goal of seeing which actually caused more casualties. However, due to the high number of low-tech attacks compared to high-tech (98,000 cases of low-tech compared to just over 200 high-tech) regression could not be used to interpret the data. A difference of means test was then conducted to assess the difference in the number of casualties inflicted; this also was unsatisfactory as  $P$  values did not meet levels of acceptability. Because of the high number of low-tech attacks present a near constant, statistical modeling cannot be used to interpret the data. What is relevant however, are the mean casualties by different types of weapons, as well as their success.

As we can see from Table 3, the attacks which result in the highest casualties are melee, firearms, vehicle, and chemical. Three out of the four weapon types used in these attacks fall into the category of low-tech attacks.

**Table 3**

## Mean Casualties By Weapon Type

	Mean Casualties	Std. Error	(95% Conf. Interval)	
Biological	2.04	1.6	-1.2	5.2
Chemical	3.1	1.4	0.29	5.9
Radiological	0	0	.	.
Nuclear	0	0	.	.
Firearms	3.4	0.06	3.3	3.6
Explosives	1.6	0.03	1.5	1.7
Fake Weapons	0.01	0.01	-0.01	0.05
Incendiary	0.38	0.07	0.24	0.53
Melee	5.2	1	3.3	7.2
Vehicle	3.2	1.7	-0.15	6.5
Sabotage	0.64	0.33	-0.005	1.2
Other	0.72	0.22	0.28	1.17
Unknown	2.5	0.14	2.2	2.8

In Table 4, we can see the success each form of attack has had historically. The most successful attacks (all over 90%) are sabotage, melee, incendiary, and firearms.

**Table 4**

## Mean Success By Weapon Type

	Mean Success	Std. Error	(95% Conf. Interval)	
Biological	0.72	0.09	0.54	0.89
Chemical	0.66	0.03	0.59	0.73
Radiological	0.07	0.07	-0.06	0.21
Nuclear	0	0	0	0
Firearms	0.95	0	0.94	0.95
Explosives	0.89	0	0.89	0.9
Fake Weapons	0.3	0.06	0.18	0.43
Incendiary	0.93	0	0.93	0.94
Melee	0.9	0	0.89	0.91
Vehicle	0.87	0.04	0.77	0.96
Sabotage	0.94	0.02	0.9	0.99
Other	0.93	0.03	0.86	0.99
Unknown	0.93	0.002	0.93	0.94

## Findings

What these results show us is that low-tech weapons used in terror attacks are in fact deadlier than high-tech. This is due partly to difficulty of non-state actors in pursuing and successfully using high-tech weapons in terrorist attacks. It is also a sign of the efficacy of low-tech attacks, and the difficulty in preventing them. A common factor in low-tech weapons, in fact the very definition itself, is that they do not require the sort of knowledge or funding to build that higher-tech weapons do. In addition, they require little to no specialized training to operate. This makes them widely available to large number of potential belligerents. Finally, they often consist of items that are widely available and common, making them difficult to screen for.

Considering that the last conventional invasion of the US took place in 1812, and the last conventional attack on US soil occurred in World War II, why is it that the US continues to prioritize high-tech threats when structuring its defense budget? The first and most obvious reason is that current budget policy that has prevented conventional invasions from occurring. As there is no alternate universe to act as control a control, one can only guess. However, we can see that as US military power has improved, invasions of the US have decreased, so it is reasonable to assume that current defense policy does in fact prevent invasion. The issue then becomes what sort of additional alternative threats the US faces as conventional threats become less likely. This is the reason that high- and low- tech threats have been examined in terror attacks only. The work does not attempt to argue that high-tech weapons systems are anything other than extremely effective in conventional warfare. However, in acts of terror technological sophistication

is not the primary factor in determining success, especially considering that success is measured differently than in conventional wars. This brings one to the next logical question: Which threats should the US be addressing?

## CHAPTER 5

### **Conclusion**

The final chapter of this work consists of possible fixes to the stagnant and dated conceptualizations in US security. This is not a new idea, and not one that I can take credit for. The UN, as early as 1990, sought to ease the suffering and strife in the world by elevating the status of the people in it. The idea behind this was that by erasing or easing the causes of conflict, the world might hope for a future free of conflict.

Anne-Marie Slaughter does an excellent job of summarizing a lengthy 2005 UN panel, and highlights the important topics of that panel. What the panel proposed was an idea of collective security, that all the people and nations of the world would band together to create a regime of peace and prosperity. The panel called for a “reconception of security, solidarity...and sovereignty” (619). This reconception would distance policy makers from traditional paradigms of security, solidarity, and sovereignty by asking member states to work towards a common goal, focused on the individuals of the world. Security would no longer be a matter of simply propagating a regime or enforcing territorial boundaries, but ensuring the security of people all over the world. This would be done through solidarity of not just citizens in a nation, but through members of an international community, working together to ensure mutual peace. Sovereignty will no longer be seen as a right of states, but a responsibility. States will be held accountable for the well-being of their citizens, and the world community will ensure their cooperation through peaceful yet forceful measures. This

would increase not just the security of the poor and peripheral, but of the rich and developed as well.

Callaway and Harrelson-Stephens work shows us that there is a correlation between human rights abuse and the rise of terrorism. These authors' work, while a case study of Ireland, could be applied to the world as a whole. By ensuring the basic human rights of individuals around the globe, the international community would disincline future generations from turning to terrorism. One could also make use of Azzam and Thelen's findings as to the effect of intervention and aid in the growth terror. The two practices in tandem could prevent current terrorist organizations from gaining the support of the populace, which is integral to their propagation and success. This is especially important to the US.

As the wealthiest nation in the world and a permanent member of the UN Security Council, the US is in the best position to ensure that these measures are adopted by the West. Furthermore, through a restructuring of its own foreign policy, it could set an example of peaceful cooperation and support that would set the example for other regional powers. Realist critics of these ideas state that relative gains and concerns on cheating collective action limit the likelihood of cooperation in an anarchic system (69). Yet, as Alexander Wendt states, anarchy is what states make of it. Wendt states that "It is collective meanings that constitute the structures which organize our actions" (74). In other words, the anarchic nature of the international system is a *product* of collective actions, and if anarchy can be produced, then why not cooperation? Humankind is the creator of the system, not its slave; what is required is a leader to step forward and set the example, to show the world that it can rise above the petty personal concerns of states

and achieve something more. This will also help to encourage the cosmopolitan approach endorsed by Mary Kaldor. A united front of effort from the nations of the world to promote human security around the world would cause terrorism to wither on the vine. Without the large populations of disaffected citizens from which to recruit from, organizations like Al-Qaeda would find themselves becoming less and less relevant. This is a direct contradiction to the alternative approach advocated by the Revolution in Military Affairs camp, which advocates an increasingly militant and technologically oriented approach to security. While the RMA is correct in confronting the outdated methods of security in use, their solution is to embed themselves even more firmly in the very source of that outdated method.

This idea of human security is crucial to any discussion of threat and security today, and one in which the US is sadly lagging. A state-centric view of security leaves the people of the US open to attacks like those of 9/11. The attacks of 9/11 themselves are a sign of the plodding evolution of US threat perception; after all, terrorism targets individuals for a reason. Any defeat of the US military in the past half century has occurred not because of any defeat of US forces, but because of a defeat of US support at home. Al-Qaeda's targets were well chosen, and show that they know the value of human security, or the lack of it. For the US to continue its policies abroad, it must acknowledge the flaw in its threat perception; the US can only continue to project power if it maintains support for its policies at home, support that can be eroded by bringing the war to US citizens through terrorism. Supporting an overseas conflict is much easier for voters when nameless camouflaged US soldiers are dying in a country they have never

heard of, compared to the sons and daughters, fathers and mothers who were killed just going to work on a September morning in 2011.

Terrorism is the greatest threat to US foreign policy, and the deadliest form of terror today comes in the form of low-tech weapons like the box cutters used in 9/11. It is imperative that the US adjusts to this threat, and acknowledges the efficacy of such forms of attack. While this work only touches the surface of an extremely complex subject, it should at the very least prove the need for more research into what is undoubtedly a crucial issue in 21<sup>st</sup> century US policy.



## BIBLIOGRAPHY

- Azam, Jean-Paul, and Veronique Thelen. "Foreign Aid Versus Military Intervention in the War on Terror." Journal of Conflict Resolution volume 54 (2010): pg 237-261
- Bunker, Robert. "Terrorists and Laser Weapon Use: An Emergent Threat." Studies in Conflict and Terrorism volume 31 (2008): 434-455.
- Callaway, Rhonda, and Julie Harrelson-Stephens. "Toward a Theory of Terrorism: Human Security as a Determinate of Terrorism." Studies in Conflict and Terrorism volume 29 (2006): 679-702.
- Crabb, Cecil V., Glenn J. Antizzo, and Leila E. Saredidine. Congress and the Foreign Policy Process. Baton Rouge: Louisiana State University Press, 2000.
- Fleck, Robert K., and Christopher Kilby. "Changing Aid Regimes." Journal of Development Economics volume 91 (2010): 185-197.
- Global Terrorism Database. 2009. January 12 2012 <<http://www.start.umd.edu/gtd/>>.
- Grieco, Joseph M. "Anarchy and the Limits of Cooperation." International Politics. Ed. Robert Art and Robert Jervis New York: Longman, 2003. 68-72.
- Henderson, Donald A. "The Looming Threat of Bioterrorism." Science volume 293 (1999): 1279-1282.
- Hunt, Michael. Ideology and US Foreign Policy. New Haven: Yale University Press, 1987.
- Huntington, Samuel P. Political Order in Changing Societies. New Haven: Yale University Press, 1968.
- Hutchenson, Joseph P., et al. "Identification of Inorganic Improvised Explosive Devices by Analysis of Postblast Residues Using Portable Capillary Electrophoresis Instrumentation and Indirect Photometric Detection with a Light-Emitting Diode." Analytical Chemistry volume 15 (2007): 7005-7013.
- Jackson, Brian, and David Frelinger. "Rifling Through the Terrorists Arsenal." Studies in Conflict and Terrorism volume 31 (2007): 1-33.
- Jepperson, Ronald, Alexander Wendt, and Peter Katzenstein. "Norms, Identity, and Culture in National Security." Culture of National Security. Ed. Peter Katzenstein. New York: Columbia University Press, 1996. 33-72.
- Kaldor, Mary. New and Old Wars: Organized Violence in a Global Era. Stanford: Stanford University Press, 2007.
- Katzenstein, Peter. "National Security in a Changing World." Culture of National Security. Ed. Peter Katzenstein. New York: Columbia University Press, 1996. 498-539.

- Katzenstien, Peter. "Alternative Perspectives on National Security." The Culture of National Security. Ed. Peter Katzenstein. New York: Columbia University Press, 1996. 1-26.
- Kirbassov, Galymzhan. "Which Autocracies Get More Foreign Aid." ISA. San Fransisco, 2008.
- Koehane, Robert. "A Functional Theory of Regimes." International Poltics. Ed. Robert Art and Robert Jervis. New York: Longman, 2003. 131-137.
- Mattox, John Mark. "Nuclear Terrorism: The 'Other' Extreme of Irregular Warfare." Journal of Military Ethics volume 9 (2010): 160-176.
- Mearsheimer, John, J. "Why We Will Soon Miss The Cold War." Atlantic Monthly volume 266 (1990): 35-50.
- Mowatt-Larssen, Rolf. "The Armageddon Test: Preventing Nuclear Terrorism." Bulletin of the Atomic Scientist volume 65 (2009): 60-70.
- Nations, United. UN Human Development Report. 2011. January 12 2011  
<<http://hdr.undp.org/en/>>.
- O'Niel, Andrew. "Terroist Use of Weapons of Mass Destruction: How Serious is the Threat?" Australian Journal of International Affairs volume 57 (2003): 99-112.
- Schelling, Thomas. "The Diplomacy of Violence." International Politics. Ed. Robert Art and Robert Jervis. New York: Longman, 2003. 166-179.
- Security, U.S. Department of Homeland. Global Terrorism Database. 2011. 7 November 2011  
<<http://www.start.umd.edu/gtd/>>.
- Slaughter, Anne-Marie. "Security, Solidarity, and Sovereignty: The Grand Themes of UN Reform." American Journal of International Law volume 619 (2005): 619-631.
- Stiglitz, Joseph, and Linda Bilmes. The Three Trillion Dollar War. New York: W. W. Norton and Company, 2008.
- Street, John. Politics and Technology. New York: The Guilford Press, 1992.
- Trajtenberg, Manuel. "Defense R&D in the Anti-Terrorist Era." NBER conference on "Innovation Policy and the Economy". Washington D.C.: Tel Aviv Univeristy, 2003. 1-44.
- United Nations Human Development Report. 2011. January 12 2012 <<http://hdr.undp.org/en/>>.
- Walker, William O., III. Naitonal Security and Core Values in American History. Cambridge: Cambridge University Press, 2009.
- Walt, Stephan. "Alliances: Balancing and Bandwagoning." International Politics. Ed. Robert Art and Robert Jervis. New York: Longman, 2003. 96-108.

Waltz, Kenneth N. "The Anarchic Structure of World Politics." International Politics. Ed. Robert Art and Robert Jervis. New York: Longman, 2003. 47-67.

Wendt, Alexander. "Anarchy is What States Make of It." International Politics. Ed. Robert Art and Robert Jervis. New York: Longman, 2003. 73-80.

—. Social Theory of international Politics. Cambridge: Cambridge University Press, 1999.

Williams, William Appleman. The Tragedy of American Diplomacy. London: W. W. Norton & Company, 2009.

APPENDIX

**Regression of Casualties and Success with predicted values for unsuccessful attacks and successful attacks**

Source		SS	df	MS	Number of obs =
92074					
-----+-----					F( 1, 92072) =
452.29					
Model		32356.6317	1	32356.6317	Prob > F =
0.0000					
Residual		6586731.85	92072	71.5389244	R-squared =
0.0049					
-----+-----					Adj R-squared =
0.0049					
Total		6619088.48	92073	71.8895711	Root MSE =
8.4581					

nkill		Coef.	Std. Err.	t	P> t	[95% Conf.
Interval]						
-----+-----						
success1		2.115552	.0994748	21.27	0.000	1.920582
2.310521						
_cons		.3932229	.0951065	4.13	0.000	.2068151
.5796308						

Predicted y: **.39322** [ .20682, .57963]

Predicted y: **2.5088** [ 2.4516, 2.5659]

**Regression of casualties and success with predicted values unsuccessful and successful low tech attacks**

Source		SS	df	MS	Number of obs =
80937					

```

-----+-----
368.69
Model | 25108.1922 1 25108.1922 Prob > F =
0.0000
Residual | 5511740.02 80935 68.1008219 R-squared =
0.0045
-----+-----
0.0045
Total | 5536848.21 80936 68.4102033 Root MSE =
8.2523

```

```

nkill | Coef. Std. Err. t P>|t| [95% Conf.
Interval]

```

```

-----+-----
success1 | 1.92884 .1004534 19.20 0.000 1.731952
2.125728
_cons | .3797605 .095731 3.97 0.000 .1921284
.5673926
-----+-----
-----

```

regress: Predictions for nkill **number of fatalities in unsuccessful attack with lowtech weapons**

95% Conf. Interval

Predicted y: **.37976** [ .19213, .56739]

. prvalue, x(success1=1)**number of fatalities in successful attack if using lowtech weapons**

regress: Predictions for nkill

95% Conf. Interval

Predicted y: **2.3086** [ 2.2489, 2.3683]

**Regression of casualties and success with predicted values for unsuccessful and successful high-tech attacks**

```

Source | SS df MS Number of obs =
91
-----+-----
3.34
F( 1, 89) =

```

```

      Model | 46.9468659    1 46.9468659          Prob > F    =
0.0708

      Residual | 1249.73445    89 14.0419601          R-squared    =
0.0362

-----+-----
0.0254          Adj R-squared =

      Total | 1296.68132    90 14.4075702          Root MSE    =
3.7473

```

```

      nkill |      Coef.   Std. Err.      t    P>|t|    [95% Conf.
Interval]
-----+-----
      success1 | 1.629975   .8914388    1.83   0.071   -.1412948
3.401245

      _cons | .0416667   .7649063    0.05   0.957   -1.478186
1.561519

-----+-----

```

regress: Predictions for nkill **number of fatalities in unsuccessful attack if hightech weapons are used**

95% Conf. Interval

Predicted y: **.04167** [-1.4575, 1.5409]

. prvalue, x(success1=1)**number of fatalities in successful attack using hightech weapons**

regress: Predictions for nkill

95% Conf. Interval

Predicted y: **1.6716** [ .77437, 2.5689]

**Summary statistics for the casualties varibale**

```

      Variable |      Obs      Mean   Std. Dev.      Min      Max
-----+-----
      nkill | 92076   2.327002   8.478687      0     1180

```

**Regression of success and high-tech weapons**

Source	SS	df	MS	Number of obs =
86256				
-----+-----				F( 1, 86254) =
33.90				
Model	2.70717455	1	2.70717455	Prob > F =
0.0000				
Residual	6887.26518	86254	.079848647	R-squared =
0.0004				
-----+-----				Adj R-squared =
0.0004				
Total	6889.97235	86255	.079879107	Root MSE =
.28258				

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
<b>success1</b>					
<b>hightech</b>	<b>-.1707068</b>	.0293175	-5.82	0.000	-.2281688 -
.1132448					
<b>_cons</b>	<b>.9126423</b>	.0009627	948.04	0.000	.9107555
.9145291					

**Regression of success with low-tech attacks**

Source	SS	df	MS	Number of obs =
86256				
-----+-----				F( 1, 86254) =
33.90				
Model	2.70717455	1	2.70717455	Prob > F =
0.0000				
Residual	6887.26518	86254	.079848647	R-squared =
0.0004				
-----+-----				Adj R-squared =
0.0004				

Total | 6889.97235 86255 .079879107 Root MSE =  
.28258

-----  
-----

success1 | Coef. Std. Err. t P>|t| [95% Conf.  
Interval]

-----+-----  
-----

lowtech | .1707068 .0293175 5.82 0.000 .1132448  
.2281688

\_cons | .7419355 .0293017 25.32 0.000 .6845045  
.7993665

-----  
-----

**Regression of Casualties and the ordinal technological ranking of weapons used.**

Source | SS df MS Number of obs =  
81356

-----+----- F( 1, 81354) =  
519.70

Model | 35104.5736 1 35104.5736 Prob > F =  
0.0000

Residual | 5495277.11 81354 67.5477188 R-squared =  
0.0063

-----+----- Adj R-squared =  
0.0063

Total | 5530381.69 81355 67.9783871 Root MSE =  
8.2187

-----  
-----

nkill | Coef. Std. Err. t P>|t| [95% Conf.  
Interval]

-----+-----  
-----

wepord | -.8669574 .0380296 -22.80 0.000 -.9414951 -  
.7924197



_cons		4.956142	.1274946	38.87	0.000	4.706254
-------	--	----------	----------	-------	-------	----------

5.206031

```
-----
-----
Source |      SS      df      MS                Number of obs =
86579
-----+-----
384.93                                F( 1, 86577) =
Model | 30.3514806    1 30.3514806          Prob > F      =
0.0000
Residual | 6826.56611 86577    .07884965      R-squared     =
0.0044
-----+-----
0.0044                                Adj R-squared =
Total | 6856.91759 86578    .079199307      Root MSE     =
.2808
-----
-----
```

```
-----
-----
      success1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf.
Interval]
-----+-----
      wepord |  -.0248092   .0012645   -19.62   0.000   - .0272876   -
.0223307
      _cons |   .9945741   .0042519   233.91   0.000   .9862404
1.002908
-----
-----
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## VITA

Harry Stewart was born in Virginia Beach, Virginia in 1984. He attended high school in Merrimack, New Hampshire and graduated in 2002. After a brief hiatus from academics with the United States Marine Corps, he enrolled in Appalachian State University. He graduated Magna Cum Laude in 2010 with a B.S. in Political Science. In the fall of 2010 he received an assistantship in Political Science at Appalachian State University and began study toward a Master of Arts degree, completed in May 2012.

Harry makes his home in Boone, NC. His parents are Gregg and Lisa Stewart of Asheville, NC