An explanation for states' adherence to noncombatant immunity in aerial bombardment post-World War II

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AN EXPLANATION FOR STATES’ ADHERENCE TO NONCOMBATANT IMMUNITY IN AERIAL BOMBARDMENT POST-WORLD WAR II

by

Jonathan D. Arnett

A Dissertation
Submitted to the University at Albany, State University of New York
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Rockefeller College of Public Affairs and Policy
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Abstract

It is has been said that “All is fair in love and war” (Orend 2000, 62); however, the norm of noncombatant immunity has developed to such a degree over the centuries that all is not fair or legal in war. Civilians and civilian property, cultural sites, hospitals, and places of worship enjoy protection under international law. When applied to aerial bombardment, the norm of noncombatant immunity, titled the “bombing norm” by Ward Thomas, had a tough time getting off the ground after the invention of the airplane in the early 20th century. The norm evaporated in World War II and air forces descended into indiscriminate bombing resulting in massive civilian casualties in Europe and Asia. Thomas claims that after World War II the bombing norm found new life and that states increasingly are restraining their use of aerial bombardment due to building international opinion that the intentional or even the unintentional yet disproportionate killing of civilians by aerial bombardment is unacceptable. The literature proposed five primary explanatory factors for states’ compliance or non-compliance with the bombing norm. These factors included norms, regime type, strategic necessity, technology, and air services’ cultures and bombing doctrines. The majority opinion of scholars of civilian victimization is that strategic necessity explains states’ adherence or non-adherence to the bombing norm. That is to say states, whether democratic or authoritarian, will adhere to noncombatant immunity if strategic circumstances do not seem to require its violation, but they will violate the norm if deemed necessary to achieve victory or prevent defeat. My research effort examined four states’ conduct of aerial bombardment post-World War II across 40 armed conflicts to ascertain whether norms, specifically democratic norms, or strategic necessity best explained the historical record. My primary finding is that a combination of democratic norms and strategic necessity rather than strategic necessity alone best fit the historical record.
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CHAPTER 1: INTRODUCTION

1.1. Summary and Research Question

The norm of noncombatant immunity, labeled the “bombing norm”¹ by Ward Thomas when applied specifically to aerial bombardment, has been incrementally codified and unevenly internalized by states over the last century as a mechanism to protect civilians, other protected persons (e.g. sick, wounded, prisoners of war) and protected places (e.g. hospitals, houses of worship, cultural sites) from aerial bombardment (Thomas 2001, 89-136; JP 3-60 2013, A-1-A-7). Noncombatant immunity means that states’ armed forces may not directly target or attack civilians or other protected persons or places during combat operations if those civilians, persons or places are not directly involved in, or being used for, warfighting or war-making (JP 3-60 2013, A-2-A-4). The norms of noncombatant immunity and discrimination are two sides of the same coin. Noncombatant immunity is a privilege of noncombatants. This immunity obligates states and their armed forces to discriminate between combatants and noncombatants and between military objectives² and civilian objects³ when conducting combat operations (Kahl 2007, 9-10; JP 3-60 2013, A-2).

In addition to discrimination as a derivative obligation of noncombatant immunity, international law levies the obligation of proportionality on states’ armed

---

¹ The term, “bombing norm,” is from Thomas’ 2001 work, Ethics of Destruction (89). The term is not a standard legal or military term for noncombatant immunity applied to aerial bombardment; however, it will be used in this research because Thomas’ work is a cornerstone of this research program and his term is a pithy means to express noncombatant immunity when applied to aerial bombardment.

² U.S. military legal doctrine states, quoting from the Laws of War, a military objective is “those objects which by their nature, location, purpose, or use make an effective contribution to military action and whose total or partial destruction, capture, or neutralization, under circumstances ruling at that time, offers a definite military advantage” (JP 3-60 2013, A-2).

³ Civilian objects are those properties and physical structures whose primary purpose and use is civilian—that is non-military. Civilian objects provide food, water, shelter, and goods and services predominantly to the civilian population. (JP 3-60 2013, A-2).
forces. Proportionality requires commanders to weigh military necessity\textsuperscript{4} with the human costs of military action (JP 1-04 2011, II-2). Aerial bombardment against lawful targets may be disproportionate if the human suffering and/or physical damage to civilian objects outweigh the military advantage gained by the attacks.\textsuperscript{5} Substantially disproportionate aerial bombardment may be de jure indiscriminate even if commanders and their aircrews did not purposely target civilians (II-2).

The primary purpose of noncombatant immunity is to limit the scope of warfare primarily to combatants in order to limit the overall destruction and human suffering of war as well as ease and speed the transition to peace (Best 1994, 41; Thomas 2001, 20; 2006, 21, 25-26). Despite a century of evolving customary use, codification, and internalization, states frequently have violated noncombatant immunity, including the bombing norm, in order to achieve their war aims (Valentino, et al., 2004; Thomas 2001, 2006; Downes 2004a, 2006a, 2007). This research effort seeks to explain why states have adhered to, or not adhered to, noncombatant immunity in the employment of aerial bombardment during the post-World War II period of 1946 to 2011?

This question is theoretically important because it goes to the heart of the central debates between realism, liberalism, and constructivism (Krasner 1996, 184-197). What fundamentally determines state behavior in the international system of states especially in regards to security? Is it state power and interests and a “logic of consequences” as claimed by realists and practitioners of realpolitick, domestic regimes as claimed by

\textsuperscript{4} JP 1-04 Legal Support to Military Operations states “The principle of military necessity justifies those measures not forbidden by international law that are indispensable for securing the complete submission of the enemy as soon as possible” (II-2).

\textsuperscript{5} For this research, the term, airpower, will include the operations of air forces, naval/marine aviation, missile/rocket forces, and rotary-wing (helicopter) aviation. For the rest of this document, the term, air forces, will include all aviation of all armed services and intelligence/secret services.
classical liberals, ideas and norms and a “logic of appropriateness” as claimed in varying
degrees by liberals and constructivists (Krasner 1996, 184-197; March & Olsen 1998;
Thomas 2001, 3-5, 89; Downes 2006a, 170, Valentino, et al 2006, 339-348) or is it some
combination of norms and power and interests as suggested by Thomas (Thomas 2001, 3-
4, 11-12, 22-23)?

The question is also important due to its policy relevance. What effect has norms,
whether democratic or ethical-legal (e.g. Laws of War—Hague, Geneva), had on taming
states’ use of force against civilians (Valentino, et al 2006)? Can and should more be
done? The early theorists of airpower and a number of writers today suggest aerial
bombardment is a special case—a unique temptation to target civilians because airpower
frequently can skip over the frontlines and range civilian populations residing in opposing
states’ heartlands while at the same time limiting friendly casualties (Pape 1996, 39-41;
Meilinger 1997, 11-13; Biddle 2002, 100-107; Beier 2003, 417; Downes 2004a, 448-
452). Some even claim airpower encourages states to “go ugly early”—that is attack
civilians and civilian infrastructure from the outset of hostilities (Daadler 2000). Is
airpower a particularly indiscriminate combat arm? If so, should it be specially
regulated? For a century, some prominent leaders, academics, and lawyers have thought
so yet all efforts to legislate some form of disarmament or a specific legal code for aerial
bombardment have failed (Roberts 2000, 139-141; Thomas 2001, 106-110). What else
can be done to protect noncombatants?

---

6 The first serious effort to specifically regulate airpower employment in warfare through enactment of a
legal code to govern it failed in the 1920s (Thomas 2001, 106-109).
1.2. Contribution

At present, no scholar of airpower and norms can credibly claim to explain with much certainty variations in aerial bombardment across the historical record because no one has conducted a systematic review of all states’ adherence to the bombing norm across all armed conflict types (e.g. interstate, internal, internationalized internal, conventional, guerrilla, hybrid\(^7\)) from the advent of aerial bombardment in 1911 to the present (Higham 1988, 11-12; Renz 2012, 19). While there are many historical works on airpower employment, especially strategic bombardment in major wars (Corum 2003), most scholarly works in the airpower and norms research program have examined too few cases so there remains no comprehensive work that answers the primary research question—what explains compliance or non-compliance with noncombatant immunity in aerial bombardment?

Table 1.1. Current State of the Airpower & Norms Literature

<table>
<thead>
<tr>
<th>Scholar/Work</th>
<th>Literature</th>
<th>Type of Research</th>
<th>Cases (if case study or mixed)</th>
<th>Type of Conflicts</th>
<th>Number of Conflicts</th>
<th>Number of States</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas 2001</td>
<td>A&amp;N</td>
<td>Case studies</td>
<td>2</td>
<td>mixed</td>
<td>5</td>
<td>1</td>
<td>1939-2000</td>
</tr>
<tr>
<td>Downes 2004a</td>
<td>CV + A&amp;N</td>
<td>Quantitative</td>
<td>12</td>
<td>interstate</td>
<td>all in period</td>
<td>all warring</td>
<td>1816-2003</td>
</tr>
<tr>
<td>Downes 2006b</td>
<td>A&amp;N</td>
<td>Case studies</td>
<td>3</td>
<td>interstate</td>
<td>1</td>
<td>3</td>
<td>1939-1945</td>
</tr>
<tr>
<td>Renz 2012</td>
<td>A&amp;N</td>
<td>Case studies</td>
<td>6</td>
<td>mixed</td>
<td>6</td>
<td>3</td>
<td>1920-2004</td>
</tr>
</tbody>
</table>

Legend

A&N: Airpower & Norms; CV: Civilian Victimization
Quantitative with case study(ies)

This research is the first step to fill the gaps left by scholars in the airpower and norms research program. Three scholars have examined a total of nineteen air campaigns

\(^7\) The term, hybrid warfare, is a relatively new term used by defense and military analysts to describe warfare that exhibits characteristics of both regular (e.g. conventional) and irregular warfare (e.g. insurgency, terrorism). The Second Lebanon War is considered a “hybrid war.” For this research, I use the term loosely and refer to wars with both regular and irregular elements or phases as a form of both conventional and guerrilla war.
by seven states in ten armed conflicts from 1939 to 2004. Roughly 50% of the air campaigns surveyed involved the United States while 25% involved Nazi Germany. The remaining five air campaigns involved single states in single conflicts. In order to analyze variation in aerial bombardment across differing strategic circumstances and democratic norms, I examined four states’ (two superpowers—one democracy, one authoritarian; two regional powers—one democratic, one authoritarian) conduct of aerial bombardment from 1946 to 2011 across 40 armed conflicts coding each states’ conduct based on a grading criteria derived from the Laws of War. These four cases in the post-World War II time period cover 56% of the roughly 72 armed conflicts in the Uppsala Conflict Data Program (UCDP)/Peace Research Institute Oslo (PRIO) armed conflict dataset in which this researcher strongly suspects aerial bombardment was employed by one of the warring parties (Gleditsch, et al, 2002). While time and resource constraints prevented a full survey of all uses of aerial bombardment from 1911 to the present, this research effort goes far beyond what any other researchers have attempted in order to investigate rigorously the fundamental factors influencing states’ conduct of aerial bombardment.

The following tables detail the diversity of states and armed conflicts examined in this research compared to the current airpower and norms literature.
Table 1.2. Types (Actor/Place) of Armed Conflicts covered by current Airpower & Norms Literature

<table>
<thead>
<tr>
<th>Type of Armed Conflict</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrasystemic</td>
<td>3</td>
<td>17%</td>
</tr>
<tr>
<td>Interstate</td>
<td>11</td>
<td>58%</td>
</tr>
<tr>
<td>Internal</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Internationalized Internal</td>
<td>5</td>
<td>26%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>19</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 1.3. Types (Actor/Place) of Armed Conflicts examined in this research

<table>
<thead>
<tr>
<th>Type of Armed Conflict</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrasystemic</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Interstate</td>
<td>15</td>
<td>38%</td>
</tr>
<tr>
<td>Internal</td>
<td>12</td>
<td>30%</td>
</tr>
<tr>
<td>Internationalized Internal</td>
<td>13</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 1.4. Types (Actor/Place) of Armed Conflicts by State in the current Airpower & Norms Literature

<table>
<thead>
<tr>
<th>State</th>
<th>Interstate</th>
<th>Internal</th>
<th>Int’l Internal</th>
<th>Extra-systemic</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>USSR/Russia</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Iraq</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Iran</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>UK</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>11</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>19</td>
</tr>
</tbody>
</table>

---

8 This table derived from figures from the current literature is not wholly congruent with my tables for my research because different scholars and I used different techniques for categorizing armed conflicts. We may have counted differently in some areas. For example, Downes (2004a) conducts 12 case studies of aerial bombardment with 7 of his case studies being in World War II alone. These were not 7 armed conflicts but 7 air campaigns. In my tables, I used the UCDP/PRIO dataset to categorize my armed conflicts so I have four separate armed conflicts counted for the Vietnam War (North Vietnam, South Vietnam, Laos, Cambodia). Downes (2004a) counted Vietnam as one conflict. North Vietnam was interstate while the rest of the conflicts were internationalized internal conflicts per the UCDP/PRIO.

9 Note that the totals in Table 1.4 do not add up to 19 but 20 because Iran and Iraq were in the same conflict. It is one conflict with two actors so 19 is the correct number of armed conflicts.
Table 1.5. Types (Actor/Place) of Armed Conflicts by State in this research

<table>
<thead>
<tr>
<th>Case</th>
<th>Interstate</th>
<th>Internal</th>
<th>Int'l Internal</th>
<th>Extra-systemic</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>6</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Israel</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>USSR/Russia</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Iraq</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>15</td>
<td>12</td>
<td>13</td>
<td>0</td>
<td>40</td>
</tr>
</tbody>
</table>

Table 1.6. Types (Style of Combat) of Armed Conflicts in the current Airpower & Norms Literature

<table>
<thead>
<tr>
<th>Type of Combat</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>12 (63%)</td>
</tr>
<tr>
<td>Guerrilla</td>
<td>6 (32%)</td>
</tr>
<tr>
<td>Both</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Totals</td>
<td>19 (100%)</td>
</tr>
</tbody>
</table>

Table 1.7. Types (Style of Combat) of Armed Conflicts examined in this research

<table>
<thead>
<tr>
<th>Type of Combat</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>22 (55%)</td>
</tr>
<tr>
<td>Guerrilla</td>
<td>9 (22.5%)</td>
</tr>
<tr>
<td>Both</td>
<td>9 (22.5%)</td>
</tr>
<tr>
<td>Totals</td>
<td>40 (100%)</td>
</tr>
</tbody>
</table>

10 The UCDP/PRIO dataset list four separate armed conflicts for what the average reader would title the Vietnam War. I categorize the conflict in South Vietnam as both conventional and guerrilla because North Vietnamese regular units fought conventionally while the Viet Cong fought with mostly guerrilla tactics.
Table 1.8. Types (Style of Combat) of Armed Conflicts by States in the current Airpower & Norms Literature

<table>
<thead>
<tr>
<th>States</th>
<th>Conventional</th>
<th>Guerrilla</th>
<th>Both</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>USSR/Russia</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Iraq</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Iran</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>UK</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>France</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 1.9. Types (Style of Combat) of Armed Conflicts by State in this research

<table>
<thead>
<tr>
<th>Case</th>
<th>Conventional</th>
<th>Guerrilla</th>
<th>Both</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>11</td>
<td>4</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Israel</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>USSR/Russia</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Iraq</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>22</td>
<td>10</td>
<td>8</td>
<td>40</td>
</tr>
</tbody>
</table>

1.3. Overview

Chapter Two reviews the relatively recent scholarly literature which is divided into two related yet separate research programs—airpower and norms that fixates on the perceived unique characteristics and history of aerial bombardment and civilian victimization by all military services. Chapter Three describes the theory. Chapter Four presents the research design. Chapter Five presents the overall findings of the research. Chapters Six through Eleven cover the four cases across 40 armed conflicts from 1946 to 2011. Chapter Twelve concludes the research effort with a short synopsis of the major findings with policy recommendations and recommendations for future research.
2.1. Framework of the Literature

There is a growing number of scholarly works, written mostly in the last thirteen years (Cochran 2010, 3), that seeks to explain states’ or armed forces’ compliance or non-compliance with noncombatant immunity during armed conflicts. Scholars specializing in this “norms and force” research program refer to these violations of noncombatant immunity as “civilian victimization” (i.e. intentional targeting and killing of civilians by direct or indirect means) (Downes 2006a, 155). Most of these works do not specifically address explanations for the indiscriminate use of airpower but embed it in the larger explanations of the indiscriminate use of military force through a variety of destructive mechanisms—massacre, execution, blockade, siege, bombing, bombardment (air, naval, artillery), forced relocation, and concentration of population (Valentino, et al. 2004, 378; Downes 2004a, 752; 2004b, 14; 2006a, 156).

While there are numerous historical works that illustrate indiscriminate aerial bombardment, there are only a few scholarly works in the norms and force literature that specifically address explanations for states’ adherence to the bombing norm in general and in particular armed conflicts. This bombing norm literature generally is divorced from the civilian victimization literature although two of Downes’ works bridge the two research programs. While the two research programs share some explanatory factors like norms and “strategic considerations” (Renz 2012, 38), the two literatures generally emphasize different explanatory factors. Civilian victimization focuses on regime type, including democratic-liberal norms as central to democratic regimes, identity, and
strategic necessity while the bombing norm literature focuses on norms, military organizational culture, the media, and technology.

Scholars of civilian victimization have very specified independent and dependent variables while the bombing norm scholars rarely codify rigorously what they are explaining and the factors that explain it. The civilian victimization literature is quantitative frequently with supporting case studies. Scholars in this program examine a whole set of armed conflicts across an entire time period using accepted conflict databases (e.g. Correlates of War, UCDP/PRIO) while scholars of the bombing norm “cherry-pick” their qualitative cases. In addition, the bombing norm literature remains limited and fixated on democracies in general and U.S. armed conflicts in particular including World War II, Korea, Vietnam, the 1991 Gulf War, and Kosovo-Serbia. In the end, what this results in are separate explanations for the same general phenomenon—violation of noncombatant immunity—stereotypically reinforcing the notion found in some historical and human rights works that airpower is a unique military arm requiring unique explanations for its violations of noncombatant immunity.

Table 2.1. Survey of the Airpower & Norms and Civilian Victimization Literatures

<table>
<thead>
<tr>
<th>Scholar/Work</th>
<th>Literature</th>
<th>Type of Research</th>
<th>Number of Cases (if case study or mixed)</th>
<th>Type of Conflicts</th>
<th>Number of Conflicts</th>
<th>Number of States</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas 2001</td>
<td>A&amp;N</td>
<td>Case studies</td>
<td>2 mixed</td>
<td></td>
<td>5</td>
<td>1</td>
<td>1939-2000</td>
</tr>
<tr>
<td>Downes 2004a</td>
<td>CV + A&amp;N</td>
<td>Quantitative</td>
<td>12 interstate all in period all warring</td>
<td></td>
<td>1816-2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downes 2004b</td>
<td>CV</td>
<td>Quantitative</td>
<td>0 asymmetric all in period all warring</td>
<td></td>
<td>1946-2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downes 2006a</td>
<td>CV</td>
<td>Quantitative</td>
<td>1 interstate all in period all warring</td>
<td></td>
<td>1816-2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downes 2006b</td>
<td>A&amp;N</td>
<td>Case studies</td>
<td>3 interstate</td>
<td></td>
<td>1</td>
<td>3</td>
<td>1939-1945</td>
</tr>
<tr>
<td>Downes 2007</td>
<td>CV</td>
<td>Quantitative</td>
<td>0 interstate all in period all warring</td>
<td></td>
<td>1900-2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valentino 2004</td>
<td>CV</td>
<td>Quantitative</td>
<td>0 all types 147 all warring</td>
<td></td>
<td>1946-2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valentino 2006</td>
<td>CV</td>
<td>Quantitative</td>
<td>0 interstate all in period all warring</td>
<td></td>
<td>1946-2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renz 2012</td>
<td>A&amp;N</td>
<td>Case studies</td>
<td>6 mixed</td>
<td></td>
<td>6</td>
<td>3</td>
<td>1920-2004</td>
</tr>
</tbody>
</table>

Legend: A&N: Airpower & Norms; CV: Civilian Victimization with case study(ies)
Table 2.2. Survey of the Airpower & Norms Literature: States, Armed Conflicts, and Air Campaigns

<table>
<thead>
<tr>
<th>Scholar/Work</th>
<th>Literature</th>
<th>Conflicts examined</th>
<th>Specific air campaigns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas 2001</td>
<td>A&amp;N</td>
<td>WW II</td>
<td>Allies as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Korea</td>
<td>war as one</td>
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<tr>
<td></td>
<td></td>
<td>Vietnam</td>
<td>Rolling Thunder &amp;</td>
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<tr>
<td></td>
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<td></td>
<td>Linebacker I-II</td>
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<tr>
<td></td>
<td></td>
<td>1991 Gulf War</td>
<td>war as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kosovo-Serbia</td>
<td>war as one</td>
</tr>
<tr>
<td>Thomas 2006</td>
<td>A&amp;N</td>
<td>1991 Gulf War</td>
<td>war as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kosovo-Serbia</td>
<td>war as one</td>
</tr>
<tr>
<td>Downes 2004a</td>
<td>CV + A&amp;N</td>
<td>WW II</td>
<td>3 x US; 4 x German</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Korea</td>
<td>war as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vietnam</td>
<td>Rolling Thunder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Russo-Afghan</td>
<td>war as one</td>
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<td></td>
<td></td>
<td>Iran-Iraq</td>
<td>war as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1991 Gulf War</td>
<td>war as one</td>
</tr>
<tr>
<td>Downes 2006b</td>
<td>A&amp;N</td>
<td>WW II</td>
<td>RAF, Luftwaffe, USAAF</td>
</tr>
<tr>
<td>Renz 2012</td>
<td>A&amp;N</td>
<td>Iraq 1920-</td>
<td>war as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nicaragua</td>
<td>war as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Malaya</td>
<td>war as one</td>
</tr>
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<td></td>
<td></td>
<td>1st Indochina</td>
<td>war as one</td>
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<tr>
<td></td>
<td></td>
<td>2d Indochina</td>
<td>war as one</td>
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<td></td>
<td></td>
<td>(Vietnam)</td>
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<td></td>
<td></td>
<td>Kosovo-Serbia</td>
<td>war as one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2001 Afghanistan</td>
<td>war as one</td>
</tr>
</tbody>
</table>

The best works to date in the bombing norm research program include Thomas (2001, 2006), Downes (2004a, 2006b, 2012), and Renz and Scheipers (2012). Thomas’ 2001 work, *Ethics of Destruction*, is two case studies examining the development of, and adherence to, norms regarding two specific types of state violence—international assassination and strategic aerial bombardment. The work is heavily weighted on the second case examining the development of the bombing norm prior to World War II and its complete break down during the war which resulted in the massive bombing of British, German, and Japanese cities. Thomas blames the existential stakes of World War
II and the failure of states to internalize the norm in the 1920s and 1930s as the primary reasons for its breakdown (Thomas 2001, 89-91). To show that the influence of the bombing norm is increasing among states post-World War II and that the norm itself is primarily responsible for fewer civilian casualties by airpower, Thomas conducts four mini-case studies of U.S. aerial bombardment in Korea, Vietnam, the 1991 Gulf War, and Kosovo-Serbia. Thomas claims that revulsion to the carnage of “city-busting” in World War II, the specter of nuclear bombardment, and the growing rejection by international public opinion of any aerial bombardment that substantially harms large numbers of civilians have reinvigorated the norm post-World War II and increased the standard of what is acceptable aerial bombardment (89, 169-173). Critics of Thomas claim his cases are far too cursory, fixated on American experience, and one respected historian claims Thomas got his airpower history wrong (Crane 2003, 455-456).

In regards to its investigation of aerial bombardment, Downes’ 2004 dissertation is the most comprehensive work in both literatures with a quantitative study of civilian victimization across all interstate wars, 1816-2003, supported by eighteen case studies of ground forces and air forces’ violations of noncombatant immunity between 1899 and 1991. Twelve of Downes’ case studies examine aerial bombardment split between the United States and four authoritarian states. Three cases examine U.S. airpower in World War II while three more examine U.S. airpower in Korea, Vietnam, and the Gulf War. Six cases cover German airpower in four air campaigns in World War II while the remaining two cases examine the Soviet Union in Afghanistan and Iraq and Iran in the Iran-Iraq War. Downes finds that strategic necessity is the primary factor for adherence or non-adherence to noncombatant immunity by airpower (2004a, 2012).
Renz and Scheipers (2012) generally concur with Downes that “strategic considerations” (38) are central to states’ adherence albeit their casual mechanism is very poorly defined while Downes (2004a) is well conceptualized theoretically and examined very rigorously. Renz and Scheipers claim states’ war aims and the conflict’s context fundamentally determine adherence (19, 37-39). Using U.S. aerial bombardment in Nicaragua and Afghanistan as well as British bombardment in Malaya as their evidence, they claim that states abide by the norm when adherence is perceived as critical to the success of states’ war strategies and becomes a specific objective of air operations (37). Almost unconsciously, they seem to suggest aerial bombardment in counterinsurgencies leads to greater adherence because loyalty of the civilian population is critical to success in counterinsurgencies while bombardment during conventional interstate wars frequently leads to violations because the loyalty of the enemy population is irrelevant to the war’s outcome (39-40).11 The problem with their analysis is that they give few concrete examples of where and why these claims are so and much of their analysis is incongruent with the historical record. Again, their findings show no integration with the civilian victimization literature which finds that states combating strong and/or popular insurgencies can be particularly brutal against civilians (Valentino, et al. 2004, 2006).

In regards to the influence of military culture and doctrine on adherence to the bombing norm, Thomas (2006) and Renz and Scheipers (2012, 37-38) find that air forces’ attachment in general and the U.S. Air Force’s in particular to air campaigns premised on “punishment” of the civilian population remain obstacles to adherence to the norm. While a far cry from the “city busting” of World War II, Thomas finds that “duress bombing”—that is aerial bombardment of civilian infrastructure in order to

11 See footnotes #12, 13, 14.
materially deprive the population of goods and services—to pressure populations and regimes to sue for peace short of decisive military defeat is a substantive violation of noncombatant immunity that is gaining legitimacy (Thomas 2006).

In a study of insurgent groups in Uganda, Bell finds that military organizational culture does affect substantially armed groups’ treatment of civilians in war (Bell 2012). Downes (2012) on the other hand disputes military doctrine as an explanatory factor for civilian victimization. In two identical case studies of the Luftwaffe and the U.S. Army Air Forces’ (USAAF) pre-war doctrines and airpower employment in World War II, Downes finds that air forces with “tactical” or counterforce doctrines are just as likely to target civilians at some point as air forces with “strategic” doctrines—that is doctrines that advocate some form of counter-value targeting or punishment of populations. Downes finds that states adopt their wartime air strategies based on the perceived requirements of the war rather than pre-war doctrines that somehow lock-in statesmen to some pre-determined course of action (2012).

A number of authors cite the advent of precision guided munitions (PGMs) as an explanation for norm adherence by states’ air forces (Beier 2003; Renz 2012, 36). Thomas claims PGMs make norm adherence easier and increases the pressure of public opinion on states to use PGMs to spare civilians (Thomas 2001, 171-173); however, there is little in the scholarly literature to support the claim that PGMs substantially explain air forces’ adherence to the bombing norm post-World War II.

While scholars of the “bombing norm” focus on norms, military culture, technology, and to a lesser extent strategy (excepting Downes) as explanatory factors for adherence or non-adherence to the bombing norm, scholars in the civilian victimization
literature have examined regime type, identity, military culture, and strategy as primary factors. While conventional wisdom has long been that democracies are more law-abiding than authoritarian states, recent scholarship strongly suggests this may not be the case during war. There is a growing consensus among scholars using quantitative methods, supported by case studies, that “strategic necessity” (Downes 2006a, 170), “military utility” (2004b, 2), or a “rational military strategy” (Valentino, et al. 2004, 376) rather than regime type, identity, or military culture is the primary determinant of states’ compliance or noncompliance with noncombatant immunity and this finding applies to democracies as well as authoritarian states (Downes 2006a, 2007).

While various scholars conceptualize and operationalize these terms as well as the dependent variable (e.g. intentional killing of civilians, mass killings, numbers of civilian fatalities) somewhat differently and uses different datasets (e.g. interstate wars, guerrilla wars, asymmetric wars), the overarching finding is that states intentionally violate noncombatant immunity across all conflict types because they perceive it as militarily necessary to achieve their war aims in particular circumstances.

Valentino, Huth, and Croco (2006) capture the strategy argument best:

We argue that the decision to target civilians is based less upon international laws or the individual characteristics of the states involved in the war and more on the incentives to target civilians created by the risks, threats, and opportunities associated with the particular conflict (340).

States’ war aims (Valentino, et al. 2004, 371) and the “costs of fighting” (Downes 2004b, 1) in the particular conflicts and the nature of the conflicts themselves (e.g. guerrilla war, war of attrition, war of territorial conquest) are the most important predictors of state adherence to noncombatant immunity (Downes 2006a, 2007; Valentino et al. 2006, 353; Eck 2007, 245). This emerging consensus reinforces realist conceptions of state behavior.
in the international system (Valentino et al. 2006, 374), especially in regards to national
security, and undermines in varying degrees liberal and constructivist explanations that
emphasize cooperation, international law, and norms.

In his defining work in this research program, Downes finds in his published 2006
quantitative study of interstate conflicts between 1816 and 2003 that states’ “Desperation
to Win,” a pithy phrase for a causal mechanism, in the setting of protracted, costly wars,
specifically wars of attrition, causes many states to target enemy civilians as a calculated
strategy to save their material and human resources and shift more costs to the enemy
(Downes 2006a, 161-165, 189-191). Downes finds that states begin most wars with
“counter-force” strategies because the adversary’s armed forces represent the greatest
immediate threat or obstacle to state objectives (Downes 2004a, 745; 2006a, 166; 2012),
but as time elapses and counter-force strategies stalemate, fail, or become very costly, the
“logic of desperation” sets in and some states adopt “counter-population” “punishment”
strategies (Pape 1996; Downes 2004a, 745-746; 2004b, 17; 2006a, 2012). This “counter-
population” strategy seeks to reduce friendly casualties, substantially attrite enemy war-
making capability, and coerce the targeted state to sue for peace in order to spare its
civilians more harm and spare the coercing state from bearing the full costs of having to
decisively defeat the target state (Pape 1996; Downes 2006a, 2007).

In wars of attrition, Downes finds that states purposely kill civilians 62% of the
time compared to states “in quick and decisive wars” which kill civilians 16% of the time
(Downes 2006a, 174). In addition, wars of territorial conquest or annexation also result
in the purposeful killing of civilians as invading states seek to deter or suppress revolts
among the population or drive the population out in order to achieve its war aims
(Downes 2006a, 166-169). Unlike wars of attrition, when civilian victimization is delayed, states begin counter-population strategies in wars of territorial annexation much earlier to prevent any opposition to their military operations and future occupation (Downes 2004a, 746). In these wars, states violate noncombatant immunity 81% of the time (Downes 2006a, 174).

Liberal theory and conventional wisdom for some time have assumed that democracies are more peaceful, law-abiding, and respectful of human rights than authoritarian states. Some scholars and commentators have projected these notions into how democracies actually fight their wars. They expect democracies to be more law-abiding and sensitive to protecting innocents including enemy civilians than authoritarian states; however, a number of works in the civilian victimization literature fundamentally undermine regime type as a primary determinant of adherence to noncombatant immunity in wartime (Valentino, et al., 2006, 339-348; Downes 2007, 898; Eck 2007).

Downes especially examines regime type as a key variable in his several quantitative studies of civilian victimization. In his examination of the effects of regime type on wartime conduct, he sees potentially two opposite effects of democracy on adherence to noncombatant immunity. First, liberal-democratic norms may constrain democratic leaders from violating noncombatant immunity through a number of mechanisms (e.g. internalization of norms, free press, reputational costs, elections). Second, the structure of democratic institutions (e.g. free press, parliamentary accountability, elections) may actually create strong incentives for democratic leaders to violate noncombatant immunity. If wars go long or bad, electorates may remove
democratic leaders from office so these leaders will seek to win their wars rapidly and at minimum cost by targeting enemy civilians and infrastructure (Downes 2006a; 2007).

Similar to a number of works in the civilian victimization research program, Downes finds “that while democracies may be slow to anger, once aroused by costly and or protracted warfare, they fight with a fury” which very likely will include the intentional targeting of civilians (2004a, 755). He states “I find that liberal democracies use force against noncombatants at about the same rate as do non-liberal states” (2004a) and “…democracies do not kill fewer civilians than nondemocracies” in armed conflicts (Downes 2007, 897). He writes “…liberal democracies targeted civilians 81 percent of the time they were involved in wars of attrition, compared with 54 percent for autocratic states” (Downes 2006a, 176).

When truncating his dataset\textsuperscript{12} and switching his dependent variable from the intentional killing of civilians in war (2006a) to mass killings (i.e. 50,000+ fatalities in 5 years or less), borrowed from Valentino, et. al. 2004, Downes’ results are similar (Downes 2007). He finds “…democracies engage in mass killing 57 percent of the time in wars of attrition, compared to only 15 percent for nondemocracies…”(890). He writes “…democracies kill significantly more noncombatants when they fight wars of attrition (\textit{than democracies in non-wars of attrition}),\textsuperscript{13} and at least as many civilians as nondemocracies in wars of attrition” (897). He finds “…when democracies do target noncombatants, they are more likely than autocracies to kill more than fifty thousand” (897). Downes states:

\textsuperscript{12} Switched from 1816-2003 dataset to 1900-2003 dataset.
\textsuperscript{13} Statement in italics added by the researcher for the purpose of clarification.
Having a democratic regime makes mass killing more than eight times more likely. The surprising positive result for democracy and mass killing highlights an important but heretofore unknown fact about regime type and civilian casualties: campaigns of civilian targeting by democracies in interstate wars are 52 percent more likely to escalate to mass killing than those by autocracies (889).

Saving democracies’ reputations to some limited degree, Downes’ does find that democracies do not purposely and methodically kill civilians on a monumental scale. Downes states:

…democracies rarely engage in massive, face-to-face killing, preferring to do their killing indirectly via bombing, blockade, or imprisonment in concentration camps. Democracies do not engage in truly massive killing of civilians, defined as over one million dead, but are somewhat more likely to kill over 500,000, 100,000, or 50,000 noncombatants (755).

2.2. Gaps in the Literature

First and overall, the greatest gap in the bombing norm literature is a systematic review of air forces’ adherence to noncombatant immunity from the advent of aerial bombardment in 1911 (Higham 1988, 11-12) to the present across all conflict types (e.g. interstate, internal, conventional, guerrilla) (Renz 2012, 17-18). As noted in the introduction of this research effort, no scholar of airpower and norms can credibly claim to explain with much certainty variations in aerial bombardment across the historical record. This is so because researchers’ case selection generally has fixated on specific states or conflicts. For example, most scholars to date in this research program have focused, if not occasionally “cherry-picked,” their cases on democracies’ airpower employment, especially American usage, and to a much lesser extent authoritarian states, in a classic set of conflicts—World War II, Korea, Vietnam, the Russo-Afghanistan War, the 1991 Gulf War, and Kosovo-Serbia. Most of these conflicts were conventional interstate wars excepting Vietnam, which was both conventional and guerrilla, and the
Russo-Afghanistan War which was a guerrilla war. Renz and Scheipers’ effort to examine aerial bombardment in six case studies of “small wars” before and after World War II is a notable exception in the literature; however, their effort also fixated on democracies—the U.S., Britain, and France—and their post-1950s cases also focus on the well-worn experiences of Vietnam and Kosovo-Serbia.

No researcher in this program has rigorously attempted to code states’ exercise of aerial bombardment across numerous conflicts by specific criteria derived from the two primary standards of the Laws of War—discrimination and proportionality. These standards include not directly targeting or attacking noncombatants, not directly targeting civilian objects, and ensuring the use of force is proportionate to the ends desired. Using the specific principles of Laws of War as sources, this work establishes specific criteria for adherence to noncombatant immunity and scores states conduct of aerial bombardment based on this criteria. For example, this work addresses proportionality in aerial bombardment. Most authors in this program fixate primarily on the intentional killing of civilians especially in very notable instances (e.g. Dresden, Hiroshima) as if airpower employment is a binary phenomenon—violation or compliance—missing the historical gradations and dilemmas of bombardment. This research effort seriously examined and coded proportionality across the 40 armed conflicts in this work. Very closely related to the question of proportionality, this research also followed Levy’s work (2012) on Israel’s systematic shifting of combat risk from combatants to civilians and looked for instances of “risk transfer”\textsuperscript{14} (Renz 2012, 37) across all 40 conflicts examined.

Very closely related to, and embedded in the concept of noncombatant immunity and proportionality, is the phenomenon of “duress bombing” (Thomas 2006). Long a part of coercive air campaigns, duress bombing focuses on civilian objects rather than civilians themselves. While some scholars address duress bombing and cite specific examples of it (Thomas 2001, 2006), no researcher has systemically coded it across a sizable number of armed conflicts. This research effort does so and attempts to comprehend its relationship with the direct targeting of civilians as well as regime type.

Another gap in the literature is that no author has systematically and rigorously addressed the question of whether or not air forces are more predisposed to violate noncombatant immunity than other combat arms. In the realms of journalism and human rights advocacy, the conventional wisdom has long been and remains that aerial bombardment is a particularly indiscriminate combat arm. This appears likely for three reasons. First, World War II’s “city-busting” campaigns climaxing in the use of atomic weapons on two Japanese cities remain powerful symbols of airpower employment. Second, a number of air forces’ past and present bombing doctrines that emphasize coercion and punishment are historically associated with violations of noncombatant immunity, and third, air forces’ historical lack of precision weaponry project future imprecision and psychological detachment from what happens on the ground. Is aerial bombardment more likely to result in violations of noncombatant immunity than ground or naval combat? This research attempted to answer this question.

In regards to the Vietnam War in particular, a notable gap in the literature is researchers’ fixation with Operation Rolling Thunder and to a lesser extent Operation Linebacker II as strategic air campaigns to the neglect of other air campaigns in the war.
For example, no researcher examines aerial bombardment in South Vietnam rigorously as well as bombardment in Laos and Cambodia. For the purpose of understanding force and norms, Rolling Thunder, which lasted three years, and Linebacker II, which lasted 13 days, simply cannot be viewed as the primary and most important cases of aerial bombardment in the war (Gravel 1971 IV, 20; Clodfelter 1995, 224; Pape 1996, 181-183). Aerial bombardment in South Vietnam, Laos, and Cambodia lasted for roughly ten, six, and five years respectively (Lewy 1978, Hamilton-Merritt 1999; Owen 2006; Renz 2012). My research rigorously examined and coded U.S. aerial bombardment in these neglected areas.

Lastly, few researchers seriously examine rotary-wing aircraft as a subset of airpower due to its historical association with ground forces. My research is not constrained by inter-service rivalries and doctrinal disputes among combat arms. In the Vietnam War and Afghan Wars—both USSR and U.S. versions, commanders used helicopters extensively in air-to-ground combat (Lewy 1978; Downes 2004a, 452-453). Such airpower employment should be examined as rigorously as fixed-wing aircraft.

What this research does that no other work has done to date is take a substantial slice—65 years—of airpower history and rigorously examine four states’ conduct of aerial bombardment across all their armed conflicts post-World War II addressing the gaps listed earlier. The only “cherry-picking” is that I confined myself to four states in the post-World War II period rather than examine all states conduct of aerial bombardment from 1911 to the present. Time and resource constraints on the research drove the number of cases chosen; however, I chose those states for specific reasons to mitigate any skewing of results that may come about from case selection. I chose the two
post-World War II superpowers one of which was a democracy and the other an authoritarian regime as well as two regional powers in the same region of the world. One state was a democracy while the other was an authoritarian regime.
CHAPTER 3: STRATEGIC NECESSITY: A THEORY OF INDISCRIMINATE AND DISPROPORTIONATE AERIAL BOMBARDMENT

3.1. The Theory

Strategic necessity\(^{15}\) (Downes 2006a, 170) as a theory of indiscriminate aerial bombardment predicts that states choose to adhere to, or violate noncombatant immunity in particular armed conflicts based primarily on their power and interests rather than on the influence of norms—ethical, legal, or liberal-democratic. One particular state may adhere to the bombing norm in one conflict yet violate it in another. Variations in the conduct of aerial bombardment are due to variations in power and interests in a strategic context rather than variations in states’ regime types, ethno-religious identities, military cultures, or attachment to norms. A “logic of consequences” rather than a “logic of appropriateness” prevails (March & Olsen 1998, 949; Krasner 1999, 5).

States abide by the bombing norm when adherence is in their perceived national interests or at least not prejudicial to their interests or when they do not have the power to violate the norm. For example, some states have no modern air forces capable of conducting substantive aerial bombardment. Some air forces are simply civil air patrols or aerial police forces. Other states may adhere in a particular conflict because they perceive violation serves no military purpose or they may adhere because they think violation will result in unacceptable military retaliation or reputational costs. In both cases, the state waging war with its air force is deterred from violation due to a calculation of costs and benefits rather than norms.

\(^{15}\) I borrow the term, strategic necessity, from Downes 2006a; however, Downes does not coin or use the term to title his theory of civilian victimization which he calls “Desperation to Win” which is driven by calculations of costs and benefits (Downe 2006a, 156).
States violate the norm when it is in their perceived power and interests to do so. Whether democratic or authoritarian, states’ leaders are more likely to use their airpower disproportionately or indiscriminately to succeed in armed conflicts when their perceived security interests are high, those interests are substantially threatened, and perceived military necessity requires violations of the norm in order to prevail or prevent defeat (Valentino, et al., 2004, Valentino, et al., 2006, Downes 2006a, 2012). In these circumstances, noncombatant immunity is an obstacle—a burdensome constraint—on decision-makers’ use of aerial bombardment to achieve their war aims.

Strategic necessity as a theory to explain the unequal relationship in armed conflict between force and norms is firmly rooted in the realist tradition (Valentino, et al. 2006, 374). Most variants of realism hold essentially to five fundamental assumptions: the state is the central actor in world politics; the state is a unitary actor; the state is a rational actor; security is the primary objective of states, and the international system of states is anarchic. These assumptions describe a world in which states pursue power in order to achieve some measure of security in order to maintain their sovereignty and independence. This security competition in an anarchic world occasionally results in war and because the consequences of war may be so profound for the state—survival or extinction, the preparation for, and waging of war, are considered “high politics” (Viotti 1999, 6-7, 55-56, 64-68).

In addition, states in this theory are unitary actors although they may be composed of numerous sub-state organizations. When the state speaks or acts, the state acts as one (Viotti 1999). Policy differences are resolved before the state fully engages other states. While few or many policymakers may provide counsel, the final decision-maker
regarding the use of aerial bombardment acts in the name of the state. The decision to adhere to, or violate the bombing norm is done in the name of the state.

Realism views norms as a manifestation primarily of state power and interests (Viotti 1999). In other words, if norms exist and are influential, it is because states develop them and abide by them because they are beneficial to their interests. When particular norms are no longer beneficial, states will cast them aside. In this sense, the bombing norm exists and is adhered to because a sizable number of states, especially a number of great powers, view them as beneficial to their interests; however, when these norms clash with new calculations of power and interests, norms give way.

Realism may be only descriptive—as an explanation for international political outcomes—or it may be both descriptive and prescriptive as in instructing states’ foreign policies (Papp 1988, 10; Viotti 1999, 82-83). In its prescriptive form, realism instructs policymakers that because norms are expressions of power and interests they impose no moral constraint on states when norms conflict with state interests especially in wartime (Orend 2000, 62). If necessary to prevail, decision-makers should violate norms in war (62). When summarizing Michael Walzer’s thoughts on the “systematic amorality of realism,” Orend writes realism is “grounded in three propositions”:

(1) there is no freedom to choose morally in the international arena;
(2) moral argument with regard to international affairs is meaningless; and
(3) any link between morality and armed force will result in greater destruction than an amoral stance. (Orend 2000, 62-63)

Strategic necessity as a theory of aerial bombardment is not only rooted in realism but also in the rational actor model which itself is central to realism. The ration actor model predicts that states hold prior preferences—interests—and they prioritize these
interests and choose the course of action which best achieves their objectives at an acceptable cost (Viotti 1999, 6-7, 175).

Directly related to the discussion of rationality and consequentialist thinking compared to normative thinking, March and Olsen claim there are two logics that fundamentally explain “human behavior” (March & Olsen 1998, 949) in both the “political and social environments” (Krasner 1999, 5). These logics are the “logic of anticipated consequences and prior preferences” and the “logic of appropriateness and senses of identity” (949). Summarizing March and Olsen, Krasner writes “Logics of consequences see political action and outcomes, including institutions, as the product of rational calculating behavior designed to maximize a given set of unexplained preferences” while “logics of appropriateness understand political action as a product of rules, roles, and identities that stipulate appropriate behavior in given situations” (Krasner 1999, 5).

March and Olsen also claim that reality is usually a mixture of the two logics. They see four major interpretations of the relationship between the two logics.” Only one of the interpretations is most relevant in this research. They write:

The first assumes that a clear logic dominates an unclear logic. When preferences and consequences are precise and identities or their rules ambiguous, a logic of consequences tends to be more important. When identities and their implications are clear but the implications of preferences or expected consequences are not, a logic of appropriateness tends to me more important (March & Olsen 1998, 949).

Krasner claims that because the international system of states exists in a state of anarchy due to the fact there is no supreme authority to adjudicate claims and impose order a logic of consequences “dominate” a logic of appropriateness (Krasner 1999, 6). He additionally supports this claim with the observation that leaders generally have
conflicting identities and their domestic roles will weigh more heavily than international ones (6). Because international law can be ambiguous and there is no supreme authority in the international system, identities and rules are weak (6). Finally, the international system is marked by substantial “power asymmetries” between states; therefore, leaders clearly comprehend that some states will have more assertive foreign policies and the military capacities to pursue them so the consequences of competition are predictable (6).

Like Krasner and his examination of the norm of sovereignty, this theory is “actor-oriented” (Krasner 1999, 7). While this theory views states as unitary actors (Viotti 1999, 6), states, as “black boxes,” do not actually choose to adhere to, or violate noncombatant immunity. People—decision-makers—decide if, and when, their governments, specifically their air forces, use aerial bombardment lawfully or unlawfully (Krasner 1999, 7). Like Krasner, a core assumption of this research is that decision-makers desire to remain in office and they privilege their states’ interests and the lives of their citizens over others (Krasner 1999, 7; Downes 2006, 153-154). Substantial failure to protect core state interests especially the lives and property of one’s constituents will likely result in removal from office by some means at some point in time.

In some states and in some conflicts, the head of state or government as commander-in-chief of the armed forces may decide if, and when, their air forces conduct discriminate or indiscriminate aerial bombardment. Numerous factors influence the decision-maker’s choice including the individual’s personal attachment to, or internalization of norms (e.g. ethical, moral, legal), perception of threat and strategic necessity, personality type, concern for reputation as a victorious leader or law-abider, fear of punishment for violations (e.g. prosecution), and fear of removal from office by
way of elections or coup for failure to win a war (Downes 2006, 153-154). If war-making and warfighting require cabinet approval, a group dynamic is added to the attachment of individuals’ to norms and perceptions of threat and strategic necessity as well as personality type.

In some states and in some conflicts, executives may delegate this decision-making authority to their ministers of defense, military chiefs, or field commanders. Executives may have different motives for delegating this decision to subordinate personnel. The state’s tradition of civil-military relations may be influential. Civilian control of the military may be strong or weak. The military may rule in some states. Sometimes, executives may conclude they do not have or desire to have the necessary military expertise to make these decisions while at other places and times executives may desire to remain detached from some war decisions in order to claim “plausible deniability” should they ever be held to account for their orders to violate the Laws of War. In circumstances when executives delegate final authority for aerial bombardment to military commanders, service culture and doctrine may influence their choices although Downes’ argues in his comparison of the Luftwaffe, Royal Air Force, and U.S. Army Air Forces in World War II that service culture and doctrine did not matter (Downes 2012).

Across its variants, the realist tradition generally views all states behaving similarly in security competition (Waltz, 1979; Orend 1999, 60-62). When norms clash with interests and power, especially during wartime, norms give way to power and interests (Orend 1999, 62; Valentino, et al. 2006, 374). In particular armed conflicts,
states do what is necessary to achieve victory or prevent defeat. I expect to find similar conduct among states in their exercise of aerial bombardment.

3.2. Predictions

I find four possible and logical outcomes regarding the influence of strategic necessity and norms on states’ adherence to noncombatant immunity in aerial bombardment—the bombing norm. These expected outcomes are probabilistic and not determinative. First, I expect that if strategic necessity is decisive—that is to say dominant in influence—in regards to adherence then both democratic and authoritarian states will conduct disproportionate and indiscriminate bombardment when they perceive strategic necessity requires it as well as when they perceive that circumstances do not require it.

Table 3.1. Outcome #1: Expected Findings if Strategic Necessity is Decisive

<table>
<thead>
<tr>
<th>Norms (Democratic)</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
</tr>
<tr>
<td>Democracies</td>
<td></td>
</tr>
<tr>
<td>Authoritarians</td>
<td></td>
</tr>
<tr>
<td>Indiscriminate bombardment</td>
<td>Indiscriminate bombardment</td>
</tr>
<tr>
<td>Indiscriminate bombardment</td>
<td>Indiscriminate bombardment</td>
</tr>
</tbody>
</table>

Hypothesis 1A: When both democratic and authoritarian states perceive the need to violate the bombing norm to be high—that is necessary to prevail or prevent defeat, both regime types will violate the bombing norm.

Hypothesis 1B: When both democratic and authoritarian states perceive the need to violate the bombing norm to be low—that is not necessary to prevail or prevent defeat, both regime types will violate the bombing norm.

Authoritarian states will violate the norm when strategic necessity requires it because authoritarian states desire to maximize the probabilities of victory and minimize the probabilities of substantial military casualties and loss of materiel and value the lives.
of their citizens more than those of their enemies. Authoritarian states will violate the norm when the need is perceived to be low because they desire to maximize the probabilities of victory and simultaneously do not value substantially civilian lives. In addition, they perceive discrimination as inefficient because discrimination requires time, energy, and resources and puts attacking forces at risk. For example, discrimination requires states promulgate rules of engagement rooted in the Laws of War, distribute these rules to subordinate units, and train their aircrews and support personnel to these standards. The best discrimination requires advanced technology in the form of reconnaissance and intelligence collection systems to aid in the search for, and identification of military targets as well as the precision weapons necessary to attack the targets. In order to discriminate, aircrews must be vigilant in attack putting themselves at risk and risking the loss of engagement opportunities when positive identification of the enemy is not possible. In numerous ways, discrimination is expensive.

Democracies with liberal norms and legal norms of compliance will also violate the bombing norm because security interests trump attachment to norms. The lives of democratic citizens and even the lives of military personnel of democratic states are more important than the lives of enemy civilians (Downes 2006a, 2007; Levy 2012). In addition, democratic states will also violate the norm as a form of retaliation when enemy states violate the norm (Thomas 2001, 91, 131). This creates some deterrence in order to dissuade other states from further and greater violations. As in the case of authoritarian regimes, discrimination is expensive. It obstructs the unimpeded pursuit of military objectives.
Second, I expect another possible and related outcome (Table 3.2). If strategic necessity is decisive in regards to adherence, then authoritarian states may conduct discriminate bombardment when there is no perceived military necessity to violate noncombatant immunity. In this circumstance, military utility makes indiscriminate bombardment illogical because it is inefficient. Contradicting the proposition cited earlier that discrimination is expensive, and it is, gratuitously bombing civilians and civilian objects is also expensive. Military resources, manpower, and materiel generally are scarce. Air sorties historically are especially scarce because most air forces have limited airframes. Conducting indiscriminate bombing when there is no need to do so only diverts and wastes scarce military resources that should be spent in support of a counterforce strategy (Thomas 2001, 140). Authoritarian states will violate the bombing norm when there is a strong need to do so because military necessity requires it and there is no substantive normative obstacle to violation.

Table 3.2. Outcome #2: Expected Findings if Strategic Necessity is Decisive

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>Discriminate bombardment</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>Discriminate bombardment</td>
</tr>
</tbody>
</table>

Democracies will adhere under low need circumstances for two reasons. First, they will adhere because norms place some degree of constraint, albeit weak, on the use of force (17-18, 31-32). Second, like authoritarian states, there is simply no logical reason to conduct indiscriminate bombing when there is no military utility in doing so. Air assets are scarce so indiscriminate bombardment usually is inefficient. Democracies,
however, will violate the norm when military necessity requires it because democracies favor victory over defeat and privilege their citizens’ lives over the enemies’ lives.

Hypothesis 2A: When democratic states perceive the need to violate the bombing norm to be high—that is necessary to prevail or prevent defeat, they will violate the bombing norm.

Hypothesis 2B: When democratic states perceive the need to violate the bombing norm to be low—that is not necessary to prevail or prevent defeat, they will not violate the bombing norm.

Hypothesis 2C: When authoritarian states perceive the need to violate the bombing norm to be high, they will violate the bombing norm.

Hypothesis 2D: When authoritarian states perceive the need to violate the bombing norm to be low, they will violate the bombing norm.

If norms are decisive rather than strategic necessity, I expect authoritarian states, which I will assume to have no or weak norms regarding human rights and the rule of law, to use indiscriminate bombing when there is no compelling need to do so because they do not care about civilians and sometimes do not care about their international reputations (Table 3.3). Authoritarian states will view anyone, everyone, and everything as fair game for aerial bombardment under both low and high need circumstances. I expect democracies to adhere to the norm under all circumstances because norm adherence is inherent to their identities as liberal democracies and law-abiding states.

Table 3.3. Outcome #3: Expected Findings if Norms are Decisive

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>Discriminate</td>
</tr>
<tr>
<td></td>
<td>bombardment</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>Indiscriminate</td>
</tr>
<tr>
<td></td>
<td>bombardment</td>
</tr>
</tbody>
</table>

Hypothesis 3A: When democratic states perceive the need to violate the bombing norm to be high, they will not violate the bombing norm.
Hypothesis 3B: When democratic states perceive the need to violate the bombing norm to be low, they will not violate the bombing norm.

Hypothesis 3C: When authoritarian states perceive the need to violate the bombing norm to be high, they will violate the bombing norm.

Hypothesis 3D: When authoritarian states perceive the need to violate the bombing norm to be low, they will violate the bombing norm.

There is a fourth possible outcome suggested by Thomas (2001) but very poorly articulated and specified by him (Table 3.4). If a combination of both norms and strategic necessity are substantially influential in states’ calculations, I expect authoritarian states to violate the bombing norm under both low and high need circumstances because they hold weak norms and additionally strategic necessity will drive them to prolific violation with high need. Because violating the norm is inefficient under low need circumstances, I expect fewer violations under low need. Democracies desire to adhere to the norm at all times so they will adhere when military circumstances do not compel them to violate it; however, as self-interested states, stressful circumstances may compel them to violate the norm when military necessity seems to require it.

Table 3.4. Outcome #4: Expected Findings if a Combination of Norms and Strategic Necessity

<table>
<thead>
<tr>
<th>Norms (Democratic)</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>Discriminate bombardment</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>Indiscriminate bombardment</td>
</tr>
</tbody>
</table>

Hypothesis 4A: When democratic states perceive the need to violate the bombing norm to be high, they will violate the bombing norm.
Hypothesis 4B: When democratic states perceive the need to violate the bombing norm to be low, they will not violate the bombing norm.

Hypothesis 4C: When authoritarian states perceive the need to violate the bombing norm to be high, they will violate the bombing norm.

Hypothesis 4D: When authoritarian states perceive the need to violate the bombing norm to be low, they will violate the bombing norm.

Of these four possible outcomes, I expect the historical record to support Table 3.2. Outcome #2: Expected Findings if Strategic Necessity is Decisive. I expect strategic necessity to be the decisive influence on state conduct. I expect to find that authoritarian states generally will prefer not to conduct indiscriminate bombing when there is no compelling need but may do so anyway due to weak norms but they will readily do so when strategic necessity seems to require it. Democracies on the other hand will not conduct indiscriminate bombing when there is no need to do so because it diverts and wastes military resources as well as because it violates norms offending domestic and international audiences and values of human rights and the rule of law. Democracies generally will violate the norm when strategic necessity requires it.

### Table 3.5. Outcome #2: Expected Findings if Strategic Necessity is Decisive (Estimated Instances)

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
<td>High Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>Zero to few violations</td>
<td>Many violations</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>Few to several violations</td>
<td>Many violations</td>
</tr>
</tbody>
</table>
CHAPTER 4: RESEARCH DESIGN

4.1. Summary and Sources of Data

This research effort is a “focused, comparative case study” using process tracing, in-case variation, and descriptive statistics. This study consists of four cases examining four states’ adherence to noncombatant immunity in aerial bombardment from 1946 to 2011 (George & Bennett 2005, 67). Provided the selected state used aerial bombardment in the armed conflict, I examined all of the armed conflicts of each selected state documented in the UCDP/PRIO armed conflict dataset. The objective of the case studies was to investigate and document states’ actual conduct of aerial bombardment and apply current explanations for adherence to noncombatant immunity from both the civilian victimization and “bombing norm” literatures to see which explanation(s) best fitted the historical record (75).

The source of data for this research was drawn from the historical record specifically secondary sources including political, military, and air forces’ histories and analyses. I sought out military and air forces’ histories and analyses in order to find

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16 I retained the First Intifada between Israel and the Palestinians as an armed conflict for examination although Israel did not use aerial bombardment in the conflict. I retained it because Israel made a calculated policy decision not to use aerial bombardment which highlighted the interplay of norms and strategic necessity. I did not count the armed conflict in the tables accounting for discrimination or in the cross-tabulations.

17 The configuration and coding of the UCDP/PRIO armed conflict dataset presented some problems for categorizing some conflicts for my purposes. For example, the dataset views the Israeli-Palestinian conflict as one long continuous armed conflict which historically one knows has ebbed and flowed in intensity. For example, one will not find the terms, First and Second Intifadas, in the dataset. One has to know that in specific conflict years the Israeli-Palestinian conflict erupted more severely and garnered a name. In addition, the dataset considers U.S. combat operations in South Vietnam, North Vietnam, Laos, and Cambodia from 1962 to 1973 as four separate armed conflicts instead of what one would title the Vietnam War. For my analysis, I examined aerial bombardment in each conflict separately since each listed conflict did result in separate air campaigns. The UCDP/PRIO also considers U.S. combat operations against Al Qa’ida as a separate conflict from U.S. operations against AQAP in Yemen. I am considering them part of the same conflict. In addition, I am considering the U.S. a belligerent in the Libyan civil war in 2011 in which U.S.-NATO air forces bombarded Libyan forces under the command of Qaddafi. The UCDP/PRIO does not list the U.S. or any NATO states as belligerents. (Gleditch, et al. 2012)
evidence for how and states actually employed their airpower in particular armed conflicts and why they did so. *Divining Victory* by William Arkin is an example of an airpower analytical work of Israeli airpower employment during the 2006 Second Lebanon War while Berquist’s *The Role of Airpower in the Iran-Iraq War* is a more traditional air force history. The airpower analytical works, frequently supported by democracies and their air forces, are fundamentally “lessons learned” works and are often excellent sources of very detailed target selection and weapons employment information.

In the general and political histories, I sought out evidence for how political leaders perceived their wars’ as either high stakes or peripheral and whether or not norms or power and interest influenced their decision-making on the levels of force used. Dean Acheson’s *The Korean War* and Kissinger’s *Ending the Vietnam War* were examples of these strategic-political histories. Other works overlapped between military and policy histories that sometimes addressed specific questions regarding a particular conflict. *The Pentagon Papers* compiled by Congress was an investigative work intended to document the policy history of U.S. involvement in Vietnam. The *Pentagon Papers* held a wealth of detailed information regarding two Administrations’ policy debates with a substantial portion of its debates revolving around aerial bombardment. *America in Vietnam*, by Guenter Lewy, is a politico-military history that provides a strategic-level yet detailed enough account of U.S. military conduct in the war to comprehend roughly levels of U.S. force and their compliance with the Laws of War. Lewy specifically tries to answer broadly the controversial question of whether or not U.S. conduct in the war by all armed services was generally lawful or unlawful.
4.2. Case Selection

The four cases included the United States, Israel, the Soviet Union (USSR)/Russia, and Iraq in the post-World War II period. I selected the post-World War II period for examination because Thomas (2001) claims that the bombing norm was re-invigorated post-war and spreading substantially across states. In addition, Thomas (2001) and others also claim that the bombing norm was very poorly internalized pre-World War II by both democracies and authoritarians states so pre-World War II aerial bombardment reportedly was frequently indiscriminate (Thomas 2001; Renz 2012). I desired to test the claim that post-World War II aerial bombardment was becoming more lawful.

I selected only four states due to time and resource constraints for the research. I selected these states as cases for a number of reasons. First, all four states possessed modern air forces and used them in aerial bombardment across the 65 years of their airpower histories examined this study (Flintham 1990; Gleditsch, et al, 2002). It was necessary for the states’ air forces to be relatively modern in order that they could perform most of the classic missions of aerial bombardment—strategic bombing, aerial interdiction, and close air support—and carry standard payloads. A fully capable modern air force presented the states the opportunity to use its air forces lawfully or unlawfully. Some air forces around the world are merely “flying clubs” or aerial police forces unsuited for combat.

Second, these selected states used their air forces across a range of armed conflicts (e.g. interstate, extrasystemic, intrastate, conventional, guerrilla) (Gleditsch, et al, 2002). This fact permitted an examination of variation in aerial bombardment across
different types of conflicts. This was an important point because there are some unanswered questions from the literature regarding how states use their air forces in different categories of conflict. For example, it remains debatable whether or not states used airpower more lawfully in interstate conventional wars than guerrilla wars?

Third, the states are evenly divided between democracies and authoritarian states permitting the ability to compare both regime types’ behavior in different conditions. One of the gaps in the literature remains whether democracies’ use of airpower is more law-abiding than authoritarian states. Some scholars claim they are while others claim they are not (Downes 2004a; Renz 2012).

Fourth, all the states represent a range of geopolitical positions and military capabilities. The U.S. and USSR/Russia are currently great powers while the U.S. remains a superpower and the USSR/Russia was a superpower between 1946 and 1991. Great powers likely will have substantial regional and global power and interests; hence, they may be more tempted to use military force regionally and globally to protect those interests. Because these states are stronger with wider interests, will that result in less lawful aerial bombardment simply because they are tested more often or think they can get away with it? Israel currently is a regional power and has been since 1948. Iraq was a regional power until 2003. Does less military power result in more or less lawful behavior? Both Israel and Iraq are in the same region controlling somewhat for geopolitical circumstances. Unlike the U.S. and USSR/Russia, Israel and Iraq have faced existential threats during specific armed conflicts between 1946 and 2011. Armed conflicts which threaten a state’s survival are the ultimate tests of norms-adherence.
Realists would expect no-hold’s bar use of military force. Thomas claims the high stakes of World War II were one major reason for indiscriminate bombing.

Fifth, the four states represent variation in military cultures and doctrines permitting another test of the military culture thesis. The USSR/Russia, Israel, and Iraq generally have possessed tactical airpower cultures while the U.S. has maintained a strategic airpower culture and doctrine. Downes (2012), looking only at the Luftwaffe, Royal Air Force, and U.S. Army Air Forces before and during World War II, claims that airpower cultures and bombing doctrines do not explain variation in aerial bombardment. Conventional wisdom has long suggested it does (Thomas 2006). Examining four states across 40 conflicts should help answer this question.

There are only a few other states that were great powers or regional powers and that both possessed modern air forces and used them repeatedly especially across different types of conflicts in the period 1946-2011. These states included Britain, France, and Egypt and to a lesser degree India and Pakistan. Ultimately, I chose not to include these states due to time constraints as well as the fact that a number of these states’ armed conflicts in the period are not well-documented especially in English.

The Royal Air Force and French Air Force have fought in a small number of interstate conventional wars as well as a host of “small wars” against terrorists and insurgents since World War II (Christienne 1986; Towle 1989; Renz 2012). An examination of these states’ conduct of aerial bombardment would have been helpful in answering the question regarding whether air forces’ exercise greater restraint in guerilla wars than conventional wars or vice versa. Additionally, because the British and French were colonial powers their experiences could have shed light on whether or not the use of
airpower against colonials was more or less law-abiding. Downes claims in his works that states do not violate noncombatant immunity because their enemies are considered “barbarians” (Downes 2006a). That is to say states do not wage war indiscriminately against other states because they are racially, culturally, or religiously different. This claim dampened my impulse to investigate the British and French cases; however, I chose not to include these states primarily due to time constraints and the fact they are both democracies which would have slanted my research more toward democracies at the expense of authoritarian states. While unfair, my examination of the U.S. and Israel were “proxies” for the democratic conduct of aerial bombardment.

If I had not chosen Iraq, Egypt would have been an excellent candidate as a case because it has fought roughly six armed conflicts since 1946 and one of those, Yemen, began as an interstate war and shifted into a counter-insurgency permitting an examination of Egypt’s use of airpower against guerrillas (O’Ballance 1971; Nordeen 1996; Ferris 2013). Egypt also would have also been a superb choice because most of its interstate wars were with Israel so I could have examined two cases—one authoritarian and one democratic—against each other as belligerents. My selection of Iraq over Egypt was based primarily on curiosity as the Arab-Israeli Wars are well-covered historically while the Iraqi Air Force was not. India and Pakistan were also candidates as regional powers; however, there was a lack of documentation in English across the majority of their conflicts (Mohan 2005).

4.3. Dependent Variable, Coding, Analysis, and Documentation

I examined each of my case’s exercise of aerial bombardment in their armed conflicts between 1946 and 2011 against a set of criteria derived from the legal
requirements of the Laws of War as they apply to noncombatant immunity in aerial bombardment. Noncombatant immunity in aerial bombardment rests on two prohibitions and one prescription, three core standards.\(^{18}\) First, air forces may not intentionally target civilians for death or wounding or terrorization (Roberts 2000, 447-456). The only exception is that civilians directly involved in warfighting or war-making may be targeted; however, there remains a lively debate among scholars, lawyers, and human rights activists regarding if this traditional view is legitimate (Downes 2006a). Unless they physically take up arms in combat, some scholars, like Downes (2006a), argue all other civilians even those involved in the armaments industry are protected. There is somewhat less debate over the targeting of “dual-use” facilities that serve both civilian and military functions (CJCSI 3160.01 2009, B-7) yet even here, some argue this “loop-hole” in international law has invited air forces to damage civilian infrastructure gratuitously in coercive air campaigns (Thomas 2006).

Second, air forces may not intentionally target civilian objects provided they are not being used for a military purpose, and third, states’ conduct of aerial bombardment must be proportional to the military advantage sought (Roberts 2000, 447-456; JAGS 2006, 614). Any intentional and substantive violation of any of the three core standards is a violation of noncombatant immunity or the bombing norm as I define it for the purposes of this research. My dependent variable then is adherence to, or violation of, requirements of the Laws of War as they apply to noncombatant immunity in aerial bombardment. Noncombatant immunity in aerial bombardment rests on two prohibitions and one prescription, three core standards.\(^{18}\) First, air forces may not intentionally target civilians for death or wounding or terrorization (Roberts 2000, 447-456). The only exception is that civilians directly involved in warfighting or war-making may be targeted; however, there remains a lively debate among scholars, lawyers, and human rights activists regarding if this traditional view is legitimate (Downes 2006a). Unless they physically take up arms in combat, some scholars, like Downes (2006a), argue all other civilians even those involved in the armaments industry are protected. There is somewhat less debate over the targeting of “dual-use” facilities that serve both civilian and military functions (CJCSI 3160.01 2009, B-7) yet even here, some argue this “loop-hole” in international law has invited air forces to damage civilian infrastructure gratuitously in coercive air campaigns (Thomas 2006).

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\(^{18}\) The core standards—the prescriptions and prohibitions—of noncombatant immunity, including that applicable to aerial bombardment, are found in the 1907 Hague Conventions, the 1949 Geneva Conventions, and 1977 Additional Protocol I, which provides the clearest guidance for aerial bombardment, as well as a number of other treaties and conventions (JAGS 2006, 612-617). There are no specific “legal tests” or questions codified for compliance in the Laws of War. I created the questions for my criteria from the literature and the Laws of War.
any one or all of these core standards of noncombatant immunity as it applies to aerial bombardment.

In parts of this work, I will use some terms interchangeably because scholars and military lawyers do so. For example, by definition, indiscriminate bombardment means the intentional targeting of civilians and civilian objects (not used for warfighting or war-making) as well as disproportionate bombardment; however, some scholars, like Thomas (2001), most closely associate the term with the intentional killing of civilians. I do not code a state’s air forces’ as wholly indiscriminate if there is some degree of “duress bombing” and disproportionate air operations especially if the state did not intentionally target civilians.

To determine if states’ air forces adhered to, deviated from, or outright violated, one or all of the core standards of the norm, I created a spreadsheet (Appendix A—code book) that categorized the core standards of the norm into specific scoring criteria. Based on the Laws of War, U.S. airpower and targeting doctrine, and the historical exercise of aerial bombardment, I attached specific questions—“legal tests” or elements—to each criterion. I had to create this criterion because the Laws of War in regards to aerial bombardment do not contain specific legal tests to determine violation as do most criminal statutes (MCM 2012). Military commanders and their prosecutors, for example, may apply the classic legal tests for murder to determine if a soldier unlawfully killed a noncombatant in a war; however, such standards do not exist for the unlawful or disproportionate use of aerial bombardment unless an aircrew conducts a targeted killing of one or more innocent individuals (Lewy 1978; MCM 2012, II-15). The closest operating and quantitative standard for judging discrimination and proportionality is the
U.S. Joint Staff’s recent collateral damage estimation methodology (CJCS 3160.01 2009, D-A-1 – D-A-29). This standard is used during the target development phase of the U.S. targeting and air tasking order cycles in order to determine the function, legality, and collateral damage risks to civilians and civilian object in or near places or facilities planned for air attack (D-A-1 – D-A-29).

As I investigated each of my case’s conduct of aerial bombardment, I scored its adherence or non-adherence with the specific questions under each criterion. If there was a pattern of authorized, doctrinal or standard behavior that deviated from, or violated some criterion of the bombing norm, I scored that state’s conduct in that particular core standard in that specific conflict as discriminate, indiscriminate, duress bombing, proportionate, or disproportionate. I recorded my findings on a data sheet (Appendix A). There is a data sheet for each armed conflict. If there were violations or deviations that were the result of one individual’s or a single unit’s acts, I did not necessarily categorize that state’s aerial bombardment as a violation especially if the state officially punished the non-compliance. If one or two deviations or violations were particularly egregious like the use of chemical weapons against civilians (JAGS 2006, 615-617), I categorized the state in non-compliance. I recorded the results of my analyses across all the 40 armed conflicts in Appendix B (Table 4.2).
Table 4.1. Cut-out of Scoring Sheet in Appendix A

<table>
<thead>
<tr>
<th>BOMBING NORM STANDARDS</th>
<th>YES</th>
<th>NO</th>
<th>NO DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Intentionally targeted/attacked civilians (indiscriminate bombing)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.A. For killing and wounding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.A.1. Did air forces bombard civilians purposely in order to (IOT) wound and kill civilians for instrumental or sadistic purposes? Did they attack civilian convoys, IDPs, refugees, housing, residential areas, outdoor events?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.B. Terrorization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.B.1. Did air forces attack civilians directly for the primary purpose of psychological effects? Did air forces drop mass leaflets to warn of future indiscriminate bombardment for the primary purpose of producing terror.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2. Cut-out of Coding in Appendix B

Appendix B: Four States Adherence to the Bombing Norm, 1946-2011

To adhere, at a minimum, to the first core standard, a state’s air forces may not have intentionally targeted and attacked civilians in order to kill or wound them (Meilinger 1993, 106; Roberts 2000, 447-449). This is the de jure definition of discriminate bombing. As a subset of this core standard, states also may not use their air...
forces to terrorize civilians which may or may not involve intentionally killing civilians (Roberts 2000, 448). Aircraft dropping leaflets threatening indiscriminate bombing may have also constituted terrorization. I also considered the use of aerial bombardment as “collective punishment” against a civil population for some reason as a direct violation of the first standard because it violates discrimination on three counts. First, collective punishment is indiscriminate because it makes no distinction between civilians and combatants. Second, it treats the offending civil population, usually a village, town, or province, as an area target as well as a “free fire zone.” Third, collective punishment is a form of reprisal which is prohibited by the Laws of War (449).

The second core standard of the bombing norm is that states’ air forces may not intentionally target or attack strictly civilian objects (449-452). Civilian objects are those private and public properties as well as goods and services that have strictly or predominantly civilian uses (449-452). For example, aerial bombardment of crops in order to starve out an enemy army or its civilian population would be a violation of the norm because crops, although they may also feed enemy armed forces, predominantly feed the civilian population (450). Aerial bombardment intended to “de-house” a population is also forbidden. At the same time, air forces generally and customarily may attack dual-use civilian objects such as roads, bridges, and ports because they do or may serve a military purpose at some point in a conflict (JP 3-60 2013, A-1-A-7); however, the 1977 Additional Protocol I to the Geneva Conventions is somewhat ambiguous in this matter (Roberts 2000, 450) leaving it to states’ interpretation what dual-use civilian objects may be attacked and with how much force.
States generally target civilian objects as part of “punishment” air campaigns intended to pressure the population and/or regime to come to terms with the opposing state short of decisive victory (Pape 1996, 13-15, 18-19). Aerial bombardment of civilian infrastructure, what Thomas calls “duress bombing,” is intended to deprive the population materially and pressure it psychologically (Thomas 2006). The punishing state hopes that its punishment does one of two things. First, it hopes the material deprivation of, and psychological pressure on, the civilian population compels it to petition its government to sue for peace to stop the suffering (13-15, 18-19). Second, it hopes that if the population cannot successfully pressure the regime to meet the demands of the coercer the population rises up against the regime and removes it bringing a “peace party” to power to end the war on the coercer’s terms (21-28).

While Thomas and other writers in the research program generally only use the term, indiscriminate bombing, to describe bombing norm violations, proportionality is also a criterion for norm observance because proportionality is a legal principle in the Laws of War (Roberts 2000, 452-453). Excessively disproportionate aerial bombardment may be de jure indiscriminate (448-449). Using secondary sources, I determined if states and their air forces attempted to balance military necessity with the human costs of aerial bombardment. In order to determine if air forces’ exercise of aerial bombardment was proportional, I evaluated it based on a number of criteria. First, did commanders, air planners, and their aircrews take exceptional risks with the safety of the civilian population in order to protect friendly combatants or achieve military objectives that were not essential to success? Did planners and aircrews use different weapons and tactics in
order to protect civilians than what standard procedure would suggest? Did air forces use firepower-heavy aerial bombardment when other options were available?

This is admittedly a very subjective exercise as is the very definition of proportionality; however, a basic comprehension of the Laws of War, military employment doctrine, and access to a historical record of an armed conflict can produce credible assessments of adherence to, or violation of the norm. For example, if a selected state used its air forces to launch knowingly an air raid in a dense urban environment to kill one terrorist cell leader and the aircrews killed 200-500 civilians in the attack even unintentionally, I would have considered that bombardment disproportionate and a deviation from the norm especially if other military options were available; however, others may not think similarly.

What is problematic regarding proportionality is that its judgment primarily is subjective. Its ultimate determination is made by political leaders and their commanders. Proportionality cannot be quantified although the U.S. Defense Department has partially done so albeit under the rubric of collateral damage estimation (CJSCI 2009, D-A-1 – D-A-29).

Different people very likely will balance the military advantage sought from air attacks with concerns for humanity differently. Proportionality generally is left to the discretion of immediate commanders or theater commanders although in some air raids national leaders may even intervene to impose their judgment. For example, one of the reasons the U.S. President chose a special operations’ raid on Osama Bin Laden’s safe house in Abbottabad, Pakistan rather than an air raid was to avoid unnecessary civilian fatalities (The Telegraph 2012). However, if a special operations’ raid had not been
feasible, an air raid would have been the only other realistic option. There is little
question that an air raid would have resulted in the deaths of Bin Laden’s immediate
family members—wives and children—as well as Pakistanis in the adjoining
neighborhood (The Telegraph 2012). The U.S. President likely would have authorized
such a raid anyway despite civilian casualties because Bin Laden was such an important
strategic and symbolic target in the Global War on Terrorism. The U.S. President’s
judgment of proportionality would have been the final word unless a substantial and
subjectively determined number of civilians were killed in such an air raid. Only in
exceptional cases is a commander’s judgment and exercise of armed force in regards to
discrimination and proportionality result in formal inquiries, courts-martial, or
international tribunals. In such cases, there usually has to be evidence of an atrocity—a
war crime. Disproportionate combat operations rarely pass muster for prosecutions.

In addition to the outright violations and deviations just noted, the use of
prohibited weapons such as chemical and biological weapons is de jure disproportionate
and simultaneously indiscriminate (Roberts 2000, 449). The Laws of War outlaw the use
of specific types of weapons and methods of war because their effects are deemed
indiscriminate and unnecessary and cruel due to the human suffering incurred by their
use.

In order to explain why a state violated or deviated from the norm in a particular
conflict, I examined that state’s political and military objectives as well as its politico-
military circumstances at different points in the conflict—in-case variation. For example,
if the selected state is adhering to the norm so long as the war is short and a counterforce
strategy prevails, but then violates the norm when the war grows long and a counterforce
strategy has failed, then I would likely find that Downes’ “Desperation to Win” thesis (2006a, 2007) explains non-adherence. I will also examine public statements of policymakers and commanders to glean any insight into why they made their decisions regarding the use of airpower. If political and military leaders publicly express concern for civilians, and follow this up with aerial bombardment that protects civilians, I will likely find norms explains adherence; however, if policymakers express concern for military retaliation if they target the enemy state’s civilians, then I likely would determine strategic considerations drove adherence rather than norms.

4.4. Explanatory Factors/Independent Variables

Using descriptive statistics in cross-tabulations, I tested eight explanatory factors for adherence to the bombing norm drawn from the literature. These included strategic necessity, democratic norms, intensity of the conflict, types of armed conflicts (e.g. actors/locations, style of combat), air forces’ cultures and bombing doctrines, air strategies employed, and possession of precision-guided munitions (PGMs).

In order to test my primary hypothesis—that states exercise aerial bombardment based on perceived power and interests rather than norms, specifically democratic norms, I borrowed the term and concept of strategic necessity from Downes (2006a) and the other scholars in the civilian victimization literature. They borrowed the term, strategic necessity, from the Law of War principle of military necessity. Military necessity permits armed forces to use that level of force necessary to achieve military objectives provided those violent acts do not violate some specific prohibition in the Laws of War or violate proportionality (JAGS 2006, 614-615; JP 1-04 2011, II-2).
Strategic necessity conceptualizes the notion that some perceived type of military action (e.g. air raids, reprisal, torture) and some level of force (e.g. escalation, massive air raids, nuclear attack) is necessary to achieve specific military or political objectives in a specific conflict. Strategic necessity may compel states to re-double their military efforts or violate the Laws of War. In his 2004 dissertation, Downes used a variable labeled as either “high cost” or “low cost” to operationalize the “blood and treasure” states invest in conflicts and capture the “pull” of strategic necessity (747-748). In his 2006 work, “Desperation to Win,” Downes used a more complex formula. He uses time (duration of conflict) and battle deaths as two of a number of variables to express strategic necessity.

Borrowing to some degree from Downes, I used “Low Need” and “High Need” to express the concept of strategic necessity. I coded an armed conflict as presenting a “Low Need” when one of my selected states was prevailing in the conflict or the adversary presented a limited threat or obstacle to the states’ objectives. I coded a conflict as “High Need” when the selected state was stalemated in its pursuit of its objectives or was losing at some point in time. For example, the “Tet Offensive” is considered both the “high watermark” of U.S. investment in the Vietnam War and its turning point. One could argue potentially that U.S. efforts after this point are “High Need” because public support was waning and the Johnson Administration and Nixon Administration were increasingly anxious to either win or exit the conflict albeit with “honor.”

While the duration of a conflict is an important factor in taxing states’ patience in wartime, some conflicts may proceed very quickly and state leaders’ perception of strategic necessity may change rapidly as well. In the Yom Kippur War for example, the
Israeli military was losing a substantial number of troops and materiel in a relatively short period of time (Herzog 1982; Air Staff 1999, 2.8.3). Having been attacked on two fronts on its frontiers by sizable and capable armed forces, the Israeli perception of threat was intense (Herzog 1982). For this reason, I coded Yom Kippur as a “high need” war for Israel although the war lasted only about three weeks.

The literature on force and norms strongly suggests that international legal norms do not substantially influence states’ compliance with the Laws of War (Valentino et al. 2006, 341-344). In other words, just because states have signed and ratified various conventions and protocols of the Laws of War does not mean they will abide them in actual conflicts. For this reason, I chose not to code and attempt to test my cases based on their ratification of various pieces of the Laws of War or their domestic institutionalization (e.g. professional military training, military law) of the Laws of War. Measuring institutionalization would also have been a monumental undertaking as it would have required surveying all four cases professional military training and education programs. Much of this information would have been missing for authoritarian states. Again, based on the literature, I chose liberal-democratic norms as a proxy for attachment to norms specifically the norm of noncombatant immunity (344-349).

During my case selection, I did not specifically use the Policy IV dataset as the source for my selection of democratic and authoritarian cases although the dataset clearly codes these states on its continuum of regimes as some form of democracy or authoritarian regimes (Marshall, et al. 2012). I used what the average political science student intuitively perceives as democratic and authoritarian regimes during my case selection. For simplicity, I assume democratic regimes possess some form of liberal-
democratic norms (Valentino et al., 2006). These liberal-democratic norms are one explanatory factor for variation in aerial bombardment in addition to strategic necessity. Authoritarian states lack in varying degrees these liberal-democratic norms.

Downes (2006a, 2007) and Valentino, et al (2004, 2006) claim that the types of armed conflicts states find themselves fighting substantially influence adherence. These circumstances frame the strategic context. While time constraints and use of a different dataset prevented my re-creating their variables, I tested three separate conditions based on the intensity and types of armed conflicts fought by states. I used two variables from the UCDP/PRIO dataset including conflicts’ intensity based on the numbers of fatalities in the conflict and type of conflict defined by its primary actors (e.g. states, non-state armed challengers/opposition groups) and location (e.g. internal, external) (UCDP/PRIO Codebook, Version 4-2012). The first variable is whether or not an armed conflict is a minor conflict or a full-fledged war as coded by the UCDP/PRIO. Based on my theory, I expected aerial bombardment in wars to be more indiscriminate than minor conflicts.

The second UCDP/PRIO variable included type of armed conflict based on the type of actors (e.g. states, non-states actors) and location of conflict (e.g. overseas, internal). For example, UCDP/PRIO researchers code conflicts between states as interstate conflicts while armed conflicts between a state and an armed group trying to secede from, or overthrow the state as an internal conflict. Conflicts between a state and its colony or a state and some overseas non-state actor are coded as an extra-systemic war. For instance, the Algerian War of Independence and the First Indochina War would be extra-systemic conflicts. UCDP/PRIO researchers coded conflicts in which a state intervenes militarily on behalf of another state against an insurgency or against another
state on behalf of an insurgency as internationalized internal conflicts. The U.S. military interventions in Vietnam and Afghanistan are coded as such (Gleditch, et al, 2002; UCDP/PRIO Codebook, Version 4-2012).

Based on my theory alone and differences of opinion among scholars, I could not easily predict variations in aerial bombardment based on the type of conflict. One would intuitively expect interstate wars potentially to be more indiscriminate due to states generally possessing larger armed forces than insurgents and other non-state actors and this larger military capacity simultaneously increases the threat to states and the intensity of the combat (Renz 2012); however, there remains a conventional wisdom of sorts in parts of academia and popular media that alien identity (i.e. barbarian) based on race, culture or religion increases the risk of indiscriminate warfare (Downes 2004a, 2006a). If this thesis is correct, then one would expect internal conflicts, especially if based on identity, and extra-systemic conflicts which frequently are colonial to be more transgressive of discrimination in aerial bombardment.

In order to test any association between style or type of combat (e.g. conventional/regular, irregular—guerrilla), I created three variables to capture style of combat. The first variable categorized armed conflicts by the type of combatants and type of combat. These conflicts included conventional wars between regular armed forces fighting openly in force-on-force high intensity combat such as the 1991 Gulf War, guerrilla wars between states’ regular armed forces and guerrillas who use hit-and-run tactics and terrorism, and conflicts that are a mixture of both guerrilla and conventional operations as was the case in South Vietnam, 1961-1972. Based on the information in secondary sources used for this effort, I categorized each armed conflict as one of the
three. As noted earlier, some scholars perceive air forces behaving more lawfully in guerilla wars than conventional wars (Renz 2012). Creating these variables and coding the conflicts was necessary to test these associations.

These remaining explanatory factors I coded for, and tested included air forces’ cultures and bombing doctrines, air strategies actually employed, and possession of PGMs. It is conventional wisdom among some commentators that air forces with strategic air forces based on strategic airpower doctrines are pre-disposed to target civilians and civilian objects because they are organized, trained, and equipped to carry out punishment campaigns (Thomas 2001, 2006). These air forces developed out of early airpower theory based on the writings of Douhet, Mitchell, and Trenchard (Air Staff 1999, 3.12.3-3.12.4). Tactical air forces like the Luftwaffe in World War II reportedly are more discriminate because they are organized, trained, and equipped to support ground forces against opposing ground forces; therefore, they generally spare civilians and civilian objects (Downes 2006a, 2012). Downes (2006b, 2012) attempted to de-bunk this theory and claimed whether or not an air force is strategic or tactical makes no difference in how states leaders ultimately use them. The problem is Downes only uses the cases of the Royal Air Force, Luftwaffe, and U.S. Army Air Forces in World War II neglecting all the other conflicts involving airpower since World War II.

I also code states’ actual employment of generic air strategies to determine their influence on adherence. Downes (2006a) claims states generally delay targeting civilians until after counterforce strategies have stalled or failed. If true, one should expect counterforce strategies to spare civilians and civilian objects especially if combat occurs
in the countryside and outside urban terrain. One should expect counter-population strategies to involve indiscriminate bombardment.
CHAPTER 5: FINDINGS

5.1. Summary

In my four cases, states adhered or did not adhere to noncombatant immunity in aerial bombardment—that is the bombing norm—due to a combination of norms and strategic necessity. Across 40 armed conflicts, the four states examined protected civilians from direct attack 83% of the time and civilian objects two-thirds of the time. Variation in aerial bombardment primarily can be attributed to democratic norms conditioned by strategic necessity. My findings show that my initial theoretical argument does not sufficiently explain the historical record of aerial bombardment in my cases from 1946 to 2011. I claimed from the literature that power and interests, embodied in the term strategic necessity, rather than norms, specifically liberal-democratic norms, primarily explained states’ adherence to, or violation of, the bombing norm. From the case studies, I found the United States, USSR/Russia, and Israel showed a baseline respect for the bombing norm although this baseline varied substantially by regime type. The democracies exhibited a strong attachment to the norm while the authoritarian states showed weak attachment. Iraq was a particular outlier as norms showed very little influence at all on its conduct. This baseline respect served as a point of departure from which states deviated from, or outright violated, the norm when stressed by military circumstances. The authoritarian states were the quickest to depart their baselines and they violated the norm most egregiously.

In addition, I found that my theory that the “objective” national interests (e.g. peripheral, vital) or high stakes (e.g. national survival, loss of territory) of an armed conflict was a substantive factor in explaining adherence did not explain the historical
record. The use of force and the levels of force used were highly subjective and contingent. States were willing to use aerial bombardment disproportionately and indiscriminately causing substantial civilian casualties and physical damage to societies, in order to secure policy objectives in peripheral conflicts far removed from states’ “objective” vital interests. Take for an example the Soviet Union in Afghanistan. Soviet air forces, in addition to their ground forces, imposed catastrophic losses on Afghan society merely to save a socialist regime on the periphery of the Soviet Union. The U.S. in Korea used indiscriminate bombardment in a conflict far removed from core U.S. interests in Europe. Israel did substantial physical damage to Lebanon’s economy and civil infrastructure because Israel desired to stop Hezbollah’s routine harassment of northern Israel by way of raids, kidnappings, and rocket attacks. The U.S. dropped three times more ordnance on Southeast Asia in order to save a weak, non-communist regime in Saigon than it did on the Axis powers in World War II.

Even in armed conflicts in which there were objectively existential threats to states, my theory did not hold in the historical record. In 1948, Arab armies posed an existential threat to the new Israeli state yet the Israeli Air Force never systematically attacked Arab civilians in Israeli territory or threatened Arab cities. Iraq faced an existential threat in 2003 yet Baghdad barely got any combat sorties or surface-to-surface missiles aloft.

While this question is beyond the boundaries of my research objective in this effort, my research suggests that once governments have chosen to go to war and invested their reputations and subsequently their “blood and treasure” in an armed conflict they are willing to use substantial military force and even violate noncombatant
immunity if these measures will speed victory even in peripheral conflicts (Downes 2004a, 769). In this sense, a peripheral conflict, even in a “war of choice,” may be high stakes for a given regime. Strategic necessity then cannot be necessarily tied to the “objective” stakes of the war. Strategic necessity becomes whatever state leaders and their commanders perceive as the force necessary to achieve their military and political objectives in the conflict at hand whether it be for objectively low or high stakes.

5.2. Confluence of Norms and Strategic Necessity

My primary finding is that a combination of democratic norms or lack thereof conditioned by strategic necessity best explains the historical use of aerial bombardment post-World War II in my four cases. The two democracies examined in this study showed much greater commitment to the core standards of the bombing norm overall than did the authoritarian states although all states examined deviated from, or violated, the norm in varying degrees in a number of armed conflicts in the period. The two democracies did not intentionally target civilians in 97% of their armed conflicts while the authoritarian states did so in 60% of their conflicts. The democracies did not intentionally target civilian objects in 73% of their conflicts while authoritarian states did so in 50% of their conflicts (Table 5.6). The democracies were generally proportionate in 60% of their air operations while authoritarian states were disproportionate 50% of the time (Table 5.7). This substantial variation in the conduct of aerial bombardment between democracies and authoritarian can only be explained by democratic norms.
Table 5.1. Variation in Aerial Bombardment across Democratic Norms

<table>
<thead>
<tr>
<th>Discrimination</th>
<th>Norms (democratic)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Democracy</td>
<td>Authoritarian</td>
<td>Totals</td>
</tr>
<tr>
<td>Discriminate (protected civilians from direct attack)</td>
<td>29 (97%)</td>
<td>4 (40%)</td>
<td>33 (83%)</td>
</tr>
<tr>
<td>Indiscriminate (intentionally targeted civilians)</td>
<td>1 (3%)</td>
<td>6 (60%)</td>
<td>7 (18%)</td>
</tr>
<tr>
<td>Totals</td>
<td>30</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

This finding of the influence of norms on adherence does much to add credibility to Thomas’ claim that the bombing norm is increasing in influence globally; however, its true influence applies in practice primarily to democracies when Thomas suggests it implies much broader acceptance among all states as an ethical-legal norm (Thomas 2001, 148). My finding, although confined to four states’ conduct between 1946 and 2011, also fundamentally undermines some of Downes’ findings regarding regime type and adherence to noncombatant immunity. Downes (2004a, 2006a, 2007) claims that regime type is not the primary explanation for adherence but strategic necessity and democracies under certain circumstances are more likely than autocracies to victimize civilians.

Of the two democracies examined across 30 armed conflicts, only one democracy used indiscriminate bombing on a finite number of occasions in order to kill civilians intentionally. The United States intentionally targeted civilians in its fire bombings of Pyongyang and its bombardment of North Korean irrigation dams during the Korean War. The U.S. in these air attacks and others on smaller cities and towns used aerial bombardment to terrorize civilians in order to pressure the North Korean regime and population and induce population movements onto the roads in order to obstruct the
movement of Chinese and North Korean troops. As a matter of policy and strategy, U.S.
air forces never intentionally targeted civilians outright again after Korea.\(^{19}\) Despite
many claims to the contrary, the Israeli Air Force (IAF) never intentionally targeted
civilians between 1946 and 2011. The IAF did not target civilians even during the War
of Independence when there was an existential threat to the new state. In addition, the
Government of Israel made a conscious decision not to use airpower at all to target
Palestinians during the First Intifada but chose to use ground forces in a policing role.
This decision was rooted in legal and ethical norms derived from Israel’s democratic
society.

In a cross-tabulation of the influence of democratic norms and strategic necessity
(Table 5.2), I find that the historical record does not match wholly my expected outcome
(Tables 5.3, 5.4) although there is some congruence. My expectation was that strategic
necessity would prove decisive in predicting adherence. I was partially wrong. For
example, as expected, the democracies did not use indiscriminate bombardment in “low
need” conflicts; however, in “high need” conflicts, the democracies only violated
noncombatant immunity once. I expected more violations. The authoritarian states, as
expected, did not violate the bombing norm often when circumstances did not seem to
compel violation. Only in one instance did an authoritarian state intentionally target
civilians when there was no compelling circumstance to do so. Iraq aggressively and
sadistically targeted Kurds, including with the use of chemical weapons, during one of

\(^{19}\) U.S. aerial bombardment in South Vietnam remains a “borderline” case for me in regards to discriminate
or indiscriminate bombardment due to U.S. Army helicopter gunships unofficial and reprimanded practice
of “shooting first and asking questions later.” In addition, helicopter gunships’ practices in “free fire
zones” are also problematic for discrimination. (Lewy 1978) I coded U.S. aerial bombardment in South
Vietnam as discriminate (e.g. no intentional targeting of civilians) in Table 8.1 in Appendix B because the
preponderance of evidence suggested general adherence to the core standard of the norm. Another
researcher could reasonably disagree.
the Kurdish insurrections during the Iran-Iraq War. All other violations of the norm by authoritarian states occurred during arduous and threatening conflicts. These conflicts included the Russo-Afghanistan War, the Iran-Iraq War, the 1991 Gulf War, and Chechnya I and II.

Table 5.2. Cross-Tabulation of Norms and Strategic Necessity

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
<td>High Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 5.3. Predictions of Outcome #2: Strategic Necessity is Decisive

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>Discriminate bombardment</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>Indiscriminate bombardment</td>
</tr>
</tbody>
</table>

Table 5.4. Broadly Estimated Predictions of Outcome #2

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>Zero to few violations</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>Few to several violations</td>
</tr>
</tbody>
</table>

Outcome #4, both norms and strategic necessity as expressed in Table 5.5, best matches the historical record. For example, I expected democratic states to conduct discriminate bombing when there was a low military need to violate the bombing norm because democratic norms posed some ethical and political constraints to violation and
because there was no strong reason to do so. The historical record supports this expected finding. Between 1946 and 2011, the two democracies examined here never indiscriminately bombarded civilians when there was no compelling military reason to do so; however, when the need was high, only once did a democracy indiscriminately bomb and terrorize civilians. My theory expected more violations because even democracies would privilege security over norms especially in stalemated or deteriorating conflicts. For democracies, norms then proved a much stronger barrier to violation than the “pull” of strategic necessity even in arduous armed conflicts.

Table 5.5. Outcome #4: A Combination of Norms and Strategic Necessity

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
</tr>
<tr>
<td>Democracies</td>
<td>Discriminate</td>
</tr>
<tr>
<td></td>
<td>Indiscriminate</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>Indiscriminate</td>
</tr>
<tr>
<td></td>
<td>Indiscriminate</td>
</tr>
</tbody>
</table>

For authoritarian states, I expected a few to several violations during low need conflicts not because norms proved a substantial obstacle but because indiscriminate bombardment was inefficient and expensive in low need conflicts. History bears this out. Only once did an authoritarian state indiscriminately bombard civilians when the need was low. As expected, authoritarian states violated the norm more so when the need was high.

In regards to the second core standard of the bombing norm—that is the prohibition that states not intentionally bomb civilian objects, states used their air forces to conduct duress bombing 33% of the time. States used their air forces to conduct duress bombing in order to pressure civilian populations and their regimes to come to
terms with coercers short of decisive defeat (Pape 1996). In those conflicts when the
democracies used duress bombing, they intentionally did so in five of eight conflicts
when the need was low and did so in high need circumstances three times (Table 5.6).
Authoritarian states violated this prohibition in 50% of their conflicts including one time
when the need was low and four times when the need was high.

Table 5.6. Intentionally Targeted Civilian Objects

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Strategic Necessity</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
<td>High Need</td>
<td>Totals</td>
</tr>
<tr>
<td>Democracies</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
</tbody>
</table>

These findings regarding adherence to the protection of civilian objects were
partially unexpected. I expected democratic states to violate this aspect of the norm more
so under less stressful circumstances because civilian structures, provided they are
scarcely occupied by civilians, are not people. Civilian structures, as in the case of the
Korean War, can provide billeting to troops and warehouses for war materiel so they can
be lucrative targets; however, I did not expect the democracies to target them so often
under low need circumstances.

For both democracies and authoritarian states, I expected duress bombing to
associate more closely with greater strategic necessity. What these findings strongly
suggest is that democracies have a much lower normative threshold for bombarding
civilian objects than bombing civilians. Drawing from Pape (1996), Thomas (2001,
2006), Downes (2004a, 2006a) and Levy (2012), attacking civilian objects appears to be
a mechanism—a “third way”—by which democracies attempt to protect their forces,
harbor their resources, and try to shift the costs of war to the enemy by pressuring the
opposing regime and its population without crossing the “red line” of actually targeting civilians. In this sense, bombarding civilian objects is a substitute for bombing civilians which democratic norms generally have placed off limits to attack. McNamara in one of his memos to President Johnson regarding Rolling Thunder and public opinion seems to allude to this phenomenon that domestic and international publics were greatly adverse to aerial attacks that seemed to target people but much more ambivalent regarding attacks against structures (Gravel III 1971, 387).

The reason the authoritarian states in these cases did not bombard civilian objects when the need was low was due to the specific circumstances of the armed conflicts. Russia did not intentionally bombard civilian objects during the Dagestan War because the insurgents were localized and isolated and the vast majority of Dagestanis supported Moscow. Attacking civilian objects had no military utility and would have been recklessly counter-productive. In the Georgian War, Russia had limited objectives and the Georgian military was the primary obstacle to these objectives; therefore, Moscow pursued a counterforce air strategy that targeted Georgia’s armed forces rather than its civilian infrastructure.

In addition to protecting civilians and civilian objects, proportionality is the third standard of lawful aerial bombardment. Proportionality requires commanders and aircrews weigh military necessity against the human costs of bombardment. It is the most difficult aspect of the norm to adhere to and enforce. In about 58% of the conflicts, aerial bombardment was proportionate with democracies adhering 60% of the time and authoritarian states adhering 50% of the time (Table 5.7).
Table 5.7: Cross-Tabulation of Proportionality and Democratic Norms

<table>
<thead>
<tr>
<th>Proportionality</th>
<th>Norms (Democratic)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportionate</td>
<td>Democracy</td>
<td>Authoritarian</td>
</tr>
<tr>
<td></td>
<td>18 (60%)</td>
<td>5 (50%)</td>
</tr>
<tr>
<td>Disproportionate</td>
<td>12 (40%)</td>
<td>5 (50%)</td>
</tr>
<tr>
<td>Totals</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>

Firepower-heavy aerial bombardment and casualty aversion, which begat the force protection norm, are the best explanations for states, especially the democracies, deviations from, and violations, of proportionality. Since World War II, most states’ air forces have been organized, trained, and equipped for high-intensity conventional warfare. This is so because the greatest threats to states’ sovereignty are other states’ armed forces. For this reason, states build air forces with survivable aircraft and munitions with high explosive weights so that each combat sortie packs the maximum destructive capability. This arrangement works for conventional wars especially those outside populated areas; however, when high intensity combat is near and among populated areas, modern air forces can do substantial harm to civilians even unintentionally and even in the era of PGMs. For this reason, modern air forces, with a few recent exceptions, are generally unsuited for counter-terrorism and counterinsurgency operations. Their aircraft are too fast, fly too high, and are laden with heavy ordnance. Aerial bombardment by modern air forces in irregular wars is bound to kill and injure many innocents.

Second, in 9 out of 11 armed conflicts in which democracies violated proportionality, there was a pattern of purposively shifting the risks of combat to civilians in order to protect friendly combatants. In Israel, Levy (2012) finds that casualty aversion among the Israeli public and now its government has compelled the IDF to
protect its manpower by using heavy firepower in its counter-terrorism and counterinsurgency operations against the Palestinians and Lebanese. His data show that fewer and fewer Israeli soldiers and civilians are being killed in its conflicts but more and more of the civilians of its adversaries are being killed (170-174). This pattern of risk transfer is also evident in U.S. aerial bombardment in South Vietnam and Russian air operations in Chechnya.

In regards to U.S. aerial bombardment in South Vietnam, U.S. conduct was just the opposite of what some of the scholars in the force and norms research program would have predicted. While the Johnson Administration strictly controlled aerial bombardment over North Vietnam in order to protect civilians as well as keep the Chinese and Soviets out of the war, U.S. aerial bombardment in the South was immensely firepower-heavy resulting in substantial civilian casualties and property damage. States are expected to put enemy civilians at risk but not those of their allies as was the case in South Vietnam. A rational calculation of power and interests is the only logical explanation for this variation. North Vietnam had powerful great powers as sponsors thus Hanoi, Beijing, and Moscow successfully deterred more intensive bombardment of the North. South Vietnam, Laos, and Cambodia were dependent in varying degrees on U.S. protection; therefore, U.S. aerial bombardment against regulars and insurgents in these territories was more intensive.

5.3. Strategic Circumstances Matter

Valentino, Huth, and Croco (2006) claim in their work on civilian victimization that the strategic aims of states and the natures of the armed conflicts they are in are very influential in determining states’ choices to spare or target civilians (340). While
democratic norms, or lack thereof, are decisive in explaining adherence to the core standards of noncombatant immunity in this research effort, strategic circumstances conditions adherence. Excepting the United States, the authoritarian states fought a higher percentage of wars as opposed to minor conflicts and they also fought a higher percentage of “high need” conflicts than the United States and Israel. Although for example 75% of U.S. armed conflicts were wars according the UCDP/PRIO dataset, I coded only 19% of all of U.S. conflicts as “high need.”

As shown in Table 5.6, only one authoritarian state, Iraq, conducted indiscriminate bombing when the need was low yet authoritarian states did so when the need was high five times. As shown in Table 5.8, 60% of Russia’s armed conflicts examined in the period were wars, as opposed to merely conflicts. Russia only violated the bombing norm during wars and I coded all of those wars as high need. All of Iraq’s armed conflicts were coded as wars and I coded 60% of them as high need. For Israel, 36% of its armed conflicts were wars but only 21% of all of its conflicts in the period were high need according to my assessment. Strategic circumstances mattered.

Table 5.8. Cross-Tabulation of Cases and Intensity of Armed Conflicts

<table>
<thead>
<tr>
<th></th>
<th>Minor</th>
<th>War</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>4 (25%)</td>
<td>12 (75%)</td>
<td>16</td>
</tr>
<tr>
<td>Israel</td>
<td>9 (64%)</td>
<td>5 (36%)</td>
<td>14</td>
</tr>
<tr>
<td>USSR/Russia</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
<td>5</td>
</tr>
<tr>
<td>Iraq</td>
<td>0 (0%)</td>
<td>5 (100%)</td>
<td>5</td>
</tr>
<tr>
<td>Totals</td>
<td>28 (70%)</td>
<td>12 (30%)</td>
<td>40</td>
</tr>
</tbody>
</table>
Table 5.9. Cross-Tabulation of Cases and Strategy Necessity

<table>
<thead>
<tr>
<th>Cases</th>
<th>Strategic Necessity</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low Need</td>
<td>High Need</td>
<td>Totals</td>
<td></td>
</tr>
<tr>
<td>U.S.</td>
<td>13 (81%)</td>
<td>3 (19%)</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>11 (79%)</td>
<td>3 (21%)</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>USSR/Russia</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Iraq</td>
<td>2 (40%)</td>
<td>3 (60%)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>28 (70%)</td>
<td>12 (30%)</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Supporting the previous observations, the data from my four cases also show specifically that the intensity of an armed conflict, coded as minor conflicts or wars by the UCDP/PRIO dataset (Gleditsch, et al, 2002), influences adherence to the bombing norm (Table 5.10). For example, all of the seven armed conflicts in my cases which I coded air forces conducting indiscriminate bombing were previously coded as wars rather than minor conflicts in the UCDP/PRIO dataset. None of the armed conflicts in my cases coded as minor conflicts by the UCDP/PRIO were indiscriminate according my coding scheme. In total, 39% of all wars resulted in indiscriminate bombardment. Wars were also more likely than minor conflicts to result in disproportionate bombardment and also more likely to result in duress bombing.

Table 5.10. Variation in Aerial Bombardment in Minor Armed Conflicts and Wars

<table>
<thead>
<tr>
<th>Aerial Bombardment</th>
<th>Minor</th>
<th>War</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discriminate</td>
<td>15 (45%)</td>
<td>18 (55%)</td>
<td>33</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td>0</td>
<td>7 (100%)</td>
<td>7</td>
</tr>
<tr>
<td>Disproportionate</td>
<td>7 (44%)</td>
<td>9 (56%)</td>
<td>16</td>
</tr>
<tr>
<td>Duress Bombing</td>
<td>4 (31%)</td>
<td>9 (69%)</td>
<td>13</td>
</tr>
</tbody>
</table>

In regards to conflict type based on the type of actors (e.g. states, non-state armed opposition) and location of conflict (e.g. external, internal), it is difficult to draw strong

---

20 Coding for what constitutes a minor armed conflict and a war were drawn from UCDP/PRIO’s coding of the armed conflicts in their database.
generalizations. Of the 15 interstate conflicts, 80% were discriminate while 20% were not (Table 5.11). In those same conflicts, 27% resulted in duress bombing and 20% were disproportionate. In regards to the 12 internal conflicts, 75% were discriminate while 25% were not. Of those same conflicts, 58% resulted in duress bombing while 75% were disproportionate. In the 13 internationalized internal conflicts, 92% were discriminate while 8% were not. Internal and internationalized internal armed conflicts combined represented 57% of indiscriminate bombardment, 69% of duress bombing, and 81% of disproportionate bombardment. These figures suggest internal and internationalized internal conflicts are more likely to result in violations of and deviations from, the bombing norm.

Table 5.11. Variation in Aerial Bombardment across Different Types of Conflicts$^{21}$

<table>
<thead>
<tr>
<th>Aerial Bombardment</th>
<th>Type of Conflict</th>
<th>Extrasystemic</th>
<th>Interstate</th>
<th>Internal</th>
<th>Int'l Internal</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discriminate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td></td>
<td>0</td>
<td>12</td>
<td>9</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>Duress Bombing</td>
<td></td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Disproportionate</td>
<td></td>
<td>0</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

For type of conflict categorized by the type of combatant (e.g. regulars, guerrillas) and type of combat (e.g. conventional, guerrilla, both), there are no strong generalizations. Renz and Scheipers (2012) suggest that aerial bombardment in conventional conflicts is more likely to be indiscriminate because belligerents do not need the goodwill of the enemy population and the enemy population likely tangibly

$^{21}$ UCDP/PRIO coded all of the armed conflicts in their database based on the type of actors and location of the conflict. For example, interstate armed conflicts are conflicts between independent, sovereign states. Extrasystemic armed conflicts occur between states and their colonies or between states and non-state entities in locations outside the state. Internal armed conflicts are generally between a state and an insurgency. Internationalized internal armed conflicts generally involve foreign states intervening on behalf another state or an insurgency during an ongoing internal conflict. These categories are based on the type of armed actor and where the conflict took place.
supports their state’s war effort while guerrilla wars are more likely to spare civilians because the counterinsurgent needs the support of the people to prevail (39-40).22 My cases only very weakly support this supposition because 43% of conventional conflicts resulted in indiscriminate bombing while only 29% of guerrilla wars resulted in indiscriminate bombing. The problem is that when hybrid wars—that is combinations of conventional and guerrilla wars like South Vietnam and Lebanon—are considered with guerrilla wars, Renz and Scheipers’ theory finds no support because 58% of all conflicts with indiscriminate bombardment were either guerrilla or hybrid and 76% of disproportionate bombardment and 61% of duress bombing occurred in either guerrilla wars or hybrid wars.

Table 5.12. Variation in Aerial Bombardment across Different Type of Conflicts

<table>
<thead>
<tr>
<th>Aerial Bombardment</th>
<th>Type of Conflict (combatants &amp; combat)</th>
<th>Conventional</th>
<th>Guerrilla</th>
<th>Both</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discriminate</td>
<td></td>
<td>19 (58%)</td>
<td>7 (21%)</td>
<td>7 (21%)</td>
<td>33</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td></td>
<td>3 (43%)</td>
<td>2 (29%)</td>
<td>2 (29%)</td>
<td>7</td>
</tr>
<tr>
<td>Disproportionate</td>
<td></td>
<td>4 (25%)</td>
<td>6 (38%)</td>
<td>6 (38%)</td>
<td>16</td>
</tr>
<tr>
<td>Duress Bombing</td>
<td></td>
<td>5 (38%)</td>
<td>5 (38%)</td>
<td>3 (23%)</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 5.13. Variation in Aerial Bombardment across Air Forces’ Cultures and Bombing Doctrines

<table>
<thead>
<tr>
<th>Aerial Bombardment</th>
<th>Air Forces’ Cultures and Airpower Doctrines</th>
<th>Tactical</th>
<th>Strategic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discriminate</td>
<td></td>
<td>18 (60%)</td>
<td>15 (44%)</td>
<td>33</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td></td>
<td>6 (86%)</td>
<td>1 (14%)</td>
<td>7</td>
</tr>
<tr>
<td>Duress Bombing</td>
<td></td>
<td>9 (69%)</td>
<td>4 (31%)</td>
<td>13</td>
</tr>
</tbody>
</table>

What of the influence of air forces’ cultures, bombing doctrines, and air strategies actually employed in the cases? Downes (2006b, 2012) claims air forces’ cultures and

bomading doctrines do not explain adherence or non-adherence. He claims cultures and doctrines do not determine the air strategies chosen by leaders and commanders but that leaders choose their air strategies based on the aims and circumstances of the war at hand. My findings are similar.

The elementary notion is that air forces with tactical or counterforce cultures and doctrines are less likely to violate noncombatant immunity because they are trained, organized, and equipped to support friendly ground forces against enemy ground forces while air forces with strategic cultures and punishment doctrines are much more likely to target civilians because they are organized, trained, and equipped to do so and relatively unprepared to conduct aerial bombardment against fielded armies. In my cases, 50% of democratic air forces had tactical cultures, per conflict, while 50% had strategic cultures (Table 5.14) yet democracies adhered to the prohibition against killing civilians directly 97% of time and against attacking civilian objects 73% of the time. Both authoritarian states had tactical cultures and doctrines yet they intentionally bombarded civilians 60% of the time and civilian objects 50% of the time.

Table 5.14. Variation in Aerial Bombardment across Air Force Cultures and Doctrines

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Air Forces' Cultures and Airpower Doctrines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tactical</td>
</tr>
<tr>
<td>Democracies</td>
<td>15 (50%)</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>10 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>25 (63%)</td>
</tr>
</tbody>
</table>

Tactical air forces flew in 60% of armed conflicts in which aerial bombardment was strictly discriminate while strategic air forces flew in 44% of conflicts in which bombardment was strictly discriminate. Of the six of seven conflicts in which there was
indiscriminate bombing, tactical air forces flew those conflicts. Strategic air forces were involved in only one conflict, Korea, when there was indiscriminate bombardment. Tactical air forces flew 69% of conflicts in which there was duress bombing while strategic air forces flew 31%. These data show that air forces’ cultures and bombing doctrines are not satisfactory explanations for adherence.

What of the influence of air strategies actually employed in the four cases? Counterforce strategies occurred in 60% of the conflicts while a mixture of both counterforce and counter-population were used in 40% of the conflicts (Table 5.15). No state employed a purely counter-population strategy. The democracies employed counterforce aerial bombardment in 67% of their conflicts and a mix of both counterforce and counter-population strategies in 33%.

Table 5.15. Variation in Aerial Bombardment across Air Strategies Employed

<table>
<thead>
<tr>
<th>Aerial Bombardment</th>
<th>Air Strategies employed</th>
<th></th>
<th></th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discriminate</td>
<td>Counterforce</td>
<td>0</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Counter-Population</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>24</td>
<td>0</td>
<td>40</td>
</tr>
</tbody>
</table>

Table 5.16. Variation in Air Strategies employed by Democratic Norms

<table>
<thead>
<tr>
<th>Norms</th>
<th>Air Strategies employed</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Counterforce</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Democracy</td>
<td>Counter-Population</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>Both</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>16</td>
<td>40</td>
</tr>
</tbody>
</table>
All of the uses of counterforce strategies resulted in wholly discriminate bombardment—that is no intentional targeting of civilians or civilian objects—while 14 of 16 employments of the mixed strategies resulted in either indiscriminate bombardment or duress bombing. What these data suggest is that while democratic norms are indeed the decisive factor in adherence to the bombing norm the type of airpower strategy being employed may also be a factor contributing to adherence seeing that 67% of all democratic strategies were counterforce while only 40% of authoritarian states were.

Aerial bombardment in armed conflicts predominantly of a counterforce nature is much less likely to be indiscriminate in the cases examined here because air forces concentrated their firepower on the adversaries’ armed forces rather than civilians. The adversaries’ armed forces were the primary threat to states’ security or obstacle to states’ policy objectives so the high commands targeted enemy forces rather than civilians and civilian objects. The only qualifier to this observation is that high intensity conventional combat in urban areas or aerial bombardment in guerrilla wars will be more likely to harm civilians even unintentionally because they occur in and amongst the people.

5.5. Influence of Precision Guided Munitions

Thomas (2001) claims that PGMs make it much easier for states to adhere to the bombing norm and that publics now expect the use of PGMs in order to protect civilians (158-161, 171-172). These claims are true; however, the data and close examination of the 40 armed conflicts in this study do not support the implied supposition that PGMs have substantially improved states’ behavior although PGMs likely have improved adherence, specifically in regards to proportionality, for democracies and the democracies proudly broadcast how many PGMs they are using in order to persuade publics that they
are trying to protect civilians in their campaigns (158-160). The historical record suggests that PGMs do not substantially explain adherence.

Table 5.17. PGMs and Protection of Civilians

<table>
<thead>
<tr>
<th>Aerial Bombardment</th>
<th>Possession and Use of PGMs</th>
<th>No Data on Usage</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Used PGMs</td>
<td>No PGMs possessed</td>
<td></td>
</tr>
<tr>
<td>Discriminate (protected civilians from direct attack)</td>
<td>18 (55%)</td>
<td>11 (33%)</td>
<td>4</td>
</tr>
<tr>
<td>Indiscriminate (intentionally targeted civilians)</td>
<td>2 (29%)</td>
<td>5 (71%)</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>20 (50%)</td>
<td>16 (40%)</td>
<td>4</td>
</tr>
</tbody>
</table>

In 55% of the 16 conflicts in which air forces conducted discriminate aerial bombardment, they used PGMs and one-third of discriminate air operations were in a non-PGM environment (Table 5.17); however, these numbers are somewhat misleading because air forces used PGMs in Vietnam and Chechnya, which were counted as conflicts with PGM use, but they did so in very small numbers because PGMs were not available in substantial numbers. This point also applies to the 1991 Gulf War when air forces used PGMs only 9% of the time and in Serbia-Kosovo when air forces used them 38% of the time, but they specifically did so where it mattered most in urban areas. However, these data suggests there is something else at work in these cited conflicts because PGMs still did not compose the majority of ordnance used yet these were generally discriminate air campaigns.

The mere possession and use of PGMs do not necessarily result in discriminate and proportionate air campaigns. Russian air forces used PGMs in its two wars in Chechnya but they frequently violated the norm there. Even if Russian air forces had
possessed more PGMs, it is uncertain the Russians would have used them necessarily to spare civilians but to increase their munitions’ lethality against Chechen combatants.

Even democracies’ mere possession of PGMs does not guarantee pristine air campaigns. Democracies have accelerated their procurement of, and use of, PGMs to the point PGMs increasingly are the majority of munitions used in their air campaigns yet there remain exceptions to their use even in the PGM era. As illustrated by the 2006 Second Lebanon War, PGMs are not so effective against dispersed and hidden combatants. In these circumstances, states may still feel compelled to use air-delivered unguided weapons, like cluster munitions, in area targeting which will drive up civilian casualties especially if used in built-up areas.

5.7. Airpower: Uniquely Indiscriminate?

As noted in the introduction, some of my derivative questions from my primary research question were: Is airpower a particularly indiscriminate combat arm? Is it a special temptation to victimize civilians because airpower frequently can range civilian populations when ground forces cannot do so and do air forces go “ugly early” in armed conflicts? The data do not support these suppositions.

First, compared to ground forces in the conflicts examined here, air forces were somewhat more discriminate at 83% while ground forces were slightly less so at 75% (Table 8.15). The variance was in regime type. In 60% of their armed conflicts, authoritarian states conducted some form of indiscriminate bombing (Table 8.2). Similarly, in 60% of their conflicts, those authoritarian states’ ground forces violated noncombatant immunity by some means. In 26 of 30 armed conflicts—87%, the ground forces of democratic states adhered to noncombatant immunity. Only in four of 30
conflicts did the ground forces of democracies violate noncombatant immunity. Contrary to popular opinion then, the ground forces of democracies violated noncombatant immunity more so than their air forces.

**Table 5.18. Variation in Ground Forces’ Conduct vis-à-vis Regime Type/Norms**

<table>
<thead>
<tr>
<th>Norms (Democratic)</th>
<th>Ground Forces violated noncombatant immunity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Democracies</td>
<td>4 (13%)</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>6 (60%)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>10 (28%)</td>
</tr>
</tbody>
</table>

**Table 5.19. Variation in Aerial Bombardment vis-à-vis Ground Forces’ Conduct**

<table>
<thead>
<tr>
<th>Aerial Bombardment</th>
<th>Ground Forces violated noncombatant immunity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td>5 (71%)</td>
</tr>
<tr>
<td>Duress Bombing</td>
<td>6 (46%)</td>
</tr>
<tr>
<td>Discriminate</td>
<td>5 (15%)</td>
</tr>
</tbody>
</table>

Second, in my four cases, air forces’ adherence to, or violations of, the bombing norm are associated with ground forces’ adherence to, or violations of, noncombatant immunity. This finding undermines the conventional wisdom among some airpower critics that air forces generally are more predisposed to violations of noncombatant immunity than other combat arms (Meilinger 1993, 103-104). In 71% of the conflicts in which air forces conducted indiscriminate bombing, their sister services, the ground forces, also violated noncombatant immunity. In five armed conflicts in which states air forces’ adhered to strict discrimination (e.g. no direct targeting of civilians), their ground counterparts violated noncombatant immunity in some way. Only in two conflicts, Korea and the Iran-Iraq War, did air forces use indiscriminate bombing and the ground forces did not violate noncombatant immunity.
Table 5.20. “Ugly Early”: Began Indiscriminate or Duress Bombing early in the conflict

<table>
<thead>
<tr>
<th>Norms (democratic)</th>
<th>Yes</th>
<th>No</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democracies</td>
<td>4 (13%)</td>
<td>26 (87%)</td>
<td>30</td>
</tr>
<tr>
<td>Authoritarians</td>
<td>3 (30%)</td>
<td>7 (70%)</td>
<td>10</td>
</tr>
<tr>
<td>Totals</td>
<td>7 (18%)</td>
<td>33 (83%)</td>
<td>40</td>
</tr>
</tbody>
</table>

Third, air forces did not generally “go ugly early” in conflicts (Table 8.17). States went “ugly early”—that is intentionally targeted civilians or civilian objects—in seven conflicts, 18% of the time. Democracies went “ugly early” four times while authoritarian states did so three times; however, there is a qualitative difference in the severity of the bombardment. The democracies initiated duress bombing early in these conflicts while the authoritarian states conducted both indiscriminate bombing and duress bombing early.

What these data strongly suggest is that the “pull” of norms and the “push” of strategic necessity generally apply equally to separate combat arms. With some exceptions, like Korea, air forces generally are not conducting operations whose normative groundings are wholly divorced from their sister services. If states’ air forces are violating noncombatant immunity, it is likely their ground forces are in violation as well.

5.8. Other Relevant Findings

Downes “Desperation to Win” logic (2004a, 2006s) is not a one conflict phenomenon. Downes’ finds that as armed conflicts grow long and costly for states they are more likely to target civilians; however, I find in the cases of Israel and Russia that war-weariness can extend the “Desperation to Win” logic over a period of relatively back-to-back conflicts and cause subsequent conflicts to experience harsher aerial
bombardment than the previous one. This happened to Israel as it transitioned from low-level violence with the PLO and Hezbollah in Lebanon in the mid-to-late 1980s to greater intensity in the 1990s and 2000s. Each episode of violence fuelled more incremental deviations from the norm. The same phenomenon happened in the two Intifadas. Russian aerial bombardment in the First Chechen War was intensive and frequently violated the norm; however, the Second Chechen War saw even harsher aerial bombardment as if the “Desperation to Win” logic had transferred from the first conflict to the second as if little happened in between.

Scholars in the airpower and norms literature and human rights advocates have been highlighting for decades that there is no specific body of international law that governs air warfare (Meilinger 1994, 103-106; Thomas 2001, 148). This is superficially true. However, it is disingenuous for scholars and human rights advocates to continue to cite this as some glaring gap in international law that makes air forces more likely to behave lawlessly than ground or naval forces for which there are specific legal codes (Roberts 2000, 67-136). Whatever gaps remained in governing aerial bombardment were mostly closed by the 1977 Additional Protocol I to Geneva even though the Protocol is not specifically devoted to air warfare but all ways and means of armed force (Roberts 2000, 447-456; Meilinger 1993, 112-113). As a matter of fact, Protocol I is so specific in regards to targeting by any military means that the U.S. Senate declined to ratify it most likely due to the fact Protocol I could be interpreted as substantially undermining the U.S. military advantage in airpower (Meilinger 1993, 113).

Aerial bombardment can be deadly for civilians but so can “death squads,” internment camps, and naval blockades (Meilinger 1994, 103-106, 112). In its most
extreme and modern form—nuclear weapons, aerial bombardment could be genocidal
and civilization-ending, but that scenario has not yet happened—thankfully! In the
histories I reviewed, I found a distinct bias among journalists, human rights advocates,
and lawyers against aerial bombardment (110). That is to say they labeled numerous
exercises of aerial bombardment as indiscriminate when there was simply no substantial
evidence of that being true. This was particularly evident in U.S. aerial bombardment
over North Vietnam, Russia’s air campaigns in Chechnya, and Israel’s air campaigns in
Lebanon and the Territories. Journalists, advocates, and attorneys appeared to
overestimate grossly civilian casualties caused by aerial bombardment (110) and made
themselves agents of influence in armed conflicts for which they were outside observers.

I do not expect journalists, attorneys, and human rights advocates to be
proponents of, or apologists for, aerial bombardment, but I expect an attempt at
objectivity when reporting and investigating the conduct of wars. Questions and issues of
peace and war are some of the most important political leaders, diplomats, military
professionals, scholars, and laypeople discuss and they need access to facts. Most states
engaged in armed conflicts understandably desire to, and have a vested interest in,
portraying their air operations as lawful and most state targets of aerial bombardment
have an interest in portraying their adversaries as behaving unlawfully. Someone needs
to be an honest broker. I expect that of journalists, non-governmental organizations, and
international investigative bodies.

While the reason for this bias is beyond the scope of my research, I suspect two
interrelated motivations based on the histories I reviewed. First, journalists, human rights
advocates, and human rights lawyers are still thinking in the shadows of aerial
bombardment in World War II specifically the “city busting” campaigns against Germany and Japan. In *Ethics of Destruction*, Thomas (2001) dedicates significant coverage to the development of, break-down, and reinvigoration of the bombing norm pre-, during, and post-World War II and he too seems to pivot the entire history of aerial bombardment around World War II. It seems many in the media and human rights community are significantly fearful that anything but negative coverage of aerial bombardment will legitimize a return to indiscriminate bombardment on the scale of World War II.

Second, I suspect there is a “David and Goliath” effect underway (Record 2007). One of the phenomena of the post-World War II era in international relations, especially since the 1970s, is the decrease in interstate wars and the increase in internal wars (Williams 2008, 156, 159). Some in the media and human rights community are either cheering for, or feel substantial empathy for the “underdogs” in these armed conflicts so they are tempted to bias their reporting especially since the “Goliath” in most of these conflicts is conducting aerial bombardment. While I did not calculate the numbers using any scholarly work on asymmetric wars (Mack 1975, Arreguin-Toft 2001; Downes 2004b, Lyall 2009), I estimate that roughly 75% of the armed conflicts I examined in my cases were asymmetric. That is they involved a great power or regional power against a weaker state or a non-state armed group. In my research, I perceive that I observed some bias related to the “David vs. Goliath” effect because most of my conflicts were asymmetric.

Third, I also suspect that some in the media, human rights community, and academia desire greater restrictions on states’ exercise of airpower; hence, their
persistence in citing the lack of specific international codes in regards to aerial bombardment. Due to its visibility, reach, and history of indiscriminate bombing, they have singled out airpower as a much easier target for specific scrutiny in an effort to lobby for more international legislation in this area of armed conflict. While a scholar of aerial bombardment and norms, Thomas is also an obvious advocate of greater restrictions on aerial bombardment as he more clearly showed in his 2006 work on duress bombing.
CHAPTER 6: THE UNITED STATES AND THE KOREAN WAR

Between 1946 and 2011, the United States engaged in 16 armed conflicts involving the use of aerial bombardment against its adversaries. In those conflicts, 94% of U.S. bombing was strictly discriminate in the sense that it did not intentionally target civilians. In just one of those conflicts, Korea, did the U.S. conduct indiscriminate bombardment. The U.S. never intentionally targeted civilians again although in 25% of its conflicts air forces intentionally targeted civilian objects as part of a campaign of “duress bombing” and U.S. aerial bombardment was also disproportionate in 25% of those conflicts. At the same time, the U.S. never fought again in the time period a high-intensity conflict against massive field armies as it did in Korea.

Table 6.1. U.S. Conduct of Aerial Bombardment, 1946-2011

<table>
<thead>
<tr>
<th>Case</th>
<th>United States</th>
<th>Conduct of Aerial Bombardment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Indiscriminate</td>
</tr>
<tr>
<td>Armed Conflicts</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>KOREAN WAR</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>NORTH VIETNAM</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>SOUTH VIETNAM</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LAOS</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>CAMBODIA</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LEBANON INTERVENTION</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>GRENADA INVASION</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>PANAMA INVASION</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>1991 GULF WAR</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>KOSOVO-SERB WAR</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>AFGHANISTAN INVASION</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>AFGHAN-COIN CAMPAIGN</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>GWOT--DRONE WAR</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>IRAQ INVASION</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>IRAQ-COIN CAMPAIGN</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LIBYA INTERVENTION</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>
Table 6.2. Categorization of U.S. armed conflicts, 1946-2011

<table>
<thead>
<tr>
<th>Case</th>
<th>Intensity</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Armed Conflicts</td>
<td>Minor</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>War</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 6.3. Conduct of Aerial Bombardment across Strategic Necessity, 1946-2011

<table>
<thead>
<tr>
<th>United States</th>
<th>Strategic Necessity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrimination</td>
<td>High Need</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low Need</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td>High Need</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Low Need</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Duress</td>
<td>High Need</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low Need</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Disproportionate</td>
<td>High Need</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low Need</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

What explains U.S. air forces’ adherence to, violation of, or deviation from, the bombing norm across 16 armed conflicts? There are two factors that primarily account for U.S. adherence and non-adherence and three secondary factors that are in several ways the confluence of the first two factors. The first factors are democratic norms and strategic necessity. The three secondary factors are military culture and airpower doctrine, the force protection norm, and the force structure of U.S. air forces. While democratic norms have constrained U.S. air forces from egregiously victimizing civilians since Korea, the American force protection norm, also borne of democratic norms, has created an impulse to wage wars intensely in order to win quickly at minimal U.S. losses. Influenced by Jomini and Clauswitz as well as the force protection norm, the armed services have long embraced a doctrine of annihilation which has created a predisposition to employ firepower-heavy operations. Built on this culture of annihilation is a strategic airpower doctrine that frequently has viewed civilians as legitimate objects of bombardment. Taken together, these trends have produced air forces with fast, big fighters and bombers with high explosive ordnance loads.
First and foremost, there is little question that democratic norms fundamentally inform and shape U.S. aerial bombardment. In three conflicts I assessed to be “high need,” U.S. air forces abided by the bombing norm in two of three. The norm of noncombatant immunity is firmly internalized today in the thinking of political elites in the United States and in much of the officer corps. This internalization accounts for much of U.S. adherence (Meilinger 1993, 109-110; Woodward 1991, 139, 374; Kahl 2007, 45; Thomas 2001, 152-155, 161).

While the bombing norm was in varying degrees accepted prior to World War II, its collapse was short-lived as it bounced back shortly in Korea. At the very start of the Korean War, President Truman verbally ordered that there be no indiscriminate bombing (Futrell 1983, 41). The motivation for this order was primarily a normative judgment by Truman that civilians, even of an enemy state, should be spared direct attack because intentionally killing civilians was inhumane (41-42). As Thomas claims, the devastation of World War II aerial bombardment had changed minds about what was and was not acceptable bombardment (Thomas 2001, 170-171).

Despite this presidential order, senior U.S. Air Force commanders immediately petitioned General MacArthur to go “ugly early” by firebombing five North Korean cities (Futrell 1983, 42, 186-187). MacArthur declined for what appeared to be both humanitarian and political reasons (Crane 2000, 31-33); however, within months of that order, MacArthur ordered air forces to spare no structure between the Yalu and UN Forces. Each U.S. armed conflict since Korea has witnessed ever greater efforts by civilian leaders and senior commanders to increase discrimination and proportionality (Thomas 2001, 147-177). The data show a rapid decline in the number of civilian
fatalities caused directly by U.S. aerial bombardment since Korea (169). The internal debates within the U.S. Government made public regarding aerial bombardment since 1950, the procurement practices of U.S. air forces, and the actual exercise of aerial bombardment since 1950 clearly show concern for, and ever greater efforts to spare civilians (Gravel 1971 III, IV; Woodward 1991; Mann 1995; Thomas 2001). In addition to this, the U.S. Joint Staff in the last decade has developed and issued the first-ever, science-based, intelligence-driven collateral damage estimation methodology that in varying degrees quantifies the thorny questions of lawful targets and proportionality (CJCSI 3160.01 2009).

The second explanation for adherence is military utility or lack of strategic necessity. In other words, U.S. air forces did not violate the norm because they had no compelling reason to do so (Thomas 2001, 140). In the 16 U.S. armed conflicts examined in this study, only three were “high need” and most of these conflicts could be considered substantially asymmetric and peripheral to core U.S. interests. U.S. Forces had such a monopoly on force that there was little temptation to target civilian populations.

If the norm of noncombatant immunity internalized in U.S. policymakers and institutions primarily explains U.S. air forces’ adherence, what explains instances of non-adherence or in most conflicts since World War II deviations from the norm? Strategic necessity best explains U.S. air forces’ outright violations, as in Korea, as well as its numerous deviations since Korea.
First, the U.S. armed services traditional and doctrinal fixation on annihilation of enemy forces in combat partially explains non-adherence (Kahl 2007, 8, 32, 43-44). Shaped by both Jomini and Clausewitz (Mann 1995, 34-35), U.S. Forces have long preferred to seek out climactic battles with their enemies rather than engage in indirect forms of warfare that may require patience and less-than-absolute outcomes. U.S. policymakers and commanders have long associated military defeat of their adversaries’ armed forces with political success. When applied to aerial bombardment, this tradition resulted in air forces organized, trained, and equipped for high intensity combat (35). These air forces procured aircraft manufactured to carry maximum bomb loads with munitions designed to incorporate the highest explosive weights. Air forces built on these premises are inherently prone to cause disproportionate damage to civilians and civilian objects.

Second, and partially related to the doctrine of annihilation, the force protection norm substantially explains non-adherence (Kahl 2007, 43-44; Renz 2012, 37). As a vibrant civil society and democracy, U.S. society has grown increasingly casualty-averse since the 19th century but even more so since the Vietnam War. For this reason, U.S. Forces have long preferred to substitute firepower for manpower (Lewy 1978, 70, 446-447) going back to the Union Army in the Civil War. With the advent of aerial bombardment in 1911 and aircraft with stronger airframes in the 1920s-1930s, this trend has resulted in air forces built to deliver the maximum firepower on the battlefield or urban areas.

Third, and related again to annihilation and force protection, is the U.S. Air Force’s strategic airpower doctrine that views an enemy state’s political and economic
networks as acceptable and vulnerable targets whose destruction or impairment may result in victory short of U.S. ground force operations or at least the total defeat of the enemy’s ground forces (Warden 1988, 9-10; Mann 1995, 35-36, 71-74; Pape 1996, 18-19, 46-47; Stephens 2001, 40-42). While the U.S. Air Force has long officially eschewed as illegal and immoral direct attacks on civilian populations (Meilinger 1993, 109-110)—terror bombing—although it totally violated the bombing norm in World War II (Thomas 2001, 140-149), it has long claimed that the psychological and material-deprivation effects of aerial bombardment may compel regimes and their populations to sue for peace short of decisive defeat (Pape 1996, 18-19, 46-47; Overy 1998, 40-43). This doctrine resulted in the legitimization of indirect targeting of the civilian population through what Thomas labeled “duress bombing”—the intentional targeting of civilian infrastructure and economic assets—which remains ethically and legally questionable (Thomas 2006; Overy 1998, 40-43).

Fourth, and again related to the doctrines and issues of annihilation, force protection, and strategic airpower, U.S. air forces have had difficulty adhering strictly to the bombing norm, especially in regards to proportionality, because the technology simply was not available to conduct precision attacks on lawful targets without endangering the civil population (Thomas 2001, 139-140). These circumstances usually resulted in collateral damage where in the tension between military necessity and human suffering commanders chose to privilege necessity rather than the civilian population. Since PGMs have become widely available and the U.S. Government has had the finances to pay for them, U.S. aerial bombardment has become rapidly more precise and less likely to cause civilian fatalities and damage to civilian property (169, 171-173).
6.1. Aerial bombardment in Korea, 1950-1953

Throughout the three-year long Korean War, President Truman, his advisors, and his commanders, and subsequently the Eisenhower Administration, formulated political and military objectives to be achieved by the force of arms. Formulating and pursuing these objectives as well as responding to enemy actions resulted in “decision points” faced by the President and his subordinates regarding what military ways and means—that is what scope and level of force—was necessary to achieve those objectives under varying geopolitical and military circumstances. A subset of this decision-making fixated on how to use U.S. airpower in the war. Of interest to this research is what factors determined decisions to adhere, deviate or outright not adhere to the bombing norm during the war.

Whenever the war in Korea began to go badly for the United Nations, U.S. commanders and frequently U.S. political leaders were willing to be less proportionate or less discriminating in the use of airpower. While U.S. political leaders and key commanders had initially desired to steer clear of any air operations terribly reminiscent of World War II urban bombing, they continually throughout the war waived restrictions, accepted substantial risks to civilians, and expanded target categories when they were deemed it necessary to achieve military and political objectives. At each impasse in the armistice negotiations, a number of commanders and organizations across the armed services proposed varying forms of less discriminate air operations or intensification of air operations in order to end the war. By 1952, the Far East Air Forces (FEAF) had concluded that the most effective way to compel China and North Korea to conclude the war was by coercive airpower that fundamentally manifested itself in a “counter-value”
air campaign. The intent of the campaign was to induce such material deprivation and hardship on the North Korean regime and its population that Pyongyang and its Chinese sponsor would accept U.S. termination terms.

North Korea invaded South Korea—the Republic of Korea (ROK)—on 25 June 1950 and the Northern army easily began to overrun the South (Acheson 1971, 15; Hastings 1987, 15). The first decision point President Truman and his advisors faced was to determine if the United States had any substantive national security interests in protecting the South and if so, what to do about them (Hastings 1987, 57, 87). The President and his closest advisors including the Secretaries of State and Defense as well as the Joint Chiefs of Staff (JCS) determined quickly that defending South Korea was important to U.S. interests in Asia and the world; however, from the outset the President and his advisors desired to keep the war limited to the Korean Peninsula and the President repeatedly issued orders that sought to restrain the geographical scope and initially the intensity of U.S. combat operations within Korea (Acheson 1971, 34, 49; Pape 1996, 143-144).

The President, along with his advisors, concluded that a regional or general (world) war with communist states, especially the USSR, must not begin and be fought in Asia sapping U.S. military strength elsewhere (Acheson 1971, 41). Their overriding concern was that a general war with communist states would be fought primarily in Europe and if substantial U.S. Forces were pinned down in Asia they could not prosecute the main effort which would and should be Europe (Pape 1996, 143-144). Throughout the war, this concern also was that of the NATO Allies. Some of what Thomas in *Ethics*

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of Destruction argues were official European concerns for U.S. adherence to the bombing norm in Korea were actually concerns about military escalation that might lead to a USSR invasion of Western Europe (Acheson 1971, 41).

The President and his closest advisors in Washington were willing to invest substantial “blood and treasure” to prevent South Korea from falling to the communists; however, they were unwilling to use all military ways and means (e.g. atomic weapons, global redeployment of U.S. Forces to Korea, general mobilization) to secure South Korea if it risked or precipitated a regional or general war with China and/or the Soviet Union in Asia and elsewhere (Futrell 1983, 41; Acheson 1971, 93, 95). Korea was competing with other national security priorities. The Truman Administration was willing to lose South Korea to the North and the Chinese if committed force levels at the height of the war could not save it (Acheson 1971, 95). This decision calculus would constrain the use of airpower throughout the war.

U.S. military commitment began incrementally albeit rapidly in Korea as the President initially sought to prevent a full-fledged U.S. combat commitment; however, once he learned that a U.S. combat commitment was absolutely necessary to prevent a communist victory, he rapidly committed U.S. Forces (Acheson 1971, 28). For example, one day after the invasion, the President and his advisors hoped that U.S. military supplies would be enough to support the South against the North and if that was not enough they hoped a U.S. commitment could be constrained to air and naval power.

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24 Acheson’s book (1971) suggests that during the dark weeks after the Chinese intervention in November 1950 that if the Chinese and North Koreas succeeded in pushing UN Forces off the Peninsula the Truman Administration was not going to attempt to intervene on the Peninsula again. The Administration seemed fixed that U.S. Forces would win or lose based on the rough force levels and rules of engagement in place. Acheson paraphrases a JCS order on behalf of the President that suggests such to General MacArthur (95).
(Futrell 1983, 22). Three days after the invasion with South Korean forces collapsing, the President reached a second decision point this time related directly to airpower when he ordered U.S. air forces to support the South Korean army in its defense south of the 38th Parallel (Acheson 1971, 23; Hastings 1987, 59; Crane 2000, 23-24). With this order, MacArthur’s air commander ordered air forces to attack North Korean ground forces, supply depots, and lines of communications (e.g. bridges, rails, roads) which supported the Northern advance south (Acheson 1971, 25).

By 29 June 1950—four days after the invasion, President Truman reached a third decision point regarding the use of ground forces (36). While he had desired to keep U.S. ground forces out of the war, he ordered a small ground contingent to secure and survey southern ports in case he were to commit U.S. Forces (36). A fourth decision point was reached almost simultaneously when the Air Force complained that North Korean forces and supplies in the North remained immune from attack so the President further escalated U.S. combat operations by authorizing U.S. air forces to attack inside North Korea; however, these air attacks were to stay clear of the Manchurian and Soviet borders (Acheson 28; Futrell 1983, 34-35). The Presidential order indicated General MacArthur was authorized to extend air attacks to interdict military personnel and material en route to the front lines that were now far south of the 38th Parallel as well as other military targets necessary to halt the invasion (Futrell 1983, 34; Crane 2000, 27-28). The specific targets listed included personnel, supply depots, and airfields (34). Later that same day, the President, at General MacArthur’s desperate request, authorized the introduction of U.S. ground forces into Korea to repel the North’s invasion (Futrell 1983, 37).
6.2.1. Evidence of the Bombing Norm: No indiscriminate bombing

When President Truman authorized U.S. air forces to attack targets in North Korea, he explicitly ordered no indiscriminate bombing (Futrell 1983, 41). He instructed commanders to take care to minimize civilian casualties (42). This is the first indication from the very beginning of the war that indeed a normative judgment (e.g. indiscriminate bombing of civilians was unacceptable) was a baseline value of U.S. policy in regards to war on the Korean Peninsula. The bombing norm was re-emerging post-World War II as Thomas argues in *Ethics of Destruction* (Thomas 2000, 149).

6.2.2. The First Strategic Air Campaign: Go Ugly Early?

In early July 1950, Air Force planners from Strategic Air Command (SAC) petitioned General MacArthur to permit the Air Force to firebomb five North Korean cities specifically their industrial centers mimicking what the U.S. Army Air Forces (USAAF) had done to Japanese cities in World War II (Futrell 1983, 42, 186-187). Militarily, SAC planners advocated this approach because they found that North Korea’s vital target systems (e.g. fuels, industry, electrical power, transportation) like Japan’s in World War II were mostly grouped inside specific urban centers and area attacks with incendiaries were the most efficient and safest approach for U.S. aircrews to destroy these systems (Crane 2000, 31-33). Strategically, the planners argued that such a massive attack would produce severe psychological effects in the regime and the people resulting in an end to the war (31-32). SAC’s arguments for the fire raids were a combination of the Royal Air Force’s “morale bombing” and the U.S. Army Air Forces (USAAF) “industrial web” bombing during WWII. While SAC planners themselves wanted to use
“demolition bombs,” which would maximize blast effects²⁵, the SAC commander and one of his senior officers desired to use incendiaries to burn the five North Korean cities down (31-32). As if in a slight nod to the bombing norm, the planners did recommend to General MacArthur that warnings could be given to the population to evacuate the targeted cities (32-33). If such a campaign had been carried out, the leaflet drops warning civilians to leave would have passed muster as satisfying the core tenet of the norm—protection of civilian lives, the gratuitous property damage to civilian objects due to firebombing would have still been a violation but it would not have been as severe.

In response to the Air Force proposal, General MacArthur refused stating he was not “…ready to go that far” suggesting that, even among senior commanders, the bombing norm was becoming influential although there remains some ambiguity about his motivations because in an immediate follow-up statement he said “his instructions were explicit” (32). This statement suggests he felt constrained by the Presidential order given days earlier regarding indiscriminate bombing. However after this statement, he immediately followed up his refusal to firebomb with instructions that only specific military targets within urban areas could be attacked and that he would “accept” collateral damage from these attacks as the cost of waging war (31-32). MacArthur’s air commander, General Stratemeyer, then issued explicit orders forbidding counter-population attacks on urban areas and emphasizing the need to limit civilian casualties (Futrell 1983, 32). Despite this apparent command approval of a nascent strategic air

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²⁵ Demolition bombs have more explosive weight than fragmentation bombs which are intended to create both blast and fragmentation effects. Fragmentation bombs are especially useful against soft-skinned vehicles, supplies, and personnel. Demolition bombs are intended to destroy buildings and installations and what is inside them. Firebombs are intended to be used against area targets in order to spread across wide areas. Firebombs are especially useful against wood and thatched structures and personnel.
campaign, no such campaign really began except in the form of a de facto strategic air interdiction campaign initiated by President Truman’s previous order authorizing attacks inside North Korea to thwart the movement of personnel and materiel to the North Korean army in the South.

In June-July 1950, the ground situation for the ROK and U.S. ground forces was desperate. On 31 July, U.S. and ROK ground forces collapsed on the Pusan Perimeter as their last stand (Hastings 1987). For these reasons, the main air effort was close air support to U.S. and ROK ground forces and battlefield air interdiction of North Korean troops and supplies south of the 38th Parallel (Futrell 1983, 187-188). While U.S. air forces had already begun attacking airfields and interdiction targets (e.g. roads, rails, depots, POL) in North Korea in July (Futrell 1983, 188; Jackson 1998, 47), airpower historians generally do not consider these attacks part of a strategic air campaign which they very obviously associate with independent air operations designed to be war-winning in their own right (Jackson 1998, 47; Crane 2000, 33). In fact, much of this aerial bombardment north was a de facto strategic air interdiction campaign designed to thwart North Korean personnel and materiel moving to the frontlines south of the 38th Parallel which was in line with presidential intent (188). President Truman never initially requested or ordered a strategic air campaign.

In late July, the Air Force, supported now by the JCS, proposed again a strategic air campaign against North Korea’s industry especially in those five cities previously briefed (186). The Air Force again pitched massive air raids on these cities with demolition bombs or firebombs. The strategic air campaign unofficially began on 30
July. The official campaign kicked off on 8 August and extended through 27 September and its intended target set was industrial facilities (Futrell 1983, 192-193; Pape 1996, 144; Crane 2000, 43-44). From the beginning of the campaign, the JCS and State Department were sensitive to civilian casualties specifically in terms of their use by the North Koreans and communists worldwide for “propaganda”—that is showing the Americans and United Nations as cruel and inhumane to the civilian population (Futrell 1983, 187; Crane 2000, 32-33, 42). In August with U.S. air superiority secured over the North, the JCS issued orders that U.S. air forces drop leaflets on North Korean cities prior to any major bombardment (Crane 2000, 32-33, 42).

Having begun unofficially in July but now running concurrently with the strategic air campaign were strategic air interdiction campaigns permitted by Truman’s 29 July order to take the air war to the North in support of the ground campaign in the South. These campaigns were known as Interdiction Campaign #1 begun in August followed by Interdiction Campaign #2 in September (Futrell 1983, 188). Their primary targets were roads, bridges, rails, oil, and supply depots. While technically separate campaigns, the strategic and interdiction campaigns overlapped as many of the target systems were co-located. What this did was increase the destruction to North Korean villages, towns, and cities.

In August, both the JCS and Air Force had desired to bomb industrial targets in Rashin, a city only 17 miles from the Soviet border (192). Both attempts to strike the target failed to bad weather and navigation errors with errant bombing occurring (192).

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26 The official start of the strategic air campaigns appears to have been 8 Aug 1950.
Fearful U.S. aircraft would sooner or later breach USSR airspace, the State Department petitioned the JCS to forbid its targeting (192). The JCS did so on 1 Sep 1950 and it remained a forbidden target area for the war (192).

In September when North Korea was in full retreat after the Inchon landing, MacArthur’s air commander had requested permission to conduct a massive air attack on military targets in Pyongyang hoping such a raid would influence psychologically the regime compelling it to quit the war or collapse (Futrell 1983, 42). The JCS immediately forbade the attacks on the grounds that a massed formation attack as planned appeared to be area bombing and such bombing would no doubt result in substantial civilian casualties (42). The JCS, with MacArthur’s subsequent concurrence, made the following points in regards to its reasoning for the prohibitions: high civilian casualties would be a propaganda victory for the North showing the U.S. as cruel and indiscriminate, possibly embitter North Koreans making their capitulation much harder to garner, and require substantial U.S. resources in “rebuilding” (Futrell 1983, 42; Crane 2000, 45). The JCS forbade any future “massed air attacks” unless approved by Washington (Futrell 1943, 42).

From August to September, Air Force planners had petitioned MacArthur and the JCS regarding future planning for North Korea specifically whether or not UN Forces would occupy North Korea (193-194). Planners reasoned further strikes on North Korean industry would be needless if the ROK would soon own the North (193-194). By 15 September, the Air Force was running out of “industrial targets” in North Korea and sought permission to strike North Korea’s hydro-electrical plants which were well-built relics of the Japanese Occupation of Korea (Crane 2000, 43-44). Many of the plants
reportedly supplied substantial electricity to China and the USSR. Considering that UN Forces had North Korean forces in retreat, what was the military utility of striking these plants? Were they really substantially supporting the war effort? Again, the Air Force’s petition appeared to be a relapse to a counter-value air strategy. MacArthur permitted one strike; however, with the 27 September JCS order permitting MacArthur to advance north of the 38th Parallel, the first strategic air campaign of the war concluded (194).

6.2.3. Compromising the Bombing Norm during the Chinese Intervention

The Chinese military intervention in North Korea as United Nations forces, including South Korean forces, reached the Yalu River in October-November 1950 is telling in regards to the United States’ adherence to the bombing norm when strategic necessity seemed to require lessening or abandoning adherence. During the Wake Island conference on 15 October 1950 between President Truman and General MacArthur, MacArthur reportedly was very optimistic about the war ending possibly by Thanksgiving and that he was confident the Chinese would not intervene in the war. He foresaw a drawdown of U.S. Forces by Christmas. (Hastings 1987, 122-123)

At some point in October, Chinese forces began to infiltrate across the border into North Korea clandestinely. These forces began aiding North Korean forces; however, the UN Command was confused regarding the nationality and nature of the reinforcements. When it became obvious to General MacArthur that Chinese forces had intervened and were intervening in Korea en masse, he perceived that the entire UN military force was vulnerable to annihilation because it was spread out across long supply lines (Futrell 1983, 214-219; Acheson 1971, 80). His air forces by early November could only find
Chinese forces when they engaged UN ground forces (217-219). MacArthur was blind to the numbers and locations of Chinese forces. Based on what he knew and feared (Acheson 1971, 82; Futrell 1983, 220), MacArthur rapidly ordered his air commander to destroy any installations (e.g. factories, buildings, warehouses) and lines of communication, including whole towns and villages, in the border region between China and North Korea that may be used to facilitate and support the Chinese invasion (Acheson 1971, 64; Futrell 1983, 221; Jackson 1998, 48). For the first time in Korea, MacArthur had ordered “unrestricted bombing” of urban areas and the countryside (Jackson 1998, 48). With winter already in full force on the Peninsula, MacArthur’s order literally became a “de-housing” program with the objective of freezing communist forces in the harsh elements. He ordered his air commander to use his pilots to the point of “exhaustion” if necessary (Futrell 1983, 221). As if mimicking Sherman’s “March to the Sea,” this was a “scorched earth” tactical and strategic air interdiction campaign to deny anything and everything of use to the Chinese forces and throw as many obstacles (e.g. rubble) as possible in the way of the Chinese advance (221). The JCS approved it and the President subsequently endorsed it to protect U.S. Forces (Acheson 1971, 65). Faced with the possible annihilation of UN Forces, military necessity had trumped the bombing norm.

Despite these desperate orders to raze towns and villages from the Yalu to the frontlines, there remained some targets, areas, and weapons off-limits; however, the historical record suggests that strategic calculations rather than norms were the most salient reasons for these restrictions. For example, MacArthur ordered his air forces to strike all Yalu bridges on the Korean side of the international border; however, all bridge
spans on the Chinese side were to be off-limits in order to remove an excuse for further Chinese escalation (221). The city of Rashin near the Soviet border and on the JCS “no strike list” since August 1950 also remained off-limits in order not to provoke a Soviet intervention (Acheson 1971, 64). The JCS ordered MacArthur not to attack hydro-electric complexes and dams on the Yalu because these installations were so close to the border, provided electrical power to Manchuria and the USSR, and their catastrophic breach would cause uncontrolled flooding on both the Chinese and Korean sides of the Yalu (66). Despite Air Force petitions, President Truman denied aerial “hot pursuit” of Chinese aircraft across the border (Futrell 1983, 223). Fearing collapse of his forces, MacArthur broached the topic of the use of atomic weapons in addition to a number of other more conventional options such as reinforcements, bombing of mainland China, and blockade of China (Acheson 1971, 83; Crane 2000, 37). At a press conference, President Truman even hinted that atomic weapons were options to thwart the Chinese invasion although his statement so concerned the press and Europeans that the White House issued a statement that de-emphasized the atomic option by stating the obvious possession of atomic weapons implied their potential use but that the President had not issued the theater commander authorization to use atomic weapons (Acheson 1971, 85). With exception of concerns over uncontrolled flooding if the Yalu dams were breached, the vast majority of the bombing restrictions in place before, and enforced during, the Chinese intervention were the result of strategic calculations rather than norms.

6.2.4. Compromising the Bombing Norm to Coerce an End to the War

On 25 January 1951, the Chinese advance on the Korean Peninsula culminated and UN Forces halted their drive south of Seoul (Pape 1996, 147, 151). With the UN
position stabilized, President Truman’s next decision point was how to salvage U.S. political objectives militarily or diplomatically. These objectives remained a whole, sovereign, secure, and non-communist South (142-144). The United States had entered the war to prevent the South from falling to North Korea as well as contain the global spread of communist regimes (142-143). When the opportunity had presented itself in September 1950, the President had permitted MacArthur to attempt Korean unification by force (Acheson 1971, 54-55). China’s intervention had nullified that effort. In February 1951, the President decided, based on the counsel of his advisors, that the U.S. would pursue a negotiated settlement of the war provided South Korea was whole and secure (Pape 1996, 142-144, 147). From this point in the conflict and onward, UN Forces would attempt to deter and thwart communist offensives as well as coerce North Korea and China to accept U.S. terms for termination (137, 145). These terms were a territorially intact South and a permanent presence of UN Forces in South Korea to prevent any further communist aggression (142-144).

In the Spring of 1950, communist forces launched two major offensives which were subsequently beaten back by UN Forces; however, prior to these UN victories the U.S. remained fearful that communist forces could overwhelm UN Forces and for this reason President Truman issued veiled threats of atomic weapons use in April 1951 when he sent atomic-armed B-29s to theater (146-147). Pape claims Truman’s threats were not credible and the Chinese offensives continued despite the threats (152), yet Truman had pushed the atomic threat more so than ever before. While some in the military had accepted atomic weapons as possible tactical weapons for the battlefield, atomic weapons carried the aura of strategic and anti-population weapons so Truman’s “saber-rattling”
was significant. Curiously, Truman and his advisors had rejected MacArthur’s request for atomic weapons when the UN military situation seemed most dire in November through December 1950 yet now with the war just beginning to drag on Truman at least rhetorically had embraced their use even if he were bluffing.

With two communist offensives defeated and most of South Korean territory regained (Acheson 1971, 92-93), the UN High Command and Washington faced another decision point: How to coerce North Korea and China to accept U.S. termination terms? Veiled atomic coercion had failed to deter two major offensives so what then could deter future offensives and coerce a settlement? General Ridgeway, MacArthur’s replacement, declined to initiate any new major UN ground offensives after May 1951 once UN Forces were established along the “Kansas Line”—the frontline which stretched across the Peninsula and was mostly north of the 38th Parallel (Acheson 1971, 92-93; Pape 1996, 146-148). Ridgeway decided to use his ground forces, supported by airpower (e.g. close air support), in a more or less static defense while initiating a new strategic air interdiction campaign to deny personnel and materiel to frontline communist units (Pape 1996, 146-149). At this point, the Korean War became fully a war of attrition (Mark 1994, 289)—a slow grinding away of personnel and materiel in order to break one side’s preference ordering regarding the war’s termination terms. The North Koreans and Chinese broke first de facto accepting South Korea’s existence and a permanent UN Force to protect it (Pape 1996, 151-152).

The Air Force conducted two major operational and strategic interdiction campaigns in 1951 and 1952 (151). The first, Operation Strange I, started in May 1951
and ended in August 1951 while the second, Operation Strangle II27, lasted from August 1951 to June 1952 (151). The target sets practically were identical to the previous interdiction campaigns: personnel and materiel in the open, rails, roads, bridges, as well as villages and towns perceived as supply depots or billeting garrisons for communist troops although these campaigns especially emphasized railways and roads in varying degrees (Acheson 1971, 25; Futrell 1983, 188; Mark 1994, 273, 275, 293). While pilots were instructed to strike only military targets and minimize civilian casualties (Futrell 1983, 42), many North Korean built-up areas became area targets and even attempts at “precision attack” were limited by weapons technology and delivery altitudes optimized for aircrew safety not precision (Mark 1994, 298, 306). Because many transportation and supply depots were within built-up areas, the physical effects of these campaigns mimicked what an outright strategic air campaign targeting industry and civilian property would have looked like—lots of damage. Over the course of three years, these ostensible interdiction campaigns had decimated most North Korean cities, towns, and villages (Hastings 1987, 268).

A number of historians claim that while these interdiction campaigns certainly made the movement of supplies to frontline forces difficult and costly, U.S. air forces failed to halt the flow decisively due to the innate limitations of airpower at the time (e.g. lack of intelligence, night vision capability, precision attack, long loiter times) as well as the resourcefulness and determination of the communist logisticians (Pape 1996, 155-156; Mark 1994, 307, 323). For these reasons, the communists were able to hold on and

27 Operation Strangle II’s target sets were “interdiction” or transportation and supply/logistics targets; however, the campaign fixated on railways at some point when other transportation targets seemed less profitable. At one point, the Air Force named the operation, the Rail Interdiction Program (Mark 1994, 293).
conduct both defensive and occasionally intense offensive operations. Some historians cite the lack of aggressive UN ground operations which would have compelled much greater use of resources on the communist side as a reason for the failure as well. The communists, they argue, did not need many resources just to hang on and harass UN Forces.

Even without the interdiction campaigns, Pape claims that on 25 July 1951 North Korean and Chinese leaders accepted UN Forces remaining behind in South Korea post-conflict and by 26 November 1951 they had accepted the “Kansas Line” as the de facto territorial line between North and South for war termination (Pape 1996, 142). According to Pape’s typology of airpower strategies, communist leaders’ concessions to the UN were due to the success of conventional coercive denial (146-147). That is UN Forces, specifically ground forces in concert with airpower, militarily denied North Korea and China their preferred political objectives—a unified South under communist control and if that were unattainable, UN Forces coerced off the Peninsula (146-147). Both states found UN Forces too powerful to eject off Peninsula and too willful to coerce so they had to bargain to stop the war.

What prevented a settlement in November 1951 was a U.S. change in political objectives specifically U.S. unwillingness to repatriate forcibly those communists prisoners of war (POW) who desired to remain in the South for fear of death or persecution (Pape 1996, 137-138, 157). This impasse prolonged the war for 19 months.

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28 The UN ground forces line which marked forward line of troops some of which was above and below the 38th Parallel.
as each side maneuvered to exhaust the other through attrition of resources and will to change their preferences.

With the air interdiction campaigns unable to coerce an end to the war by May-June 1952 (Mark 1994, 307, 323; Pape 1996, 160), the Truman Administration and U.S. public were growing weary of the war (Pape 1996, 158-159). Pape claims the UN Command then settled for another round of “punishment”—that is a counter-value and counter-population air campaign—designed to break the will of the communist regimes and their peoples (150). With the blessing of the new UN commander, General Mark Clark, and the JCS, the Air Force would again compromise adherence to the bombing norm by targeting purposely civilian objects and civilians to achieve UN political objectives (150). “Air Pressure” was a series of three air operations which included air attacks on five hydro-electric complexes in June 1952, Operation Pressure Pump which consisted of two fire-bombings of Pyongyang in July and August 1952, and Operation Strike which was a series of planned air attacks on 78 North Korean towns and villages (Pape 1996, 150; Thomas 2000, 150).

By definition, air attacks on the hydro-electric complexes were not illegal according to the Laws of War if commanders reasonably perceived the complexes being used to produce electricity for the war effort. Pape claims that because previous UN air operations had destroyed the vast majority of North Korean industry the electrical power was primarily for civilian purposes and thus the attacks were gratuitous destruction for the purposes of “punishment” (161). At the same time, fears of breaching dams and flooding civilians as well as escalating the conflict due to the fact China and the USSR used power generated by the facilities created fear in Washington and Europe of
escalation (161). The fire bombings of Pyongyang were clearly anti-population attacks intended to terrorize the population and psychologically manipulate the regime even if military targets were ostensibly the aim points for the weapons. In addition, the planned attacks on the 78 North Korean towns were also obviously counter-value and anti-civilian albeit the decision to drop leaflets warning civilians to flee superficially appeared to mitigate the violation (161). However, on closer inspection, Pape claims the leaflet drops were most likely psychological operations intended to “disrupt” civil society in order to undermine regime control of the population (161). If so, these operations were clearly intended to terrorize the population which is forbidden by the Laws of War. The Air Force conducted attacks on two towns on the list using incendiaries, which maximized physical destruction, and “delayed-fused” bombs which terrorized and victimized firefighters and rescue crews (161).

The attacks on the electrical complexes as well as the fire raids on Pyongyang had garnered international criticism; however, the Air Force’s publication of its intended attacks on 78 towns and the leaflet drops compelled the State Department to intervene with the Defense Department to stop the raids because of their propaganda value to the communists who categorized the attacks as wanton death and destruction to civilians (161). An Air Force attempt to be superficially discriminate in regards to protecting civilian life by compelling evacuations yet terrorizing the population in the process backfired as it portrayed the attacks for what they really were anti-civilian. In Autumn 1952, the UN Command brought this round of punishment bombing to an end and U.S. air forces again concentrated on close air support and interdiction (162).
By the Spring of 1953, the Eisenhower Administration and the UN High Command reached a decision point regarding how to conclude the war on U.S. terms specifically in regards to the POW impasse (Pape 1996, 162). War weariness had set in with the U.S. public and Eisenhower had promised to end the war. The Administration settled on a two-prong strategy—nuclear diplomacy and an airpower-centric “punishment strategy” against North Korea (140-141, 162-163).

Pape claims that President Eisenhower’s quietly communicated atomic threats to China successfully coerced both China and North Korea to accept U.S. terms ending the war (140, 164-167). Unlike the Truman Administration, Pape claims the Eisenhower Administration was much more willing to escalate the war specifically in nuclear terms and President Eisenhower had actually “approved contingency plans for the use of nuclear weapons” which he argues the Truman Administration never did (165). The Eisenhower Administration had contingency plans to either use atomic weapons in a tactical or even strategic role against Chinese cities and ports (164-167). If indeed true, then President Eisenhower and his closest advisors were willing to kill civilians and destroy civilian objects in nuclear attacks in order to coerce an end to the war. If these contingency plans had been executed, the bombing norm would have been wholly abandoned even in a non-existent war for the United States.

With North Korean industry in tatters, most cities and towns in rubble, and with the international community critical of direct anti-civilian attacks on cities, the Air Force recommended the targeting of the North Korean rice crop via attacks on irrigation dams (162-163). In this way, the Air Force indirectly targeted the population with the threat of starvation and signaled psychologically the regime. This anti-population strategy was at
its face a violation of the Laws of War because it attacked civilian foodstuffs. The dams did not produce electricity which could ostensibly be tied to war production. The Air Force’s strategy in many respects supports Downes thesis that democracies prefer to kill civilians in war indirectly. Such was the case in the last three months of the Korean War. Desperation had set in.

Breaching the dams would flood rice crops downstream as well as destroy villages and towns in the flood waters path. To obfuscate that the population was indeed the true target, the Air Force claimed the attacks would primarily deny food to the communist forces assuming that military personnel rather than civilians were getting most of the rice crop anyway. In addition, the Air Force simultaneously attacked interdiction targets like roads and bridges to portray the dam attacks as part of a larger effort to destroy transportation networks (161-162). In a target list of 20 irrigation dams, the Air Force attacked only five as the North Koreans rapidly figured out a countermeasure to reduce the flooding (163). Not long afterward, North Korea and China acceded to U.S. terms ending the war.

6.2.5. Aerial Bombardment in Korea: Did it adhere to the bombing norm and why?

Did U.S. aerial bombardment during the Korean War adhere to the bombing norm and why or why not? U.S. aerial bombardment sometimes did adhere and at other times it did not. Two things are certain about U.S. aerial bombardment in the Korean War. First, it destroyed most built-up areas in North Korea and much of this was due to the interdiction campaigns rather than classic “strategic bombing.” North Korea’s cities, towns, and villages became billets and transshipment points for communist forces and
supplies so U.S. air forces extensively bombed these areas over the course of three years. Due to the limitations of U.S. airframes (e.g. no precision, poor night vision), collateral damage was inevitable. In some areas, U.S. air operations literally became a “de-housing” program to deny shelter to communist troops. Second, despite the devastation to built-up areas, U.S. air forces only purposely targeted civilian population centers for the purpose of psychological terror a specific number of occasions. The Korean War was not a replay of World War II “city busting” where civilians became fair game for bombers. Many civilians already had fled cities and towns before U.S. bombardment.

There is no question that a normative judgment that the purposeful bombardment of civilians was wrong was the baseline value and policy of the Truman and Eisenhower Administrations. After authorizing airstrikes on North Korea, an aerial interdiction campaign, President Truman specifically forbade indiscriminate bombing. What followed during the war as political and military fortunes changed for good or bad was a change in U.S. adherence to the norm. At the start of the war, the U.S. commanders, under Presidential order, adhered to the norm. When the Chinese intervened with major force levels and a catastrophic defeat was possible, MacArthur deviated from the norm by ordering the bombardment of any and all facilities including civilian objects that could support the Chinese. Once the battle lines had stabilized, two Administrations permitted counter-value and a limited form of counter-population targeting to compel an end. The U.S. deviated or outright violated the norm as an exception born of perceived strategic necessity. Both the force protection norm and Downes’ “Desperation to Win” explain these decisions.

U.S. participation as a belligerent in the Vietnam War resulted in roughly six independent air campaigns, a major air effort in support of ground forces, and a number of lesser-known, smaller air operations. U.S. air forces conducted three independent air campaigns over North Vietnam and parts of South Vietnam, two over Laos, and one over Cambodia. Air campaigns over North Vietnam included Operation Rolling Thunder (1965-1968), Operation Linebacker I (1972), and Operation Linebacker II (December 1972). Air campaigns over Laos included Operations Barrel Roll and Steel Tiger. Between 1969 and 1973, a series of air operations occurred over Cambodia. The lesser-known, smaller operations included the aerial reprisal for the 1964 Gulf of Tonkin incident, Operations Flaming Dart I and II (February 1965), reprisals after Rolling Thunder (1968-1971), and Operation Freedom Train which overlaps with Linebacker I (May 1972). Finally, a major air effort spanning the entire conflict included U.S. aerial bombardment, in the form of close air support and battlefield air interdiction, in support of the South Vietnamese and U.S. ground forces in South Vietnam (1961-1972). Likewise in Laos, U.S. air forces supported Laotian ground forces against insurgents and North Vietnamese regulars (1964-1973).

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29 Renz 2012 marks 1961 as the year of the start of FARMGATE—the U.S. air advisory mission in South Vietnam (29-30).
30 For sake of brevity, I am considering air operations over Cambodia one campaign although in fact there were several air operations with differing military objectives. This history is not well developed in this area.
31 For the sake of brevity, I am categorizing the independent air campaigns into two although from 1964 to 1973 they assumed different titles in serial form.
Despite a great deal of popular and political advocacy literature to the contrary (Thomas 2001, 153), U.S. aerial bombardment during the Vietnam War generally adhered to the bombing norm; however, there was variation in adherence in regards to bombardment in North Vietnam, the enemy, and South Vietnam, Laos, and Cambodia, the ally and neutrals beset by insurgency and invasion. Bombardment in the North was more discriminating and proportional than in the South, Laos, and Cambodia. This fact presents a puzzle for both the norms and strategic necessity explanations for adherence as one would expect theoretically greater adherence in friendly territory and less in enemy territory. In addition, there was some variation in adherence between Rolling Thunder and the Linebacker campaigns over the North. Whatever the reasons for these differences—which will be addressed shortly, aerial bombardment overall was more discriminating and proportional in the Vietnam War than had been the case in the Korean War.

Although U.S. aerial bombardment during the Vietnam War began as early as 1961 in South Vietnam in support of South Vietnamese ground forces, air campaigns against North Vietnam garner most of the journalistic and scholarly attention (Van Creveld 2011, 381-383; Renz 2012, 29-30) and for that reason my analysis will begin with U.S. bombardment of the North. U.S. adherence to the bombing norm in the North will be a useful benchmark by which to understand variation in adherence in the North, South, Laos, and Cambodia.
7.2. Aerial Bombardment over North Vietnam, 1964-1972

According to Thomas, it remains conventional wisdom in many scholarly and journalistic circles that the aerial bombardment of North Vietnam was particularly indiscriminate although more contemporary historical and legal opinions cite its general compliance with the Laws of War (Lewy 1978, 233, 444-446; Thomas 2001, 153).

Excepting the use of limited U.S. airpower in Central America and the Caribbean during U.S. interventions there between 1911 and 1935 (Renz 2012), the Johnson Administration’s use of airpower against North Vietnam was the most discriminating in U.S. history up to that time. As noted by Thomas, the Johnson Administration went above and beyond the call of the Laws of War in regards to adherence to the bombing norm (Thomas 2001, 144-145). The Administration never ordered or condoned the purposeful targeting of civilians or strictly civilian objects and the Administration placed many more restraints on its air campaigns that had the effect of protecting civilians.


In February 1965, Johnson ordered Operation Rolling Thunder against North Vietnam (March 1965-October 1968)—a combination of strategic bombardment and aerial interdiction campaigns rolled into one—that would last for 43-months (Gravel
Rolling Thunder had four major politico-military objectives. These were: 1) coerce the communist regime in Hanoi to negotiate a settlement to the war on U.S. terms which included an independent, non-communist, and unmolested regime in Saigon; 2) signal diplomatically to “free” and communist states U.S. political resolve to defend the South and all states battling communist expansionism; 3) interdict—that is halt or hinder—the movement of personnel and materiel from North Vietnam to the South; and 4) psychologically improve the morale of the Saigon regime, its armed forces, and population (Lewy 1978, 375; Parks 1982; Kohn 1986, 61, 67; Pape 1996, 174-175; McMaster 1997, 73-75, 180).

In addition to its positive objectives, the campaign also had a number of “negative” objectives—unintended yet foreseen consequences the Administration did not want to occur (Clodfelter 1989, 118). These included strong desires to avoid military escalation that could provoke Chinese or Soviet military intervention, domestic and international condemnation for waging an offensive war against a small agricultural state, high U.S. casualties, an irrevocable military commitment to the conflict, and political and resource competition with Johnson’s Great Society (Gravel 1970 IV, 172; Lewy 1978, 382-383, 392-383; Summers 1982, 25, 37-38, 57-59; Parks 1982; Kohn 1986, 61, 67; Thompson 1980, 10-11). Considering both his positive and negative objectives for Rolling Thunder, Johnson tried to steer a middle course of just enough military coercion to compel Hanoi to U.S. terms but not enough destruction to provoke Chinese and/or Soviet intervention as well as substantial domestic and international condemnation (Summers 1982, 58; Kohn 1986, 58-59; McMaster 1997, 73).
Using Pape’s typology of air strategies, Rolling Thunder was a coercive air campaign with conventional “punishment” and “denial” strategies mixed together (Pape 1996, 18-20, 55-57, 178-179); however, what made Rolling Thunder so different than previous air campaigns was its employment of airpower as the core feature of a limited war strategy of “graduated pressure” (McMaster 1997, 73)—a strategy of controlled, incremental escalation (Gravel 1971 IV, 21; Summers 1982, 117; Pape 1996, 55, 57)—intended as the military element of a complex political bargaining scheme to raise the psychological, financial, and political costs of Hanoi over time as the regime resisted U.S. political terms for settling the conflict (Gravel 1971 IV, 19-22, 98). Pape labels this modification of a punishment strategy as a “risk strategy” (Pape 1996, 19). A risk strategy operates on the premise that the threat of future punishment is more important than the imposition of present punishment as present punishment is merely a signal to communicate the future threat (18-20). Theoretically, Hanoi would concede to U.S. terms at some point in order to avoid future punishment. For this reason and others, the Johnson Administration tightly controlled the types and locations of targets, the weapons used, and strike parameters of Rolling Thunder (Summers 1982, 117; Parks 1982).

Unlike most major air campaigns in U.S. history, Rolling Thunder had no specific campaign plan with defined military objectives, decision points, phases, and specific benchmarks to measure progress (Thompson 1980, 28; Kohn 1986, 59). The campaign evolved into roughly three to four to six phases depending on the views of the scholar (Thompson 1980, 28, 35; Kohn, 1986, 51; Pape 1996, 181-183). In general, each phase represented either a Presidential decision for escalation or de-escalation which resulted in

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32 Pape sees three phases of Rolling Thunder, Thompson sees four, and Kohn documents six.
either an increase or decrease in combat sorties, an expansion or restriction in the geographical scope of bombing, and a change in approved targets. According to Pape, Rolling Thunder cycled through three overlapping phases dedicated to a separate air strategy each with a different set of target systems (Pape 1996, 181-183). These separate air strategies included a limited “Schelling,”

33  denial, and limited “Douhet” with each strategy focusing on “a different mix of strikes against fixed-site economic, transportation, and military targets, and armed reconnaissance missions against broad areas in which mobile or temporary targets might be found” (181-182). According to Thompson, Rolling Thunder had five phases (Thompson 1980, 40). Phase I, 1965-1968, focused on aerial interdiction and the North’s logistics system beginning in southern North Vietnam and then later stretching back and forth across the entire country (41). Phase I lasted for the duration of the campaign (41). Phase II, June-July 1966, focused on the North’s petroleum distribution system while Phase III, Spring 1967, targeted industrial facilities (42-43). Phase IV, April-October 1968, was the de-escalation of the campaign and it focused on interdiction south of the 19th parallel north of the DMZ (42). Although Rolling Thunder officially ended October 1968, Thompson considers the reprisal air raids between 1968 and 1972 as Phase V (42-43).

The Johnson Administration managed the campaign on a weekly basis at the well-known “Tuesday Luncheons” in the White House when the President and his closest advisors would establish geographical boundaries, choose specific targets, establish sortie ceilings, and direct “strike parameters” (e.g. axes of attack, weapons) for the following

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33 According to Pape, a Schelling air strategy is a risk strategy—gradualism, a denial strategy is counter-force and frequently focuses on interdiction, and a Douhet strategy emphasizes punishment—counter-value especially counter-population bombing.
week based on military nominations, political circumstances at that point and time in the war, and the Administration’s immediate political objectives (e.g. alleviate press criticism, offer negotiations to Hanoi) (Gravel 1971 III, 344; Thompson 1980, 31; 35, 45-46; Park 1982; Kohn 1986, 66-67).

At various times during the campaign, the Administration would reach a decision point regarding whether to escalate the air war by some means or de-escalate. Several factors shaped the timing and substance of decision points including Hanoi’s intransigence, diplomatic initiatives, domestic and international opinion, and military recommendations. When the administration decided to escalate or de-escalate, it would issue new orders for permitted sorties and target systems (Thompson 1980, 35). For instance, the Administration first ordered air attacks on military targets in southern North Vietnam and then over time escalated by expanding the campaign geographically northward toward the Hanoi-Haiphong Corridor as well as functionally by expanding attacks to infrastructure and industrial targets (Lewy 1978, 378; Thompson 1980, 37-38; 40-43, 45). The Administration de-escalated through “bombing halts” (there were eight such halts) and restrictions on sorties, geography, and target types (Thompson 1980, 37-38, 45). For example, the Administration strictly controlled bombardment in the Hanoi-Haiphong Corridor which included the industrial, infrastructure, and population centers of the country (35)

North Vietnam invaded South Vietnam en masse on 30 March 1972 (Hone 1998, 508). With the vast majority of U.S. ground forces withdrawn, North Vietnam saw an opportunity to collapse the Saigon regime or at least create an untenable military and political situation that would fatally undermine the regime in time (Pape 1996, 195-196).
In order to save the Saigon regime or at least buy it time as well as extract the U.S. from the conflict with “honor,” President Nixon ordered the renewed bombardment of South and North Vietnam (197-198). On 6 April, Nixon authorized air attacks, which included B-52s, in support of aerial interdiction up to the 20th parallel (Hone 1998, 508). Pape claims the Nixon Administration pursued “two coercive strategies in succession” (Pape 1996, 197). These included Operation Freedom Train and Operation Linebacker I. Like Rolling Thunder, Freedom Train was a “risk strategy” premised on increasingly escalatory airstrikes beginning in the south and progressing northward (198). Central to Freedom Train were airstrikes in the Hanoi-Haiphong corridor against POL and logistical centers (198) as well as the mining of Haiphong harbor on 4 May (Hone 1998, 508). Pape claims Freedom Train’s objective was a very slight punishment strategy that Nixon hoped would coerce North Vietnam to stop its invasion of the South (198). It did not work so Nixon authorized Operation Linebacker I in May 1972, although in fact it was de facto already underway a month before it became official, and it continued until October 1972 (Pape 1996, 199).

Linebacker I adhered to the bombing norm. President Nixon never ordered nor did U.S. air forces ever purposely target the North Vietnamese population or strictly civilian objects. In terms of targeting, Linebacker I like Rolling Thunder only serviced lawful military targets although it did so much more quickly and intensely. What made Linebacker and Rolling Thunder similar was that both ultimately fixed on aerial interdiction and several of the core prohibitions of the Johnson Administration remained in place except for their relaxation.
With little hope of re-starting negotiations with Hanoi to permit an “honorable” U.S. withdrawal from the conflict, Nixon ordered Operation Linebacker II—the “Christmas Offensive”—to coerce Hanoi back to negotiations through aerial punishment and denial (Pape 1996, 201; Hone 1998, 513). U.S. air forces bombarded roughly 85 targets—installations—in North Vietnam for twelve days with a total of 1,353 air-to-ground sorties dropping 20,000 to 36,000 tons of ordnance on the North (Eschmann 1989; 217-219; Clodfelter 1995, 224). In terms of types of targets, there was little change from Rolling Thunder in that most of the targets were counterforce and related to air defenses, interdiction, and logistics with a smattering of counter-value targets\(^{34}\) such as power plants and radio facilities (Eschmann 1989; 1-3, 217-219).

What made Linebacker II different from Rolling Thunder was its operational tempo—sustained high sorties day and night—and its attacks within the former sanctuaries around Hanoi and Haiphong (Eschmann 1989; 1-3; Clodfelter 1995, 224). Of particular emphasis were the 734 night-time B-52 strikes on Hanoi and Haiphong which dropped a lot of ordnance on their targets (Eschmann 1989; 217; Clodfelter 1995, 224).

Linebacker II adhered to the bombing norm by the letter and the spirit of the law; however, the Nixon Administration accepted much greater risk to the North Vietnamese civilian population than the Johnson Administration had in Rolling Thunder. The night-time B-52 strikes with dumb bombs inside two major cities particularly invited collateral damage. Why did the Nixon Administration accept greater risk and deviate from the previous Administration in regards to the norm? Strategic necessity, embedded in

\(^{34}\) Roughly 12% of Linebacker II targets were counter-value—that is strictly civilian objects with only tangential support to the North Vietnamese war machine. These targets included electrical power plants, transformer yards, and radio facilities. Dual-use infrastructure yet classical military targets included highway and rail bridges as well as ports (Eschmann 1989, 217-219)
Downe’s “Desperation to Win” thesis, is the best explanation. Nixon was anxious to extract the U.S. from the war yet he greatly desired to do so in a way that did not appear to be a precipitous withdrawal that signaled defeat (Van Creveld 2011, 396-399). He desired to maintain the Saigon regime as a viable government for as long as possible and a failure of his Administration to compel Hanoi to the U.S.’s limited termination terms would likely have led to the collapse of Saigon (398-399).

7.3. Aerial Bombardment in South Vietnam, 1961-1973

Despite the fact Operations Rolling Thunder, Linebacker I, and Linebacker II against North Vietnam get most of the journalistic and scholarly attention, most aerial bombardment during the Vietnam War occurred in South Vietnam and not the North (Lavalle 1976, 9; Clodfelter 1995, 218-229; Van Creveld 2011, 384, 393). Between 1964-1973, U.S. air forces flew one million fixed-wing sorties in the South and 36 million helicopter sorties of which 4 million were “gunship sorties” and 7.5 million were “combat assault” (Clodfelter 1995, 225-229). Counting only fixed-wing sorties, U.S. air forces launched 2.4 times more air sorties in the South than North across nine years of war. U.S. air forces dropped 7.7 million tons of ordnance in Southeast Asia of which roughly 6.7 million tons or 87% fell on South Vietnam, Laos, and Cambodia (225). U.S. air forces dropped 3.5 times more ordnance on Southeast Asia than on the Axis Powers in World War II (225).

35 Clodfelter suggests these are total air sorties (e.g. transport, air-to-ground, reconnaissance) not simply air-to-ground sorties, but the number shows the size of the total air effort of which a sizable proportion of sorties were air-to-ground since there was no air-to-air threat in the South.

36 The use of helicopters in a close air support role to ground forces or direct attack role against the enemy.

37 Combat assault, or air assault as compared to airborne (paratroop), is the heliborne insertion of combat troops, sometimes under fire, into a combat zone. The helicopters generally are armed with door gunners.
Most civilian casualties by aerial bombardment, as best as can be estimated, occurred in the South (Lewy 1978, 443-445) and not the North (Clodfelter 1995, 216; Pape 1996, 351). In North Vietnam, Pape and Van Creveld cite estimates of 52,000 or more civilian fatalities during Operation Rolling Thunder and 13,000 during the Linebacker campaigns (Pape 1996, 351; Van Creveld 2011, 392). Downes cites U.S. Government sources estimating civilian fatalities caused by Rolling Thunder were even lower and of these numbers the majority were civilian workers involved in military logistics (Downes 2004a, 375-376). Of these fatalities, armed reconnaissance missions seeking out targets of opportunity outside population centers were responsible for the majority of these fatalities (375-376). In South Vietnam, a very sketchy figure would be 72,000-145,000 civilian fatalities\(^{38}\) caused by both airpower and artillery out of 250,000 total civilian fatalities (Lewy 1978, 443-445, 447).\(^{39}\) Very truncated and rudimentary figures suggest ground attack and not airpower or artillery may have caused the majority of civilian casualties (447). Numerous commentators assume U.S. Forces, of all branches, in South Vietnam caused the vast majority of civilian casualties rather than communist forces due to the superior technology of U.S. Forces and their heavy use of firepower (446).

The Johnson and Nixon Administrations never authorized or condoned the purposeful targeting of civilians in South Vietnam. There were specific war crimes

\(^{38}\) These are my numbers and they are extremely sketchy because they are based on Lewy’s and then the Kennedy Commission’s estimates of total civilian fatalities and then percentages of civilian fatalities estimated killed by artillery/airstrikes together between 1967-1970 figures from South Vietnamese civilian hospitals. The artillery/airstrike numbers cannot be disaggregated and they are subjective because WWII experience suggests it is hard to differentiate artillery from aerial ordinance wounds.

\(^{39}\) Lewy garner his figures from a number of official and private sources and creates his own estimate. Clodfelter claims 250,000 civilian fatalities in the South. The Kennedy Commission’s estimation of fatalities was about 500,000 about twice that of Lewy’s.
committed by U.S. military personnel, mostly ground troops, against Vietnamese civilians. While an examination of the number and magnitude of war crimes in Vietnam is beyond the scope of this research, Lewy claims these war crimes were not the results of systematic and purposeful violations of the Laws of War by two Administrations or senior commanders (307-325). Lewy notes there were countless and highly publicized claims by individual veterans, veteran groups, civic leaders, and human rights advocates of widespread crimes and atrocities in South Vietnam but that many of these claims simply were not credible although it is likely some crimes were not reported (307-326). From 1965 to 1973, courts-martial convicted 201 soldiers and 77 marines of “serious” crimes against Vietnamese civilians including “murder, rape, assault with the intent to commit murder or rape, mutilation of a corpse and negligent homicide” (324-325). Of this number, 112 were murders of which 28 were murders of civilians during combat (325).

The best known and most sinister war crime of Vietnam was the My Lai massacre. In 1968, Captain Medina led C-Company in a ground assault on My Lai which supposedly was a VC stronghold. The unit’s division had taken substantial casualties in the area before and Lewy claims C-Company was looking for retaliation. Captain Medina reportedly ordered the company to destroy the village. During the assault, the unit discovered no guerrillas and then soldiers of the company began killing men, women, and children. C-Company killed 175 to 400 villagers. The Army prosecuted 12 soldiers for murder. (325-327)

While both Administrations never ordered the purposeful bombardment of civilians or civilian objects, both Administrations showed much greater tolerance for
collateral damage in the South than in the North (Renz 2012, 29-30). While the Johnson Administration micromanaged the air campaign against the North, Generals Westmoreland and Abrams and their subordinate ground and air commanders had wide discretion in the use of airpower against insurgents and North Vietnamese regulars in the South. U.S. air forces never purposely targeted civilians as a matter of policy (Lewy 1978, 95-96). U.S. rules of engagement (ROE) issued by General Westmoreland in Saigon for ground and air operations reportedly were superb according to one legal expert (233-234). Lewy quotes Westmoreland communicating to “his commanders” that “the utmost in discretion and judgment must be used in the application of firepower” and U.S. Air Force, Navy, and Marine Corps aircrews generally followed the prescribed rules of engagement (ROE) (95-96, 234); however, despite those ROE and exhortations, there were incidents of the purposeful indiscriminate use of force especially by Army helicopter gun crews (235-236). While MACV issued ROE that specifically instructed aircrews to minimize civilian casualties during operations (95), U.S. air forces deviated from the norm in the South, as compared to the North, in three ways. These included proportionality, establishment of free fire zones, and use of defoliants on the environment.

First, adherence to the bombing norm was weakened in that many air attacks were frequently disproportionate in terms of the military advantage (e.g. clearing a village of insurgents) sought weighed against the potential harm to civilians especially with the standard weaponry of U.S. air forces which were organized, trained, and equipped for
The Viet Cong frequently engaged U.S. and South Vietnamese troops from among the civilian population (230). The VC used villages not only as bases of support and cover but also as fortifications and “strongpoints” from which to engage U.S. Forces (101-105, 230-231). While not written for counterinsurgency but for conventional war, the Laws of War prescribed and proscribed specific actions for this scenario (230-231). Lewy writes:

The Hague Convention IV (1907) prohibits “the attack or bombardment, by whatever means, of towns, villages, dwellings, or buildings which are undefended.” “Firing on localities which are undefended and without military significance,” stated a 1966 MACV directive, “is a war crime.” However, according to the general practice of states, once a village or town is occupied by a military force or is fortified, it becomes a defended place and is subject to attack (231).

In regards to air attacks on villages, Lewy continues:

In accordance with Article 26 of the Hague Convention IV (1907), which requires notice of an impending bombardment “except in cases of assault,” the applicable MACV directive stated that “if the attack on a village or hamlet is not in conjunction with any immediate ground operation, the inhabitants must be warned by leaflets and/or loudspeaker system prior to the attack and must be given sufficient time to evacuate the area.” After obtaining GVN approval and once the inhabitants had been adequately warned and given time to evacuate, “the hamlet/village may then be struck without further warning.” (235)

Lewy claims there was substantial variation in adherence to ROE among U.S. ground units as well as helicopter gunners as noted earlier (96, 102-103, 233-242). When ground commanders faced enemy resistance that they perceived best weakened by airpower, they

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40 U.S. air forces in Vietnam used ordnance tailored for high-intensity conventional warfare. While precision guided munitions like laser-guided bombs made their debut in the late 1960s on a few aircraft, the vast majority of U.S. air-to-ground ordnance was dumb bombs designed to produce substantial blast and fragmentation effects. Most U.S. bombs had roughly a 50/50 weight ratio of explosive weight to bomb casing weight (FAS). A 500-lbs. bomb then had roughly 250 lbs of explosives which produced 250 lbs of shrapnel and these effects were wholly unsuited to combat amongst civilians and civilian habitations in a counterinsurgency environment although they were more appropriate for large unit combat in rural or uninhabited areas. The smallest weapon on some aircraft would have been a machine gun or cannon for strafing. Some aircraft and helicopters carried rockets with much smaller explosive weights; however, these rockets were also unguided. Smaller, guided air-to-ground weapons like the Maverick and Hellfire missile had yet to be invented and fielded. Air Force gunships with machine guns did appear in the war but they were few in number.
called for close air support (231-232). U.S. military practice has long been to substitute firepower for manpower and when proportionality clashed with perceived military necessity, necessity usually won (96). In addition, commanders frequently used ground forces as “as a means to expose the enemy to the killing action of air and artillery firepower” by drawing insurgents and regulars into the open (Lavelle 1976, 9).

In Vietnam, the best, most discriminating weapon against insurgents was an infantryman; however, infantrymen were also the most vulnerable so in order to protect U.S. manpower, ground forces took advantage of U.S. airpower. U.S. air forces in Vietnam generally were not equipped to conduct precision attacks against insurgents (Van Creveld 2011, 383, 389-390). While laser-guided and electro-optical bombs would debut on a few aircraft in the late 1960s (393), they simply were not available in mass. The best air weapon for counterinsurgency was the helicopter gunship which itself was vulnerable to ground fire (385-387) and the worst weapon yet least vulnerable, due to its speed and altitude, was the fast-moving, short loiter fighter-bomber (390) with dumb bombs in the 250, 500, 1000, and 2000 lbs categories. The blast and fragmentation effects of these weapons were extensive while their precision was poor to moderate depending on the delivery system and release altitude (389). A typical air-to-ground mission could include a “shallow 15-degree dive” with a bomb release at 800 feet above the ground or if ground fire was extensive fighter-bombers could deliver ordnance at 7000 feet in a 45-degree dive (Lavelle 1976, 9).

To increase accuracy and discrimination between combatants and noncombatants, the U.S. Air Force routinely used forward air controllers (FACs) in smaller, slower aircraft to spot enemy movements and call in airstrikes on enemy positions (12).
addition to using radios to talk fighters onto to their targets, FACs also used rockets and flares to mark their targets, but even these tactics did not always prevent mistakes or disproportionate force. These practices, tactics, and large munitions in conjunction with insurgents purposely fighting among civilians frequently resulted in substantial civilian casualties and damage to civilian property. To illustrate the substantial collateral damage done by U.S. ground and air operations, Lewy cites U.S. counteroffensives in early 1968 against VC strongholds in urban areas (233). He claims “allied firepower” destroyed “9,580 dwellings” in Saigon alone resulting in numerous civilian casualties (233). A subsequent investigation “found” that “allied airstrikes” were the cause of most of the damage (233).

Second, U.S. air forces sometimes operated in “free fire zones” (FFZs) or quickly renamed in late 1965 “specified strike zones” due to negative press (105-106; 226-229). FFZs were controversial and legally suspect. First, FFZs were outright illegal under the Laws of War unless U.S. Forces issued warnings to the population to flee and even then the notion of considering every human in the FFZ as a combatant and every habitation a lawful target was legally problematic because it seemed to suspend discrimination which is a centerpiece of the Laws of War (105-106). Complicating legal questions more, these FFZs reportedly were also used occasionally as part of U.S.-Saigon relocation programs to move civilians out of VC strongholds and into government-controlled villages (226-230). Airstrikes and artillery barrages provided strong incentives for civilians to relocate. In attempted compliance with the Laws of War, U.S. and Vietnamese forces reportedly would announce the FFZs via leaflets and radio broadcasts in order to give time for
noncombatants to flee; however, the practice was not always uniformly and smartly carried out (105-106; 229-230).

Lewy cites a number of specific incidents in which FFZs were substantially unlawful yet were permitted to persist. In the Mekong Delta, some Army commanders had designated FFZs in specific areas suspected to be VC-controlled areas. Under local ROE, helicopter gunships were permitted to attack all boats in these areas of the Mekong Delta. Locals complained to U.S. civilians regarding this practice because innocent civilians were being injured and killed and their boats destroyed. Local commanders refused to stop citing FFZs as necessary measures to deny foodstuffs to the VC. (Lewy 1978, 107).

Third, U.S. air forces from 1962 to 1971 used defoliants to destroy vegetation along roads and around garrisons and airbases as well as large swaths of forests suspected of being hideouts and infiltration routes for enemy forces. While the use of defoliants was not technically illegal by the Laws of War, a number of states and scholars considered the practice legally suspect and in violation of the spirit of the Hague Conventions as well as the post-World War I convention banning the use of chemical weapons. In addition and most legally suspect, U.S. air forces used defoliants to destroy crops of suspected VC strongholds in rural areas. While MACV attempted to mitigate the legal issue and the effects on civilians by only using defoliants in very rural areas with small populations suspected of being VC strongholds, these crops even if used by the VC were the products of rural farmers and some proportion of the crop was intended for civilian consumption; therefore, the destruction of these crops was a technical violation of the Geneva Conventions. (Lewy 1978, 257-266)
Was U.S. aerial bombardment in South Vietnam in adherence with the bombing norm? In general, U.S. air forces adhered to the norm in terms of discrimination. U.S. air forces rarely purposely attacked persons they knew to be civilians; however, the norm, in both spirit and often in letter, was compromised most gratuitously in terms of proportionality.

The popular counterinsurgent slogan “If all you have is a hammer, everything looks like a nail!” rang true in South Vietnam. The heavy-handed use of firepower—air-to-ground ordnance—in close air support and air interdiction against insurgents and regulars fighting in the midst of Vietnamese civilians resulted in substantial civilian casualties and property damage. Both Administrations exhibited high tolerance for civilian casualties in the South. While U.S. ground and air commanders tried to minimize civilian casualties and property damage, the U.S. force protection norm and the U.S. tradition and doctrine of annihilation of enemy forces frequently trumped the bombing norm in the weighing of military advantage and harm to civilians. Close adherence to the norm in terms of proportionality would have required both ground and air forces totally re-organized, re-trained, and re-equipped for counterinsurgency as well as a U.S. willingness to incur much greater military casualties. All of this was politically, bureaucratically, and financially impossible.

7.4. Aerial Bombardment in Laos, 1964-1972

In 1961, President Kennedy authorized both overt and covert support to the regime in Laos in order to thwart communist expansion in Southeast Asia including a communist insurgency in Laos itself (Hamilton-Merritt 1999, 225-228). In 1961, President Kennedy and Nikita Khrushchev agreed in principle to maintain Laos as a
buffer state between U.S. and USSR interests in Southeast Asia. The core of what was to become the 1962 Geneva Agreement was that Laos was to remain an independent and neutral state in Southeast Asia and all foreign forces were to exit the country all foreign military aid to the internal belligerents was to cease (225-228). The U.S. Government initially lived up to its end of the bargain and withdrew its military advisors; however, with 5,000 North Vietnamese troops in Laos in 1963 and 15,000 by 1964, Washington responded with a covert operation of its own to maintain the status quo ante (Kirk 1971, 213; Castle 1993, 62; Kissinger 2003, 122).

Determined to adhere to the spirit of the 1962 Kennedy-Khruschev agreement as much as possible without conceding Laos to the communists but unwilling to commit ground forces, the Johnson Administration crafted a covert operation—an economy of force effort—centered on arming and training the Laotian armed forces, such as they were, with U.S. advisors (Hamilton-Merritt 1999, 135; Kirk 1971, 234). Diplomats and military advisors had concluded early on that training up a competent and competitive regular army in Laos was to be cost-prohibitive and possibly futile (Castle 1993, 65, 73). The tiny, tribal state simply was not up to the challenge posed by North Vietnam. For all of these reasons, airpower was to be central to the U.S. covert operation (Hamilton-Merritt 1999, 225-228). Run by the U.S. Ambassador out of the U.S. Embassy, the U.S. covert operation in Laos would be embodied by Air America, the CIA’s “air force” in Laos, and a small number of ground advisors (Castle 1993, 65, 77-78; Hamilton-Merritt 1999, 135; Kirk 1971, 237).

By 1964 to the end of U.S. military involvement in Laos in 1973, aerial bombardment in Laos would be two-part. First, there was the air and ground war against
the Pathet Lao communist insurgents and North Vietnamese regulars in northeast and north-central Laos and second, there was the mostly air and partially ground war, by 1969, along the Ho Chi Minh Trail in southern Laos—the Panhandle.

In April 1964, U.S. Intelligence advised President Johnson of the North Vietnamese expanding construction of the Ho Chi Minh Trail through Laos and into South Vietnam (Castle 1993, 67). Unwilling to permit this to go unanswered, he authorized by May 1964 with the concurrence of the regime in Vientiane for U.S. “civilian” pilots of Air America, flying T-28 propeller-driven aircraft, to begin limited ground attacks against combatants in northern Laos (68). Ambassador Sullivan ran this air war with reportedly strict ROE and with sensitivity to civilian casualties (Hamilton-Merritt 1999, 135).

Almost simultaneously with this program, Johnson ordered “Team Yankee” unarmed reconnaissance flights in both northern and southern Laos in order to track North Vietnamese construction and movements along the Trail. Unlike the Laotian-marked T-28s with “civilian” pilots, Team Yankee aircraft were USAF and USN jets. In June 1964, communist anti-aircraft guns shot down a U.S. reconnaissance aircraft. The U.S. retaliated with F-100 fighter attacks on the guns. During the same period, the Embassy introduced forward air controllers (FACs) who could better sight combatants and call in airstrikes on behalf of the Laotians. In August 1964 with a number of shoot downs of U.S. aircraft on the same day, Ambassador Sullivan defied State Department orders and authorized U.S. pilots to use napalm during a rescue mission for downed aircrew. He ordered that aerial bombardment and napalm not be used against villages
and civilian habitations. Washington was very concerned about the incident but understood the desperate circumstances. (Castle 1993, 68, 70-75, 86)

By December 1964 with South Vietnam going badly and with North Vietnamese infiltration into and through Laos, President Johnson ordered Operation Barrel Roll in northern Laos. Barrel Roll authorized a limited and specific number of armed reconnaissance sorties, mostly U.S. jets being flown from Thailand and U.S. carriers, in the north against targets of opportunity. By 1965, the President authorized Operation Steel Tiger in southern Laos against the Ho Chi Minh Trail. U.S. conventional aircraft were now fully engaged in aerial bombardment in Laos simultaneously with Rolling Thunder and U.S. air support to ground forces in South Vietnam. (88)

When Johnson stopped Rolling Thunder in 1968, he and later the Nixon Administration permitted U.S. air forces to expand their efforts in Barrel Roll and Steel Tiger and there was an incremental increase in combat sorties over Laos (Kirk 1971, 238). The ground war in Laos was persistently a stalemate until 1969 and 1970 as offensives and counter-offensives by both Vientiane and Hanoi escalated the fighting compelling substantial U.S. aerial bombardment in northeastern and central Laos against communists (195). Until 1970, U.S. B-52s had only been used in Steel Tiger in the Panhandle; however, with Hanoi on the offensive in 1970, Nixon ordered substantial B-52 raids into northeastern and central Laos (242-243). The Panhandle of Laos where the Ho Chi Minh Trail meandered to South Vietnam virtually had become “free fire zones” as U.S. aircraft sought out targets of opportunity—trucks, troops, roads, ammo depots (239).
At no time, did anyone in the Johnson or Nixon Administrations order or condone the indiscriminate bombing of civilians or civilian objects in Laos. U.S. air forces adhered to the norm. There was variation in the rules of engagement and the intensity of aerial bombardment between northern and southern Laos. In northern Laos, the U.S. Ambassador ran the air war and controlled the timing and types of targets attacked analogous to how the White House ran Rolling Thunder yet even the Ambassador did not micromanage his air war as tightly as Johnson did Rolling Thunder. The Ambassador was sensitive to protecting civilians and issued strict ROE. He was very sensitive to the use of napalm as an anti-personnel weapon and only approved its use sparingly. He introduced FACs and reconnaissance units early on the conflict in order to call in more accurate air strikes on insurgents and regulars. The Nixon Administration only introduced B-52 raids into northern Laos when it appeared the Pathet Lao with the aid of North Vietnamese regulars would overrun the country in 1970. In southern Laos which was mostly wilderness and de-populated, U.S. air forces had substantial liberty in regards to bombardment.

There is no question that norms were the baseline for U.S. adherence to noncombatant immunity in Laos. At the same time, and as in the case of North Vietnam, U.S. restraint was not simply centered on noncombatant immunity. Both the Johnson and Nixon Administrations desired to keep the war in Laos limited so they sought to prevent any provocations that may invite greater North Vietnamese aggression and increased support from the communist bloc. In addition, both Administrations desired to keep Laos out of the newspapers and increased civilian casualties caused by extensive bombardment would have defeated that objective.
7.5. Aerial Bombardment in Cambodia, 1969-1973

The secret aerial bombardment of Cambodia reportedly began during the Johnson Administration with roughly 1,600 sorties flown delivering 214 tons of ordnance in support of covert and special operations raids into Cambodia against communist hideouts and supply lines (Owen 2006, 67). The military objective of both the Johnson and Nixon Administrations was to interdict North Vietnamese troops and materiel en route to South Vietnam via the Ho Chi Minh Trail (Burchett 1970, 59-60). In total between 1965 and 1973, Owen claims newly declassified Air Force records show that U.S. air forces flew 231,000 sorties and dropped 2.8 million tons of munitions on 114,000 targets in Cambodia (62-63). Kissinger claims the estimates of civilian casualties are wholly exaggerated and cites in his work a high estimate of 50,000 civilian fatalities across the years of aerial bombardment (Kissinger 2003, 69-70).

Kissinger claims that the aerial bombardment of Cambodia during the Nixon Administration occurred in three time periods. Nixon first authorized the “secret bombing” of communist “sanctuaries” along an 80 mile stretch of border between March 1969 and May 1970 (Kirk 1971, 126; Kissinger 2003, 70). It was at the end of this time period that Nixon also authorized U.S. and South Vietnamese ground incursions into Cambodia (Kirk 1971, 124-125). The second period was May 1970 to January 1973 and third was February to August 1973 (Kissinger 2003, 70).

At no time did the Johnson or Nixon Administrations or their commanders order or condone the indiscriminate aerial bombardment of Cambodia; however, during the Nixon Administration’s air campaign over Cambodia between 1969 and 1972, U.S. air
forces operated under less stringent ROE. This was to change in February 1973 with the Paris Accords. From February to August 1973, ROE became more stringent requiring U.S. commanders garner the approval of the U.S. Ambassador and Cambodian government before air strikes could take place yet the advance of the Khmer Rouge deeper into Cambodia resulted in aerial bombardment closer to populated areas (69-70).

There was substantial concern for protecting civilians in both Washington and Phnom Penh (60, 67-69). Both the U.S. and Cambodian governments assessed that few civilians lived in the communist sanctuaries along the South Vietnamese border. The North Vietnamese reportedly had expelled them or they had left (67-70). For this reason, B-52 raids against area targets reportedly hosting North Vietnamese troops and ammo depots seemed logical. At the same time, there is no question that the Nixon Administration assumed more risks with Cambodian civilians and habitations albeit in rural areas than the Johnson Administration had in North Vietnam during Rolling Thunder because even there Johnson had even micromanaged armed reconnaissance missions in rural areas. Like in rural South Vietnam in the B-52 Arc Light missions, U.S. Forces provided no warnings of impending attacks but “carpet bombed” swaths of jungle that reportedly had communist forces and supplies.

There is no question the U.S. Government adhered to the norm as a baseline because it did not desire to kill civilians indiscriminately and such a campaign would have been counter-productive internationally and domestically. The fact that few civilians lived in the border area also invited more aggressive aerial bombardment. At the same time, risks were accepted with B-52 raids and fighter-bomber attacks with no FACs. Such raids invited collateral damage even in reportedly de-populated areas.
Why? As in Laos, the regime in Phnom Pen desired and accepted the bombing as necessary to stop communist expansion in Cambodia (59, 67). The fact that the bombardment was welcomed by the host government seemed to permit greater flexibility. In addition, the bombardment was initially secret and this kept the campaign officially out of the newspapers which permitted greater liberty in regards to bombardment. As the communist Khmer Rouge advanced on the capital later in the conflict, U.S. aerial bombardment became more intense and moved into more populated areas increasing the risks of civilian casualties. In order to thwart the Khmer Rouge, the Nixon Administration accepted these risks.

7.6. Why was there variation in adherence between North Vietnam and South Vietnam, Laos, and Cambodia?

In my review of the relevant military and political histories of the Vietnam War, I find four broad and overlapping reasons for U.S. restraint in its air campaigns against North Vietnam especially Operation Rolling Thunder. These reasons include desires to prevent military escalation that could provoke Chinese and/or Soviet military intervention, exercise strict civilian control of aerial bombardment that was part of a complex, graduated “risk strategy” designed to coerce North Vietnam to U.S. terms, limit civilian casualties and damage to strictly civilian objects because of the domestic and international reputational costs to the U.S., and a conclusion that heavy-handed aerial bombardment had little utility for the objectives sought by both Administrations. Adherence to the bombing norm was in fact one constraint in a number of constraints on the conduct of aerial bombardment in the war.

Supporting his norm thesis for restraint, Thomas argues that:
United States bombing in Vietnam remains controversial to this day, often being criticized as indiscriminate and disproportionately harmful to Vietnamese civilians. Nevertheless, far more than in Korea, sensitivity to civilian casualties served as an important constraint on bombing operations from the start. (Thomas 2001, 152)

Thomas writes: “The focus on avoiding civilian casualties helped make Rolling Thunder, in the words of one legal expert, ‘one of the most constrained military campaigns in history,’” (154). While I concur with Thomas that the bombing norm was more influential in Vietnam than Korea, I differ with him in that I argue it was not the bombing norm that fundamentally constrained aerial bombardment in North Vietnam, but it was the limited political objectives and the restrained military strategy pursued by the Johnson Administration, and later the Nixon Administration, that constrained bombardment and this restraint made it logical to adhere to the bombing norm. In this sense, the bombing norm was a proxy for strategic restraint. The choice to adhere to the bombing norm was just one constraint among many on the conduct of aerial bombardment.

It is impossible to determine conclusively that either the bombing norm or strategic necessity or both factors equally were the most important determinants in two Administrations’ decisions to minimize civilian casualties and tightly control aerial bombardment. In the following analyses, I will compare and contrast the evidence in the historical record for the norms and strategic necessity theses as explanations for U.S. adherence to the bombing norm in Vietnam. I will begin with the evidence for norms being the primary determinant of U.S. adherence to the bombing norm.

Was concern for preventing civilian deaths and damage to civilian objects the primary or most influential determinant for adherence to the bombing norm as claimed by Thomas? If so, what is the evidence? In *Ethics of Destruction*, Thomas lays out his
evidence in about six distinct ways in which U.S. bombing of North Vietnam (he neglects U.S. bombardment in the South Vietnam, Laos, and Cambodia) was constrained by the bombing norm citing roughly seven sources to substantiate his claim. In several respects, Thomas conflates adherence to the bombing norm with explanations for U.S. adherence. He seems to assume that if the U.S. observed the norm in some way in North Vietnam the norm was the reason for the observance.

First, Thomas claims that the bombing norm was very influential in North Vietnam because the Johnson and Nixon Administrations specifically kept the vast majority of targeting strictly to military objects eschewing any direct targeting of the population or indirect targeting to cause civilian hardship (152-153). More importantly, both Administrations went above and beyond the call of international law by forbidding attacks on even lawful military targets due to concerns for collateral damage (152, 155). Second, he highlights that the Johnson Administration had placed restricted and prohibited zones around Hanoi and Haiphong wholly assuming this was done to prevent civilian casualties and damage to civilian objects (152). Third, he notes that even SAM sites in populated areas, which of course were direct threats to U.S. aircrews, were forbidden for attack primarily as a manifestation of concern for collateral damage (152). Fourth, he focuses on the fact that while U.S. air forces were permitted to strike Korean dams in the Korean War in order to coerce Pyongyang through punishment of the population such strikes on North Vietnamese dams and dikes were never seriously considered (152-153). Fifth, he claims that when U.S. air forces did cause excessive collateral damage the Administration immediately issued corrective measures (152-153). Sixth, Thomas claims that there was just a general domestic and international revulsion to
“the bombing of North Vietnam” and this weighed heavily on U.S. policymakers resulting in constrained aerial bombardment (157).

The seventh way the bombing norm manifested itself according to Thomas was in the “target selection process” (153). As noted earlier, President Johnson and his closest advisors picked targets for Operation Rolling Thunder at the weekly “Tuesday Luncheons” (Gravel 1971 IV, 208-210; Parks 1982). Thomas writes “The target selection process itself, moreover, was designed so that almost as much weight was given to avoiding civilian casualties as its military effectiveness, and sometimes more” (Thomas 2001, 153). To substantiate this claim, he cites Parks’ assertion that President Johnson selected targets based on “four criteria” (Thomas 2001, 15341; Parks 1982). These criteria included “…the military advantage for striking the target; the risk to U.S. aircraft and pilots; estimated civilian casualties; and danger to third-country nationals” (Parks 1982). Superficially then, one specific criterion dealt exclusively with strategic considerations while the second dealt with force protection, which in many respects is also a strategic issue, with the remaining two, according to Thomas, dealing with civilian casualties and “third country nationals” (footnote #22, 153).

For Thomas, two out of the four criteria—half—relate to protecting civilians and for this reason he claims in the text that “almost as much weight was given to avoiding casualties as to military effectiveness” (153). Thomas’ error is that he equates protecting third country nationals in North Vietnam wholly with protecting civilians. This is simply not the case. The Johnson Administration knew of Soviet advisors assisting the North Vietnamese at military sites (Gelb 1979, 269; Davidson 1988, 363). It feared their deaths

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41 See Thomas’s footnote #22 on Parks 1982, on page 153.
would escalate the conflict and trigger increased support to Hanoi if not outright intervention.

While Parks claims there were only four criteria for selecting targets in North Vietnam, what both Thomas and Parks fail to highlight is the influence of signaling embedded in the de facto phasing of targeting in Rolling Thunder. The Administration additionally chose targets based on the political and diplomatic signals it desired to send Hanoi. Before the Administration reviewed targets lists for its weekly Luncheons, it had already decided in earlier meetings the geographic scope and broad restrictions it would place on that week’s targeting so while the Administration may have chosen specific targets based on the four criteria it had already decided to only review targets south of the 20th parallel in order to signal U.S. restraint to the Hanoi.

In addition to Parks, Thomas references roughly six other sources for his claims regarding the bombing norm. First, he cites in Lewy’s 1978 work *America in Vietnam* Telford Taylor, “the former chief counsel at Nuremberg” (Thomas 2001, 154) and “critic” of U.S. Vietnam policy, who upon examining the MACV rules of engagement found them “virtually impeccable”42 (Lewy 1978, 233; Thomas 2001, 154). The problem is MACV’s rules of engagement, which covered both air and land operations, only applied to South Vietnam (Lewy 1978, 233). General Westmoreland and later General Abrams had no command authority over Rolling Thunder (Van Creveld 2011, 389). Thomas has his history wrong. The White House in coordination with the Defense Secretary, U.S. commander in the Pacific, and the Seventh Air Force commander issued rules of engagement for air operations over North Vietnam (389).

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42 Quoted directly from Lewy 1978, 233, see footnote 28 in Lewy.
Second, Thomas references anti-war British journalist, James Cameron, who visited bombed areas in North Vietnam and concluded that U.S. air attacks had actually pursued military targets (154). Third, he cites Papes’ casualty figures for North Vietnam during Operations Rolling Thunder and Linebacker II and concludes that U.S. bombing was objectively and substantially restrained compared to U.S. aerial bombardment in World War II (154).

Thomas’ fourth and fifth sources are really the strongest evidence for the influence of the bombing norm in North Vietnam and if not taken in context of other memoranda and internal debates could be considered decisive for the influence of norms or a 50/50 conclusion regarding the influence of both norms and strategy. Thomas, quoting from Parks, lists eight bulleted directions in a June 1966 Presidential order to air planners planning an attack on oil facilities “in Hanoi and Haiphong” (Thomas 2001, 153). Of the bulleted directions, all of them relate in some manner either to minimizing civilian casualties and incidental damage to civilian objects or increasing bombing accuracy which also decreases collateral damage and improves mission effectiveness (153). One bullet states: “- stress the need to avoid civilian casualties in detailed briefing of pilots;” (153). Two other bullets specifically direct air tactics to avoid populated areas (153). All the other bullets address topics related to both improving bombing accuracy and limiting the possibility of incidental damage. For example, the first bullet states “- execute strikes only under optimum weather conditions, with good visibility and no cloud cover;” and the second bullet states: “- make maximum use of experienced Rolling Thunder pilots;” (153).
In what superficially appears to be a 50/50 split between norms and strategic calculation for explaining adherence to the bombing norm in Vietnam, Thomas, quoting from Lewy, states:

In an October 1966 memo Secretary of Defense Robert McNamara advised Johnson against unrestricted bombing, arguing that ‘to bomb the North sufficiently to make a radical impact upon Hanoi’s political, economic, and social structure, would require an effort which we could make but which would not be stomached either by our own people or by world opinion, and it would involve a serious risk of drawing us into open war with China (154).

Based on the quote above and other evidence, there is no question that the bombing norm itself had strong influence on aerial bombardment in North Vietnam. Thomas is in fact right that for some lawful military targets the Johnson Administration, in particular, forbade their attack if there was a strong likelihood of collateral damage so his statement that avoiding civilian casualties sometimes took precedence over military effectiveness is accurate (153); however, the question remains was it decisive or predominant in influence over, or equal to, other factors overall?

Contrary to Thomas, I find the preponderance of evidence points to the Johnson and Nixon Administrations’ concerns for military escalation, military necessity, and for using aerial bombardment primarily as a diplomatic instrument as the most important factors in their ostensible adherence to the bombing norm in North Vietnam. In the South with a friendly, dependent government and with no concerns for great power (e.g. China, USSR) intervention, both Administrations permitted and tolerated greater risks for collateral damage in aerial bombardment. Aerial bombardment in the South was more aggressive and less concerned with civilian casualties.
What is my evidence for the strategic necessity thesis? If the avoidance of civilian casualties was the primary factor for the constrained nature of Rolling Thunder, why were there so many other restrictions unrelated to minimizing collateral damage on the air campaign and why did these not apply in the South (Clodfelter 1989, 111, 118)? While there was frequent contention and confusion among President Johnson’s advisors over what U.S. strategy in North Vietnam was and should be, it was never the Johnson Administration’s intent to defeat North Vietnam militarily and decisively coerce capitulation to U.S. terms (Gravel 1971 III, 287). In fact, the Administration simply was not willing to do everything it could to save South Vietnam. It was willing to lose if U.S. objectives could not be achieved at an ambiguous yet intuitively internalized limit (e.g. no invasion of the North, no strategic air campaign, no nuclear threats).

In the minds of Johnson and his closest civilian advisors, Operation Rolling Thunder was always about improving the U.S. bargaining position vis-à-vis North Vietnam in order to coerce a favorable negotiated settlement to the conflict as well as improving the politico-military situation in the South (287). The “risk strategy” of graduated military pressure, at the core of Rolling Thunder, was always a “third way”—a series of political, bureaucratic, and strategic compromises—between doing nothing to North Vietnam and conducting a full-blown strategic air campaign. In the documented internal debates among Johnson’s advisors and in numerous official memoranda regarding U.S. strategy and targeting, there are very few specific references to

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43 In fact, Rolling Thunder was a strategic air campaign (despite McNamara’s argument that it was not) according to U.S. Air Force doctrine because one of the primary objectives of the campaign was to coerce North Vietnam to stop support to the Southern insurgency. In some respects, this was perceived as a “war-winning” strategy to achieve political effects not tied to battlefield results.

44 The JCS and theater commanders generally wanted more aggressive operations while civilians in State and the White House generally wanted a “third way” between nothing and a strategic air campaign (Gravel 1971 III, 287-290)
minimizing civilian casualties and damage to civilian objects as a reason for restraint. Most of the specific references to minimizing civilian casualties are found in specific orders issued by Secretary McNamara to commanders in Vietnam and these orders usually only applied to aerial bombardment against North Vietnam not South Vietnam and Laos. In other words, adherence to the bombing norm was not central to U.S. strategy. It was a byproduct of U.S. strategy primarily applicable to North Vietnam.

U.S. and South Vietnamese aerial bombardment against Viet Cong insurgents and North Vietnamese regulars began in South Vietnam in the early 1960s under Operation Farmgate. As noted earlier, U.S. aircrews, with real or token South Vietnamese pilots, flew Vietnamese or unmarked aircraft as advisors but increasingly engaged in combat as the insurgency intensified. These air operations were conducted with little consternation by the Administration and they certainly never generated the internal debate that aerial bombardment of the North would cause. (Van Creveld 2011, 381-383; Renz 2012, 29-30).

U.S., Vietnamese, and Taiwanese combat operations against the North began in 1964 with Plan 34A, a covert military operation, intended to bring increasing military pressure against North Vietnam without the messiness of domestic and international publicity. These operations, mostly by South Vietnamese and Taiwanese forces with U.S. support, included commando raids, acts of sabotage, leaflet drops, and coastal attacks in the North. In addition to Plan 34A, the President had authorized in May 1964 U.S. air forces, under the codename “Team Yankee,” to conduct “reconnaissance” and

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45 Team Yankee missions over Laos “…included roughly four daylight reconnaissance flights in the Plaines des Jarres-Route 7 area every two weeks, and during a like period, approximately ten reconnaissance flights along Route 7” (Gravel 1971 III, 253).
“armed escort” missions over Laos in support of Laotian forces’ counter-insurgency operations against its own indigenous communists as well as counter-infiltration operations against North Vietnamese transiting though Laotian territory (Gravel 1971, III, 253).

While President Johnson was not ready to commit U.S. airpower against the North in December 1964, he authorized Operation Barrel Roll in Laos under a limited regime of sorties⁴⁷ (Gravel 1971 III, 92). Barrel Roll included armed reconnaissance missions against North Vietnamese infiltration routes through Laos and into South Vietnam (Gravel 1971 III, 253-255; Haney 271-273). If concerns for civilian casualties and their impact on domestic and international audiences were central to U.S. restraint in North Vietnam, why were combat air operations approved for Laos two months before Rolling Thunder? Why not similar consternation? The Administration did shroud U.S. operations in Laos in greater secrecy in order to prevent publicity (Haney, 248, 271-272), yet it was obvious to the North Vietnamese and Laotians that U.S. air forces were operating over Laos yet there appeared to be little consternation in the Administration, Southeast Asia or the press initially over these operations (254).

What made North Vietnam unique? What maintained North Vietnam’s sanctuary from overt U.S. combat operations? The logical answer is that Laos had invited U.S. support; therefore, the U.S. was not in a position as an aggressor in a “David vs. Goliath” struggle in a small Asian state so whatever collateral damage may occur in Laos was

⁴⁶ Reconnaissance would include visual, electronic, and photo-reconnaissance. Armed escort included aircraft armed with air-to-air and potentially air-to-ground weapons to protect U.S. reconnaissance and Laotian interdiction missions. Armed reconnaissance included air missions to observe and location targets of opportunity for attack.
⁴⁷ Barrel Roll began in December 1964 with two weekly missions with four aircraft per mission (Haney, 272).
somehow consensual (Clodfelter 1989, 138; Record 2007, x). In addition and most importantly, Laos had no superpower or great power sponsors like North Vietnam opposed to U.S. intervention. There were no substantial arguments in the Administration that U.S. operations in Laos may escalate the war although such missions were initially tightly controlled by the White House (Haney 272; Gravel 1971 III, 253-255).

With the political and military situation deteriorating rapidly in the South in 1964-65, the Johnson Administration debated the appropriate overt military pressures that could spare the South collapse. The JCS advocated a sustained, decisive strategic air campaign intended to coerce Hanoi to concede to U.S. terms. The JCS recommended 94 targets including industry, ports, depots, garrisons, airfields, air defenses, and lines of communication. The Administration deemed these measures too aggressive and unsuited to U.S. objectives. (Gravel 1971 III, 253-255)

On 1 November 1964, days before the U.S. Presidential election, Viet Cong guerrillas attacked the U.S. airbase at Bien Hoa resulting in five U.S. fatalities and the destruction or damage of 27 B-57 bombers (288). The JCS recommended very aggressive, retaliatory air operations against the North including air attacks on airfields, fuel depots, infiltration routes to the South, and progressive attacks on the JCS 94 Target List (292-293). With an election days way and unwilling to escalate the conflict at this stage, Johnson rejected the JCS recommendations.

Due to the deteriorating politico-military situation in the South and the end of the U.S. 1964 election cycle, a NSC Inter-Agency Working Group (IAWG) convened in November 1964 to provide President Johnson more options for reversing the situation in
the South. The group proposed three courses of action titled Options A, B, and C. Option A was a continuation of current policy including advisory support in the South and covert operations in the North. Option B emphasized greater military pressure on North Vietnam including a more aggressive, sustained air campaign to coerce Hanoi to U.S. terms. Option C, termed the “slow squeeze, emphasized incremental, graduated air operations against the North in addition to other military pressures. After debating the pros and cons of maximum and minimum military options, the NSC IAWG:

…recommended a graduated program of controlled military pressures designed to signal U.S. determination, to boost morale in the South and to increase the costs and strains upon the North. A basic aim of the program was to build a stronger bargaining position, to restore an “equilibrium” in the balance of forces, looking toward a negotiated settlement (289).

Central to this course of action were diplomatic initiatives, goodwill gestures, and bombing halts to signal U.S. intentions and provide incentives for negotiation. Option C became the foundation for Rolling Thunder in February 1965. (Gravel 1971 III, 289)

Due to the deteriorating situation in the South and after the VC attacks on Pleiku and U.S. retaliation with Operation Flaming Dart I, McGeorge Bundy, the President’s national security advisor, issued a memo urging the Administration to adopt a policy of “sustained reprisal” against North Vietnam for its support of the Southern insurgency (Gravel 1971 III, 312). Bundy and his civilian colleagues advocated that the President order a graduated air campaign against the North tied specifically to VC acts and levels of violence in the South (309, 313). If VC violence increased, U.S. air attacks would increase while if VC violence decreased, U.S. aerial bombardment would decrease. Bundy argued this course of action was the best to tie U.S. bargaining with Hanoi with a publicly acceptable rationale for U.S. attacks on North Vietnam (308-315). Throughout
the memo, Bundy emphasized the limited nature of U.S. objectives and the need to communicate this fact to Hanoi and its sponsors, China and the USSR (308-315). Bundy writes:

Even in such a more generalized pattern [of reprisals], however, it would be important to insure that the general level of reprisal action remained in close correspondence with the level of outrages in the South. We must keep it clear at every stage both to Hanoi and the world, that our reprisals will be reduced or stopped when outrages in the South are reduced or stopped—and that we are not attempting to destroy or conquer North Vietnam (312).

Emphasizing again the limited nature of U.S. ends and means, Bundy writes “…we will not provoke, we will not use our force indiscriminately; but we can no longer sit by in the face of repeated acts of terror and violence for the which the DRV is responsible” (312). Adopting the gradualist approach, Bundy advocated further for beginning air attacks at low levels and only increasing their tempo in response to increased violence in the South (313). Again emphasizing the limited nature of U.S. intentions, he writes “The essence of such an explanation should be that these actions are intended solely to insure the effectiveness of a policy of reprisal, and in no sense represent any intent to wage an offensive war against the North” (313). From this reasoning, one can see that many of the future restraints placed on Rolling Thunder were attempts to frame publicly and diplomatically U.S. aerial bombardment in a defensive light intended only to achieve that level of damage necessary to respond to communist violence in the South.

With domestic and international criticism of U.S. policy in Southeast Asia already underway by late 1964 and early 1965, the U.S. State Department issued a “White Paper” and issued press reports in order to explain to U.S. and foreign audiences U.S. intent to
defend South Vietnam militarily yet at the same time limit its “objectives in Southeast Asia” (330). While the White Paper specifically cited U.S. intent to escalate its attacks on North Vietnam if Hanoi did not stop its support to the insurgency in South Vietnam, U.S. representatives simultaneously privately informed foreign governments, including China, of its intent to limit its objectives to halting North Vietnamese military support to the South (330). The U.S. emphasized that invasion and/or regime change were not U.S. objectives (330).

In response to NSC internal debates regarding the likely international consequences of increasing military pressures against North Vietnam, Foy Kolher, U.S. Ambassador to the USSR, informed the State Department that Moscow would not likely respond substantially to U.S. reprisal air strikes in southern North Vietnam, but he writes in a cable:

However, if attacks on DRV\(^{48}\) become general, particularly if they are extended to industrial or urban targets and areas beyond border zone. Soviets will reassess our intent as well as basic politico-military situation. If reassessment leads them to see U.S. aim as ending existence of DRV as socialist state, Soviets will not only step up defensive aid but supply means of counterattack, e.g. aircraft for raids on SVN cities and heavy ground equipment. While aware of risk this might bring Peiping into picture, Soviets will not hold back if existence of DRV seems threatened (330).

In this cable, there is no mention whatsoever of the effects of civilian casualties on U.S.-USSR relations and Soviet willingness to intervene in the conflict based on civilian hardship. The U.S. ambassador unmistakably associated U.S. air attacks on North Vietnamese industrial facilities and urban areas with military escalation that would signal political objectives the Soviets would associate with regime change (332).

\(^{48}\) Democratic Republic of Vietnam, North Vietnam
Strongly supporting the strategic thesis is Secretary McNamara’s refusal to grant authority for U.S. air forces to attack parts of North Vietnam’s nascent integrated air defense system early on (Gravel 1971 III, 284, 286; Parks 1982). Thomas suggests that SAMs were generally spared because they were in or near populated areas and he supports his claim mostly by referencing the fact that (Thomas 2001, 152) and indeed early on many initial SAM sites were in the Hanoi-Haiphong Corridor (Parks 1982), but that does not mean that the Administration necessarily spared them for fear of harming civilians.

On 5 April 1965, just a month into Rolling Thunder, the JCS requested permission for U.S. air forces to attack a new SAM site near Hanoi (280). For some reason, McNamara initially declined to respond (280) but did so later rejecting the request (284). In his book, *A Soldier Reports*, General Westmoreland claimed that Assistant Secretary of Defense McNaughton argued with him that the North Vietnamese never intended to use the SAMs as they were a “political ploy” (Parks 1982). In this sense, it appears that the Administration perceived the SAMs initially as a form of political signaling (e.g. steer clear of Hanoi); therefore, the Administration may have desired to spare the SAMs to signal back that if the SAMs were not used U.S. air forces would not attack them. On 15 June 1965, McNamara again refused to grant strike authority for SAM sites as well as authority to strike Soviet-made IL-28 cargo aircraft at North Vietnamese airbases for fear of provoking the USSR whom the Administration knew had advisors at North Vietnamese facilities (Gravel 1971 III, 284; Davidson 1988, 363). Park writes “When the first aircraft [US] was lost to a surface to air missile (SAM)

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on 24 July 1965, a 10-mile prohibited strike area was placed around Phuc Yen Airfield” outside Hanoi (Parks 1982). The JCS petitioned McNamara on numerous occasions to attack the base and he refused until after the Stennis hearings in 1967 (Gravel 1971 IV, 208). After the first 1965 shoot-down, Johnson did authorize air attacks on SAM sites provided they were south of the 20th parallel (Parks 1982).

The same logic seems to apply to Administration refusals to permit attacks on other airbases whose MiG fighters increasingly were threatening U.S. strike formations ingressing into North Vietnam. Lewy claims that the Administration refused to destroy all North Vietnamese airbases for fear of Hanoi ordering its MiGs to Chinese airbases for sanctuary re-creating one of the problems of the Korean War (Lewy 1978, 393). In addition, considering that airbases usually are outside the most urbanized areas and they often cover significant acreage creating buffer space between military objects and civilian objects, air attacks on these targets could have tactically minimized collateral damage so why did McNamara spare these targets for so long? The only logical reason is that McNamara perceived U.S. attacks on Northern airbases with Soviet equipment and advisors as escalatory and provocative as well as likely to drive the North’s fighters to China.

Another example of strategic considerations rather than the bombing norm being more important to decision-making regarding aerial bombardment involved the use of B-52s over North Vietnam and South Vietnam. Although the Administration had permitted the deployment of B-52s to Southeast Asia in February 1965 (Gravel 1971 III, 383), the U.S. Air Force had only used them once in addition to fighter-bombers, on its first Rolling Thunder mission (Parks 1982). Due to the high sortie counts of fighter-bombers
required for large area targets, aircraft losses, and weather restrictions, the Administration initially desired their continued use because they could bomb area targets, like large garrisons, from high altitude above the North’s initially poor air defenses and bad weather; however, the Administration reversed course and then banned their continued use due to concerns that a “strategic” (e.g. long-range bomber with nuclear weapons capability) weapon like the B-52 sent the wrong message to Hanoi and the world regarding U.S. intentions in the North (Parks 1982).

Problematic for the norms thesis, the Administration’s ban on B-52s over the North had no impact on the use of B-52s in the South as the B-52 Arc Light missions, which involved the “carpet bombing” of alleged VC strongholds in the jungle, began in earnest in June 1965 and continued throughout the war (Gravel 1971 III, 383-384). While the Arc Light missions generally took place in jungle areas far outside urban areas, the U.S. Air Force accepted risk, in terms of discrimination, in “saturation bombing” wide swaths of territory (383-384). What is of relevance to the norms and strategic necessity debate is that B-52 saturation bombing was acceptable against insurgents in the South but not acceptable against North Vietnamese regulars in the North. If the bombing norm was the primary constraint on aerial bombardment during the war, why was there variance between North and South? The logical explanation is that strategic considerations like not provoking North Vietnam’s communist sponsors were predominant.

In a message to Ambassador Taylor briefing him on the next round of Rolling Thunder attacks—Rolling Thunder VII, Secretary Rusk directed Taylor to brief Saigon on the increased tempo of airstrikes and their rules of engagement (339). In addition, he
directed Taylor to inform the prime minister that “we seek no enlargement of the struggle and have carefully selected targets with view to avoiding undesirable provocation” (339).

Reinforcing the diplomatic and strategic nature of targeting restrictions, President Johnson found himself rapidly under domestic and international pressure to stop the bombing and negotiate with Hanoi (273-274). On 13 May 1965, he ordered the first bombing pause of Rolling Thunder’s eight pauses and communicated his desires to Hanoi for a negotiated settlement to the conflict if Hanoi would stop military support to the insurgency in the South (274-275). The North Vietnamese rejected the offer and Johnson ordered bombardment to re-start on 18 May (275).

On 20 April 1965, Secretary McNamara led a conference in Honolulu of U.S. diplomats and commanders involved in Vietnam (274). While the conference’s primary purpose was to coordinate U.S “troop deployments” to South Vietnam, attendees reportedly concurred that Rolling Thunder, which was now almost two months old, was applying “sufficient pressure” to the North (274). Attendees supposedly “agreed” “that it was important not to ‘kill the hostage’ by destroying the valuable assets inside the ‘Hanoi do not’”50 (Gravel 1971 III, 274). These statements of the Honolulu conference show that the President and McNamara’s grant of geographical sanctuary from U.S. air attacks to Hanoi had little to do with concerns for civilian casualties and collateral damage as suggested by Thomas but rather these restrictions primarily were rooted in the “risk strategy”—the graduated pressure approach—to the air campaign (Gravel 1971 III, 289-290). As noted earlier, the risk strategy was premised on the notion that the threat of future and greater punishment is more important that present limited punishment (Pape 50 The Hanoi Prohibited Zone
1996, 19). If the coercer applies maximum pressure to the target—“kills the hostage”—quickly and destroys the targets of greatest value, the coercer has no more coercive leverage over the target and coercion is likely to fail (19).

On 30 July 1965, Secretary McNamara responded to President Johnson’s request for a review of Rolling Thunder with a memo detailing Administration objectives, current results of the campaign, and recommendations for future action (Gravel 1971 III, 385). Nowhere in the document is there a direct reference to, or priority given to, keeping civilian casualties low; however, there are two insightful passages bearing on concerns for military escalation, especially in regards to why Hanoi and Haiphong were off-limits, and the impact of Rolling Thunder on the “…peaceful image of the U.S” (387). In regards to how the “bombing program” (385) (McNamara does not call it a campaign) is limited in scope and differentiated from a strategic air campaign as well as concerns for military escalation, McNamara writes:

It should be noted that the program has not been a “strategic” bombing program; it has been limited to selected targets of fairly direct military relevance. Populations and targets such as dikes and basic industries have not been struck. Furthermore, the immediate vicinities of Hanoi and Haiphong have been avoided, partly because the targets there are primarily of the “strategic” type and partly because strikes there would involve even more serious risks of confrontations with the Soviet Union and China (386).

In the memo, McNamara does not define clearly what he perceives as “strategic”; however, one can see that he associated a “strategic” air campaign with counter-value (e.g. industries, dikes) and counter-population targets while strictly military targets are viewed as non-strategic. Those who see norms driving the Johnson Administration’s decision to adhere to the bombing norm in Rolling Thunder will find evidence for their argument in the memo because McNamara associated strategic bombing with counter-
population targeting and he notes to the President that the campaign is not strategic. In addition, McNamara states that the Hanoi-Haiphong corridor has been restricted “partly” because of the many “strategic” targets there so an association can be made between making these cities off-limits and protecting civilians (386-387).

Those seeing strategic necessity primarily driving adherence to the bombing norm will find evidence as well. For example, McNamara states that the other reason Hanoi and Haiphong have been placed off-limits is due to concerns for military escalation that could provoke China and the USSR. What would have been provocative about U.S. air attacks in Hanoi-Haiphong corridor? The presence of Chinese and Soviet diplomatic facilities, military advisors stationed in the region, Chinese and Soviet ships at Haiphong, and the general perception of U.S. intensification by strikes on North Vietnam’s major cities likely would have signaled military escalation.

McNamara claims in the memo that Rolling Thunder is undermining U.S.-Soviet détente by threatening another communist state that is being aided by the USSR, reminding Soviets of German bombing in WWII, and bringing U.S. and Soviet military equipment into competition (387-388). More interesting for the strategic necessity thesis, McNamara claims that the extent of the rift in U.S.-Soviet relations and how it can be repaired depends on the extent of U.S. military operations against North Vietnam and “how long the campaign continues” (387).

In regards to damage to the U.S. global image, McNamara writes:

The price paid for improving our image as a guarantor has been damage to our image as a country which eschews attacks on other nations. The hue and cry correlates with the kind of weapons (e.g. bombs vs. napalm), the kind of targets (e.g. bridges vs. people), the location of targets (e.g. south vs. north), and not the least to which the critic feels threatened by Asian communism (e.g. Thailand vs.
the UK). Furthermore, for a given level of bombing, the hue and cry is less now than it was earlier, perhaps to some extent helped by communist intransigence toward discussions. The objection to our “warlike” image and the approval of our fulfilling our commitments competes in the minds of nations (and individuals) in the world producing a schizophrenia. Within such allied countries as UK and Japan, popular antagonism to the bombings per se, fear of escalation and belief that the bombings are the main obstacle to negotiation, have created political problems for the governments in the support of US policy” (387).

Based on McNamara’s perception of world opinion, one can read vague concerns for civilian casualties specifically in regards to general purpose bombs, which seem more military-related, and napalm which evokes imagery of a fiery anti-personnel weapon whose effects are perceived as wider spread. He perceives greater criticism for personnel targets which would seem to even cover enemy combatants than physical targets like bridges. In addition, McNamara finds that the location of targets garners greater or lesser criticism suggesting that attacks in the North caused more criticism than in the South.

McNamara’s remarks also make an initial correlation early in the campaign between the level of U.S. bombardment and world criticism suggesting that it was not necessarily civilian casualties driving criticism but the very fact the United States was waging war on a small state. He seems to support this claim with his observation that in allied states publics opposed Rolling Thunder for three reasons: opposition to the very aerial bombardment itself, concerns for escalation, and perception that U.S. bombardment was an obstacle to negotiations with the North Vietnamese.

On 9 August 1967, Senator Stennis (D-MS) began hearings into Rolling Thunder especially in regards to its effectiveness and the Administration’s restrictions on the use of airpower. Stennis was of the mind that the Johnson Administration was mishandling the war and wasting U.S. airpower. With “hawks” within and without the Administration
demanding more aggressive aerial bombardment of the North and “doves” within and without demanding a bombing halt and negotiations, the Stennis hearings presented “hawks” including the Joint Chiefs and U.S. commanders in Vietnam the opportunity to air their grievances regarding the restrained nature of the air campaign. Not surprisingly, the JCS and commanders in theater argued for more aggressive operations against the North. Secretary McNamara was the most important speaker for the Administration and during his testimony he repeatedly emphasized that more aggressive air operations in North Vietnam lacked political and military utility. He made very little mention of preventing civilian casualties or civilian hardships among the Vietnamese. His justifications for restraint were predominantly strategic.

Senator Gravel writes in his edition of the *Pentagon Papers* that McNamara during his testimony “…defended the bombing campaign as one which was carefully tailored to our limited objectives in Southeast Asia and which was therefore aimed at selected targets of strictly military significance, primarily the routes of infiltration” (Gravel 1971 IV, 199-200). In response to committee accusations that he declined to approve targets recommended by the JCS, McNamara argues that most of the recommended targets, 85%, had been approved for attack and that “25 were lesser targets in populated, heavily defended areas, 4 were more significant targets in such areas, 3 were ports, 4 were airfields, and 5 were in the China buffer zone (201). In this statement, McNamara seems to meld norms, force protection, and strategic arguments for restricting attacks in the Hanoi-Haiphong corridors due to concerns for the population as well as U.S. aircrews. He makes the case that for all of these reasons most of these unstruck targets from the JCS list are not worth the effort. Senator Gravel writes “Some of these
targets did not warrant the loss of American lives; others did not justify the risk of direct confrontation with the Chinese or the Soviets…” (201).

During his testimony to the Stennis committee, McNamara went on the rhetorical offensive against those advocating more aggressive bombardment against the North.

Again, he couches his defense of restraint in strategic terms. He testified:

Those who criticize our present bombing policy do so, in my opinion, because they believe that air attack against the North can be utilized to achieve quite different objectives. These critics appear to argue that our airpower can win the war in the South either by breaking the will of the North or by cutting off the war-supporting supplies needed in the south. In essence, this approach would seek to use the air attack against the North not as a supplement to, but as a substitute for the arduous ground war that we and our allied are waging in the South (201).

In this testimony, McNamara fundamentally claims that Rolling Thunder has been restrained because it was never intended to be a “war-winning” strategy but an augmentation to the core objective of defeating the insurgency in the South. This statement came after and supported earlier statements in his testimony that U.S. objectives against the North were limited and that Rolling Thunder was designed to impose costs on the North and not decisively defeat it. In addition, the campaign had been intended to curtail but not wholly stop infiltration of personnel and materiel to the South. In fact, McNamara was being disingenuous in his testimony because early on the Administration had indeed hoped that the campaign would compel Hanoi to bargain on U.S. terms and substantially thwart infiltration to the South. The Administration had adjusted its objectives and expectations by August 1967.

As he continued his defense of Rolling Thunder, McNamara again couches his justification for restraint in terms of military utility. He essentially claims that more
aggressive bombardment simply would not achieve U.S. objectives anyway so why waste the lives and effort? Countering those who desired a “strategic” air campaign, he states:

…the economy of North Vietnam is agrarian and simple. Its people are accustomed to few of the modern comforts and conveniences that most of us in the Western World take for granted. They are not dependent on the continued functioning of great cities for their welfare. They can be fed at something approaching the standard to which they are accustomed without reliance on truck or rail transportation or on food processing facilities. Our air attack has rendered inoperative about 85 percent of the country’s electric generating capacity, but it is important to note that the Pepco Plant in Alexandria, Va., generates five times the power produced by all of North Vietnam’s power plants before the bombing. It appears that sufficient electricity for war-related activities and for essential services can be provided by the some 2,000 diesel-driven generating sets which are in operation (201).

This fact supports the “strategic necessity” argument rather than the norms argument. According to the civilian victimization literature, states prefer to protect their civilians rather than enemy civilians and this is especially true of democracies whose leaders answer to the people during elections. In addition, the literature suggests that in counterinsurgencies it is important to garner support from the domestic population against the insurgency; therefore, indiscriminate or disproportionate aerial bombardment is more likely to alienate the population. Based on these notions, one would have expected U.S. aerial bombardment in the North to be more indiscriminate or intense than bombardment in the South yet that is not what happened. The U.S. Government was more discriminating in the North rather than the South because discrimination in the North facilitated U.S. objectives while less discrimination in the South also facilitated U.S. objectives—military efficiency and economy of force.

In the North, the Government feared that indiscriminate or even simply very aggressive bombardment could provoke Chinese or Soviet intervention or drive the North
Vietnamese from negotiations. These fears deterred indiscriminate or even very intense aerial bombardment in the North early and mid-way through the war. In the South, aerial bombardment was less discriminating because U.S. Forces, in coordination with South Vietnamese forces, desired to maximize destruction to the Viet Cong and North Vietnamese regulars fighting in the South while at the same time protecting friendly forces and efficiently using resources. While a simplistic rendering, this explains the use of napalm as an aerial weapon in the South. Napalm spread out and killed personnel in an area larger than what could be expected from middleweight blast and fragmentation weapons. So long as the South Vietnamese regime concurred with U.S. ROE, the U.S. Government had no substantive negative consequences to fear from less discriminate operations in the South. With the counterinsurgency doctrine of “winning hearts and minds” poorly internalized by U.S. Forces early in the war, aerial bombardment could be less discriminating because the civilian population and the Viet Cong could not do anything about it. As U.S. commanders later concluded, heavy-handed operations actually undermined U.S. objectives by driving parts of the population to the insurgency.

In addition to strategic necessity, there is a third explanation for lessened adherence to the bombing norm in the South than North. That explanation is both the U.S. military and U.S. Air Force doctrinal predispositions to use overwhelming firepower in war. With no substantial political restrictions on the use of airpower in the South, the Air Force was freer to follow its preferred doctrine of overwhelming firepower. The best evidence for this explanation comes from internal debates between civilians in the Kennedy and Johnson Administrations prior to Rolling Thunder. Civilian policymakers reportedly argued with the Air Force over its increasingly firepower-centric approach to
counterinsurgency in the South between 1961 and 1963 during Operation Farmgate—the U.S. aerial advisory mission in the South (Van Creveld 2011, 383; Renz 2012, 29-30). The civilians warned the Air Force that heavy firepower would endanger civilians and harm the counterinsurgency effort to win “hearts and minds” (Van Creveld 2011, 383). The Air Force reportedly ignored these warnings. “By the end of 1963,” according to Van Creveld, the Air Force and Army had lost 114 aircraft to enemy fire (Van Creveld 2011, 383). In response, the Air Force flew higher and began to convert its slower, propeller-drive force in South Vietnam to jets (383). In 1964, MACV loosened the rules of engagement “governing air support” in order to permit the use of “greater firepower” (383).

7.7. Conclusion

As a matter of policy or strategy, U.S. air forces during the Vietnam War never intentionally targeted civilians for direct attack with the intent to kill, wound, or terrorize civilians; however, the establishment of free fire zones by U.S. ground commanders in South Vietnam, who relied heavily on airpower, came very close to qualifying on occasion as indiscriminate bombing. I have not coded South Vietnam as an example of indiscriminate bombardment because I assess that U.S. air forces never wholly abandoned discrimination even in those areas designated as free fire zones even though there were specific examples of indiscriminate attack by helicopter gun crews (Lewy 1978, 107). Other researchers may come to different conclusions.

As shown in Appendix C, there was variance in adherence between U.S. aerial bombardment in North Vietnam, South Vietnam, Laos, and Cambodia. The Johnson and Nixon Administrations restrained aerial bombardment of North Vietnam much more than
they did bombardment over South Vietnam, Laos, and Cambodia. Even the “duress bombing” of the North was considerably lighter than one would expect from a strategic air campaign. While concern for Vietnamese civilians was a baseline normative concern, the best explanation for the variance is strategic necessity. North Vietnam had powerful communist sponsors in the form of the USSR and China with the military capability to intervene militarily in the conflict. Wary of another “Korean War” in Asia, the Johnson and Nixon Administrations took care not to use aerial bombardment in such a way as to provoke an armed intervention. Like in South Vietnam, the Laotian government had invited U.S. support and accepted U.S. aerial bombardment on its soil. Vietianne only had the U.S. as a sponsor while the communist insurgents in Laos had North Vietnam as a sponsor. U.S. restraint in Laos primarily was intended not to provoke a full-blown North Vietnamese invasion and turn the population against the government seeing the U.S. had no substantial combat troops there to support Vietianne in case of a strong insurgency. Cambodia also invited U.S. support and aerial bombardment. U.S. air forces were less restrained in Cambodia because North Vietnamese forces were occupying parts of the eastern border and presented a substantial threat to the heart of South Vietnam.
8.1. Aerial Bombardment during the Invasion of Grenada

On 25 October 1983, President Reagan ordered U.S. Forces to invade the tiny Caribbean island of Grenada in Operation Urgent Fury (Borrowes 1988, xiv, 79). According to Borrowes, “The objectives of the invasion were to protect and evacuate approximately 1,000 U.S. citizens, neutralize the Grenadian and Cuban forces, and stabilize the internal situation so that democratic government could be restored” (79). In the 1970s, a Marxist regime had assumed power in Grenada and the new Reagan Administration was fearful of Soviet encroachment in the Caribbean and Central America (Borrowes 1988, xii, 6; O’Shaughnessy 1984, 1-2). Of particular concern, the Administration reportedly feared the Cubans were constructing an airfield in Grenada that could be used by Cuban and Soviet military forces (Borrowes 1988, xii). The political and security situation in Grenada deteriorated such that a military junta assumed control over the island and President Reagan ostensibly fearful for U.S. citizens studying and living in Grenada ordered an intervention (75).

Because Grenada had no air force or substantive air defenses, the island was small, and the element of surprise was important for the protection of U.S. citizens, U.S. commanders opted for a series of preparatory commando raids followed by rapid paradrops and Marine landings on strategic locations on the island (79, 81). Considering that Grenada’s 1,100-man paramilitary force was small and wholly overmatched, U.S. Forces mostly concentrated on neutralizing Cuba’s purported 1,000-man military force on the island (82). Airpower was mostly used for airlift and close air support to ground forces.
U.S. air forces during the invasion conducted discriminating air attacks on military targets only. Most close air support missions concentrated on strongpoints on the island where Grenadan or Cuban forces opposed U.S. ground forces (O’Shaughnessy 1994, 1, 22). The worst collateral damage incident occurred when air forces mistakenly bombed a mental hospital near the intended target—a Grenadan strongpoint (Burrowes 1984, 80; O’Shaughnessy 1994, 1). Roughly 30 patients died in the attack (O’Shaughnessy, 6).

Why did U.S. policymakers and U.S. air forces adhere to the bombing norm? There is little question that U.S. commanders desired to protect noncombatants. Commanders desired to maintain surprise and executed initial preparatory operations with commandos precisely so that Grenadan and Cuban forces would have no time to make the invasion costlier than necessary. U.S. victory was inevitable but the question was how many civilians and military personnel would be killed or injured. The Reagan Administration perceived its actions as a rescue mission and liberation rather than a conquest so indiscriminate and disproportionate firepower would have endangered U.S. citizens and undermined that narrative. In addition, there was no utility to being indiscriminate and disproportionate. Grenadan and Cuban forces were small and overmatched. Airpower could be easily focused on enemy ground forces with no aerial opposition.

8.2. Aerial Bombardment during the Lebanon Intervention, 1983-1984

In 1982, President Reagan ordered the introduction of an element of U.S. Forces into Lebanon to be part of a multinational force to police the evacuation of PLO and Israeli forces from Lebanon after the Israeli invasion that summer. As the multinational
force became embroiled in Lebanon’s internecine civil war, various factions with or without the support of Syria began attacking U.S. and multinational forces. In one incident upon the killing of two U.S. Marines, U.S. Forces retaliated against the alleged perpetrators with artillery and helicopter attacks. In other incidents, Syrian forces fired SAMs at U.S. naval aircraft resulting in U.S. retaliation. In that air raid, the USS Independence and John F. Kennedy reportedly launched a 28-aircraft air raid on Syrian forces. In addition, the U.S. battleship New Jersey bombarded Syrian positions with 16-inch rounds. (Flintham 1990, 71)

U.S. aerial bombardment in Lebanon appeared to adhere to the norm. At no time did U.S. policymakers or commanders order indiscriminate attacks on civilians. All targets appeared to be military personnel and equipment or positions that had attacked or threatened U.S. Forces.

U.S. Forces adhered to the norm not only likely because of norms themselves but because U.S. political objectives in Lebanon were limited. In most respects, the U.S. intervention was humanitarian in nature. U.S. Forces were in Lebanon to separate the warring factions and protect civilians. For this effort, U.S. Forces became targets of the various warring factions. In an interesting test of the bombing norm, the U.S. did not retaliation randomly or indiscriminately after the 23 October 1983 bombing of the Marine Barracks in Beirut. The U.S. lost 239 Marines yet the Reagan Administration continued to protect civilians.

8.3. Aerial Bombardment during the Invasion of Panama

On 19 December 1989, President George H.W. Bush ordered the execution of Operation Just Cause triggering a U.S. invasion of Panama to overthrow the Noriega
regime, install a democratic government, protect the Panama Canal, and protect U.S. citizens in Panama (Flanagan 1993, 65). The U.S. invasion occurred because Noriega, the dictator of Panama, at the time had become an irritant and increasingly a threat to U.S. citizens (13-14, 18-19, 38-39) and military personnel stationed in Panama. The withdrawal of U.S. Forces and the return of the Panama Canal under treaty had yet to take place and the Noriega regime did not appear to be a responsible regime to turn the Canal over to so the Bush Administration chose to militarily end the regime.

U.S. air forces during the invasion conducted discriminating air attacks on military targets only. According to Woodward, General Thurman, the U.S. theater commander with operational authority over Panama, built his war plan on “three principles—maximum surprise, minimum collateral damage (damage to nonmilitary targets) and minimum force (139). Like Grenada, airpower was mostly used for airlift, psychological operations, and close air support to ground forces (Flanagan 1993, 79). Gunships, attack helicopters, and a few airstrikes represented most of the air-to-ground bombardment. Because combat operations—both aerial bombardment and ground—were close to, or within, urban areas, there was some collateral damage.

U.S. air forces were discriminating because they desired to protect noncombatants many of whom were U.S. citizens and dependents of military personnel. In addition, there was no military utility to being indiscriminate. U.S. opponents in Panama were Panamanian military and paramilitary forces loyal to Noriega. U.S. Forces had an overwhelming military advantage with no air threat or substantive air defenses. With so many U.S. Forces, their dependents, and U.S. citizens living in Panama all close to the major urban centers, Panamanian bases, and the Canal, U.S. air forces had multiple
compelling reasons to discriminate and use only proportionate force. Indiscriminate and disproportionate bombardment would have severely undermined U.S. standing in Latin America as well as U.S. military and political objectives.

8.4. Aerial Bombardment in Iraq and Kuwait: 1991 Persian Gulf War

On 2 August 1990, Saddam Hussein ordered Iraqi forces to invade and occupy Kuwait (AHSO ODS). Iraq’s invasion and conquest was swift and complete. In response, President George H.W. Bush ordered Operation Desert Shield in order to reinforce Saudi Arabia to deter a feared Iraqi invasion of that state (Hallion 1992, 132-135; Pape 1996, 214-215). The first forces to arrive in Saudi Arabia were aircraft (Hallion 1992, 135-136). Over the next several months, the Administration debated the appropriate political and military course of action all the while deploying U.S. air, naval, and ground forces to the region in case a military solution was adopted. Once the military solution seemed to be the only reasonable one to end the occupation of Kuwait, the Administration sought domestic and international support for the military solution. The Administration eventually built a robust coalition of Western and Middle Eastern states to roll back Iraq’s invasion.

Determined not to experience another “Vietnam,” especially a repeat of Operation Rolling Thunder’s gradualism, the U.S. Air Staff in the Pentagon, rather than General Schwartzkopf’s theater air commander, rapidly crafted a strategic air campaign titled Instant Thunder (Hallion 1992, 142-143; Pape 1996, 219-220). With limited Coalition ground forces available from August to December 1990, U.S. air planners built Instant Thunder to provide General Schwartzkopf a stand-alone, independent air campaign to defeat an Iraqi invasion of Saudi Arabia, if it came, or coerce an Iraqi withdrawal from
Kuwait through a combination of decapitation, punishment, and denial to use Pape’s typology of air strategies (Pape 1996, 211-212, 219-226).

Instant Thunder was initially and primarily a decapitation and punishment campaign which Air Force planners hoped would be decisive alone negating any need for a ground war (Mann 1995, 1-2; Pape 1996, 219-226). The proposed campaign had three key attributes. First, it would concentrate on Iraq’s perceived “centers of gravity” using Colonel John Warden’s “The Five Strategic Rings” model of strategic warfare (Hallion 1992, 151-152). Each strategic ring had a number of specific target systems associated with it. Warden’s model was premised on the notion of “inside-out” warfare (Mann 1995, 1). That is aerial bombardment should begin strategically (e.g. focusing on enemy will and war-making capability) vice tactically (e.g. focusing on fielded military). Air Force planners desired to strike Iraq’s national politico-military leadership first and then permit airpower to work its way out through supporting socio-economic structures in the enemy society and state and then, if only necessary, attack fielded forces (Hallion 1992, 152). U.S. Air Force planners perceived Hussein himself and his inner circle as Iraq’s most important center of gravity followed by his substantial ground forces and his weapons of mass destruction (WMD) (Pape 1996, 223). For these reasons, Instant Thunder focused initially on Iraqi leadership and communications targets in an attempt to “decapitate” the regime, but the final air campaign would focus in phases across all of Iraq’s centers of gravity finally fixating on Iraq’s forces deployed in Kuwait (223, 227, 229).

The second and third attributes of Instant Thunder were that it emphasized intensity and the pursuit of decisive results (Hallion 1992, 143-144). The campaign was
not intended to negotiate a bargain with Iraq’s regime but compel it to Coalition terms. Depending on the airpower available, this bombardment should be “simultaneous” and “parallel”—that is attacking as many of the rings as possible in the shortest period of time to create “paralysis” in the enemy command and control linking back to the decapitation aspects of Warden’s targeting strategy (151).

Warden’s model for airpower strategy and targeting undermined strict adherence to a progressive bombing norm in two ways. First, by seeking to decapitate a regime, it kept some types of civilian objects like governmental facilities and leadership residences, media centers, electrical power and distribution facilities, as well as communication facilities not only on air forces’ target lists but also at the center of them.

Second, by still embracing punishment, Warden’s model of aerial bombardment revitalized interest in ways and means to influence psychologically and deprive materially civilian populations; therefore, civilian infrastructure, like electrical power production and distribution and civilian manufacturing, remained a viable set of target systems embedded in U.S. airpower doctrine (Thomas 2001, 2006; Renz 2012). Of course, this is very likely one of the reasons the U.S. Government chose not to sign the 1977 Geneva Additional Protocol I because the U.S. Government perceived it micromanaged in an issue area—strategic bombardment—where the U.S. held a comparative advantage.

The U.S. Air Force, in particular, remained wedded to the notion that U.S. air forces could indirectly—psychologically—target a civilian population through fear and material deprivation bringing about a collapse of a regime or national will short of
decisive ground operations (Thomas 2006, Renz 2012). In U.S. Air Force thinking, it was not “terror bombing” if civilians were not directly attacked. In light of the 58,000 U.S. fatalities in Vietnam and with 9,000 to even 45,000 military casualties estimated for a war with Iraq, no U.S. Administration or Congress wanted to countenance a major ground war again if avoidable; however, if unavoidable, airpower would maximize damage to the enemy state and its forces in order to limit U.S. ground casualties (Hallion 1992, 140-141). Once again, the U.S. would substitute firepower for manpower in the form of airpower.

The military objectives of Operation Desert Storm were:

Attack Iraqi political-military leadership and command and control facilities. 2) Gain and maintain air superiority; 3) Sever Iraqi supply lines; 4) Destroy nuclear, biological, and chemical production, storage, and delivery capabilities; 5) Destroy Republican Guard forces; and 6) Liberate Kuwait City. (Y’Blood 1997, 457-458)

The overall joint campaign would unfold in four phases (456). These included: Phase I: Strategic air campaign against Iraq; Phase II: Air campaign against Iraqi air defenses in Kuwait; Phase III: Attrition of Iraqi ground combat power to neutralize Iraq’s deployed ground forces and isolate the Kuwait battlefield; Phase IV: Ground attack to eject Iraqi forces from Kuwait. (456). The air campaign itself consisted of three phases in support of the joint campaign. These included: “(I) strategic attack; (2) Kuwait theater of operations air defense suppression; and (3) attack the Republican Guard and Iraq’s army in Kuwait (Hallion 1992, 150).

Did aerial bombardment in the 1991 Gulf War adhere to the norm? Excepting aerial bombardment in Grenada and Panama, the Coalition air campaign of Desert Storm was likely the most discriminating in military history to that time for a war of its size (Thomas 2001, 159) eclipsed only eight years later by Allied Force. Despite this
discrimination, the campaign deviated from Thomas’ progressive vision of the bombing norm in two closely related areas—civilian objects, specifically infrastructure, and proportionality.

Coalition policymakers and commanders never purposely ordered or condoned the targeting of civilians or strictly civilian objects. The strictly military objects of aerial bombardment included airfields, air defense sites, garrisons, command posts, and fielded forces (Hallion 1992, 188). Thomas notes Coalition air forces’ rules of engagement were fairly strict and intelligence officers maintained a robust no-strike list to protect noncombatants and prohibited civilian facilities like hospitals and mosques (Thomas 2001, 158). Air planners were very concerned with collateral damage and worked to limit it when attacking lawful targets through tactics and PGMs. Coalition air forces flew 109,876 sorties of which roughly 27,000 were air-to-ground sorties resulting in the delivery of “84,200 tons of munitions” (Hallion 1992, 188). Of those munitions, only 9% were PGMs (188) and these munitions were used especially in those urban areas where PGMs helped protect the civilian population while at the same time substantially improving accuracy. For all of these reasons, Thomas writes “Paradoxically, therefore, Operation Desert Storm was one of the most intense air campaigns in history and at the same time perhaps the most restrained” (159).

Thomas’ claim of increased discrimination during Desert Storm is certainly right; however, Thomas again, like in his analysis of Vietnam, conflates adhering to the bombing norm primarily with military restraint and while adherence to the norm is a form of restraint in regards to sparing civilians, Thomas misses the finer points of what Desert Storm represented for the norm. Compared to Rolling Thunder and Linebacker I and II,
the Desert Storm air campaign was less restrained! Better intelligence, airframes, and munitions in the form of PGMs made aerial bombardment faster-paced and more precise expanding the capability of U.S. air forces to attack more targets with less vulnerability in a shorter period of time.

Because air planners viewed so much of Iraq’s politico-military and economic systems as connected to national and regime will and capability, more of Iraq was acceptable to bombard. The air campaign left no sanctuaries for ostensibly lawful targets the Coalition thought would degrade Iraqi military capabilities or coerce the regime to terms. Counter-value targeting and Warden’s expanded conception of counterforce targeting resulted in bombardment of electrical power production and distribution, refineries, and all heavy and light industries tangentially related to military arms and WMD including pharmaceutics and agricultural facilities (Mann 1995, 61). The types of facilities and installations the U.S. Government and its air forces perceived as necessary and acceptable to attack in Desert Storm did not shrink compared to Vietnam but increased! This was not the intent of the writers and ratifying parties of Additional Protocol I. This is not Thomas’ vision of a progressive bombing norm.

While the strategic bombardment of Iraq was cast as preparation for the expulsion of Iraqi forces from Kuwait in support of ground operations (Schwartzkopf 1992, 430, 434; Balz 1991), U.S. air planners all along hoped to coerce Hussein to depart Kuwait prior to a Coalition ground invasion by not only denying him the capability to command and control those fielded forces but also by denying him assets of value (e.g. infrastructure, palaces, factories) (Mann 1995, 1). In addition, air planners hoped that
fear, anxiety, and material deprivation of the civilian population would inspire a revolt against the Hussein regime (60-61).

Thomas singles out Coalition bombardment and destruction of Iraq’s electrical grid as a particularly onerous violation of the norm (Thomas 2001, 158, 165-166). Thomas cites a number of estimates claiming that 100,000 Iraqis may have died over the course of months and years due to the failure of water and sewage systems reliant on electricity (158, 165-166). There are two sets of particularly damning evidence of disproportionate bombardment. First, as noted in McNamara’s testimony to Congress in 1967, military planners have long known that stand-alone generators may support military operations when the civilian electrical grid is denied (Gravel 1971 IV, 201). Such was likely the case in Iraq. Second, U.S. air forces purposely pursued “hard kills”—long term damage—to Iraq’s electrical grid. Aircrews targeted both electric generating halls and transformer yards and substations when attacking transformers and substations likely would have been sufficient for U.S. objectives. This is punishment! While such bombardment may pass legal muster as tangentially supporting the war effort, most defense analysts afterward questioned the level of destruction which knocked Iraq back years to a decade in terms of electrical power production (158, 165-166).

Thomas cites a number of estimates of direct Iraqi civilian fatalities from the war. These estimates range from below 1000 to 5,000 to 15,000 (158). Thomas settles on a consensus figure of roughly 3,000 fatalities (159). If accurate, this estimate equates to 0.034 civilian fatalities per ton of bombs (169). Considering that Desert Storm saw four times more tonnage of bombs dropped than Linebacker II (159), the Desert Storm air
campaign resulted in only 43% of the number of civilian fatalities per ton of bombs in Linebacker II suggesting very discriminating aerial bombardment (169).

Why did the Bush Administration and U.S. air forces adhere to the norm and what explains the deviations? There is no question the norm of noncombatant immunity was deeply embedded in the thinking of U.S. civilian leadership as well as it commanders. Minimizing civilian casualties was fundamental to the fashioning of the air campaign. The Bush Administration cast the war as a contest between the U.S.-led Coalition and a ruthless dictator rather than one with the civilian population who were the victims of a wicked regime. The intelligence community and air planners worked hard to identity lawful targets whose attack may result in collateral damage and they employed tactics and weapons to minimize that damage. Thomas shows the accidental killing of civilians in the Al Firdos bunker as a turning point in the war as the Bush Administration rapidly restricted bombardment in Baghdad after the incident (160-161).

In terms of deviations from the norm, the types of facilities and installations acceptable for bombardment increased in Desert Storm for two reasons. First, a rejuvenated U.S. strategic airpower doctrine, emboldened by the Reagan “Build-up” and PGMs, claimed that decapitation and punishment air campaigns could still compel regimes to U.S. terms short of ground operations provided the aerial bombardment was swift, accurate, and relentless. The Bush Administration was willing to try even though it would take aerial bombardment into Iraq’s cities. Second, the force protection norm explains the Bush Administration’s willingness to accept an intensive air campaign and tolerate more collateral damage than the Johnson Administration in Rolling Thunder if it helped prevent a force-on-force slugfest between Coalition and Iraqi ground forces in
Kuwait that could result in substantial U.S. casualties. If not for Air Staff’s proposal of a “strategic” air campaign and the disturbing estimates of U.S. troops likely to killed in a ground assault into Kuwait, it is highly the Administration would have accepted the U.S. Army’s preferred war plan which would have been ground-centric with airpower conducting interdiction and close air support in support of Schwartzkopf’s scheme of maneuver to eject Iraqi Forces out of Kuwait through a massive ground assault (Mann 1995, 60).

When the force protection norm was in direct competition with the bombing norm, the U.S. Government deviated in varying degrees from the bombing norm by putting civilians at greater risk and destroying infrastructure. Reinforcing these circumstances in Iraq, the Bush Administration had no intention of invading and occupying Iraq; therefore, destruction of Iraq’s WMD programs, much of which were embedded in dual-use facilities, would have to be done by airpower. Bombardment of WMD programs swept many civilian facilities up as targets. Worse yet for the norm, the U.S. Government and its commanders accepted substantial risk in attacking WMD sites which could have subjected Iraqi civilians to chemical and biological agents. Once again, perceived strategic necessity—eliminating Iraq’s WMD programs—was judged by U.S. policymakers as more important than mass casualties among Iraqi civilians although this scenario did not occur.

Reverence for non-combatant immunity clearly formed a baseline, starting position for military planning in Desert Storm. The deviations from the norm confirm two propositions in the literature. First, it confirms Pape’s findings that coercive air campaigns focused on punishment frequently victimize the civilian population. In Desert
Storm, the air campaign had a strong punishment element to it and it was this aspect of the campaign in addition to attriting Iraq’s WMD programs that led to substantial damage to Iraqi infrastructure and its economy. Second, the force protection norm figured prominently in U.S. planning. With the Iran-Iraq War in the background, the Administration did not desire a force-on-force confrontation with a dug-in Iraqi Army. Echoing this concern, General Powell remarked in one of his Pentagon briefings during the war "Our strategy to go after this army is very, very simple. First we're going to cut it off, and then we're going to kill it.” Cutting that army off meant using aerial bombardment to destroy communications, transportation, and logistics across Iraq in order to weaken it so much that U.S. ground forces would not sustain substantial casualties.

8.5. Aerial bombardment in Serbia-Kosovo: Operation Allied Force

In March 1999, President Clinton led the North Atlantic Treaty Organization (NATO) to war against President Milosevic’s Serbia in order to stop the killing and “ethnic cleansing” of Kosovar-Albanians in Kosovo (Lambeth 2001, v, 5-7). From 24 March to 9 June 1999—78 days, U.S.-NATO air forces “flew 38,004 sorties, including 10,484 strike sorties” releasing “23,614” air-to-ground munitions equaling “6,303 tons” of ordnance on 400+ targets (Fenrick 2001, 489; AFHO). In the end, Milosevic conceded to NATO’s terms at the cost of roughly 500+ Serbian troop fatalities and 500+ Serb and Kosovar civilians incidentally killed by NATO airstrikes (Fenrick 2001, 492-493).

Serb atrocities against ethnic Albanians in Kosovo began escalating in 1998 and continued into 1999 (6-7). In September 1998, the UNSC passed UNSC 1199 calling the situation in Kosovo an “impending humanitarian catastrophe” and demanded Serbia to
stop (6-7). With the threat of NATO airstrikes in response, President Milosevic agreed to negotiations to de-escalate the military stand-off between Serbs and Albanian guerrillas as well as return Kosovo to some form of regional autonomy within Serbia; however, Serb paramilitaries and security forces continued to commit atrocities (5-7). In early 1999, President Clinton offered U.S.-NATO peacekeepers in Kosovo to police an agreement between Albanian guerrillas and Serbia (9). Milosevic refused (9). In a last ditch effort, Clinton delivered a diplomatic warning to Milosevic that NATO airstrikes would be against his forces in both Kosovo and Serbia proper (10). Milosevic refused again and began a build-up of Serb forces within and without Kosovo (9-10). In response, NATO haltingly went to war for the first time in its history (Cordesman 2000, 16, 54).

Based on the perceived coercive success of Operation Deliberate Force—a short, month-long air campaign—in 1995 which airpower advocates claimed halted the Serb Republic’s war against Croats and Bosnians (Cordesman 2000, 5, 18), U.S. policymakers in 1998-99 decided that a similar strategy of limited, coercive airstrikes would work to compel President Milosevic of Serbia to halt the ethnic cleansing of Kosovo (Lambeth 2001, 10, 12-13). Due to fears that publics in the U.S. and Europe would oppose a war that resulted in substantial military casualties (12), President Clinton and his NATO partners decided and publicly announced that ground forces would not be used in such a war (v, 12). NATO would rely solely on coercive airstrikes to compel Belgrade to U.S.-NATO terms (12-13). U.S.-NATO initially prepared for an air war lasting days to maybe two weeks (Cordesman 2000, 16; Lambeth 2001, 10, 13-15). In

51 Operation Deliberate Force is not documented in the UCDP likely due to the lack of military fatalities which meet UCDP’s threshold.
fact, the U.S. Air Force was the only entity that had developed a strategic air campaign against Serbia in 1998-99; however, NATO never endorsed such a major air effort and General Clark, the NATO commander, selectively integrated a number of plans together into a series of short bombing raids on “50 pre-approved military targets—including air defense facilities, communications relays, storage depots, and ammunition dumps” (Cordesman 2000, 17, 19-20). NATO was psychologically, politically, and militarily unprepared for a real war.

In addition to its lack of preparation, NATO’s political objectives far outpaced its political will to generate the military means to achieve those objectives. The strategic objectives of Operation Allied Force were: 1) Signal NATO’s resolve; 2) end Serbian forces’ ethnic cleansing of Kosovo; 3) “withdrawal” of Serb forces from Kosovo; 4) “deployment of an international peacekeeping force in Kosovo;” 5) “return of refugees;” 6) set the conditions “for a settlement in Kosovo;” 7) Attrit Serbia’s military capabilities in order to diminish it as a future threat to Kosovo and its neighbors (Lambeth 2001, 10; Fenrick 2001, 490).

While U.S. air planners envisioned basically a three phase air war, NATO’s political leaders did not foresee or hoped not to see such a plan executed and the campaign began with General Clark’s limited raids (Cordesman 2000, 20). When those raids failed to coerce Milosevic to terms, NATO haltingly embraced a piecemeal phased air war (18-19). Phase I primarily focused on achieving air superiority over the battlespace (Lambeth 2001, 13; Fenrick 2001, 490). The roughly 51 targets included airstrikes against Serbia integrated air defense system (IADS) which included fixed and mobile SAM sites, airfields, and command, control, and communications (C3) facilities.
as well as 40 “punishment targets” which were mostly “fixed” military bases (Lambeth 2001, 13; Fenrick 2001, 490). Phase II directed airstrikes on military forces in Kosovo and military forces and facilities south of the 44th parallel in Serbia proper with Belgrade essentially being given some sanctuary from attack (Lambeth 2001, 13; Fenrick 2001, 490). Phase III focused on finding and attriting Serb forces in Kosovo and expanding the target list to include leadership, infrastructure, media, and business facilities in Serbia including Belgrade (Lambeth 2001, 13; Fenrick 2001, 490).

In several respects, Operation Allied Force, like Rolling Thunder, initially was more about signaling resolve and coercing Milosevic to negotiate a political settlement to the conflict rather than physically stopping the ethnic cleansing in Kosovo through direct attack against Serb ground forces (Cordesman 2000, 19-21). Throughout the campaign, Milosevic generally maintained control over what his forces were doing in Kosovo and the decision to concede remained his alone. Also like Rolling Thunder, the air campaign was graduated in intensity, types of targets attacked, and geographically (16, 19-21). Initially, targets, excepting IADS, were confined to Kosovo and south of the 44th parallel in Serbia (16-17). Only after Phases I and II seemed to fail did NATO substantially direct airstrikes against the heart of Serbia (18-19). While NATO never conducted bombing halts like Johnson did in Vietnam, some NATO leaders desired such pauses and they watched carefully for any signs of concessions from Milosevic hoping to end the campaign as soon as possible (20).

Using Pape’s typology of airpower strategies, Allied Force was both a punishment and denial campaign. Initially, the punishment, like Rolling Thunder, focused on strictly military targets, especially fixed facilities, so the punishment was that Milosevic slowly
had to witness the attrition of his military facilities and those equipment inventories that had yet to deploy to Kosovo. Part of the coercive denial aspect of the strategy was direct in that NATO air forces threatened Serb forces in Kosovo who were conducting the ethnic cleansing however this air threat was slow in coming (20). The second part of denial was parallel with the punishment in that airstrikes on military facilities and logistics denied those assets to Serb forces in Kosovo. Later in the campaign at the urging of U.S. commanders, NATO leaders permitted more intensive airstrikes on infrastructure, leadership, and businesses owned by Milosevic and his political supporters (20-23). These attacks were solely punishment as NATO hoped that the loss of assets of value to Milosevic’s supporters as well as the population would compel Milosevic to concede or the political class supported by the people would force Milosevic out of power.

Did the U.S.-NATO aerial bombardment of Serbia and Kosovo adhere to the bombing norm? Yes, compared historically, the U.S.-NATO air campaign was probably the most discriminating in airpower history considering its intensity within an urbanized society with a village-strewn countryside. NATO’s rules of engagement were strict and targets were always selected with an eye toward preventing collateral damage. Unlike any targeting effort in history, U.S. intelligence services generally vetted most targets for military significance and collateral damage concerns before air planners added those targets to air tasking orders. Incidental deaths of civilians frequently resulted in corrective action in tactics or ROE intended to prevent a repeat of the accident. In addition, about 29-35% of all air-to-ground munitions were PGMs (AFHO; Fenrick 2001, 490). In 78 days of bombardment, 500+ civilians were lost incidentally (Fenrick 2001,
That is 0.08 civilian fatalities per ton of bombs dropped (493) and 0.05 fatalities per strike sortie. In most respects, airstrikes were on strictly military or dual-use facilities that a reasonable air commander and military lawyer could argue met the legal definition of a lawful military objective; however, there remain suspect aspects of the campaign that challenge Thomas’ notion that the bombing norm is mostly progressive (e.g. improving discrimination, driving down numbers/types of objects deemed lawful to attack) post-WWII.

While NATO leaders never ordered or condoned the direct targeting of civilians, NATO commanders never asked to target civilians directly, and NATO air forces never purposely targeted civilians, U.S. air commanders did desire to impose some psychological pressure on the Serb people and their regime through material deprivation and discomfort (Thomas 2001, 165; Thomas 2006, 16-17). This can best be illustrated by attacks on the electrical power grid and many Serbian bridges far from Kosovo. Since Vietnam, U.S. air planners have known that enemy military forces frequently may rely on mobile electrical generators for electrical power when the civil electrical grid is unavailable or knocked out in war, yet air planners persistently nominate the electrical power grids of adversaries for attack knowing well that civilians may be the most affected. Why? The logical answer remains that U.S. air commanders remain wedded to some notion of punishment campaigns (Renz 2012, 37-38)—“Douhet-lite”—in which denial of electrical power is intended to make the civilian population uncomfortable (Thomas 2006, 11-12, 16-17). It also seems inconvenience was the primary reason for dropping a host of bridges over the Danube in Belgrade and northern Serbia. Denial of movement for work and leisure targeted civilians not soldiers.
Thomas argues “duress bombing,” as he labels destruction of civilian infrastructure, violates the spirit, if not the letter, of the law (1-2, 13). One human rights organization took particular offense at NATO’s multiple bombings of a Serb TV station owned by Milosevic’s spouse resulting in 16 civilian deaths sparking a debate about the legality of targeting media in the adversary state (Fenrick 2001, 495-496). NATO claimed the TV station, in addition to radio stations, was a lawful target because it was owned by the regime and was being used for propaganda. Human rights advocates claimed the TV station was not a lawful target because it was not making a direct, physical contribution to the war effort. Again, it seems that at least tangentially the civilian population was an indirect target of the NATO attacks because NATO wanted to deny civilian support to the regime which used the TV station to maintain contact with the population.

NATO opened up a new target set in the campaign that remains legally suspect. Air forces late in the war began bombing businesses and residences owned by the Milosevic family and its political supporters (Thomas 2006, 3). This is a new form of coercive punishment. Thomas referred to this strategy as “crony targeting” and interestingly he finds no substantive legal or ethical dilemma with the practice (3). However a strict reading of Additional Protocol I suggests that these residences and facilities are civilian objects and protected by law provided they are not serving a military purpose like producing war materiel or housing C3 capabilities. Imagine if the United States were at war with a great power and that state’s air forces bombarded the Democratic Party headquarters in D.C. as well as the private residences of the Bill Gates’ and Clinton families because they were supporters of a particular U.S. Administration?
Most disconcerting for an air campaign initiated for humanitarian reasons, NATO knowingly sacrificed Kosovar-Albanians to Serb ground forces early and midway through the campaign by declining to commit enough airpower sorties, including ISR and attack, to the aerial interdiction and direct attack missions over Kosovo. NATO’s negative objective of preventing aircrew casualties, including POWs who could be used as hostages, caused General Short, the NATO air commander, to order an altitude ceiling of 15,000 feet for NATO aircraft over Kosovo to protect them from anti-aircraft guns and shoulder-fired SAMs. Considering Kosovo’s rough terrain and bad weather, aircrews had difficulty positively identifying their targets. Serb forces reportedly began using civilian vehicles and parked their military equipment near civilian objects to shield them from attack. The high altitude ceiling figured prominently in a number of incidents resulting in the accidental deaths of Albanian civilians at the hands of airpower. In addition and for the same reason, the NATO air commander never permitted the deployment of attack helicopters, gunships, and forward air controllers (FACs) who would have worked at lower altitudes over specific patches of territory in order to positively identify ground targets and call in airstrikes. All of these measures to protect NATO forces compromised adherence to the bombing norm.

Why did U.S.-NATO generally adhere to the bombing norm during Allied Force and what explains the deviations? There is no question that unlike any war in modern history, including the 1991 Gulf War, the norm of noncombatant immunity was clearly very influential during the campaign. U.S. and NATO political leaders had internalized the norm of noncombatant immunity. Extraordinary efforts were made to vett targets before they made it onto target lists and collateral damage concerns figured prominently
in the very selection of many targets. The North Atlantic Council frequently argued over specific targets and some states in NATO exercised veto power over some targets or they would refuse to permit their air forces to attack targets they perceived as legally suspect or high collateral damage risks. Whenever there were even minor collateral damage incidents resulting in civilian fatalities, NATO would rapidly move to institute changes in ROE, tactics, or ordnance. The bombing norm was ever present in both political and military deliberations, but there were substantive deviations.

While the bombing norm was very influential on the campaign, Allied Force was not a pristine example of Geneva Additional Protocol I aerial bombardment. The very fact that as many civilians died in collateral damage incidents as Serb combatants suggests compromises occurred and that NATO struck as many structures with people nearby as fielded Serb forces. Perceived strategic necessity obviously figured prominently in deviations from a strong enforcement of the norm.

For example, from the very beginning of the campaign, NATO evaded making a strong commitment of airpower to Kosovo early on despite the fact the entire war was supposed to be dedicated to stopping Serbia’s ethnic cleansing of Albanians from the province. NATO delayed applying substantial airpower to Kosovo because close air support and aerial interdiction, especially in rough terrain with bad weather, was resource-intensive (e.g. many sorties of different capabilities) and dangerous to aircrews. While NATO delayed action, preferring to attack fixed targets in Kosovo and Serbia from medium altitudes, Milosevic’s forces aggressively pushed forward Serbia’s ethnic cleansing campaign. For many Kosovar-Albanians, NATO’s intervention made things worse not better. Why did NATO delay? NATO delayed because when the force
protection norm in Western states clashed with the bombing norm, force protection usually won. In order to protect NATO aircrews and prevent bad press at home over military casualties, NATO sacrificed civilians. For the very same reason—force protection, NATO never deployed forward air controllers, gunships, and attack helicopters in Kosovo airspace. In addition, the NATO air commander enforced a 15,000 ft ceiling for aircraft flying missions over Kosovo in order to protect them from ground fire; however, this tactic made identification of noncombatants from combatants very hard resulting in civilian casualties among the very people NATO intended to protect. NATO only lowered the altitude after a series incidental killings of Kosovar civilians by aircraft.

As Downes’ “Desperation to Win” thesis would predict, NATO deviated from a strong enforcement of the bombing norm as the war dragged on, Milosevic refused to concede to NATO’s terms, and NATO’s very credibility as a military alliance was challenged with the possibility of failure. Faced with stalemate and possibly failure, NATO deviated from the norm in two substantive ways. First, NATO embraced “duress bombing” of civilian infrastructure to pressure the regime and the population when early on in the campaign NATO governments would have never approved of such a strategy. This choice violated Additional Protocol I in spirit if not by the letter of the treaty. NATO targeted two types of infrastructure that even President Nixon never approved of during Linebacker II—the bombing of government ministries and state media (Fenrick 2001). Second, NATO bombed specific civilian properties, residences and businesses, belonging to Milosevic’s family and political supporters in order to punish regime supporters and create fractures among the elite class that undergird the Milosevic regime.
This was another strategy of punishment that NATO governments would have never embraced early on yet desperation to end the war short of a ground invasion of Kosovo drove them to this end. While the scholarly jury is still out, some airpower advocates and defense commentators argue the punishment bombing worked and coerced an end to the war.

8.6. Aerial bombardment in Afghanistan: The 2001 Invasion

President Bush ordered the bombardment and invasion of Afghanistan in October 2001 in response to the terrorist attacks of September 11, 2001. The Taliban regime which governed most but not all of Afghanistan had hosted Osama Bin Laden and Al Qaeda. After demanding the regime deliver Bin Laden to U.S. authorities and being rebuffed, the Bush Administration finally concluded the only way to deny Al Qaeda sanctuary in Afghanistan was to remove the Taliban regime and install a new regime. U.S. political objectives were to sweep Al Qaeda from Afghanistan, prevent its return, end the Taliban regime that had harbored it, and finally institute a new regime favorable to the West. (Lambeth 2005, 15, 41-47, 49-62; AFHSO OEF)

The U.S. air campaign in Afghanistan, 7 October to 18 December 2001, had two aspects during the invasion (AFHSO OEF). First, it initially was unique in that airpower delivered most of the firepower which was being called in by U.S. special operations forces (SOF) aligned with the Northern Alliance, an Afghan opposition group (Williams 2012,189). Much of this initial bombardment was in close support of Northern Alliance light infantry and scattered, highly vulnerable SOF who were engaging much larger Taliban forces across a wide geographical area. While U.S. SOF in Vietnam also called in airstrikes for support when engaging larger forces, Afghanistan marked the first time
when SOF was the only initial ground arm with airpower delivering the firepower in support. The second aspect of the campaign were independent air operations against fixed targets like airfields and suspected terrorist hideouts like caves as well as targets of opportunity like convoys and Taliban militia who offered resistance (AFHSO OEF). After the invasion in 2001, the Taliban and its terrorist allies offered one last major battle in early 2002 in Operation Anaconda (163-177). During Anaconda, U.S. air forces played a more traditional close air support mission in support of both Army ground forces and SOF (177, 183-185). Anaconda occurred in a remote region of Afghanistan; therefore, there was little to no civilian casualties.

Yes, U.S. policymakers and U.S. air forces strictly adhered to the bombing norm. U.S. aerial bombardment during the invasion of Afghanistan probably came closest to the ideal of Additional Protocol I. At no time did U.S. policymakers or commanders order or condone the purposeful targeting of civilians or civilian objects. Targets for aerial bombardment included airfields, radars, terrorist training camps, hideouts, caves, suspect convoys, and fielded forces of militia and terrorists (Lambeth 2005, 60, 80-83, 89). Although the Taliban had given sanctuary to a terrorist group who had perpetrated the worst terrorist attack in world history on U.S. soil, Secretary Rumsfeld and General Franks, commander of U.S. Central Command (CENTCOM), issued very strict ROE regarding the delivery of air-to-ground munitions near civilians or civilian objects with the intent of aggressively minimizing collateral damage (55-57, 60, 98, 303). The Administration strictly forbade except when absolutely militarily required attacks on any civilian infrastructure including highways and bridges.
In an unexpected move, General Franks decided not to forward deploy to the
Middle East and ran the invasion and portions of the aerial bombardment strategically
from his headquarters in Tampa, Florida (304-305, 308-309). Influenced by the
Administration, General Franks and his staff obsessed over collateral damage to the point
that he and his designees frequently required both fixed targets and targets of opportunity
whose attack may result in high collateral damage or simply be related to infrastructure
be passed to them personally for strike approval (99-102, 303). Some high collateral
damage targets had to be passed to Secretary Rumsfeld for approval (Lambeth 2005, 56).
For this reason and others, Frank’s headquarters strictly controlled the approved targets
lists including constructing the daily strike list\textsuperscript{52} used for aerial bombardment (308-309).
This high-level “micromanagement,” reminiscent of Rolling Thunder except almost in
near-real time, angered U.S. Air Force planners and aircrews (305-306, 314-315). In a
number of cases, CENTCOM refused to grant strike authority for suspect convoys that
some intelligence officers and aircrews perceived may be transporting senior Taliban and
Al Qaeda leadership for fear they may kill civilians possibly even innocent family
members of terrorists (Lambeth 2005, 56, 314-315). At other times, U.S. aircrews, based
on ROE, showed enormous restraint when attacking terrorist and Talban hideouts
agonizing over who were and were not likely combatants and frequently sparing mosques
from attack even when they were used to shield military activities (99).

During the initial invasion, SOF generally called in airstrikes from aircraft with
PGM capability. Even the B-52 by 2001 had been fitted with GPS-assisted weapons in

\textsuperscript{52} U.S. Air Force doctrine instructed air commanders to build the daily target lists within the air operations
center that subsequently were packaged into the Air Tasking Order (ATO)—the master air war order—
passed to flying units for execution. General Schwartzkopf permitted U.S. Air Force doctrine to prevail in
Desert Storm. The process was mostly abandoned in Enduring Freedom with General Frank’s joint
headquarters reining supreme in targeting matters.

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the form of JDAM. SOF could call in attack coordinates on a Taliban stronghold and the B-52 aircrew could upload those coordinates into their bomb load and then deliver those weapons with a relatively small CEP. If these intended targets were near civilian habitations, SOF and/or the aircrew may have had to call for strike approval to the U.S. air commander or even to the CENTCOM commander depending on the circumstances (55-56). To support both SOF and ground forces better, the U.S. Air Force deployed ground-based forward air controllers (FACs) specifically trained for directing aircrews to ground targets (AFHSO OEF). Because they were intimately familiar with U.S. aircraft, weapons, including their strengths and limitations, they were better able to limit collateral damage and protect U.S. ground personnel. For all of these reasons—PGM use (Lambeth 2005, 56-57), FACs, and strict ROE, civilian casualties during the U.S. invasion of Afghanistan were small.

Why did U.S. policymakers and commanders strictly adhere to the norm despite the fact that U.S. public opinion likely would have tolerated substantial collateral damage due to the severity of U.S. civilian casualties on 9/11 (Lambeth 2005, 7-9)? The historical evidence suggests two primary reasons. First, U.S. political leadership decided that the demonstration of restraint would serve U.S. strategic communication purposes in the Muslim world by showing that the U.S. Government would not retaliate on innocent Muslims in general or Afghans in particular (60). U.S. policymakers appeared determined to narrow its use of force against only terrorists and their Taliban supporters and avoid any action that would suggest a “clash of civilizations” (60). The world was watching and the international press and Muslim populations would scrutinize closely all collateral damage incidents. In addition, there was a realization fairly early on that some
form of U.S.-Coalition occupation force and administrative apparatus would be left in Afghanistan to secure and enable the transition to a new regime and policymakers understood that excessive collateral damage may alienate the population and make reconstruction programs harder and more expensive to implement (60). For all of these reasons, aerial bombardment in Afghanistan likely was the closest to what the writers and ratifying parties of AP I had envisioned in 1977 especially for a major invasion of one state by several others.

8.7. Aerial bombardment in Iraq: The 2003 Invasion—“Major Combat Operations”

In March 2003, President George W. Bush ordered U.S.-Coalition forces to invade Iraq to end the Hussein-Ba’athist regime and institute a new regime based on popular consent (Moseley 2003, 4). The Bush Administration invaded Iraq because it perceived that Iraqi intransigence regarding its post-Gulf War UN obligations had grown intolerable. The Administration, based on contested intelligence reporting and assessments, concluded that Iraq was maintaining active WMD programs that in the post-9/11 world could be used to threaten militarily the U.S. or be passed to terrorist groups (Collins 2008, 6). The invasion was the merger of post-9/11 counterterrorism and counter-proliferation policies (Moseley 2003, 4; Collins 2008, 6). The Bush Doctrine advocated and justified preemptive military action against rogue states that harbored terrorists or pursued WMD (Collins 2008, 6). The invasion of Iraq was the first case of U.S. preemptive military action post-9/11.

During the invasion phase of Operation Iraqi Freedom, U.S.-Coalition air forces flew 41,404 total air sorties of which roughly 29,000 were fighter and bomber sorties. Those combat sorties delivered 29,000 air-to-ground munitions on roughly 29,000
desired points of impact (DPI)—the specific object (e.g. tank, person, bridge pier) to be attacked. Of those DPIs, 55% were close air support or aerial interdiction missions against Iraqi fielded forces while 1% were counterland DPIs like specific portions of garrisons, leadership sites or ammunition depots (e.g. barracks, bunker). During the air campaign, air forces dropped roughly three munitions on every two DPIs. That is to say figuratively that every air-to-ground sortie dropped 1.5 munitions per every specific target (DPI)—an astonishing degree of precision which should have substantially limited civilian casualties. (Moseley 2003, 5, 7-9, 11)

Yes, U.S.-Coalitions air forces adhered fairly strictly to the bombing norm. At no time did U.S.-Coalition policymakers or commanders purposely seek to kill civilians or destroy civilian objects with no connection to the Hussein-Ba’ath regime. Unlike the 1991 Gulf War, the U.S.-Coalition sought to overthrow directly the regime in Baghdad. The air campaign generally had no coercive intent; therefore, there was no coercive denial, punishment or risk strategy at play that targets assets of value like industry and infrastructure. It was a counterforce effort that primarily focused on fielded forces and regime targets. The war plan was for U.S.-Coalition ground forces to invade the country and drive on Baghdad and physically remove the regime with air forces serving to enable the small invasion force through the delivery of overwhelming firepower on fielded forces that chose to resist (Collins 2008, 6-8). U.S.-Coalition forces sought to destroy only those Iraqi military forces that resisted the invasion sparing most of those that chose not to fight.

Why did U.S.-Coalition forces adhere to the bombing norm during the invasion of Iraq? There are three primary reasons. First, there is no question that the norm itself—
sparing innocent civilians—was influential throughout the campaign as had been the case but growing from Korea through Vietnam and to the 1991 Gulf War. Second, like Afghanistan, there was concern about Muslim public opinion in that the U.S. was once again invading a Muslim state. Gratuitous civilian casualties would suggest Bush’s “Global War on Terrorism” may indeed be anti-Muslim. Third, U.S.-Coalition forces were going to occupy Iraq for some period of time, install a new regime, and then depart hopefully leaving an Arab democratic state behind. Secretary Rumsfeld did not want U.S. Forces involved in substantial reconstruction or “nation-building” activities in Iraq. Limiting collateral damage served these purposes.

What explains any deviations in a strict adherence to the norm? Unlike Enduring Freedom in Afghanistan, the Bush Administration did not so tightly micromanage targeting in Iraq. While ROE remained restrictive, concerns for collateral damage did not figure so obsessively in Pentagon and CENTCOM thinking. CENTCOM this war pushed much of the daily targeting back to the Air Operations Center under U.S. Air Force leadership. Why this was so remains somewhat a mystery considering so much of the emotion wrapped up in post-9/11 military operations against Al Qaeda and the Taliban in Afghanistan. Afghanistan was mostly a rural battlespace while Iraq’s population was heavily clustered in urban areas. If anything, collateral damage concerns should have been reversed in the two wars.

Short of historical documentation explaining the variance, the only logical explanation for differences in collateral damage concerns between Afghanistan and Iraq is that sizable U.S. Forces were physically invading Iraq and more subject to enemy action. In other words, the Bush Administration feared Iraqi forces capability to impose
more substantial casualties on U.S. Forces than the Taliban. It cannot be forgotten that U.S. commanders still feared that Iraq may use chemical weapons on U.S. Forces and initially U.S. ground forces entered Iraq in chemical warfare suits. In this sense, once again, the force protection norm resulted in some degradation of attention to protecting civilians. Commanders in Iraq simply had more discretion on the use of force than commanders did in Afghanistan. The force protection norm seems to offer the best explanation.

8.8. Aerial bombardment in Afghanistan: The Counter-Insurgency, 2002-Present

After Operation Anaconda, U.S.-Coalition forces seemingly had vanquished any substantive resistance from Al Qaeda fighters or the Taliban in Afghanistan. U.S. efforts shifted to enabling the new regime in Kabul to take up its duties. Reconstruction and “nation-building” became the primary methods by which U.S. and partner governments would assist Kabul. While U.S.-Coalition forces remained in Afghanistan to conduct counter-terrorism operations and secure the new government, the U.S. and its partners hoped not to become involved in any drawn-out counter-insurgency campaign.

After the successful U.S.-Coalition invasion, Taliban leadership escaped to Pakistan and began to build new networks there from which to launch cross-border operations. The Taliban did not give up so easily and as years passed with U.S.-Coalition military forces shifted to Iraq in 2003-2008 the Taliban reconstituted itself and began to contest incrementally and aggressively U.S.-Coalition forces and the new regime in Kabul. U.S.-Coalition forces were compelled to mount a counter-insurgency campaign albeit with limited means with the Iraq War raging from 2003 to 2008. Not until the Iraq “Surge” under the command of General Petraeus was complete in 2008/9 were U.S.
Forces shifted back to Afghanistan for a “Surge” of its own from 2009-2011. In 2009, President Obama seemed to embrace General Petraeus’ counsel for a long-term counter-insurgency campaign of clear, hold, and build, but the President reversed course in late 2009 detailing a new U.S. strategy. At the end of a short “Surge,” U.S.-Coalition forces would focus on building Afghan military and police in order to withdraw U.S. Forces and hand over security to Kabul.

Have U.S.-Coalition air forces adhered to the bombing norm since the end of Operation Anaconda? Yes, U.S. air forces generally have adhered to the norm; however, there has been much greater risk-taking with the civilian population in the counter-insurgency phase than during the invasion. At no time have U.S. policymakers or commanders purposely ordered or condoned the killing of civilians; however, there have been many more controversial collateral damage incidents in the counter-insurgency phase than before when the Bush Administration and CENTCOM obsessed over collateral damage.

Since 2006—when UNAMA began documenting civilian casualties, UNAMA claims that combat in Afghanistan has resulted in 14,173 civilian fatalities (Rogers 2013). Of this number, UNAMA claims adversaries (e.g. insurgents and terrorists) of the government (e.g. Kabul) and its allies (e.g. ISAF) have killed 10,737 civilians while pro-government forces have killed 3,436 (Rogers). From 2006-2012, insurgents and terrorists have been responsible for 66% of all civilian deaths (Rogers). In 2012 alone, Afghan forces and ISAF killed 316 civilians (UNAMA 2013). Of that number, aerial bombardment was responsible for a plurality of those fatalities (UNAMA). Aerial bombardment resulted in 35% or 126 fatalities in 55 separate air attacks making for 2.3
civilians fatalities per responsible air attack (UNAMA). UNAMA also claims that offensive air operations\(^{53}\) instead of defensive air operations represented most of the civilian fatalities by aerial bombardment (UNAMA). In way of comparison, ground combat caused 27% of civilian fatalities while searches/raids caused 13% resulting in ground forces being responsible for roughly 40% of civilian fatalities (UNAMA). That would put civilian deaths caused by airpower almost at the same level as ground forces. UNAMA documented that 5% of the 316 fatalities were illegal acts by pro-government forces (UNAMA).

As an example of the worst collateral damage incident since the U.S. invasion, U.S. air forces in close air support of Coalition ground forces accidentally killed anywhere from 26 to 86 to 100-140 Afghan civilians, depending on the source, in Fatah Province in May 2009 (Motlagh 2009; Coomarasamy 2009). During a firefight with Taliban insurgents, ground forces called in seven air attacks on insurgents escaping into an Afghan village (Coomarasamy 2009). Reportedly three B-1 bombers delivered 500-2000 lb bombs on the village resulting in most of the civilian fatalities (Motlagh 2009).

The ISAF investigation officially put the death toll at 26 while an Afghan investigation put the death toll at a total of 86 persons including insurgents. Whatever the final number, the case highlights a recurring feature of U.S.-Coalition counterinsurgency operations in Afghanistan and that is ground forces and SOF calling in airstrikes in or near civilian habitations when out-numbered or when faced with insurgents holed up in strongpoints in villages resulting in sizable civilian fatalities including women and

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\(^{53}\) UNAMA is using non-doctrinal terms for air operations. UNAMA’s term, offensive air operations, would suggest intuitively aerial bombardment against pre-planned fixed targets or targets of opportunity rather than defensive air operations in which aircrews are responding to calls for firepower from “troops in contact” with enemy forces or aircrews are responding to enemy surface-to-air fire that threatens aircrews.
children. While these incidents pale in comparison in regards to frequency in Vietnam, they show the revival of a tactic reminiscent of Vietnam—the overwhelming use of aerial firepower to defeat insurgents in or near civilian habitations albeit generally with PGMs instead of dumb bombs.

In response to the incident, General McCrystal, the U.S.-NATO commander, issued a new directive in July 2009 ordering ISAF forces to disengage, when feasible, from firefights and airstrikes in or near villages that may result in unnecessary civilian fatalities (Motlagh 2009). McCrystal writes in the unclassified and publicly-released version:

I expect leaders at all levels to scrutinize and limit the use of force like close air support (CAS) against residential compounds and other locations likely to produce civilian casualties in accordance with this guidance. Commanders must weigh the gain of using CAS against the cost of civilian casualties which in the long run make mission success more difficult and turn the Afghan people against us.

The use of air-to-ground munitions and indirect fires against residential compounds is only authorized under very limited and prescribed conditions (specific conditions deleted due to operational security). (McCrystal 2009, 1-2)

McCrystal essentially ordered his subordinates to de-emphasize force protection and the pursuit of targets and embrace more wholly the bombing norm. While a number of MACV directives seemed to echo similar sentiments in Vietnam, this directive is a rare instance in military history of a theater commander demanding the strictest proportionality from his forces even to the point of permitting combatants to escape. This would have been unheard of in Vietnam.

What explains this variance from the invasion phase to the counter-insurgency phase? Strategic necessity seems to explain it. Downes thesis—“Desperation to Win”—
seems to be moderately at work. When the U.S.-Coalition invaded and successfully swept Al Qaeda and the Taliban from Afghanistan, policymakers and commanders thought and hoped the war was over. It was not. The war has dragged on and with competing conflicts elsewhere the Congress and public grew weary and commanders, under-resourced, grew anxious to vanquish the insurgency so they substituted firepower from the air for the lack of ground forces and in order to protect those few forces from casualties (Gant 2009, 13).

In addition, when U.S.-Coalition forces invaded Afghanistan, Al Qaeda and Taliban forces mostly fought in the countryside with a few major engagements in urban areas like Masir-a-Sharif; however, the Taliban since 2002 frequently have aggressively engaged U.S. Forces from within villages and towns in order to shield their forces and increase civilian fatalities. Like the Viet Cong except much more so, Taliban insurgents appreciate U.S. and world aversion to civilian casualties; therefore, the Taliban have sought to increase civilian casualties by initiating intense firefights from within villages. In addition, Coalition SOF have aggressively pursued terrorist and insurgent cellular leaders which frequently have included high-risk capture/kill raids into villages and towns where they hide. When a raid goes badly, small and highly vulnerable SOF teams call in close air support. Some of these battles have resulted in sizable numbers of civilian casualties as noted earlier (Gant 2009, 32). In both of these circumstances, the force protection norm again has compelled U.S. air forces to lessen strict adherence to the norm and put civilians at greater risk to suppress with overwhelming firepower Taliban insurgents (Gant 2009, 32). In this sense, U.S. air forces are lessening adherence to the norm but not to the degree that occurred in previous conflicts like Vietnam.
Since 2009 and beyond, ISAF has sought to better control aerial bombardment (McCrystal 2009) and the numbers of civilian fatalities caused by ISAF and Afghan forces have been decreasing incrementally since 2008 even as the Taliban have contended more aggressively in Afghanistan and civilian casualties caused by anti-government forces have continued to increase (Rogers 2013). In these circumstances, there is no question that the confluence of strategic necessity and the bombing norm have resulted in more discriminating use of aerial firepower.

McCrystal’s directive shows how hard it is to differentiate between the influence of the norm and strategic necessity. Circumstances like collateral damage incidents and domestic and international condemnation inspired by them drove McCrystal’s issuance of new guidance, but it was strategic necessity and its interaction with the norm that seemed to pre-occupy McCrystal’s thinking. He writes:

> Our strategic goal is to defeat the insurgency threatening the stability of Afghanistan. Like any insurgency, there is a struggle for the support and will of the population. Gaining and maintaining that support must be our overriding operational imperative—and the ultimate objective of every action we take.

> This is different from conventional combat, and how we operate will determine the outcome more than traditional measures, like capture of terrain or attrition of enemy forces. We must avoid the trap of winning tactical victories—but suffering strategic defeats—by causing civilian casualties or excessive damage and thus alienating the people.

> I recognize that the carefully controlled and disciplined employment of force entails risks to our troops—and we must work to mitigate that risk wherever possible. But excessive use of force resulting in an alienated will produce far greater risks. We must understand this reality at every level in our force. (1)

In these circumstances, adhering strictly to the norm made perfect strategic sense because success and failure rests in counter-insurgencies on the preferences of the population.

Like Afghanistan, the Bush Administration and General Tommy Franks thought and had hoped the war for Iraq was over after a very swift and successful invasion, but it was not. Although the regime collapsed speedily, much of Iraq became ungoverned space and a number of competing, armed factions, including former regime elements, sought to fill the vacuum. Determined to keep the U.S. ground “footprint” limited as he had ordered during the invasion (Collins 2008, 7-8), Secretary Rumsfeld had no interest in substantive reconstruction specifically involving U.S. Forces in Iraq yet the insecure environment and the rise of a multi-faced insurgency compelled U.S. Forces to begin to conduct a counter-insurgency campaign. As in Afghanistan, aerial bombardment was mostly used to supplement ground force operations but the use of airpower was not to figure so prominently in Iraq as in Afghanistan due to the larger U.S. ground force in Iraq.

Press reporting generally shows that aerial bombardment simply has not been marked by the same controversy in Iraq as has been the case in Afghanistan. This is likely true because U.S. commanders in Iraq have possessed sizable ground forces in country lessening the need for airpower. The opposite has been true in Afghanistan. The Iraqi population also generally is concentrated in cities, towns, and villages along distinct river valleys permitting logical basing of U.S. ground forces. Again, the opposite has been true in Afghanistan where the population remains mostly rural and scattered across innumerable plains, valleys, and mountains. This geography has complicated an already small U.S. footprint in Afghanistan and compelled U.S. commanders to rely more heavily on airpower.
U.S. aerial bombardment in Iraq during U.S. counterinsurgency operations has adhered to the bombing norm. At no time have U.S. policymakers or commanders ordered or condoned the purposeful targeting of civilians. U.S. air forces generally have been used in support of ground forces when those forces perceived they needed firepower to defeat a strongpoint without risking U.S. ground casualties. One of the few and memorable air strikes of the post-invasion period was the U.S. air attack on Abu Musab al-Zarqawi’s “safehouse” outside Baquba, Iraq (CBS/AP 2006). U.S. air forces reportedly used two 500-lb PGMs to destroy the house killing Zarqawi and some of his aides (CBS/AP 2006). The fact that the raid took place outside the city and that there were no civilian casualties attests that U.S. commanders took exceptional care in sparing civilians.

The vast majority of U.S. servicemembers’ crimes against Iraqi civilians have been the result of individual servicemen or squad-sized units. While beyond the scope of this research, the U.S. and international press have accused U.S. personnel and commanders of abetting and committing acts of murder and torture against detained terrorist suspects and insurgents as well as civilians (Hersh 2004, Danner 2004, Surk 2012). Abu Ghuraib is the classic and symbolic case of these violations of Geneva; however, these are cases of ground forces’ violations of the Geneva and Torture Conventions and not violations of noncombatant immunity by aerial bombardment.

8.10. Aerial Bombardment in The Global War on Terrorism—The “Drone War,” 2004-Present

The UCDP/PRIO dataset lists the global U.S. war on Al Qa’ida with the assistance of its coalition partners as a separate armed conflict from the U.S. invasion of
Afghanistan. For brevity, I will title this conflict the “Global War on Terrorism” (GWOT) since that is what the Bush Administration called it. Because so much of the GWOT outside Afghanistan and Iraq has been wrapped in Government secrecy, it is difficult to assess its adherence to the bombing norm. While there may have been manned aerial bombardment of terrorists outside Afghanistan and Iraq, there are no prominent stories in the media. For this reason, my examination of aerial bombardment in the GWOT will focus solely on the use of armed unmanned aerial vehicles (UAVs) as these appear to be the U.S. Government’s weapon and tactic of choice.

U.S. armed UAVs, popularly referred to as “drones” in the Western press (Benjamin 2012, 13), made their combat debut after 9/11 in Afghanistan (Engelhardt 2012, 4-5, 9-10, 41; Benjamin 2012, 7). So long as drones were used against insurgents and terrorists in Afghanistan and Iraq, these novel weapons of war did not generate significant controversy. What controversy they did generate seemed to fixate on their unmanned nature and concerns by lawyers, journalists, and human rights advocates that there remain a “man in the loop” with sufficient accountability for targeting and positive control over weapons employment (Engelhardt 2012, 4-5, 9-10, 12-13). It was the U.S. Government’s use of them covertly in western Pakistan and then elsewhere like Yemen when the substantive controversy really began over their use (Engelhardt 2012, 11, Turse 2012, 80-81; Benjamin 2012, 61).

There seem to be five central and salient issues with the use of drones within but especially outside recognized war zones. First, the nature of the target is at issue. The targets reportedly are known or suspected terrorists re-initiating the post-9/11 debate whether terrorists are criminal suspects or combatants or both (Engelhardt 2012, 87-90).
The Israelis continue to debate this issue in regards to their counter-terrorist operations (Stein 2003, 127). In the criminal suspect-combatant debate, the U.S. Government has taken numerous positions depending on who the terrorist is (e.g. U.S. citizen or foreigner, leader or foot soldier, insurgent-terrorist or regional/global terrorist), what he/she is accused of doing or plotting (e.g. U.S. domestic attacks, attacks in war zones) and where he/she is located (e.g. war zone, ungoverned space, global). If a terrorist is a combatant, armed forces can attack and kill the terrorist without warning just as if he/she were a uniformed soldier. If a terrorist is not considered a combatant but a civilian, who happens to be a criminal suspect as many lawyers, journalists, and human rights advocates tend to perceive, then attacking and killing the person is something else—an assassination, an extrajudicial killing, or a murder depending on one’s legal and political point of view (Stein 2003, 127; Engelhardt 2012, 13-14, 23-24, 52; Benjamin 2012, 60-63).

The second issue is geography. Some are concerned the U.S. drone war is spreading out globally making the whole world a potential battlefield with the U.S. violating states’ sovereignty and international law with its drones (Engelhardt 2012, 16, Turse 2012, 87-90, 97). Third, and related to both previous issues, the covert nature (which is not very covert now) of the drone war causes consternation in that it suggests there is less accountability within and without the U.S. Government for U.S. attacks (Engelhardt 2012, 11, 23-24). Fourth, collateral damage is a controversy in that a number of drone attacks have resulted in the deaths of terrorists’ family members or innocent third parties who reportedly had no association with terrorism or insurgency (Engelhardt 2012, 5; Benjamin 2012, 7-8). Fifth, some argue U.S. drone attacks are doing more
strategic harm than good in that they are unintentionally de-stabilizing regions (Hudson 2011; Ali 2013). In other words, while the tactical effects may be immediate and beneficial (e.g. one less terrorist operative or planner), the strategic effects are wholly negative in that they are generating more anti-Americanism and recruiting more terrorists and sympathizers than suppressing them (Hudson 2011; Ali 2013).

This research will not debate these issues thoroughly as they have already been debated and these debates are part of other research programs regarding general U.S. compliance with international law post-9/11 as well as the overall strategic effects of the Global War on Terrorism. What is of concern to this research is whether or not U.S. air forces are applying the principles of discrimination and proportionately to drone attacks? Are these attacks adhering to the bombing norm? If one considers terrorists wholly as civilians and criminal suspects, then U.S. drone attacks are violating the bombing norm. If one considers terrorists as some sort of combatant, then drone attacks are being applied to legitimate military targets. At the micro-level yet very relevant to this research is the how the U.S. Government defines a terrorist? How does the Government sort out operators, plotters, facilitators, supporters, and sympathizers? Are they all equally terrorists and legitimate targets? How does a suspected terrorist get on the drone target list (Priest 2011; Campbell 2013)? Is the Al Qa’ida propagandist in Yemen a terrorist just like the roadside bomb-maker in Wardak Province, Afghanistan a terrorist? For the U.S. Government, the answer seems to be yes considering U.S. drones attacked and killed a U.S. citizen, in Yemen because he was a popular and well-known Al Qa’ida cleric and propagandist (Rafferty 2013; Reilly 2013).
Has U.S. aerial bombardment via unmanned aerial vehicles—drones—adhered to the bombing norm? Considering that most of the data regarding drone attacks remains classified and there is scarce accurate primary and secondary source material, it is difficult to assess discrimination and proportionality. Based on what information is in the media, U.S. bombardment generally appears to be discriminate despite the dire reports of a number of human rights organizations, foreign media, and foreign governments.

One media source estimates 416-439 covert drone attacks in Pakistan, Yemen, and Somalia between 2004 and 2013 (Ackerman 2013) while another estimates 489-513 attacks (BIJ). These attack rates are extremely low considering the numbers of manned aerial attacks in Korea, Vietnam, the Gulf, and Kosovo.

In regards to fatalities, Senator Graham (R-SC), in a rare public statement on death tolls, estimated 4,700 total fatalities from drone attacks (Ackermann 2013). If indeed correct, this number would suggest roughly ten fatalities per drone attack which unscientifically correlates with a number of media reports on specific attacks (Benjamin 2012). Because the drone attacks seek to kill individual terrorists or small numbers of them at a time, and considering the weapon’s effects of a 100-lb Hellfire missile (Ackerman 2013)—the drone weapon of choice, an average of ten fatalities per drone

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54 Much of these drone attack numbers and death tolls have been garnered from a number of sources. These include U.S. Government acknowledgment of drone attacks and local, regional, and national newspaper and foreign correspondents’ reporting. Based on the public discussions of these questions in the U.S. even with U.S. senior officials, it seems logical that if the media’s rough drone attack counts were wildly off the mark a U.S. official publicly or unofficially would have protested. I suspect the drone attack number estimates are close to reality 400-600 attacks. The fatality counts are likely much more open to debate.

55 2004 reportedly is the first year of the U.S. covert operation to use drones to attack terrorist and insurgents in Pakistan. The program reportedly has spread to other states including Yemen and Somalia. This covert operation is separate from the military use of drones in war zones in Afghanistan and Iraq.

56 Based on press reporting, it appears the settings for most drone attacks are houses, vehicles, or outdoor gatherings. For example, a standard Chevy Suburban SUV carries a maximum of 6-9 passengers in seats. If there are no passengers stuffed in the cargo bay, a drone attack on a large SUV will likely kill 1-9 people per vehicle. This formula discounts any personnel near the SUV.
attack superficially appears logical. Most media sources reporting on the drone war assess a fewer number of fatalities than Senator Graham. One media source tracking the drone war assesses low to high estimates of 2,772 to 3,933 fatalities with 423 to 944 “civilian”57 casualties (BIJ). If these numbers are even close to accurate, the ratio of killed terrorists to unintended civilian fatalities is 7:1 and 4:1 respectively. Assuming those killed were indeed somehow associated with terrorism or insurgency, these numbers do not suggest indiscriminate, specifically disproportionate, attacks. They suggest fairly strict discrimination between terrorists and innocent people and substantive sensitivity to collateral damage. If U.S. drone attacks were indiscriminate, one would expect to see many more attacks and an inverse ratio of terrorists killed to civilians. That is to say one would expect to see substantially more civilians to terrorists killed.

Due to the fact that the Drone War is technically a covert operation, the U.S. Government generally has said little about the operations although Attorney General Eric Holder has probably spoken the most about the program. Based on the conduct of the program and what few public statements have been made by the Bush and Obama Administrations, U.S. air forces appear to have adhered to the bombing norm because the norm of discrimination as well as military utility are innate to the program. The U.S. Government is attempting to target only those persons it reasonably suspects are involved in terrorist activities, especially terrorist operations, and attacking noncombatants would be unethical and counter-productive resulting in much more negative press as well as greater condemnation from foreign governments (Priest 2011). In terms of military utility, attacking noncombatants simply makes no sense in terms of the military

57 These civilians would be people assessed not to be the intended targets—terrorists, insurgents, militants.
objectives (e.g. attrition of terrorist operatives) pursued by the program. In addition, the UAVs themselves simply are ideally suited for discrimination and proportionality and highly unsuited for creating disproportionate effects unless they were purposely used for gratuitous assassination. The UAVs, whether Predator or Reaper, fly slow and carry Hellfire missiles or at the most 500 lb bombs and they are loaded with a sensor suite designed to track ground targets. In this sense, technology truly has made being discrimination fairly easy so long as the pilots and sensor operators know what they are looking for in terms of specific targets or specific movement or behavioral patterns.

8.11. Aerial Bombardment in the Libya Intervention, 2011

On 19 March 2011, President Obama ordered U.S. air forces stationed in Europe and aboard U.S. aircraft carriers to bombard Libya’s air defenses and shoot Libyan aircraft posing a threat to an UN-sanctioned No Fly Zone over Libya (AP/Huffington Post; Obama). For some time, Libya was engrossed in a civil war as rebel forces attempted to oust long-time dictator Muammar Qaddafi (Obama). Because Qaddafi’s forces were threatening and attacking portions of the civilian population, the U.S. Government in coordination with some of its European allies including Britain and France concluded armed force was necessary to protect the population (Obama). The UN Security Council authorized a NFZ and arms embargo on Libya (Huffington Post; Obama). U.S. air forces supported by British and French air forces initially attacked Libya’s air defenses and airfields; however, the President subsequently authorized attacks on Qaddafi’s ground forces (Cohen; Garamone). On 25 March 2011, NATO assumed command from the U.S. of the NFZ over Libya and the arms embargo under Operation
Unified Protector. U.S. air forces continued to support NATO air forces but reported with fewer combat sorties (NATO; Garamone; Densmore).

There is no question U.S. and NATO air forces adhered to the bombing norm throughout the air campaign. The press reporting and public statements of U.S. and NATO officials made it very clear that in a campaign to protect civilians from a dictator protecting those civilians from aerial bombardment was a top priority (Inskeep; Reguly). NATO’s rules of engagement were reportedly very strict (Reguly). NATO pilots reportedly bypassed targets if there were any possibility of collateral damage (Reguly).

U.S. and NATO targets included air defenses, airfields, supply depots, command posts, and the fielded forces of Qaddafi (Garamone; Cohen). U.S. and NATO used PGMs extensively including cruise missiles from naval vessels as well as “smart bombs” dropped from the B-2 bomber (Garamone; Cohen).

Why did U.S. and NATO air forces strictly adhere to the norm? There is little in the press reporting to explain definitively why U.S. and NATO adhered to the bombing norm except that it was understood that protecting civilians was not only standard procedure but also absolutely necessary in a campaign dedicated to protecting civilians.
CHAPTER 9: THE SOVIET UNION (USSR)/RUSSIA

What explains Soviet/Russian adherence or non-adherence to the bombing norm across five armed conflicts including Afghanistan, Chechnya I and II, Dagestan, and Georgia? What are the trends in compliance or non-compliance? Weak norms, specifically lack of democratic norms and weak attachment to, and internalization of, legal norms, combined with strategic necessity are the best explanations for Soviet/Russian aerial bombardment post-World War II. In three out of five conflicts, Soviet/Russian air forces employed indiscriminate bombardment (Table 9.1). All of those three conflicts were coded by the UCDP/PRIO dataset (Gleditch, et al, 2012) as wars rather than minor conflicts (Table 9.2) and all of those three conflicts were assessed as “high need” according to this research’s coding scheme. Moscow only used indiscriminate bombardment when it felt compelled to so in arduous conflicts. One prominent and interesting trend in Soviet/Russian use of force is that Moscow has become very sensitive to its military casualties. This developing force protection norm is driving Moscow to use heavy-handed aerial bombardment to keep its ground casualties limited to avoid domestic controversy.

Table 9.1. Soviet and Russian Conduct of Aerial Bombardment, 1946-2011

<table>
<thead>
<tr>
<th>Case</th>
<th>USSR/Russia</th>
<th>Conduct of Aerial Bombardment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armed Conflicts</td>
<td>Indiscriminate</td>
<td>Duress Bombing</td>
</tr>
<tr>
<td>1979 AFGHAN WAR</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>CHECHNYA 1</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>DAGESTAN WAR</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>CHECHNYA 2</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>GEORGIA WAR</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>
Table 9.2. Categorization of Soviet and Russian armed conflicts

<table>
<thead>
<tr>
<th>Case</th>
<th>Intensity</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td>USSR/Russia</td>
<td>Minor</td>
<td>High Need</td>
</tr>
<tr>
<td>Armed Conflicts</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>High Need</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Low Need</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 9.3. Conduct of Aerial Bombardment across Strategic Necessity

<table>
<thead>
<tr>
<th>USSR/Russia</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrimination</td>
<td>High Need</td>
</tr>
<tr>
<td>Discriminate</td>
<td>0</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td>3</td>
</tr>
<tr>
<td>Duress</td>
<td>3</td>
</tr>
<tr>
<td>Disproportionate</td>
<td>3</td>
</tr>
</tbody>
</table>

First, Soviet/Russian policymakers as well as their commanders do not wholly lack norms regarding noncombatant immunity. They simply have a much higher tolerance for civilian casualties and collateral damage to civilian objects than their Western counterparts. Across four conflicts excepting Georgia, Soviet/Russian policymakers and commanders simply saw civilian casualties as a regrettable fact of war for which little can be done (Seely 2001, 250). In addition, Thomas’ (2001) claim that internalization of the bombing norm, especially among the military, is vital to adherence is confirmed although Russian civilian leaders frequently appeared more bellicose than its officers during the First Chechen War (Leiven 1998, 46; Seely 2001, 103, 250). Soviet/Russian internalization of the norm is poor although policymakers and commanders showed some sensitivity to noncombatant immunity and were defensive regarding accusations of violations during the First Chechen War; however, this sensitivity rarely fundamentally changed operations, and it rarely applied during the Second Chechen War (Gall 1997, 200; Seely 2001, 249).
Second, the Russian case challenges the notion that national interests or the geopolitical stakes of a war determine the influence of norms on adherence to noncombatant immunity. Thomas claims that one of the reasons the bombing norm broke down in World War II was because the existential stakes of the war drove states to extremes. While some Russian policymakers definitely saw Chechen secession as a major step toward the dissolution of Russia, Chechen secession did not present an immediate existential threat to Moscow, yet in the Second Chechen War Moscow treated the war as a “must win” and used force accordingly.

In another example, aerial bombardment in Afghanistan lasted the longest and was the most transgressive of Russian air campaigns post-World War II and it was all done to prop up a socialist regime in a Third World state far from Moscow. Renz and Scheipers claim the strategic circumstances and aims of a war are the primary determinants of states’ air forces’ adherence to noncombatant immunity and this indeed seems to be the case except that strategic circumstances cannot be measured in terms of objective national interests or high stakes (e.g. existential, peripheral). While aerial bombardment in Chechnya was highly destructive because it took place mostly in Grozny, towns, and villages, it still did not measure up to the high casualties and violations in Afghanistan yet Chechnya was a secessionist province of Moscow and the Kremlin feared such secession may result in the unraveling of the Russian Federation.

Third, the force protection norm was the primary driver of Russian aerial bombardment during Chechnya I, II, and Dagestan. Moscow partially learned its lesson from its military fatalities in Afghanistan and was determined not to incur casualties on such a scale again that it undermined public support. In the tension between military
necessity and protection of civilians, military necessity always won. Much of the substantial damage done to Grozny in both wars was due to aerial and artillery bombardment of strongpoints (e.g. buildings of all types) not “carpet bombing.” Russian commanders were determined to spare their ground forces house-to-house fighting so they used airpower to blast away resistance. This tactic was not necessarily a violation of the Laws of War but it was an incredibly uncomfortable reminder of how damaging aerial bombardment can be in an urban environment. The international media reflexively found this reality offensive and the literature is full of claims of indiscriminate bombing which do not wholly stand up to scrutiny. In fact, aerial bombardment in Grozny was more lawful than Russian bombardment of Chechen villages and towns occupied by fighters where commanders used airpower to punish and coerce civilian populations.

The primacy of the force protection norm in Chechnya I and II and Dagestan challenges Renz and Scheipers’ claim that the continuance of punishment air campaigns is the greatest obstacle to states’ adherence to the bombing norm although they do claim that the force protection norm weighs heavily on states’ calculations regarding adherence (Renz 2012, 37-38). The Russian case strongly suggests that the force protection norm better explains non-adherence in the Russian case more so rather than coercive punishment. In addition, the Russian case challenges Pape’s notion of coercive punishment. While coercive punishment was certainly a factor in Afghanistan and Chechnya, Russia revealed in Chechnya II that punishment can be purely punitive with little coercive effect intended.

Fourth, Soviet/Russian aerial bombardment supports the Valentino, et al. (2004) thesis that states facing popular and threatening guerrilla forces are much more prone to
victimizing the civilian population. In Afghanistan and Chechnya where Russian forces faced popular and threatening insurgencies, aerial bombardment was much more likely to violate the norm including using indiscriminate airpower to dislodge populations. In Dagestan where Russian forces had the “home field” advantage—that is the majority of the civilian population favored Russian rule—and the insurgents were small and localized, aerial bombardment was more likely to adhere even though it was frequently intensive.

Fifth, Soviet/Russian aerial bombardment also supports Downe’s “Desperation to Win” thesis but with some deviations (2004a, 2006a, 2007). Whenever an armed conflict became long and costly in lives and materiel, like Afghanistan, the Soviets/Russians were willing to violate the norm substantially. In the case of Chechnya, Moscow violated the norm more so in the second war than the first as if the “Desperation to Win” impulse had carried over from the first war. Russian aerial bombardment was more intensive in the second war and more damaging. Downes claims that states generally pursue counterforce strategies until these fail and then they pursue counter-population strategies. The Second Chechen War challenged that thesis. In the Second Chechen War, Russian air forces went “ugly early” attacking infrastructure and the economy.

Georgia is the outlier case. The Russo-Georgia War is the only conflict in which Russian air forces wholly adhered to the norm. Interestingly and not surprisingly, it is the only case in which Russia was at war with another state and it was the shortest war confirming in this one case Downes’ thesis that states pursue counterforce strategies first. Russia had limited objectives in Georgia and Georgia had small and generally weak armed forces; therefore, Russia was able to obtain its objectives in a very short period of
time. In addition, one may speculate that deterrence played some role in Russian adherence. Georgia is on the periphery of Europe and both the European Union and NATO have interests in preventing Russian expansionism. Non-adherence would certainly have invited international condemnation and possibly some form of sanctions on Moscow so the Kremlin had a strong interest in adhering.

9.1. Aerial Bombardment during the Soviet-Afghanistan War, 1979-1989

In December 1979, Moscow ordered its ground and air forces to invade Afghanistan to save the socialist experiment in that country as well as better secure its southern borders (Arnold 1985, 94; Collins 1986, 99, 124-133; Grau 2002, xxiii). While some Westerners claimed the invasion was a Soviet attempt to threaten the Persian Gulf or pursue its long-desired warm water port, most historians view the invasion in less sinister terms. After World War I, Soviet influence slowly expanded in Afghanistan as British influence waned in South Asia and Soviet control increased over its Central Asian possessions—“the Stans” (Grau 2002, xxi-xxii). U.S.-Soviet détente, the Iranian Revolution, and perceived communist expansion in Central America and Africa in the 1970s simultaneously emboldened and threatened Moscow (Collins 1986, 99, 124-133). A coup by Soviet-trained Afghan military officers in 1978 brought socialism under a much-divided communist party to power (Grau 2002, xxi). Kabul’s attempt to re-structure Afghan society along modern and socialist lines precipitated a societal revolt (xxii).

Civil war ensued as the Afghan countryside rose up to defeat the socialist regime in Kabul (xxii-xxiii). Factionalism within the communist regime resulted in another coup in September 1979 (xxiii). At this point, secondary sources conclude Moscow decided to
invade to save the communist regime and put down the rebellion (xxiii). Grau and Gress claim Moscow saw the invasion as a re-play of Hungary 1956 and Czechoslovakia 1968; however, they failed somehow to comprehend the depth of Afghan resistance to socialism and foreign invasion (Arnold 1985, 94; Grau 2002, xxiii). The Soviets reportedly desired to make the Afghan military fight most of the war enabling a Soviet withdrawal in a few years; however, the weakness of Kabul’s armed forces required a major Soviet military effort (Grau 2002, xxiii). Soviet commanders executed the invasion quickly and with little loss of Soviet or Afghan lives. The fact that a sizable number of Soviet personnel in the form of advisors and security forces were already spread across the country enabled the invasion.

At the height of the Soviet occupation in 1985, Soviet forces numbered between 90,000 and 120,000 personnel with a combined Soviet and Afghan force of 400,000 (Grau 2002, 24). By this time, Mujahedeen forces numbered as high as 145,000 from 45,000 in 1982 (24). By 1989, Moscow claimed 13,000 military fatalities although some sources claim the true number at 26,000 (xix).

While not all of Soviet operations were indiscriminate (Grau, 2002, 25), the historical record strongly suggests both Soviet ground and air forces were frequently indiscriminate across the conflict resulting in massive civilian fatalities as well as calamitous refugee and IDP flows. While raw numbers of civilian fatalities do not necessarily correlate with discrimination or indiscriminacy, sources claim 1.3 million Afghans killed in the nine year guerrilla war in a rural country of 17 million (xxiv). If indeed true, such a figure puts Afghan civilian fatalities in the same class as the Korean War—a high intensity conflict with massive armies and aerial bombardment of urban
areas. This evidence suggests that the Soviets were indeed indiscriminate. In addition, roughly one-third or 5.5 million of the civilian population fled the country to escape the war while 2 million were internally displaced (xxiv). Such population migrations never occurred in the Vietnam War despite the heavy use of firepower. This figure too corroborates claims that it was Soviet military policy to drive out the rural population in some parts of the country in order to deny popular and logistical support to the Mujahideen (xxv). Such a policy of forced migration by way of indiscriminate operations was a clear violation of Geneva.

Grau writes:

From 1980 to 1985, the Soviets sought to eliminate Mujahedeen support in the rural countryside. They destroyed crops and irrigation systems, bombed granaries and rural villages, mined pastures and fields, machine-gunned herds of livestock, and launched sweeps through rural areas to conscript young men and destroy infrastructure. This turned Afghanistan into a nation of refugees and forced the Mujahideen to transport food along with establishing logistics bases inside Afghanistan. (xxv)

As noted in the passage, the Soviets widely mined Afghanistan but worse yet many of these mines reportedly were designed to look like everyday objects and were made of non-metallic casing (Collins 1986, 146). Obviously, this increased casualties among civilians, especially children, and livestock.

In addition to forced migration by way of indiscriminate attacks on villages, destruction of crops, free fire zones, and indiscriminate mining, some claim the Soviets also used chemical weapons on a number of occasions (147). The use of chemical weapons in counter-insurgencies especially in rural areas seems to be a staple of very brutal guerrilla wars as the Soviets apparently succumbed to the temptation as did the Iraqis in their operations against the Kurds and Egyptian operations against the Yemeni.
Why were the Soviets indiscriminate? There are no *Pentagon Papers* to shed light on what the Soviets were thinking 1979 to 1989 although *The Soviet-Afghan War* developed by the Russian General Staff may be the best military source. Without other strategic sources, the historical evidence itself, Soviet military doctrine, and Soviet political objectives will have to represent Soviet motivations.

The logical response is that the Soviets were indiscriminate because they lacked strong legal norms and strategic necessity drove them to it. The Soviets had no desire to annex Afghanistan so Downes’ annexation thesis is not an explanation (2006a). The “Desperation to Win” thesis seems the best overall explanation (2006a). The initial invasion involved little violence so it is not that the Soviets entered the war to deal harshly with the Afghan people.

Explanations for Soviet violations of the bombing norm in addition to its ground forces’ violations of noncombatant immunity fit into four categories. First, the ferocity and depth of Afghan resistance so threatened Soviet objectives that it compelled the Soviets to apply harsh measures to battle the insurgency. This supports Valentino, et al. (2006) and Renz (2012) theses that states’ war aims fundamentally influence adherence. Second, as the length of the war grew long, the Soviets grew impatient to achieve results—“Desperation to Win.” Third, the Soviet military like the U.S. in Vietnam was organized, trained, and equipped for high-intensity conventional warfare so it did what it knew how to do best. High intensity operations in and around civilians and their habitations usually results in high civilian casualties especially in the pre-PGM era of aerial bombardment.
Fourth, the Soviet military commitment was not commensurate with the political objectives Moscow issued its commanders in the context of a strong insurgency. At the height of the war, Soviet forces numbered 120,000 in a far-flung country much larger than Vietnam. Compared to Vietnam, the Soviets had only 22% the manpower commitment the U.S. made to its war. In this circumstance, widespread pacification was physically impossible. The Soviets had difficulty securing urban centers and its LOCs. In this resource-constrained environment, the Soviets resorted to efficient and lethal operations designed to inflict maximum damage with as little damage to their forces as possible (Downes 2004a, 452-453). Fifth, and related to the other explanations, government forces facing a strong insurgency find it difficult to target the foe and pacification of the population friendly to the insurgency is at best difficult so the counter-insurgent resorts to what Arreguin-Toft (2001) labels “barbarism.” The civilian population from which the insurgency derives support is a much easier target for the conventional forces of the government so the government attacks the population by some means.

9.2. Aerial Bombardment during the First Chechen War, 1994-1996

The First Chechen War occurred because Chechnya desired independence from the Russian Federation after the fall of the USSR and Moscow was unwilling to grant it independence or even a more semi-autonomous status that may have been acceptable to many Chechens (Seely 2001, 3-4). Internal strife and power struggles within both the Yeltsin and Dudayev administrations in Moscow and Grozny set the conditions for armed conflict within Chechnya and between Chechnya and Moscow (Seely 2001, 163; Gall 1997, ix-x, 163-167). Ultimately, Moscow concluded that granting Chechnya
independence or a strong form of autonomy would result in the dissolution of the Russian Federation as other regions attempted to, or broke away, from Russia in response (Seely 2001, 3; Gilligan 2010, 5). In order to keep Chechnya as part of Russia, Moscow decided that invasion was the best method to achieve its objectives after subterfuge and not so covert operations failed to overthrow the Dudayev regime in Grozny (Seely 2001, 170).

Russian aerial bombardment in Chechnya frequently did not adhere to the bombing norm and some of the violations were severe; however, the “conventional wisdom” of many journalists and human rights activists that Russian aerial bombardment in Chechnya was wholly indiscriminate does not hold under historical scrutiny. There was substantial physical damage to Grozny and other towns and villages across the length and breadth of Chechnya and a high number of civilian fatalities caused by the fighting but the numbers cited by many Chechen and international sources are exaggerated and strongly suggest the aerial bombardment of Chechnya was not as indiscriminate as claimed (Lieven 1998, 107-108; Gilligan 2010, 2). For example, a number of sources claim 5,000 to 35,000 persons killed on all sides, civilian and military, specifically in Grozny (Seely 2001, 258), but Lieven, who was a seasoned journalist on the ground in Chechnya off and on during the war, claims the best estimate is 5,000 civilian fatalities during the bombardment and siege of Grozny and possibly a maximum of 20,000 civilian fatalities conflict wide (Lieven 1998, 107-108). Complicating analyses of adherence to the bombing norm, no one can historically disaggregate fatalities caused by aerial bombardment, artillery, sniping, firefights or extrajudicial killings.

Russian air forces transgressed the norm to varying degrees in three areas that in many respects are all closely related because they merge questions of discrimination and
proportionality. These three areas include the Russian High Command’s failure to permit the evacuation of cities, towns, and villages of civilians prior to aerial bombardment, disproportionate attacks in those same towns and villages with civilians, and aerial bombardment as a form of collective punishment.

First, Russian air forces, under orders from senior ground commanders, pushed the envelope of, and outright violated the principle of proportionality by failing to permit the evacuation of civilians from Grozny and other towns and villages intended for bombardment throughout the war (Gilligan 2010, 2). This failure was a transgression of the 1907 Hague Convention and mimicked much more intensely and purposely U.S. aerial bombardment of towns and villages in South Vietnam.

In the case of Grozny for example, aerial bombardment came in four waves across over a month of preparation and invasion (Lieven 1998, 43-44; Souleimanov 2007, 99-99, 105). The initial Russian invasion was a surprise, but the follow-on incursions were clearly telegraphed; therefore, the 1907 Hague provision permitting bombardment of towns in order to preserve the surprise of a ground assault do not apply to Grozny and its suburbs (Roberts 2000, 78). Curiously, Russian air force leaflet drops warning of the coming war if the Chechen rebellion did not end did not warn civilians to flee (Lieven 1997, 93). Many Chechen civilians took the hint and left Grozny for the countryside; however, many civilians, mostly ethnic Russians—“pensioners,” with nowhere else to go were stuck (45-46). The Russian High Command could have prevented many civilian casualties if it had ordered an evacuation.
Seely claims there are four reasons why the Russian High Command did not evacuate Grozny of civilians. First, he claims senior commanders were so convinced of a “cake walk” to victory that an evacuation was not needed. Second, Russian military planning was so “disorganized” that planning an evacuation was not within the competence and logistics of senior commanders. Third, the Russian military professionally does not highly value noncombatant immunity; therefore, in varying degrees, the civilian population was expendable. This argument seems to match what happened on the ground seeing that the Russians did not seriously attempt to protect ethnic Russians who inhabited the center of Grozny. Fourth, Seely strongly suspicions that the High Command desired to “punish” Chechens for the war so keeping civilians in harm’s way served that purpose. (Seely 2001, 250)

The first wave of aerial bombardment began on roughly 26 November 1994 and focused on Chechen airports, airbases, and military posts as well as leaflet drops as the initial and halting Russian ground incursion crossed Chechen borders and headed for Grozny (Lieven 1998, 43-44; Souleimanov 2007, 98-99). One author claims this bombardment was very light and included only two daily bombing sorties over Grozny itself (Gall 1997, 167).

The second wave of bombardment began before the main invasion on 11 December 1994 (Lieven 1998, 43). Lieven, described as an eye witness the early aerial bombardment as almost “random” as well as “sporadic and less intense…” than the artillery and aerial bombardment of Grozny before the 31 December 1994 final ground assault (42-43). Lieven claims the bombardment appeared more intended to terrorize the population than kill Chechen fighters and he cites a number of early civilian fatalities but
no Chechen combatants (42-43). If terrorization of the population of Grozny was indeed the intention of the Russian High Command, then such bombardment would be a violation of Geneva and the Additional Protocol. It is likely Russian air forces had multiple objectives in its early bombardment and targets of opportunity and terrorization as well as “dumping” ordnance probably went together.

The third wave began on 22 December 1994, appeared “systematic,” and intended to “soften up” Grozny for the Russian ground forces (Lieven 1998, 43; Souleimanov 2007, 105). Lieven cites an ethnic Russian victim of a 21 December aerial attack on an apartment complex as stating that Russian television communicated Moscow’s view that Grozny was now a “military target” (Lieven 1998, 46). If indeed this was the official view of the High Command, then Grozny was an “area target” and a “free fire zone” and such area targets and zones are illegal under Hague and Geneva because discrimination can never be legally abrogated. Added to this, Lieven and other war journalists claim that the artillery bombardment of Grozny was much worse than that of Beirut at the hands of the Israelis and Sarajevo at the hands of the Serbs (43). The fourth wave began in January 1995 and was concentrated on interdiction and close air support to Russian ground forces fighting in Grozny (44).

It is a fact that the third and fourth waves of aerial bombardment as well as artillery bombardment caused massive damage especially to the center of Grozny (39, 47). A substantial number of civilians, especially ethnic Russians, were killed due to air and artillery attacks in addition to firefights, sniping, and raids by both sides (Seely 2001, 252). Was Russian aerial bombardment indiscriminate or disproportionate? The testimony of seasoned, objective journalists suggests it was not the initial intent of the
Russian High Command to raze Grozny (241). Many Russian senior and mid-level officers opposed the war and stated they did not desire to harm civilians (103). The initial war plan by the High Command was modeled on Hungary 1956 and Czechoslovakia 1968 (221). Senior policymakers and commanders perceived the invasion going quickly and had hoped that a massive show of force combined with the targeting and seizing of symbols in Grozny would end the rebellion (Seely 2001, 221-222, 250; Souleimanov 2007, 104-105). It did not and compelled the Russians to fight their way into Grozny with the city center and Presidential Palace being their main geographic objectives (Seely, 221-222).

The battle damage in Grozny strongly suggests this was indeed the case. The greatest damage to Grozny and its suburbs was along the axes of advance of Russian ground forces (Lieven 1998, 47). The Russian Air Force could have randomly bombarded wide swaths of the city and one author claims that this happened accusing the Russians of “carpet bombing” (Souleimanov 2007, 104). It is highly likely this may have occurred on occasion and Russian pilots may have sought out targets of opportunity outside the axes of advance, but if the Russians had indiscriminately bombed Grozny then the whole city would have been razed not just the center and main avenues of approach.

There is no question that Russian air forces, in addition to artillery, heavily bombed Grozny and this was the policy of the High Command. Recalling Afghanistan’s casualties and the inexperience of their troops (Seely 2001,223-224), Russian commanders used firepower—aerial and artillery—to destroy communications and logistic facilities as well as Chechen strongpoints in all sorts of civilian objects especially...
large apartment complexes which housed stranded civilians (Lieven 1998, 111; Seely 2001, 231, 243). The Russians did not want to dismount their infantry and engage in “street by street” fighting (Seely 2001, 222), although such fighting occurred, so they relied heavily on armor and cavalry as spearheads inside Grozny and then commanders used airpower and artillery to destroy resistance blocking their ground advance (Lieven 1998, 109, 111; Seely 2001, 241). While breathtaking in destruction, these tactics were not unlawful or necessarily disproportionate. Civilian objects used by the Chechens became lawful military targets and those civilians trapped in areas of fighting frequently became victims.

After the siege and occupation of Grozny, Russian commanders concluded that their heavy-handed approach was alienating Chechens en mass and uniting them against Russia (Lieven 1998, 127-129). In response, operational commanders attempted to reduce their “search and destroy” missions and become more judicious in their use of firepower against towns and villages, but this was not an embrace of classical pacification (127-129). As a matter of fact, Russian commanders never really embraced counterinsurgency (127, 129). With the exception of force on force engagements in rural areas, aerial and artillery bombardment in Chechnya became a tool of coercion as Russian commanders sought to pacify the countryside without persistent combat or provision of essential services (127, 130).

Russian tactics against those towns and villages selected for coercion frequently still ran afoul of Hague and Geneva. For example, Russian ground and air forces frequently, but not always, refused to evacuate Chechen towns and villages of civilians and punitively bombarded them by air and artillery as a form of collective punishment for
willingly or unwillingly harboring fighters (127). One of the Russian commanders’ tactics was to surround and blockade a town or village suspected of hiding Chechen fighters and weapons and then demand the town leadership surrender the fighters and weapons or face aerial and/or artillery bombardment (127). Commanders occasionally would refuse to permit civilians to evacuate literally holding them as “hostages” (127). If village elders relented, ground forces swept in searching for military-age males and weapons (130, 133). These sweeps frequently were very aggressive resulting in civilian casualties (130, 133). When commanders did permit all civilians to evacuate, they detained the men and “military-age” boys. The Russians tortured some of these men and some were illegally executed. Some were released only after paying ransoms (130, 133).

What explains Russian general neglect of the norm of noncombatant immunity as well as occasional and purposeful adherence? There seemed to be a legitimate concern by a number of Russian officers for the protection of civilians; however, that concern was not institution wide especially at the highest and lowest levels of the Russian military hierarchy. There can be no doubt that noncombatant immunity was not highly valued by policymakers or senior commanders as it was nowhere embedded in military planning yet President Yeltsin reportedly did ban aerial bombardment in Grozny on 26 December 1994 after negative press (Gall 1997, 200; Seely 2001, 249) and days before the final ground assault showing that the bombing norm tugged ever so slightly in the Kremlin yet his orders appeared to have been generally ignored by local commanders (Seely 2001, 249).

In Grozny, the Russian High Command did not desire or plan to raze the city. Heavy fighting did that. Grozny was the most damaged urban terrain in Chechnya yet
surprisingly it may have been the most legitimate exercise of airpower in addition to that applied to Chechen fielded forces. It is the aerial and artillery bombardment of towns and villages as part of a coercive campaign targeting town elders and civilians that was the greatest violation of the war in regards to the bombing norm because this bombardment frequently involved the purposeful suspension of discrimination and the use of collective punishment.

In addition, Russian air forces transgressed the norm because they and their ground force colleagues were so ill-prepared for a war in Chechnya and there was little time to plan the operation thoroughly. Lack of knowledge of the enemy frequently leads to the heavy use of firepower among other reasons. Russian ground forces did not even have up-to-date maps of Chechnya (Seely 2001, 230) so it is unlikely the air force had any. Just as the ground forces complained of the lack of intelligence on Chechen forces (230), it is highly probable there was little target development (e.g. target photos, coordinates) of Chechen positions and facilities by Russian air forces. The highly centralized nature of Russian military planning and decision-making was not conducive to the flexible use of airpower and its integration with the movement of ground forces. The literature reviewed is silent regarding whether senior commanders detached Russian pilots to ground units in order to better call in airstrikes, but a good assumption is that they did not. Flying “blind,” pilots likely did the best they could to spot and deliver ordnance on Chechen positions. Numerous observers of aerial and artillery bombardment in Chechnya claim it was incredibly inaccurate to the point of reckless with friendly casualties (Lieven 1998, 39, 43; Seely 2001, 223, 231). Like the vast majority of air forces worldwide, the Russian Air Force was organized, trained, and equipped for high-
intensity, conventional conflict. Its weapons were mostly “dumb bombs” in high explosive categories ideally suited for force-on-force combat. In urban terrain with civilians, aerial bombardment inevitably was going to cause high casualties.

Aerial bombardment in Chechnya especially Grozny garnered much press attention and international condemnation. Such seems to be the case with airpower as its effects are frequently so much more visible to the press especially when used in an urban environment while ground force operations, especially in the countryside, often escape strict scrutiny until days, weeks, or months after the use of force. Such seems to be the case in Chechnya. It was hard for journalists and human rights activists to witness and document the innumerable raids in Grozny and in countless towns and villages across Chechnya, but the historical record strongly suggests many civilians were killed due to both the reckless and purposeful violations of noncombatant immunity by ground forces. As noted earlier, it is impossible to accurately disaggregate civilians killed by aerial and artillery bombardment as well as raiding, sniping, and assassination; however, in Chechnya it is likely many civilians died by artillery bombardment and many other illegal ground tactics.

9.3. Aerial Bombardment during the Dagestan War, 1999

Dagestan is a majority Muslim republic of two million in the Russian Federation adjoining Chechnya in the Caucasus region (Hass 2004, 149). Seeing that Dagestan and Chechnya share a long border, it was only a matter of time before separatism and militancy would creep into Dagestan and that began to occur especially by 1998 (Haas, 72). After the First Russian-Chechen War, Chechen militants, specifically Islamists, began to infiltrate into Dagestan; however, they found few converts as the majority of
Dagestanis were “Muslim traditionalists” (Ware 2010, 121). Coercion and low-level violence between Chechens and their few Dagestani converts and traditionalists soon followed. On 2 August 1999, Basaev, a militant Chechen commander, led reportedly 1,500 Chechen fighters in an invasion of Dagestan supposedly hoping to ignite a rebellion against the Russians in an effort to establish an Islamic state across the Caucasus (121). Many Dagestanis resisted with militia and paramilitary police and welcomed the strong Russian military response (123). That initial invasion failed, but it was followed up in September with another invasion (Ware 2010, 121, 124; Haas, 72-73).

Russian political objectives were straight-forward. These objectives were to repel the invasion of Dagestan, defeat those fighters remaining behind, and restore Russian sovereignty to those villages under Islamist control (Haas 2004, 150).

It is difficult to determine with much analytical rigor how Russian air forces conducted aerial bombardment except that most press reporting labeled it intensive and emphasized that Russian bombardment was in and around villages and included attacks on homes (CSM 1999; AFP 1999; Ware 2010, 123). The general impression in the international press is that Russian airpower was heavy-handed and that probably was the case; however, military force may be intensive but not necessarily unlawful or even disproportionate. Russian bombardment was in and around villages and against homes because that is where the Chechens and their few Dagestani allies chose to fight from for concealment and cover (Ware 2010, 123-124). Considering that a number of villages reportedly were being de facto governed by Islamists (Haas 2004, 149; Ware 2010, 123-124), it appears that Russian bombardment and ground operations, for that matter, were indeed intense; however, there is no evidence in secondary sources that the Russians used
bombardment as collective punishment. Ground forces used artillery (CSM 1999). One author indicated strong animus among most Dagestanis for Islamists and that these citizens held high tolerance for the destruction of those villages held by the militants (Ware 2010, 124).

According to one airpower history book on the conflict, the author, Haas, indicates a large Russian airpower response to the invasion of Dagestan in addition to the deployment of 4,000 to 10,000 Russian ground forces. Hass records roughly 150 Russian aircraft, most rotary-wing, dedicated to the war. Most of these helicopters were attack helicopters for direct attack and close air support to Russian ground forces. The Russians reportedly also used fighter-bombers for aerial interdiction at delivery altitudes of 9,000 feet and ground attack aircraft at altitudes of 3,000-9,000 feet. Haas indicates that some Russian fighters were PGM-capable; however, he does not cite how often these weapons were used. Concerned for shoulder-launched, surface-to-air missiles from Chechen fighters, these bombing altitudes appear standard as air commanders attempted to balance force protection with effectiveness against ground targets. If Russian aircraft were delivering PGMs, then these altitudes were likely almost perfect for precision and collateral damage avoidance; however, if the majority of Russian ordnance dropped were dumb bombs, as suspected, then substantial collateral damage was inevitable (Haas 2004, 150-152)

Based on the information available, Russian air forces appeared to have adhered to the bare minimum of the norm. Russian air forces bombarded villages occupied by, or being used as strongpoints by Chechen and Dagestani fighters. They also attacked enemy fielded forces in contact with Russian ground forces. They attacked camps, depots, and
convoys on the roads. There is no information that Russian air forces purposely sought to kill civilians or destroy civilian objects. Any deviations to the norm likely were in the areas of proportionality—that is using more force than was really necessary—and indiscriminate attacks on villages suspected of being friendly to, or inhabited by the militants but not actually being used as strongpoints; however, this is speculation considering so little information that is available yet it would follow some Russian practice from the First Chechen War.

Why did Russian air forces generally adhere to the norm? Secondary sources are relatively silent on the question so one may only analyze the question from Russian behavior. Dagestan was a Russian republic that was not in rebellion against Moscow. As a matter of fact, the vast majority of Dagestanis did not want Chechens in their land and welcomed Russian military intervention. Indiscriminate aerial bombardment would have been counter-productive to the extreme. In addition, there simply was no military utility to wasting limited airpower and ordnance on non-military targets. Chechen fighters were the targets and Russian airpower attempted to root them out wherever they found them.

The war reportedly ended on 16 September 1999 with a Russian victory; however, by this time, Moscow had already ordered the aerial bombardment and re-invasion of Chechnya in response to both the invasion of Dagestan and a number of high casualty terrorist attacks in Moscow (Ware 2010, 121,124-125). By conflict’s end, Moscow claimed 300 Russian troops killed and 1,500 insurgents which, if true, show that the Dagestan War was relatively intense for a “small war” (Haas 2004, 149).
9.4. Aerial Bombardment during the Second Chechen War, 1999-2005

The Second Chechen War occurred from September 1999 to an indefinite endpoint sometime in 2005-2007 as Chechen resistance in terms of combat simply faded into sporadic terrorism. The period September 1999 to February 2000 is considered the height of the war due to the initial Russian invasion of Chechnya, the envelopment and push into Grozny, and then the final fall of the city (Haas 2003, 62-64). The conflict after February devolved into a classic guerrilla war (Haas 2003, 63-64).

The war had a number of causes (Evangelista 2002, 191). First, the Russian Federation’s desire, under the Yeltsin and Putin regimes, to re-assert its sovereignty over Chechnya after its de facto stalemate in the first war was a root cause of its willingness to try again (Gilligan 2010, 5, 27, 32). Moscow desired to keep the Russian Federation strongly intact and a second invasion of Chechnya would serve that purpose in addition to sending a message to other regions who would try to break away (Evangelista 2002, 197). Second, and more importantly, Chechnya’s decent into ungoverned space and lawlessness and the fact that it had become sanctuary for Chechen terrorists—in some cases jihadists—launching terrorist attacks into Russia proper drove Moscow’s determination to end the separatist movement as well as destroy Chechen terrorists’ base of support (Evangelista 2002, 190-191; Gilligan 2010, 2, 27-30). Third, the immediate cause of the Russian invasion was a radicalized Chechen commander’s military incursion into Dagestan in order to create a greater Caucasus Islamist state (Evangelista 2002, 166; Gilligan 2010, 30-32). This incursion presented Moscow its casus belli against Chechnya in order to “finish the job” from the first war.
Chechnya is a small piece of territory compared to Afghanistan and its population of roughly 900,000 or more made it but 6% of Afghanistan’s population yet Moscow dedicated a total force of 120,000 troops in and about Chechnya during the second war tripling its previous commitment from 1994-96 (Evans 2001, 15; Gilligan 2010, 33-34). This force level provided for 133 troops per every 1,000 residents seven times higher than the classic British counterinsurgency rule of thumb of 20 security personnel per 1,000 (Arnett 2010). This force level also equaled Moscow’s maximum commitment to Afghanistan at the height of that war. What these numbers meant is that Moscow was determined to prevail in Chechnya and to do so with overwhelming force.

The effects of the war were sobering. Grozny, the capital, was ruined as an urban center (Evangelista 2002, 173). According to Gilligan, one-third of the population became refugees in neighboring regions or was internally displaced (2). Roughly 3000-5000 people were “disappeared” (2). Mass graves reportedly contained 3,000 civilians (2).

What made aerial bombardment in the Second Chechen War different than the first war was that it was better planned, better coordinated with ground forces, used more PGMs, applied more independently in strategic attack and aerial interdiction missions, and used much more frequently and intensely especially before the ground assault on Grozny (Evans 2001, 4, 15-18, 21-26, 34-35, 40-41). Gilligan claims Russian air forces flew 4,000 combat sorties, mostly air-to-ground, between September 1999 and February 2000 (Gilligan 2010, 34)—seventeen weeks—while Evans cites sources claiming 3,600 combat sorties “in the first ten weeks” of the war and 2,160 sorties in the two weeks of the last ground assault on Grozny between 17 January 2000 and the end of the month.
when Grozny finally fell (Evans 2001, 19). If Evans cited sources are correct, combat
sorties in the first ten weeks of the war equated to 21 or lower ground attack sorties a day
which is not too far off from Gilligan’s number of 34 sorties a day. Those are not
operationally or historically high figures compared to other air campaigns. It is not even
close to Desert Storm or Allied Force. The sortie counts during the final assault on
Grozny are higher at 154 sorties a day and reflect what an airman would expect in higher
intensity combat. Evans cites a source claiming 250 combat sorties on 24 January 2000
just a week before Grozny fell (19).

What these sortie count data show is that aerial bombardment from 23 September
1999 to 16 January 2000 was not as intensive as much of the press and human rights
literature claims. Bombardment during the final fifteen days of ground fighting could be
rightly labeled intensive. What these numbers suggest is that there may be some
hyperbole in the literature regarding aerial bombardment in Chechnya. That is not to say
Russian airpower did not substantially contribute to civilian casualties or physical
damage in Chechnya in general or Grozny in particular especially considering that Haas
claims that airpower conducted 70-80% of fires compared to artillery’s 15-17% (Haas
2003, 57). If 21 Su-24 Fencer fighter-bomber sorties were to drop a full load of
ordnance, especially on Grozny, daily, that is going to cause a lot of damage, but it is
unlikely those 21 sorties a day between September 1999 and 16 January 2000 were all
Fencers, all at maximum loads, and all on Grozny. Aerial bombardment was occurring
across Chechnya.

The human rights and journalistic literature overwhelming condemns Russian
military operations conducted in Chechnya by all arms as “wanton and disproportionate”
(Gilligan 2010, 5). The term, genocide or attempted genocide, frequently is evoked by human rights advocates for Russian policy during the war (Gilligan 2010, 1). Indiscriminate bombing by aviation and artillery is persistently cited as significant factors in civilian casualties and property destruction in addition to a host of other indiscriminate tactics (Evangelista 2002, 167-168, 173, 192-193; Gilligan 2010, 1-2, 34-35). These other tactics, mostly perpetrated by ground forces and secret operatives, included kidnapping for ransom, extrajudicial killings, summary executions, torture, rape, looting, and blockades of villages as collective punishment (Evangelista 2002, 193).

A review of the literature strongly indicates Russian air forces frequently did not adhere to the bombing norm; however, I find some of the claims of human rights advocates and journalists of Russian indiscriminate aerial bombardment to be exaggerated. Russian combat sortie counts, if correct, suggest the bombardment was not as intensive as claimed by the international press. It is also possible that these sorties, while not even close to Desert Storm or Allied Force rates, may very well have caused the majority of the civilian casualties and physical damage depending on how and where those sorties were used. More information is needed and it is likely Russian military record-keeping was not sophisticated enough to record this combat history. While it is impossible to disaggregate Chechen casualties by military arms, indiscriminate methods by all arms not just airpower were responsible for many civilian casualties, extensive damage to civilian property, and the massive refugee flows (Evans 2001, 47). It is also possible, yet again impossible to prove, that Russian ground forces may have killed just as many civilians in artillery bombardment, firefights, summary executions of civilians after its ground sweeps and in detention camps as aerial bombardment (Gilligan 2010, 2).
Most Russian air forces’ transgressions of the norm were in five areas. First, Russian air forces frequently used indiscriminate and disproportionate force against civilian areas or habitations by destroying a village because a small force of Chechens offered resistance (Evangelista 2002, 167, 173; Gilligan 2010, 39). Based on public statements by the High Command, these disproportionate attacks were purposeful. For example, the Russian deputy commander in Chechnya stated “If we are fired upon from a house, we destroy that house, if we are fired upon from a settlement, we destroy that settlement” (Gilligan 2010, 37). The second declarative clause in that public statement is clearly an official endorsement of disproportionate and indiscriminate air attacks. First, such aerial bombardment was disproportionate because the advantage gained by the attack—neutralizing a small number of combatants—was minimal compared to the substantial human suffering caused—many noncombatants killed or wounded and severe physical destruction. Second, such aerial bombardment was indiscriminate because it treated the whole town as an area target which violated the Additional Protocol. Discrimination under the 1977 Additional Protocol I requires air commanders to target only military objectives within the urban area not treat the urban terrain as an area target in order to disable or destroy the military objective (Roberts 2000, 447–456). In other words, Russian commanders could target only those positions within the town from which the Chechens mounted resistance; however, they could not raze or de-house the town to neutralize a small band of fighters.

In another example of disproportionate attacks that smacked of indiscriminacy was the 21 October 1999 ballistic missile attack on one of Grozny’s central marketplaces (Gilligan 2010, 35). With Russian ground forces still outside the city and aerial
bombardment inconsistent, Chechen civilians routinely gathered in Grozny’ marketplaces to purchase foodstuffs and necessities. On 21 October, Russian forces reportedly launched six SS-21 short-range ballistic missiles on the marketplace resulting in 137 civilian fatalities (35). The warhead reportedly was a cluster munition ideal for area targets especially those containing people and light shelters (35). The Russian choice of weapon, an SRBM, and munition, cluster, were clearly purposeful. Gilligan claims Moscow initially denied the attack, but then acknowledged the attack citing the target as the market itself because it was an “arms bazaar” (35). While Gilligan acknowledges that the market indeed had some arms dealers, the market primarily was both an open-air and sheltered civilian marketplace (35-36). There is no question this missile attack was indiscriminate due to the disproportionate effects it had on the civilian population in the context of the intended target, the weapon chosen, and state of the war at that time.

At the same time, journalists have overstated Russian lawlessness in some larger cases, like Grozny, because substantial numbers of Chechens used civilian buildings as strongpoints from which to battle Russian ground forces (Gilligan 2010, 2, 41-42). In order to spare itself from grueling block-by-block and house-to-house fights—which still occurred, Russian commanders used airstrikes to destroy these strongpoints (Evangelists 2002, 167-169) and they did it more aggressively in the second war than in the first (Evans 2001, 22; Haas 2003, 64). On many occasions, civilians were trapped in these battles and they were killed in the bombings (Evans 2001, 24). These are not specific violations of the norm as codified in the Laws of War. In other words, Russian air forces did not routinely “carpet bomb” wide swaths of Grozny or villages simply to destroy buildings as counter-value targets although some of that did occur (Gilligan 2010, 41).
Evans claims that much of what the press labeled “carpet bombing” in Grozny was simply what aerial bombardment against strongpoints in urban terrain with fighter-bombers delivering heavy, “dumb” ordnance from 9,000 feet, especially in weather, looks like (Evans 2001, 31). It is destructive, but it is not unlawful although it certainly transgresses Thomas’ vision of a progressive norm.

Second, and again in the area of proportionality, Russian air forces did substantial damage to Chechen infrastructure. Aerial bombardment targeted bridges, roads, TV and radio stations, an electrical power plant, Chechnya’s largest oil refinery, POL storage, fuel distribution facilities, airports, factories, armament plants, and communication facilities like telephone switches and cell phone towers (Evans 2001, 21-22, 40). Russian air forces ostensibly attacked these installations in order to deny material and economic support to Chechen fighters (20-21, 40). Certainly, some of this infrastructure had purely military purposes like the armaments plants and many of these installations, like POL and cell phone towers, had dual-uses that Russian air forces had the lawful authority to deny to its adversary, but some of the infrastructure damage was simply gratuitous—that is disproportionate—to the military objectives sought. The Chechen resistance was not a conventional force and did not rely on an industrial base for its arms and supplies yet Russian aerial bombardment targeted infrastructure and light industry as if Chechen fighters did. Considering that it was Russian intent to occupy Chechnya and keep it within the Federation, there really is no reasonable justification for the substantial human suffering caused by interrupting electric and water service to so many Chechens as well as making the re-building of the economy so difficult.
Third, Russian air forces, like U.S. air forces in Vietnam, bombed villages, suburbs, and municipalities being used by Chechen fighters without giving the civilian population warning and time to evacuate as required by the Hague Convention (Gilligan 2010, 2). On a grand scale, human rights advocates rightly criticized Russian commanders for not giving the civilian inhabitants of Grozny warning and time to evacuate the city prior to the start of bombardment in September 1999 (2). Without such warning, many Chechens, especially the elderly, poor, and infirmed, found it impossible to escape the bombing and the final ground assault. In November 1999, Russian air forces did distribute leaflets that read “People who stay in the city will be considered terrorists and bandits and will be destroyed by artillery and aviation” (38). Gilligan claims the Russians then reneged on a promised five-day bombing halt to permit evacuation by re-starting the bombardment the very next day (38). In many respects, it appears the Russians may not have wanted a successful evacuation because it desired attrition—the killing of Chechens in general and military-age males in particular. An extensive evacuation may have permitted fighters to escape.

Fourth, the Russian Air Force violated the bombing norm because its leaflets, if acted on by Russian air forces, communicated an unlawful threat to treat any person in a specific area as a combatant. That would be a free fire zone and such zones are legally suspect because they suspend discrimination.

Fifth, and related closely to the fourth, Russian aerial bombardment in the context of leaflet drops communicating free fire zones initiated population movements that may have been unlawful. The Russian High Command, mimicking what it did in Afghanistan, seemed to have purposely communicated threats and conducted military operations in
such a manner as to create purposeful population movements in order to disrupt Chechen social life which Moscow partially blamed for separatism and terrorism. As is so often the case with the Laws of War, there are many “gray areas” regarding intent and actions taken. Temporary population movements in order to protect noncombatants from combat are not necessarily prohibited but permanent or coercive movements in order to cause civilian hardship and deprivations are (Lewy 1978). This seemed to have been the intent of combat-induced population movements in Chechnya.

Why did Russian air forces occasionally adhere to the norm but frequently not adhere? While the Russian High Command almost always denied any indiscriminate bombing or mistakes thus showing notional concern for international opinion, Russian adherence in most respects seems to have been based on both weak norms and strategic necessity. In order to spare Russian soldiers house-to-house fighting, aerial bombardment had to be targeted on positions occupied by Chechen fighters. Airpower, even in large air forces, is limited; therefore, aerial bombardment could not be wasted frivolously attacking civilians and civilian objects.

There are five primary reasons for Russian transgression of the norm. First and foremost, Russian policymakers and commanders greatly desired to protect their ground forces from high casualties—the force protection norm; therefore, like U.S. Forces historically, Moscow sought to substitute firepower for manpower (Evangelista 2002, 191; Gilligan 2010, 34, 36). One of Russia’s lessons learned from both Afghanistan and the First Chechen War was that high Russian casualties would undermine public support for the war. There is extensive documentation that Moscow purposefully adopted for Chechnya the “NATO model” from Serbia-Kosovo (Gilligan 2010, 34, 36) albeit a very
poor mimicking of NATO’s air campaign over Serbia and Kosovo. That is Moscow
desired to maximize the use of airpower against Chechen ground forces while limiting its
use of Russian ground forces. While that may have been their initial intent, Moscow
eventually used many ground forces in Chechnya.

Second, Russian air forces in concert with the larger Russian military strategy
sought to create fear and deprivation among the civil population in order to undermine
popular support to Chechen resistance forces whether they were insurgents or terrorists
(Gilligan 2010, 32). Once again, as Arreguin-Toft highlights in his study of asymmetric
warfare, “barbarism”—that is the purposeful targeting of the population—is a classic big
power approach to counter-insurgency when other approaches, like direct attack against
guerrillas, prove ineffective (2001). In the Second Chechen War, the Russians do not
appear to have initiated any serious attempt at pacification. Perceiving the second war as
an extension of the last, the Russians fairly quickly turned to disabling and dispersing the
civil population upon which resistance rested (Gilligan 2010, 4-5).

Third and related to the second cause, Russian air forces violated the norm
because “collective punishment” was de facto Russian policy (4, 32). There is a dramatic
change in Russian political and general officer attitudes from the First to Second Chechen
Wars. In the first war, Moscow and its mid-level officers showed some sensitivity to
claims of indiscriminate bombing and civilian casualties even to the point of President
Yeltsin once ordering a halt to the bombing of Grozny. No such sensitivity existed in the
Putin regime and its High Command.
Chechen stubborn resistance to Russian sovereignty in the 1990s, the radicalization of parts of Chechen society, and Chechen terrorists’ dramatic, high casualty attacks in Russia drove Russian malice and determination to impose maximum damage on Chechen society. Gilligan quotes Russian Lieutenant General Troshev, the deputy commander of Chechen operations “If we are fired upon from a house, we destroy that house, if we are fired upon from a settlement, we destroy that settlement” (37). Gilligan cites that most Russian generals verbalized strong animus toward the Chechen people and indicated high tolerance for indiscriminate operations. In another example, Gilligan quotes the overall Russian commander, Lieutenant General Kazantsev “We will cleanse Chechnya of any scum” (37). In numerous respects, that appears to be what Russian forces did. Direct combat with Chechen fighters and Russian disproportionate operations across all arms forced a third of population out of their homes as refugees and IDPs. Unlike a number of historical air campaigns where aerial punishment is intended to coerce the opposing regime to the coerson’s will short of decisive military defeat (Pape 1996), punishment in Chechnya was often purely punitive intended to rack up casualties and create physical destruction. Gilligan argues that Moscow had so demonized Chechens as a people in the press and in its armed services that atrocities became inevitable and acceptable because the Chechen people, not the regime and its combatants, had become the enemy (4-5).

Fourth, Russian air forces violated the norm, especially in terms of proportionality, because again like U.S. air forces in Vietnam, Russian air forces were organized, trained, and equipped for high intensity, conventional combat (33-34). Russia had and used more PGMs in the second war than the first, but these numbers remained
low compared to what observers expect from U.S. aerial bombardment (Evans 2001, 26, 34-37). Air force munitions were mostly “dumb bombs” in the high explosive weight categories designed to maximize blast and fragmentation. These were not weapons ideally suited for counterterrorist or counter-insurgency operations. In addition, while the Russians had increased their number of ground-based forward air controllers (FACs) from the first war to the second which increased the accuracy of aerial bombardment thus decreasing collateral damage, they did not seem to make use of low-flying, slow-moving airborne FACs (Haas 2003, 53, 56). Airborne FACs, like the USAF used in Vietnam, have a “bird’s eye” view of the battlespace and frequently are better situated to discriminate than fast-moving jets bombing from 9,000 feet. Russian air forces did not use airborne FACs because they had no aircraft for the mission and they likely did not desire to incur the inevitable shoot-downs endemic to the airborne FAC mission.

Fifth, Russian air forces, especially aircrews, simply were poorly trained and exercised and this resulted in poor bombardment and air-ground coordination although the Russians had improved in these areas since the first war (64). Haas cites sources indicating that Russian aircrews were only getting 23-25 flight hours per year compared to 150 annually in the Soviet era (58). Russian air forces had not recovered from the fall of the Soviet Union.

9.5. Aerial Bombardment during the Russo-Georgian War, 2008

Between 8 and 12 August 2008 in five days of combat, Russian and Georgian military forces clashed “over Georgia’s breakaway republics of South Ossetia and Abkhazia” (Lefebrve 93, 95). In those five days, Russian air forces reportedly flew hundreds of combat sorties (e.g. air-to-ground, counterair) (95); however, most of the
The conflict originated with the fall of the USSR and establishment of Georgia as an independent state with substantial numbers of ethnic minorities in the provinces of South Ossetia and Abkhazia historically inclined to associate politically with Russia rather than Georgia (Goltz 2009, 17-22; 93). Georgia and Abkhazia fought a war over that province’s independence ending with an agreement and deployment of peacekeepers in both Abkhazia and South Ossetia (93). For over a decade, there was persistent political intrigue and intermittent low-level violent conflict in the provinces (Lefebvre 93-94; Gerdadze 2009, 28-45). In addition, Georgia’s interest in joining NATO and NATO’s 2008 recognition of Kosovo independence compelled Russia to re-assert its sphere of influence on its borders (Lefebvre 94; Cornell 2009, 5, Goltz 2009, 28-30; Gerdadze 2009, 44; Illarionov 2009, 64). In regards to state interests, Georgia saw the war initially as an effort to re-assert its sovereignty over two provinces under the sway of Russian influence and at the worst a wholesale Russian invasion of Georgia proper (Felgenhauer 2009, 164-166). Russia saw the war mostly in terms of re-asserting its influence along its periphery and downsizing Georgian political ambitions especially in regards to thwarting Russian objectives and damaging Russian prestige (177).

Did Russian air forces adhere to the bombing norm during its intervention into parts of Georgia and its air war over Georgia? Yes, Russian air forces adhered to the norm. Russian air forces attacked military, military-related, and civilian infrastructure with dual uses like tunnels, civil radars, and civil airports across the depth and breadth of Georgia; however, none of this aerial bombardment appeared to be a classical strategic air campaign (Lefebvre 93, 95-98). Lefebvre and McDermott claim Russia purposely
sought to limit its targeting to military objectives (93, 95). They write “Targets were carefully selected to avoid unnecessary damage to Georgia’s critical infrastructure, transport, communications and civilian industry; however, collateral damage and civilian casualties were caused by aerial bombing” (95). According to Fekgenhauer’s sources, Georgia lost 170 soldiers and 188 civilians killed (178). It is unknown how many of these civilian fatalities were due to aerial bombardment; however, considering much of the combat was both among civilian habitations and in the countryside one may assume ground combat claimed a number of these lives. Taken in context, Russian aerial bombardment did not appear superficially to cause a disproportionate number of civilian fatalities.

Russian air forces purposefully sought to establish air superiority over the battlespace so many initial targets were Georgian air defenses and air force facilities (96-97). Once air superiority seemed sufficient, Russian air forces turned their attention to Georgia’s fielded forces in and around the breakaway republics (93, 97-98). Russia used PGMs as well as cluster munitions and while some human rights groups took issue with the use of cluster munitions both Russia and Georgia are not signatories to the Ottawa Treaty; therefore, the use of these weapons were lawful albeit controversial (98).

Why did Russian forces adhere to the norm? While there is no historical evidence available to shed light on Russian targeting decision-making (Illarionov 2009, 49), evidence from the war strongly suggests military utility drove Russian targeting. Georgian ground and paramilitary forces were the primary obstacles to Russian political objectives. Those political objectives were to secure Abkazia and South Ossetia as Russian protectorates from Georgian military re-conquest and re-assert Russian influence
along its periphery specifically in Georgia (177). In order to accomplish these ends, Russian air forces needed to disable to some degree Georgia air and air defense forces in order to apply Russian airpower in coordination with its ground forces to Georgian ground forces threatening the two provinces. All Russian airstrikes deep inside Georgia were against military objectives even if some happened to have dual civilian uses. Russian objectives were never to coerce Georgia to do anything but to achieve a Russian military victory in two specified areas; therefore, Russian air forces never embarked on a punishment air campaign.
CHAPTER 10: ISRAEL

What explains Israeli adherence to the bombing norm across 14 armed conflicts and its policy decision not to use aerial bombardment during one conflict? At no time in Israeli airpower history did its political or military leadership ordered its air forces to kill civilians indiscriminately. That prohibition held true even during the War of Independence when there was an existential threat to the state. Democratic norms, conditioned by strategic necessity, best explain Israeli behavior. To borrow from Thomas, norms are fully “embedded” in Israeli thinking in regards to aerial bombardment (Thomas 2001, 4, 40); however, unlike the U.S. post-Vietnam War, Israeli decision-makers and their commanders still rigorously debate how much deviation from the strictest adherence they perceive domestic and world opinion can tolerate when crafting air campaigns.

So long as Israel’s wars were interstate and conventional albeit arduous, Israeli air forces pursued counterforce air campaigns because foreign military forces were greatest threat to the State of Israel. Israeli aerial bombardment became increasingly disproportionate including the use of duress bombing as its conflicts became more irregular as its adversaries hid and fought among civilians and Israelis viewed civilians culpable with its irregular foes.

58 As noted in the methodology section, I am examining the First Intifada as part of the Israeli case; however, I do not count it in Table 8.1 in Appendix for analyses because there was no aerial bombardment.
Table 10.1. Conduct of Aerial Bombardment, 1946-2011

<table>
<thead>
<tr>
<th>Case</th>
<th>Israel</th>
<th>Conduct of Aerial Bombardment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Indiscriminate</td>
</tr>
<tr>
<td>1948 WAR OF INDEPEND.</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>1956 SUEZ WAR</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>1967 SIX-DAY WAR</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>WAR OF ATTRITION</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>1973 YOM KIPPUR</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LEBANON, 1970s</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LEBANON, LITANI, 1978</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LEBANON INVASION</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LEBANON, 1983-1992</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LEBANON, 1993</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>LEBANON, 1996</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>INTIFADA 1</td>
<td>Decision not to use airpower</td>
<td></td>
</tr>
<tr>
<td>INTIFADA 2</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>2006 2D LEB WAR</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>2008 GAZA WAR</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

Table 9.2. Categorization of Israeli armed conflicts, 1946-2011

<table>
<thead>
<tr>
<th>Case</th>
<th>Intensity</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>Minor</td>
<td>High Need</td>
</tr>
<tr>
<td>Armed Conflicts</td>
<td>9</td>
<td>5</td>
</tr>
</tbody>
</table>

There is no question that Israeli policymakers, commanders, and even the rank-and-file of the Israel Defense Forces (IDF) have internalized in varying degrees noncombatant immunity. In recent decades, the Government of Israel has become even more increasingly sensitive to international and domestic public opinion regarding its combat operations in general and aerial bombardment in particular especially as its armed conflicts have taken place increasingly in and among civilians. The norm of
noncombatant immunity is a baseline position of the Government of Israel and its armed forces. Deviations from the norm generally are incremental and necessity-driven. Once the perceived necessity is passed, the IDF returns to its baseline adherence

Israeli aerial bombardment since 1948 has shown a number of patterns and trends over time. First, Israel’s first five wars were against states, mostly on Israel’s borders, and those states possessed sizable armed forces specifically armies. These militaries posed substantial threats to Israel’s security so due to both geography and foreign military threats the IDF executed counterforce strategies against those armies on Israel’s borders. The Israeli Air Force (IAF) supported its army through counter-air, close air support, and aerial interdiction missions. While it is highly likely democratic norms formed a baseline for conduct even during these conflicts, adherence was easy and unspoken because the threats posed to Israel compelled policymakers and commanders to wage counterforce operations. While the IAF could have conducted counter-population campaigns against nearby Arab cities, such efforts would have drained scarce sorties from the immediate threats—Arab armies.

After the 1973 Yom Kippur War, a new threat emerged as the threat of Arab invasion decreased. Palestinian terrorism increasingly occupied Israeli attention on its borders especially as Lebanon degenerated into war and lawlessness. Palestinian terrorism and insurgency then became closer as it erupted in the Gaza and West Bank and within Israel proper during the First and Second Intifadas. Unlike its counterforce operations from 1948 to 1973, these irregular conflicts on its borders and within the Territories brought Israeli bombardment in and amongst civilians increasing the risks to civilians as well as testing Israeli adherence to noncombatant immunity.
This second trend especially in the aftermath of the Lebanon Invasion and occupation sparked an increasing war-weariness among Israelis and a strengthening casualty-aversion norm manifested in a stronger force protection norm. Israeli policymakers had long been sensitive to their small population and lack of military manpower; however, this force protection norm even in irregular conflicts gained salience as the Israeli public simply was unwilling to sacrifice sizable number of troops for minimal gains in its never-ending war on terrorists (Levy 2012, 82-108).

As shown by Levy (2012), this casualty aversion norm set off a new pattern of Israeli behavior. This pattern was the methodical shifting of risks of combat to civilians (149-152). The IDF would use firepower-intensive operations even in urban areas in order to protect Israeli troops. Included in this pattern was increasing reliance on aerial bombardment. This bombardment would result in air raids pushing the borderlines of proportionality. While the IAF never purposely targeted civilians, its bombardment, along with ground operations, were resulting in ever fewer Israeli military and civilian casualties yet ever greater civilian casualties among the Palestinians (172).

Casualty aversion and its subsequent reliance on firepower led to the fourth pattern of behavior, increasing reliance on duress bombing as the core features of punishment campaigns. Unwilling to bear the full costs of decisive victory yet unwilling to do nothing about irregular threats to Israeli citizens, the Government of Israel increasingly chose to go “ugly early” by bombarding civil infrastructure and the economy of its foes in order to compel them to Israeli terms and punish them for Israeli casualties.
What the case of Israel also reveals is that airpower frequently is not the sole or even primary violator of noncombatant immunity. Israeli ground forces, especially in the 1948 war, as well in its campaigns in Lebanon and the Territories have on occasion methodically violated noncombatant immunity albeit not egregiously.

10.1. Aerial Bombardment during the War of Independence, 1948-1949

On 14 May 1948, David Ben Gurion declared the State of Israel with the British withdrawal from Palestine (Bickerton 2009, 78). The next day, Arab armies numbering perhaps 40,000 invaded Palestine in an effort to destroy the new Jewish state (78-80). Arab armies were an existential threat to the new state especially considering Israel’s irregular and porous frontiers with hundreds of thousands of Arab civilians within and without these borders (Bregman 2000, 13-14). The Government of Israel rapidly built a unified defense force that totaled 63,000 in mid-1948 and 115,000 in early 1949 (Bickerton 2009, 80).

The Israeli Air Force (IAF) began the war with 20 aircraft and 38 pilots but by the Autumn of 1948 the IAF had 100 aircraft thanks to the extraordinary efforts of Jewish agents, volunteers, and businessmen to procure and funnel as many aircraft as possible into the war (Nordeen 1990, 10, 20). Arab air forces were not much larger than the IAF but the IAF quickly eclipsed Arab air forces in number, pilots, and quality of aircraft, crews, and maintainers (20).

The vast majority of air warfare in the War of Independence was aerial interdiction of Arab ground forces and close air support to Israeli ground forces in addition to counter-air missions against Arab air forces such as they were (12-15). The IAF targets included troops in the open, convoys, strongpoints, and airfields (12-15).
Secondary sources indicate the IAF did bombard some Arab towns, but there is no
detailed information regarding what was the intended target or whether there was any
counter-population strategy involved (Cohen 1993, 34-35). IAF air-to-ground weapons
included machine guns used for strafing, hand grenades, general purpose bombs, and
homemade bombs (Nordeen 1990, 10). In a few rare instances, the IAF conducted
“strategic” bombing raids on Arab cities including Cairo, Amman, and Damascus (Cohen
1993, 31-36). These raids appear to have been mostly symbolic with Arab leadership
being the intended target. On 2 June 1948, two aircraft carrying “one ton of ordnance”
attacked the meeting place in Amman, Jordan of representatives of the “Arab Legion’s
Council” (31-32). Considering these likely civilian and military officers were involved in
war planning, these persons were lawful targets. In another “strategic” attack, IAF pilots
ferrying B-17 bombers from Europe to Israel purposely made bombing raids on Cairo
(35-36). They attacked the King of Egypt’s palace from high altitude to avoid fighters
and gunfire resulting in 85 civilian casualties (36).

There is no evidence in secondary sources that Israeli political leaders or
commanders ordered the IAF to attack civilians or strictly civilian objects. In an
existential war, why did the IAF adhere to the bombing norm? Why did the IAF not turn
its aircraft on civilians especially the hundreds of thousands of Arabs in Palestine? One
may assume that the new democracy respected noncombatant immunity considering
many new Jewish immigrants had just come out of Europe escaping or surviving the
Holocaust. Secondary sources on the Arab-Israeli Wars or Israeli airpower history do not
document why Israeli leaders and the IAF adhered. It is logical to assume that the IAF
pursued a counterforce strategy because that was the main threat to Israel—Arab armies
not civilians—and IAF assets were so few in number (Bickerton 2009, 81) that they could not be spared except for the most important missions. In addition, the de facto expulsion of the Arabs in Palestine was aided by Israeli ground forces and did not require air support (Bickerton 1991, 101-102; Bregman 2000, 13).

What does the War of Independence reveal about air and ground forces’ adherence to noncombatant immunity? First, the war shows that air forces may adhere to the norm while ground forces, even those of democracies, may violate it. Many variables may determine if one or several military arms adhere to the norm. Before Arab armies invaded Palestine in May 1948, a civil war of sorts had already been underway in Palestine between Jews and the British and between Jews and Arabs (Bregman 2000, 13). Bregman writes this pre-independence conflict was “littered with atrocities” and it was all the work of ground forces, paramilitaries, and terrorists (13). Arabs killed Jews, some of whom were combatants and many who were not, and Jews retaliated killing Arabs, some of whom were combatants and many who were not, and vice versa (13). For example, in one atrocity, Irgun, a Jewish paramilitary group, killed six Arabs and in retaliation Arabs killed 39 Jews in Haifa (13). In retaliation, Haganah, the Jewish defense arm, killed 60 Arabs in a village including many who were unarmed men, women and children (13). Many more similar incidents followed with high fatality figures. Aircraft were not used in any of these incidents.

What explains the mass exodus of Arabs out of Palestine at the beginning of, and during the War of Independence? While the Government of Israel has never acknowledged culpability, writers strongly suggest it was a combination of both Arab fears and de facto Israeli policy to create mass refugee flows to clear the land for security
purposes as well as for immigration (Bregman 2000, 13; Downes 2004a). The IDF on occasion purposely forced Arabs from their villages and towns and directed them to the borders (13). By the end of the war, roughly 750,000 Arabs had departed Palestine for Arab-controlled territories (Bregman 2000, 13). Airpower had no part in this expulsion. It was solely the work of ground forces and paramilitaries.

Between November 1947 and May 1948, fighting had resulted in 1,308 Jewish soldiers’ deaths and 1,100 Jewish civilians (Bregman 2000, 14). Britain lost 223 servicemen between 1945 and May 1948 (Flintham 1990, 39). Aircraft played no role in the pre-May 1948 fighting. By the end of the war in 1949, 5,682 Israelis had perished 80% of whom were soldiers (Bregman 2000, 14). The vast majority of these fatalities were caused by ground combat.

10.2. Aerial Bombardment during the Suez War, 1956

On 26 July 1956, Gamal Nasser of Egypt nationalized the Suez Canal specifically threatening British, French, and other Western interests (Bickerton 1991, 125). These related and disparate interests built the military coalition of London, Paris, and Tel Aviv. Britain had several political objectives in a military seizure of the Canal. London desired to preserve its commercial interests in the Canal, ensure the free and unhindered passage of its ships and energy resources from the Middle East, shore up its international prestige as a great power, and reduce Nasser’s stature in the Middle East (126-126, 129). The French also appreciated the Suez as a vital strategic waterway but also desired to strike at Nasser for his help to the Algerian insurgency plaguing France (126, 129). Israeli political objectives were multiple. Egypt was arming itself with Warsaw Pact weapons and Israel saw the balance of power shifting in Egypt’s favor (126-127). Nasser was
aiding the Fedeyeen who were attacking across the border against Israeli civilians (126-127). The withdrawal of British forces from the Canal was leaving Sinai open for Egyptian military deployment (127). Last, Egypt had blocked the Suez and Strait of Tiran from Israeli vessels damaging Israel economically (126). All three states perceived that a successful seizure would topple Nasser in Egypt (125-126).

The British, French, and Israeli war plan was for Israel to invade the Sinai in order to give the British and French an excuse to intervene in the conflict to protect the Canal from the belligerents (Bickerton 2009, 102-103). As the IDF drove west across the Sinai defeating Egyptian ground forces, the British and French would bombard Egyptian airfields to neutralize its air force and then launch airborne and seaborne assaults on the Canal Zone (Flintham 1990, 47-53; Bickerton 2009, 102-103). On 29 October 1956, the IDF began its invasion of the Sinai (Flintham 1990, 44).

The IAF adhered to the norm throughout the conflict. IAF targets were classical counterforce military objectives—enemy aircraft, surface-to-air missiles (SAMs), and fielded ground forces including tanks, trucks, infantry, garrisons, and depots (Flintham 1990, 43-46). Why did Israel adhere to the norm? The logical answer is that Israel’s political objectives were to seize the Sinai and eliminate Egyptian military forces there and along the Canal. Military necessity drove targeting. It was the Egyptian armed forces that stood in the way of Israeli objectives. Diverting air forces to attack prohibited targets like civilian objects would have diverted limited and precious airpower. In addition, aerial bombardment of targets in Egypt itself were the mission of the British and French air forces sparing the IAF any concerns with collateral damage.
10.3. Aerial Bombardment during the Six-Day War, 1967

From 5 June to 10 June 1967—six days, Israel simultaneously waged war against Egypt, Jordan, and Syria decisively defeating their armed forces. Israeli political objectives were to maintain its territorial integrity and independence and increase its “strategic depth”59 (Bickerton 2009, 151-153). The Israelis perceived that Arab states were coordinating a three-prong simultaneous invasion of Israel and launched a pre-emptive war to seize the initiative and take the offensive to the Arab armies (151-152). The end result was an infamous defeat for the Arabs and the tripling of Israeli territory (153).

Yes, the IAF adhered to the norm throughout the conflict. The IAF attacked lawful and classical counterforce targets—enemy airfields, SAMs, bridges, and fielded ground forces (Flintham 1990, 56-60). At no time, did Israeli policymakers or commanders order the targeting of civilians or unlawful civilian objects.

The war was a high-intensity, conventional conflict resulting in substantial personnel and materiel losses on all sides. Israel suffered 983 total military fatalities while Arab forces suffered 4,296 killed (Bickerton 2009, 153). The Israelis lost 394 tanks and 40 aircraft to Arab forces 965 destroyed tanks and 444 lost aircraft (155).

As in the case of the War of Independence and Suez War, the IAF adhered to the norm because there was no substantial reason to violate it. Arab armed forces were the primary and immediate threats to Israeli security and political objectives; therefore, the IAF concentrated on those targets. Once those military forces were eliminated or neutralized, Israeli objectives were achieved.

59 Quoted in Bickerton, 153.
10.5. Aerial Bombardment in the War of Attrition, 1967/69-1970

The “War of Attrition” occurred between 15 June 1967 and 8 August 1970 (GOI MFA). After the Six Day War with the IDF on the east bank of the Suez, Egyptian forces sniped, raided, and traded artillery barrages with the IDF off and on for years as Cairo attempted to impose personnel casualties on the IDF and weaken its physical hold on the east bank (Bickerton 1991, 170-171). In October 1968, an Egyptian naval vessel sank an Israeli destroyer (Flintham 1990, 61). Determined to wear the Government of Israel out and drive the IDF from the Sinai through loss of political will, the “War of Attrition” became Egypt’s low level, undeclared war with Israel (GOI MFA; Bickerton 1991, 171).

IAF aerial bombardment during the War of Attrition adhered to the norm. At no time did Israeli policymakers or commanders order the IAF to attack civilians; however, in retaliation for the sinking of an Israeli destroyer in 1968 the IAF attacked an Egyptian refinery at Suez reportedly badly damaging it (Flintham 1990, 63). While not necessarily a de jure prohibited target because ostensibly its fuels likely supplied the Egyptian military, the refinery was a civilian object and it was only tangentially related to Egyptian-Israeli combat. The vast majority of its product likely went to the civil population. Israel’s choice of target is puzzling considering the IAF’s previous history of mostly counterforce rather than counter-value targeting. One would have predicted the IAF attacking a valuable military target, like the Egyptian naval vessel that sank the destroyer, in retaliation. The IAF attack on the refinery may very well have been the IAF’s first truly counter-value target and it reflected a creeping Israeli frustration with Egyptian air, naval, and ground attacks on the IDF in and near the Suez.
IAF aerial bombardment began as retaliatory raids against Egyptian ground forces and air defense sites near the Canal. In time, aerial bombardment increasingly became part of a de facto coercive air campaign intended to punish (Pape 1996, 52, 352) the Nasser regime and compel it to stop its attacks on the IDF in and around the Suez-Sinai region. There was a very specific psychological element to the campaign as the IAF commander hoped to “break the spirit” of the Egyptian military and population. Again, this campaign appeared to be an IAF first as it was the first air campaign in IAF history with a strongly coercive purpose. Considering that the only decisive means to stop the Egyptian attacks on the IDF was a costly invasion of eastern Egypt which Tel Aviv was unwilling to try, the IDF High Command was left with only the air option to attrite Egyptian forces near the Canal and punish the Nasser regime. (Cohen 1993, 293-305)

The vast majority of IAF targets were artillery pieces, radars, SAMs, and strongpoints along the Canal and immediately behind Egyptian lines (Flintham 1990, 62-63). As Egyptian harassment increased though, the IAF launched deeper raids on “military targets in the immediate vicinity of Cairo” in an effort to punish and impact psychologically the civilian population reminding them that their government was in a shooting war and that Cairo was vulnerable (62). Apparently for this reason, newly-acquired IAF F-4 Phantom fighters buzzed Cairo creating sonic booms over the city (Cohen 1993, 293). More destructive, the IAF began bombarding Egyptian military installations with no specific connection to the Canal Zone. These installations included command posts, training centers, garrisons, and depots in addition to air defense sites (294-296).
Throughout this campaign, the IAF adhered to the norm and genuinely seemed concerned for collateral damage. While the IAF did not have air supremacy over Egypt, the IAF could ingress Egyptian airspace, including all the way to Cairo, with careful planning at will; therefore, the Government of Israel could have used aerial bombardment to terrorize the population, damage infrastructure, and/or kill civilians purposely yet it did not. This restraint strongly supports a claim that the bombing norm was substantially internalized in the Israeli political class and IDF. In varying degrees, the IAF campaign echoed Rolling Thunder, albeit with fewer sorties, as it attempted to coerce mostly through counterforce targeting. As an example of concern for civilian casualties, an IAF airstrike accidentally bombed a “metal plant” outside Cairo rather than the intended military base nearby. The bombing resulted in 70 civilian fatalities. According to Cohen, the IAF used a delayed-fuse bomb in the attack in addition to instantaneous-fused ones and upon learning of the accidental bombing Tel Aviv notified Cairo to evacuate the plant before the delayed-fused bomb detonated. In another collateral damage incident, blast effects apparently damaged a nearby school killing 47. (Cohen 1993, 295-296)

Tel Aviv halted the air raids in and around Cairo and Egypt proper when the Soviets began flying missions for the Egyptians and the Soviets began installing their more advanced air defense network (305). It is obvious the Israelis feared provoking the Soviets so they stopped the coercive air campaign. In August 1970, Nasser and Tel Aviv agreed to a cease-fire to stop the fighting (310). Egypt used the next three years under the cease-fire to build its air defense network west of the Suez with massive Soviet assistance to prepare for the next Arab-Israeli war in 1973 (312-313).
10.6. Aerial Bombardment in the Yom Kippur War, 1973

Egypt led by Anwar Sadat and in cooperation with Syria launched the Yom Kippur or October War in order to restore lost territories from the 1967 war to Arab states and create action in the international community regarding the long-term Arab-Israeli conflict (Bickerton 1991, 174-177). For Sadat, his political objectives were limited in the sense that his primary objective was to regain the Sinai (174). This objective required Egyptian forces to cross the Suez and drive the IDF out of the Sinai. For Syria, Damascus desired to re-acquire the Golan Heights (Bickerton 2009, 133). The intensity of the conflict caused Israel to run low of ammunition and supplies (Bickerton 1991, 177-178) creating a sense of extreme vulnerability that Arab armies could do more than merely restore lost lands but also advance on Israel proper (Flintham 1990, 66).

The Yom Kippur War was a high intensity, conventional conflict that resulted in substantial personnel and materiel losses to both sides. Israel lost 2,838 personnel and 840 tanks while Arab forces lost 8,528 troops, 2,554 tanks, and 47 aircraft (Bickerton 1991, 178).

Like the Suez War, Six-Day War, and in most respects the War of Attrition, the IAF attacked classic military targets during the war. Once again, the IAF attacked Arab military forces because they were the primary threats to Israeli political objectives—the retention of territories garnered in the Six-Day War and protection of Israel proper. In one apparent deviation from counterforce targeting, the IAF attacked some undocumented targets in Damascus and an oil refinery in retaliation for a Syrian surface-to-surface missile (e.g. a Soviet-made Frog) attack on an IAF airbase (Flintham 1990, 64). Secondary sources do not record whether these attacks were authorized by Tel Aviv or
simply a commander retaliating on his own, but this attack would appear to be the second counter-value attack in IAF history. The reason the IAF did not pursue a more rigorous counter-value strategy was because it would have diverted limited airpower from the most pressing threats—the Arab armies.


Israeli aerial bombardment in Lebanon was the result of two significant politico-military trends in the 1970s—the expulsion of the PLO and Palestinians from Jordan to Lebanon, the Lebanese Civil War which weakened central authority and made the country a base of operations for the PLO against Israel, and the intervention of Syrian forces into Lebanon as an interloper in the civil war (Flintham 1990, 69; Bregman 2000, 97, 99, 101-107; Corum 2003, 398-401). Between 1968 and 2000, Israeli aerial bombardment in Lebanon occurred across seven overlapping time periods with each period culminating in an air campaign in support of major Israeli ground forces.

In 1968, the IAF conducted its first air raid into Lebanon proper in conjunction with a commando raid in retaliation for Palestinian raiding and terrorist acts against Israel (Bickerton 2009, 148). Between 1970 and 1977, Israel intermittently launched air raids into Lebanon, mostly the south, in order to retaliate for Palestinian raids, terrorists acts, and shelling into northern Israel (Pape 1996, 352-353; Bickerton 2009, 148-150). Many of these raids were in or around Palestinian refugee camps where the PLO garrisoned and stored its supplies, hence increasing the risks of collateral damage. With

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60 Pape (1996, 352-353) categorizes Israeli aerial operations in Lebanon in the 1970 as one of his coercive air campaigns in Bombing to Win. While Israeli air operations were not in a classic or technical sense one continuous air campaign, they were intended to retaliate punitively against the PLO and Lebanon for attacks on Israelis as well as coercively deter the PLO from future attacks (Pape 1996, 352-353; Bickerton 2009, 148-151).
Egyptian and Israeli peace negotiations underway in 1977, the PLO attempted to derail talks by increasing its attacks on Israel (Nordeen 190, 160-161; Bickerton 2009, 149). These provocations culminated in even more intensive air raids on PLO positions (Nordeen 1990, 160).

Increased PLO attacks on northern Israel from 1977 to 1978 climaxed on 11 March 1978 when PLO operatives hijacked an Israeli bus in Israel resulting in a deadly rescue raid (160-161). This provocation culminated in Operation Litani a major 25,000-troop Israeli incursion into southern Lebanon in order to clear out the PLO and establish a 9-mile security zone along the border (161). Based on what little operational details are available in secondary sources, aerial bombardment appeared to be discriminate and proportional; however, airstrikes in and around refugee camps were bound to cause civilian casualties (O’Ballance 1998, 74). Reportedly, Operation Litani, in just seven days of fighting, resulted in somewhere between 1,000 and 2,000 Lebanese and Palestinian fatalities (O’Ballance 1998, 74-76; Bickerton 2009, 150). The defining features of Litani, in regards to the bombing norm, were its high civilian fatalities, 100,000-person IDP flows, and Israeli gratuitous use of cluster munitions to kill PLO fighters and/or simply make life hard for Lebanese civilians which pushes the envelope of proportionality (Flintham 1990, 68; Bickerton 2009, 150). The IDF withdrew months later and ceded southern Lebanon to its client, “The Free Lebanon Army” a Lebanese Christian militia, with a UN monitoring force in over-watch (Nordeen 1990, 162; Bickerton 2009, 150-151).

The time period between 1978 and 1981 marked another period of calm, then intermittent PLO attacks, Israeli air raids in response, and then substantial aerial
bombardment (Bickerton 2009, 151). This time in July 1981, the IAF raided Beirut reportedly resulting in 350 civilian fatalities (Bickerton 2009, 151). As a result Washington sent a U.S. envoy for negotiations to end the fighting, the U.S. envoy reportedly was “shocked” by the damage caused by IAF airstrikes in Beirut (151).

A ceasefire held for a while but then PLO attacks against northern Israel escalated again from 1981 to 1982 (Nordeen 1990, 168). On 5 June 1982, the Israeli Army, 30,000 strong, supported by air, naval, and special operations forces invaded Lebanon and began a combined arms thrust northward with the final destination being Beirut and a line along the Beirut to Damascus Road (Bregman 2000, 104; Corum 2003, 404-405; Bickerton 2009, 152-153). The day before the Cabinet had authorized the IAF to attack multiple PLO targets across Lebanon including Beirut (Bregman 2000, 104). The immediate cause—the “trigger event”—was the Palestinian attempted assassination of the Israeli ambassador to Britain (Bregman 2000, 103). The Government of Israel’s overarching political objectives, some acknowledged and some secret, were to remove the PLO from Lebanon in order to stop the raids, shelling, and terrorist attacks on Israel, strengthen the Arab Christians militarily in order that a Christian regime in Beirut may make peace with Israel, and reduce Syrian military power in Lebanon (Corum 2003, 379, 398; Bickerton 2009, 152).

At the start of the invasion, roughly 15,000 PLO fighters under the leadership of Yasir Arafat and supported by militia occupied southern Lebanon (Corum 2003, 401). Approximately 500,000 Palestinians by this time lived in Lebanon (Bickerton 2009, 152-153). By the end of the invasion and the Israeli withdrawal, Arafat and the vast majority of his forces had evacuated Lebanon (Corum 2003, 398, 405). Israeli military fatalities
numbered 368 for the invasion and siege (405). Estimates of PLO, Palestinian, and Lebanese civilian fatalities vary widely. One source claimed 15,000 total fatalities, combatants and noncombatants of all sides, by all arms during the invasion and siege (Flintham 1990, 70); however, much lower figures are cited by airpower historians who claim the most accurate figure for civilian fatalities caused by aerial bombardment is in the hundreds killed mostly in Beirut (Corum 2003, 408).

Overall, the IAF adhered to the bombing norm during its invasion of Lebanon; however, it is also a fact that the IDF used aerial bombardment, as well as artillery, intensively to destroy PLO forces in Lebanon and punish the Lebanese especially during the siege of Beirut (407-408). Corum claims Lebanon was the first conflict in Israeli history in which the IAF extensively conducted bombardment in an urban environment (407). The IDF used artillery and aerial bombardment against the PLO in urban areas, especially Beirut, because the PLO chose to hide and fight amongst the population just as the Viet Cong did in the Vietnam War (Bregman 2000, 113; Corum 2003, 407). This heavy use of firepower resulted in civilian casualties although accurate figures are not available (Corum 2003, 407). Corum claims the IAF operated under “strict rules of engagement” and that sparing civilians was always a priority (407). Despite these efforts, the conventional wisdom in the international press remains that Israeli aerial and artillery bombardment was practically indiscriminate and certainly disproportionate (407-408). The historical evidence however does not support these claims.

In many respects, the PLO held the civil population “hostage” by “hugging” the population compelling the IDF to attack civilian objects because they were used by the PLO as strongpoints. These PLO tactics obviously were purposeful and intended to play
into their strategic communications (e.g. propaganda) campaign. For example, during one of the more intensive aerial bombardments of Beirut, IAF attacks reportedly killed 300 civilians in one day (Bregman 2000, 114). Without access to IAF records,\textsuperscript{61} it is impossible to assess whether the IAF conducted the attacks discriminately or proportionately. It is possible the attacks were wholly discriminate and proportionate and that the IAF simply attacked residential buildings used as PLO strongpoints that happened to have sizable numbers of civilians in them. If the IAF had purposely intended to impose high civilian casualties, it could have done so. Roughly 300 civilian fatalities a day would have resulted in 21,000 total deaths by airpower alone across the war yet that did not happen.

In another example, the IAF attacked an anti-aircraft gun atop an apartment building in Beirut resulting in 20 civilian deaths (Corum 2003, 408). After the war, a private international commission of judges and legal experts cited this attack as an example of indiscriminacy because the gun was not truly a threat to Israeli aircraft (407-408); however, these claims run afoul of the Laws of War which permit attacks on civilian objects when they are used by combatants and the attacker weighs the humanitarian costs of the attack against the military advantage garnered. The commission members apparently expected the IAF to spare the gun because it was atop a residential building as well as fly at higher altitudes to evade the gun’s range. Of course, higher altitudes decrease the accuracy of both dumb bombs and PGMs increasing the likelihood of civilian casualties.

\textsuperscript{61} IAF mission reports detailing what the pilots were asked, ordered, or desired to attack as well as their weapons loads and what they saw as battle damage post attack in addition to battle damage photos from reconnaissance could answer the questions of discrimination and proportionality.
In regards to weapons and tactics, the IAF had a number of types of PGMs in its inventory at this time (402-403); however, there were likely few aircraft configured so that they could deliver these weapons and its PGM inventory likely was very small as well. Flintham claims the IAF relied heavily on 500 lbs. Mk 82 “Rockeye” cluster munitions$^{62}$ which are ideal for armor and vehicles spread over a wide area in southern Lebanon but not so effective in an urban environment (1990, 70). If indeed the IAF used a large number of “Rockeye” in an urban environment which would cause substantive but not catastrophic building damage, such use suggests the IAF had few PGMs capable of precision engagement and additionally it also strongly suggests the IAF pursued a “middle course” in Beirut between using air-delivered “building-busting” 2000 lbs. bombs which would cause major, if not catastrophic, structural damage to buildings thus increasing civilian casualties or simply using lower-yield artillery munitions which would be much less effective against personnel holed up in large structures.

In regards to adherence to the bombing norm, one of the puzzles of the invasion was the variance in IDF treatment of two large Palestinian refugee camps in Tyre and Sidon and West Beirut (Bregman 2000, 108; Corum 2003, 407). During the Israeli Army’s advance up the western coast, the IDF desired to clear a large Palestinian refugee camp of guerrillas (Bregman 2000, 108). Aerial and artillery bombardment were options to avoid close quarters fighting within the camp which would certainly result in substantial Israeli ground casualties. The IDF chose not to subject the camp to substantial bombardment fearing civilian casualties but chose a ground assault (Corum

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$^{62}$ The 500 lb Mk 82 “Rockeye” unguided cluster bomb releases 247 anti-armor (shaped charge) submunitions over an area in order to disable or destroy armor and vehicles. It is logical the IAF had a large inventory of “Rockeye” due to its mission emphasis on counterforce targeting of enemy armor which represented the striking force of many Arab armies. (FAS)
In this case in the tension between the bombing norm and force protection norm, the IDF chose the bombing norm. That is the IDF strictly weighed proportionality and privileged civilians over the protection of its own troops. Weeks later however during the siege of Beirut, the IDF repeatedly subjected the PLO-occupied neighborhoods of West Beirut as well as a number of Palestinian refugee camps to withering aerial, artillery, and naval bombardment albeit the IAF after the first few days of air raids dropped leaflets warning civilians to flee Beirut (Bregman 2000, 110, 113-114; O’Ballance 1998, 114).

Why the variance between Sidon and Tyre and Beirut? Without access to the internal communications of the IDF or personal interviews with the decision-makers, it is impossible to know but the logical answer appears to be “strategic necessity.” More Israeli ground casualties would have been incurred in clearing a very urbanized West Beirut than refugee camps in Sidon and Tyre (Corum 2003, 407). The IDF chose strict proportionality in Sidon and Tyre when it perceived it could afford to do so but compromised that strict proportionality when it perceived the costs too high (407).

Sharon made a calculated decision not to subject the Israeli Army to a house-to-house fight in West Beirut which most certainly would have resulted in high ground casualties (Bregman 2000, 113-114). Sharon chose a siege. Already, the phenomenon of IDF officers, troops, and reservists protesting the war and refusing to serve there was making headlines in Israel (114-117). Civilian protests were also growing. While the Israeli bombardment primarily remained counterforce in terms of attriting PLO forces, Sharon also purposely chose a punishment campaign against West Beirut with the intent of compelling the population and regime in Beirut to force the PLO out (113-114).
addition, the coercive campaign psychologically targeted the international community, specifically the great powers, by essentially holding both PLO fighters and Lebanese population in West Beirut “hostage.” In other words, the IDF would continue the bombardment and maintain the siege until the international community, with or without Lebanese cooperation, helped eject the PLO out of Lebanon. While it took some time, the strategy appeared to succeed when the regime in Beirut told Arafat to leave (Bregman 2000, 114-115).

Aerial bombardment in Lebanon especially West Beirut and its outskirts was intensive. Some argue it was indiscriminate and it is probable that on specific occasions it was technically disproportionate (Corum 2003, 408) yet what the invasion of Lebanon and siege of Beirut reveal is that ground forces can play a substantial role in the indiscriminate or disproportionate use of force equal to or more so than air forces. In its attempts to deny provisions and comfort to the PLO as well as coerce the population, the IDF blockaded Beirut by land and sea and cut off electricity, water, food, and reportedly even medicine to PLO-occupied parts of the city (Bregman 2000, 113-114). There were solid tactical reasons for doing this; however, a number of these measures pressed the envelope of legality and proportionality due to the fact some civilians remained behind during the siege even after the Israelis dropped leaflets calling on civilians to evacuate. In this case, the IDF privileged its pursuit of its military objectives over noncombatant immunity, defined in terms of access to material essentials.

The massacres of Palestinian civilians, reportedly 600 to 1000, in the Shatila and Sabra refugee camps in Beirut in September 1982 (Flintham 1990, 70; Bregman 2000, 115) are a case in point regarding gross violations of noncombatant immunity by ground
forces and paramilitaries rather than air forces. A Lebanese Christian militia was responsible for these war crimes; however, the Israeli Army reportedly provided artillery support and some Israeli troops were in the camps during the killings (Bregman 2000, 115). Because the IDF was the de facto occupying power in West Beirut at the time and IDF personnel reportedly were at the camps during the massacres, the IDF was derelict in its duties to enforce international law regarding the protection of civilians. While once again there are few reliable numbers on civilian fatalities in Lebanon, it may be possible that the numbers of civilians unlawfully killed by Lebanese militia in Shatila and Sabra may be equal to, or exceed those killed by the IAF during its air campaign.

Aerial bombardment in Lebanon did not end with the invasion, the successful removal of the majority of PLO forces in 1982, and the IDF’s incremental withdrawal of forces to southern Lebanon. It continued off and on in small air raids and occasional short-lived but intense air campaigns because a number of PLO fighters remained in Lebanon especially in the Bekaa Valley and Hezbollah emerged as a Shi’a-based insurgency determined to drive the IDF out of Lebanon (Corum 2003, 412-413; Flintham 1990, 72-73).

The historical record strongly supports the claim that the IAF adhered strictly to the bombing norm in its many air raids against PLO, Syrian, and Hezbollah forces and facilities in Lebanon between 1983 and early 1993. Corum argues Israel judiciously used aerial bombardment in its tit-for-tat air raids on remaining PLO forces and emerging Hezbollah bases in the 1980s-90s (Corum 2003, 412-413). As a matter of fact, the IDF initially forbade air strikes on PLO and Hezbollah fighters from October 1982 to 1983 hoping to prevent any provocations that could result in retaliation on the IDF still in
Lebanon (412). Additionally, when air raids began again in 1983 in response to attacks on the IDF, the IAF focused mostly on PLO forces because they used more identifiable facilities and vehicles (412). The IAF frequently spared Hezbollah fighters because they were operating among civilian habitations and the IDF feared civilian casualties (412-413). Corum claims the IAF had “strict rules of engagement” (412). For this reason, Hezbollah soon began using villages and schools to shield its facilities and rocket attacks from IAF retaliation (413). Corum also claims the IAF began to use its attack helicopters, like the U.S.-made AH-64 APACHE, more intensely because they frequently were stealthier and more accurate, due to the TOW and Hellfire missiles, for air raids and commando raids (414).

The IDF’s creeping exceptions to a strict adherence to the bombing norm, in terms of discrimination and proportionality, appeared to have occurred during the major air operations in support of Operation Accountability in 1993 and Operation Grapes of Wrath in 1996 (Bickerton 2009, 168, 177). In retaliation for Hezbollah’s attacks on the IDF in Lebanon and Israeli habitations in northern Israel, the Government of Israel in 1993 and 1996 chose to launch major air and ground operations against Hezbollah in southern Lebanon in the hopes of both attriting its military capabilities and deterring it from future attacks (Corum 2003, 414; Bickerton 2009, 168, 177). However, aerial bombardment differed from previous air raids in that the IAF air strikes and artillery bombardment engaged Hezbollah forces within civilian habitations increasing the risk of civilian casualties (Bickerton 2009, 177). Bickerton claims 150-170 Lebanese civilian fatalities and 2,018 homes and businesses damaged or destroyed in Grapes of Wrath (177). In addition, the IAF attacked civilian infrastructure in a form of coercive
punishment intended to compel the Government of Lebanon to assert its sovereignty over southern Lebanon and curtail Hezbollah military operations against Israel (168, 177). The IAF’s mass use of leaflets warning civilians to flee the fighting in southern Lebanon superficially appears to show concern for noncombatant immunity and indeed it does; however, mass IDP flows also seem to have been calculated by the IDF to cause hardship to the Lebanese and their government as they clogged the roads and overwhelmed relief and emergency services.

What is revealing about the 1993 and 1996 air operations in Lebanon was that the IDF was increasingly embracing an element of coercive punishment to its air employment. As if borrowing from the siege of Beirut, aerial bombardment was no longer simply to be used in a counterforce capacity against fielded forces but also in a punishment campaign to compel regimes and their populations to do Israel’s bidding short of decisive victory (Schow 1994; London 2008; Goodman 2009, 20). Excepting for a moment whatever Israel’s nuclear weapons doctrine may have been at the time, the IAF had no counter-value or counter-population conventional bombing doctrine. While the IAF had a strategic bombing mission in terms of long-range raids like Osirak, the IAF was an air force organized, trained, and equipped primarily to establish air superiority, interdict enemy ground forces before they made contact with friendly forces, and then destroy those ground forces in contact with friendly forces through close air support (Cohen 1993, 420). Operations Accountability and Grapes of Wrath were making aerial punishment a de facto part of IAF doctrine and this change would later culminate in the 2006 Second Lebanon War (Goodman 2009).
What explains changes in IAF and IDF targeting between 1983 and 1993 to 1996? Downes’ “Desperation to Win” thesis and casualty aversion best explain Israeli behavior. As the costs of war—human, material, and psychological—increased, IDF adherence decreased. The IAF airstrikes during the siege of Beirut were frequently intense but almost always counterforce albeit the IAF had to strike civilian objects like residences and apartment complexes to get to PLO fighters; however, there appeared little purposeful targeting of infrastructure yet by 1993 and 1996 the IAF was attacking infrastructure. From 1983 to early 1993, the IAF had worked to prevent collateral damage by attacking only identifiable PLO and Hezbollah targets (Schow 1994) yet by 1993 to 1996 the IAF and Israeli Army artillery were pounding Hezbollah positions amongst the population. The Israelis were frustrated and increasingly desperate to achieve effects to stop attacks on its forces and its towns at bearable costs. Strict adherence to the norm suffered.


On 9 December 1987, Palestinians began to riot for a number of grievances against the State of Israel which had occupied and governed the West Bank (e.g. Samaria and Judea) and the Gaza Strip since the 1967 war (Shalev 1991, 1). Within days, the riots had developed into a full-blown “popular” uprising (e.g. intifada) against Israeli rule in the “Territories” (Shalev 1991, 1-5; Levy 2012, 154-155). The primary political objective of the uprising was to end Israeli rule in the West Bank and Gaza; however, the Palestinians realized that while Palestinian statehood was the final objective, the journey may be long and arduous with many “intermediary” objectives on the way to their desired endstate (1-5). One of those immediate objectives was to garner international attention to
the plight of the Palestinians (5). Due to the fact firearms were in short supply in 
Palestine and due to a calculated decision by the insurrection’s leaders not to use firearms 
and provide a lawful basis for Israeli lethal force, the Palestinians primarily relied on 
alternative means of force (Bregman 2000, 123). They sought their objectives through 
protests, mass demonstrations, rioting which involved stone-throwing, “Molotov 
cocktails,” vandalism and other forms of “civil disobedience” in addition to a number of 
acts of terrorism (Shalev 1991, 2-3; Isseroff 2008).

Across roughly three to five years of insurrection, there was no Israeli air-to- 
ground bombardment during the First Intifada which begs the question “Why not?” 
Seeing that Israel had used its airpower against both regulars and insurgents in Lebanon 
to substitute firepower for manpower, why did it not do the same in the Territories? Why 
were IDF operations in the West Bank and Gaza Strip ground force affairs—the work of 
infantry, commandos, and military police?

Without access to Israeli internal debates among its principals, and internal 
documents, it is impossible to know the true logic which drove its use of force decision-
making. Based on the context of the conflict, a number of public statements by Israeli 
policymakers and commanders (Shalev 1991, 99-100), and the “restrained” levels of 
force used by the IDF, it appears that Israel did not use airpower in an air-to-ground role 
primarily because it feared airpower would cause civilian casualties and it was unsuited 
to the threat posed by mostly unarmed Palestinian rioters, militants, and leaders (Levy 
2012, 155-156). In other words, norms is the primary reason for the decision not to use 
airpower.
The Government of Israel desired to manage the uprising within a civil law framework and considered the Palestinians both subject to Israeli law and its protection (Shalev 1991, 47-49, 99-100, 164; Levy 2012, 159). This is the primary reason the Cabinet chose not to use airpower. To reinforce this conclusion, the chief IDF judge advocate (e.g. prosecutor) issued a “directive to the military police to open an investigation into every incident in which a Palestinian was killed” (Levy 2012, 156). Levy cites another source indicating that “some senior officers were tried” (156). In a number of respects, Jerusalem was following precedent because it mimicked Britain’s refusal to use airpower to quell the Arab Revolt in the 1930s (Omissi 1990; 46; Shalev 1991, 47-49), the Jewish Revolt in the 1940s, and the “Troubles” in Northern Ireland in the 1960s-70s (Townshend 1986, 104, 113).

A number of examples are in order. When discussing the use of force in the Territories, the IDF Chief of Staff (COS) stated “that the IDF could not ‘completely eradicate a violent struggle conducted by a civilian population;…”63 (100). Shalev again writes the COS stated “that the only way to suppress completely a violent struggle waged by civilians is to employ extreme tactics,…” which Shalev quotes the COS stating “such as [a population] transfer, starvation and genocide—and none of these means is acceptable to the State of Israel” (99). Curiously, the COS did not cite that all of these measures generally are illegal under international law adding credibility to Thomas’ claim that internalization of noncombatant immunity among the armed services is critical to the norms’ implementation. In other words, if Israeli policymakers were amenable to more extreme measures, the IDF was willing to implement them. Early on in conflict

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63 Quoted by Shalev (1991, 100).
when it became obvious that the conflict would be difficult and protracted, the
government desired to use the IDF in a policing capacity within the rule of law yet it
pressed the IDF to find means to stop the uprising and restore deterrence (99-100). This
desire for deterrence pushed the IDF in some measure toward coercive punishment on the
civil population (100).

Even without the application of airpower, the Israeli use of force by its ground
forces was controversial internationally and even domestically. In roughly 5.5 years, the
IDF and police forces killed 1,087 Palestinians of which 22% were minors while
Palestinians killed 48 Israeli civilians (Bregman 2000, 131). Isseroff claims based on his
sources that Palestinians also killed roughly 1,000 of their fellows in internecine violence
and retaliation for perceived collaboration with Israel (2008).

Some of the more controversial, legally suspect, and outright illegal acts by the
IDF and police forces included off and on curfews, movement restrictions like
“clampdowns,” denial of Palestinian exports to cut off revenue, deportations of militant
Palestinians to other states, administrative detentions, cutting off electricity to villages
and towns where there had been violence, closings of schools and universities, and
demolition of houses of terrorists and militants or their families (Shalev 1991, 2-3, 99-
100, 101, 105, 111, 116). Domestic and international audiences found the killings of
minors, deportations, and demolitions of homes particularly objectionable. During the
Intifada, the IDF purposely destroyed 1,473 homes (Bregman 2000, 131). Taken
together, all of these measures—a number of which qualify as collective punishment—
brought significant deprivation to Palestinian civilians which in many respects was the
intent of the Government of Israel yet none of it involved the use of airpower (Shalev 1991, 99-100).

What the lack of airpower use in the First Intifada reveals, as in numerous other armed conflicts, is that ground forces frequently stretch the limits of, or outright violate, noncombatant immunity. The conflict shows that when terrorists and insurgents choose to fight among civilians or when even civilians become directly involved in violent conflict as either outright combatants or armed protesters the military branches of the opposing state will find it extremely difficult to discriminate and they will be tempted, if not compelled, by circumstances to violate noncombatant immunity in varying degrees.

Israel never used airpower during the conflict yet the IDF and police still killed over 1,000 Palestinians, many of whom were using improvised weapons like stones and petrol bombs, and destroyed over 1,400 homes. Despite its restraint including the decision to not use airpower, the Government of Israel still incurred substantial reputational costs domestically and internationally.

10.9. Aerial Bombardment in the Second Intifada, 2000-2005

On 28 September 2000, Ariel Sharon, the controversial former IDF general and parliamentary opposition leader, visited the Temple Mount or Haram al-Sharif in Jerusalem creating a pretext for a number of Palestinian groups to launch the Second Intifada or Al Aqsa Intifada (BBC News 2000). The Second Intifada grew out of the failure of a number of negotiating efforts to provide for Palestinian statehood and long-term Israeli security (BBC; mideastweb.com). The political objectives of the Second Intifada were for Palestinians to coerce the State of Israel to grant statehood to the Palestinians, carve out the Palestinian territory along pre-1967 borders, and withdraw
Israeli forces from this territory. Palestinian groups primarily sought to achieve these objectives through terrorist acts such as the bombings of buses, cafes, and other public gathering places as well as rocket and mortar attacks into Israel (BBC). Israeli political objectives were to resist any political concessions to the Palestinians under coercion. The Government of Israel desired to ensure that any “land for peace” agreements with the Palestinians included Palestinian recognition of Israel’s right to exist and that these agreements occur through negotiations rather than violence. Israeli military objectives were to coerce the Palestinian Authority to conduct counter-terrorism operations against terrorist groups in the West Bank and Gaza and attrite the terrorist apparatus to such a level that attrition drove down terrorist and rocket attacks to the most minimal levels (Hurley 2010, 3-5).

From 28 September 2000 to 1 January 2005, the IDF conducted air, ground, and clandestine operations against the Palestinian Authority and Palestinian terrorist groups in the West Bank and Gaza Strip. The IAF conducted roughly 572 documented air-to-ground attacks in over four years. That is an average of 114 combat sorties per year and 13 per month. This is not an operationally or historically high number of sorties. Of those sorties, helicopters were 80%, fighters 17%, and drones 2% of the totals. (52)

The Second Intifada was costlier for both Israelis and Palestinians than the First Intifada. By conflict’s end, roughly 3,200 Palestinians, combatants and civilians, had been killed while 1,000 Israelis, combatants and civilians had been killed (IRC). According to the IRC, of those Palestinian fatalities, 1,099 were civilians and 1,542 were fighters and of those Israeli fatalities 764 were civilians while 215 were military personnel (IRC).
Israeli aerial bombardment during the Second Intifada adhered to the bombing norm although the international press and many states condemned it as disproportionate (Hurley 2010, 1). Secondary sources convincingly show that the IAF worked very hard to spare innocent civilians and labored under strict rules of engagement although there were a number of embarrassing and widely condemned incidents of civilian fatalities and property damage (9-10). These sources also reveal that it was not only concern for negative press and international condemnation that drove Israeli decision-making but also a genuine, popular concern in civil society for Palestinian fatalities and suffering (10-13, 23).

At no time did Israeli authorities order or condone the killing of innocent civilians; however, as in the case of many counter-terrorist and counter-insurgency campaigns many Israeli targets were personnel—known or suspected individual terrorists and insurgents—who lived and moved amongst the population (Hurley 2010, 4-5). For this reason, many aerial attacks concentrated on civilian objects—buildings, many residential, which housed or hid these personnel. This substantially complicated traditional airpower targeting and increased the risk of collateral damage because most of the Israeli weapons inventory was composed of ordnance intended for high-intensity conventional warfare (3-4). The Israeli air force never purposely targeted persons it knew to be innocent civilians and it never purposely targeted civil infrastructure excepting that administrative apparatus of the Palestinian Authority (3-4).

The IAF targeted the following persons and objects, individual persons known or suspected by intelligence of being active or supporting terrorist operatives including bombers, bomb-makers, lieutenants, and leaders as well as weapons caches, safe houses,
and facilities used by the Palestinian Authority including police stations, headquarters, and support facilities. Of those targets attacked by airpower, 55% were retaliatory in nature, 26% were ground support, 17% were arms caches or weapons labs, and 9% were pre-emptive attacks against suspected terrorists. (52-53)

Israeli use of force in general and airpower in particular was controversial throughout the campaign for a number of reasons. First, Israel attempted to both retaliate against, and coerce the Palestinian Authority (PA) to stop the waves of Palestinian resistance and terrorist bombings by attacking the facilities of the PA (Hurley 2010 3-4, 9; Levy 2012, 157). These attacks were normatively problematic for two reasons. First, these facilities technically were civilian in that they housed the civil administration and police forces of the Authority some of whom may very well have been supporting the terrorists. While attacking the police forces of the PA may have passed legal muster under the Laws of War, IAF attacks on the rest of the civil administration as part of a coercive and counter-value strategy was excessive. The data cited by Hurley of 55% of air attacks being retaliatory in nature were those directed mostly against the PA (Hurley 2010, 53). These attacks on administrative infrastructure were clearly disproportionate. Hurley writes “…senior IAF commanders expressed their disapproval of so-called ‘real estate raids’” where the IAF destroyed buildings with no military utility (9).

Second and most controversial, Israeli airpower became the central symbol of Israel’s “targeted killing” program against terrorist operatives and leaders. Unable to coerce the PA to police the West Bank and Gaza, the Cabinet ordered the IDF to begin an aggressive counter-terrorist operation against individual terrorists or supporters across the
board (4-5). These targets are reflected in sortie counts as “preemptive” attacks yet they represent only 9% of aerial bombardment (53).

The central legal question in the “targeted killing” program and one that remains problematic to this day is whether or not it is lawful under both domestic and international law to kill terrorist operatives who are not engaged in an actual act of terrorism? Can a suspected terrorist operative pre- or post-terrorist act be killed by military arms for having conducted attacks or conspiring to plan attacks? What is the threshold of information required to get an individual on the “kill list”? How culpable must an individual be in regards to terrorist activity? May military forces kill persons supporting terrorism such as suppliers, couriers, and propagandists just as readily as bombers, bomb-makers, lieutenants, and leaders? Is terrorism an act of war or a criminal act or both? Are terrorists criminals to be indicted, arrested, and tried by civil courts for their crimes or are they combatants engaged in warfare against a state? One’s answers to these questions may determine how one judges Israeli use of airpower against known or suspected individual terrorists.

Levy explains that the Cabinet chose to categorize Palestinians and the PA as external enemies because the Oslo Accords had granted them a form of autonomy (Levy 2012, 158-159). For this reason, the IDF’s chief lawyer approved lethal attacks on Palestinians (159). Complicating matters, it was physically impossible for the IDF to attempt to arrest Palestinian operatives, if found, because it would have taken combat to seize them so Israel adopted the “targeted killing” program.
There is much evidence that the IDF in general and IAF in particular sought to protect civilians. First, the IDF chose to use IAF helicopters rather than fighters for 80% of air-to-ground attacks. Helicopters were slower, able to loiter, and employed guns or highly accurate, guided Hellfire missiles at targets. The Hellfire’s warhead is much smaller than the average fighter ordnance; therefore, it substantially lowered the probability of collateral damage. Second, the IAF introduced armed UAVs—drones—to the conflict. The drones, in addition to improving military effectiveness, carried smaller munitions due its lighter airframe. Smaller munitions did less damage. The IAF also bought JDAMs—a satellite-aided guided bomb—which permitted more accurate bombing in urban settings and bad weather than laser-guided bombs. Finally, the IAF invested in a new munition smaller than the Hellfire but just as accurate yet with the ability to permit the pilot to terminate the attack up until detonation. This capability again decreased the probability of collateral damage. (Hurley 2010, 6-8; 11-12)

There is no question that influential portions of Israeli civil society were very uncomfortable and troubled by collateral damage. The Government of Israel was influenced by this pressure to keep its airstrikes discriminating and proportionate. While Israeli leaders themselves are clearly influenced by noncombatant immunity, it is likely they would have been more willing to accept greater collateral damage if not for international and domestic pressure.

The IAF pushed the outer boundaries of the norm when it used fighters to drop 2,000 lbs. bombs, albeit PGMs, on residential buildings to kill terrorists and fighters knowing full well such tactics substantially risked killing noncombatants. At the same time, the IAF used these weapons because helicopters either could not get at these targets
due to urban terrain or because their ordnance was much less effective against reinforced-concrete buildings. In these circumstances, IDF and air commanders weighed military necessity against the danger to civilians and chose necessity.

When the protection of civilians clashed with force protection, the Israelis usually chose to put Palestinian civilians at risk in regards to the use of airpower (Levy 2012, 158). According to Levy, this excessive privileging of Israeli combatants transferred risk from military personnel to civilians and substantially decreased proportionality (158). To support his claim, Levy details that the ratio between Israeli and Palestinian fatalities, both combatants and noncombatants, have been rising rapidly for two decades (171-172). For instance, he notes that during the First Intifada six Palestinian civilians died for every one IDF soldier and five Palestinian civilians died for every one Israeli citizen yet by the Second Intifada nine Palestinians died for every one Israeli soldier and 18 Palestinian civilians died for every one Israeli citizen (171-172).

10.10. Aerial Bombardment in the 2006 Second Lebanon War

On 12 July 2006, Israel went to war with Hezbollah and Lebanon over the abductions of two Israeli soldiers and Hezbollah’s increasing military power in Lebanon (Harel 2008, 1, 77-78; Kainikara 2007, 16-18). The war lasted 34 days resulting in 118 Israeli military fatalities, 53 Israeli civilian fatalities, 650-750 Hezbollah fatalities, and 1,190 Lebanese civilian fatalities (Arkin 2007, 61, 74, 98; Harel 2008, 259). Israeli air, ground, and naval bombardment resulted in substantial physical and economic damage to Lebanon (Arkin 2007, 75). The Lebanese Armed Forces (LAF) sat out the war by order of its government in Beirut while Hezbollah fired roughly 4,000 rockets into Israel and staunchly resisted an Israeli ground incursion into southern Lebanon to destroy its rockets.
and military infrastructure (55-57). The war ended with a ceasefire agreement. By agreement, Israeli ground forces withdrew from southern Lebanon while LAF troops and an international peacekeeping force deployed to the region to police the agreement and ostensibly demilitarize southern Lebanon (Harel 2008, 249-251). The conventional wisdom in the international press, diplomatic community, and defense circles is that Israel overreached militarily, botched its strategy, and caused disproportionate physical damage to Lebanon with the war ending as a stalemate with Hezbollah bloodied militarily but improved politically (Kainikara 2007, xiv, 4; Murphy 2010, iv; Lambeth 2011, iii).

There were strategic and immediate causes for the Government of Israel’s decision to take the state to war. First, the immediate cause of the war was Hezbollah’s 12 July 2006 attack on an Israeli patrol in Israel killing three soldiers and kidnapping two others as hostages to trade for Lebanese prisoners held by Israel (Harel 2008, 76, 84). When a rescue force mounted a raid into Lebanon to retrieve the soldiers, Hezbollah successfully ambushed the force destroying a main battle tank and killing four more soldiers (Matthews 2008, 36). This kidnapping followed just a few weeks earlier a HAMAS kidnapping of another Israeli soldier near Gaza (Harel 2008, 77). The second and strategic cause of the war was two-fold. First, the Government of Israel was weary of persistent harassment along its borders by Hezbollah and HAMAS (76-77). It hoped a strong retaliatory response would deter future harassment in general and kidnappings in particular. Second, Israeli policymakers and commanders concluded that Israel had lost its strategic deterrence (Kainikara 2007, 4, 5, 15-18). Perceived Israeli restraint, if not weakness, by its enemies was inviting more brazen attacks. The inner circle of the
Cabinet and defense leadership concluded that Israel had to substantially punish Lebanon, disable Hezbollah’s military capabilities, and reduce Hezbollah as a political force in Lebanon (Harel 2008, 77-78, 99). These were the strategic politico-military objectives that drove the campaign in fits and starts.

Most defense analysts argue that the Government of Israel somehow misunderstood the nature of the conflict before it and substantially botched the formulation of political and military ends, ways, and means (Harel 2008, 81-82; Murphy 2010, iv; Lambeth 2011, iii). For example, from the outset of the war, Prime Minister Olmert and a number of his principal advisors blamed the Government of Lebanon for the kidnapping despite the fact Hezbollah actually conducted the raid (Harel 2008, 77-78). While Olmert knew this, he and many other policymakers resented Hezbollah’s political influence in Lebanon and its place within the Beirut Cabinet. As if a form of strategic “displaced aggression,” Olmert concluded that the primary cause of the kidnapping was the failure of the Government of Lebanon to control its coalition partner and exert its sovereignty in south Lebanon despite Beirut’s many handicaps (Harel 2008, 77-78; Murphy 2010, 49). Obviously, any attempt by Beirut to establish full sovereignty in south Lebanon would have invited a renewed civil war which was not in anyone’s interests including Israel’s (Matthew 2008, 15). Based on this faulty logic, Olmert’s Cabinet sought initially to wage war on both Lebanon and Hezbollah simultaneously (Harel 2008, 77, 79, 80).

From the outset of the conflict, the IDF Chief of Staff, the first airman in that position, repeatedly recommended airstrikes on Lebanese infrastructure (77-80). The Defense Minister, Peretz, declined to approve sweeping attacks on infrastructure. In the
immediate hours after the abductions, he did approve airstrikes on Hezbollah fighting positions along the border and Lebanese highways and bridges ostensibly in order to interdict the abductors (77). After the initial airstrikes, Peretz finally approved three military options for the Cabinet consider which included a recommendation to strike Beirut airport and the Beirut to Damascus highway (78). These three options included “Attack only Hezbollah; attack Hezbollah and targets in Syria; attack Hezbollah and the Lebanese infrastructure” (80). Of those options, what the Olmert Cabinet initially approved was a modified version of Option #3 which focused on Hezbollah’s longer-range rockets and Lebanon’s communications and transportation network (81-82). Once the IAF quickly struck the known Hezbollah long-range rocket hide sites, the war changed course when Hezbollah retaliated with its shorter-range rockets against Israeli population centers and the IDF was unable to stop it (81-82).

In terms of a war waged against a moderately-sized irregular army in a relatively small region, the air campaign was high-intensity (Arkin 2007, 62). The Israeli operational tempo in 34 days of combat was easily in the range of U.S. air operations in the 21-days of the U.S.-Coalition invasion of Iraq (Lambeth 2011, xviii-xix). For example, Arkin claims the IAF conducted 15,500 combat sorties with both fighters and attack helicopters (Arkin 2007, 63). The IAF dropped 24,000 air-to-ground munitions compared to 29,500 for the U.S.-Coalition in Operation Iraqi Freedom resulting in 705 munitions delivered per day compared to 1,340 per day in Iraq (Arkin 2007, 66; Lambeth xviii-xix). The IAF attacked 2,700 fixed and mobile targets with 7,000 individual desired points of impact (Arkin 2007, 71). The Israeli Army fired 162,000 artillery rounds and rockets on Hezbollah positions in southern Lebanon (71). Of those rounds and rockets, a
sizable number were counter-battery fires reacting to rocket launches against Israel from southern Lebanon in the hope that artillery and rockets would destroy launchers and firing teams (67-69).

Israel generally adhered to the bombing norm throughout the war although it deviated from the norm in three to four areas. Israel’s general adherence, especially strong concern for civilian casualties but lesser concern for civilian objects, is evident in the post-war data. Despite the widespread physical destruction of structures (Lambeth 2011, 172), a relatively small number of Lebanese civilians died in the war which attests to Israeli sensitivity to that aspect of the norm related to protecting civilian life. In 34 days of bombardment, Lebanon lost roughly 1,200 civilians (Arkin 2007, 98) below the 1,600 North Vietnamese civilians killed during the 12-day U.S. Linebacker II bombardment of North Vietnam.

At no time did Israeli policymakers or commanders order or condone the purposeful killing of civilians. Early on in the war, the Cabinet and IDF leadership verbalized concern for civilian casualties especially in regards to how such casualties would hurt Israel’s cause in the international community (Harel 2008, 80). After the initial round of bombardment when it became obvious the war would last weeks rather than days, the IAF began a leaflet campaign to induce Lebanese civilians to leave the combat zone in the south and hundreds of thousands fled (102). When debating the initial air attacks on Hezbollah’s long-range rockets which reportedly were hidden among civilian habitations, the Cabinet was more inclined to accept the 100-400 estimated civilian casualties than the bellicose IDF Chief of Staff (COS) who expressed concern for that number (77-80).
At the same the IDF COS argued against airstrikes on Hezbollah’s long range rocket inventory, he simultaneously advocated for a punishment air campaign on Lebanese infrastructure (77-80). Recognizing that the COS’s recommendation to destroy Lebanon’s electrical grid would result in substantial suffering to the civilian population, Olmert refused to authorize such attacks (77-82) yet Olmert proved generally tolerant of substantial destruction to Lebanon’s communications and transportation infrastructure despite the fact he promised Secretary Rice that he would spare civilian infrastructure and that the international community rapidly condemned Israel’s targeting of this infrastructure (81). The Cabinet also accepted the possibility of substantial civilian casualties in the air raids on Hezbollah’s Beirut compound which composed several city blocks (99).

What target systems were eventually attacked? Israel attacked military objectives it perceived as strictly military or military-related. Israeli air, ground, and naval forces bombarded the following types of targets, fixed and mobile rocket launchers, fighting positions, depots, bunkers, headquarters, radars, cell phone towers, a TV station, gas stations, roadways, bridges, ports, the Beirut Airport runways, and any buildings being used to launch, hide, and shield rocket launchers as well as house Hezbollah fighters and their leadership (Arkin 2007, 62; Lambeth 2011, 33). In these respects and provided the civilian objects attacked were being used for military purposes, Israel adhered to the Laws of War in regards to its targeting.

In addition to these types of targets, a number of credible Lebanese and international human rights organizations, including a UN entity, claimed Israel purposely and wantonly attacked a wide range of civilian objects and infrastructure wholly
unrelated to the war (Arkin 2007, 75-83). They claimed Israeli forces attacked electrical power plants, hospitals, mosques, businesses, civilian factories, and civilian residences whose destruction superficially appeared to be a “de-housing” strategy (75-80). While admitting that Israeli forces imposed a lot of physical damage, Arkin, who participated in an unofficial “bombing survey” of Lebanon, claims these accusations from a wide number of organizations are “grossly exaggerated” or “patently false” (76). Because Arkin has worked for the U.S. Government, including on a number of airpower surveys, and also been a strong critic of the U.S. Government in private work as a correspondent and defense analyst, Arkin’s arguments are strongly credible. Arkin claimed Israel did not purposely attack many of the facilities listed as damaged or destroyed by the human rights organizations (76-83). He insists most of these damaged facilities were the results of collateral damage and even that damage was exaggerated (76-83).

In regards to tactics and weapons, the IAF showed concern for civilian casualties, as well as military effectiveness, by using PGMs throughout the campaign. Roughly 35% of all air-to-ground munitions delivered in Lebanon were PGMs closely matching the same percentage U.S.-NATO dropped in Serbia-Kosovo in 1999 (Johnson 2011, 62).

Despite Israel’s general adherence, there were a number of deviations from a strict adherence to the norm in regards to civilian infrastructure, proportionality, use of cluster munitions, and psychological operations to induce population movement. Israeli adherence or non-adherence depending on one’s view was marked by substantial controversy and the conventional wisdom in the international press and diplomatic community is that Israel’s aerial bombardment of Lebanon was disproportionate overall in the context of its desired political objectives and the adversary it faced.
Israel first deviated from strict adherence to the bombing norm in regards to its gratuitous targeting of Lebanese infrastructure primarily in the realms of communications and transportation networks. In terms of compliance with the “letter” of the Laws of War, Israel behaved lawfully in its targeting of cell phone towers, gas stations, roadways, and bridges because these civilian objects were and had the potential to be useful to Israel’s adversary Hezbollah; however, in terms of the “spirit” of the Laws of War, especially a strict interpretation of Additional Protocol I, Israel was obviously in violation because a sizable number of these targets were simply tangential to the conflict and beyond the theater of actual combat; therefore, their attack appeared gratuitous, punitive, and hence disproportionate.

A number of examples are in order. Within hours of the abductions, the Israeli Defense Minister approved airstrikes on roughly 69 bridges in Lebanon especially the south ostensibly in order to thwart the escape of their soldiers’ abductors () yet considering the time lapse from abduction to airstrikes it appears farfetched to conclude that airstrikes on bridges could halt the clandestine movement of abductees and their kidnappers. Once safely clear of the border, the abductors could have hidden the soldiers in any house or bunker in southern Lebanon. For the same reason, the IAF also bombed the largest Lebanon-Syrian border crossing packed with escaping tourists ostensibly to interdict its soldiers’ kidnappers; however, the attack appeared wanton designed to inspire fear and create civilian hardship rather than interdict kidnappers and their victims. In addition, the IAF attack on Beirut International Airport seems wholly gratuitous and Israeli internal debates make clear the primary purpose of the attack was to punish Lebanon by stopping air traffic at the airport at the height of the tourist season (78).
In regards to proportionality, it is evident by any historical measure of airpower application that the Israelis dropped a lot of ordnance, 24,000 air-to-ground munitions and 150,000 artillery rounds and rockets, on Lebanon so that there was a lot of physical destruction (Arkin 2007, 63-67). Lebanese and international critics argue much of this destruction was disproportionate because much of it occurred to civilian houses, businesses, and infrastructure. They claim the greatest threat to Israeli security was Hezbollah’s low-yield, unguided rockets 4,000 of which struck Israel resulting in 53 civilian fatalities (98). Israel’s primary military objective was the destruction of these rockets and the reduction of Hezbollah’s military power. In their view, the military means used to attack Hezbollah positions in and around civilian habitations was grossly disproportionate to the military advantage garnered—sparing Israeli civilians the fear of being struck by Hezbollah rockets. In this sense, a simplistic rendering of the data appear to support their argument. Lebanon lost 22 civilians for every one Israeli civilian killed and $2 billion in economic damage.

As noted earlier, the test of proportionality is a subjective one because the commander generally is the judge of what constitutes military advantage and the balance of that with human suffering. The Government of Israel saw the conflict very differently from its critics arguing Israel could use all lawful military means to stop the rocket attacks on Israeli civilians. In other words, Israel did not have to passively absorb Hezbollah’s rocket attacks because these rockets were unguided with low yields. Hezbollah, the Israelis claimed and supported with reconnaissance photos and gun camera videos, purposely used civilian objects to shield their military operations. These civilian objects lost their protected status when Hezbollah used them for military
purposes. In terms of the law, the Israelis are right. According to Arkin, the IAF reportedly destroyed 5,800 “housing units” (82).

In addition to the targeting of infrastructure, where Israeli warfighting crept into some degree of disproportionality was its counter-battery fire and airstrikes on locations where Hezbollah fighters had launched rockets. The most militarily effective means to have stopped Hezbollah’s rocket attacks was to occupy physically with sufficient manpower southern Lebanon. The Government of Israel made a political decision not to re-invade Lebanon and bear the extensive military costs and casualties such a response would have incurred. Having rejected invasion, the only other military means to destroy Hezbollah’s rockets was to find, fix, track, and target them using ISR, airpower, and artillery. After a Hezbollah firing team launched a rocket, Israeli ISR and counter-battery radars would attempt to pin-point the location of the launch. In some cases, airstrikes and counter-battery fire from artillery and rockets would deluge the launch location with munitions in order to hit anything and everything nearby. As will be noted later, the use of cluster munitions became one of the preferred tactics and weapons to destroy launchers and kill fighters around the launch sites.

One of the most obvious examples of the IAF’s heavy use of firepower against a target in an urban residential area was its multiple raids on Hezbollah’s sprawling headquarters compound in a Shi’a neighborhood—the Dahiyeh—in southern Beirut. The compound was in many respects also a residential area itself with many high-rise apartment complexes including the private residence of Nasrallah, Hezbollah’s leader. The IAF reportedly dropped 500 1000-2000 lbs. PGMs on the compound. The IAF claimed every PGM found its intended DPI. The post-strike reconnaissance photo of the
compound showed massive damage to the dozens of buildings while sparing surrounding Beirut neighborhoods. The legal question is “Were the raids proportionate seeing that much of the headquarters’ compound was mostly housing?” Was it proportionate to destroy a neighborhood to kill one leader? Do the private quarters of the Hezbollah bureaucracy side by side with C3 nodes count as legitimate targets? The Cabinet thought so and approved the raid. After the war, Lebanese and international observers were appalled at the destruction yet few lives were lost because the Israelis had warned of the raid. (Arkin 2007, 80-81; Harel 2008, 99-102)

The third deviation from the norm is that there is compelling evidence that Israel purposely scattered cluster munitions over some parts of southern Lebanon during the last three days of the war when the Israeli military knew a ceasefire was coming in order to induce civilian hardship after the war (Arkin 2007, 66-71). The IDF claims it used substantial quantities of cluster munitions to attack area targets of known rocket firings (69) and indeed the physical evidence points to that; however, what is particularly damning evidence is that Israeli forces also delivered and fired substantial cluster munitions north of the Litani River beyond where Hezbollah was firing its rockets (70). Some IDF personnel unofficially spoke to the press and divulged that they were ordered to expend lots of sub-munitions into Lebanon (70). What was the military utility in those attacks with cluster munitions beyond the Litani? Older cluster munitions frequently have a high “dud” rate resulting in unexploded ordnance or de facto mines after the war (69). Clearing the ordnance required substantial resources and expertise (67). Analyzed in context, the evidence seems to support the punitive use of cluster munitions while at
the same time the Israelis may have also been attempting to increase the Hezbollah casualty numbers before the end of the war.

In what may have been a fourth deviation, Israel’s air-delivered leaflet operation to clear southern Lebanon of civilians ostensibly to protect them from combat may have had a secondary purpose which was to punish the population, clog the roadways with IDPs to complicate Hezbollah movements, and induce hardship on the Government of Lebanon. In 1996, Israel’s Operation Grapes of Wrath had also induced IDP flows through aerial bombardment which reportedly had as one of its purposes to pressure Beirut and the Lebanese public regarding its refusal or inability to reign in Hezbollah who was pressing for an Israeli withdrawal from Lebanon. Purposeful forced population movements or migrations are forbidden by Geneva; however, efforts to clear noncombatants temporarily from combat zones are not so Israel may have behaved lawfully in a strict sense but the induced IDP flows were suspect as they caused civilian deprivations.

Why did Israel generally adhere to the norm and what explains its deviations? There is no question the Government of Israel desired to adhere to that part of the norm that commands the protection of innocent civilian lives; however, one source that documents the internal debates of Israel’s leaders suggest much of this concern fixated on the international repercussions of violating the norm rather than altruistic concern for human life (Harel 2008, 77-82). One internal debate regarding the initial bombardment of Hezbollah’s long-range rockets suggests Israeli leaders viewed Lebanese civilians in southern Lebanon culpable with Hezbollah (80). In addition, there was strong U.S. and
international pressure for Israel to spare lives and infrastructure and this pressure weighed heavily on Israeli decision-making as the conflict wore on (81-82, 121-122).

What explains Israel’s three to four deviations to the norm? What explains the extensive bombardment of communications and transportation infrastructure? The 2006 air campaign was the third time and most destructive example in Israeli military history of counter-value targeting of civilian infrastructure. Throughout its airpower history, Israel generally had used its airpower in a counterforce capacity. Since 1948, Israeli airpower traditionally had been used in a counterair, interdiction, and close air support role fundamentally to advantage its smaller ground forces against much larger enemy ground forces. That role began to change slowly during the Israeli occupation of Lebanon in the 1990s when Hezbollah guerrilla tactics began to attrite Israeli manpower and create negative political effects in the Israeli public.

Israel’s 2006 air campaign was driven by both a punitive and punishment strategy. In terms of retaliation, the air attacks on civilian infrastructure were intended to create pain and costs to Lebanon for the deaths and abduction of Israeli soldiers. In terms of punishment, the air campaign was intended to coerce the Government of Lebanon to enforce its sovereignty in the south and disarm Hezbollah and compel Hezbollah to stop its raids and sporadic rocket attacks on Israel. In this sense, the 2006 war was Israel’s first true attempt at a coercive air campaign on the scale of Rolling Thunder, Linebacker, and Allied Force.

The documented internal debates of Israeli political and defense leaders support this assessment. From the outset of the air campaign, the majority of Israeli policymakers
and commanders desired to punish Lebanon for Hezbollah’s actions and coerce the Government of Lebanon to re-assert its sovereignty over southern Lebanon (Johnson 2008, 56-57). On 12 July 2006—the first day of the conflict, Prime Minister Olmert in a joint press conference with the visiting Japanese prime minister stated:

The events of this morning cannot be considered a terrorist strike; they are the acts of a sovereign state that has attacked Israel without cause. The Lebanese government, which Hezbollah is part of, is trying to upset regional stability….We will not give in to blackmail or negotiate with terrorists on any aspect of the lives of IDF soldiers.64 (Harel 2008, 76)

Afterward, a rapidly formulated Cabinet communiqué stated “Israel views the sovereign Lebanese Government as responsible for the action that originated on its soil and for the return of the abducted soldiers to Israel. Israel demands that the Lebanese Government implement United Nations Security Council Resolution #1559”65 (Johnson 2011, 57). As the day progressed and policymakers and commanders were assessing the situation, the IDF spokesman told reporters at a military briefing that the IDF Chief of Staff had said Israel “had to put Lebanon back 20 years” (Harel 2008, 78). The Chief of Staff became the most vocal advocate inside the government for punishment via infrastructure targeting so very on in operational planning both policymakers and commanders signaled that they desired a strongly punitive or punishment campaign against Lebanon proper not simply Hezbollah.

The Government of Israel wanted Beirut to do the dangerous and arduous work of engaging and disarming Hezbollah rather than Israel. For this reason, the air campaign developed rapidly into a type of coercive campaign with a strong element of punishment for the population and Lebanese government. For Israelis, they desired an economy of

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64 Quoted from Harel 2008, 76.
65 Quoted in Johnson 2008, 57
force war effort that would spare them a slugfest of going house-to-house in southern Lebanon. The Olmert Cabinet and its commanders simply did not want another ground campaign in southern Lebanon to dislodge Hezbollah (121-122). In addition, they likely also did not want a high sortie count air operation orbiting southern Lebanon attempting to find, track, fix, and destroy mobile rockets and fighters exposed to Hezbollah ground fire although this is what the campaign finally became. The loss of airmen to ground fire would provide more prisoners and propaganda for Hezbollah. The Israelis remembered U.S.-NATO air operations over Kosovo and their difficulty finding Serb mobile targets as well as the “SCUD hunt” from the 1991 Gulf War. Egged on by the Bush Administration that saw Syrian and Iranian meddling, there was an unusual fixation with state sponsors of terrorism rather than the politico-terrorist organization responsible for the crisis—Hezbollah (81).

What explains the extensive damage to civilian property in south Lebanon that calls into question Israeli proportionality? There is little question that force protection and military utility explain it. Technically, much of this destruction was permissible by the Laws of War although it violates Thomas’ progressive vision of what the bombing norm is becoming. Hezbollah fighters made civilian habitations into strongpoints and used them to launch, hide, and shield their rockets targeting Israel. The Israelis, adverse to a close quarters’ slugfest, used firepower to suppress and attrit Hezbollah fighters and rockets. Civilian property paid the price for Israel’s adherence to the norm of force protection.

In the last three days of the war with a cease-fire looming, Israeli air and ground forces dropped a lot of cluster munitions in parts of southern Lebanon. Why? While
ostensibly intended to increase Hezbollah casualties and deny it maneuver space, international observers perceived the gratuitous use of cluster munitions as another manifestation of Israeli punitive measures to make life hard and dangerous for Lebanese civilians returning to the south. Because a sizable number of sub-munitions fell outside the range of Hezbollah’s rockets, there is compelling evidence that Israel did this as part of its punitive campaign to make Lebanon pay for permitting Hezbollah to have free reign in the south.

What was the role of Israeli airpower doctrine in the deviations from the norm? Renz and Scheipers (2012) claim that states’ air forces with airpower doctrines with punishment strategies embedded in them are more likely to violate the bombing norm. Downes (2006b, 2012) claims in two papers that states’ airpower doctrines rarely are good predictors of their air forces’ violations of noncombatant immunity. He notes that states with counterforce airpower doctrines sometimes violate the bombing norm just as states with punishment doctrines sometimes do and sometimes do not violate the norm. In regards to the Second Lebanon War, it does appear that the IDF’s creeping adoption of U.S. “effects-based operations” doctrine played a role in the IDF’s persistent recommendations to rely strongly on the firepower of airpower in the conflict and bombard civilian infrastructure (Lambeth 2011, 279-281). The fact that the first Israeli airman to be IDF Chief of Staff at the outset of the war also seems to have strongly influenced the military options presented to the Cabinet (Arkin 2007, 131). The war presented the COS an opportunity to apply and prove EBO doctrine. EBO is a warfighting concept rooted in the RMA that posits that superior intelligence and PGMs permit the precise targeting of an adversary’s multifaceted networks in which its armed
forces are part and parcel. EBO claims to reject the traditional attritional warfare model of industrialized militaries in which the state which loses the most in terms of manpower and materiel loses the war; therefore, the path to victory is destroying as much as possible of the enemy which usually requires large military forces. If intelligence accurately portrays the enemy’s physical and cognitive networks, EBO against those networks will permit minimal military output (e.g. manpower, munitions, logistics) to achieve maximum gains (e.g. desired results—concessions, victory).

Israel’s slow embrace of EBO seemed to mimic the U.S. Air Force’s doctrinal trajectory. Israel desired to do more militarily with less manpower and materiel with fewer casualties to its personnel as well as adversary populations (Lambeth 2011, 282-285). PGMs and advanced ISR systems seemed to promise speedy victories at minimal costs and the Government of Israel was ready to embrace such promises especially in light of its continual military conflict with Hezbollah, HAMAS, and Palestinians though the 1990s and 2000s.

In conclusion, Israel generally adhered to the bombing norm during its 34-day war against Hezbollah and Lebanon. The 1,200 Lebanese fatalities in a high-intensity war in a relatively small region strongly suggest Israel sought to avoid civilian casualties; however, widespread physical destruction suggests Israel took extensive liberties with proportionality. The air campaign in numerous respects was disproportionate. Perceived military necessity explains the campaign’s deviations. Israel desired to prevent a high-casualty ground war in southern Lebanon and utilizing airpower in both a coercive punishment and denial capacity served this purpose. Down’s “Desperation to Win” thesis is applicable to the 2006 war not in the sense that the war grew long but that
Israel’s previous wars and skirmishes with Hezbollah, HAMAS, and the Palestinians had already made the government and population war-weary.

10.11. Aerial Bombardment during the 2008 Gaza War—Operation Cast Lead

On 27 December 2008, The Government of Israel authorized the execution of Operation Cast Lead a joint air-ground campaign in Gaza that would last to 18 January 2009 (Goodman 2009, 4; Johnson 2011, 111). The Israeli political objectives were to reduce as much as militarily feasible, short of total defeat of HAMAS, HAMAS’s ability to fire rockets into Israel and deploy terrorists into Israel, severely damage HAMAS politico-military infrastructure, and deter HAMAS and other regional non-state actors from attacking Israel in the future (Goodman 2009, 4; Johnson 2011, 111, 124-125). HAMAS’ political objective was to survive as a political entity, attrite IDF personnel to such an extent that Israel gave up the operation, and launch as many rockets into Israel as possible to prove the futility of deterring HAMAS with IDF attacks (118-120).

Operation Cast Lead was a high intensity conflict. The war lasted roughly 33 days close to the Second Lebanon War. Israel suffered ten military fatalities and three civilian fatalities (Johnson 2011, 121). Depending on the source, the Palestinians suffered a total of 1,387 to 1,417 fatalities, combatants and noncombatants (120). Israel claims 1,166 total fatalities (120). A Palestinian rights organization claimed 926 civilian fatalities as well as “255 police officers, and 236 fighters” (120). In ratios, and assuming the highest figures, that is roughly two Palestinian civilian fatalities for every one Palestinian combatant and 309 Palestinian civilian fatalities for every one Israeli.

The IDF had been preparing for Cast Lead for some time and had attempted to incorporate many of its lessons learned from Lebanon (124-125). The IAF kicked off the
war with a major air raid on Gaza (113). According to Johnson, the IAF used 88 aircraft to attack almost simultaneously “100 pre-planned targets” in less than four minutes (113). The IAF flew 1,700 air-to-ground attack sorties and 1,150 helicopter attack sorties delivering 5,500 munitions on 3,430 targets (114).

The IAF adhered to the bombing norm throughout the campaign although almost 1,000 Palestinian civilians died in the war (Goodman 2011, 4). A number of human rights organizations claim that Israeli air and ground operations were de facto disproportionate because so many Palestinian civilians died in the campaign. Many of these fatalities can be attributed to the fact that most of the aerial and artillery bombardment and ground fighting took place inside a very tight geographical and urban environment. HAMAS purposefully fought among civilian habitations in order to find cover and concealment and unlike Lebanon in 1993, 1996, and 2006 civilians had few places to flee. They were trapped in the fighting. Based on a number of statements by IDF officers and soldiers, it does appear that the Israeli Army was particularly sensitive about force protection and was willing to risk civilians inordinately in order to protect soldiers (12-14; 24-27). It is likely Israeli ground forces using artillery bombardment and calling in airstrikes to provide maximum firepower in some engagements may have increased the civilian fatality rate and there are credible reports of soldiers destroying civilian property after combat in order to re-shape the urban terrain in order to deter future construction where future combat may be anticipated (24-27). If indeed true, some of these measure would meet a minimum test of disproportionality mostly at the hands of the Israeli Army.
At that same time, the IDF took substantial measures to protect civilians as best it could considering the urban terrain (16-17). According to Johnson (2011), 81% of IAF munitions used in the war were PGMs compared to 36% in Lebanon in 2006 and Joint Terminal Attack Coordinators (JTACs) were fielded with ground units in order to better coordinate air strikes (114, 131). The IDF reportedly dropped 2.5 million leaflets and issued 100,000s of phone calls warning Palestinians to flee specific areas of combat (128-129). Prior intelligence preparation, mission planning, PGMs, and JTACs showed the IDF’s commitment to both attacking the enemy and simultaneously limiting civilian casualties (112). At no time did the IAF purposely seek to target infrastructure. If not for all of these factors in concert, it is highly likely Palestinians civilian fatalities would have been much higher.

Why did the IAF adhere to the norm more closely in Cast Lead while it had deviated much more gratuitously in Lebanon? In addition to Israel’s innate humanitarian concerns and the different military objectives, it is obvious the Cabinet and IDF did not desire to suffer the same international condemnation it had endured in 2006. The IDF purposely desired to avoid a repeat of the Second Lebanon War. For these reasons, the IDF feverishly had sought to prepare for hostilities with HAMAS. Unlike Lebanon, the IDF knew the locations of much of the HAMAS infrastructure prior to the war and was able to strike it quickly precluding the intensive and firepower-heavy “rocket hunt” in Lebanon (Johnson 2011, 112-113). In addition, Israeli politico-military objectives were limited. The Cabinet did not desire to eliminate HAMAS or occupy Gaza as these objectives would have required a much greater commitment of forces and more intensive use of force.
CHAPTER 11: IRAQ

What explains Iraqi adherence or non-adherence to the bombing norm across five armed conflicts? Iraq violated the norm during the Iran-Iraq War, the Kurdistan campaign in 1988, and partially so in the 1991 Gulf War yet adhered to it during its 1990 invasion of Kuwait and during the U.S.-Coalition invasion of 2003. A pronounced lack of norms, as evidenced by the use of chemical weapons in two conflicts, and strategic necessity best explain Iraq’s conduct. According to the UCDP/PRIO dataset, all of Iraq’s armed conflicts in the period were wars rather than minor conflicts (Gleditch et al, 2012). According to this research, Iraq used indiscriminate bombardment in two of three “high need” conflicts and one time in a “low need” conflict.

Table 11.1. Conduct of Aerial Bombardment

<table>
<thead>
<tr>
<th>Case</th>
<th>Conduct of Aerial Bombardment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>Indiscriminate</td>
</tr>
<tr>
<td>Armed Conflicts</td>
<td>YES</td>
</tr>
<tr>
<td>IRAN-IRAQ WAR</td>
<td>YES</td>
</tr>
<tr>
<td>KURDISTAN</td>
<td>YES</td>
</tr>
<tr>
<td>KUWAIT INVASION</td>
<td>NO</td>
</tr>
<tr>
<td>1991 GULF WAR</td>
<td>YES</td>
</tr>
<tr>
<td>2003 INVASION OF IRAQ</td>
<td>NO</td>
</tr>
</tbody>
</table>

Table 11.2. Categorization of Iraqi armed conflicts

<table>
<thead>
<tr>
<th>Case</th>
<th>Intensity</th>
<th>Strategic Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>Minor War</td>
<td>High Need</td>
</tr>
<tr>
<td>Armed Conflicts</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>High Need</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Low Need</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 11.3. Conduct of Aerial Bombardment across Strategic Necessity

<table>
<thead>
<tr>
<th>Iraq</th>
<th>Strategic Necessity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrimination</td>
<td>High Need</td>
<td>Low Need</td>
</tr>
<tr>
<td>Discriminate</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Indiscriminate</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Duress</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Disproportionate</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

During the Iran-Iraq War, in both the air and on the ground, Baghdad chose to “go ugly early” and strategic necessity—even perceptions of it—cannot wholly explain it. Iraq was the first state in the war to attack refineries and infrastructure, take aerial bombardment into urban areas, shell and bombard whole towns, use chemical weapons by its ground forces, use ballistic missiles, and use chemical weapons on its civil population specifically the Kurds.

At the same time, Baghdad did abide by the norm in regards to aerial bombardment during its invasion of Kuwait. What little literature is available strongly suggests Baghdad desired to capture Kuwait’s cities intact for exploitation and to legitimize its invasion and occupation by appearing to be a liberator rather than conqueror. Adherence in the case of Kuwait appears to be squarely motivated by strategic necessity rather than norms. A similar argument applies to the 2003 U.S.-Coalition invasion of Iraq. Baghdad chose not to apply its airpower unlawfully because it had so little to spare and such use would have been futile anyway.

Downes (2004a, 2006a, 2007) claims that regime type does not determine states’ adherence to noncombatant immunity; however, in the case of Iraq, the inevitable conclusion is that the very nature of the Hussein-Ba’athist regime did play a substantial role in decisions to violate the bombing norm. The regime lacked norms, legal or
democratic, and the person of Saddam Hussein (Woodward 1991, 360) combined with the ideology and history of the Ba’ath Party may explain Iraq’s violations.

11.1. Aerial Bombardment during the Iran-Iraq War, 1980-1988

On 22 September 1980, Saddam Hussein ordered his armed services to war against Iran (Cooper 2000, 72). The war, like so many wars, was intended to end in a short time (Bergquist 1988, 37-38; Flintham 1990, 172). This war, like many wars, turned into a grueling war of attrition with shifting political objectives and military escalation as the tides of war changed (Bergquist 1988, 37). In this case, the war lasted almost eight years with massive ground casualties on both sides. The end results were two exhausted states and politico-military circumstances that were essentially status quo ante (Flintham 1990, 174). The air war, specifically the infamous “Tanker War” and “War of the Cities,” grabbed international headlines and directly influenced world politics finally compelling ever greater U.S. and UN intervention yet the air war was practically irrelevant to ground force operations in southern Mesopotamia (Bergquist 1988, ix, 3, 59; Flintham 1990, 174, 177-178).

Hussein ordered the invasion of Iran, specifically the province of Khuzestan to achieve four major objectives. First and foremost, he desired to assert full control and sovereignty over the vital Shatt-al-Arab waterway that separated Iraq and Iran and made Basra a large port city. Iraqi and Iranian border disputes over the waterway made Iraq persistently insecure. Without unhindered use of the waterway, Iraq had poor access to the sea. Second, he desired to incorporate Khuzestan into Iraq seizing its Arab population and oil reserves. Third, he desired to cripple the new Islamic state as much as possible because he perceived the Iranian mullahs as an internal threat to his secular
regime seeing that the majority of Iraq’s population were Shi’a Muslims. Hussein hoped an invasion of Iran would cause the Islamic regime in Tehran to collapse. Fourth, and related to the third, Hussein hoped to make Iraq a major regional power and reducing Iran as a rival was essential to this purpose. (Flintham 1990, 172; Bergquist 1988, 29-33, 37)

Iran’s initial political objectives were to restore its lost territory and the international border; however, as the war progressed and became more brutal Iran hoped to impose such casualties on Iraq and capture portions of southern Iraq such that there would be a rebellion against Hussein resulting in a Shi’a state. Seeing that Iraqi Sh’ia were the vast majority in southern Iraq, Tehran had reason to think such a strategy might succeed. (Flintham 1990, 172-174; Cooper 2000, 132)

Iraq kicked off the air war by attempting to mimic Israel’s decisive, pre-emptive air attacks on the Egyptian Air Force from the 1967 war (Flintham 1990, 171; Cooper 2000, 72). The Iraqi Air Force (IQAF) attacked a number of major Iranian airbases and airports, but the attacks, while substantial, did not achieve the desired effect—a knockout blow to Iranian airpower (Flintham 1990, 171; Cooper 2000, 73). Poor target intelligence, mission planning, lack of PGMs, weapons delivery, and aversion to aircraft losses doomed the air raids to practical irrelevance (Flintham 1990, 171). With the invasion of Iran underway, the Islamic Iranian Air Force (IIAF) responded with air raids of its own against Iraqi airfields and oil facilities as deep as Baghdad (Bergquist 1988, 37, 44-45).

When the IIAF attacked Iraqi oil facilities especially as far as Baghdad (Flintham 1990, 172), Hussein perceived these attacks as “strategic” attacks apparently not knowing
his ground forces had shelled Iran’s oil facility along the Shatt-al Arab (Bergquist 1988, 44-45). In Iran’s mind, Iraq was the first to go “strategic”—that is threatening a core, existential interest, oil revenue (41-43), which kept both regimes solvent; therefore, Iran responded in kind.

Roughly eleven days into the war, Iraq’s invasion began to slow down dramatically as Iranian resistance stiffened. Baghdad realized it was not going to be militarily feasible to seize all of Khuzestan at a cost Baghdad was willing to pay. Baghdad early on began trying to find a diplomatic means to extract itself from the conflict. Iran was determined to force Iraqi forces out of Iran without negotiations. Faced with fierce counterattacks, Baghdad sought some means to end the war short of requiring its ground forces to defeat decisively Iranian ground forces or suffer a rout in retreat so Baghdad turned to a cyclical air campaign focused on punishment. The IQAF would coerce Tehran to concede to Iraqi termination terms by destroying Iran’s oil infrastructure and threatening its population. (Flintham 1990, 171; Bergquist 1988, 37-38; Cooper 2000, 132)

Bergquist writes that the air war between Iraq and Iran perplexed defense analysts worldwide because both regimes never used their sizable air forces to their maximum potential. They seemed in some respects to even defy their air forces’ ostensible core missions. The IQAF in particular existed to support the Iraqi Army in air defense and close support yet the IQAF rarely conducted close air support for the army and most of its counterforce missions were some form of aerial interdiction—that is raids on roadways, convoys, and depots in the rear areas. More telling, even these aerial attacks involved few aircraft violating the airpower tenet of concentration. Bergquist claims Baghdad, as
well as Tehran, quickly learned that close air support was extremely dangerous to aircraft resulting in both sides using their air forces sparingly in close air support. In addition, close support required a level of training and army-air force cooperation that the Hussein regime could not tolerate for internal security reasons. As a result, the IQAF and IIAF primarily became “strategic” air forces intended to be used in a coercive capacity to attack deep, soft targets valuable to both regimes. Across eight years, air forces essentially became the preferred arm of economic and psychological warfare. (Flintham 1990, 172, 173; Bergquist 1988, ix, 1, 23-24, 59-61)

Iraq pursued both counterforce and counter-value targeting strategies with the main effort given to counter-value targeting (Flintham 1990, 172; Bergquist 1988, 46). Iraq frequently violated the norm in regards to its counter-value targeting; however, its violations were not necessarily as severe as conventional wisdom would assume especially in regards to the use of aircraft. In aggregate, Iraq deviated from the norm in varying degrees in three areas.

First, Iraq essentially violated the bombing norm by using hundreds of ballistic missiles against Iranian cities in the “War of the Cities.” While the use of unguided ballistic missiles is not de jure a violation of the Laws of War, Baghdad’s use of these weapons with such large CEPs against urban areas invited civilian casualties to little military effect. By strict definition, these attacks were disproportionate and indiscriminate. These attacks treated cities as area targets running afoul of the Additional Protocol. The primary purpose of these ballistic missile attacks was to scare the Iranian civil population compelling it and the Islamic regime to sue for peace. In this sense, the ballistic missile attacks were essentially psychological and counter-population. Because
these missile attacks were so few in relation to historical bombing campaigns against cities and because their destructive effects so miniscule in relation to a city, they had no coercive effect on Tehran (Pape 1996, 52).

Second, it is likely the IQAF purposely targeted Iranian civilians with some of its air raids on Iranian towns and cities. For example, after the execution of one downed Iraqi pilot in Arak, Iran by local civilians, the IQAF reportedly attacked the town purposely to kill civilians in retaliation (Cooper 2000, 220). If true, this attack would be a war crime and a very clear violation of the norm; however, this act appears to be the exception rather than the rule for IQAF air raids. The historical literature of the Iran-Iraq War persistently speaks to Iraqi aerial bombardment of Iranian cities. The very term, “War of the Cities,” echoes World War II and the firebombing of German and Japanese cities suggesting the IQAF attacked cities with the intent of indiscriminately killing civilians. The problem is that the airpower histories usually are not detailed enough to determine overall whether or not the IQAF, in regards to its aircraft, viewed cities as area targets with the intention of killing civilians or whether the IQAF was attempting to attack a specific installation within a city.

There is no question Baghdad wanted to frighten the civilian population hoping Iranian civilians would demand their regime sue for peace yet occasional or even routine air raids by two or four-ship formations of fighters, which was the norm, over a city do not measure up to terrorization (Flintham 1990, 172; Bergquist 1988, 46). In fact, when the historical record does provide detail it superficially appears the IQAF attempted to

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66 An Al-Husayn missile with a 350 lb warhead would be roughly 770lbs of explosive weight (FAS) which is below the explosive weight of a standard U.S. Mk 84 bomb—the largest general purpose bomb among U.S. air forces.
strike economic or industrial targets during these raids on cities and the loss of civilians and damage to residential areas may very well have been incidental as it was for the U.S. Air Force in Operation Rolling Thunder (Cooper 2000, 228, 230-235, 262). Again, there were likely exceptions as Cooper cites one incident when Iraqi fighters attacking a plant strafed laborers fleeing the facility (221). If indeed true, such an attack would seem gratuitous albeit the killing of industrial workers in an arms plant would not de jure be indiscriminate. Without access to the mission orders or interviews with the pilots, it is impossible to account fully for IQAF targeting over Iranian cities, but the accusations of indiscriminate targeting appear greatly exaggerated.

Third, Iraq violated the norm in a very rare case of targeting airborne civilian aviation. On 3 May 1983, the IQAF attacked a civil aircraft ferrying an Algerian diplomat and delegation between Tehran and Ankara (Cooper 2000, 134). Afterward in another incident, the IQAF chased away a civil airliner bound for Iran (134). Seeing that these attacks scared away civil aviation from flying to Iran from the west, Iraqi intent appeared to be to shut down international flights to Iran; however, the shoot-down of a civil aircraft and the willingness to do so again were outright violations of noncombatant immunity.

What explains Iraq’s off and on adherence and non-adherence? Examining one of the puzzles of the war may be the best means to articulate the reasons. One of the puzzles of the air war between Iraq and Iran is why Iraq violated the norm more aggressively than Iran. Both states were authoritarian regimes and a Kantian would predict that both states would not be law-abiding. Iraq started the war, first used chemical weapons on the battlefield, initiated the “Tanker War,” and started the “War of
the Cities.” IIAF air raids always attacked oil facilities or power plants as counter-value targets and never appeared to target civilians purposely except when Tehran began trading ballistic missile volleys with Iraq later in the war.

Lack of any norms including respect for international law even at a symbolic level were lacking in Iraq and is the most important factor. Second, strategic necessity, specifically in terms of “Desperation to Win,” and service culture and its related airpower doctrine explain Iraqi non-adherence. Downes (2006a, 2007) “Desperation to Win” theory would have predicted both states to violate noncombatant immunity as the war grew long and casualties mounted. Both states were “desperate” but not equally so at different stages of the war.

The Iraqis went “ugly early” when their initial ground invasion came to a halt and they were unable to extricate themselves from the conflict through negotiations. While the Iranian regime was new and appeared weak, Iran was much larger than Iraq in terms of population so Iraq feared a “nation at arms” in Iran. Additionally, Baghdad feared the radical Shi’a regime in Tehran because it could inspire a rebellion among its Shi’a majority. Time was actually on Iran’s side. For all these reasons, Iraq was desperate to end the war early. Tehran also perceived itself as desperate in that their revolution had yet to be fully consolidated, they were internationally isolated, and Iraq initially appeared to be achieving their goal of annexing Khuzestan. What explains the variance between Iraq and Iran?

There are three factors that appear decisive in Iran’s greater adherence to the norm than Iraq. The first factor is service culture. The IIAF was modeled on the U.S.
Air Force while the IQAF was somewhat modeled on the Soviet Air Force at least in terms of inventory and organization (Bergquist 1988, 24; Cooper 2000, 77). The IIAF’s persistence targeting of oil facilities after Iraqi attacks in urban areas showed consistent institutional restraint. As Iraq tried to punish and coerce Tehran by threatening urban areas, the IIAF consistently went after Iraq’s perceived center of gravity—oil revenue. This reflected embedded U.S. influence on IIAF service culture in regards to noncombatant immunity and the targeting of centers of gravity. Second, the IQAF was also a creature of Saddam Hussein and all of his idiosyncrasies. The IQAF was part of the internal security apparatus and Hussein had used it before against the Kurds. Lack of restraint for Iraq’s domestic population led to less respect for Iran’s. Third, one cannot explain Iranian restraint without examining the regime in Tehran. The mullahs were no friends of human rights as they sent waves and waves of poorly trained and equipped young men and boys to the front in the war (Flintham 1990, 173). It is curious that such a regime did not order its air force to conduct retaliation in kind against Iraqi civilians. It certainly could have. Why didn’t it? The answer seems to be that Tehran perceived a harsher air campaign would alienate Iraq’s Shi’a whom they desired to liberate. Tehran knew its armed forces could never invade Iraq in mass and march on Baghdad so the only means to overthrow the Ba’ath regime was to get the Iraqi Shi’a to do it for them.

11.3. Aerial Bombardment in Kurdistan, 1988

The UCDP/PRIO armed conflicts dataset lists Iraq’s long-running armed conflict with the Kurds lasting from 1961 to 1996 when Hussein ordered his last ground incursion into Kurdish areas (Gleditch, et al, 2012). The United States responded to this incursion with Operation Desert Strike—an operation intended to punish Iraq—and deter future
incursion into Kurdistan. While the UCDP/PRIO lists the Iraq-Kurdish conflict and Iran-Iraq War separately, the two conflicts came together in March 1988 when Hussein ordered the IQAF and army attack Kurdish areas containing Kurdish civilians, fighters, and Iranian troops with chemical weapons resulting in the massacre of roughly 5,000 Kurds (Cooper 2000, 262). These chemical attacks were wholly indiscriminate and war crimes.

The IQAF and army had already used chemical weapons on Iranian combatants in the south. What explains Hussein’s use of chemical weapons against civilians in the north? First and foremost, the Hussein-Ba’ath regime had few to no norms and it had high tolerance for risk-taking and few concerns for international opinion. Second, one could make an argument that strategic necessity played a role as Iran threatened northern Iraq yet by any “objective” standard strongly suggest Hussein’s decision to use chemical weapons was gratuitous.

Frustrated by lack of progress in ground operations in the south, the Iranians launched an offensive in March 1988 into northern Iraq in Kurdish areas. While Iran’s exact military objectives remain murky, it appears the Iranians intended on capturing or damaging Iraq’s northern oilfields as well as damaging its electrical power supply seated in several dams in the region (262). Iranian forces captured Halabchah, a Kurdish town with 70,000 residents spread around its environs in mid-March (262-217). Cooper claims Hussein was surprised by the invasion in the north and reacted with the chemical attacks. The IQAF attacked the town with 50 aircraft delivering mustard and nerve gas (263). Cooper claims Iraq had used chemical weapons on the Kurds before in the early 1970s (217); however, Halabchah was the first attack to garner international attention.
What explains Hussein’s decision to violate noncombatant immunity to such a degree? Strategic necessity, while plausible, falls short because Iran’s true interest was in the south. The Iranian invasion into Kurdistan was more of a distraction than an effort to annex Kurdistan to Iran. Without access to any debriefings of Hussein or his closest advisors after the 2003 invasion of Iraq, one may only speculate as to the causes but lack of norms is the most likely. If Hussein’s primary objective in the use of chemical weapons was to thwart an Iranian invasion in the north, why did he dedicate his chemical attack to a city rather than Iranian forces? Why are there no photos of dead Iranians in the now well-known photo albums of dead Kurds in Halabchah. While Hussein likely desired to deter greater Kurdish cooperation with Iran, the use of chemical weapons on Kurdish civilians seems more an act of sadism than strategic necessity.

While not the primary factor, strategic necessity may have played a role. First, the war had entered its eighth year and Baghdad was desperate to end the war. Second, the Iranian invasion of the north penetrated deeper than any previous Iranian incursion (262) and it occurred in a region prone to rebellion against Baghdad. Third, Baghdad likely perceived its attack as a matter of grave internal security and surmised that chemical attacks on its own citizens would not bring retaliation while an attack on Iranian civilians would. As noted by a number of authors including Downes (2006s, 2007), wars of attrition, which include guerrilla wars, are prone to violations of noncombatant immunity. The confluence of an Iranian invasion of Iraq combined with the Kurd’s long-standing armed conflict with Baghdad resulted in one of the worst violations of the bombing norm since World War II.
11.4. Aerial Bombardment in the Invasion of Kuwait, 1990

Saddam Hussein ordered Iraqi forces to invade and occupy Kuwait on 2 August 1990 (Bickerton 1991, 245). The battle for Kuwait lasted two days before a 100,000-strong Iraqi Army overwhelmed Kuwaiti defenses and occupied the country (BBC). Hussein’s political objectives were to seize Kuwait’s oil reserves in order to drive up the price of oil to pay off Iraq’s war debts as well as restore what Iraq perceived was traditional Iraqi territory carved out by Britain decades earlier (Bickerton 1991, 245). Some observers and many governments at the time also feared Iraq was positioning itself for an invasion of Saudi Arabia (Woodward 1991, 243-244).

Iraq adhered to the bombing norm during the invasion and occupation of Kuwait. At no time did the Iraqi Air Force (IQAF) purposely target civilians or civilian objects not being used for military purposes. According to Cooper and Sadik, restraint by both ground and air forces was built into the war plan (Cooper 2003). They claim the IQAF was not supposed to bombard Kuwait City but concentrate on Kuwaiti airfields while commandos were to do most of the fighting in the capital yet other sources claim the IQAF did bombard the capital although the bombardment did not seem to be intense (Ghabra 1991, 112; Cooper 2003). According to Cooper and Sadik, Baghdad adhered to the norm because it desired to create as much an air of legitimacy for the invasion as possible as well as garner support from Kuwaitis and Third Country nationals working in Kuwait (Cooper 2003). In addition, it is likely aerial bombardment simply had little military utility in the invasion. Iraq invaded with a massive force and its victory was inevitable.
Once again though, this case of restraint of aerial bombardment in order to protect civilians and civilian objects apparently did little to protect Kuwaitis from the predations of ground forces, paramilitaries, and the secret police. According to Ghabra, Iraqi ground personnel both methodically and haphazardly began looting Kuwait City, beating persons they perceived as uncooperative, and committing arson against private property in the days and weeks after the invasion (Ghabra 1991, 113). The army even burned down government buildings and purposely destroyed public records apparently in an attempt to delegitimize the previous regime’s rule in order start afresh.

Why this variance in behavior seeing that it was self-defeating in the long run? The historical record provides no answers; however, Kahl’s (2007) and Thomas’ (2001) arguments regarding armed forces’ internalization of noncombatant immunity seem to explain it. Noncombatant immunity was not well internalized in the Iraqi military. The Iraqi High Command and IQAF adhered to the norm because it was useful to the war plan and kept collateral damage from airpower out of the international media. Baghdad ordered the IQAF to be discriminating and focus on counterforce objectives so the IQAF obeyed; however, abuse by ground forces were rampant yet did not garner substantial media attention at least initially.

11.5. Aerial Bombardment during the 1991 Persian Gulf War

The Coalition, led by the U.S., and arrayed against Saddam Hussein’s Iraq was formidable with almost 500,000 total personnel and hundreds of combat aircraft—fighters, bombers, attack helicopters (Schwartzkopf 1992, 145). On 17 January 1991, U.S. and Coalition air forces began a 42-day aerial bombardment of Iraq in order to coerce Hussein to remove his forces from Kuwait and if that failed to so heavily attrite
Iraqi ground forces that U.S. and Coalition ground forces could easily defeat these Iraqi forces in Kuwait and southern Iraq sparing Coalition ground forces substantial casualties (Schwartzkopf 1992; 416-417; Mann 1995, 89-91, 77).

During the war, Iraq used its airpower very sparingly and when it became apparent that its air force could not stand up to Coalition airpower Hussein ordered it grounded and sheltered to preserve it for the future. Hussein sent roughly 100 of his aircraft to Iran to sit out the war. Even these measures did not preserve it as Coalition PGMs penetrated hardened Iraqi aircraft shelters and Iran kept Iraq’s aircraft permanently.

The Iraqi air force was never substantively used in an air-to-ground role in the Gulf War yet its ballistic missile force of SCUDs and modified SCUDs was used against Israel, Saudi Arabia, and Bahrain (Apple 1991). Because these missiles were inaccurate and could only be lobbed at area targets which were usually cities, the conventional wisdom is that Iraq violated noncombatant immunity in the Gulf War because it attacked area targets, mostly cities, with a weapon system it knew had very little probability of striking military targets so the most likely victims would be civilians (Schwartzkopf 1992, 417). In fact, about 17 Israelis died of the direct and indirect effects of SCUD attacks (Apple 1991). There is little doubt that creating fear, especially of chemical or biological attack, was one of Hussein’s objectives in using his missiles. Iraq transgressed a strict adherence to the bombing norm by essentially “terrorizing” Arab and Israeli civilians albeit by limited means (Schwartzkopf 1992, 417). At the same time one missile did strike a military target in Saudi Arabia, incidentally, killing 27 U.S. military personnel so the missiles were not totally without military utility (Apple 1991).
Hussein never ordered his ballistic missiles loaded with chemical or biological weapons as feared by Coalition leaders and populations in the region. This norm’s adherence was no doubt born of fears of Coalition retaliation rather than norms themselves.

11.6. Aerial Bombardment during the 2003 Invasion of Iraq

In March 2003, the Bush Administration ordered U.S. Forces in concert with his “coalition of the willing” to invade Iraq to overthrow the Hussein-Ba’athist regime and replace it with an Arab democracy (Sanger 2003; Murray 2003, 44). Faced with an existential threat to his regime, Hussein chose not to fly his air force or what was left of it and without any significant military advantages to offset Coalition air and ground forces Hussein’s regime used part of its regular forces and irregulars to delay the Coalition drive to Baghdad (Murray 2003, 84-85, 174-175). It failed and the regime fell.

What accounts for Hussein’s adherence to noncombatant immunity in the 2003 invasion of Iraq? The logical answer seems to be that Hussein apparently had very few military options available. Lack of capability best explains his adherence. His air force was but a shadow of its former self (180-181). Although it could have attempted air raids on U.S. supply depots in Kuwait or Kuwait City itself such attacks would have been futile as Coalition air forces rapidly garnered air supremacy (180-181). While U.S. commanders feared Hussein would order chemical weapons attacks by air or artillery on Coalition forces (Gordon 2006, 282), Hussein apparently had none to employ. Facing an existential threat, it remains a mystery why Hussein did not do more to thwart the Coalition advance into Iraq, but it appears that lack of capability explains adherence.
CHAPTER 12: CONCLUSION

12.1. The Bombing Norm post-World War II

What explains air forces’ adherence to noncombatant immunity in aerial bombardment—the bombing norm? Reviews of both the airpower and norms and civilian victimization literatures led me to conclude initially that strategic necessity rather than norms, democratic or ethical-legal, primarily explained adherence. My four cases covering the period 1946 to 2011 and including the United States, Israel, the USSR/Russia, and Iraq showed that democratic norms, albeit conditioned by strategic necessity, primarily explained adherence. Thomas is right that the bombing norm has gained salience post-World War II; however, it applies primarily to democracies rather than all states.

There are four particularly interesting findings of this research effort that suggest my findings are not spurious. First, democracies protected civilians from direct attack 97% of the time while the United States used indiscriminate bombardment only once in the period and Israel never used indiscriminate bombardment across 15 armed conflicts. The authoritarian states conducted indiscriminate bombardment in 60% of their conflicts. This evidence overwhelmingly supports the hypotheses of Outcome #3 that norms are decisive in the conduct of aerial bombardment; however, while democratic norms are decisive, there is also evidence that this adherence was conditioned by strategic necessity. All of the six instances of indiscriminate bombardment among the authoritarian states, excepting Iraq in Kurdistan, occurred during wars, as coded by the UCDP/PRIO dataset, rather than minor conflicts and all of these wars were coded as “high need” circumstances.
based on my coding scheme. In other words, the authoritarian states fought a disproportionate number of arduous wars compared to the democracies.

Second, aerial bombardment during the Vietnam War is particularly informative regarding the relationship between norms and strategic necessity. While democratic norms certainly informed and overshadowed all U.S. bombardment, U.S. air operations over North Vietnam were particularly discriminate and proportionate because the Johnson Administration feared Chinese and Soviet interventions in the war. Johnson did not want to trigger an Indochina version of Korea. To prevent such a scenario, the Johnson Administration micro-managed the aerial bombardment of North Vietnam.

Contrary to the expectations of norms, U.S. aerial bombardment in the territories of its allies—South Vietnam, Laos, and Cambodia—was much less restrictive especially in the case of South Vietnam. Strategic necessity explains this variation. While North Vietnam had great power sponsors who were U.S. adversaries, the other three states did not, so U.S. administrations accepted much more firepower-intensive and disproportionate bombardment in those areas. The lives and civilian objects of the North Vietnamese were more important than the lives of South Vietnamese, Laotians, and Cambodians because the loss of North Vietnamese lives could have triggered foreign military intervention. What this evidence strongly supports is that adherence was conditioned by strategic necessity. If the United States had fought more wars like Korea in the post-World War II period, it is not a given those wars would have been as discriminate as most U.S. aerial bombardment turned out to be after 1953.

A third interesting and encouraging finding for the credibility of my coding scheme is that all of the armed conflicts in my cases that I coded as including
indiscriminate bombardment had been previously coded by UCDP/PRIO researchers as wars. In my four cases, there were no instances of indiscriminate bombardment in minor conflicts. In addition, 69% of instances of duress bombing and 56% of instances of disproportionate bombardment occurred during wars rather than minor conflicts. This evidence again strongly supports the argument that strategic necessity conditions adherence.

Fourth, the democracies surprisingly used duress bombing in five conflicts in which I coded the conflict as “low need.” This evidence suggests Thomas has a point regarding the increasing embrace of duress bombing by states. Duress bombing appears to be a “third way” by which states, especially democracies, protect their forces by avoiding risky ground incursions and close air support missions yet coerce civilian regimes and their populations by destroying infrastructure. In this circumstance, democracies spare civilians direct attack yet still target them indirectly.

My other explanatory factors did not substantially influence adherence. Technology, in the form of PGMs, did not decisively explain adherence and neither did air forces’ cultures and bombing doctrines. The actual air strategies employed by states do seem to have an effect on adherence. Aerial bombardment in counterforce strategies are more likely to spare civilians and civilian objects while air strategies predicated on a mix of counter-population and counterforce are more likely to involve some form of indiscriminate or disproportionate bombardment. Air forces generally did not go “ugly early” and discriminate bombardment and discriminate ground operations are closely associated and vice versa. Airpower, post-World War II, is not a particularly
indiscriminate combat arm especially in the hands of democracies (Meilinger 1993, 103-104).

In his 2004 dissertation on civilian victimization in war, Downes speculated based on his findings that liberal norms, international law, and international tribunals would not be enough to deter civilian victimization if the costs of fighting in specific wars became particularly costly for states even democracies (Downes 2004a, 766-769). My findings suggest Downes should not be so pessimistic in regards to airpower especially of democratic states’ use of aerial bombardment in the future; however, what my four cases across 40 armed conflicts did not examine was a major war between two great powers with modern air forces. That is because, thankfully, there has not been such a war. In Ethics of Destruction, Thomas quoted Eliot Cohen “it is highly unlikely that advanced powers will again resort to wholesale devastation of cities and towns, whether to shatter enemy morale or as a by-product of efforts to hit other target systems, such as railroads or factories” (Thomas 2001, 168). Who is right Downes or Cohen? The crucial case for the bombing norm post-World War II has yet to occur.

12.2. Policy Relevance

What else can or should be done to protect civilians and civilian objects in air warfare? At this time, I find that no new legal codes are necessary to govern aerial bombardment and the pursuit of such codes would be counterproductive. The 1977 Additional Protocol I sufficiently governs aerial bombardment although the Protocol addresses it in the broader context of military force in general. For example, the Protocol specifically defines military objective drawing a clear distinction for armed forces between lawful military targets and prohibited civilians and civilian objects (ICRC 2009).
The Protocol additionally prohibits indiscriminate bombardment as well as the terrorization of civilians by any means (ICRC 2009). These prohibitions cover the core standards of the bombing norm.

The U.S. and Israel have not ratified Protocol I although the U.S. is one of three signatories but non-ratifying parties including Iran and Pakistan (RULAC, ICRC 2012). Russia is a ratifying party by way of its ratification under the USSR in 1989 (ICRC 2012). Iraq finally ratified in 2010 under the new regime (ICRC 2012). While one could argue that if the U.S. Senate were to ratify Protocol I, the bombing norm may be symbolically strengthened, I suspect such an act would do little to strengthen the norm. With the exception of duress bombing, U.S. air forces already abide by the core aspects of Protocol I so in this sense Protocol I practically is already customary law for the U.S.

Any new effort to legislate aerial bombardment via treaty would fail because it likely would result in an attempt at micromanaging states’ air forces and the great powers who maintain a comparative advantage in this arena (Falk 1974, 4-5) would simply not sign and ratify it. This eventuality would do more to hurt the legitimacy of, and adherence to, the bombing norm than the present violations already do. A more profitable area for future negotiations and legislating may be in the area of air-delivered munitions (Meilinger 1993, 103) as the Ottawa Convention on the production and use of anti-personnel mines (ACA 2013) and the Convention on Cluster Munitions illustrate (LMCMM).

With a few exceptions such as the U.S. and Israeli investments in armed drones, the air forces of the great powers and major regional powers remain organized, trained, and equipped for high intensity, conventional combat. This is true because the greatest
military threats to great powers and regional powers are other states’ armed forces despite the present scourge of terrorism. For this reason, most states’ air forces are composed of jets with sizable bomb loads with munitions in the high yield categories of explosives (NAWCWD 2007). This is ordnance designed to kill as many personnel and wreck as much military equipment as possible per combat sortie. While PGMs help mitigate these effects by increasing the probability that high yield ordnance hits the intended military target, PGMs still cannot prevent the standard blast and fragmentation effects of 500 to 2,000 lbs. bombs. In regards to protecting civilians and civilian objects, this force structure is not well-suited to protecting them during counter-terrorism and counterinsurgency operations as well as high intensity combat within urban terrain.

In order to protect civilians and civilian objects, states’ air forces need to invest in more precision weaponry of smaller explosive weights. U.S. air forces finally embraced this course of action during their counterinsurgency campaigns in Iraq and Afghanistan. Before the first decade of the 21st century, standard U.S. air-delivered ordnance, whether in “dumb” or PGM form, came in the form of 500, 1,000, and 2,000 lbs. bombs (GS.org; FAS). The other smaller munitions included the AGM-65 Maverick and the Hellfire missiles (FAS). U.S. air forces used these munitions mostly for anti-armor attacks so they rarely found their way onto aircraft not slated for close air support duties. “Tank plinking” from medium altitudes during the 1991 Gulf War with 500 to 2,000-lbs. bombs as well as the use of anti-armor cluster munitions in the desert undermined to some degree the procurement and use of the Maverick and Hellfire missiles resulting in ever greater reliance on the standard ordnance although now packaged with PGM capability.
The Second Intifada (Hurley 2010, 6-8; 11-12) and Global War on Terrorism renewed Israeli and U.S. efforts to increase the production and capabilities of unmanned aerial vehicles—drones. What both conflicts needed were slow, very long loiter aircraft with intelligence sensors capable of finding, tracking, and engaging pre-planned targets or targets of opportunity (USAF 2010). Because low speed and long loiter requirements required small airframes, air forces had to re-embrace smaller missiles which the small drones could carry so the Hellfire missile and other missiles like it found their way back into the inventories (Hurley 2010; USAF 2010). The integration of intelligence sensors with PGMs on drones has greatly increased the accuracy of air forces targeting personnel, vehicles, and safe houses of terrorists and guerrillas. In regards to protecting civilians, the armed drones with sensor suites have increased the ability of states to discriminate closely and engage accurately while also using lower yield munitions which limit collateral damage. The primary limitation with drones is that they are survivable only in low threat environments such as counter-terrorism operations or counterinsurgency campaigns in which guerrillas have no advanced air defense capabilities. Drones are not survivable in high intensity conventional conflicts. For this reason, states remain reticent in purchasing large numbers especially if their defense budgets are constrained.

Since many states’ air forces follow the lead of the U.S. Air Force, the U.S. Government should take advantage of this opportunity by encouraging foreign air forces to outfit some element of their air forces with smaller, precision weaponry. Since the numbers of interstate conflicts have dropped since World War II (Williams 2008, 156, 159), more armed conflicts have been internal which frequently equates to conventional government forces battling insurgents or terrorists. Jet and heavy-ordnance focused air
forces in these environments are much more likely to harm civilians (Falk 1974, 2-5; Lyall 2009, 67-68, 72-78). Possessing an element of aircraft and airmen trained and equipped for low intensity combat may help mitigate the effects of that part of the air force that remains conventionally-centered. In addition, forward air controllers in both the air or on the ground may greatly assist air forces in limiting collateral damage by having well-trained airmen assigned to ground forces in order to aid them in calling in accurate and timely aerial bombardment (AF.com). Even when equipped with high-tech targeting pods and PGMs, aircrews operating from medium or high altitude are much better served in finding, tracking, and engaging enemy forces, especially irregulars, when assisted by “eyes and ears” on the ground.

12.3. Future Research

As noted in the introduction, no one has conducted a systematic review of states’ adherence to the bombing norm across all armed conflict types from the advent of aerial bombardment in 1911 to the present (Higham 1988, 11-12; Renz 2012, 19). My work has partially closed 65 years of the gap post-World War II with the examination of four states, including two superpowers, one democratic and one authoritarian, and two regional powers, one democratic and one authoritarian, that have actively used their modern air forces across 40 armed conflicts of all types. What remains is a quantitative study of all states’ exercise of aerial bombardment from 1911 to the present with a number of cases studies to trace my variables’ influence across specific conflicts especially those that may be outliers. What is particularly important is unraveling why Downes’ findings in his three quantitative studies (2004a, 2006a, 2007) regarding the primacy of strategic necessity over regime type and norms as explanatory factors for
adherence to noncombatant immunity across all combat arms did not bear out substantially in my research on aerial bombardment?

I suspect we reached different results for two reasons. First, my selection of four cases, albeit balanced intentionally between two different regime types and two differently sized military powers, unintentionally resulted in two-thirds of the armed conflicts examined having been fought by democracies and only one-third by authoritarian states. Since the selected democracies turned out to be more substantially norms-adhering in aerial bombardment, this result caused my findings to vary from Downes. This reflects an important consequence of not doing a quantitative survey of all states’ conduct of aerial bombardment across the entire history of airpower.

Second and related to the first, Downes and I surveyed two periods of time. Downes generally examined the period of 1816 to 2003 while I studied only the post-World War II era up to 2011. Now that I know, based on my findings, that democratic norms substantially influence the conduct of aerial bombardment post-World War II, I suspect that we surveyed two qualitatively different periods of time. Downes captured part of Western history when there were customs of war but no written Laws of War. In other words, noncombatant immunity remained poorly institutionalized for part of his study while the Laws of War were written and increasingly institutionalized in the post-World War II era. His research likely captured a number of armed conflicts when states, fewer democratic and more authoritarian, were less norms-adhering than my period of study.

Third, Downes and I used different coding criteria. For example, he had a lower threshold for what constituted civilian victimization—his dependent variable—than I did.
Downes states in his 2006 work, “Desperate Times, Desperate Measures,” that he considers any targeting of persons not actively bearing arms as civilian victimization—that is a violation of noncombatant immunity. For example, Downes considers the targeting of munitions workers as a violation of noncombatant immunity although most “just-war theorists” do not (Downes 2006a, 157). It is highly likely then that Downes coded more conflicts than I did as violations of noncombatant immunity because my threshold was more congruent with Anglo-American military jurisprudence and Law of War doctrine.

For example, I coded U.S. aerial bombardment in the Vietnam War as lawful because I only examined aerial bombardment while Downes coded the war as a case of civilian victimization because of the Phoenix Program—a covert ground operation between the U.S. Army and CIA (Downes 2006a Annex). Downes considered the Viet Cong insurgents as well as all those persons aiding and supporting them noncombatants if they were killed while not actively engaged in combat. In other words, he likely considered such killings assassinations of civilians rather than military operations. While I coded the War of Independence as a lawful use of Israeli airpower, Downes examined the Israeli expulsion of Arabs from Palestine, conducted by ground forces and paramilitaries, and found it a form of civilian victimization (Downes 2006a Annex).

In addition to a quantitative study of adherence across all armed conflicts from 1911 to the present, what my research highlights is the need for more airpower history and greater detail in those histories. Corum and Johnson (2003) cites the lack of airpower history of small wars as part of his motivation for writing *Airpower in Small Wars* (xi). Most airpower history focuses either on air-to-air combat with a special emphasis on
states’ aircraft inventories and their aircrafts’ technical capabilities or strategic bombardment in a classic set of cases including World War II, Korea, Vietnam, the Gulf War, and Kosovo-Serbia. There is a need for more airpower history of aerial bombardment that is not classically “strategic” or fixated on great powers. Across all forms of aerial bombardment, there is a need for greater detail on why air planners chose the targets they did, how they planned to disrupt, neutralize, or destroy those targets, and how and why aircrews conducted their attacks on specific targets. This is the operational and tactical levels of air warfare history that frequently is missing.

As an adjunct to producing this history is the need to de-classify large volumes of U.S. airpower history from 1991 to the present. With the advent of automation and the centralization of airpower planning in air operations centers, U.S. air operations from the 1991 Gulf War to the present are the most heavily recorded and documented cases of warfare in history. With due respect to protecting classified capabilities and tactics as well as intelligence sources and methods, much could be learned about airpower employment if these records were reviewed and edited by government censors, de-classified, and then subsequently released to researchers.
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**APPENDIX A: CODE BOOK FOR DETERMINING STATES’ AIR FORCES ADHERENCE TO THE BOMBING NORM**

<table>
<thead>
<tr>
<th>BOMBING NORM STANDARDS</th>
<th>YES</th>
<th>NO</th>
<th>NO DATA</th>
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<tbody>
<tr>
<td>1) Intentionally targeted/attacked civilians (indiscriminate bombing)</td>
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<tr>
<td>1.A. For killing and wounding</td>
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<tr>
<td>1.A.1. Did air forces bomb civilians purposely in order to wound and kill civilians for instrumental or sadistic purposes? Did they attack civilian convoys, IDPs, refugees, housing, residential areas, outdoor events?</td>
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<td>1.B. Terrorization</td>
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<td>1.B.1. Did air forces attack civilians directly for the primary purpose of psychological effects? Did air forces drop mass leaflets to warn of future indiscriminate bombardment for the primary purpose of producing terror.</td>
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<td>1.C. Collective punishment</td>
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<td>1.C.1 Did air forces, independently or in coordination with ground forces or paramilitaries, intentionally bombaord villages and towns as area targets or struck civilian infrastructure or residences in order to punish those populations centers for some real or perceived offense against the opposing state’s armed forces?</td>
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<td>1.D. Free Fire Zones</td>
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<td>1.D.1. Did air forces, with or without ground force coordination, create and operate in free fire zones that suspended discrimination and air forces treated all persons and civilian objects in those zones as targets?</td>
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<td>1.E. Forced dislocation of population</td>
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<tr>
<td>1.E.1. Did air forces conduct bombardment whose primary or secondary purpose was to move civil populations, long-term or permanently, by attacking civilians to increase the credibility of threat or use leaflets warning of FFZs or threatening bombardment?</td>
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<td>1.F. Failure to permit evacuation of population centers before bombardment</td>
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<tr>
<td>1.F.1. Bombarded undefended villages and towns when ground assault was not planned?</td>
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<tr>
<td>1.F.2. Failed to warn defended town or village of impending bombardment, when no ground assault planned, to permit evacuation of civilians</td>
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<tr>
<td>1.F.3. Refused to permit civilians of villages and towns to evacuate before impending bombardment as act of punitive nature or for coercion?</td>
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<td>1.G. Prohibited weapons</td>
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<td>1.G.1. Did air forces used prohibited weapons which had substantive indiscriminate or disproportionate effects? Such as CW and BW?</td>
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<tr>
<td>2) Intentionally targeted civilian objects</td>
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<td>2.0.1. Did air forces intentionally bombard civilian objects not being used by enemy military for warfighting or war-making? (this does not apply to dual-use civilian objects which do or may serve a military purpose presently or in the future of the conflict)</td>
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<td>2.0.2. Did air forces attack dual-use civilian object which at the present time of attack had no support or impact to the war and whose destruction appeared to be gratuitous?</td>
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<tr>
<td>2.A. De-housing/de-sheltering</td>
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<td>2.A.1. Did air forces bombard civilian residences or other civilian structures for the purpose of de-housing the population IOT to cause material hardship and psychological stress?</td>
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<td>2.A.2. Did air forces bombard civilian structures IOT to prevent their use by the enemy although the enemy were not yet using them?</td>
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<tr>
<td>2.B. Eradicate crops or foodstuffs</td>
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<td>2.B.1. Did air forces bombard crops in the field or granaries or other civilian foodstuffs whose primary consumers are civilians although military forces may use them at some point?</td>
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<tr>
<td>2.C. Civilian infrastructure</td>
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<tr>
<td>2.C.1. Air forces intentionally bombarded civilian infrastructure, which was not being used for a military purpose, including those civilian objects which provide public services (e.g. electricity, water, trash, roads, medical, emergency services, police, trash) and aid to the population?</td>
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<td>2.C.2. Did air forces intentionally attack civilian manufacturing or businesses that do not support war-making (armament factories are lawful targets)</td>
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<td>2.D. Private property/Crony Targeting</td>
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<td>2.D.1. Air forces intentionally targeted the civilian/private properties of state leaders (not official residences, HQs, command posts, etc.), their families, their supporters and other social and political elites in society IOT to punish or coerce them?</td>
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<tr>
<td>3) Proportionality</td>
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<td>3.A. Area targeting of civilian areas</td>
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<tr>
<td>3.A.1. Air forces purposely targeted urban areas as area targets IOT to attack other targets within the urban area? The area targeting used unguided weapons whose effects are just as likely or more likely to effect civilians and civilian objects as the intended military targets?</td>
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<tr>
<td>3.B. Area targeting of rural areas</td>
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<tr>
<td>3.B.1. Did air forces intentionally conduct area targeting of rural areas in order to destroy reported or visually identified concentrations of enemy forces or camps or logistical bases?</td>
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</table>
### 3.C. Risk transfer from combatants to civilians

3.C.1. Did air forces, with or without coordination with ground forces, systematically shift the risks of combat to the civilian population in order to protect friendly air and ground forces? In the weighing of military necessity and force protection against the prohibition of unnecessary suffering and disproportionate military force, did air forces regularly as standard operating procedure (SOP) or practice choose to put civilians rather than military forces at risk?

3.C.2. When solid estimates of civilian fatalities available, were the proportions of friendly military troops killed much lower than civilians killed? (fatality ratios)

3.C.3. When other military options were available to address the target and spare civilians and civilian objects, was the firepower-centric choice or high collateral damage choice usually chosen?

### 3.E. Substantial number of civilians died after bombardment of civil infrastructure?

3.E.1. After air forces attacks and damaged, disabled, or destroyed parts or the whole of specific civil infrastructure, did the indirect effects of such destruction result in immediate or long-term fatalities to the civil population?

### 4) MITIGATING FACTORS

4.A. Possessed PGMs

4.B. Used PGMs

4.C. Leaflet drops to warn of bombing

4.D. Used FACs (Forward air/ground controllers)

### 5) AIR STRATEGIES EMPLOYED

5.1. Counterforce strategy

5.1.1. Did air forces conduct aerial bombardment in support of ground forces or used to directly strike enemy ground forces without coordination with friendly ground forces? Did air forces predominantly conduct close air support, battlefield air interdiction, or theater or strategic air interdiction missions?

5.2. Counter-Population

5.2.1. Did air forces conduct aerial bombardment directly against civilians in order to kill and maim or indirectly against civilians via duress bombing of civilian objects such as civil infrastructure?

5.2.2. Did air forces intentionally seek to terrorize the population through bombardment of civilians directly or indirectly through selective targeting of specific civilian habitations to make an example?

5.2.2. Did air forces directly attack the economy to materially deprive or impoverish the regime or population?
<table>
<thead>
<tr>
<th>5.3. Both CF and CP</th>
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<tbody>
<tr>
<td>5.3.1. Did air forces use both a counterforce strategy and counter-population simultaneously or did they begin with one and switch to the other off and on during the conflict?</td>
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</table>

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<tr>
<th>5.4. Went Ugly Early</th>
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<tr>
<td>5.4.1. Did air forces initiate indiscriminate or duress bombing very early in the conflict?</td>
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<thead>
<tr>
<th>6) AIR POWER CULTURES-DOCTRINES</th>
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<tbody>
<tr>
<td>6.1. Tactical air forces</td>
</tr>
<tr>
<td>6.1.1. Were air forces organized, trained, and equipped to conduct aerial bombardment in support of ground forces in close air support and aerial interdiction missions against ground targets?</td>
</tr>
<tr>
<td>6.1.2. What kind of aircraft and munitions did the air forces possess? Fighters? Fighter-bombers? Helicopters?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6.2. Strategic air forces</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2.1. Were air forces organized, trained, and equipped to conduct aerial bombardment esp. at long-range against infrastructure, economic facilities, bunkers as part of independent air campaigns to achieve war-winning effects?</td>
</tr>
<tr>
<td>6.2.2. Did the air forces possess nuclear weapons?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7) Ground Forces violated noncombatant immunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1. Did ground forces purposely and systematically violate noncombatant immunity through a number of destructive mechanisms such as executions, mass killings, disappearances, torture, razing civilian habitations, destroying civil infrastructure, looting, etc. and the civil and military chains of command ordered, consented to, or acquiesced to such targeting?</td>
</tr>
<tr>
<td>Type of Conflict</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Intentionally targeted civilians</td>
</tr>
<tr>
<td>Disproportionate bombardment</td>
</tr>
<tr>
<td>Used prohibited weapons</td>
</tr>
</tbody>
</table>

**Appendix B: Four States Adherence to the Bombing Norm, 1946-2011**

**CRITERIA**

- Coercion: Population
  - Went Ugly Early
  - Airpower Doctrine

**CONDITIONS**

- Attempted to protect civilians
- Possessed PGMs
- Leaflet drops
- Used FACs
- De-housing/De-fortification
- Expropriation
- Private property/Civilian targeting
- Area targeting of urban areas
- Area targeting of rural areas
- Failure to permit evacuation of target
- Orchoptic bombing
- Shifted tabs to platform/TF > BK

**Appendix B: Four States Adherence to the Bombing Norm, 1946-2011**

**TOTALS**

- GRENADA INVASION
- SOUTH VIETNAM
- UNITED STATES
- USSR/RUSSIA
- 2008 GAZA WAR
- LEBANON, 1996
- LEBANON, 1983-1992
- 1973 YOM KIPPUR WAR OF ATTRITION
- 1967 SIX-DAY WAR
- KUWAIT INVASION 1991 GULF WAR
- 2003 INVASION OF IRAQ
Appendix C: Variation in Aerial Bombardment across the Vietnam War, 1961-1973

<table>
<thead>
<tr>
<th>CONDITIONS</th>
<th>Intensity: Minor or War</th>
<th>Type of Conflict</th>
<th>Strategic Necessity</th>
<th>Great Power sponsor(s)</th>
<th>ADHERENCE TO BOMBING NORM</th>
</tr>
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<tbody>
<tr>
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<td></td>
<td>Intentionally targeted</td>
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<td>civilians</td>
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<td>Terrorization</td>
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<td>Collective Punishment</td>
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<td>Free Fire Zone</td>
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<td>Forcibly targeted population</td>
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<td>Intentionally targeted</td>
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<td></td>
<td></td>
<td>civilian objects</td>
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<td>Eradicate crops</td>
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<td>Civilian infrastructure</td>
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<td></td>
<td>Disproportionate</td>
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<td>Area targeting of urban</td>
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<td>areas</td>
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<td>Area targeting of rural</td>
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<td>areas</td>
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<td>Failure to permit</td>
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<td>evacuation of towns</td>
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<td>Shifted risks of combat</td>
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<td>to civilians</td>
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|                  |                        |                  |                    |                        |                        |
| Armed Conflicts |                        |                  |                    |                        |                        |
| North Vietnam    | War                     | Interstate Conv. | HIGH USSR & PRC    | NO                      | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  |                         |                  |                    | NO                      | YES                     |
|                  |                         |                  |                    | NO                      | YES                     |
|                  | War                     | Int’l Internal Both | HIGH US | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | YES                     | YES                    |
|                  | War                     | Int’l Internal Guerrilla | LOW US | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW less so US | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |
|                  | War                     | Int’l Internal Conv. | LOW | NO                      | NO                      |
|                  |                         |                  |                    | YES                     | NO                      |
|                  |                         |                  |                    | NO                      | NO                      |