

Edith Cowan University
Research Online

Theses : Honours

Theses

2016

**Physical and moral forces: An analysis of World War II's
1944-1945 Ardennes offensive using Clausewitzian Theory**

Rebecca Griffin
Edith Cowan University

Follow this and additional works at: https://ro.ecu.edu.au/theses_hons

 Part of the [Military History Commons](#)

Recommended Citation

Griffin, R. (2016). *Physical and moral forces: An analysis of World War II's 1944-1945 Ardennes offensive using Clausewitzian Theory*. https://ro.ecu.edu.au/theses_hons/1495

This Thesis is posted at Research Online.
https://ro.ecu.edu.au/theses_hons/1495

Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Physical and Moral Forces:

**An Analysis of World War II's 1944-1945 Ardennes
Offensive Using Clausewitzian Theory**

Rebecca Griffin

(Bachelor of Arts, Bachelor of Business)

**This thesis is presented in partial fulfilment of the requirements for the
degree of Honours in Arts**

School of Arts and Humanities

Edith Cowan University

Date of Submission: 30 May, 2016

Abstract

This thesis employs Carl von Clausewitz's theory on moral forces to conduct an analysis of World War II's 1944-1945 Ardennes Offensive. The literature largely focuses on presenting the physical components of the offensive, neglecting the moral. This thesis aims to fill this gap by presenting an analysis of the utilisation and effects of both physical and moral forces in the Ardennes Offensive and determining the importance of each to the outcome. Analysing the planning and execution of the offensive through this theoretical perspective reveals that moral forces played a significant part in Allied success in the Ardennes. The analysis exposed the German reliance on physical superiority yet failure to adjust initial plans to the geographical conditions in the area, in part due to Adolf Hitler's total control of the armed forces. Following the offensive's commencement, Allied military leadership demonstrated intuitive thought, good judgment, and determination resulting in swift defense of the area. German Forces were unable to break through this defense despite their great physical advantage. The analysis suggests that Allied moral forces greatly contributed to this initial defense, utilising psychological strength until the physical forces were able to be brought up to equal strength. As a re-interpretation of the Ardennes Offensive, this thesis contributes to the historical studies on battles of World War II and demonstrates the importance of moral forces in warfare.

Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;*
- (ii) contain any material previously published or written by another person except where due reference is made in the text; or*
- (iii) contain any defamatory material.*

Signed.....

Date.....

Acknowledgments

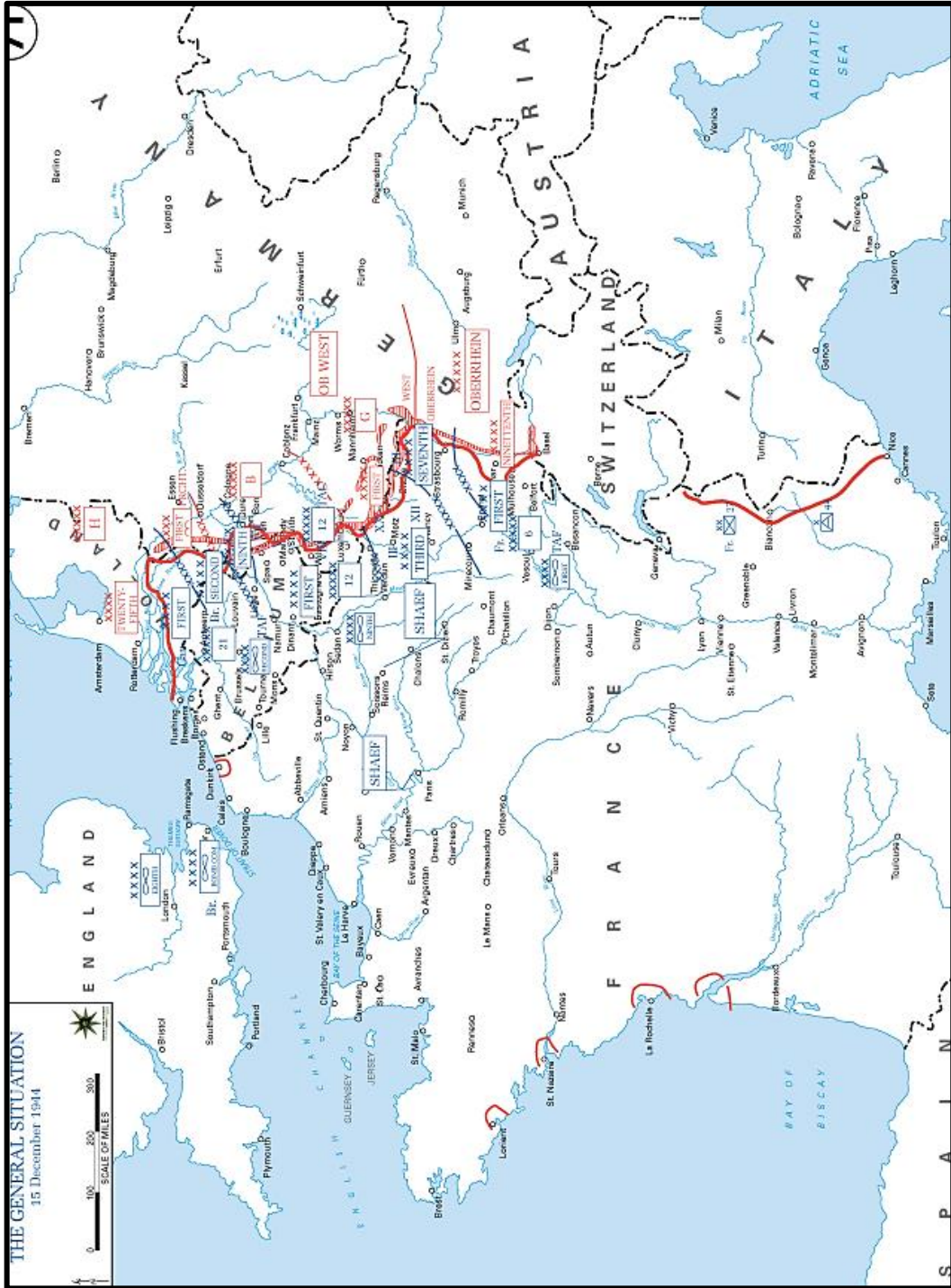
I would like to thank my supervisor, Dr. David Robinson for his knowledge, advice and patience in the entire thesis process.

To my father, Richard, thank you for your support in everything, especially my education and for your encouragement to simply do my best. This is dedicated to you.

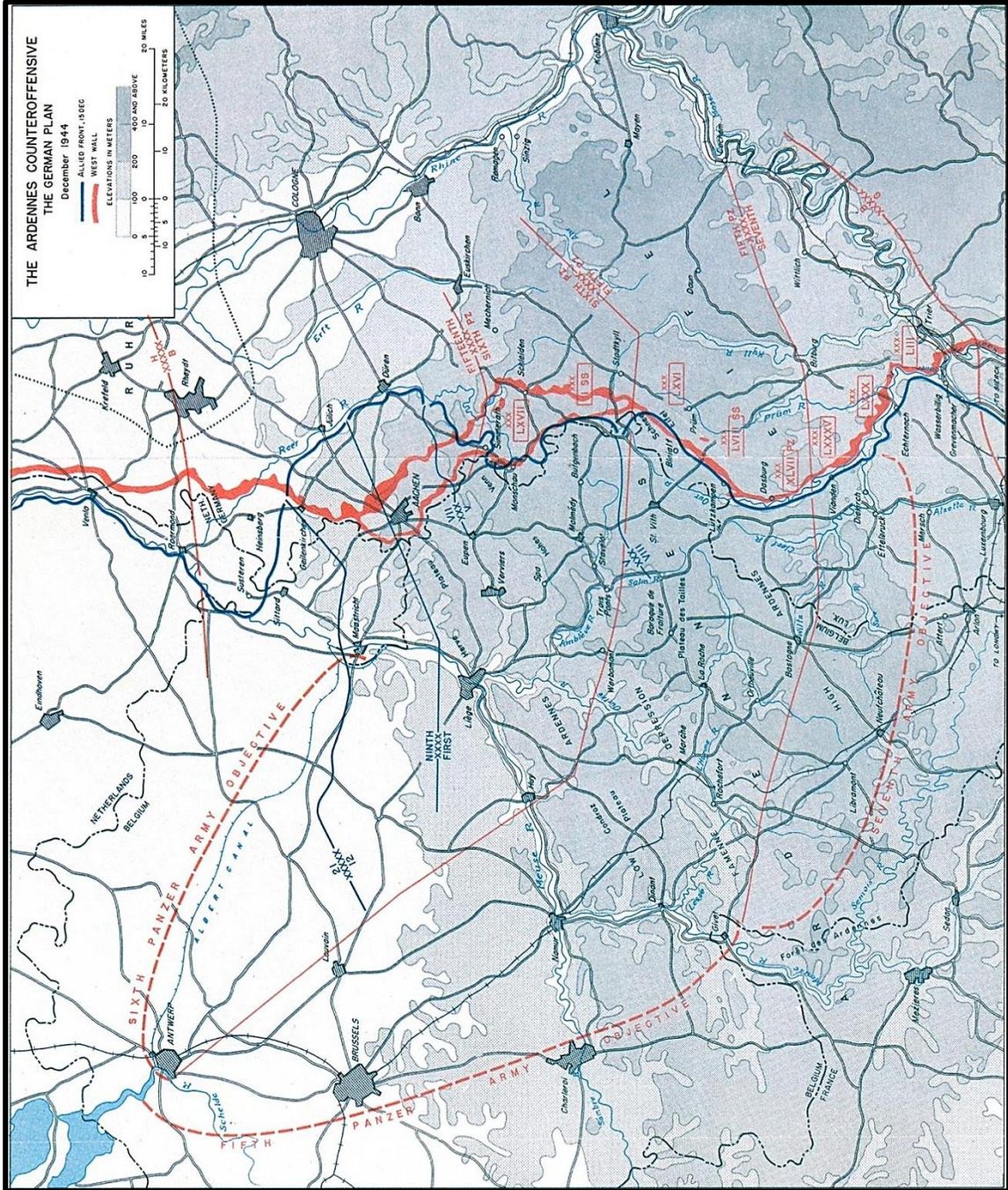
To my sister, Melissa, thank you for your support, love, reassurance and encouragement. I could not have done this without you.

Table of Contents

Title Page	i
Abstract	ii
Declaration	iii
Acknowledgments	iv
Maps	vi
Figures	viii
Introduction	1
Chapter One	6
Theory	6
Literature Review	9
Methodology	18
Chapter Two	20
Leading Up to the Ardennes	20
Chapter Three	33
Physical Forces in the Ardennes	33
Chapter Four	47
Moral Forces in the Ardennes	47
Chapter Five	65
Military Leadership in the Ardennes	65
Conclusion	83
References	87



Map 1: The General Situation in Western Europe, 15 December 1944 (Source: United States Military Academy West Point, 2012)



Map 2: The Ardennes Offensive – The German Plan (Source: Ibiblio, 2009)

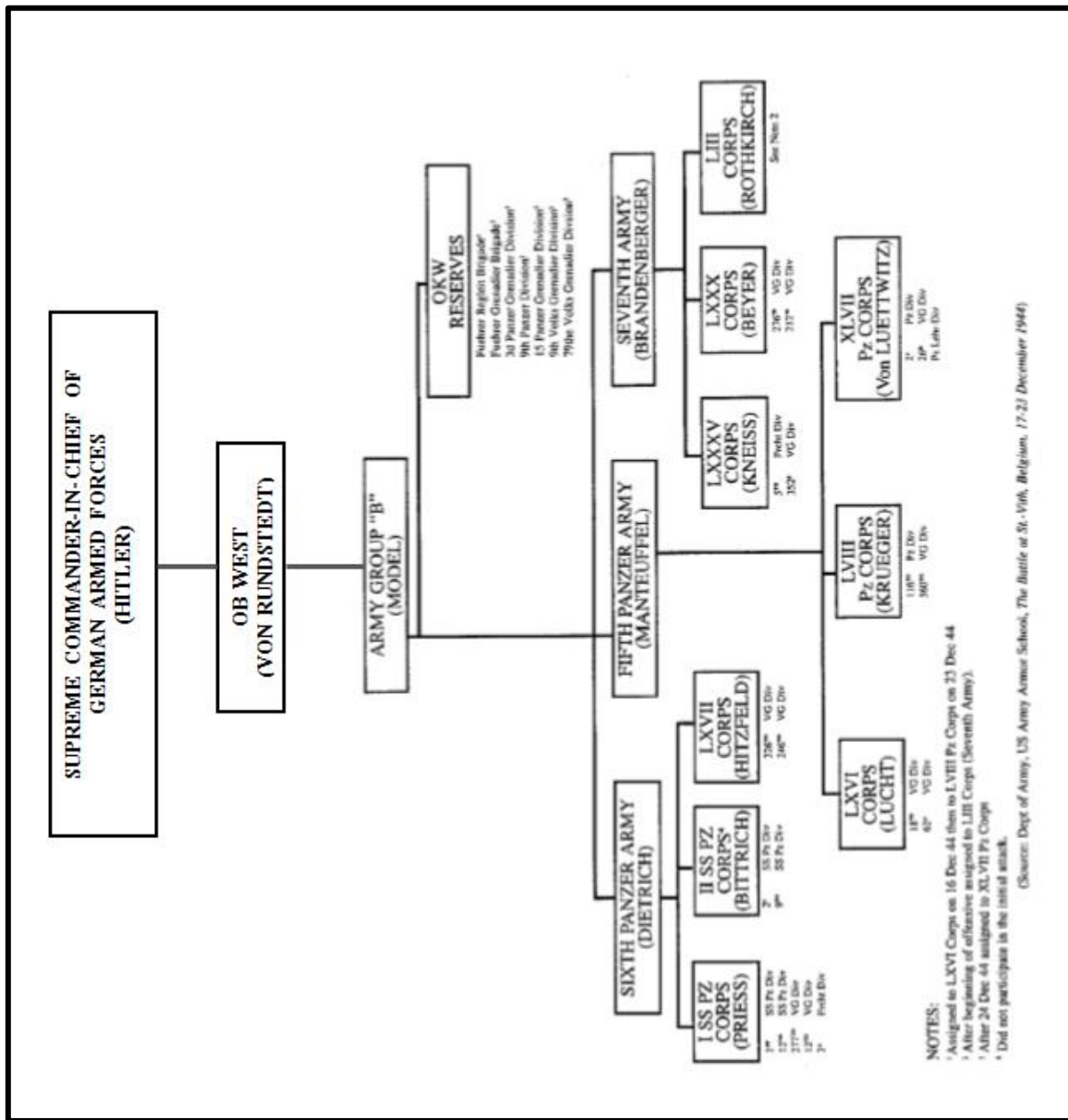


Figure 1: German Command Structure During the Ardennes Offensive (Source: Morelock, 1994, p. 379) [modified]

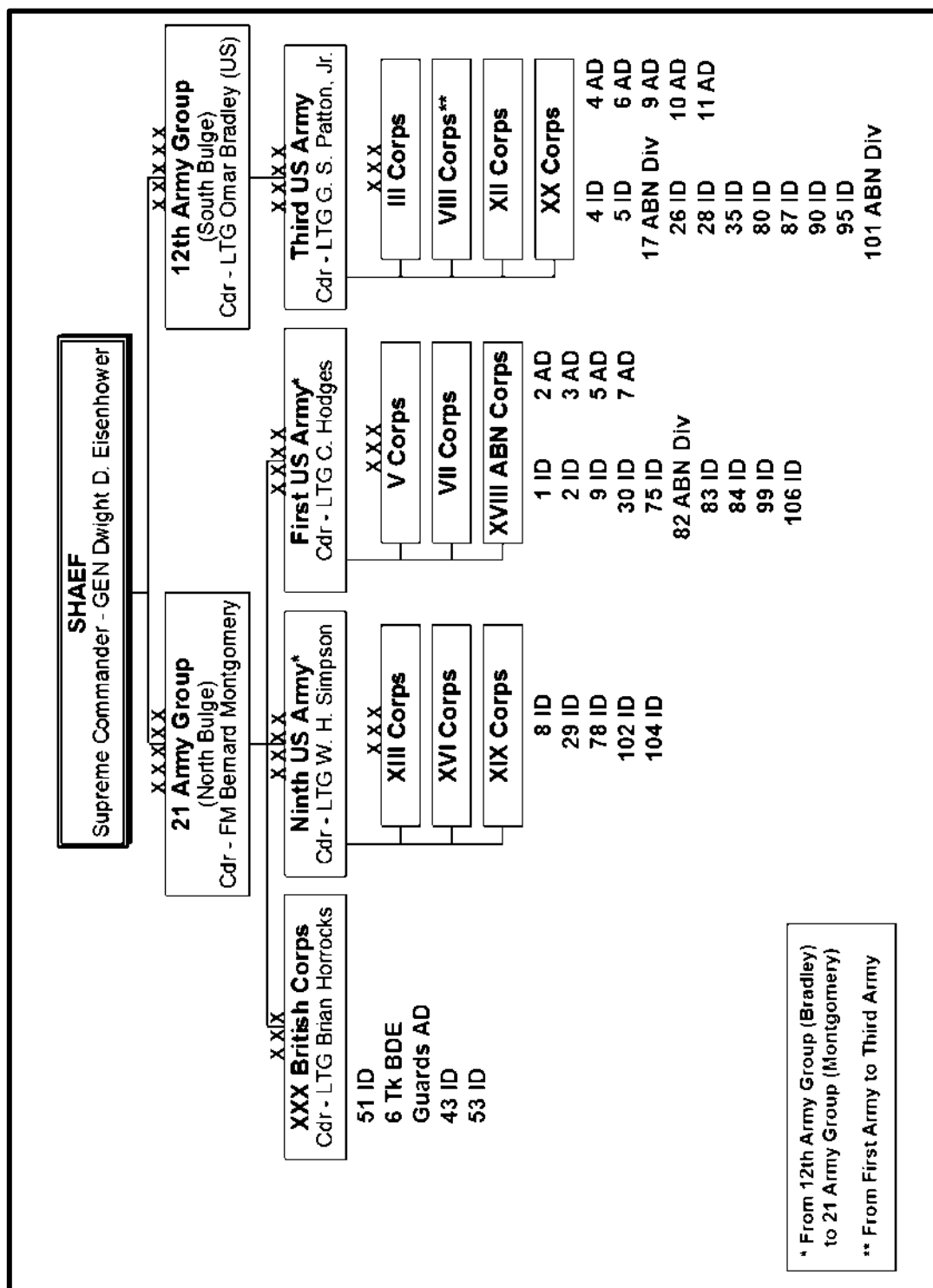


Figure 2: Allied Command Structure from December 20, 1944 (Source: U.S. Army Europe, 2011, tab C, p. 3)

Introduction

The Ardennes Offensive, more commonly known as ‘The Battle of the Bulge’ was the last major German offensive of World War II and took place in the Ardennes region of Belgium, Luxembourg, and France between 16 December, 1944 and January 25, 1945. On December 16, German Forces totalling approximately 250,000 began the attack against a mere 68,822 United States Forces who were resting and refitting in the region (Cole, 1965). There were multiple objectives to the offensive; firstly, the key objective was to capture the port of Antwerp, north of the Ardennes, which was currently occupied by the Allies (Whiting, 1985, p. 23). Secondly, in doing so, the Germany Army was to split the British Forces in the north from United States Forces in the south and create disruption within the Allied High Command (Cole, 1965, p. 17). Lastly, it was expected that the culmination of these objectives would force the Western Allies to sign a separate peace treaty from the Soviets which would allow Germany to focus solely on the war in the east (Cirillo, 2003, p. 5; Cooke & Evans, 2008, p. 9; Ethier, 2009, p. 38; Whiting, 1985, p. 22). By this stage of the war, the physical components were not the only determining factor of successful offensive and defensive actions, the psychological strength of an army’s troops pushed them farther than imaginable.

This thesis will employ Carl von Clausewitz’s theory on moral forces, as outlined in his text *On War* (1993), originally published in 1832, in its analysis of the Ardennes Offensive. Clausewitz’s perspective states that it is

the interaction between physical and moral forces that determines the victor in warfare (Clausewitz cited in Howard, 2002, p. 27). Physical forces are those that are more commonly linked to warfare and include the armed forces, their composition and armament (Clausewitz, 1993, p. 157). A study of the literature reveals that most examinations of the offensive focus purely on the physical forces, yet Clausewitz's perspective perceives this as incomplete as all warfare involves psychological forces. These psychological forces Clausewitz terms 'moral forces' and include courage, morale, and the skill of the commander (Clausewitz, p. 96, 221; Howard, 2002, p. 25; Wallach, 1986, p. 5). This thesis will employ the perspective that physical and moral forces intertwine to produce the final result, therefore an army is more likely to be the victor in warfare if they marshal both physical *and* moral forces.

The aim of the research is to analyse how Allied and German Forces utilised their physical and moral forces and to determine the effects in doing so. The physical forces will form the foundation due to their measurability which will be followed by a deeper analysis of the moral forces. This will include analysing the individual and group sources of the adversaries moral forces as these effect the output of both forces as "war is a trial of moral and physical forces by means of the latter" (Clausewitz cited in Howard, 2002, p. 27). The Ardennes Offensive is an ideal battle to analyse through this perspective as the German Army held a vast physical superiority in the

offensive's initial stage, yet failed to capitalise on this advantage to produce success.

As the last major German offensive of the war, and the United States largest land battle of World War II, the Ardennes Offensive is frequently examined in the literature (Cole, 1965; Forty, 2000; Goolrick & Tanner, 1979; MacDonald, 1993). Despite this, historians continue to focus primarily on physical aspects, suggesting that physical forces were the single influence on the final result (Blanchette, 1998; Cole, 1965; Dupuy et al., 1994; Forty, 2000). While many authors briefly mention moral forces (Ambrose, 2001; Blumenson, 1985), the failure to provide a deeper analysis reveals that there is no comprehensive study of the offensive which then limits our understanding of the offensive, and consequently warfare itself, to a battle defined solely by physical aspects. This gap within the literature can be filled by an analysis employing Clausewitz's perspective on moral forces that has not previously been applied to the Ardennes Offensive. In doing so, this thesis aims to answer the following research questions:

1. Using Clausewitzian theory, what does an analysis of World War II's 1944-1945 Ardennes Offensive reveal about the utilisation and effects of physical and moral forces?
2. To what degree was the Ardennes Offensive determined through physical or moral forces?
3. What were the main events, operations or situations that effected moral forces in the Ardennes Offensive?

This thesis employs historiography to conduct the historical analysis and provide a re-interpretation of the Ardennes Offensive. Historiography is the most appropriate methodology as it allows for the discovery of the various interpretations of the offensive through the study of primary and secondary sources, most notably official histories, memoirs and interviews (Berg, 2001; Lundy, 2008). By analysing the various interpretations presented in the literature, this thesis will produce a re-interpretation of the Ardennes Offensive through the perspective of Clausewitzian theory by applying a connection between the theoretical concepts outlined by Clausewitz to the offensive to provide an explanation for Allied success in the Ardennes.

This thesis is structured according to subjects to allow for a clear and organised analysis. Beginning with Chapter One, the thesis will outline the theoretical perspective, review the literature and describe the methodology. Chapter Two examines the events and decisions leading up to the Ardennes Offensive to provide perspective on its significance to both Germany and the Allies. This chapter will also provide background to the planning of the offensive whilst introducing the German and Allied leaders involved. Chapter Three begins the analysis of the physical forces to establish how the adversaries utilised these forces and conclude the effectiveness of the manner in which they were employed according to Clausewitz's theory. Chapter Four explores the moral forces involved; this analysis progresses from the discussion of physical forces in Chapter Three and explores further by focusing on specific events occurring within the offensive, notably the

Siege of Bastogne. Lastly, Chapter Five investigates military leadership in the Ardennes, discussing the influence of both German and Allied leaders on the utilisation of physical and moral forces and the result of decisions and actions made throughout the planning and execution on Allied success and German failure. The analysis of physical and moral forces in the Ardennes Offensive offers a unique perspective that contributes to the study of the psychological and emotional influence on warfare.

Chapter One

Theory

Carl von Clausewitz (1780 – 1831) is a well-known military theorist whose text, *On War* (1993), originally published in 1832, is considered by many historians to be the most significant text on warfare (Louise Wilmott cited in Clausewitz, 1997, p. ix). Clausewitz's theory of warfare encompasses almost all aspects relating to the operation, ranging from the relationship between attack and defense, political and military objectives, and the tactics of combat. *On War*, and its precursor, *Principles of War* (2003), originally published in 1832, were developed during his experiences in the Revolutionary and Napoleonic Wars; it was through these experiences that Clausewitz became observant to the human dimension of warfare (Howard, 2002, p. 5). This human dimension, or emotionally based element, became what is known as 'moral forces' - forces that are unquantifiable for instance courage and morale, but have a great effect on the execution of war on all levels. Clausewitz's perspective is that moral forces are just as important as 'physical forces' - forces that are more commonly associated with warfare as they include weapons, equipment, and troop numbers (Handel M. I., 2001, pp. 83, 106; Kleemeier, 2007). It is through this theoretical perspective in which the analysis of World War II's Ardennes Offensive will take place.

Clausewitz's (1993; 2003) notion of physical forces consists of three elements: the size of the armed forces, their composition and their armament (1993, p. 157). Unlike moral forces, physical forces have the ability to be quantified and thus make it easier to determine a connection to the outcome of an offensive. Clausewitz's principles on the application of physical forces include utilising a maximum use of force by employing surprise and speed, and having superiority in terms of numbers. Clausewitz states that with physical forces being equal between opponents the determining factor in war would be the moral forces (Howard, 2002, p. 30). Thus, it is the interaction between physical and moral forces that determine the victor as "war is a trial of moral and physical forces by means of the latter" (Clausewitz cited in Howard, 2002, p. 27). Michael Handel author of the classic text, *Masters of War* (2001), expresses Clausewitz's perspective of the relationship between the forces in his article, *Who Is Afraid Of Carl von Clausewitz. A Guide To The Perplexed* (1997):

In addition to mobilizing and using all possible physical/material force, the opponents simultaneously marshal all of the moral and spiritual forces available (e.g., motivation, dedication, and spirit of sacrifice). When one side has reached the limits of its material strength, it can always add to its military efforts by mobilizing all possible moral strength. Moral forces thus act as a force multiplier... (p. 7)

The Ardennes Offensive is an ideal battle to analyse due to the large physical superiority initially held by the German Army.

Moral forces are those that underline all aspects of war and are endless; those that Clausewitz discusses include courage, morale, and the skill of the commander. According to Clausewitz, everything in war is uncertain due to the influence of these moral forces; thus “all military action is intertwined with psychological forces and effects” (Clausewitz cited in Howard, 2002, p. 25). It is this notion that has formed the lens through which the analysis of the Ardennes Offensive has taken place to reveal how moral forces were utilised and the effects of this; which is then used to determine the influence on the troops and consequently their utilisation of physical forces. It is important to note the weakness of the theory which lies in the inability to provide quantifiable standards by which to measure moral forces; regardless the utilisation and effects can be discussed in detail. The three forces that will be analysed are courage, morale and military leadership. Courage: “the highest of all moral qualities in times of danger” (Clausewitz, 1993, p. 96), assists troops in fighting through constant danger and fear and is a result of either habit or positive motivations (p. 97, 158). Morale is the spirit or mood of the individual soldier or the mass; high morale is a result of frequent success or the use of maximum effort but will also depend on why each soldier fought (Clausewitz, 1993, p. 221; Wallach, 1986, p. 5). It is a commander’s responsibility to understand the morale of his troops which leads into the final factor of military leadership. The ideal

military leader has a number of balanced characteristics, that of skilled judgement, a sense of intuition, courage, and determination (Clausewitz, 1993, p. 96). The assessment on the quality of these forces will occur by evidence of the General's adaptability according to actual conditions, displays of fortitude in the face of danger, understanding of their troops moral forces, and by evidence of following their intuitive thoughts. Evidently, moral forces often intertwine and affect not only each other, but also the utilisation of physical forces. Therefore, an army has a greater chance of success if they mobilise both physical *and* moral strength.

Literature Review

Clausewitzian Theory

Carl von Clausewitz's theory deviates from the theoretical writings of nineteenth century military theorists due, not merely to his argument on the importance of moral forces, but to the simple fact that he includes these forces in his argument at all. The literature notices this omission, yet it continues to be unknown as to why his contemporaries, including Antoine-Henri Jomini, known for his work *The Art of War* (2006), fail to mention this human or emotional element. Gat (2001, p. 125) and Martel (2011) believe military theorists omit moral forces due to a dismissal as irrelevant or an inability to quantify these forces unlike physical forces. Michael Handel's text, *Masters of War* (2001), is considered a classic text on the study of military theory and his examination of various military theories concludes that this gap is due to the explanations mentioned by Gat and

Martel, however he adds that physical forces are the most recognised element of warfare, thus naturally they become the focus of developing theories (p. 82). Clausewitz himself expected this, writing before his death that as moral forces are unquantifiable they are often dismissed (1993, p. 216). He goes on to state that any theory that disregards this element is incomplete as all “warfare has psychological effects” (p. 217).

Just as military theorists tend to ignore moral forces in warfare, so does the literature examining Clausewitz’s theory ignore, or note very briefly, his argument on moral forces as detailed in *On War* (1993) and *Principles of War* (2003). Clausewitz’s well known statement that “war is a mere continuation of policy by other means” largely dominates the focus of the literature (Paret, 1992; Roxborough, 1994; Waldman, 2010). However, the examination of moral forces has developed in recent years with authors such as Drohan (2006), Gibbs (1975) and Kleemeier (2007) publishing works which examine moral forces in detail. The development of literature on Clausewitz’s theory of moral forces appears to coincide with the public’s recent interest in the psychological effects of warfare and thus could potentially begin the academic body of work on the concept.

Ulrike Kleemeier’s, “Moral Forces in War” (2007) is among the leading contributions on moral forces in the literature as he expands on the discussion as outlined by Clausewitz in *On War* (1993). Kleemeier provides an extension to the work by breaking down the individual elements of moral forces and is the most comprehensive study found within the literature.

However, he sees one major weakness to Clausewitz's framework of moral forces, that of obedience. Kleemeier challenges Clausewitz's perception of a soldier being largely independent as he states that this can create chaos and issues with leadership (p. 119). Adding obedience to the arrangement of forces, he asserts, will assist in combatting these issues. Brian Drohan (2006) completes a similar discussion in his work, *Carl von Clausewitz, His Trinity, and the 1812 Russian Campaign*, however his discussion appears to simply reiterate Clausewitz's writings due to a similar but slightly different military direction than that of moral forces. Even so, Drohan's work provides the connection of moral forces to additional elements of Clausewitz's overarching theory. Baldwin's (1981) work is similar, whilst not applying moral forces specifically, he discusses the influence of Clausewitz on Nazi Germany. Where the literature lacks further insight is through application of the theory of moral forces to actual warfare. This thesis attempts to fill this gap by analysing a modern offensive through a nineteenth century military theory to provide a re-interpretation of the event.

Similar to Kleemeier (2007), Clausewitz scholar, Peter Paret (1985; 1992) perceives limitations to Clausewitz's approach. Paret believes Clausewitz's approach in employing men like Napoleon as examples to his theory are unsatisfactory for practical application as he states the average soldier will not meet these standards (1992, p. 113). Nonetheless, this alleged 'one-sidedness' does not diminish the importance of moral forces as a whole. Jehuda L. Wallach (1986) approaches the theory in a different manner, stating the theory was never meant to be set rules but a guide. This

stance is more accurate as all soldiers have psychological differences and this is acknowledged by Clausewitz. Thus, no matter the example he utilised in his writings, the application would differ, making Paret's argument irrelevant. Clausewitz utilised Napoleon as an example as he was involved in the Napoleonic War and was privy to these experiences and information that a study of historical warfare could not provide. Wallach believes that the knowledge presented by Clausewitz is beneficial as it stresses the need for commander's to understand the importance of moral forces in warfare (p. 5). In *The Dogma of the Battle of Annihilation* (1986), Wallach very briefly discusses Clausewitz's theory in relation to World War II and on the Ardennes Offensive in Chapter 19 of Book Three (p. 296-300). However, there remains no analysis of both the physical and moral forces in the Ardennes Offensive.

The Ardennes Offensive

The Ardennes Offensive was the largest land battle fought by United States Forces in World War II involving over half a million troops. Consequently it is heavily examined in the literature (Blanchette, 1998; Cole, 1965; MacDonald, 1984; Toland, 1999). These examinations began immediately following the offensive's conclusion to the present day. The Ardennes Offensive commenced with very different physical forces in terms of size, composition and armament (Cole, 1965). Given this disproportion of physical forces, it is surprising that the state of moral forces has been neglected in the literature. Instead, the majority of the literature has focused

on providing a detailed examination of the offensive, with no theoretical foundation for analysis. A re-interpretation of the offensive employing Clausewitz's theory of moral forces may fill the gap in our understanding of the offensive's outcome and provide an alternative explanation for Allied success in the Ardennes.

Hugh M. Cole's, *The Ardennes: Battle of the Bulge* (1965), was published in 1965 as one part of the U.S. Army's official history of World War II. This text is considered by scholars as the most significant work on the Ardennes Offensive and is often used as the foundation for further research (Blanchette, 1998; Dupuy, Bongard, & Anderson Jr., 1994). Each author's extensive research supports the accuracy of Cole's study, proving the methodology and production of results as appropriate. The literature on the physical forces in the Ardennes is vast, providing detailed information to be analysed. In contrast, information on moral forces in the literature is mentioned, yet most fail to investigate further.

Hal C. Pattison (cited in Cole, 1993, p. vii) states that before the offensive began the American soldier was "buoyed with success" with Whiting (1985, pp. 4, 33) adding that they were 'relaxed' and 'tolerant' with commanders confident as most were expecting the war to be over by Christmas. Historians including Forty (2000) connect this state of morale to the almost constant victory in offensive movements since the United States Army had landed on the continent (p. 83). Consequently, the Ardennes region of Belgium, Luxembourg, and France was a resting and refitting

ground for U.S. troops (Blanchette, 1998). Whiting describes the Ardennes in September, 1944:

...the Ghost Front [Ardennes region] had settled into a kind of limbo, a haven of peace in the midst of war. Here the artillery fired mainly for the sake of registration, and patrols probed the enemy lines on the other side of the twin rivers only to keep in practice. (1985, p. 39)

The presentation of the United States contentment can be compared to the presentation of the Germany Army's passion once news of the offensive became known (Cole, 1965). While Whiting (1985, p. 4, 33) believes U.S. troops were relaxed, Forty disagrees (2000, 30-31). This appears similar with the Germans, Whiting stating they were nervous and tense (p. 88) and Forty believing they were still determined (p. 30). MacDonald (1984) continues this assessment stating that the SS Panzer Divisions had morale highest of all (p. 90). Ambrose's (2002, p. 383) opinion differs, stating that the average soldier did not understand the offensive in the west at all which Whiting agrees as he states threats were used to produce effort (p. 56, 57). By connecting the various presentations within the literature on the state of moral forces between the adversaries to Clausewitzian theory it may provide a theoretical explanation for the offensive's final result. As well as broad remarks on moral forces within the Allied and German Armies in their entirety, some authors, including Robert S. Rush (1999) and Stephen Ambrose (2001), have narrowed their focus.

Robert S. Rush's 1999 journal article, "A Different Perspective: Cohesion, Morale and Operational Effectiveness in the German Army, Fall 1944" provides an interesting explanation for Whiting's (1985) presentation of the German Army's passion. Although Rush studies an individual Corps not directly involved in the offensive, the study provides useful information on the state of moral forces in 1944. Rush is one of many authors who state that the majority of German soldiers were continuing to fight even though they did not believe they would ultimately succeed (p. 497). The discussion then turns to the abuse of tactics, including threats of death, to produce the moral forces needed for soldiers to fight intensely which provides explanation for their continued effort. A collection of interviews with the senior German generals involved in the Ardennes Offensive including Gerd von Rundstedt, Josef "Sepp" Dietrich, and Hasso von Manteuffel, is assembled in Danny S. Parker's text, *Hitler's Ardennes Offensive: The German View of the Battle of the Bulge* (1997). Parker observes the lack of belief amongst the generals as to the possibility of success which aligns with Rush's observation of German soldiers lacking the belief in success in the overall war. Kleemeier's (2007) study of moral forces, in particular his addition of obedience, provides an interesting link to the typical German soldier's disbelief in success but continued fighting in combat. The gap in the literature then lies in whether the belief or disbelief in success, and how moral forces were produced, effected the actions of the troops and produced greater force.

Rush (1999) also provides another layer to the development of moral forces, stating that newly formed units are unlikely to have as high a state of morale as those that have served with one another for a longer period of time (p. 479). As the German Army had recently altered the drafting age to increase the amount of divisions available for the offensive, nearly one million soldiers were added to the Army (Blanchette, 1998, p. 17). Stephen Ambrose in his text, *Band of Brothers* (2001), follows one U.S. Company from their first days of combat training to the end of World War II, including their involvement in the Ardennes. These texts are invaluable, whereas Whiting (1985) and Forty (2000) provide overall depictions of the Ardennes and moral forces, Ambrose and Rush provide a more narrowed examination. The literature also accounts for specific events and situations within the Ardennes such as Weingartner's (1979) focus on the Malmédy Massacre, an event that shook Allied morale, and Marshall's (1988) focus on the Siege of Bastogne.

The literature surrounding Allied and German leadership in the Ardennes Offensive is led by J. D. Morelock's book, *Generals of the Ardennes: American Leadership in the Battle of the Bulge*, (1994). Morelock focuses on six generals involved in the Ardennes from the Supreme Commander of the Allied Forces, General Dwight. D. Eisenhower through to Division level. Danny S. Parker's collection of interviews and essays in his text, *Hitler's Ardennes Offensive: The German View of the Battle of the Bulge* (1997) is similar; however this collection provides first-hand accounts with the main German generals involved. Both Morelock and

Parker's texts provide valuable details that can be analysed and linked for comparison purposes. An analysis of the literature on Allied and German leadership will provide the information necessary to discuss the use of leadership in the planning and execution of the offensive and the effects of this leadership throughout.

Primary source documents are essential for the analysis to occur, providing unpolluted accounts of the events. Collections of letters, diary entries and various documents by Allied forces can be accessed through the Eisenhower Library. The study of memoirs written following the war, such as Eisenhower's *Crusade in Europe* (1997), Patton & Harkin's *War as I Knew It* (1995), and Bradley's *A Soldier's Story* (1975) occur through a critical eye due to natural or intended bias. However, the memoirs will be supported by biographical works which provide detailed examination of the situation and individuals (Ambrose, 1990; Blumenson, 1985). Cole (1965, p. 17) Dupuy, et al. (1994, p. 10), and MacDonald (1984, p. 22) agree that a common objective of the offensive was to cause chaos in Allied leadership. By analysing the decisions, actions and movements of Allied and German generals at the three major levels of leadership presented in the literature a conclusion can be made as to the effectiveness of the utilisation of leadership in the Ardennes.

Methodology

This thesis employs historiography as a methodology in its production. Historiography, or historical research, is the most appropriate methodology for this analysis as it allows for the different presentations and interpretations of the offensive to be revealed and allows for an in-depth study due to the vast amount of information able to be obtained, analysed and interpreted (Berg, 2001, p. 210-211). By analysing the presentation of statistical data and varying interpretations of the Ardennes Offensive, historiography will allow this thesis to provide an explanation as to the utilisation and effects of physical and moral forces and their effect on the outcome.

As historiography employs analysis and interpretation of sources it is reliant on both primary and secondary sources (Berg, 2001). This thesis will draw its research and evidence from both sources through document analysis (Lundy, 2008). Primary sources will be primarily from official histories, memoirs and interviews. The official histories will ensure the evidence used to support the thesis' argument is accurate and verifiable, but will still require a critical eye to catch subjectivity (Andrews, 2008, para. 2). Secondary sources are also important as they provide analyses and interpretation of a variety of sources, particularly sources that are unable to be collected due to research restrictions or limitations. Secondary sources also often provide the main arguments on the topic following a thorough examination and can provide quantitative data essential for an analysis of a

military offensive as this data becomes the constant in which the analysis is formed around. The limitations as to this methodology are that the analysis is limited to research previously conducted and literature that is available to the public.

Historiography as a methodology and historical research and document analysis as methods allows for a relationship to form between the theoretical ideas of Carl von Clausewitz and the Ardennes Offensive (Edwards, 2000, pp. 7-11). Following this, the information obtained can provide evidence to support the argument that moral forces had a large effect on the execution and outcome of the Ardennes Offensive which has previously not been interpreted in such a manner. In doing so, this thesis will answer the following research questions:

1. Using Clausewitzian theory, what does an analysis of World War II's 1944-1945 Ardennes Offensive reveal about the utilisation and effects of physical and moral forces?
2. To what degree was the Ardennes Offensive determined through physical or moral forces?
3. What were the main events, operations or situations that effected moral forces in the Ardennes Offensive?

Chapter Two

Leading Up to the Ardennes

This chapter details the events and decisions leading up to the Ardennes Offensive, beginning from the outbreak of World War II. This will explain the significance of the offensive to both Germany and the Allies and the importance of having the port of Antwerp in their possession.

On September 1, 1939 the world was once again plunged into war (Evans, 2008a; Taylor, 1975). Germany's invasion of Poland, under the direction of the Führer of Germany, Adolf Hitler, was quickly followed by a formal declaration of war by both Britain and France, whilst the United States, who was not directly threatened due to their remoteness, refused to intervene in what they considered European affairs (Kimball, 2004, p. 86). All nations viewed the second war of the century with its predecessor in mind, thus contributing to their conflicting stances at its outbreak (Mawdsley, 2009). German Forces and their allies quickly overran nations to provide the nation's supposed great need for *lebensraum* (living space), this resulted in mass German support for the war effort (Michel, 1973, pp. xv-xvi). Hitler and the Nazi regime had a number of war goals: conquer Europe for living space for the Third Reich, reverse the damage caused by the Treaty of Versailles of World War I, and exterminate races he deemed responsible or despised (Evans, 2008a).

The fall of France on June 22, 1940 was both unexpected and a debilitating blow to the Allies. Germany, however, was soon to be at the height of their eventual six year war. Hitler's decision to invade the Soviet Union in June 1941 began the start of Germany's downfall. Against the advice of his senior generals and turning against the non-aggression pact between Germany and the Soviet Union, Hitler ordered for a full-scale attack on the Soviets named Operation Barbarossa (Mawdsley, 2009; Michel, 1973, p. 9). World War II scholars almost unanimously agree that Operation Barbarossa was a gamble that German Forces were not prepared for logistically or operationally (Mawdsley, 2009; Taylor, 1975). A year after Operation Barbarossa began it was evident that the German Army was running out of resources, they were simply unable to match the speed in which the Allies were able to produce and dispatch equipment (Taylor, 1975, p. 32). While the invasion of the Soviet Union was always a major war aim, it was also necessary to gain the resources needed to continue the war.

Whilst still not directly involved, the United States became according to Supreme Commander of the Allied Forces, General Dwight D. Eisenhower (1997), the "arsenal of democracy" (p. 1) in their fight against Nazism and their principles, ranging from totalitarianism to expansionism. The United States became an essential part of the Allied Powers with their program titled 'lend-lease' providing material, equipment and supplies to the Allied nations to assist in the fight against the Nazis (Lovelace, 2014, p. 593). It was not until the Japanese attack on Pearl Harbor in December 1941

that the United States was forced to declare war on the aggressor. Germany, after signing the Tripartite Pact with Japan, was then forced to declare war on the United States. The war had officially become a world war fought in the air, sea, and on the land with all the Great Powers involved (Michel, 1973, p. 120; Taylor, 1975, p. 81, 127).

The Western Allies - United States, Britain and France, prepared for a number of years to begin an invasion of Europe and defeat Nazi Germany, to coincide with operations in North Africa and the Mediterranean. On June 6, 1944, the invasion began in Normandy, France. The next few months were debilitating for German forces, as they began losing huge numbers of territory, men and equipment as the Allies swept through France and Belgium towards Germany. In doing so, the port of Antwerp, located north of the Ardennes region of Belgium, was lost to Allied forces (Cole, 1965; MacDonald, 1984). This port had significance to both the Allies and Germans. In Allied hands, their logistical situation would be partially solved; the supplies needed in their pursuit to destroy Nazi Germany would arrive from Britain in Antwerp, shortening supply lines. The assistance of Antwerp's port would only speed up German demise. Thus, it was in Germany's best interest to do what was necessary to keep Antwerp out of Allied hands as it was only a matter of time before they, as well as Soviet forces from the East, pushed into Berlin (Evans, 2008, p. 657). Whilst Stalin was able to operate the Soviet war against Nazi Germany in his separate theatre of war, Britain and the United States were required to collaborate

with one another. Whilst necessary, it was not easy (Weinberg, 1994, p. 722).

The motivation of the Allied nations to fight against Nazism can be summed up by the Supreme Commander of the Allied Forces, General Dwight D. Eisenhower's reflections in his post-war book, *Crusade in Europe* (1997): "We could not afford to sit still doing nothing" (p. 340). Nazi Germany had almost total power and control over their occupied territories, submitting these nations to their rules and ideological standings, exterminating millions of people that they blamed for Germany's demise in World War I, including the Jews and Communists, and ruining economies and industries to support the war effort. By 1944, Germany had lost most of its allies; Romania, Bulgaria and Finland had deserted Germany, the Allies were fighting firmly in Italy, and nations were now beginning to increasingly refuse Germany the resources they relied on (Michel, 1973, p. 55; Taylor, 1975, p. 124). Not only was the military situation declining, the morale of both the troops and population followed (Evans, 2008b, p. 468). With the Allies closing in on from both east and west, Hitler's 'no withdrawal' mindset left two options available: an offensive in the east, or the west. Hitler decided on the west. In December, 1944, a mere six months before the conclusion of the War in Europe, Germany launched its last major offensive in the Ardennes; an offensive that was significant to both Allied and Axis Powers in a time of such desperation.

On September 16, 1944, Adolf Hitler had his daily morning meeting in his office with Generaloberst Alfred Jodl, the German High Command of the Armed Forces (OKW) and the Armed Forces Operations Staff, including Generalfeldmarschall Wilhelm Keitel (Mawdsley, 2009, p. 391; Parker, 1997, p. 233; Whiting, 1985, pp. 10-11). Jodl, as the Chief of the Operations Staff, who was charged with planning and operations, announced Germany's grim situation. Amongst the various other matters, the heavily valued port of Antwerp was currently in Allied hands (Whiting, 1985, p. 23). Not yet fully operational, Antwerp had the potential to drastically increase the amount of supplies available and speed up the Allied drive into Germany (Bradley, 1975, p. 416). Both Allied Forces in the West and Soviet Forces in the East were regrouping and organising supply lines and replacements troops, resulting in them being unable, for the time-being, to continue movement towards Germany (Evans, 2008b, p. 657). After Jodl discussed the Allied situation Hitler suddenly announced his decision that he firmly believed would turn the war back in Germany's favour: "I have just made a momentous decision. I shall go over to the counter-attack, that is to say...here, out of the Ardennes, with the objective--Antwerp" (cited in Cole, p. 2).

The decision to form an offensive in the west with Antwerp as the main objective was based upon the facts that the Soviet Red Army was overwhelming in comparison to the Western Allies, and the distances in the Soviet Union were too large to gain any major objectives with the forces

available (Cirillo, 2003, p. 4; Whiting, 1985, p. 220). The route to Antwerp would be through the heavily forested region made up of the Ardennes and Eifel, a distance of 150 kilometres (Cole, 1965, p. 39; Whiting, 1985, p. 23). The small towns in the area are essential to the road system, the most important being Bastogne in the south and St. Vith and Malmédy in the north as they are essential to occupying the area (Cirillo, 2003, p. 6). The region is composed of forests, hills, ridges and valleys with the main rivers being the Meuse and the Our (Dupuy, et al., 1994, p. 10; MacDonald, 1993, p. 19) Cole (1965) describes the terrain: “The area through which Hitler chose to launch his counteroffensive was, with the exception of the Vosges, the most difficult terrain on the entire line of the Western Front” (p. 39).

In December 1944, the ninety-six kilometre front of the Ardennes was defended by four divisions of the VIII Corps, U.S. First Army, 12th Army Group, commanded by Corps Commander Major General Troy Middleton (Dupuy, et al., 1994; MacDonald, 1984, p. 50). With only the 4th, 28th and 106th Infantry Divisions and 9th Armoured Division, totalling 68,822 troops, defending such a vast area, the Allies were obviously not expecting an attack (Bradley, 1975, p. 439; Eisenhower, 1997, p. 345; Smith, 2014). Hitler based the plan on this assumption (Cole, 1965, p. 48). Eisenhower describes the reasoning for the decision to place only four divisions along the front, “Our conclusion was that in the Ardennes region we were running a definite risk but we believed it to be a mistaken policy to suspend our attacks all along the front merely to make ourselves safe until

all reinforcements arriving from the United States could bring us up to peak strength” (p. 228). Two of the divisions in the Ardennes were ‘green’ units, meaning they were newly formed. The remaining two were veteran divisions resting and refitting after months of heavy fighting (Cirillo, 2003, p. 7; MacDonald, 1984). Under General Montgomery, the British 21st Army Group and the First Canadian Army were situated north of the Ardennes and under General Devers, elements of the the U.S. 6th Army Group were in the south (MacDonald, 1984, p. 49-50). Hitler aimed to capitalise on the Allied decision to only lightly defend the area.

Hitler’s military advisors were struggling with his decision. Their desire to act in accordance with the Führer’s orders was contrasted by the desire to act according to appropriate military tactics and planning. The literature makes an important note to almost all aspects of Hitler’s plans for the offensive being almost identical to the offensive which took place through the Ardennes in 1940 which resulted in great success (Forty, 2000; Goolrick & Tanner, 1979). Despite the differences in season, weather and most importantly the current state of the German Army, and the United States defenders being of greater calibre than the French Army in 1940, the offensive was almost a carbon copy (Cole, 1965, p. 18; Forty, 2000, p. 65). Jodl, as the Chief of the Operations Staff, was tasked with making a detailed plan according to the German Army’s capabilities; however Hitler continuously argued that Antwerp as the objective was non-negotiable (Cole, 1965, p. 17). Jodl disagreed but the plan went forth to Gerd von Rundstedt, the Commander-in-Chief West, and Field Marshal Walter Model

of Army Group B, whose Armies were to form the attack. Both men quickly agreed with Jodl that the objective was as von Rundstedt states, “far too ambitious” (cited in MacDonald, 1984, p. 35). It should also be noted that von Rundstedt was only recently reinstated to Commander-in-Chief West after Hitler had taken the position from him earlier in the year - another aspect Hitler was attempting to recreate from the 1940 offensive. Just a few of the problems with the plan included German troops having less training and experience than they had in 1940, the supplies available not being in proportion to the objective, the Allies’ air superiority, the Army’s flanks would be exposed, and the need for manpower would require changes to conscription and men fighting in the East (Cole, 1965, p. 25; Forty, 2000, p. 42; Parker, 1997, p. 73).

In an attempt to give the German Army a chance at success, the leaders discussed five alternative plans that would be appropriate for the physical forces available to them and according to the state of morale after five years of war (Hart, 1983, p. 447). All plans were dismissed; Hitler’s failure to logically assess the disagreements put forward by his staff resulted in the plan moving forward with little alterations. Following this, the Army commanders who were to be involved then became privy to the plan. Generaloberst der Waffen-SS Josef “Sepp” Dietrich of the Sixth Panzer Army, General der Panzertruppen Hasso von Manteuffel of the Fifth Panzer Army and General der Panzertruppen Erich Brandenberger of the Seventh Army also all disagreed. Von Manteuffel and his superior, Model, managed to get Hitler to change various tactical details but it became apparent that the

offensive would be executed according to the plan set forth months earlier by Hitler (Cole, 1965, p. 173). Dietrich, whose Army was to form the main thrust asserts his opinion:

All Hitler wants me to do is cross a river, capture Brussels, and then go on and take Antwerp! And all this in the worst time of the year through the Ardennes where the snow is waist deep and there isn't room to deploy four tanks abreast let alone armored divisions! Where it doesn't get light until eight and it's dark again at four and with re-formed divisions made up chiefly of kids and sick old men – and at Christmas! (MacDonald, 1984, p. 37)

The plan was as follows: Army Group B under Field Marshal Walter Model would have three armies for the offensive. Beginning at 5:30am on December 16, 1944, the three armies would launch their attacks with infantry, followed by tanks, through the Ardennes between Monschau and Echternach (Dupuy, et al., 1994, p. 17; Hart, 1983, p. 458). The Sixth Panzer Army under the leadership of Dietrich would be the main attacking army and would be opposing the U.S. 99th Infantry of the V Corps. They were to move northeast, cross the Meuse River between Liege and Huy, then continue to Antwerp (Cole, 1965, p. 19; Hart, 1983, p. 198). They were to capture the town, Malmédy, in doing so. The Fifth Panzer Army under von Manteuffel were to cover the left flank of Dietrich's Army by holding

the line approximately 15 miles to its south with the towns Dinant, Namur, Brussels and Antwerp along this line (Cole, 1965, p. 75). In doing so, the Fifth Panzer Army would cross the Meuse River between Huy and Dinant then move on to Brussels (Parker, 1997, p. 236). They were facing the U.S. 106th and 28th Infantry Divisions and were to capture St. Vith and Bastogne (Toland, 1999, p. 20). The Seventh Army under Brandenberger was to provide a supplementary role; composed mainly of infantry, their aim was to cover the south flank of the Fifth Panzer Army and would be facing the U.S. 28th and 4th Infantry Divisions. The first objective of reaching the Meuse River was to be reached in four days (Cirillo, 2003, p. 28). The need to successfully recapture Antwerp quickly was essential before the Allies could produce a staunch defense. If successful, Cirillo (2003) states that a third of the Allied ground forces would be annihilated (p. 5).

Although Antwerp was the major objective of the offensive, scholars studying the offensive discuss additional aims. Along with the logistical problems resulting from the capture of Antwerp, Hugh M. Cole, the United States Army's official historian, in his official text, *The Battle of the Bulge* (1965), states Hitler declared the separation and encirclement of the British (and Canadian) forces to the north from the United States forces in the south would lead to chaos between British and United States leaders (p. 17). He saw the Allied coalition as a front with tension and conflict behind what he considered an allied façade. Once the Allies were destroyed and in disagreement with one another, Hitler believed this would force them to surrender and he could force a separate peace treaty from the East then

focus solely on destroying the Soviets (Cooke & Evans, 2008, p. 9; Whiting, 1985, p. 22).

Along with the obvious need for an advantage in physical and moral forces, German success was heavily dependent on a number of factors. Danny S. Parker in his text, *Hitler's Ardennes Offensive: The German view of the Battle of the Bulge* (1997), assembled various interviews and essays by the key leaders involved in the offensive. Jodl, von Manteuffel, and Brandenberger all state that a primary factor necessary for success would be extreme weather, that of fog, mist, rain, heavy winds and snow (pp. 6, 141, 225) This would force the grounding of the superior Allied air force (Cirillo, 2003, p. 5). The importance of the air force is evident in Eisenhower's (1997) memoir as he states, "As long as the weather kept our planes on the ground it would be an ally of the enemy worth many additional divisions" (p. 345). This grounding would firstly, prevent the Allies from conducting aerial reconnaissance and discovering the massive build-up in the Schnee-Eifel (p. 346), secondly, prevent the Allies from conducting defensive operations from the air, and lastly, from dropping essential supplies to their troops.

The prevention of Allied intelligence becoming privy to the upcoming offensive would also be dependent on keeping any information pertaining to the offensive secret. Hitler was so insistent on total secrecy that historian, Cole (1965), states the death penalty was the ultimate consequence and the small number of men privy to the plan were required to

sign contracts as to this condition (p. 49). In addition, the offensive was named '*Wacht Am Rhein*' (Watch on the Rhine) to appear to be a defensive action (Cooke & Evans, 2008, p. 9), misinformation was purposefully recorded in documents (MacDonald, 1984, p. 39, 40), and a complete radio silence was ordered (Cirillo, 2003, p. 10; Dupuy, et al., 1994, p. 37). The secrecy that was so essential was necessary to successfully surprise (and then destroy) the four divisions that defended the area. If any information was to be discovered by the Allies, they would quickly reinforce the area and the possibility of procuring Antwerp would be even more improbable.

The tactic known as *Blitzkrieg*, involving surprise and speed, was often employed by the German Army in World War (Evans, 2008b, p. 179; Hart, 1970, p. 27). With total secrecy, the ability to surprise the four divisions, the 4th, 29th and 106th Infantry Divisions and the 9th Armoured Divisions of the First Army, in the Ardennes was essential as it would provide the ultimate advantage (Smith, 2014). The Supreme Headquarters Allied Expeditionary Force (SHAEF) deemed the Ardennes not conducive to an offensive and consequently, were not concerned with such a possibility and placed only four divisions in defense of the area (Smith, 2014). The lack of Allied intelligence (of which they were usually highly confident in) also contributed to this assessment and would assist in the next factor necessary for success in the Allied High Command underestimating the force of the attack and failing to produce swift countermeasures (Blumenson, 1985, p. 245). If so, the first elements of the German Army were expecting to reach the Meuse River in less than four days (Parker,

1997, p. 6). However, to do so they were dependent on fuel. If the German Army were to reach Antwerp, the capture of Allied fuel supplies that were located in Liege and Verdun to the west of the Meuse River were essential (Eisenhower, 1997, p. 338, 348-9). Supplies were so low that the German Army was not expected to even reach Antwerp without obtaining the enemy's supplies.

The Ardennes Offensive, more commonly known as the "Battle of the Bulge" due to the German penetration creating a bulge in the Allied line began on December 16, 1944 (Eisenhower, 1997, p. 335). The planning and execution took place entirely under Adolf Hitler's personal command. His interference in the planning stages was filled with disagreement from his military advisors and generals. Yet the offensive moved forward with the main objective being to capture the port of Antwerp. Relying on various aspects for success, the offensive needed to employ total secrecy and the tactic of *Blitzkrieg* if it were to have any chance of successfully surprising and destroying Allied forces in the region. To provide further insight into why the Ardennes Offensive failed so miserably for the German Army the following chapter will analyse the utilisation and effects of physical forces.

Chapter Three

Physical Forces in the Ardennes

When analysing the Ardennes Offensive we must first make ourselves acquainted with the physical forces as these provide qualitative figures that become the foundation for further examination, and the basis for Chapter Four's analysis of moral forces as the two are interconnected. This chapter will demonstrate the physical standings at the offensive's commencement as the offensive was dependent on a large physical advantage. Following this, the discussion will then center on how each side utilised their physical forces, whether this utilisation was advantageous, and the effects of this.

Physical Standings of the German and Allied Armies

Carl von Clausewitz in Book Three, Chapter 8 of *On War* (1993), originally published in 1832, classifies physical forces as one of the five elements of strategy that characterise an engagement (p. 215). The framework for physical forces consists of three elements: the size of the armed forces, their composition, and their armament (materiel and equipment). These elements are often the focus when examining historical military events and often the only strategic element examined. This is fundamentally flawed for two reasons. Firstly, according to Clausewitz, military action, and warfare itself, is never concentrated against physical forces alone, it is also concentrated against moral elements, and always endeavours to break-down an adversary's moral forces (p. 157). Secondly,

physical destruction will always have a moral effect; consequently the two, physical and moral, cannot be analysed without consideration for the other. However, this is not to say that physical forces are not important; in fact, the opposite is true: their importance is impossible to overlook. Without an appropriate armed force utilising modern and quality equipment the armed force has little chance of success as all warfare is based on the destruction of an enemy's force, and the way to achieve this is primarily through the utilisation of physical forces (p. 111).

When analysing the utilisation of German and Allied physical forces in the Ardennes Offensive it seems appropriate to initially concentrate on their physical standings at its commencement on December 16, 1944. The first of the three theoretical principles stipulated by Clausewitz in *On War* (1993) Book Three, Chapter 8 is the 'most general principle of victory': superiority of numbers, meaning a vastly superior army in terms of numbers is the element most closely aligned with victory (p. 155, 228). Although it would be naïve to state that numbers alone determine an engagement's outcome, it is extremely important (Brodie cited in Clausewitz, 1993, p. 296). The German Army as the attacking force quite clearly had the advantage in terms of the size of their armed force (Ambrose, 2001, p. 173). With three armies, the Sixth Panzer Army, the Fifth Panzer Army, and the Seventh Army involved, the total number of German troops attacking Allied Forces in the Ardennes was over 250,000 (Morelock, 1994, p. 7; Toland, 1959, p. x). United States Forces occupying and defending the 100-kilometre front totalled 68,822, Morelock (1994) accounts it to "one soldier

for every 2 meters” the majority of which were the VIII Corps, which consisted of just over three divisions (Morelock, 1994, p. 235; Toland, 1959. p. 12). Following Clausewitz’s theoretical principles, with German Forces outnumbering Allied Forces to such a high degree the Germans held the *principle of victory* at the offensive’s commencement with numerical superiority.

After examining the quantity of troops, we must now turn to the quality and composition. Situated in the Ardennes on December 16 were Major General Troy Middleton’s VIII Corps, consisting of just over three divisions. The Ardennes was described as “the nursery and the old folk’s home of the American command” (cited in Morelock, 1994, p. 30) which refers to the 4th and 28th Infantry Divisions who were resting and refitting after heavy fighting in the Huertgen Forest in October and November 1944; they were undermanned and exhausted (Morelock, 1994, p. 234; Toland, 1999, pp. 4, 5). The remaining two divisions were on the opposite end of the scale: the 106th Infantry Division had only recently arrived and had no experience in combat. The remaining troops made up the 9th Armoured Division. The 28th, the veteran division, and the 106th, the inexperienced division, were the main target by the German Army on December 16 in the battle for Antwerp. The German Army was in a similar situation with the character of its troops; with five years of continuous warfare the German Army was forced to modify the enlistment age – dropping to 16 years and increasing to 60 years (Cole, 1965; Morelock, 1994, pp. 22-23). In doing so, they were able to create 25 new ‘Volksgrandier Divisions’, however these

divisions were not adequately trained and were not appropriately equipped for such a large undertaking (Cirillo, 2003, p. 4). Many of these new divisions were involved in the offensive. In contrast to the four U.S. divisions involved on December 16, the German Army had thirteen infantry divisions, seven panzer divisions and two panzer brigades (Cirillo, 2003, p. 4). The German Army held physical superiority in almost all respects.

The German Army's advantage in physical forces becomes even more apparent with the final element of armament. Whilst we are forced to adapt Clausewitz's nineteenth century thinking to modern equipment, the theory remains unchanged. Historians, including Morelock (1994) and Cole (1965) offer a comprehensive account of the materiel and equipment available to either side. In his text, *Generals of the Ardennes: American Leadership in the Battle of the Bulge*, J.D. Morelock (1994) expands on the figures by providing a detailed comparison of the equipment utilised by infantrymen, tankers and artillerymen in the Ardennes Offensive. In 1944 the U.S. had the advantage in superior infantry and artillery equipment in terms of both quality and supply, particularly shoulder weapons; however as the offensive intensified the Germans actually had the advantage at almost eight to one in infantry; they were also superior in machine pistols and machine guns (Cole, 1965). Similarly, the Germans also had the advantage to their U.S. equivalent in infantry support and antitank weapons (Morelock, 1994, p. 14, 22). The major difference, however, was in tanks. The German Panther and Tiger tanks were renowned in World War II, forcing the U.S. to attempt to compete not in quality but in quantity of their Sherman tanks. At

its commencement, Morelock states the Germans had a four to one advantage in tanks totalling fourteen hundred against the 242 of the VIII Corps (Morelock, 1994, p. 7, 235; Toland, 1999, p. x). On the other hand, the U.S Army had become increasingly mobile; the German Army could not compare, still relying on horses for transport even after five years of war. Lastly, air support initially favoured the Germans simply for the fact that the weather conditions prevented Allied Forces from utilising their air support for intelligence purposes, logistical reinforcement, and offensive tactics (Morelock, 1994, p. 15). This last element was a major factor in the planning of the offensive.

Morelock (1994) presents an interesting depiction of the U.S. Army in World War II that had a large effect on the utilisation of their physical forces: standardization (p. 11, 12). U.S. standardization created yet another distinction with the German Army as it allowed for a more resourceful use of materiel, equipment and supplies; whereas the German Army, with its unstandardized organisation resulted in a lack of efficiency as specialised divisions relied on varied resources and this “could impact on supply, maintenance and training and a commander’s tactical control” (p. 12). The increased mobility of the U.S. Army by 1944, and its standardization, made it one of the greatest armies in the world (Cole, 1965). However, the German Army’s superiority of numbers was great, thus if they could break through to the west in an undermanned region, destroy as many Allied forces as possible and dash through to Antwerp, Adolf Hitler believed it would change the tide of the war. The Ardennes region, defended by only

four infantry divisions totalling less than 70,000 troops, was this ideal region.

The Utilisation and Effects of Physical Forces

The literature largely agrees that the German Army effectively utilised their superiority of numbers by applying Clausewitz's principle aligning with this superiority – the maximum use of force (Cirillo, 2003; Eisenhower, 1997; Hart, 1983). By employing a complete silence and strict confidentiality clause (with serious consequences if broken) they managed to successfully build-up an enormous physical force with Allied intelligence remaining uninformed, apart from heresy from locals that was quickly dismissed (Bradley, 1975; Eisenhower, 1997). Hitler firmly believed that with their numerical superiority the German Army would quickly overrun the four divisions defending the Ardennes. General Hasso von Manteuffel (cited in Parker, 1997) describes the plan: The plan was for the troops of the Sixth Panzer Army to form the main thrust against two U.S. divisions in the north-east and reach Antwerp in less than a week by crossing the Meuse River between Liège and Huy (cited in Morelock, 1994, p. 5). The Fifth Panzer Army was to cross the Meuse River between Namur and Dinant and the Seventh Army was to protect the flank. On December 16, thirteen infantry divisions and seven panzer divisions thrust through the Ardennes to attack the surprised Allied Forces accompanied by one thousand tanks (Cirillo, 2003, p. 4). Historians examining this offensive have provided another layer of interest by observing the utilisation of an SS Army, the

Sixth Panzer, in the main role. Parker's (1997) text, *Hitler's Ardennes Offensive: The German View of the Battle of the Bulge*, implies this was no coincidence and was purely for the glory that would result from the expected victory. Hitler wanted this glory to be placed upon the SS, not the regular German Army.

While many historians, including Parker (1997) identify the initial German superiority as an initial advantage, further research discovered that this advantage was unable to be effectively exploited. The sheer volume and force of German armament clogged the roads due to the unsuitable terrain creating a build-up of supply lines and traffic jams (the poorly constructed roads also meant that the U.S. Army's mobility became a large advantage) (Cole, 1965). The utilisation of such a large volume of tanks and equipment was also reliant on an adequate fuel supply, of which the German Army did not have (Parker, 1997). Consequently, the need to capture Allied fuel supplies became a major operation during the execution of the offensive; the need to quickly cross the Meuse River was, in part, because of the fuel supplies located there (Toland, 1999). With a fuel supply adequate for less than a 100 kilometre journey, and a terrain obstructing tanks and equipment, fuel was used at a higher rate than expected (McManus, 2007). The German Forces were then unable to utilise their physical forces to their full capacity. The utilisation of physical forces in unsuitable terrain and without the proper equipment became a major complication that prevented the armies from exploiting the surprised and undermanned area defended by the U.S. VIII Corps who were unprepared and unequipped for such an attack.

Evidence to support this can be seen in Parker's (1997) compilation of interviews in which Dietrich and von Manteuffel, of the Sixth Panzer and Fifth Panzer Armies, state that the terrain and inadequate fuel supplies were major factors that assisted in their defeat. Von Manteuffel states that by the fourth day, it was evident that the offensive had failed. The analysis reveals that Clausewitz's theoretical principle of superiority of numbers had a large counter effect for German Forces on the German offensive.

The German High Command was depending on Eisenhower and his advisors underestimating the sheer force of the offensive and consequently taking an extensive amount of time to utilise U.S. strategic reserves (Cole, 1965; Dupuy, et al., 1994). Following the December 16 breakthrough, the following day Eisenhower's immediate direction for the 82d and 101st Airborne Divisions to move to St. Vith and Bastogne had a large effect on the German timetable (Ambrose, 2002, p. 197) Not only were two major towns now heavily defended since the arrival of the 82d and 101st Airborne Divisions on December 19, there were now approximately 30,000 troops brought into the two towns and surrounding areas, decreasing the German numerical advantage and preoccupying thousands of German troops. In *On War*, Clausewitz (1993) positions his view on strategic reserves, declaring it an 'essential condition of strategic leadership' to hold reserves in direct relation to the 'degree of strategic uncertainty' (p. 247). This will be discussed in detail in Chapter Five due to the moral nature of intuition leading this decision. However, the utilisation of such strategic reserves in such a rapid manner without full understanding of the situation undoubtedly

played a large role in preventing German Forces from exploiting the undermanned Ardennes (Ambrose, 2001; Cole, 1965; McManus, 2007; Toland, 1999).

Along with the utilisation of the 82d and 101st Airborne Divisions, the strategic reserves for the entire northwest Europe, Eisenhower (1997) ordered for the movement of physical forces still in Normandy to the Ardennes. Ambrose (2001) provides data of 250,000 men and 50,000 vehicles moving to support Allied Forces in the Ardennes (p. 174). German Forces no longer had numerical superiority. The relatively clear routes outlined in the German planning stages were now heavily defended, creating additional obstacles. Ambrose (2001) boldly states the extraordinary movement of such a large number of forces to the Ardennes as an “achievement unprecedented in the history of war” (p. 174). The German advantage decreased even further on December 23rd, one week from the offensives commencement, when the weather cleared. The weather conditions (fog, mist, and snow) were no longer an assistive element to the Germans as Allied air support was now able to be brought into the offensive. The Allies were now able to receive reinforcement of their physical forces by air and were supported with additional defense (Ambrose, 2001, p. 186; 2002, p. 225). This was a major factor that effected German success in the Ardennes.

Historians, in their examinations following the offensive, and the major German leaders involved before and during the offensive, agree that a

key element needed for German success was to successfully surprise the U.S. VIII Corps defending the Ardennes and consequently Allied leaders (Parker, 1997; Toland, 1999). Clausewitz describes surprise as “the means to gain superiority” (1993, p. 233). Utilising physical forces in conjunction with surprise can result in a devastating moral effect on the enemy, creating chaos and confusion, and allowing the surprised defenders little time to comprehend the attack. The Germany Army frequently utilised their physical forces through the medium of surprise throughout the war (and were highly successful in doing so). While by 1944 it was a well-known tactic by the enemy, in the 1944 Ardennes Offensive it was highly successful in its effect; chaos and confusion formed amongst the troops defending the Ardennes following the December 16 breakthrough and continued to the highest personnel. Allied commanders differed heavily in their strategies to combat the breakthrough, and as there was not one sole ground commander, disagreements prevented quick response to the attack. Eisenhower, in an attempt to revert the chaos that had resulted, deemed it necessary to have one sole ground commander. The effect of the German breakthrough was a complete command handover of ground forces north of Bastogne to General Montgomery on December 20, 1944 (Morelock, 1994, p. 64, 66). The chaos and disorder that German High Command was expecting amongst Allied High Command, was certainly an effect of the breakthrough.

Whilst unrelated to any specific principles recognised by Clausewitz, the effect of disagreement between these key players undoubtedly effected

the eventual utilisation of physical forces. With Montgomery's new control, he became, according to Eisenhower (1997) and General Bradley (1975), over-cautious and unwilling to commit to a swift counterattack. Weigley (cited in Morelock, 1994, p.68) distinguishes Montgomery as focusing strategically on organising forces for the final goal of defeating German forces by pushing into Berlin and ending the war under his single control as ground forces commander. Thus, Montgomery extending the Ardennes Offensive was a consequence of him planning beyond the offensive and centering these plans upon recognition and ultimately his envisaged reputation. Eisenhower, on the other hand, wanted a swift counterattack to take control of the offensive and defeat Germany's last reserves which would ultimately affect the Allied drive across the Ruhr and into Germany (Morelock, 1994, p. 68). Following this a major consequence of the utilisation of physical forces and the change in command was the relationships between the military leaders.

As shown, the decision on when to form a counterattack was a source of major disagreement between Allied leaders. The utilisation of physical forces by Montgomery in the counteroffensive was deemed slow by Eisenhower and various other commanders (Bradley, 1975, p. 416; Morelock, 1994, p. 68). Eisenhower wanted to "exploit the opportunity" (Weigley, cited in Morelock, p. 68) produced by the German offensive as he saw it as an opportunity to capitalise on by destroying as many German forces, materiel and equipment as possible to make the eventual journey into Germany easier (Morelock, 1994, p. 63). Consequently, he sought to initiate

a counteroffensive as quickly as possible once strategic reserves and additional forces had moved into play to assist in the defense of the Ardennes. Whilst General George S. Patton, commander of the U.S. Third Army had initiated his part of the counteroffensive in late December, it was not until January 3, 1945 that Montgomery initiated his part of the counteroffensive (Ambrose, 2001, p. 191). The literature refers to this date as the beginning of Allied movement into Germany. The effect of this slow utilisation of physical forces was large. Ultimately, it allowed a large amount of German troops to withdraw and join the final defense of Germany, and also affected the Allies own timetable as the Armies did not link up until two weeks later on January 17, 1945, one week before the conclusion of the offensive (Ambrose, 2001, p. 191).

The utilisation of physical forces was also a source of disagreement amongst German commanders, with the majority stating that the quantity of physical forces did not align with the objective. As the physical components were vastly different from those involved in the 1940 offensive, their use and the calibre was a source of disagreement. Evidence of the obvious state of physical forces not matching with the objective can be seen in the interviews conducted following the conclusion of World War II with the generals involved in the Ardennes Offensive (Parker, 1997). Dietrich stated that from the planning stage he knew the undertaking was not likely to succeed. Even with this initial advantage, the generals still did not agree with the proportion of physical forces (Parker, 1997). Additional support for this lies in von Manteuffel's interview. Thus, while they may have had the

initial advantage in numbers alone, von Manteuffel in a post-war interview admitted that he proclaimed the lesser calibre of the current state of the German Army than the German Army in 1940 (of which the 1944 Ardennes Offensive was based). Further evidence to support this claim is discussed largely in the literature. The addition of one million young, old and injured men resulted in a need to decrease training and attempt to bridge this gap by increased equipment (Toland, 1999). While German Forces may have had the advantage in numbers the quality of troops decreased.

Clausewitz (1993) states the effects of effort can be seen in the loss of forces and territory (p. 105). In analysing the Ardennes Offensive these effects are evident. Arguably, the greatest effect throughout the five week period was the loss of thousands of troops, and large numbers of material and equipment. The effects of the ineffective utilisation of physical forces by German forces was casualties totalling over 100,000, or one fifth of the forces utilised, that ultimately resulted in no territory gained or objectives seized, and that should have been used in the final defense of Germany (MacDonald, 1984). On the Allied side, the effect was 80,000 casualties, of the 600,000 troops utilised, that resulted from defending territory they were already occupying (Ambrose, 2001, p. 173). However, whilst the physical effects were important, equally as important were the effects on moral forces. As Clausewitz (1993) states:

Physical casualties are not the only losses incurred by both sides in the course of the engagement: their moral strength is also

shaken, broken and ruined. In deciding whether or not to continue the engagement it is not enough to consider the loss of men, horses and guns; one also has to weigh the loss of order, courage, confidence, cohesion, and planning. The decision rests chiefly on the state of morale, which, in cases where the victor has lost as much as the vanquished, has always been the single decisive factor (p. 273).

Thus, it seems appropriate to now turn to the analysis of the utilisation and effects of moral forces in the Ardennes Offensive.

This chapter demonstrates the effect of the German Forces relying on unreliable aspects, such as the slow response from Allied Forces to the offensive, the requirement of capturing Allied fuel supplies, and weather conditions favouring German movement by forced grounding of U.S. air support. This chapter reveals the initial German superiority of numbers was not effectively exploited due to ineffective planning and study of the Ardennes terrain and the unmatched physical forces to the geographical conditions. On December 23rd, one week following the commencement, the final element of weather seemed to decide the fate of the German offensive. By the offensive's conclusion, over 600,000 Allied troops had been involved and over 500,000 German troops. The analysis concludes that whilst the initial superiority was with the Germans, the quick movement by Allied leaders quickly evened the playing field (Ambrose, 2001, p. 184).

Chapter Four

Moral Forces in the Ardennes

Now that we have analysed physical forces that are quantifiable and therefore comparable, it is time to turn to the moral. The previous chapter demonstrated the disproportion of physical forces advantageous to German Forces in the first stage of the Ardennes Offensive. Beginning on December 16, 1944, 250,000 German forces broke through the Ardennes. Defended by 68,822 United States troops, German forces were expecting to reach the Meuse River in just four days before moving towards Antwerp under the expectation that their superiority of numbers would overpower the lightly defended area (Cirillo, 2003). However, the addition of unsuitable terrain, lack of fuel, and unpredictable weather conditions created additional obstacles that prevented the effective utilisation of the physical forces. Whilst these obstacles contributed to slow attacking movements, allowing Allied Force to regroup, reorganise and move troops to join the defense, an analysis of the offensive reveals another element crucial to Allied defense of the area: moral forces. The courage, morale, and skill of the commanders involved contributes to the explanation of why Allied Forces were able to hold off the initial attack before the physical forces were able to be equalled. Various events, including the Siege of Bastogne, were physically unbalanced, thus an explanation can be derived from analysing the utilisation and effects of moral forces to provide support for the notion that

physical and moral forces combined to produce Allied success in the Ardennes.

In *On War* (1993), Carl von Clausewitz states that “The highest of all moral qualities in times of danger is courage” (p. 97), adding “courage is the soldier’s first requirement” (p. 116). There are three types of courage in Clausewitz’s theory on moral forces, however only the first will be discussed. This type of courage - courage when in ‘personal danger’ - consists of two elements: Clausewitz states it may be an ‘indifference to danger’ which may result from a variety of reasons but is most often due to habit (Kleemeier, 2007, p. 115). The second source of courage when in danger is ‘positive motives’ such as patriotism or ambition. Clausewitz has very specific comments on both. He states that when courage is the result of habit it is a constant condition and will not let one down; the second is an emotion; it is not as dependable but will have greater results (Clausewitz, 1993, p. 116). The combination of both types is the most effective as it will result in dependable, great actions. Both Allied and German Forces undoubtedly showed courage over the five week period, however the *sources* of courage is what differentiates the adversaries. An important point to note is that, by this time, Germany was “forced to turn to their children to fight the war to a conclusion” (Ambrose, 2002, p. 207; Goolrick & Tanner, 1979). For the German Forces this meant that while these new combatants had little to no experience and could therefore not rely on courage sourced from habit, they had grown-up only with memories of their nation under Hitler’s regime and the ruling of Nazi ideology over all aspects of life

(Goolrick & Tanner, 1979). In many cases these young men would be considered more patriotic than their elders in the Wehrmacht and following Clausewitz's theory would produce greater acts of courage.

The literature revealed that the Allied courage was formed by both indifference to danger - through habit and routine - and positive motives, but mostly by the former (Ambrose, 2001). The German courage is of greater interest. Whilst certainly a result of habit, many soldiers had been in combat since 1939, and built an endurance to fear through courage. The source of the courage was through positive motives, most notably patriotism and their deep belief in the rise of the Fatherland (Baldwin, 1981). However, Whiting (1985) reveals an unusual source of courage; one that certainly does not subsume itself under *positive* motives. His research exposed the already commonly conjectured use of threats and internal fear as the motive for courage; Whiting states that under the orders of Heinrich Himmler any soldier "deserting to the enemy would be arrested and sent to a concentration camp" (p. 56-57). In view of this information we could state that courage formed from this source, was not natural and organic, but fabricated. We are unable to statistically evaluate whether this had any effect on the results, nonetheless it is important to mention.

It is here we must turn the discussion to Clausewitz's concept of 'friction' as all the contending elements, such as weather, lack of intelligence, and exhaustion, can be labelled as such. Friction is composed of those aspects that interfere with the "effective application of force"

(Clausewitz, 1993, p. 18). Friction is effectively the elements that prevent action from going exactly according to plan. In simpler terms, as Clausewitz succinctly describes it, friction is the elements that “distinguish real war from war on paper” (p. 138). Friction caused major chaos during the Ardennes Offensive, particularly as German military leaders were well aware of its effect. Here is an example of how they utilised courage to create friction for the Allied forces: on direct orders from Hitler, an operation to support the Ardennes Offensive was initiated prior to the offensive’s December 16 commencement. It was named Operation Greif and was under the command of Major Otto Skorzeny (Weingartner, 1979, p. 191). Skorzeny and 500 men of the 150th Panzer Brigade were to attempt to infiltrate Allied lines by pretending to be American and British soldiers (Ambrose, 2002, p. 189; Whiting, 1985, p. 8). They did so by wearing stolen American and British uniforms, speaking fluent English, and wearing dog tags stolen from those killed in action (Weingartner, 1979, p. 209). The effect was immediate: fear spread quickly through the lines (Goolrick & Tanner, 1979, p. 58). Operation Greif was an operation formed from courage; courage was utilised at every step and was sourced from the motivation of patriotism for the cause, and the longing for honour. Knowingly conducting an operation that would most likely get one’s self killed is a courageous action like no other. However, these men were not simply on the offensive, moving towards physically and morally harming the enemy; these soldiers were attempting to *infiltrate* Allied lines and interact with their adversary in the attempt to create chaos, destroy

communication lines, capture fuel dumps, and most importantly capture bridges (Parker, 1997, p. 21). Utilising courage in this manner resulted in the opposite of this moral force in Allied forces: fear. The effect of Operation Greif was felt all through the Allied line. A game of cat and mouse ensued in the attempt to find the imposters, taking valuable thought away from defensive actions and slowing down operations as it became mandatory for soldiers to prove their nationality by answering questions that United States troops would recognise such as the name of certain United States baseball players (Whiting, 1985, p. 9). Courage was therefore exploited by German forces not just to inflict physical casualties, but to effect moral forces in the same capacity.

Morale, termed ‘military spirit’ by Clausewitz, is the most widely discussed moral force in warfare. Morale is commonly regarded as the stimulus of a soldier’s strength which is shown by his ability to continue with a high level of skilled fighting in constant danger. While the definition of morale differs according to occupation, the one that will form the basis of this analysis is defined by Clausewitz (1993) as “the troops’ national feeling (enthusiasm, fanatical zeal, faith and general temper” (1993, p. 221). Morale is important as it effects every aspect of warfare as the feeling on behalf of one man generally effects the next until the ‘spirit of the whole’ is one. Accordingly, it becomes the task of an army to not only inflict physical casualties on its enemy, but to also reduce the enemy’s morale as this will not only increase the physical casualties, it will limit the courageous actions of its enemy, increase the likelihood of surrender, and in many cases, result

in the loss of confidence in military leaders (which will have its own effects).

According to Clausewitz there are two sources of morale; continuous success in engagements and the use of an army's greatest strength (1993, p. 222) and, similar to most of his thinking, Clausewitz adds that they must interact to produce morale. Through this thinking, the analysis revealed that the source of morale for the Allies was indeed the continuous success they had experienced since they became directly involved in World War II by the invasion of Normandy on June 6, 1944 (Forty, 2000, p. 83). Since then they had continually been on the offensive; and had used every effort available to them. It is easy to understand why those soldiers in the Ardennes, who were either resting and refitting or replacements training to enter combat, were "buoyed with success" and strongly believed they would be home by Christmas (Hal C. Pattison cited in Cole, 1993, p. vii). Whiting (1985) shows the unity of morale between the ranks, describing the national feeling amongst the troops as 'relaxed' and the commanders 'confident' (p. 4, 33). The morale among the German troops was described by Whiting as 'nervous and tense' (p. 88). The German Army had been on the defensive for many months; however they continued to fight with all their power as they "seemed to have found new strength and determination to resist" (Forty, 2002, p. 30).

The Malmédy Massacre is an example of how far the attempt to destroy the morale of the enemy during the Ardennes Offensive could go. In the

texts focused the Ardennes Offensive, of which there are hundreds if not thousands, nearly every one of them discusses the Malmédy Massacre (Cole, 1965; Cooke & Evans, 2008; MacDonald, 1984). On the 17th December, the second day of the offensive, the 1st Division SS Panzergrenadiere Leibstandarte Adolf Hitler came across Battery B, 285th Field Artillery Observation Battalion of the 7th Armoured Division of the United States Army. Under the leadership of Jochen Peiper, 1st Division rounded up the American soldiers they captured – who had surrendered and were now Prisoners of War (POW) – and opened fire, killing approximately 84 troops. The following day the news reached all along the frontline and the Supreme Headquarters (Weingartner, 1979, p. 65). The effect was immediate: U.S. resolve and determination strengthened (Cole, p. 261; Goolrick & Tanner, 1979, p. 57; Weingartner, 1979, pp. 1, 2). In the framework of military theory, this terrible act of hostile aggression should have *reduced* morale; it did the opposite. The general temper amongst U.S. troops was full of anger and fury, but the effect was an increase in motivation as “the news of the massacre acted as a stimulant to flagging American resistance...” (Weingartner, 1979, p. 1) and those who may have been contemplating surrender quickly gave up this option.

By taking the analysis further, into one of the main events of the Ardennes Offensive, the degree in which moral forces determined the final result becomes evident. On December 16, 1944, the German Army broke through Allied frontlines across the Ardennes region. Of the three main armies involved, the Fifth Panzer Army was selected to cover the left flank

of the Sixth Panzer Army (Cole, 1965, p. 75). Hasso von Manteuffel's Fifth Panzer Army had multiple towns to capture in their drive to support the Sixth Panzer Army's objective of Antwerp; one of which was successfully capturing the road-junction of Bastogne currently defended by elements of the United States 28th Division, VIII Corps, First Army (Cirillo, 2003; Marshall, 1988, p. 19; Toland, 1999, p. 20). The attack on Bastogne would feature three divisions of the Fifth Panzer Army; the 2d Panzer to attack on the right, the 26th Volksgrenadier Division on the left, and the Panzer Lehr Division in reserve (Marshall, 1988, p. 179). On December 16, only one U.S. Company was able to defend against the multiple German battalions that began the attack in the Bastogne area. Following the breakthrough, VIII Corps Commander Major General Troy Middleton was well aware of the importance of the road-junctions to attacking movements (Cirillo, 2003; Marshall, 1988, p. 19). Accordingly, he ordered troops to move towards Bastogne to assist in its defense. Physical forces utilised through the tactic of *Blitzkrieg* had its intended effect by creating disorder amongst the defenders (Eisenhower, 1997, p. 354). Theoretically, with such a superiority of numbers, German Forces should have completely overpowered the enemy captured Bastogne and raced towards the Meuse River; however the majority of the United States 28th division managed to hold out for at least one day before withdrawing (Marshall, 1988, p. 6).

The United States 28th division were one of two veteran divisions in the Ardennes, and were resting and refitting after fighting in the Huertgen Forest (Lone Sentry, 1945); however they were still on the line. Thus,

through Clausewitz's theoretical perspective it can be ascertained that the 28th division were accustomed to combat and could rely on their habitual courage to respond to the attack, whereas the emotional courage formed from positive motives was negatively affected by the sheer physical force. This was demonstrated by their ability to defend their area for the initial days of the offensive before being forced to give up ground due to the sheer physical force of the enemy. S. L. A. Marshall's (1988) U.S. Army official history of fighting in Bastogne during the offensive describes the state of troops retreating as disordered. He adds that some wandered back to the front line in their confusion but did not stay to defend (p. 73). The effect of the overpowering physical forces utilised through *Blitzkrieg* was unable to be matched by moral forces once disorder and fear settled in. However, the 28th's defense was essential in preventing the three German divisions from advancing further. If they had lacked courage due to inexperience in combat, they may have retreated immediately which would have allowed the German Army to race through to Antwerp before the Allies were able to put up a staunch defense.

The effect of the breakthrough on moral forces was obvious to the soldiers of the United States 101st Airborne division when they moved into defend the area close to the town of Foy on December 19 to assist in the defense of Bastogne (Ambrose, 2001, p. 179) following Combat Command B of the 10th Armoured Division's move to Bastogne the previous day. Major Richard Winter, in one of several interviews with Ambrose (2001) reported seeing the American soldiers defeat. Ambrose paraphrases Winters,

“...down the middle of the road came the defeated American troops, fleeing the front in disarray, moblike. Many had thrown away their rifles, their coats, all encumbrances. Some were in a panic, staggering, exhausted, shouting, ‘Run! Run! They’ll murder you! They’ll kill you! They’ve got everything, tanks, machine-guns, air power, everything!’” (p. 174?)

Fortunately for the American Army, those on the receiving end of such a site were the veterans of the 101st Airborne Division (Burgett, 1967, p. 199)

To those with little experience in warfare or with a lack of positive motives, the site of thousands of men fleeing from the direction in which they were moving towards would have undoubtedly shaken their courage and unsettled their morale, yet Winters, as well as the thousands of other troops, marched forward with little information and little preparation. Winters felt ashamed by the display, stating, “They were just babbling...it was pathetic” (Ambrose, 2001, p. 176).

World War II historian, Stephen E. Ambrose’s (2001) extensive research into the United States Army provides a background that gives an interesting take to the utilisation of courage by United States forces:

It was the policy of the U.S. Army to keep its rifle companies on the line for long periods...making up losses by individual replacement. This meant that replacements went into combat now not with the men they had trained and shipped overseas with, but with strangers. It also meant that the veteran could look forward to a release from the dangers threatening him only

through death or serious wound. This created a situation of
endlessness and hopelessness... (p. 202)

Of the four divisions in the Ardennes, two were green units who had little experience, and the remaining two were being refitted for replacements. What this essentially means is the replacements in the Ardennes on December 16 were not surrounded by men they had complete trust in as they were unable to build such a relationship with the veterans who had trained, fought and felt fear together for many years. Furthermore, they simply did not have the experience of combat and had not built an indifference to danger. Brian Drohan (2006) in his exploration of Clausewitz's moral forces logically considers courage and morale to be linked to motivation (p. 304). This is certainly the impression given by the negative effect of the breakthrough on the courage and morale of the retreating divisions as the retreating men also eagerly gave the men of the 101st Division their ammunition, symbolically releasing "...themselves of any further obligation to stand and fight" (Ambrose, 2001, p. 176-177).

From this point forward, it became less about physical numbers and more about utilising moral forces. Considering the conditions, the offensive was bound to become a psychological battle. The Supreme Commander of the Allied Forces, General Eisenhower's intellect and skill as a military leader was most evident during the first few days of the offensive. Utilising airborne divisions such as the 82d and 101st was certainly a strategic move, not simply because of their experience and the recognition of the knowledge

of their ability, but because of the moral forces that result from these. Both divisions had experienced almost constant fighting against German forces since the invasion of Normandy (Ambrose, 2001; 2002; Cole, 1965). Therefore, the courage utilised in the Ardennes was largely due to habit, these men were not unaccustomed to the chaos they were suddenly thrown into. The 82d and 101st Airborne Divisions were notified on 17 December, the second day of the offensive, that German forces had broken the line and they were to be moved out immediately but little else was known (Cole, 1965). Just two days following the 101st's arrival in Bastogne they were completely encircled by German forces but had set up a strong defense. The Division had little medical supplies, little food, no proper winter clothing, and as the Division Commander, Major General Taylor, was not with the Division, no higher-level military leadership.

While the utilisation of experienced Allied combat soldiers was a tactical move due to their experience and recognised combat ability, the German Army was statistically undertrained across the board (Dupuy, et al., 1994). Sixth Panzer Army commander, Josef Dietrich, describes the 1944 state of training of his troops as 'medium' as 60% of the combat elements had less than six to eight weeks training (Parker, 1997, p. 16). He adds that replacements were from other non-army elements or young and old men new to the army (MacDonald, 1984, p. 37). This is consistent with the Fifth Panzer Army who relied on the 26th Volksgrenadier Division to form the first attack. These Volksgrenadier divisions were formed in 1944 specifically for this offensive and primarily consisted of those that had

previously been exempt from conscription due to age, disability or home-front purposes. Cirillo (2003, p. 19) and Cole (1965, p. 9) agree with this assessment, stating that Hitler's obsession with numbers was to overcompensate for the lack of training. Employing the 26th Volksgrenadier division as the first attacking division was a tactical move as infantry is considered by most military theorists, including Clausewitz (1993), to be most effective in the first stages due to the ability to move quickly and quietly, unlike panzer armies. Von Manteuffel's utilisation of the 26th Volksgrenadier division was effective in terms of tactics relating to physical forces, such as superiority of numbers. This is evident by their ability to make an opening against the U.S. 28th division, allowing the two panzer divisions to move past and race for the Meuse River which made good progress in the initial days (Lone Sentry, 1945; Shapiro, 1976, p. 142). However, following the movement of the 101st Airborne Division to the area the moral forces became a greater influence on the offensive due to the sources of courage. The newly formed German 26th Volksgrenadier Division did not have the habitual courage resulting from experience (Kleemeier, 2007, p. 115) and whilst patriotic, most soldiers involved in the offensive did not understand the move to the west at all. Stephen E. Ambrose (2002) explains the situation:

For the Germans, their physical misery was exacerbated by the terrible thought that what they were doing was the absolute worst thing they could do for their country and the German people. As Lt. Walter Rahn of the 11th Panzer Division put it,

‘Why were we holding up the Americans in the west and allowing the Russians to penetrate Germany? It was senseless what we were doing there, fighting the Americans.’ (p. 383)

Regardless of the troop’s patriotism, the average soldier’s inability to understand the move to the west undoubtedly would have affected both courage and morale. This is supported by Lieutenant Colonel John W. Appel and Captain Gilbert W. Beene’s research on the psychological effects of combat in “Preventative Psychiatry: An Epidemiologic Approach” who assert that “group morale was improved when soldiers were given clear reasons for the importance of engaging in specific combat operations” (cited in Wanke, 1999, pp. 133-134). Without understanding the move to the west, German soldiers were unable to keep the morale high, particularly as the defense strengthened.

From 21st December to 26th December the 101st Airborne Division, along with elements of the 10th Armoured Division, the 705th Tank Destroyer Battalion and 755th Armoured Field Artillery, were completely surrounded in what is now known as the *Siege of Bastogne*. During this period, the moral forces played an important part in delaying German attacks. It is evident that there was a large physical disadvantage to Allied forces as they totalled approximately 11,000 men (Ethier, 2009; Murphy, 2014) against the 45,000 men of the 26th Volksgrenadier Division, 2d Panzer Division and Panzer Lehr Division (Shapiro, 1976, p. 142). Not only were the physical forces inferior, the Allies were contending with a

multitude of frictional elements. The German divisions were charged with breaking through the Allied line and exploiting this friction. Due to the winter weather conditions (a frictional element) the Allies were unable to be resupplied by air meaning they had only the little supplies they entered Bastogne with.

However, as evident in the literature they understood the mental ability needed to not only survive the action, but to take well thought-out bold, courageous actions for the benefit of themselves and their fellow soldiers (Ambrose, 2001; 2002). They had trust in one another formed from experiencing some of the most difficult situations imaginable. It is also important to note that the Airborne Divisions were paratroopers, and thus used to being surrounded (Marshall, 1988, p. 135). It is evident that the troops in the Ardennes from the 21st to the 26th December 1944 relied on moral forces until the physical forces were able to be increased. One man of the 2d Battalion, 506th Infantry Regiment, 101st Airborne contributes the trust gained from long periods of combat for the ability to utilise courage to persist in the face of danger during the offensive:

We weren't particularly elated at being here. Rumours are the Krauts are everywhere and hitting hard. Farthest from your mind is the thought of falling back. In fact it isn't there at all. And so you dig your hole carefully and deep, and wait, for that mythical superman, but for the enemy you had beaten twice before and will again. You look first to the left, then right, at your buddies

also preparing. You feel confident with Bill over there. You know you can depend on him. (Ambrose, 2001, p. 178)

There are three points of interest in this quote. The first, the use of the words, “you know you can depend”, demonstrating that the relationships built in combat were essential to positive morale. The utilisation of veteran soldiers by the United States in the Ardennes Offensive was a strategic move that, the literature suggests, assisted in German defeat and the failing of the Ardennes Offensive (Cole, 1965; Dupuy, et al., 1994). The second point: the soldier’s words, “farthest from your mind is the thought of falling back”; demonstrating the courage was a result of habit. Finally, the rumours that circulated; rumours are the perfect example of friction at work during the offensive. Clausewitz states that friction always has an effect on moral forces; however moral forces also combat friction. Friction in the Ardennes Offensive was almost all against the Allied forces; however their moral forces were able to prevent friction from greatly affecting their ability for successful action.

Various events within the six day siege had a positive effect on the courage and morale of Allied troops. Firstly, on December 22nd, a small number of German troops entered Bastogne demanding the Allies to surrender. The 101st Division’s commanding officer reply of “Nuts!” became famous across the entire front (Cole, 1965; Ethier, 2009). The absolute refusal for withdrawal by the commanding officer in the area increased morale as it became clear that those in high command had belief

in Allied success. Secondly, on December 23rd, the weather that the Germans were so dependent on to deny Allied forces use of their air support cleared allowing U.S. air men to drop essential supplies to attack German tanks and infantry from the air (Marshall, 1988; Murphy, 2014). While the supplies were still not adequate for the circumstances, and the weather quickly turned against the Allies once again, it greatly increased morale among the troops.

On December 26th, 1944, the siege was broken when elements of General Patton's Third Army fought their way through the Fifth Panzer Army's encirclement (Ethier, 2009). The addition of the Third Army in the area decreased the German superiority in physical forces which was followed by an Allied counteroffensive, pushing German forces back behind the Siegfried Line. However, during the six day siege the Allies relied on their moral forces to defend the area until the physical forces were able to equal the German Army's, this was also the case in many other situations during the offensive.

The effect of moral forces on the offensive overall is evident by the fact that the Fifth Panzer Army's advance was by far the most successful of the three main armies involved, even though their advance was slight (Cole, 1965, p. 135). An initial four U.S divisions against the Germans thirteen infantry divisions, seven panzer divisions, and two panzer brigades demonstrates that moral forces across the entire front were strong enough to form a successful defense until their physical forces could be increased. The

Sixth Panzer Army were stopped before the Our River (MacDonald, 1984, p. 588) and the Seventh Army achieved only slight penetrations, with most divisions failing to break through the initial defense (Cirillo, 2003, p. 18). The speed of troop movement in the initial stage of the offensive is evidence of the high morale amongst German troops, however as soon as Allied defense thwarted any significant progress moral forces decreased which is also evident by the lack of objectives seized (Parker, 1997, p. 79). Each day the Germans fell behind their timetable, their morale and courage decreased. However, it was not until January 22, 1945 that Hitler allowed complete withdrawal from the Ardennes with the conclusion of the offensive on January 25 (MacDonald, 1993, p. 26). According to Clausewitz (1993), the loss of what little ground the Germans gained during the five week period demonstrates the loss of morale (p. 273). While the courage and morale of the German and Allied armies was crucial to the outcome, the last element of moral forces, military leadership, will require further examination due to its effect on all aspects of the offensive.

Chapter Five

Military Leadership in the Ardennes

Chapter Three and Chapter Four have explored the utilisation and effects of physical and moral forces in the Ardennes Offensive. However, one aspect of moral forces has been separated from its counterparts for a stronger analysis – military leadership. In his 1832 text, *On War*, Carl von Clausewitz (1993) informs the reader on the concept of moral forces of which the first and most important element is military leadership. The military leaders chosen for discussion of this form of moral force either, demonstrate the characteristics outlined by Clausewitz, thus aligning with his theory on military genius, or oppose the characteristics but remain in a position of power within their country's armed forces. Either way, military leaders have a great effect on their own, and their adversaries, utilisation and effects of physical and moral forces.

In the chaos and danger that characterises war it is often the mind of one man that is forced to put the situation and its elements into perspective. Although all soldiers are forced into such circumstances, and those of lower ranks often in more danger due to their proximity to the front, it is a commander's responsibility to make the critically important decisions in times of danger. Accordingly, military action must be supported by the appropriate military leadership. According to Clausewitz (1993), a military commander must have certain characteristics: a skilled judgement, sense of

intuition (and the ability to follow this intuition), courage, and determination are but some of the characteristics that compose a skilled commander. It is the *combination* of these characteristics that constitute the paradigmatic commander. An outstanding form of military leadership is more rare. Ulrike Kleemeier in his text, *Moral Forces in War* (2007), elucidates on this concept. As mentioned, the combination of the characteristics of the ideal commander is necessary. These characteristics are listed under the terms 'rational' and/or 'emotional' (p. 110). It is the harmony of the rational and emotional aspect of man's personality that when revealed - in this case in warfare - in extraordinary circumstances and successes that the military leader is termed a 'military genius' (Clausewitz, 1993, p. 115; Kleemeier, 2007, p. 111).

To begin, Dupuy et al. (1994, p. 369) makes an important point regarding the convoluted structure of the German High Command. This must be noted as Adolf Hitler, as Führer of Germany and its occupied territories, was in theory the equal of American president, Franklin D. Roosevelt, and should require no discussion in regards to the Ardennes Offensive. However, Hitler had direct control over both the planning and execution of the offensive and therefore will be referred to as the equal, in a military capacity, to the Supreme Allied Commander of the Allied Expeditionary Force, Dwight D. Eisenhower.

As outlined in Clausewitz's moral forces theory, the ability for great actions results from the relationship between reason and passion

(Kleemeier, 2007). This relationship is linked by will power which has both rational and emotional characteristics and, as such, the harmony of both may produce extraordinary feats (Clausewitz, 1993, p. 115). While Hitler's goal for the Third Reich could be considered a passion (a 'long-term emotion'), his sudden want for Antwerp was not, as it was an impulsive decision that was merely a pathway to the ultimate objective (Kleemeier, 2007, pp. 112, 113). As "passions can combine with reason in a way spontaneous feelings cannot", Hitler was unable to utilise the aptitude of will power (intellect) in guiding the spontaneous want for Antwerp (p. 112). It was Hitler's *passion* that determined his longing for honour and renown – regarded by Clausewitz as the most powerful of all passions – which he believed the success of the offensive would result, as it would be a step closer to Germany's rise (Clausewitz, 1993, p. 121). However, it was his lack of reason or rational thinking that determined the route. The literature on the Ardennes agrees that the failure in the initial planning stages of the offensive was a factor that largely contributed to its downfall (Cole, 1965). The decision to place Antwerp (a port north of the Ardennes) as the objective was entirely Hitler's decision – and one with many opponents. It was not rational to base a plan on the success of a previous offensive (the 1940 invasion of France), considering the Allies were now fully aware of German tactics in terms of *Blitzkrieg*, the United States Army situated in the Ardennes was of much higher calibre than the French Army in 1940, and the winter weather conditions being almost completely opposite of those of the 1940 offensive (Cirillo, 2003). However, as Hitler's mind was clearly

unbalanced in terms of rational and emotional harmony, with emotion being the dominant element, the result was failure. His insistence on having total control over the German armed forces resulted in the ineffective utilisation of military leadership in its highest capacity.

Hitler made the momentous decision to launch a major offensive during one of his daily morning meetings in September 1944 with his military advisors, General Jodl and General Keitel in attendance (Toland, 1999). Three Armies would be involved, two of those being SS Armies; the Sixth Panzer Army led by General Josef 'Sepp' Dietrich, the Fifth Panzer Army led by General Hasso von Manteuffel and the Fifteenth Army led by General Erich Brandenberger (Cole, 1965). Both Jodl and Keitel produced several alternate plans to the Führer as after analysing the logistical situation both Generals were well aware of its failings, only some of which included Germany's failing situation in the East requiring the bulk of material and manpower, the lack of fuel and ammunition available, and the need to rely on aspects that were unreliable such as the slow reaction from Allied leadership to the offensive (Forty, 2002, p. 42-43). All plans were rejected. The literature supports the view that the utilisation of Clausewitz's concept of judgment in Hitler's examination of the alternative options was almost non-existent (Cole, 1965; Forty, 2000; MacDonald, 1984). The planning stage of the execution was not supported by the intellect needed to provide structure to Hitler's impulsive emotions; thus once again there was a dominant emotional element, without the rational to provide support.

Danny S. Parker's text, *Hitler's Ardennes Offensive: The German View of the Battle of the Bulge* (1997), provides an invaluable source to support this assessment of Hitler's lack of logical judgment. Parker has compiled the most important collection of interviews and essays comprising all of the key members of the German command, excluding Hitler. These interviews and essays were conducted just months following the conclusion of World War II as a program initiated by the European Theater of Operations (ETO) Historical Section. Each interview was conducted separately and all three Army Generals, Dietrich, von Manteuffel and Brandenberger criticise Hitler's military advisors for supporting Hitler's delusions. General von Manteuffel of the Fifth Panzer Army remarks on Jodl's lack of experience in war (Parker, 1997, p. 232); his opinion on Keitel was just as bad. The book's editor, Parker (1997), agrees with von Manteuffel's assessment of Keitel stating, "What Hitler saw in Keitel was an unthinking assistant who would blindly obey his bidding..." His lack of "imagination or intellectual power..." was evident (p. 232). General Dietrich of the Sixth Panzer Army which was tasked with the main thrust through the Ardennes adds, "They [Jodl and Keitel] only waged war...on maps" (p. 234). The utilisation of military leadership in this regard was another flawed element that had devastating effects. It is evident that Hitler abused his military leadership position to surround himself by those who would provide advice but ultimately submit to his judgments.

It was not until just days before the December 16 offensive was set to begin that all of the Generals who were to be involved became privy to the

plan. Consequently, Hitler's method of military leadership had a run-on effect that affected the Generals who were to lead the offensive. His paranoia in keeping the details of the offensive a secret prevented his Army Generals from having the appropriate time to plan or counsel their division commanders as General Dietrich of the Sixth Panzer Army declares, "I should have been given four weeks of planning instead of four days. I was not in the area even once before the attack, and I couldn't look at the terrain. I didn't have time to prepare my thoughts and ideas in the way they really should have been prepared" (cited in Parker, 1997, p. 28). He bravely admitted his doubts directly to Hitler following the meeting, "I told Hitler that I wasn't ready to attack with my Army and that we didn't have the ammunition or fuel to carry it through successfully. The generals were all in a line waiting to speak to Hitler and I had only a minute to tell him...He said that I would have all I needed" (cited in Parker, 1997, p. 18). Parker (1997) states that by 1944 German military leadership was "merely a mechanical commanding body" (p. 147), suggesting that they were just puppets without any ability for individual thought and action. The army commanders, Dietrich, von Manteuffel and Brandenberger were to rely on the decisions made by inexperienced men who far from understood the actual situation at the front. Their efforts in altering the plan were rejected; it appeared they had the individual thoughts and judgement but were not expected to actually display this. A statement by Dietrich expressing his disdain for the final plan supports this assessment, "This winter offensive, in

my opinion, was the worst prepared German offensive of this war” (cited in Parker, 1997, p. 30).

Hitler’s strict control over the offensive left the Commander in Chief West, General Gerd von Rundstedt in an odd position. Technically, von Rundstedt should have been the man to control the offensive, yet he had little involvement choosing to allow Army Group B commander, General Model the little control that Hitler offered (Hart, 1983, p. 444). Cole (1965) emphasises the lack of control given, stating, “Instructions issued by Hitler for the conduct of operations were in such detail that field commanders of the stature of [von] Rundstedt and Model lacked the authority to move units as small as divisions” (p. 31). The question can then be asked as to what Hitler’s reasoning was for von Rundstedt’s employment. A study of the literature revealed several interesting points of explanation. Von Rundstedt had only recently, as of September 1944, been recalled to his position, previously being dismissed according to MacDonald (1984) for minor suggests of withdrawal (p. 21). Zabecki (1999) states that von Rundstedt was well-respected by the Allies (p. 481). He was therefore to be the ‘figurehead’ which was ultimately a tactic to persuade the Allies that the war in Europe onwards would be based on appropriate military strategies which was effective as it contributed to the Allies surprise of the December 16 breakthrough (MacDonald, 1984, p. 34).

The Ardennes Offensive began on December 16, 1944 with an hour long bombardment of infantry along the one hundred kilometre front. Chaos

and fear quickly spread through Allied lines and according to highly regarded historian Stephen Ambrose (2002), a “breakdown of discipline” ensued (p. 204). It was here that the Supreme Commander of the Allied Forces, General Eisenhower was responsible for “...the critical decisions of the entire battle...” by his immediate direction of the 82d and 101st Airborne Divisions to move into the Ardennes (Ambrose, 2001, p. 174). Both divisions were refitting following the failure of Operation Market Garden (Cole, 1965). The use of these divisions – the strategic reserves for the entire Northwest – was not a decision to make lightly. Yet, Eisenhower’s determination, another element of military genius, ensured not only the divisions, but vehicles and material immediately began the move to the Ardennes. Hitler’s assumption that Eisenhower would take several days to even understand the offensive was one of major proportions was immediately thwarted as Eisenhower’s skill as a military leader became evident. Historians, Dupuy et al. (1994), Forty (2000), and MacDonald (1984) agree that Eisenhower’s reaction to the breakthrough was critical to Allied success. This factor was also mentioned in almost all interviews conducted by Parker (1997). The effect of this was the saving of thousands of lives and potentially prevented German forces from gaining back ground and lengthening the war.

Eisenhower’s decision relates to Clausewitz’s use of judgment and intuition titled *coup d’oeil*. Kleemeier (2007) describes it as “truth [being] felt rather than deduced” (p. 113). The critical decision was a result of Eisenhower’s ability to realise the importance of the December 16

breakthrough with no military intelligence to support this feeling (Parker, 1997, p. 141). No other decision during the Ardennes Offensive displays the utilisation of this characteristic to such a great extent. It is a textbook example of intuition leading military action as “action can never be based on anything firmer than instinct, a sensing of the truth” (Clausewitz, 1993, p. 125). Considering the lack of military intelligence, aerial reconnaissance, and little organised front-line reports to support this intuitive feeling, his boldness in taking action is a considerable feat and one in which undoubtedly effected the rest of the offensive as it denied the Germans the time, and the frictions, they were relying upon to make a major breakthrough, and greatly affected their timetable.

Once Eisenhower had given general strategies for the defense against German Forces, it was up to the army group commanders to initiate these orders. In Chapter Three, the discussion centred on the utilisation and effects of physical forces. It was concluded that a key effect was General Montgomery being given temporary command of all Allied forces north of Bastogne on December 20, the fourth day of the offensive (Eisenhower, p. 355; MacDonald, 1993, p. 4). Eisenhower in his memoir, *Crusade in Europe* (1997), stresses the positive effect of Montgomery’s command on the northern area as control and communication between armies was able to stay open which would have been difficult without this changeover as General Bradley was situated in his headquarters south of the Ardennes and unable to make contact with two of his armies whilst simultaneously executing a counterattack from the south (Cirillo, 2003, p. 29; Eisenhower,

1997, pp. 355-356; Smith, 2014). However, the analysis suggests that Eisenhower's employment of Montgomery as sole ground commander was to ensure the Allied military system and public, as well as the German high command recognized that Supreme Headquarters Allied Expeditionary Force (SHAEF) was committed to the Allied coalition (Morelock, 1994; Smith, 2014).

While, Montgomery may have calmed the situation, the effect of the changeover on the planned counterattack was disastrous. The literature largely agrees that Montgomery's ambition was to obtain command of allied forces and lead the final drive into the political heart of Germany - Berlin. This goal was partly to end the war under British command – almost in opposition to Eisenhower's staunch coalition based war. Once command was achieved, Montgomery became over-cautious; we may assume as a result of not wanting to make errors and either lose command or the public's perception. Following the breakthrough, SHAEF immediately began planning for a counteroffensive to push German forces back behind the West Wall or as the Germans titled it, the Siegfried Line. Montgomery's lack of boldness and bad judgment – unwanted characteristics in a commander – prevented him from initiating his part of the counteroffensive in a timely manner. Clausewitz's (1993) statement that “boldness grows less common in the higher ranks as [commanders] become governed by intellect but must obey orders” (p. 221, 224) was accurate in Montgomery's case. He lacked the boldness required for such a role; however, interestingly he went against the orders from his superior. Morelock (1994) outlines his

explanations for the delay, ranging from Germany having reserves the Allies were unaware of to Allied troops being too shocked to effectively form a counteroffensive (p. 67). Consequently, whilst General Patton initiated the Third Army's part of the counteroffensive on December 23rd, Montgomery delayed his First Army's role until January 3rd (Ambrose, 1990). The issue was that by the time the attack had progressed Hitler had slowly succumbed to von Manteuffel's insistence on withdrawal which affected the Allies efforts to destroy as many German troops and equipment as possible (MacDonald, 1993, p. 26).

Montgomery's ambition, or passion, had overridden any reason. Morelock (1994) states:

Monty was so preoccupied with gaining approval of his single thrust offensive in the north (and receiving overall command of Allied ground forces) that he treated the Ardennes counteroffensive as a sideshow, to be finished with the least possible effort and expenditure of resources, thereby not detracting from his real priority – the final campaign into Germany. (p. 74)

This affected not only the counteroffensive itself, but the eventual drive into Germany. The main reason for the counteroffensive to be initiated swiftly was to destroy as many German forces as possible that would be used in the defense of the Reich (Eisenhower, p. 363). If Montgomery had initiated his part earlier and pushed south to link with Patton's Third Army the war may

have ended long before it actually did. The destructive effects of Montgomery's control was evident when following the linkup of the two armies on January 16, the following day the First Army was returned to Bradley's control (Morelock, p. 127). Montgomery's lack of boldness, bad judgement and his determination for British fame resulted in him fabricating the truth to the public and press of his influence (Ambrose, 1990, p. 180; Brighton, 2008; Zaloga, 2010) yet the analyses conclusion is clear: Montgomery's leadership had a negative effect on the Allied role in the Ardennes Offensive.

Thus far the analysis of military leadership in the Ardennes Offensive has been varied as to the success of decisions, actions and overall command. However, as we turn to army level we can see a definitive increase in successful decisions made purely by the commander's military understanding and psychological strength. With varying degrees of training, development and experiences in war, we can only conclude that in this instance Clausewitz's (1993) notion that the further one goes down in command, the more boldness and individualism increase is accurate (p. 221). This is particularly true when analysing Lieutenant General George S. Patton's influence on the offensive. As commander of the United States Third Army, Patton was well renowned within the military and on the home front which the literature suggests was a large motivation for him (Blumenson, 1985, p. 223). As stated earlier, Clausewitz describes renown and honour as the most powerful of all passions, providing "the ambition to strive higher than the rest, as he must if he is to distinguish himself" (p. 121-

122). It was this ambition that produced Patton's great actions that had direct effects on Allied success in the Ardennes.

The employment of Patton as Third Army commander had a positive effect on the outcome of the Ardennes Offensive for Allied Forces. Whilst the literature agrees that the December 16 breakthrough was a complete surprise to SHAEF, various historians (Dupuy et al., p. 11; MacDonald, 1984, p. 75; Morelock, p. 203) including Patton scholar, Martin Blumenson, who dedicated much of his academic career studying the army commander and produced such texts as, *Patton, the Man Behind the Legend, 1885-1945* (1985), states that Patton was concerned about the lightly defended Ardennes long before the attack began as evident in his diary which directly relates to Clausewitz's idea of intuitively based action. His intuitive thought alone was not remarkable; his actions based upon his intuition were. Clausewitz (1993) states that "war is the realm of uncertainty..." (p. 117) which requires one to have two qualities *coup d'oeil* defined as intuition and judgement, and determination, the ability to take action on the intuitive thought (p. 117). Patton perceiving the Ardennes as a potential opportunity for the enemy demonstrates Clausewitz's first quality. The truly remarkable aspect lies in his actions in combatting this concern. Firstly, early in December Patton advised his staff to begin developing plans in case of a breakthrough as the Ardennes was situated on his Army's north flank. Secondly, following the breakthrough he began moving numerous divisions, consisting of thousands of troops into a northward facing position in the event he receive an order to counterattack (Patton & Harkins, 1995). It must

be mentioned that the Allies were preparing for their own offensive to begin on December 19, 1944. As such, Patton's determination in following his intuition is even more impressive. The effect of Patton's intuition and correct judgement can be seen in his next action.

Following the December 16 breakthrough SHAEF staff held a meeting at Verdun to discuss how to counterattack, which was also attended by army group and army level Generals (Patton & Harkins, 1995). It was here that, once again, Patton demonstrated his skilled leadership. Among the various issues since the breakthrough, the town of Bastogne had been under siege with the 101st Airborne Division and elements of the 10th Armoured Division in its centre. Patton's response to the situation was to inform those in attendance that on December 23 three of his divisions could begin moving north towards Bastogne with three divisions to follow later (Blumenson, 1985, p. 246, 247; Patton & Harkins, 1995, p. 330). Historians such as Ambrose (2002), Blumenson (1985), and Dupuy et al. (1994) all describe Eisenhower's shock and uncertainty at the possibility of such an action, even though interestingly Eisenhower (1997) does not comment on this in his own memoir. Third Army movement went ahead towards Bastogne and on December 26, just three days following the first stage of movement, the siege was broken with Morelock (1994) describing the action as "masterfully executed" (p. 130). Additional evidence to Patton's skill as an army commander lies in a point Morelock makes that 12th Army Group commander General Bradley, Patton's superior, should have been the one to plan and command this action (p. 130). The fact that these divisions

had moved so quickly over one hundred miles not only demonstrates Patton's leadership skills, it also demonstrates the high rate of morale as they were able to overcome the obstacles that delayed the German Army in their own advance (Kirkpatrick, 1992). The Allies, in their initial defense then relief of Bastogne, had successfully prevented German forces from achieving a crucial military objective which slowed the German drive to Antwerp and contributed to General von Manteuffel's assessment that the German offensive could no longer reach the objective (Cirillo, 2003, p. 26; Cole, 1965; MacDonald, 1993, p. 23).

The utilisation of General Patton's skilled leadership successfully relieved Bastogne. Whilst Stephen Ambrose, in his 2001 book, *Band of Brothers*, which follows the United States Easy Company of the 506th Infantry Regiment, 101st Airborne Division who were involved in the siege of Bastogne, states that none involved have ever admitted they needed "to be rescued" (p. 191) it is not certain as to what may have transpired if Patton's Army had not broken the siege. A study of the literature and the major events, decisions and actions that transpired over the five week period concludes that Patton's leadership displayed the most characteristics outlined by Clausewitz for the ideal military leader amongst Allied generals as he demonstrated intuition, judgement, boldness and determination that greatly affected the Ardennes Offensive by contributing to the staunch defense at Bastogne and the counteroffensive. This was not the conclusion from one action but from multiple that often occurred consecutively. Although the other generals did display these characteristics, they were

often displayed in isolated incidents and did not encompass the combination of Clausewitz's characteristics.

Fifth Panzer Army commander, General von Manteuffel was one of the opposite army commanders to Patton, but the only one who was an equal in terms of skill. From the planning stages of the offensive, von Manteuffel demonstrated professional ability. Hitler trusted this ability which resulted in von Manteuffel convincing Hitler to alter various aspects of the plan; the first being to begin the attack with infantry followed by a broad front panzer attack, and to begin at 5:30am to take advantage of the daylight (Cole, 1965, p. 173; Goolrick & Tanner, 1979, p. 86; Mellenthin, 1977, p. 243). Whilst not managing to make major changes, these tactical changes were an improvement. However, it was during the execution of the offensive that von Manteuffel's skill, particularly his boldness, was unmistakable. Whilst Dietrich and Brandenberger were quickly halted by U.S. defense, von Manteuffel managed to quickly breakthrough the Allied line, in part because he had covertly altered the Fifth Panzer Army's plan according to the terrain as he sent forth assault detachments to begin the attack (Mellenthin, 1977, p. 244).

Following the staunch U.S. defense at Bastogne, von Manteuffel made the decision to instead focus his panzer divisions on reaching the Meuse River as U.S. defenders would still be under siege from his infantry divisions until Patton's Army could make contact from the south (Cirillo, 2003, p. 26). His boldness in doing so appears to go against Clausewitz's

(1993) idea of obedience, as the theorist states “only when boldness rebels against obedience, when it defiantly ignores an express command, must it be treated as a dangerous offensive...” (p. 224). At first glance, Clausewitz’s statement seems quite contradictory within the whole, however we must remember that his idea of obedience stems from the standpoint that in theory the superior will allow for independent thought on all levels. The commander must be given a broad plan which allows for individual decision making to counter frictional elements that are unforeseeable (Kleemeier, 2007, p. 116-117). So, we could state that von Manteuffel’s deviation from his orders was merely adapting to actual conditions and elements. These deviations resulted in greater success as the Fifth Panzer Army became the main attacking army with elements getting close to the preliminary objective of reaching the Meuse River in comparison to Dietrich and Brandenberger who strictly obeyed their orders and did not manage to advance against the initial U.S defense (Cirillo, 2003, p. 18). Once Patton’s Army was involved, it became clear to von Manteuffel that withdrawal was the only option. After many failed attempts, he managed to convince Hitler and saved thousands of troops, equipment and materiel from destruction which was then able to be used in the final defense of the Reich. Mellenthin (1977) agrees that von Manteuffel’s performance was the greatest of the German generals in the field which we can attribute to his display of good judgement, boldness, and determination which Dupuy et al. (1994) goes so far as to state that he “seems to have had at least a touch of genius...” (p. 369-370). Regardless of his total disbelief in the offensive, he did

everything in his power to achieve success. The utilisation of von Manteuffel as an army commander was Hitler's greatest achievement in the Ardennes Offensive.

This chapter has demonstrated that the German commanders did not effectively utilise their positions as military leaders due to their inability to employ their own initiative and judgement. The effect was disastrous; they were unable to make even the most minor decisions without permission from Hitler himself, wasting precious time for Allied leaders to utilise their skill, regroup, and make effective decisions that quickly turned the offensive in their favour. Military leadership as under Clausewitz's concept of moral forces titled 'skill of the commander' had the largest impact on determining the outcome of the Ardennes Offensive as it effected the utilisation of both physical and the remaining moral forces.

Conclusion

This thesis provided a re-interpretation of World War II's 1944-1945 Ardennes Offensive by utilising the theoretical perspective of Carl von Clausewitz according to his military text *On War*, published in 1832. This perspective aimed to provide an explanation as to why such an initial physical superiority failed to produce success for German forces. Clausewitz's theory on moral forces was chosen as it has not previously been applied to the offensive, as the majority of the literature on the offensive simply provide an examination of the physical forces, thus, this thesis provides a different re-interpretation of the final result. By taking the Clausewitzian terms and concepts of physical and moral forces and placing them in the context of a twentieth century period of military and political action this thesis reveals the importance of moral forces in warfare. This thesis aimed to answer three research questions:

1. Using Clausewitzian theory, what does an analysis of World War II's 1944 Ardennes Offensive reveal about the utilisation and effects of physical and moral forces?
2. To what degree was the Ardennes Offensive determined through physical or moral forces?
3. What were the main events, operations or situations that effected moral forces?

To do so, this thesis was broken down into three topics: physical forces, moral forces, and military leadership.

The analysis reveals that the German Forces effectively utilised their physical forces by employing Clausewitz's concept of the maximum use of force through speed and surprise, however, the strategy (a result of ineffective military leadership) did not accurately account for the lack of fuel and influence of terrain on such a large number of forces. This resulted in clogged roads which prevented a swift attack. Allied Forces were then able to regroup, reorganise and move forces to the Ardennes and set up a staunch defense. The initial physical superiority garnered slow results, nowhere near the level expected. It is clear that physical forces were not effectively utilised due to ineffective planning, thus the planning stages of the offensive were crucial to its failure.

The utilisation of moral forces in the Ardennes Offensive was most evident during the Siege of Bastogne from December 21 to December 26. During this operation the Allies managed to utilise their moral forces to produce a staunch defense which prevented German Forces from moving towards the port of Antwerp to assist in its capture. The analysis revealed that both Allied and German Armies had replacements and new divisions, however the German Army employed many Volksgrenadier Divisions in main roles. While this was effective in terms of physical superiority, as soon as the physical superiority was reduced the moral forces of the adversaries became a large contributor to the effective utilisation of physical forces. The

utilisation of moral forces, particularly courage, was a result of different sources of courage. Allied military leaders ensured the United States 82d and 101st Airborne Division were quickly relocated to the Ardennes. This was a strategic move, not only as they were the reserves available for Northwest Europe, but also because they had the ability to produce large amounts of courage and positive morale due to their experience, training and patriotism. The new German divisions were ineffectively utilised in the endeavour to capture Bastogne, as their courage was formed purely from patriotism, threats, and fear. Consequently, the United States veteran division in Bastogne were able to utilise their moral forces against the inexperienced German division until reinforcements arrived.

The utilisation of military leadership in the Ardennes Offensive had the greatest effect on the result. This is evident from the initial planning stage through to execution. German Führer, Adolf Hitler's, total control affected every aspect of the offensive, particularly his influence on his subordinates. The German military leaders were unable to utilise their judgement and intuition to secure a more realistic objective and strategies to achieve this. However, the Fifth Panzer Armies commander, General Hasso von Manteuffel demonstrated the most characteristics of Clausewitz's concept of a skilled commander by utilising his intuition and judgement to alter his army's route and tactics; interestingly his army made the most progress during the offensive. Allied Forces had a much more effective command structure, largely a result of the Supreme Commander of the Allied Forces, General Dwight D. Eisenhower's commitment to the Allied coalition.

Eisenhower made numerous critical decisions during the offensive, the most important being his movement of the major reserves to the Ardennes following his intuitive thought of the offensive being one of major proportions. However, the December 20 command change permitting British General, Bernard Montgomery command of all forces north of Bastogne resulted in a delayed counteroffensive, allowing thousands of German Forces to regroup for the final defense of the Third Reich. General George S. Patton's role as commander of the United States Third Army was essential to success in the offensive. His skilled judgement and determination in relieving Bastogne and commitment to the Allied counteroffensive prevented German Forces from regrouping and altering their strategy.

The analysis of the 1944 Ardennes Offensive through the perspective of Clausewitz's theory on moral forces has provided an alternative explanation for Allied success in the Ardennes due to the interaction of physical and moral forces. The human element of warfare was chosen as the basis for the analysis of the Ardennes offensive as it is ignored by most military theorists, yet plays a large role in warfare. This thesis contributes to previous examinations of the offensive, and application of Clausewitz's concept of moral forces. This theoretical perspective can also be applied to other historical battles to provide an additional layer for analysis and a deeper understanding of the psychological contribution to warfare.

References

- Ambrose, S. E. (1990). *Eisenhower: soldier and president*. New York: Simon & Schuster.
- Ambrose, S. E. (2001). *Band of brothers*. London, England: Pocket Books.
- Ambrose, S. E. (2002). *Citizen soldiers*. London, England: Pocket Books.
- Andrews, G. J. (2008). Historiography. In L. M. Given (Ed.), *The sage encyclopedia of qualitative research methods* (pp. 400-401). Thousand Oaks: SAGE Publications, Inc.
- Baldwin, P. M. (1981, January). Clausewitz in Nazi Germany. *Journal of Contemporary History*, 16(1), 5-26.
- Berg, B. L. (2001). *Qualitative methods for the social sciences* (4th ed.). Needham Heights: Allyn Bacon.
- Blanchette, S. C. (1998, August). Re-examining the Battle of the Bulge: Assessing the role of strategic intelligence and coalition warfare against the 1944 Wehrmacht. Denton, Texas: UNT Digital Library.
- Blumenson, M. (1985). *Patton, the man behind the legend, 1885-1945*. New York, NY: William Morrow and Company. Inc.
- Bradley, O. N. (1975). *A soldier's story*. Westport, Connecticut: Greenwood Press.
- Brighton, T. (2008). *Masters of battle: Monty, Patton and Rommel at war*. Victoria, Australia: Penguin Books.

- Burgett, D. R. (1967). *Currahee! A Screaming Eagle at Normandy*. New York: Dell Publishing.
- Cirillo, R. (2003). *Ardennes-Alsace*. Retrieved February 11, 2016, from U.S. Army Center of Military History:
<http://www.history.army.mil/brochures/ardennes/aral.htm>
- Clausewitz, C. v. (1993). *On war*. (M. Howard, P. Paret, Eds., M. Howard, & P. Paret, Trans.) London, England: Everyman's Library.
- Clausewitz, C. v. (2003). *Principles of war*. (H. W. Gatzke, Ed., & H. W. Gatzke, Trans.) New York: Dover Publications, Inc.
- Cole, H. M. (1965). *The Ardennes: Battle of the Bulge, the United States Army in the Second World War*. Washington, D.C.: Office of the Chief of Military History.
- Cooke, D., & Evans, W. (2008). *Kampfgruppe Peiper at the Battle of the Bulge*. Stackpole Books.
- Drohan, B. (2006). Carl von Clausewitz, his trinity, and the 1812 Russian Campaign. *Journal of Slavic Military Studies*, 19, 295-341.
- Dupuy, T. N., Bongard, D. L., & Anderson Jr., R. C. (1994). *Hitler's last gamble*. New York, NY: HarperCollins Publishers.
- Eisenhower, D. D. (1997). *Crusade in Europe*. London, England: John Hopkins University Press.
- Ethier, E. (2009, December). The bulge. *America in WWII*, 5(4), 34-49.

- Evans, R. J. (2008a). Nazism. (J. William A. Darity, Ed.) *International encyclopedia of the social sciences*, 5, 448-450.
- Evans, R. J. (2008b). *The Third Reich at war*. Victoria, Australia: Penguin Group.
- Forty, G. (2000). *The Reich's last gamble*. London, England: Cassel & Co.
- Gat, A. (2001). *A history of military thought: From the Enlightenment to the Cold War*. Oxford: Oxford University Press.
- Gibbs, N. H. (1975, January-February). Clausewitz on the moral forces in war. *Naval War College Review*, 15-22.
- Goolrick, W. K., & Tanner, O. (1979). *The Battle of the Bulge*. New Jersey: Time-Life Books.
- Handel, M. (1997). *Who is afraid of Carl von Clausewitz. A guide to the perplexed* (6th ed.). Newport, RI: U.S. Naval War College, Department of Strategy and Policy.
- Handel, M. I. (2001). *Masters of war* (3rd ed.). Milton Park, Abingdon: Frank Cass Publishers.
- Hart, B. L. (1970). *History of the Second World War*. London: Book Club Associates.
- Hart, B. L. (1983). *The other side of the hill*. London: Pan Books Ltd.

- Ibiblio. (2009). *[The German Plan for the Ardennes Offensive]*. Retrieved May 2, 2016, from Ibiblio:
<https://www.ibiblio.org/hyperwar/USA/USA-E-Ardennes/maps/USA-E-Ardennes-I.jpg>
- Jomini, A.-H. (2006). *The art of war* (Reformatted ed.). ARC Manor.
- Kimball, W. F. (2004). Franklin D. Roosevelt and World War II. *Presidential Studies Quarterly*, 34(1), 83-99.
- Kirkpatrick, C. E. (1992). *Omar Nelson Bradley: The centennial*. Retrieved March 16, 2016, from U.S. Army Centre of Military History:
<http://www.history.army.mil/brochures/Bradley/Bradley.htm>
- Kleemeier, U. (2007). Moral forces in war. In H. Strachan, & A. Herberg Rothe (Eds.), *Clausewitz in the twenty-first century* (pp. 107-121). United States: Oxford University Press.
- Lone Sentry. (1945). *28th Roll On: the Story of the 28th Infantry Division*. Retrieved March 22, 2016, from Lone Sentry:
http://www.lonesentry.com/gi_stories_booklets/28thinfantry/index.html
- Lovelace, A. G. (2014). Amnesia: How Russian history has viewed lend-lease. *The Journal of Slavic Military Studies*, 27(4), 591-605.

- Lundy, K. (2008). Historical research. In L. M. Given (Ed.), *The sage encyclopedia of qualitative research methods* (pp. 296-400). Thousand Oaks: SAGE Publications, Inc.
- MacDonald, C. B. (1984). *A time for trumpets : the untold story of the Battle of the Bulge*. New York: Morrow.
- MacDonald, C. B. (1993). *The last offensive*. Washington, D.C.: Center of Military History: United States Army.
- Marshall, S. L. (1988). *Bastogne: The first eight days*. Washington, D.C.: U.S. Army Center of Military History.
- Martel, W. C. (2011). *Victory in war: Foundations of modern strategy*. New York: Cambridge University Press.
- Mawdsley, E. (2009). *World War II*. New York, New York: Cambridge University Press.
- McManus, J. C. (2007). *Alamo in the Ardennes*. Victoria, Australia: Penguin Group.
- Mellenthin, F. v. (1977). *German Generals of World War II: As I saw them*. U.S.A: University of Oklahoma Press.
- Michel, H. (1973). *World War II: A short history*. Farnborough Hampshire, England: Saxon House.

- Morelock, J. (1994). *Generals of the Ardennes: American leadership in the Battle of the Bulge*. Washington, DC: National Defense University Press.
- Murphy, B. J. (2014, December). The glorious blunder: the December 1944 Battle of the Bulge was an American disaster--until it turned into the greatest victory in US Army history. *America in WWII*, 10(4), 14-27.
- Paret, P. (1985). *Clausewitz and the state: The man, his theories, and his times*. Princeton: Princeton University Press.
- Paret, P. (1992). *Understanding war: Essays on Clausewitz and the history of military power*. London, England: Greenhill Books.
- Parker, D. S. (Ed.). (1997). *Hitler's Ardennes Offensive: The German view of the Battle of the Bulge*. London, England: Greenhill Books.
- Patton, G. S., & Harkins, P. D. (1995). *War as I knew it*. New York, New York: Houghton Mifflin Harcourt.
- Roxborough, I. (1994, December). Clausewitz and the sociology of war. *The British Journal of Sociology*, 45(4), 619-636.
- Rush, R. S. (1999). A different perspective: Cohesion, morale and operational effectiveness in the Germany Army, Fall 1944. *Armed Forces & Society*, 25(3), 477-508.
- Shapiro, M. J. (1976). *The screaming eagles: The 101st Airborne Division in World War II*. New York: Julian Messner.

- Smith, G. W. (2014). *Eisenhower's six great decisions, 1944-1945*. Pickle Partners Publishing.
- Taylor, A. J. (1975). *The Second World War*. London, Great Britain: Hamish Hamilton Ltd.
- Toland, J. (1999). *Battle: The story of the bulge* (Revised ed.). Knoxville, Tennessee: Bison Books.
- U.S. Army Europe. (2011). *United States Army Europe*. Retrieved April 22, 2016, from Battlebook, senior leader staff ride: The Battle of the Bulge:
<https://archive.org/details/BattlebookTheBattleOfTheBulgeSeniorLeaderStaffRide>
- United States Military Academy West Point. (2012). [*Western Europe, 15 December 1944*]. Retrieved May 1, 2016, from United States Military Academy West Point:
<http://www.westpoint.edu/history/SiteAssets/SitePages/World%20War%20II%20Europe/WWIIEurope71.gif>
- Waldman, T. (2010, Autumn). Politics and war: Clausewitz's paradoxical equation. *Parameters*, 40(3), 48-60.
- Wallach, J. L. (1986). *The dogma of the battle of annihilation*. Westport: Greenwood Press.

Weinberg, G. L. (1994). *A world at arms*. Cambridge, England: Cambridge University Press.

Weingartner, J. J. (1979). *Crossroads of death*. Los Angeles, California: University of California Press.

Whiting, C. (1985). *Ardennes: The secret war*. Briarcliff Manor, New York: Stein and Day.

Zabecki, D. T. (Ed.). (1999). *World War II in Europe: An encyclopedia*. London, England: Garland Publishing, Inc.

Zaloga, S. J. (2010). *Battle of the Bulge*. USA: Osprey Publishing.