The provisions of the Freedom of Information Act are applicable to this document.

By depositing this document at The National War College for permanent retention, the author permits the College to use and reproduce this document as the College sees fit in the pursuit of its educational goals.

The opinions and conclusions expressed herein are those of the individual student author and do not necessarily represent the views of either The National War College or any other government agency. References to this study should include the foregoing statement.
# The Uncertainty Principle and Operational Art

**FEB 1986**

**N/A**

**-**

**The Uncertainty Principle and Operational Art**

**National Defense University National War College Fort McNair Washington, DC 20319**

Approved for public release, distribution unlimited

**Unclassified**

**Unclassified**

**Unclassified**

12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:

<table>
<thead>
<tr>
<th>a. REPORT</th>
<th>b. ABSTRACT</th>
<th>c. THIS PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>unclassified</td>
<td>unclassified</td>
<td>unclassified</td>
</tr>
</tbody>
</table>

17. LIMITATION OF ABSTRACT

UU

18. NUMBER OF PAGES

38

19a. NAME OF RESPONSIBLE PERSON

**Unclassified**
DISCLAIMER

This research report represents the views of the author and does not necessarily reflect the official opinion of The National War College, the National Defense University, or the Department of Defense.

This document is the property of the United States Government and is not to be reproduced in whole or part without permission of the Commandant, The National War College, Fort Lesley J. McNair, Washington, DC 20319-6000.
Title: The Uncertainty Principle and Operational Art

Author: Edward L. Trainor, Lieutenant Colonel, USMC

Date: February 1986

This report addresses the role of uncertainty at the operational level of combat. Specifically, it addresses the question of whether uncertainty should affect planning at the operational level and, if so, how. Three major battles are analyzed to determine whether uncertainty was present, and, when discovered, to discuss its consequences. The principles of war currently espoused by the U.S. Army are discussed in relation to uncertainty and recommendations are offered regarding the planning for uncertainty in future operations.
Lieutenant Colonel Edward L. Trainor, USMC, has been interested in the operational art throughout his career. In addition to commanding a tank platoon in Vietnam in 1967-68, he has spent the majority of his time either serving with operational units or teaching within his occupational specialty. He wrote his Masters of Management thesis on a streamlined command and control system for mobile units. The thesis led to the local publication of a battalion-level SOP for operations. Portions of that SOP were further incorporated into current USMC doctrinal publications. Lieutenant Colonel Trainor is a graduate of the National War College, Class of 1986.
CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCLAIMER</td>
<td>ii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>BIOGRAPHICAL SKETCH</td>
<td>iv</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2. THE PRINCIPLES OF WAR</td>
<td>4</td>
</tr>
<tr>
<td>3. GETTYSBURG, STALINGRAD, INCHON</td>
<td>8</td>
</tr>
<tr>
<td>Gettysburg</td>
<td>9</td>
</tr>
<tr>
<td>Stalingrad</td>
<td>13</td>
</tr>
<tr>
<td>Inchon</td>
<td>13</td>
</tr>
<tr>
<td>4. SUMMARY AND CONCLUSION</td>
<td>24</td>
</tr>
<tr>
<td>NOTES</td>
<td>30</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>32</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

Most war theorists and historians, as well as experienced generals, readily admit that uncertainty exists at the operational level of war. Von Moltke, in his introduction to the German General Staff's treatise on the War of 1870-1871 stated, "No operation plan extends with any certainty beyond the first encounter with the main body of the enemy. It is only the layman who, as a campaign develops, thinks he sees the original plan being systematically fulfilled in every detail to its preconceived conclusion."(1) Further, Field Marshal Erich von Manstein, speaking strictly of intelligence availability, stated, "A veil of uncertainty -- the one unvarying factor in war -- had descended on the enemy's location and intentions."(2)

Although history illustrates that uncertainty, in its many and varied forms, exists at the operational level of war, there seems to be a reluctance to address it in terms of operational planning. Perhaps it is the thought that
uncertainty by its very nature cannot be specifically addressed until it has become a reality (therefore, a certainty) in a given situation. Perhaps it is that the concept of planning for uncertainty could be interpreted in either of two extremes: first, that the requirement to cover all eventualities would necessitate a hopelessly voluminous and hence, unmanageable plan or, second, its reverse, that the requirement to cover all eventualities would necessitate such flexibility that one could argue for no plan at all. Either of those two conclusions would be anathema to the normally organized mind of the military professional. Whatever the reason, there has been a failure to link the uncertainty admittedly encountered during combat operations with the planning for those operations.

Nine principles of war are taught within the U.S. military establishment as fundamental truths which, if properly applied, will contribute to success. Three of those principles, maneuver, surprise, and security, indirectly assume that uncertainty is present in one form or another on the battlefield. Just how their application might be influenced by those uncertainties, however, is questionable.

This paper will first address the nine principles of
war espoused by the U.S. military and then will discuss some general aspects of uncertainty relative to operational art.

Following that, the battles of Gettysburg, Stalingrad, and Inchon will be briefly analyzed to determine the presence and degree of uncertainty in each. When appropriate, applicable principles of war also will be addressed in the analysis.

The final portion of this paper will discuss the uncertainties identified in the previously analyzed battles and how they related (or could have related) to the planning process and to the applicable principles of war. That discussion will lead to conclusions and recommendations regarding the relationship between uncertainty and future planning at the operational level.
CHAPTER 2
THE PRINCIPLES OF WAR

Army Field Manual (FM) 100-5, *Operations*, presents the principles of war as follows:

The United States Army published its first set of principles of war in a 1921 Army training regulation. These principles were in large measure drawn from the work of British Major General J.R.C. Fuller, who developed a set of principles of war during World War I to serve as guides for his own army. In the ensuing years, these original principles of war adopted by our Army have undergone minor revisions and changes, but have essentially stood the tests of analysis, experimentation, and practice. For the United States Army today, the principles of war are:

- OBJECTIVE
- MANEUVER
- OFFENSIVE
- UNITY OF COMMAND
- MASS
- SECURITY
- ECONOMY OF FORCE
- SURPRISE
- SIMPLICITY

The field manual then provides for each principle an explanatory paragraph too voluminous and certainly unnecessary to duplicate in this paper. However, some discussion of several of those principles provides a brief analysis of their relationship to operational uncertainty.

In its definition and discussion of the principle of
the objective. FM 100-5 emphasizes the requirement to define clearly and decisively an attainable military objective. Although it further advocates continuously subjecting political objectives to "rigorous analysis and review" (suggesting their periodic change), there is no statement or intimation that possibly vacillating political objectives might require flexibility in the assignment of operational or tactical military objectives. Rather, the emphasis remains on "clearly defined, decisive, and attainable tactical objectives that can ultimately assist in achieving the strategic aims." (5)

When discussing the principle of economy of force, the field manual exhorts commanders at all levels to "allocate minimum essential combat power to secondary efforts." (6) In this case, the discussion emphasizes the possible risk (uncertainty) involved and "places a premium on the need for flexibility of thought and action." (7)

The paragraph provided on the principle of maneuver best emphasizes the requirement for its flexible application in response to anticipated operational uncertainty. Specifically, FM 100-5 proposes:

In the strategic sense, this principle has three interrelated dimensions: flexibility, mobility, and maneuverability. The first of these involves the need for flexibility in thought, plans, and operations. Such flexibility enhances the ability to react rapidly to unforeseen circumstances. . . . At all levels, successful
application of this principle requires not only fire and maneuver, but also flexibility of thought, plans, and operations, and the considered application of the principles of mass and economy of force. (8)

The principles of security and surprise are discussed as reciprocals. The employment of the principle of security is intended to limit the enemy's acquisition of an unexpected advantage, thereby, attempting to reduce operational uncertainty. Conversely, proper and frequent application of the principle of surprise elevates the level of operational uncertainty confronting the enemy. Strategic and operational security and surprise are addressed in context with the obvious difficulties each presents relative to the American society and its free press.

FM 100-5 has been revised every six to eight years over the past three decades, and depending upon the specific edition, the nine principles of war are presented either as guides or as "fundamental truths governing the prosecution of war." (9) Carl von Clausewitz, the renowned Prussian theorist of the early nineteenth century, offered some thoughts concerning principles and their relationship to operational uncertainty. In his discussion of the qualities of war, Clausewitz stated that plans are built upon general circumstances and are often thwarted by the unexpected. For that reason, he emphasized that, instead
of specific and binding principles. "More must be made of a theoretical guide than in any other business." (10) He further stated,

Theory can give no formulas to solve problems; it cannot confine the mind's course to the narrow line of necessity by principles set up on both sides. It permits the mind a glimpse into the mass of objects and their relations; and then transports it again into the higher regions of action, there to act according to the measure of its natural gifts. (11)
CHAPTER 3
GETTYSBURG, STALINGRAD, INCHON

The battles of Gettysburg, Stalingrad, and Inchon are reviewed in this chapter. Although numerous battles of perhaps equal or even greater importance might have been selected for similar analysis, those three were identified for two significant reasons. First, they include three major battles spanning nearly eighty years of history, and thereby, represent a fairly broad view of the relationship of uncertainty to modern warfare. Second, although they represented battles fought between different adversaries and at widely divergent geographic locations (in order to reduce the possibility of too narrow an analysis), they are comparable since each resulted in a major turning point in its respective war.

It is not the purpose of this paper to retell the story of each of those battles. In fact, the assumption is made that the reader has a basic knowledge of those particular military operations. The battles are, therefore, analyzed to determine the presence of operational uncertainty and, when discovered, to discuss its nature and degree.
As it is not the purpose of this paper to reiterate battle history, neither is its purpose to analyze the entire thought process involved in each situation. For example, Generals Lee and Meade certainly had their reasons for deciding as they did at Gettysburg. Similarly, Hitler had his reasons for concentrating major military effort against the Soviets at Stalingrad. Although those reasons are interesting and could be (and have been) the subject of analysis, their existence has no bearing on the operational uncertainty caused as a result of the decisions made in each case.

GETTYSBURG

As General Robert E. Lee marched his Army of Northern Virginia north across the Potomac in mid-June 1863, his mission was certain: to take the war to the north, to replenish his army, to draw out and defeat the Army of the Potomac as soon as practicable, to allow the Confederacy to offer peace terms to the North and, thereby, to end the struggle.

Lee's army was confident of its ability in battle based upon its recent successes against the North. In addition, General Lee perhaps had reason to feel greater
than normal self-confidence because of his unusual knowledge of the opposing general officers. "In all at least two dozen instructors and cadets during Lee's superintendency at West Point became general officers in the Federal forces and were directly opposed to him on the battlefield." (12)

As the Army of the Potomac marched north from Washington in response to Lee's crossing of the Potomac, it too had a clearly defined mission: that of finding the Army of Northern Virginia and defeating it. The Federals were also operating under standing orders to protect the capital if imperiled.

Although the missions of both armies were quite clear and each knew the general whereabouts of the other, uncertainty existed in the mind of each commander regarding the specific location and intention of his opponent. In the case of General Lee, his lack of operational intelligence concerning the location of the Federal army (lack of sufficient operational intelligence being an historically common uncertainty) was exacerbated by his loss of contact with his most trusted cavalry captain, J.E.B. Stuart. Although his mission depended in large part upon locating the Federal Army of the Potomac and then of drawing it into a battle at his chosen time and place, General Lee continued to wait for Stuart's cavalry report.
rather than tasking his remaining and available cavalry units with the mission of locating the enemy.

Uncertainty caused or exacerbated by Lee's overreliance on specific subordinates was also manifested as a result of his loss of Thomas J. (Stonewall) Jackson at Chancellorsville. Jackson's death "created a void which was never filled. . . Whether Lee was justified in expecting Longstreet or Ewell to emulate Jackson techniques or not, Gettysburg proved that if Lee had counted on another Jackson in the execution of his plan, he was sadly disillusioned."(12)

If, perhaps, the claim is incorrect that Lee was overreliant on specific subordinates, thereby creating operational uncertainty, then, at least, the loss of Jackson, a strong corps commander, still required Lee to make personnel shifts to fill the void. In so doing, he reorganized his two corps into three. Only one of these, however, was commanded by an experienced corps commander, Lieutenant General James Longstreet. The other two were commanded by Lieutenant Generals Ambrose P. Hill and Richard S. Ewell, each recently promoted from division command. The operational uncertainty caused by that reorganization became obvious during the initial phase at Gettysburg.

Why did Ewell pursue the defeated Yankees to take Culp's Hill and Cemetery Heights at the end
of the first day? Why did Ewell hesitate? ... Why didn't (Lee) insist that Ewell move? ... These are questions that have been debated for the better part of a century; they remain now, as they remained after the first day of fighting at Gettysburg, in large part unanswered and perhaps unanswerable. (14)

Just as chance played its part when the inexperienced Ewell failed to occupy commanding terrain, several instances may be identified that further demonstrate uncertainty as a result of the commander's professional ability (or inability). For example, the uncertainty of the actual field of battle at Gettysburg was in large measure decided by the commander of Federal cavalry, Major General John Buford who, unlike Ewell, had an eye for terrain. Although pushed back during the first day of battle, it was Buford who on the eve of the first day dug in on Seminary Ridge. He reasoned, "If we withdraw -- there is no good ground south of here. This is the place to fight." (15)

Professional inability through indecisiveness was demonstrated by Major General George Meade when he failed to pursue and decisively defeat Lee's army subsequent to Gettysburg. Instead of winning the war through decisive action at Gettysburg, Meade's failure to pursue prolonged the war nearly two years, thereby injecting an unwarranted degree of operational and strategic uncertainty into the North's war effort.
This paper need not expound on more instances of uncertainty encountered by each side at Gettysburg to show that the historical fog of war was prevalent at the operational level on the battlefield. Clausewitzian friction was evident from Longstreet's corps' countermarch to Major General Daniel E. Sickles's unanticipated move from the line. Uncertainty caused by a lack of combat intelligence was obvious in Meade's initial hesitation to believe Lee was massing at Gettysburg and in Lee's loss of communication with Stuart. Operational uncertainty as a result of the commander's professional ability was displayed by Lee when he ordered Pickett's charge rather than, perhaps a flanking movement and by Meade when he failed to pursue and destroy Lee's army immediately subsequent to Gettysburg.

Clausewitz taught that military strategy must be subordinate to and consistent with political objectives and that war is the extension of politics by other means. History has also taught, however, that once the military
mission which best supports the political aim has been established, the professional soldier can best prosecute the military operation without undue interference by the politician. In that regard, Friedrich Wilhelm von Seydlitz, one of Frederick the Great's trusted cavalry commanders, stated at the battle of Zorndorf in August 1758, "After the battle, the king may dispose of my head as he will, but during the battle he will kindly allow me to make use of it." (18)

Although the Germans were obviously well aware of the battle of Zorndorf and of the teachings of Clausewitz, the defeat of the German Sixth Army at Stalingrad was the result of operational (and perhaps strategic) uncertainty that resulted from interference from the political quarter. Stalingrad was the culmination of strategic and operational decisions made by Hitler. Those military decisions were made by a politician, against the advice of his generals concerning the best military strategy with which to achieve his political aim of overthrowing the communist regime in Russia.

During the planning phase for Operation Barbarossa, the invasion of Russia, the German high command was faced with deciding whether to defeat the Soviets by annihilating the bulk of their military with a direct attack against Moscow, or whether to wage a more protracted campaign
against the Soviet industrial-economic base located in the Caucasus and Ukraine. Although the German General Staff coupled with several generals in the field saw the benefit of occupying the industrial base in the south in order to bolster their own war machine as well as to pinch off that of the Soviets, they agreed that the primary objective must be Moscow in order to defeat the Soviets before they could bring the full weight of their armies and industrial power to bear.

Unable, however, to completely convince Hitler, who opted for the southern industrial base strategy, Directive #21 "Barbarossa" dated 18 December 1940 was issued in an attempt to strike a middle ground. It violated the principles of mass and objective by ordering simultaneous and widespread German thrusts against Moscow and the Ukraine-Caucasus region.

Although the German armies had captured vast amounts of territory during the initial eighteen months of Barbarossa, they had failed to gain a decisive victory over the Soviets. By the spring of 1942 the German armies were no longer able to wage war from the Baltic to the Black Sea. Their campaign had taken its logistic toll and now necessitated the more concentrated approach that should have been planned initially. Although the General Staff still saw Moscow as the key objective, a summer offensive
for 1942 was planned at Hitler's direction to occupy the industrial base of the Ukraine-Caucasus with two army groups consisting of five armies.

The point of main effort was to be Stalingrad with the Sixth Army in the main assault. The details of the battle of Stalingrad between 23 August 1942 and 31 January 1943 are unnecessary to illustrate the operational uncertainty created by military decisions being made by a politician. The fact that the tragedy of Stalingrad even occurred is sufficient. Strictly military decisions were being made, to an ever increasing degree, by Hitler. Although he insisted on making even the operational and in some cases tactical decisions, Hitler lacked the requisite professional knowledge to make them and, therefore, often balked when faced with the responsibility as indicated by the following quote concerning the Chief of the German General Staff, Field Marshal Franz Halder, and his bouts with Hitler:

Halder wanted clear decisions; Hitler avoided them. Halder had protested against the summer offensive of 1942: Hitler had insisted. Halder favored a concentration of strength and a strategic defense; Hitler wanted oil and the Volga. Halder pointed out how weak were the forces to carry out Hitler's strategic plans; Hitler brushed them aside. Halder warned him of Russian strengths; Hitler said that only half-who could be taken in by such propaganda. When Halder showed him intelligence reports concerning the constant arrival at the front of new Russian divisions, Hitler said that it was just a 'Stalin's bluff on Stalin's part'.
Halder wanted freedom of action but Hitler issued orders down to regimental level and made tactical decisions which should have been left to battalion commanders on the spot. (17)

When Russian resistance in and around Stalingrad stiffened, Field Marshal von Manstein, the army group commander, told Hitler, "It was strategically impossible to go on tying down our forces in an excessively small area while the enemy enjoyed a free hand along hundreds of miles of front. What we must regain at all costs was our maneuverability." (18) Hitler's response, however, to his proven and respected field commander was to forbid "any disengagement by the troops fighting in and around Stalingrad." (19)

The worsening situation at Stalingrad caused by Hitler's refusal to give an inch of ground was exacerbated by the ever-present Clausewitzian friction. Since Hitler believed the Stalingrad operation would be concluded prior to winter 1942, he reneged on continued requests to issue orders to prepare winter equipment for the troops. Problems abounded when his field commanders attempted to care for their men through normal supply channels in spite of Hitler's refusal to expedite.

Only the troops in Stalingrad went empty-handed. It was others, a hundred miles behind the front, who wore fur coats. Forty-thousand fur coats, caps, and fur boots and twenty-five hundredweight of moth powder were stored in Millerovo. (Close by) were 400,000 shirts, 40,000 caps, 102,000 pairs of felt boots, 88,000 pairs of pants,
61,000 denim trousers, 53,000 uniform jackets, 121,000 greatcoats, as well as scarves, balaclavas, mittens, gloves, and socks. (20)

On 31 January 1943 at 05:45, Sixth Army Headquarters sent its final message signaling the loss of its twenty-two divisions and 364,000 men: "Russians stand at the door of our bunker. We are destroying our equipment. This station will no longer transmit." (21)

According to General Władysław Anders, a Polish general writing about Stalingrad after the war:

The Wehrmacht had no superiority in numbers over the Red Army, and its mobility was not much greater than that of the enemy. The only field in which it had an absolute advantage was the superiority of its commanders and that of the German soldier. Perhaps this would have been enough to defeat the Russians if it had been accompanied by an equally high standard in the German High Command. This, however, not being the case, the Wehrmacht failed to make good use of its only real advantage. (22)

The operational uncertainty created by the politician's military decision-making at Stalingrad perhaps had more far-reaching strategic consequences for Germany than just the loss of their Sixth Army. "His hysterical terror of losing ground, and thus prestige, culminated in the disposition that the German Army was finally forced to adopt in France, and thus ensured that army's destruction at the hands of the technically superior and better equipped forces of the Americans and British." (23)
On 24 June 1950, the North Koreans attacked south across the 38th parallel in an aggressive attempt to unify Korea under communist rule. The North Koreans achieved complete surprise with their invasion of the south. That fact, together with the World War III scenario that doomsayers had been brooding about since Hiroshima, created an immediate hesitant uncertainty regarding the proper response to the situation. As a result, within three months, the northern offensive had successfully pushed the South Koreans and their allied American troops into a small defensive perimeter around Pusan in the southeastern corner of the peninsula.

General Douglas MacArthur, the allied commander at the time, was faced with the immediate task of planning an operational countermove against the North Koreans but within the context of the strategic uncertainty concerning a possible precipitate Soviet move into Europe while the United States was concentrating its attention on the destabilized situation in Korea.

In retrospect, Operation Chromite, the code name for
the amphibious landing at Inchon on 15 September 1950, was a brilliant operational success. Anyone, whether military professional or not, who scans a map of the Korean peninsula can readily understand the basic logic of striking a logistically extended enemy in the flank with an assault from the sea in the vicinity of Inchon. It was close to the South Korean capital of Seoul which had been occupied by the invaders, and it provided an excellent logistic base from which to launch a major counter offensive to reestablish the 38th parallel separating North and South Korea.

The obvious logic of the Inchon operation coupled with its historic success tend to cloud the operational uncertainties with which MacArthur was faced while planning the landing. Unlike Stalingrad, the commander in the field was not thwarted by the politician. President Truman greatly respected the professional ability of MacArthur and, at least throughout the Inchon campaign, gave him his head. General MacArthur's uncertainties were strictly military in nature and, in large measure, were overcome by his audacity born of an extreme self-confidence as a result of his many years of combat experience.

The normal uncertainty existed as a result of incomplete intelligence concerning exact enemy strengths and dispositions around Inchon and its harbor island.
Holmi-do. In addition, as previously stated, MacArthur felt the presence of the strategic uncertainty being addressed by the Joint Chiefs at the time. They were, "dubious as to the proposed amphibious counterthrust, especially when troop requirements were explained coupled with the guess whether the Russians would seize this convenient moment to march on the Rhine and points west." (24)

Perhaps the greatest uncertainty was created by the geography of the proposed landing area around the port city of Inchon. In addition to the previously mentioned island of Wolmi-do, there was a sea wall to be scaled by the landing force; the available landing beaches were extremely narrow; and the tidal range coupled with the bottom gradient not only severely canalized amphibious shipping but restricted its entry into the area to no more than a couple hours each day.

Once again, with the clarity of hindsight, one can argue that the shrewd tactician, by overcoming all such negatives emphasizes the principle of surprise and, therefore, turns darkness into light. With foresight, however, those negatives loom as gross uncertainties to be carefully weighed by the commander.

In the case of the uncertainties at Inchon, Lieutenant Commander Arlie G. Cipps, gunnery officer on the amphibious
staff of Rear Admiral James Doyle (MacArthur’s Commander of the Amphibious Task Force) said, “We drew up a list of every natural and geographic handicap -- Inchon had 'em all.”(25) Doyle’s communications officer said, “Make up a list of amphibious 'don’ts' and you have an exact description of the Inchon operation.”(26) In fact, the 1952 edition of USF-6, then the Navy’s guide for the conduct of amphibious operations and written based on vast experience gained during World War II, listed seven criteria for a landing area; all were violated at Inchon.(27)

Aiding MacArthur in his decision-making at the time, were professional officers with recent and highly successful experience in amphibious operations conducted throughout the Pacific during World War II. Admiral Doyle, after hearing General MacArthur brief his proposed Inchon landing said, “General, I have not been asked nor have I volunteered my opinion about this landing. If I were asked, however, the best I can say is that Inchon is not impossible.” After a pause, MacArthur replied, “If we find we can’t make it, we will withdraw.” Doyle then responded, “No, General, we don’t know how to do that. Once we start ashore, we’ll keep going.”(28)

Other uncertainties extant at Inchon are, at this point, superfluous. Anyone with any knowledge of
amphibious operations is well aware that normal
Clausewitzian friction is increased by the added complexity
of amphibious requirements. Inchon was no exception and
friction abounded.

The uncertainty created by the geography at Inchon,
compounded by, at best, lukewarm acceptance of the plan by
his experienced staff, could well have caused a commander
less confident than MacArthur to avoid the operation.

Having faced that uncertainty prior to the operation,
however, MacArthur concluded, "I realize that Inchon is a
five thousand to one gamble, but I am used to taking such
odds. . . . We shall land at Inchon and I shall crush
them." (29)
Historically, war has been fraught with uncertainty. Like poker, war is a game of chance as well as of skill and bluff. War is generally in some degree a gamble, and he who seeks certainties only is likely to miss every opportunity. There is no other human activity that stands in such constant and universal contact with chance as does war. Thus chance, the accidental, and good luck play a great part in war. The art of war has to do with living, moral forces. It, therefore, follows that it can nowhere attain the absolute and certain; there remains always a margin for the accidental, in great things and small. War is the province of uncertainty! three-fourths of the things upon which action in war is calculated lie hidden in a fog of uncertainty. War is the province of chance. In no other sphere of human activity must such a margin be left for this intruder. It increases the uncertainty of every circumstance and deranges the course of events. Because of these continual incursions of chance, and the uncertainty of all reports and assumptions, the person acting in war constantly finds things different from his expectations. This inevitably influences his plans, or the expectations connected with his plans.

Just as war has been historically laced with uncertainty as attested to by historians and by battle analysis, there is no reason to expect that future conflict will bring certainties. Soviet doctrine, in fact, emphasizes the destabilization of the enemy on future battlefields.
The importance of the principle of surprise increases as the means of warfare develop. Surprise permits forestalling the enemy in delivering strikes, catching him unawares, paralyzing his will, sharply reducing his combat effectiveness, disorganizing his control, and creating favorable conditions for defeating even superior forces. ... Surprise may be achieved by leading the enemy astray regarding one's intentions, by secrecy of preparation and swiftness of troop actions, by wide use of night conditions, by the unexpected employment of nuclear weapons and other means of destruction, by delineating a forceful blow where and when the enemy doesn't expect it, and by employing methods of conducting combat operations and new means of warfare unknown to the enemy. (32)

A basic relationship surely exists between at least some forms of operational uncertainty and the principles of war as exemplified in the above quote linking surprise with the uncertainty it creates. Just as surprise creates uncertainty for the enemy, its counterpart, the principle of security, attempts to thwart or, at least, reduce the enemy's ability to employ surprise. Further, the principle of maneuver provides the commander with an operational and tactical tool with which to hopefully counter enemy surprise and to capitalize on opportunities on the battlefield.

Few argue, then, that uncertainty has been and will continue to be pervasive in military operations. Most also recognize that several of the principles of war at least indirectly address that pervasive uncertainty. With that in mind, what can be concluded concerning uncertainty and
its relationship to planning at the operational level?

Commanders at all levels during planning as well as execution must understand that the so-called principles of war are, in reality, concepts instead. Interpreted as concepts, they will continue to stand the test of time; but they are not givens; they are not axiomatic. They must, instead, be applied when and where applicable and to the degree required by the situation.

Commanders must train for and prepare to deal with uncertainty at all levels. In order to plan effectively for it, they must be able to recognize it for what it is. As evidenced by the analysis presented in the preceding chapter, operational uncertainty can be subdivided as follows: intelligence; geography and "acts of God"; political; and operational/personal. Although these categories are not mutually exclusive, viewing uncertainty within that framework might facilitate the understanding of the young officer in his initial attempts in confronting it.

Uncertainty as it falls within the intelligence category is readily apparent. Commanders must be constantly prepared to make decisions without full knowledge of the enemy's total strength, exact location, or intentions. Uncertainties created by a lack of complete intelligence were obvious in each of the analyzed battles.
The category labeled "geography and 'acts of God'" includes most of the uncertainties such as those confronting MacArthur at Inchon, but also includes uncertainties created by changing or unexpected climactic conditions as well as just plain luck.

The political uncertainty that caused the ultimate defeat of the Sixth German Army at Stalingrad represents the next category. Commanders must at least be aware that the omnipotent political aim may change and the politician may either be or become indecisive or meddlesome in military affairs. Any of those uncertainties can require additional military flexibility.

The operational/personal category includes the uncertainty resulting from differences in commanders' professional talent, the level of troop training, and leadership. Much of the operational uncertainty observed at Gettysburg fell into this category. It also includes many of those logistic and mechanical failures which constitute a large percentage of the friction that Clausewitz addressed.

In training, commanders must emphasize Field Marshal von Manstein's advice: "The army and army group staffs adhered firmly to two well-established German principles of leadership: (1) Always conduct operations elastically and resourcefully; (ii) Give every possible scope to the
initiative and self-sufficiency of commanders at all levels." (33) The current edition of the U.S. Army's FM 100-5 Operations is consistent with that view: "The attack must be flexible. The plan must foresee developments as far ahead as possible. However, it must also expect uncertainties, and it must be ready to exploit opportunities." (34) Unfortunately, however, FM 100-5 violates its own stated respect for flexibility when it addresses at length the expected detail of the execution paragraph in the operation plan and order. The "certainty of uncertainty" must shift the emphasis from the third to the first and second paragraphs of the operations order; from the detail of execution to the detail of the situation and the mission. As much as is known of the situation that might effect the operation must be discussed. Available intelligence concerning the enemy, his forces and intentions as well as available friendly forces must be delineated. Sufficient time must be taken to ensure that each commander at each echelon understands the intent of his mission and how it relates to the overall operational fabric. Here, again, current Army doctrine is correct in requiring commanders to understand the mission of the next higher echelon. That may not be sufficient in every situation, however. The overall operational fabric and the future intentions of the commander two echelons above may
be of even greater importance.

With a complete understanding of the "mission concept," the plan should then discuss an "execution concept" in some detail. The emphasis should be on the concept, however, rather than on the execution itself. Selected "concepts" of war which might be especially applicable to the operation at hand should be discussed as should priorities of targets and anticipated timing. All of this should be discussed, however, in the full realization that it is the part of the plan most likely to change. The plan should include detailed and numerous control features to facilitate operational and tactical maneuver through rapid and flexible decentralized control.

With that in mind the commander must then be willing to place sufficient authority in the hands of his subordinates to allow them to capitalize on that decentralization.

Commanders at all levels during planning as well as execution should remember that war is, by its very nature, an art and not a science: "an art by which, as is true of all arts, the sublime cannot be taught." (35)
NOTES


2. Ibid., p. 137.


4. Ibid.

5. Ibid.


8. Ibid.


11. Ibid., p. 198.


13. Ibid., p. 76.


18. von Manstein, Lost_Victories, p. 320.
20. Ibid., p. 47.
21. Ibid., p. 258.
26. Ibid.
27. Ibid., p. 25.
28. Ibid., p. 40.
29. Ibid., p. 42.

31
BIBLIOGRAPHY


The provisions of the Freedom of Information Act are applicable to this document.

By depositing this document at The National War College for permanent retention, the author permits the College to use and reproduce this document as the College sees fit in the pursuit of its educational goals.

notice to reader