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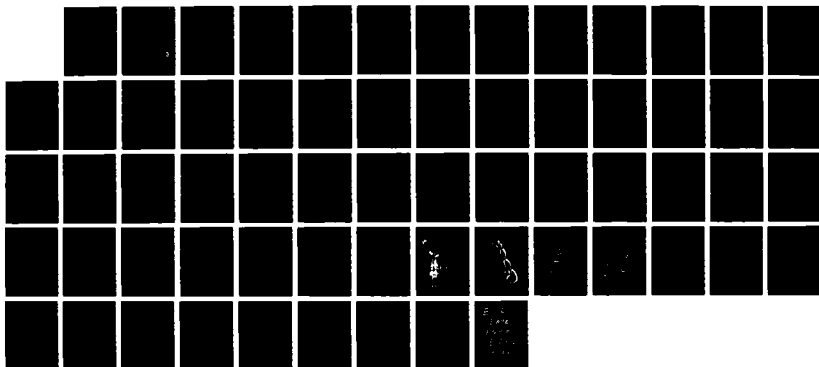
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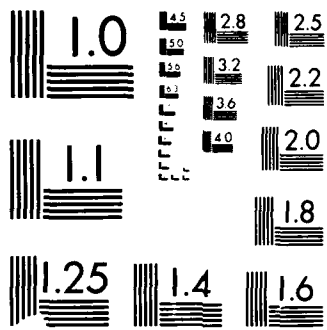
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Sequels:
Thinking About the Future

Major William S. Pennypacker
Infantry

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

7 May 1988

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<p>This monograph explores the role of sequels in the process of operational design. The complexity and resiliency of today's armies has made the design of campaigns to achieve strategic ends an increasingly difficult undertaking. Campaign planners must contend with many factors not the least of which is understanding the need to develop operations which extend to the depths of time and space. The operational commander must be prepared to fight multiple battles, multiple operations, or even multiple campaigns in his quest for victory. However, everpresent uncertainty can make planning for subsequent actions a difficult process. Whether or not the operational commander can see the future with sufficient clarity to make the detailed planning of sequels useful will be the subject of this monograph.</p> <p>This paper seeks to answer that question (continued on other side of form)</p>					
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19. Cont. through the use of a two part methodology. First the theoretical basis for sequels, their historical development, and their relationship with operational design are examined. Next a number of historical cases are considered to determine if sequels have been employed in the past or if sequenced planning has merely been an afterthought of historians.

On the basis of the analysis of the theoretical foundation of sequels and historical example, the monograph concludes that sequels are a critical part of operational design which commanders must address in campaign planning. In addition, a number of parameters are established which must govern the creation of sequels. Summarized these basic guidelines include the need to maintain a constant focus on the end state, an application of the elements of campaign design so that they can support continuous operations, and an appreciation of the role of initiative and freedom of action. The paper suggests the importance of sequels to operational design and the parameters for their employment ought to receive consideration by the U.S. military establishment as it develops joint operational doctrine.

**Sequels:
Thinking About the Future**

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Infantry

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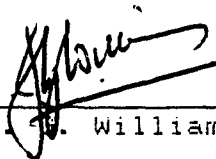
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ABSTRACT

SEQUELS: THINKING ABOUT THE FUTURE by Major William S. Pennypacker, USA, 55 pages.

This monograph explores the role of sequels in the process of operational design. The complexity and resiliency of today's armies has made the design of campaigns to achieve strategic ends an increasingly difficult undertaking. Campaign planners must contend with many factors not the least of which is understanding the need to develop operations which extend the depths of time and space. The operational commander must be prepared to fight multiple battles, multiple operations, or even multiple campaigns in his quest for victory. However, ever present uncertainty can make planning for subsequent actions a difficult process. Whether or not the operational commander can see the future with sufficient clarity to make the detailed planning of sequels useful will be the subject of this monograph.

This paper seeks to answer that question through the use of a two part methodology. First the theoretical basis for sequels, their historical development, and their relationship with operational design are examined. Next a number of historical cases are considered to determine if sequels have been employed in the past or if sequenced planning has been merely an afterthought of historians.

On the basis of the analysis of the theoretical foundation of sequels and historical example, the monograph concludes that sequels are a critical part of operational design which commanders must address in campaign planning. In addition, a number of parameters are established which must govern the creation of sequels. Summarized, these basic guidelines include the need to maintain a constant focus on the end state, an application of the elements of campaign design so that they can support continuous operations, and an appreciation of the role of initiative and freedom of action. The paper suggests the importance of sequels to operational design and the parameters for their employment ought to receive consideration by the U.S. military establishment as it develops joint operational doctrine.

Table of Contents

	Page
I. Introduction.....	1
II. Theory and Historical Development.....	3
Definition.....	3
Historical Roots.....	5
Sequels and Operational Design.....	14
III. Historical Employment of Sequels.....	18
Grant's Design for the Defeat of the Confederacy.....	19
Slim--Setting the Trap/Making the Kill.....	23
Manstein--Sequencing on the Strategic Defensive.....	29
Historical Summary.....	32
IV. Parameters for Sequencing Campaigns and Joint Planning...	23
Parameters for Sequels.....	33
Joint Campaign Planning.....	38
V. Conclusion.....	39
Maps:	
Map 1: Grant's Theater of War Strategy.....	41
Map 2: Grant's Eastern Theater of Operations.....	42
Map 3: Phase 1, Slim's 1944 Defensive Operations.....	43
Map 4: Phase 2, Slim's 1944-45 Offensive Operations..	44
Map 5: Manstein's Plan, Phase 1.....	45
Map 6: Manstein's Plan, Phase 2.....	46
Map 7: Manstein's Plan, Phase 3.....	47
Map 8: Manstein's Plan, Phase 4.....	48
Diagram: The Campaign Continuum.....	49
Endnotes.....	50
Bibliography.....	53

INTRODUCTION

"...all considerations of an operational nature are ultimately based--especially when one has lost the initiative to the enemy--on appreciations or hypotheses regarding the course of action which the enemy may be expected to take. While no one can prove beforehand that a situation will develop in such-and-such a way, the only successful military commander is the one who can think ahead. He must be able to see through the veil in which the enemy's future actions are always wrapped, at least to the extent of correctly judging the possibilities open both to the enemy and himself. The greater one's sphere of command, of course, the further ahead one must think."¹

The operational commander has the responsibility to achieve his country's strategic objectives using the means provided him. To do this the commander designs operations which will create the military conditions necessary to achieve the desired end state. The campaign plan, his framework for this design, is used to communicate his scheme to his subordinates. This plan ought to visualize the required actions from start to finish. This seems simple but as Clausewitz said, "Everything in strategy is very simple, but that does not mean that everything is very easy."²

One of the most difficult parts of operational design is arranging the actions which get one to the end. Prior to modern war, a campaign, like a chess game, was often reduced to maneuvering a foe into a single climactic battle. War and the societies which fight them have since become much more complex. A single battle no longer suffices to bring the enemy to the peace table prepared to accede to one's demands. One must be prepared to fight multiple battles, multiple operations, or even multiple campaigns. For this reason a commander must think through his plan in great depth.

Planning in depth is addressed in current U.S. Army doctrine in the form of branches and sequels. Branches--options for changing dispositions, orientation, or direction of movement and accepting or declining battle³--are the simpler of the two concepts. These are the familiar contingency plans which commanders learn to plan for and employ in their formative experiences. Sequels--actions after battle⁴--address a subtler issue. Here the commander seeks to plan for actions for which he can only guess. Whether or not the operational commander can see the future with sufficient clarity to make the detailed planning of sequels useful will be the subject of this monograph.

Sequels, only recently introduced as a doctrinal concept, have received limited attention. In this paper, the theoretical basis for sequels, their historical development, and their relationship with operational design will be explored. A number of historical cases will be examined to determine if sequels have been employed in the past or if sequenced planning has been merely an afterthought of historians. If it can be determined that sequels have proven in the past to be an important tool of operational design, then I will offer some parameters which may help future commanders to see into and manage the future. Finally, the issue of doctrinal sufficiency will be addressed to determine where the U.S. military establishment falls on this issue.

THEORY AND HISTORICAL DEVELOPMENT

The concept of operational art received scant attention in the western world from the end of World War II until about fifteen years ago. Western military thought focussed on nuclear

strategies and the problems of revolutionary wars in a post colonial world. The so-called Soviet revolution in military affairs and the recent renaissance in U.S. operational thought placed new emphasis on conventional theater operations. War at the operational level is not simply an expansion of tactical actions. It is a distinct entity with its own lexicon much of which requires definition and explanation for practitioners long ignorant of the subject.

Among the concepts embodied in operational art is campaign design which requires sequencing of actions to accomplish strategic objectives. The term sequels is derived from this idea of sequencing. A cursory look at theoretical writings reveals little about the origins of this term and leads to several questions. What does this term really mean? Where are the theoretical roots of sequels and how have they developed relative to the rest of operational thinking? Finally, how important are sequels to operational design and how do they integrate with other important operational concepts?

DEFINITION

Sequels are often confused with the related term branches. They have almost assumed a linguistic unity in which they are used together or interchangeably. In fact, they are separate, but related terms. One of the problems associated with this confusion is the lack of a clear definition for a sequel.

A dictionary definition serves as a good start point for clarification. Sequel is described as anything that follows or is a continuation. A secondary explanation refers to a sequel as a

result or consequence.⁵ In each case the concept refers to something which occurs beyond a result. In other words it is a response to a completed action not a choice or possibility applicable to an on-going event.

A specific operational sense for this word surfaced only in the current version of FM 100-5. Slightly more than a paragraph is devoted to its description. It is defined as:

"Actions after battles; an important means of anticipating the course of action and accelerating the decision cycle. Sequels to a future battle are based on possible outcomes--victory, defeat, or stalemate. They establish general dispositions, objectives, and missions for subordinate units after the battle. They then can be amended as necessary and ordered into effect."

This definition clearly conveys the idea of subsequent action and the necessity of planning for it. The manual speaks to the criticality of the existence of sequels. They are the vehicle which permits the exploitation of tactical (and operational) success or, conversely, minimizes the operational effects of a tactical loss. The unspoken difficulty is how to plan for the future.

There is an element of uncertainty in sequels. While outcomes may be simplistically described as win, lose, or draw, how does an operational commander plan for eventualities in depth of time and space on the battlefield? FM 100-5 says the use of operational reserves is linked to the planning of sequels, but what if the commander positions the reserve to take advantage of the wrong opening? What of the initial dispositions? There is a dichotomy associated with this concept. The commander must plan

for them, but can he plan with a degree of accuracy to make the effort worthwhile?

Historical Roots

The basic idea of sequels seems clear, but the term itself has been only recently coined. The basis for sequels or the sequential planning they represent is as vague as the background of operational art. Warfare at the operational level is presumed to be a fairly recent innovation--a result of the evolution of the means of war. Common opinion places its roots in the style of warfare practiced by Napoleon but first addressed by his teachers, the eighteenth century French theorists.⁷

One of these theorists, Pierre de Bourcet, had a principal role in the development of grand tactics. Bourcet, a major figure in the eighteenth century French Army, gained a reputation as the consummate army chief of staff. His particular skill seems to have been his ability to study a military problem and to devise a systematic solution for it.⁸

His principal contribution stems from his thoughts on grand tactics and their contribution to current operational thought. In his treatise, Principes de la Guerre de Montagnes, he addresses a number of operational concepts.⁹ Liddell Hart suggests Bourcet's concept of branches was among his most important offerings.¹⁰ Bourcet's treatise, written to support his instruction at the French staff school late in his career, notes the need for a plan to have many branches. He said,

"...One should study the possible courses in the light of the obstacles that have to be overcome, of the inconveniences or advantages that will result from the

success of each branch, and, after taking account of the the more likely objections, decide on the part which can lead to the greatest advantages..."¹¹

This statement coupled with other examples of his work such as his Imaginary Campaign in a Known Country clearly convey the image of a soldier who had grasped the need to think clearly through the mechanics of campaign planning. Both his treatise and the history of the campaigns he designed demonstrate his appreciation of the need to lay out operational dispositions ahead of their actual execution.

What is not present in his work is any reference to sequels. This is not surprising considering that he lived and worked in the age of limited warfare. Commanders of this age still sought to meet their opponents in a single decisive battle. However, his theoretical writings demonstrate the need to sequence actions within the context of a single campaign. His greatest disciple, Napoleon, showed further evidence of this during his twenty years of fighting.

Napoleon was the great synthesizer. Historians have attested to his ability to assimilate and make use of the work of his predecessors. His link to Bourcet has been suggested due to methods he employed in his Italian campaign of 1796. Another example of his appreciation of sequential planning can be seen in his instructions to his stepson, Prince Eugene, prior to the 1809 campaigns. In a series of letters to the inexperienced Eugene, Napoleon, in addition to giving advice on how the campaign in Italy ought to be prosecuted, provides insight into how actions in Italy will support efforts elsewhere in the theater of war.

Specifically, in a letter of January 14 1809, Napoleon addresses several alternatives or branches available to the Prince for the defense of Italy.¹² More importantly for this discussion, we see him suggest possible sequential actions:

"Palmanova (a city in northern Italy) has a defensive and offensive role. Should the French army seek to move on Laibach in Carniola, Palmanova would serve a depot and terminal...After threatening the enemy in Carniola and along the Isonzo, should the French army desire to march on Klagenfurt to unite with the Army of Germany, which has marched on Salzburg, Palmanova is still important."¹³

In this particular reference, we see Napoleon looking beyond the actions in one theater of operations to those in another. As with the Ulm-Austerlitz Campaign, he was able to think through and execute a design incorporating sequential actions. Napoleon's visualization of the campaign as a unity was a facet of his genius. This capacity was not generally the forte of his competitors. War for most was still a matter of a single campaign.

While there was a growing understanding of war's increasing complexity, theory with respect to campaign design lagged somewhat behind. Even Clausewitz and Jomini were unable to visualize the need for a system of war which fully incorporated successive and sequential operations. However, some practitioners of military operations demonstrated an increasing understanding of the need for operational design.

After Napoleon, the best known European military figure of the nineteenth century was arguably Count Helmuth von Moltke, architect of the wars of German reunification. Moltke's design for the campaign against Austria reflected the depth of his

thought. By making use of concentric dispositions, he gave himself significant operational flexibility for subsequent operations. This "controlled" dispersion resulted in the decisive victory at Koeniggraetz. His subsequent actions give further evidence of his understanding of the need for sequencing action.¹⁴

Following the battle at Koeniggraetz, Moltke directed only his Second Army to pursue the Austrians. The remainder of the Army continued its movement towards Vienna, the strategic center of gravity. Second Army's mission was to fix the Austrian army in its encampment. If the enemy attacked, Second Army was to engage the Austrians. In the event of the Austrians proving too strong, they were to fall back away from the main body. Moltke reasoned that the main body could continue towards its objective and force the Austrian surrender. However, even if it had to be diverted to reinforce the Second Army, the Austrian army would again find itself in the jaws of a nutcracker.¹⁵

It is not clear how far in advance Moltke planned this operation. Consequently, aspects of this plan are more suggestive of branches than of sequels. In a campaign of a few weeks duration this may be an inescapable conclusion. Moltke's writings on military strategy reveal a depth to his views which clarify his views on operational design and which is not necessarily reflected in his operations.

Following the Franco-Prussian War, Moltke wrote:

"strategy is the employment of the battle to gain the end of a war... strategy is a system of expediciencies. It is more than a science; it is the application of

knowledge to practical life, the development of the original leading idea in conformity with ever-changing circumstances; it is the art of acting under the pressure of the most trying circumstances."¹⁶

This passage reflects the realism with which Moltke viewed war. Although he has a reputation as the ultimate "military technician" of his time, he recognized the need not only to cope with, but to take advantage of the dynamic nature of the battlefield. The commander has a role beyond planning. He must also act, not according to his plan, but according to objective reality.

Moltke's writings demonstrate an important ambiguity associated with planning for sequels. Commanders must plan, but the circumstance upon which the plan is based may change. Yet Moltke also said operational dispositions once made could not be easily changed. Therefore, planning must consider the future and its possibilities because an army inevitably fights along its initial lines of operation.

From Moltke's time to the end of World War I the development of military thought was largely stagnant. Characterized by the offensive spiritualism of the French and the not-to-be-tampered-with train schedules of the elder Moltke's nephew and namesake, this period did little to further operational thought. Frustration over the course of the war, coupled with the amazing technical innovations coming out of it, led to a renaissance in military thinking in the 1920's and 30's. The greatest strides at the operational level were undoubtedly made by theorists in the Soviet Union. With experience in mobile war during the revolution coupled with the natural willingness of revolutionaries to accept

new ideas. Soviet military writers embraced a number of new concepts.

Among the many Soviet military writers considering the effects of modern conditions was V.K. Triandafillov. Writing about the impact of social and technological change, he rejected the thoughts of some western writers. These authors (including J.F.C. Fuller) believed future war would be fought by smaller, fully mechanized armies because nations could not support the large and cumbersome levies characteristic of World War I forces. To the contrary, Triandafillov believed modern societies could indeed produce the weapons necessary to support massive armies. Moreover, in his view the return to maneuver warfare would be made possible through the combination of technology and large forces. These two factors working in concert would provide a depth to operations necessary for operational success: depth of the sort which eluded Ludendorff in the closing stages of World War I.¹⁷

This initial premise led him to the conclusion that operations would be both longer and continuous. His thrust was towards building a model for large scale operations. He saw a doctrine of war based on the massing of firepower and manpower on a wide front and attempting breakthroughs at the point of concentration with secondary efforts elsewhere fixing the defender's reserves. Triandafillov's views envisioned decisive campaigns or operations. Others, however, saw the breadth and depth of the modern battlefield creating a need for sequential operations.

Mikhail Tukhachevskiy, perhaps the major Soviet theorist of this period, is credited with being the originator of consecutive operations. He, too, saw war as being much more complex. The battle of annihilation was no longer possible according to Tukhachevskiy. Carefully arranged operations were now required to achieve success.¹⁸ He declared,

"The impossibility of destroying the enemy's army at one blow with the contemporary broad fronts forces us to achieve this by a series of consecutive operations, combined by constant pursuit; this can replace the destructive engagement which was the best form of encounter in previous armies."¹⁹

The technical means now available provided the striking power and momentum which would restore movement and permit operational maneuver.

He and others formulated a complex model for the employment of forces. In the process they defined a new level of war--namely the operational level of war. In his view:

"Modern operations involve the concentration of forces necessary to strike a blow and the inflicting of continual and uninterrupted blows of these forces against the enemy throughout an extremely deep area. The nature of modern weapons and modern battle is such that it is an impossible matter to destroy the enemy's manpower in a one day battle. Battle in a modern operation stretches out into a series of battles not only along the front but also in depth until that time when either the enemy has been struck by a final annihilating blow or when the offensive forces are exhausted."²⁰

In this brief passage, he identifies both a new level of war and establishes the context within which it will be fought.

Sequential action was an important part of his operational design.

Conceptually, Tukhachevskiy identifies the process of sequencing operations as being the same as sequencing within

operations. His is a rational process which includes careful arrangement of friendly actions in a deliberate process. The basic process, similar to that advocated by his colleague Triandifillov, involved broad front operations to fix the enemy; concentration for the breakthrough (taking advantage of opportunity where possible); followed by exploitation and pursuit.²¹ This concept at the tactical level was not significantly different from Liddell Hart's "expanding torrent" or Guderian's Blitzkrieg. It is revolutionary in its recognition of the resiliency of modern armies and the necessity to plan in depth in order to maintain the tempo of operations.

A key issue for modern doctrine is the knowledge that forces will reach culminating points requiring operational pauses followed by subsequent action. From the perspective of the early Soviets, coping with complicated and successive operations required detailed operational design which included tactical preparations, logistical arrangements, and operational deployments. Another early Soviet, recognizing this new aspect of war, said:

"Combat actions are not self sufficient but rather are the basic materials from which operations are composed. Only on a very few occasions can one depend on one engagement to secure the final objectives of military actions. Normally, the path to final aims is broken up into a series of operations...subdivided in time, by more or less sizable pauses, comprising differing territorial sectors of a theater of war and differing sharply as a consequence of differing intermediate aims."²²

In the years prior to World War II, the Soviets generated an immense amount of doctrine to implement their theoretical concepts. Their 1936 Field Service Regulations served as a model for operations in World War II and since. Of their many innovations, the concept of successive operations or sequels is possibly the only one for which they can claim complete credit.

Of the many operational concepts and terms, sequels are a relatively recent innovation. The roots of sequels extend to beginning of the development of operational art, but the concept as it exists today evolved slowly through a dialectical process. This process centered on the responses of practitioners and theorists, often the same people, to the demands of increasingly complex war. Practitioners were forced to attend to the task at hand--namely to win the war. In doing so they applied expedient measures to the process of operational design. Following each war, theorists then assessed the actions of those that fought the wars and sought to develop a doctrinal framework for future war. This framework could only be tested in the next major war. As the elements of major war evolved the theorists eventually recognized the need for sequential planning in campaign design.

Sequels and Operational Design

Having examined the sequel's antecedents, the place of sequels in current doctrine will be examined. Sequels now play an important role within the overall rubric of operational design. They do so due to the recognition that most wars will be won through extended operations. Current efforts to develop doctrine for the operational level of war have focussed attention on the

design of operations. These activities have caused doctrine writers to consider those processes which planners must address in their efforts to produce effective military operations. They have recognized the linkage between operational design, campaign planning and the key theoretical concepts of operational art.

Operational design encompasses setting operational objectives to support theater of war military strategy, orchestrating the many activities which must take place to accomplish them, and garnering the resources necessary to conduct those actions. Five major elements make up operational design:

1. Establishment of Operational Objectives
2. Sequencing of Operations
3. Application of Resources
4. Management₂₃ of Major Operational Functions
5. Leadership

Each of these plays an important part in a successful operation. Sequencing of operations has a special place in that it provides the skeletal structure for the operation.

Establishing a logical sequence is a natural part of any problem solving process. Once the commander has decided what he wishes to accomplish, he must then determine the steps, and their order, which must be taken to assure his desired ends. As he works through this process the commander has a number of considerations which shape his design. These include an assessment of the enemy's center of gravity, his and the enemy's culmination points, and protection of his own center of gravity.

Of the three, the first may be the most important. Defeat of any foe, requires one to determine the source of the enemy's strength, his center of gravity. Once that source of strength is

identified, then a plan can be formulated to attack vulnerabilities of the center of gravity. This may be a complex process particularly if the enemy is naturally strong or if his center of gravity is well shielded. Getting at this source of strength may require much thought and a series of carefully sequenced actions.

Culmination is another important consideration for visualizing the sequence of operations necessary to defeat an enemy. This concept, applicable to both the attacker and the defender, can be a key element in effective phasing. The attacker must guard against overextension and must recognize he will probably experience greater relative attrition to his force as he surges forward. He must be prepared to shift to the defense to regain strength and protect his gains. The defender must carefully review his options, ensuring he takes advantage of opportunities to seize the initiative. Those that are forgone will be forever lost. Planners must be cognizant that a dynamic relationship exists between the two forms of war, and that they will inevitably employ both to achieve strategic ends.

Finally, correct sequencing requires a clear understanding of one's own center of gravity. A commander must protect his own source of strength or risk defeat. This means he must balance risk and potential gains. If he does not possess unlimited resources then his efforts should be phased over time because forces must be allocated to protect potential vulnerabilities of his center of gravity.²⁴

Uncertainty also plays a significant role in the sequencing of operations. Just as they must plan branches to react to unexpected enemy actions, commanders must also ensure they build flexibility into their operational designs. This is accomplished through the establishment and employment of operational reserves for probable enemy actions or through the shifting of forces to meet unexpected threats. For forces to be available, commanders must ensure their dispositions are balanced not only for the present but for future potentialities as well.²⁵

For a power such as the U.S., deployment of forces takes on a special significance. This aspect of force disposition is complicated due to the inherent logistics and sustainment problems associated with moving large forces over great distances. Often the task of deployment overshadows subsequent operational actions in the planners mind. The Normandy invasion, where base of origin in the United Kingdom and movement considerations took precedence over follow-on combat operations, illustrates this point all too well.²⁶

Allied planners in an effort to reduce deployment difficulties for the forces moving to France assigned beaches and sectors based on the most direct route from England. As a result British forces landed in the east (left) and American forces landed in the west (right). Had the more mobile American army with its greater readiness to accept casualties been landed on the left, in the open country around Caen, they would have been able to avoid the bloody hedgerow fighting and might have broken out far

earlier than they eventually did. Planners must seek balance between immediate and long term requirements.²⁷

The instrument which plays out the operational design is the campaign. The campaign,

"is the operational way that the commander of a theater of war or theater of operations, coordinates, employs, and sustains available resources in a series of joint, and combined actions to achieve strategic objectives."²⁸

Its environment is constrained by the geography of the theater of war and time. A principal characteristic of campaigns is that they consist of a series of sequenced operations which occur along an intended line(s) of operations with the intent of obtaining decisive results through battles. The campaign plan is the means of transmitting the operational design into an effective campaign.²⁹

The campaign plan is not a document of specifics. It expresses the commander's intent in the form of broad concepts concerning the deployment, employment, and sustainment of forces. The focus is on providing subordinates with the commander's sequential view of how the strategic objectives will be attained. In short, it forms the basis of all other actions which will be carried out in the theater.³⁰

The framework for action rests on the phasing or sequencing of action. The commander must see the course of the campaign from beginning to end. Doctrine says the initial stages of the campaign must be clearly defined. Later phases may of necessity be less clear. Regardless, the campaign must follow a common thread with the focus on the eventual undermining of the enemy center of gravity. To ensure flexibility, plans must possess

built-in latitude and should be supplemented with options (branches) in each phase of the campaign. Flexible plans will consider failure as well as success within a given phase and sequels must address alternative actions in subsequent phases.³¹

Other factors make up the essentials of operational design namely: identification of the enemy center of gravity; selection of decisive points to act against the center of gravity; recognition of culminating points; and selection of lines of operation. Planned sequels should integrate these concepts into a functional whole and serve as a basis for subsequent action which can keep a force on the path to eventual success. Ever present uncertainty in war raises the question of the overall efficacy of this tool. One must naturally wonder whether sequels actually have served as an effective planning tool.

HISTORICAL EMPLOYMENT OF SEQUELS

Identifying where and when sequels have been employed effectively ought to provide some guidelines for their use in the future. By way of example, three modern campaigns will be examined to see if they can reveal some of these parameters; the Union's 1864/65 campaign which ended the American Civil War; Field Marshal Slim's campaign of 1943/44 resulting in the seizure of Rangoon; and the Soviet campaign of late 1944 resulting in the defeat of the German offensive at Kursk and the Russian advance to the Dnieper. Each provides interesting insights on the potential for effective sequential planning.

Grant's Design for the Defeat of the Confederacy

As the the new General-in-Chief of the Federal forces in the spring of 1864, LTG U.S. Grant knew that he needed to end the Civil War quickly. Decisive northern victories in the summer and fall of 1863 had given the north the strategic initiative, but war weariness had begun to take its toll on the northern populace. Time for preservation of the Union was running out. Grant, victor of several campaigns in the west, came east with a new strategic vision. This vision and the operations it produced demonstrates the effective use of operational design on two levels. (Maps 1 and 2)

With responsibility for all northern forces, Grant needed to develop a comprehensive theater of war military strategy and a campaign plan to ensure its execution. His most important contribution was the coordination of all Federal forces. In his letter to Sherman, his principal subordinate, he wrote,

"It is my design, if the enemy keep quiet and allow me to take the initiative in the spring campaign, to work all parts of the army together, and somewhat towards a common center."³²

To accomplish that aim, he then told Sherman how each of the various armies of the Union--including Sherman's--would support the total effort.

In the eastern theater of operations, centered on Virginia, Grant had three armies which he intended to coordinate in person. The Army of the James, then based out of Fort Monroe at Hampton Roads, was to be reinforced and to operate against Richmond from south of the James River. In western Virginia, General Sigel in command of another army was to make a two pronged attack to clear

the Shenandoah Valley, seize Lynchburg, and move to cut the main rail link between the Valley and Richmond. The primary eastern army, the Army of the Potomac then based south of Washington and under General Meade's immediate command was to move forward and directly to engage Lee's Army of Northern Virginia.

In the western theater of operations, Grant had two armies available. One under the command of General Banks was directed by Grant to disengage all but a few security forces from an ongoing action in northwest Louisiana and to move in concert with the navy against Mobile, one of the last large seaports left to the Confederacy. The other army, Sherman's, received broader orders. Sherman's instructions in Grant's letter were clear and to the point,

"You [Sherman], I propose to move against Johnston's army, to break it up and to get into the interior of the enemy's country as far as you can, inflicting³³ all the damage you can against their war resources."

Grant's intent was clear, the enemy's army was the first objective. Of secondary importance was the economic infrastructure of the Confederacy represented in the short term by the rail center of Atlanta. Sherman understood this. His confidence in the commander of the western theater was such that he said only:

"I do not propose to lay down for you a plan of campaign, but simply lay down the work it is desirable to have done and leave you free to execute it in your own way. Submit to me, however, as early as you can, your plan of operations."³⁴

Grant was able to communicate his strategy for the whole theater of war to his chief subordinate, Sherman, in a short

letter. Its brevity belies its brilliance. Grant, without a large, modern general staff created an operational design which included all the key factors. The Confederate strategic centers of gravity were identified as being the two principal southern armies and the southern heartland consisting of Georgia and the Carolinas. The strategic decisive points were the key port of Mobile, the railhead at Atlanta, and the rear of the Army of Northern Virginia targeted by the intended attack of the Army of the James towards Petersburg and Sigel's objective at Lynchburg. The lines of operation were clearly identified by Grant and are expressed in his letters to his subordinates. Finally, the concept of culmination was understood by Grant as demonstrated by his acquiescence to Sherman's initial intent to focus his efforts only as far as Atlanta and his recognition that efforts such as Sigel's in the Shenendoah would attain only limited success.²⁵

Grant's actions in the eastern theater of operations demonstrate the same operational acumen. Grant viewed the theater in Virginia as the most important for a variety of reasons. As a result he elected to remain in the east and to base himself with the Army of the Potomac. Although, General Meade remained in command of that army, he did not enjoy the same level of confidence as Sherman in Grant's mind. Accordingly, Grant took it upon himself to accompany the eastern armies and oversee their operations.

As a prelude to planning, Grant acquainted himself with country within which he would fight and its probable impact on his operations. His intent was to meet and defeat Lee's army, if

possible, and if not to fix him so that he would be unable to interfere with Sherman's operations in Georgia. His instructions to Meade were unmistakable,

"Lee's army will be your objective point. Wherever Lee goes, there you will go also."³⁶

Meade would command, but within Grant's operational framework.

Having identified the Southern center of gravity as Lee's main army, his next task was to determine the best line of operations. He considered two possibilities: in the east, adjacent to the Chesapeake Bay or in the west blocking Lee's historical route to the north. He evaluated each alternative carefully. An attack in the east promised continuous support and would place him in communication with the Army of the James. It held the disadvantage of exposing Washington and assuring Lee would have interior lines as Meade was forced to negotiate the series of rivers. The western approach protected Washington DC and would have provided maneuver room, but had the disadvantage of forcing the Army of the Potomac to subsist off the countryside which at this point in the war was stripped bare. In the end, logistics drove the decision and Grant took the eastern approach.³⁷

He strengthened his plan by moving Burnside's Ninth Corps to protect his rear. In addition, all attacks in the theater of war were to begin simultaneously; a measure designed to stretch southern resources to the limit and in doing so ensure the security of Federal forces and their freedom of action. Grant's intention was to meet and defeat if possible Lee outside his defensive stronghold at Richmond. If not, he intended to pin him in the Petersburg-Richmond area and use Sherman's army as the

hammer to his anvil. In anticipation of Lee's escaping the first battles north of Richmond, Grant ordered the stockpiling of engineer equipment necessary to cross the James, planned for the movement of siege guns south, coordinated for naval support, and instructed Meade to reduce his trains in anticipation of the possible major river crossing. With these plans and this general preparation for subsequent operations, Grant began his campaign.³⁸

As with any plan, some parts worked better than others. Key to this discussion is the recognition that in spite of some failures, the overall design held through to the end. Grant's strategic design allowed for continued operations throughout the theater of war and overall retention of the initiative. In the Virginia theater of operations his design anticipated the various possibilities. His first phase ended at Cold Harbor when it became apparent he could not outflank Lee and defeat him in a decisive battle. Here his planned sequel, the next phase, worked just as he had foreseen. Lee was trapped and Sherman was free to close the ring.

Slim--Setting the Trap/Making the Kill

By the beginning of 1944, the Japanese Empire had lost the strategic initiative in its war with the Allies. Shipping losses and the inexorable pressure of allied naval and air forces were robbing the Japanese of any hope of winning the war. Of all the active theaters of operation, only Burma offered the possibility of the sort of success which might preserve some of the gains of the first year of the war. The Japanese reasoned that a

successful drive out of northwest Burma into the Assam region of India would end with the defeat of the British Army, the cutting the lifeline to the Chinese Army in the north--thereby driving China from the war, and that already rebellious India would be ripe for the taking. General William Slim, commander of the 14th Army of the Allied Southeast Asian Command, had other plans.

(Maps 3 and 4)

Slim had arrived in theater just in time to lead a fighting retreat out of Burma. His forces, like all other allied armies in 1942, were roughly handled by the Japanese who quickly gained a reputation as invincible jungle fighters. Slim's task throughout the middle years of the war was to hold the line while trying to build-up forces and restore his soldiers confidence in themselves. By January 1944 Slim's leadership had accomplished the latter goal. Redressing the force imbalance was a more difficult task because Burma was last on the Allies' priority list.

As Slim assessed his position, he could take heart due to the allied mastery of the air. Unfortunately, the ground force correlation still favored the Japanese. Moreover, his lines of communication were tenuous at the best of times. Further, both operational maneuver and logistical support were constrained due to the topography and climate of this part of India and Burma. On balance, while his force posture was improving he did not yet have the strength to ensure success on the offense.³⁹

Slim's objective was Rangoon and the reestablishment of British authority in Burma. The obstacle which lay between Slim

and his goal was the Japanese operational center of gravity in northern Burma, its Fifteenth Army. As already addressed, Slim did not believe his current forces were adequate for him to take the initiative. The Japanese were ready in Slim's view to fill this void with their own attack. Intelligence and his own evaluation of the Japanese commander's intentions led Slim to forecast a multi-pronged attack against his lines of communication. Specifically, he anticipated a double envelopment of his most forward base at Imphal and a supporting attack directed at Kohima which would break his north-south supply line. British forces were particularly vulnerable because their line of communication was perpendicular to the expected enemy attack.

Slim's assessment of the theater was more detailed than would have been necessary had he been attacking. To a greater degree than the attacker, who has the initiative, the defender must weigh the possible effects of the specific factors--decisive points, enemy options, etc.--which can effect his operations. Only by grasping and manipulating these factors can the defender gain the initiative necessary for the execution of sequels.

In developing his operations to accomplish his final goal, Slim saw that he would have to fight a multi-phased operation. First, Japanese strength had to be reduced by attrition. Slim could not afford to take them on directly while simultaneously fighting the Burmese jungle. His next task, as he then saw it, would be the crossing of the Chindwin River and the defeat of the main Japanese force north of the Irrawaddy on the Shwebo Plain. Subsequently, he would force a crossing of the Irrawaddy and

exploit towards Rangoon. Each phase offered a number of alternatives for achieving the intermediate end state and each subsequent phase's alternatives were dependent on the results of its predecessor.

In designing the first phase, Slim had to decide in what way he could best meet and blunt the Japanese offensive. He considered three alternatives. The first was a spoiling attack across the Chindwin. This was discarded because it would have placed a smaller force on the far side of a major obstacle with a narrow link to its support base. A second alternative called for a forward defense of the Chindwin. This was rejected because of logistics constraints and the unlikelihood of achieving decisive results. The third alternative, which was adopted, called for the concentration of Slim's major force, 4th Corps, around the base at Imphal. This plan, set on terrain which was well known to the British, was designed to draw the Japanese in on the British defenses. Using interior lines the British could, and in fact did, destroy large portions of the 15th Army. Slim balanced this plan operationally by shifting additional forces in theater so that they could reinforce Imphal if necessary and serve as an operational reserve. Moreover, they were also available on the general line of operation for the sequel. This was fundamental. Defensive deployments had to be such that they could support Slim's planned sequel. Finally, he experimented with new concepts such as aerial resupply, a technique which took advantage of allied air superiority and afforded an operational advantage not available to the Japanese.⁴⁰

The first phase of the campaign to retake Burma ended with a decisive defeat for the Japanese. A defeat of which Slim said:

"We had inflicted on them in the Imphal battle the major defeat that I had always felt would be necessary before we could with assurance break into Central Burma and meet their main army on its own ground."⁴¹

Slim's dispositions following the defensive operation which allowed him to transition directly to the offense were as important as the defeat of the Japanese offensive. The operation which served as the sequel to this action was designed to meet and defeat the Japanese north of the Irrawaddy on the Shwebo plain. There were three essential phases in this operation. The first required occupation of the Kalewa-Kalemyo area which provided a secure base on the East and south side of the Chindwin. The second phase was an advance over the Shwebo Plain where Slim expected to meet the enemy. The final phase was the liberation of Burma as far south as the north bank of the Irrawaddy between Mandalay and Pakokku.⁴²

According to Slim, the plan was predicated on three assumptions. Of these three, two would prove false. Slim placed great faith in the intention of the Japanese to fight north of the Irrawaddy on the Shwebo Plain. A new Japanese commander proved to be more flexible and elected to defend on the south bank. The other key assumption was the availability of air and ground support for the operation. From the start difficulties--such as the loss of aircraft and a change in the command structure--arose which impeded the air effort. Terrain in Burma made ground support a constant challenge. Problems with supply were dealt with through imaginative expedient measures. The

failure of the enemy to cooperate resulted in a major plan change within a week of the operation's start.

That Slim was able to design and execute a branch which required an elaborate deception plan, change the direction of each of his corps, execute major river crossing operations, and attack deep in the enemy's rear, is a tribute both to his vision and to the operational flexibility inherent in his plan. Slim's vision and flexibility enabled him to structure his force in a way which allowed him to make changes when the need arose. A lesser commander might have been content to complete this phase on the Irrawaddy. Slim, however, kept his eye on the center of gravity, 15th Army, and took the action necessary to defeat it. In this case that meant going beyond the initial terrain objective to strike at Meiktila the decisive point in the enemy's rear.⁴³

Slim's campaign to open Central Burma demonstrates two key aspects of campaign design. The first is use of the defense to set the conditions for an offensive operation. Recognizing his relative weakness in the winter of 1944, Slim determined he could not attack and hold the initiative. Yet by structuring the battlefield and by choosing how and where the defense would be committed, he exercised a form of initiative. The defender can usually choose where to fight and in this case Slim did so brilliantly. The second facet of operational design employed to good effect by Slim was his constant effort to anticipate events (i.e. plan sequels). He did this by never forgetting his ultimate object. With that always in mind he ensured his lines of support

were always synchronized with where he intended to be operating. Even as he was operating on the Shwebo Plain he was concerned about future operations in south Burma. Finally, as already noted, operational forces were treated in the same manner. Forces were always in motion, but never wasted effort as logistically Slim could never have afforded it. Units always seemed to be where they needed to be.

Manstein--Sequencing on the Strategic Defensive

Unlike Grant in 1864 or Slim after his victory at Imphal in 1944, Erich von Manstein did not have the luxury of the strategic initiative as he took command of Army Group Don in the late fall of 1942. Allied landings in North Africa would soon result in the capture of much of the Afrika Korps and that would mark the end of any hopes for a great linkup with the forces in southern Russia. More decisive was the Soviet's successful defense at Stalingrad followed by their first great offensive designed to encircle the German Sixth Army and crush the several allied armies contained in Army Group B. In southern Russia, the operational situation for the Germans had reached a critical juncture. (Maps 5-8)

Germany had not only lost the strategic initiative, but Manstein and the other operational level commanders on the southern front had clearly lost the operational initiative. German dispositions in the south consisted of a collapsing Army Group B deployed generally along the upper Don River and an over-extended Army Group A deployed in a salient between the Caspian Sea and the Black Sea. Manstein's newly formed Army Group Don lay

behind these two forces. Operational command for these forces rested with Hitler and his headquarters. Operational direction was neither coordinated nor did it reflect reality. Manstein sought to fill this void.⁴⁴

In effect Manstein's force was created to restore the situation. In addition to the vulnerability of the forward German dispositions, the Germans were faced with an increasing disparity in total forces (although they were still roughly comparable in tanks and aircraft). More importantly the lines of communication for the southern wing of the German army were dangerously exposed. The Soviet objective was to cut off the southern wing of the German Army. Manstein's objective as he saw it was to restore the situation and stabilize the line. Two broad courses of action were available to him. The first called for evacuating Stalingrad and attempting to shore up a linear defense along the Don. This option was fleeting because Russian attacks quickly precluded its use. The second alternative was visualized as a withdrawal to the Donetz River and the lower Dnieper River followed by a counteroffensive. This was the concept around which Manstein built his plan.⁴⁵

He visualized the plan being executed in four phases. In the first phase, Manstein would attempt to relieve the Sixth Army or at least extricate as much of it as he could. Next he had to protect the rear of Army Group A which was still exposed in the Caucasus salient, and he needed to extract safely as much of that force as possible, especially the First Panzer Army. In the third phase he would conduct a fighting withdrawal towards the Dneiper.

Having then extended the Soviets. Manstein intended in his fourth phase to conduct a counter-offensive in which he would drive into the enemy's northern flank and destroy the Soviet force. As clear as this plan was, his position at the beginning made it difficult to carry out.⁴⁶

Manstein's role in the beginning was that of one of three army group commanders. The convoluted command structure made it difficult for him to implement any plan. This situation changed as Army Group B became more and more fragmented and Army Group A became increasingly isolated. However, the larger command problem stemmed from Hitler's insistence that no territory would be given up. Manstein was forced to fight with his superiors for every bit of operational flexibility. The greatest difficulty grew out of the inability to obtain additional reserves. Manstein's focus remained at all times on his efforts to create the conditions for his counterstroke. Soviet pressure against his center placed him in the position of constantly committing available reserves at the expense of building forces for his attack. In spite of these problems he was able to achieve his aim.

Working without the initiative once this battle began, Manstein was constantly reacting to new Soviet threats. Soviet actions were frustrated by German tactical successes and Manstein's ability to manage the battlefield. As each phase played itself out changes occurred. The most graphic difference in the German plan and its execution was the fact that the counterstroke was executed from both north and south as opposed to a massive attack from the north. Success in the battle between

the Donetz and the Dnieper temporarily restored the operational initiative to the Germans. This battle was followed by a successful attack to retake Kharkov and set up the decisive battle of the war at Kursk.

How was Manstein able to take a disastrous situation and turn it into a victory? A major contributor was German tactical skill. Tactically, they still outclassed their Soviet counterparts at this point in the war. Soviet mistakes also proved to be an important factor. They had not yet perfected their operational technique of deep battle and they overextended themselves. The key, however, was a clearer operational vision.

Manstein saw the operation through from beginning to end. The fact that he could not immediately seize the initiative was not permitted to obstruct his aim. By employing his strengths and playing on Soviet failures he was able to influence the course of battle if not actually shape it. This in itself must be considered a form of initiative. Operationally, all effort was directed at only two tasks--namely maintaining cohesion and husbanding strength for the counterstroke. Each phase played a role in moving towards the final goal. That Germany lost everything only six months later is testimony to their inability to develop operations of the same quality throughout the Eastern theater of operations.

Historical Summary

The three campaigns were all successful yet each was different. Grant fought as a supreme commander orchestrating actions in a theater of war as well as supervising the campaign

in his most important theater of operations. He had overwhelming physical power as he began his campaign and regardless of his fears he had the initiative. Politically, it was necessary for him to win quickly or at least demonstrate that victory would be achieved. This he did. Slim fought as an army commander in a separate theater of operations. Strategically, his side had the initiative. Operationally, he had to take it to reach his goal. His campaign required him to gain the initiative and then be in a position to use it properly to gain a long-term objective. With great difficulty he was able to do this. Manstein began his planning with neither the strategic initiative (which was probably unattainable) nor the operational initiative. His task required him to defeat the enemy in order to regain the operational initiative with an unclear eventual end state. Unclear because the Germans had lost their ability to obtain their original goals and they had not set any lesser ones. The differences speak only to the effect of these campaigns on the results of the wars in which they occurred. The similarities, especially with respect to operational design and sequencing of actions, are the key to this discussion. They provide some parameters for application to future battles.

PARAMETERS FOR SEQUENCING CAMPAIGNS AND JOINT PLANNING

It is clear that sequels are an important facet of successful campaigns. Unfortunately, their application is shrouded with a measure of ambiguity. In this final section of the paper those aspects which are unclear will be addressed. Reviewing these factors should allow some parameters to be identified around

which operations can be more effectively sequenced. Finally, the status of U.S. joint doctrine will be addressed briefly to determine how these parameters might be employed.

Parameters for Sequels

The first factor applicable to the sequencing of operations is that of end state. Operational design must focus on attaining military conditions that achieve or contribute to the strategic end state. The complexity of modern war mandates multi-phased operations in most cases. Each subsequent phase is in effect a sequel of its predecessor. Regardless of the outcome of the previous phase, be it victory, defeat, or stalemate, sequels must remain on the same critical path towards the final desired endstate.

Sequels (Diagram 1) are different from branches. Branches are contingencies within a given phase designed to react to unforeseen events. Sequels follow the conclusion of a phase. They represent a new start, a beginning necessarily affected by past events, but a new action nonetheless. Sequels will often begin at a point on the operational continuum different from what was originally forecasted. If that point is significantly different from the original plan then the commander may have to recast subsequent sequels. Grant did this effectively when he ordered Sherman to the sea, but sent Thomas back to Nashville to cover Tennessee because Hood could not be cornered and defeated. The key objectives in his southern theater of operations, the Confederate Army and the destruction of Confederate war making

potential, remained covered.⁴⁷ The first rule of sequencing is never to forget the end state.

Another facet of the end state is the need to ensure that the overall end state and the end states for each sequel remain within the range of feasibility. Operations must proceed on a logical basis. They are phased for the expressed purpose of breaking the mission into consumable pieces. If an operation in its totality or within a phase is not feasible then it probably ought not to be attempted. Working within this iterative process allows the operational artist to make periodic assessments of his situation and prospects. No open-ended process can be risk free. Regular review ensures the process remains one of calculated risk as opposed to a gamble.

In their role as the framework for operations, sequels must be designed to remain structurally sound throughout the course of the operation. Accordingly, as they are being planned they must make full use of the major elements of operational design. By adhering to these theoretical concepts each phase of an operation remains in balance with the rest.

Chief among the elements of operation planning is the necessity of focussing on the enemy's center of gravity. As the enemy's source of strength the center of gravity must be identified and attacked either directly or indirectly. Operations in the first phase and all of the sequels must focus on its defeat. However, center of gravity is a dynamic concept. Over time the center of gravity may change. A new formation or a particular formation with decisive weaponry may appear to take

the place of a previous center of gravity. Sequential operations must be planned to recognize this fact and to defeat the enemy's strength wherever it appears.

Related to the center of gravity is the concept of decisive point. Force must be directed at that point where it can achieve decisive effect. The battlefield is a dynamic place for both players. Decisive points are like gates which may appear on any one of a number of roads which may lead to the objective. When sequencing actions commanders must choose which gates they intend to pass through as they go either forward or back. In the sequential operation the commander must see the ground over which he will fight in both time and space. By recognizing the advantages an action may afford him at a particular time and place, the commander may implement measures which may produce effects in sequels to the current phase of operations.

When acting on his identification of decisive points present and future, the commander makes his dispositions and establishes their means of support. It is with these actions that commanders demonstrate a true appreciation of sequential planning. If Moltke's dictum on operational dispositions is correct, then this aspect of operational design must be done correctly. Sequential operations demand that dispositions support the first or current operation, the planned sequel, and possible variations from the sequel. Often the simplest design works best. Operational flexibility must be built into the plan. Obviously the stronger the force the easier that is to accomplish. Strengthening the force may well demand economy of force in other areas or, in the

case of weakness, abandoning a minor operation altogether. Arranging and supporting forces through several phases is accomplished by establishing flexible lines of operations.

Lines of operations provide a physical focus for the projection of power. When operating over time in sequential action, these lines must be capable of supporting operations throughout the length of the campaign. When the operational commander selects lines which come to a dead end, he wastes effort and may be placing his force in an inflexible position. Avoiding this state requires visionary thinking through all planned sequels to the operation. Alternatively, sometimes lines of operation in a theater of operation may intersect. When this occurs the commander must be prepared to choose which sequel to employ. At such a juncture both opportunities and pitfalls appear. Taking advantage of the first and avoiding the latter requires thought and effective sequential planning.

Finally, the role of initiative is a key parameter in sequencing operations. In the three historical examples considered in this paper, each commander had a different degree of freedom of action. Phasing ultimately requires the commander to determine what specific military action he will employ in each stage. The commander can attack or defend. In theory he may do either at any time; making his choice on the basis of which action favors his particular situation at a given time. The weaker or more constrained he is, the more likely he will be forced to the defense. While in this role he will inevitably be

forced into a reactive mode. Yet to execute a sequel to a phased plan he must somehow regain some freedom of action.

Freedom of action can only be gained by seeking to control the enemy's attacks. Slim as a commander with at least strategic initiative could choose to fight defensively on terrain of his choosing. While the Japanese could have attempted to outflank him he had the means to sustain himself temporarily and then strike at their rear. Since they could not afford this, Slim in a sense controlled the battle. Manstein, conversely, controlled nothing initially--including much of his own force. He gained freedom of action by playing on other strengths of his force. By maneuvering his force deftly through each phase of the operation he was able to execute the third sequel, phase four, on the general terms of his original conception. Execution of an effective phased campaign when overwhelmingly outnumbered inevitably comes to depend to a large degree upon numerous enemy mistakes. This was the situation faced by the Confederates in 1864.

Joint Campaign Planning

At present the U.S. appears to be at a doctrinal crossroads for campaign planning. The current Joint Operational Planning System is designed to get the force into the theater but not to conduct subsequent operations. Of the numerous unified and combined commands under which U.S. forces are organized to fight, only one has a campaign plan designed to fight forces beyond the first phase.⁴⁸ For many contingencies this is probably appropriate. For others it reflects a fundamental misunderstanding of sequential war planning. This situation is

probably a result of peacetime uncertainty and deployment considerations, but it has contributed to a situation where warfighting in long term situations has received little thought. Indeed the format for campaign plans was actually omitted in most recent version of JCS Pub 2, Unified Action Armed Forces.⁴⁹

Recent efforts are reversing this trend. In January 1987, the Unified Commands were directed to submit their theater employment concepts in campaign plan format. This renewed emphasis on warfighting, represents a distinct departure from the past. Even more encouraging are the renewed doctrinal developments stemming from some of the recent Army doctrinal publications and the recent emphasis on joint operations.⁵⁰ As a part of the JCS reorganization, the J-7 has proponency for the development of joint doctrine. The capstone operations document in the hierarchy will be JCS Pub 3, Joint Operations. Still in the conceptual stage, it will probably draw heavily from the Army's FM 100-6, Large Unit Operations (Coordinating Draft) which discusses campaign plans in great depth. An important part of that discussion addresses the importance of sequencing operations. This effort is still in its infancy, but, is expected to grow at an increasing rate over the next several years.⁵¹

CONCLUSION

This paper began by asking if sequels were really important to the process of conducting operations and if they were could the future be seen with sufficient clarity to plan for them. Answering this question required a definition of the term. This led to an examination of the historical development of this

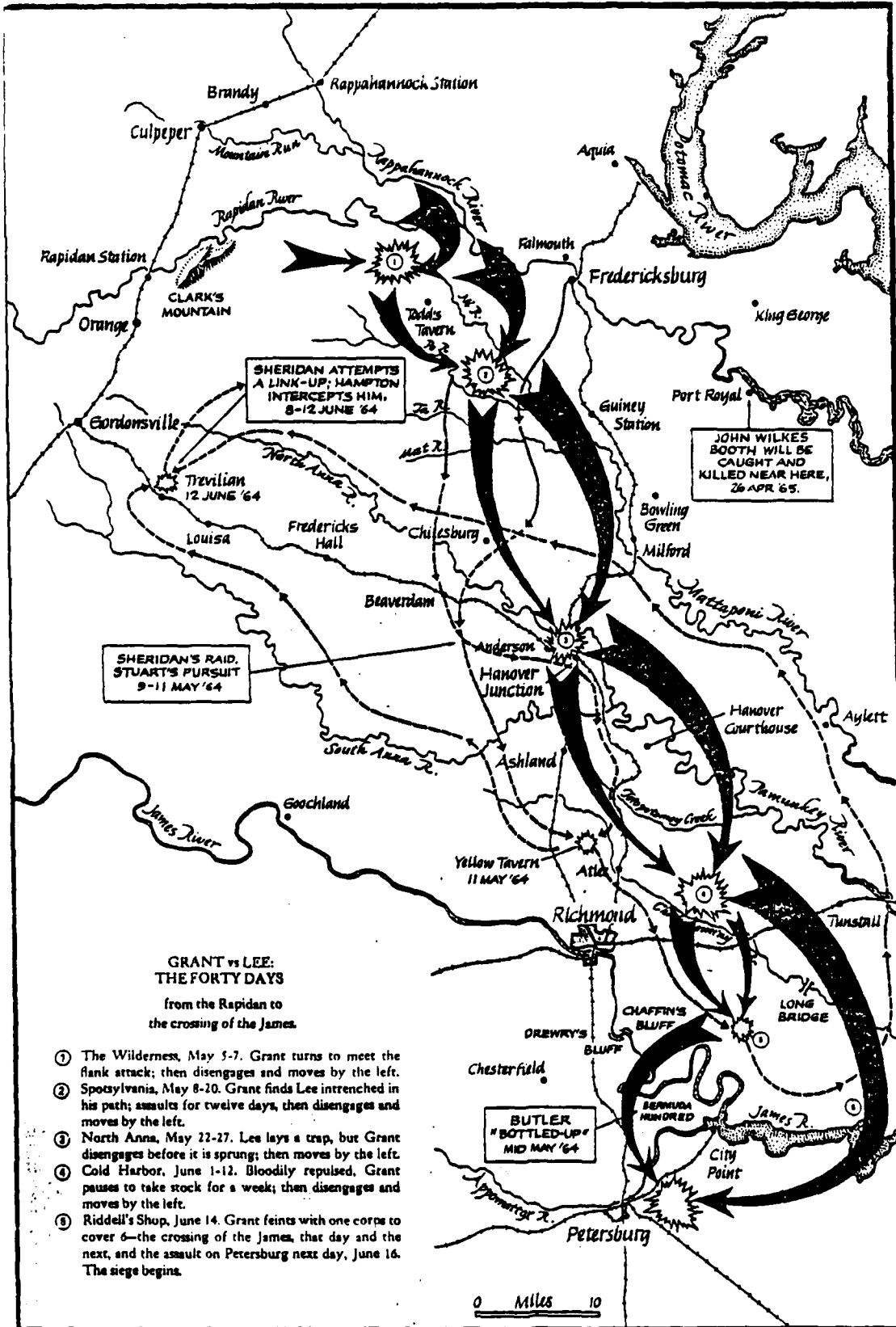
theoretical concept and its place in operational design. Three distinct historical examples were then evaluated to see if the concept could apply under differing degrees of freedom of action.

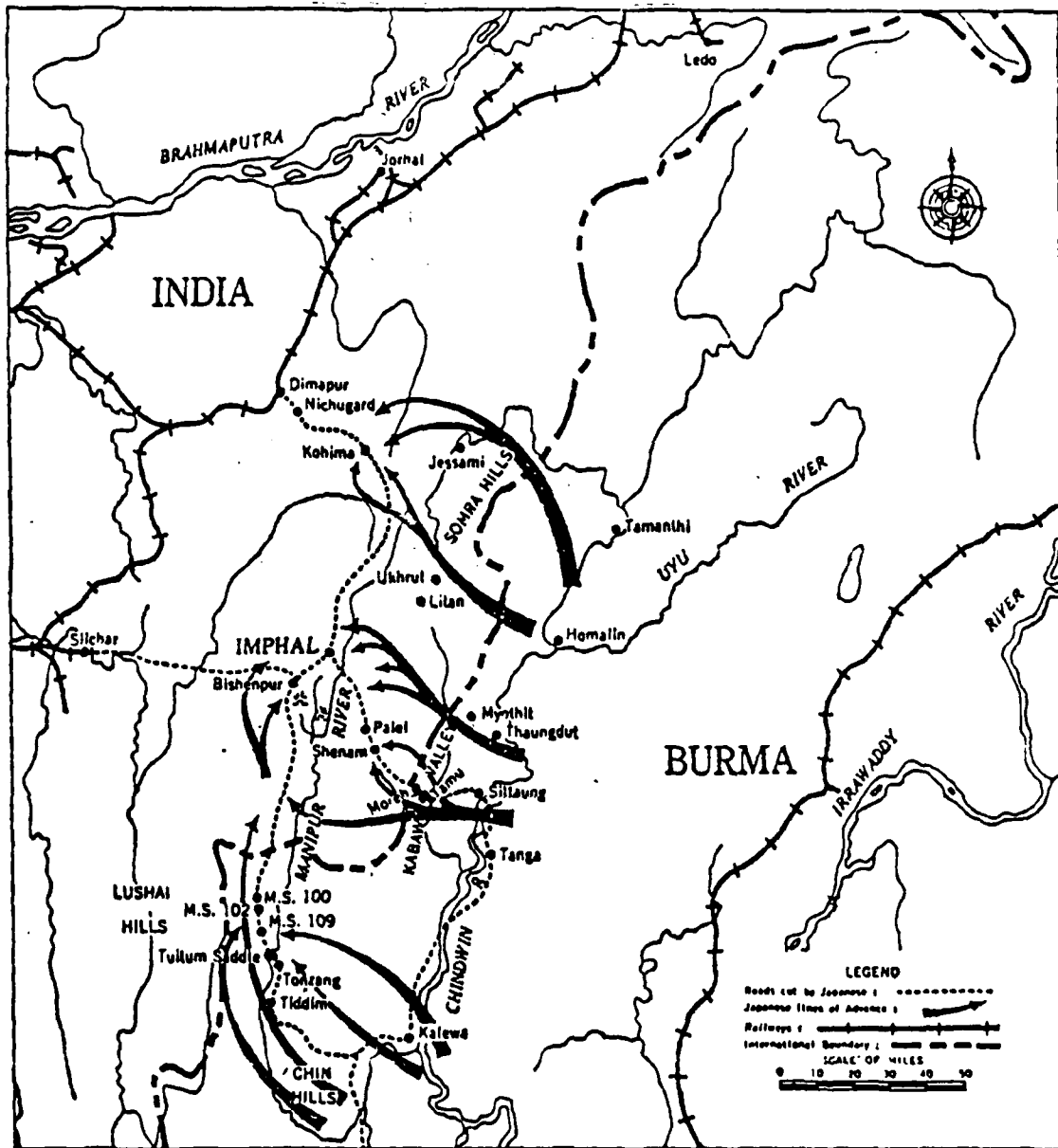
The answer to the first part of the question is yes, sequels are a critical part of operational design in that they provide a structure for phased operations in modern war. The answer to second question is more difficult.

On the basis of the historical analysis and through extracting key parameters critical to the design and execution of sequels, commanders under varying conditions have been shown to be able to phase their operations. Importantly, the phasing has occurred in accordance with the commanders original view of the campaign and with a view to all the options that presented themselves at each decision point. The basic parameters include a continuous focus on the end state, an application of the elements of operational design so that they can support continuous operations, and an appreciation of the role of initiative and freedom of action. No commander can see the future with perfect knowledge. However, every operational commander must bring sufficient vision to his planning process to shape the campaign towards his final objective. To do this he must think his actions through from beginning to end and ensure that each step supports the one to follow.

MAP 2: Grant's Eastern Theater of Operations

SOURCE: Reproduced from The Civil War, A Narrative, Red River to Appomattox by Shelby Foote, 1974





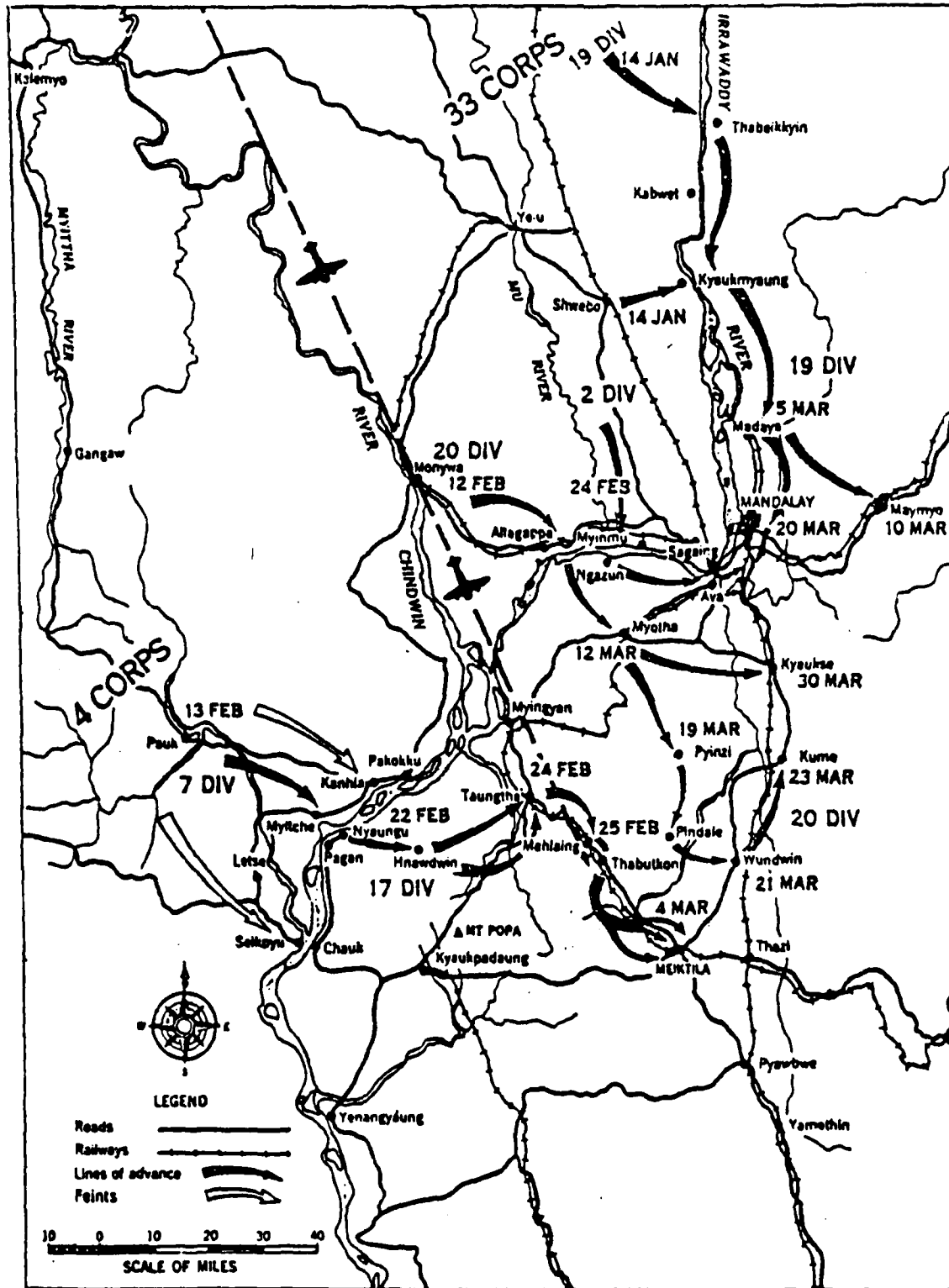
JAPANESE INVASION ROUTES, BURMA 1944

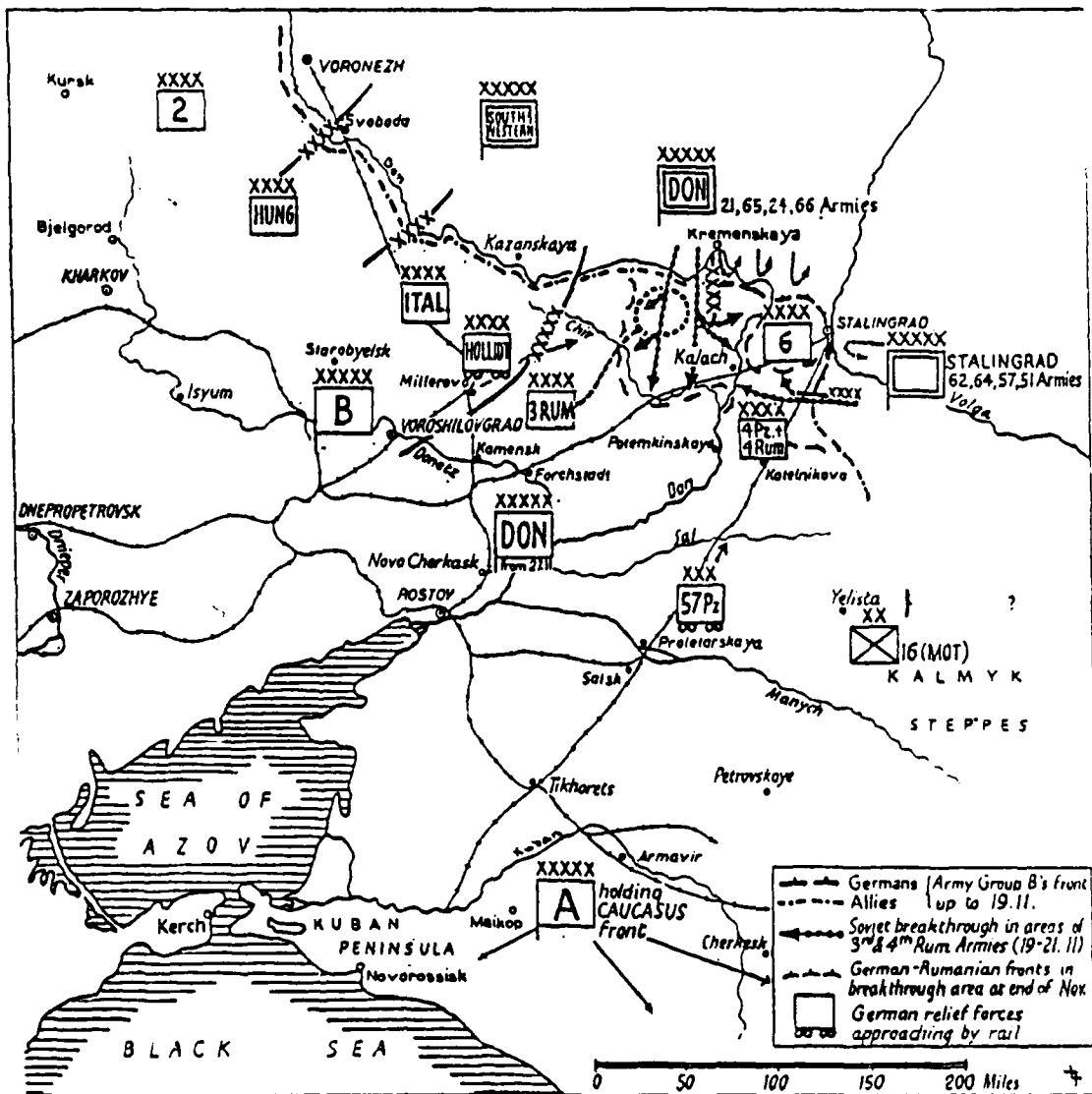
MAP 3: Phase 1, Slim's 1944 Defensive Operation

SOURCE: Reproduced from Defeat into Victory by William Slim, 1956

MAP 4: Phase 2 (The Sequel), Slim's 1944-45 Offensive Operation

SOURCE: Reproduced from Defeat into Victory by William Slim, 1956

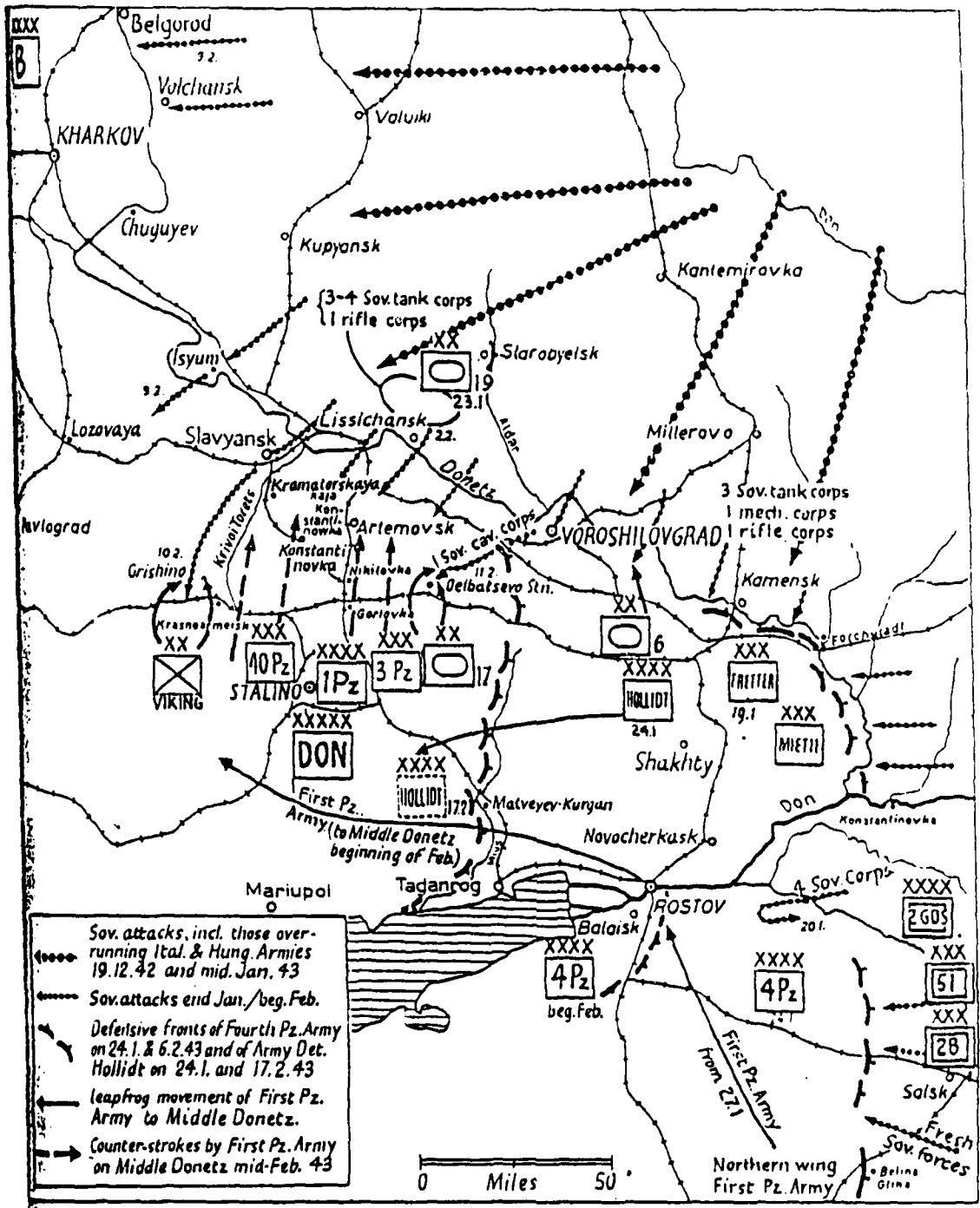




Map 15. Situation on German Southern Wing at end of November 1942: the Struggle to free Sixth Army.

Map 5: Manstein's Plan, Phase 1

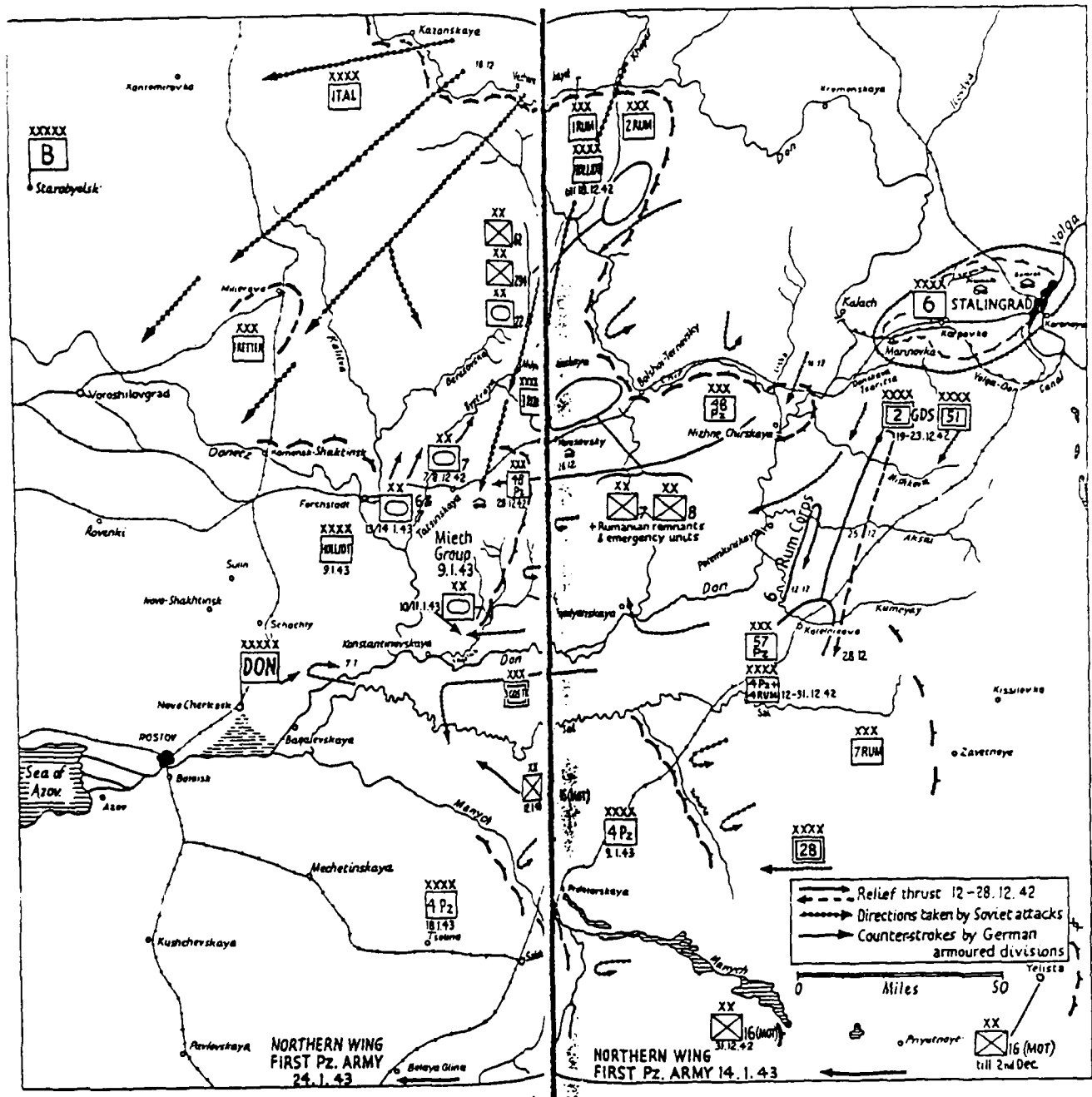
SOURCE: Reproduced from Lost Victories by Erich von Manstein, 1958



Map 17. Winter Campaign 1942-3: Don Army Group's Battles to keep Communications Zone free.

MAP 6: Manstein's Plan, Phase 2

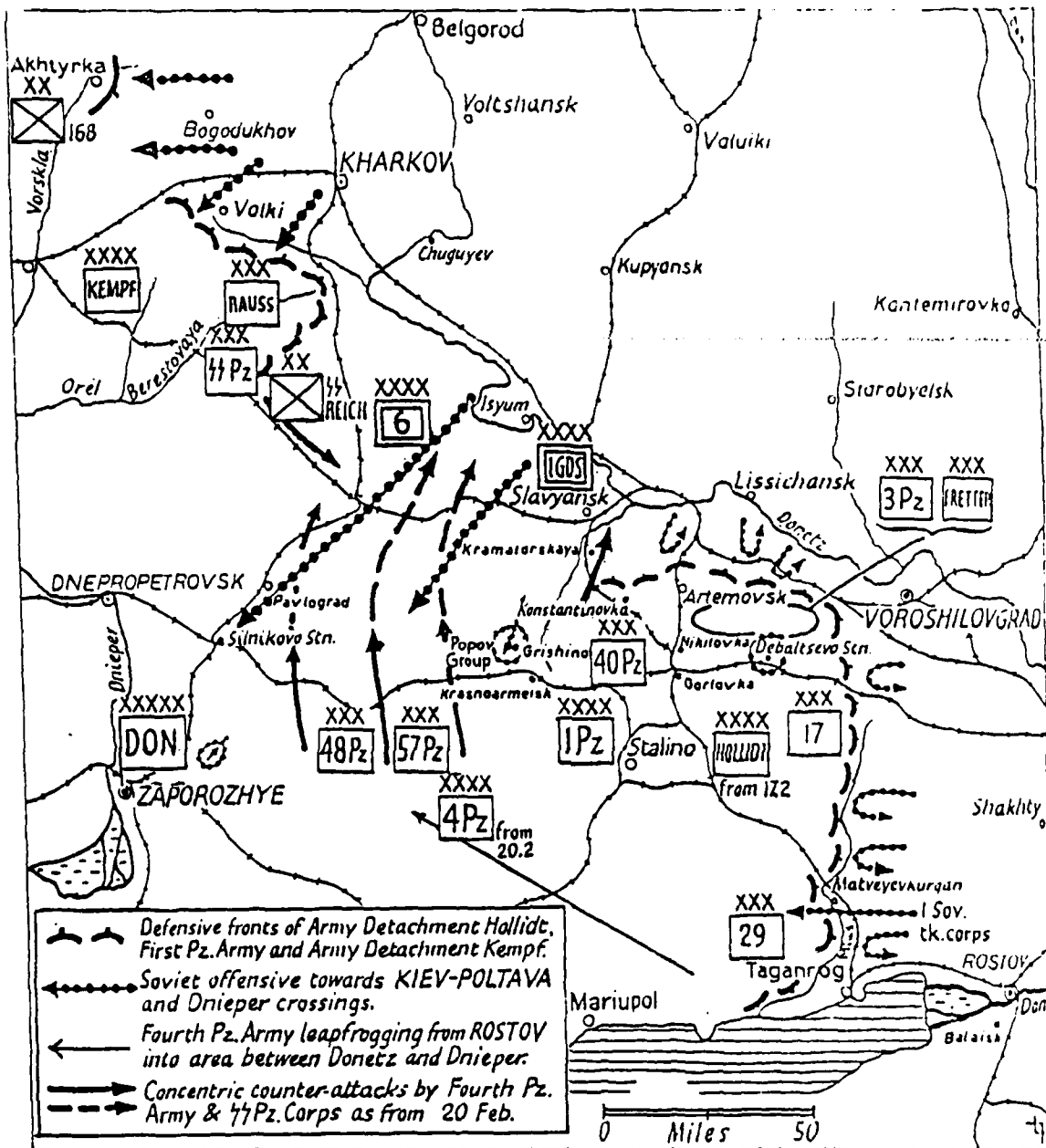
SOURCE: Reproduced from Lost Victories by Erich von Manstein, 1958



Map 16. Winter Campaign 1942/3: Don Army Group's Struggle to keep Army Group A's rear free.

MAP 7: Manstein's Plan, Phase 3

SOURCE: Reproduced from Lost Victories by Erich von Manstein, 1958

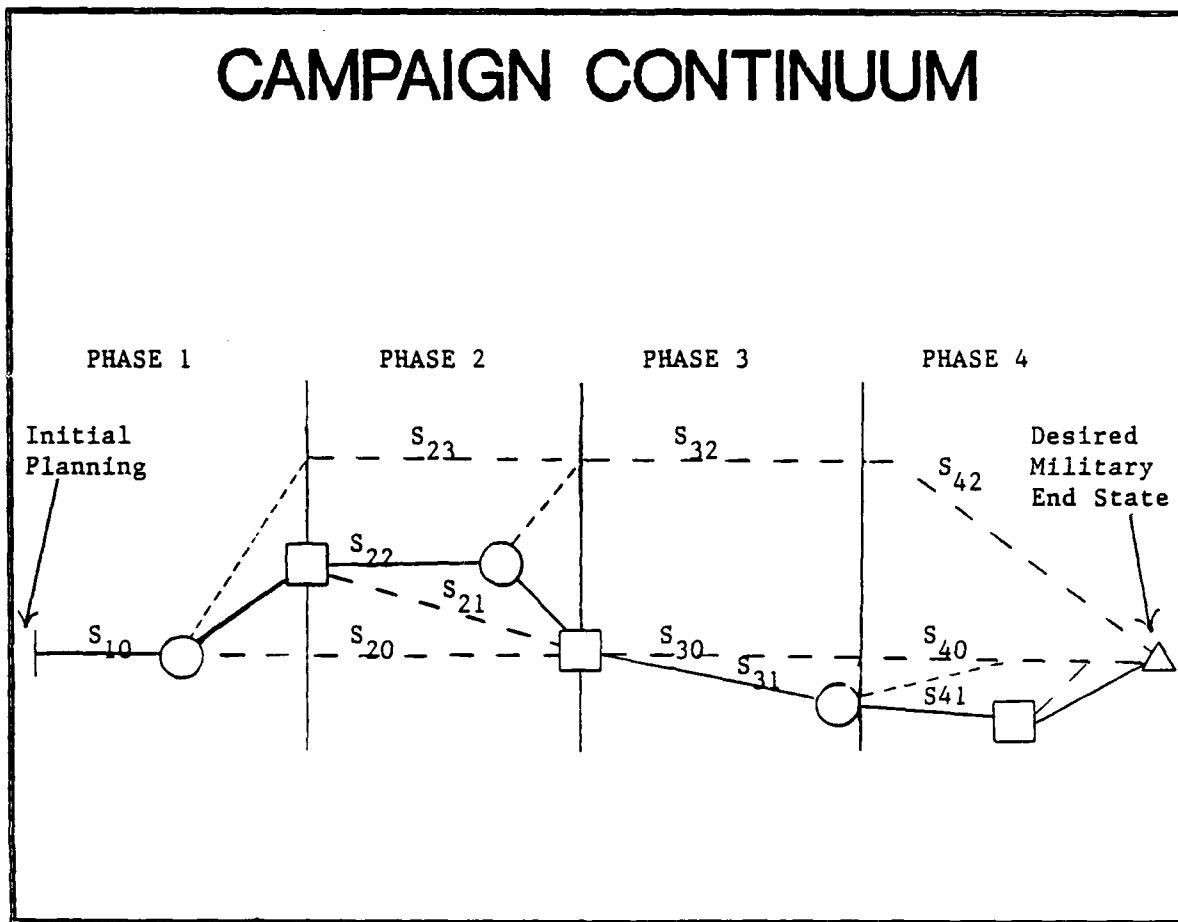


Map 18. Winter Campaign 1942-3: German Counterstroke, the Battle between Donetz and Dnieper.

MAP 8: Manstein's Plan, Phase 4

SOURCE: Reproduced from Lost Victories by Erich von Manstein, 1958

CAMPAIGN CONTINUUM



LEGEND:

- Branch Node
- Battle/Major Operation
- △ End State
- Paths of Potential Sequels
- Paths of Potential Branches
- Path of Operations Taken

NOTES:

- + The planned operation moves along the $S_{10}-S_{20}-S_{30}-S_{40}$ vector.
- + Following a branch ○ or end of a battle/major operation □ the commander may or may not attempt to return to the planned path of operations.
- + Battle/major operations will not always occur at the forecasted point on the continuum.
- + Irrespective of actions taken, sequels should be supportable within the context of the initial line of operations.

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