

SUN TZU AND CLAUSEWITZ: THE ART OF WAR AND ON WAR COMPARED

But war, though conditioned by the particular characteristics of states and their armed forces, must contain some more general — indeed, a universal — element with which every theorist ought above all to be concerned.

Clausewitz

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FOREWORD

Since the Industrial Revolution, war has been shaped increasingly by the ever-accelerating pace of technological change. As a result, no major wars since the mid-nineteenth century have been fought with the same weapons or doctrines. From a technological point of view, therefore, wars seem to bear less and less resemblance to one another, as can be seen from a comparison of the First and Second World Wars, the Vietnam War, the Arab-Israeli 1967 and 1973 wars, and most recently, the war against Iraq. Yet although modern warfare appears to be dominated by weapons technology, other factors such as human nature, the political essence of war, the quality of leadership, national commitment, coalitions and diplomacy have remained the same. This explains why modern strategists and military professionals can, despite revolutionary changes in the material nature of warfare, derive great benefit from reading the classical works on war.

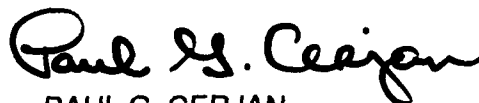
Of all the classic studies on war, *The Art of War* by Sun Tzu and *On War* by Clausewitz are still the most outstanding, "modern," and relevant despite the passage of time. With the exception of the *collective* innovative works on nuclear strategy written primarily in the 1950s, no comprehensive paradigms or frameworks for the study of war that *substantially* alter or add to the works of Sun Tzu or Clausewitz have been published. In fact, the incredible complexity of war today may have so obscured its fundamental characteristics that a contemporary strategist would find it impossible to capture the essence of war in a relatively simple framework. Not distracted by constantly changing technological, bureaucratic, organizational, and economic factors, as well as by new dimensions of warfare in the air, underwater, in outer space, and in the role of intelligence—the insights of Sun Tzu and Clausewitz identify the immutable "human" dimensions of warfare so essential for victory. It is ironic that the greatest works on war—the one human activity which continues to affect the future of mankind more than any other—were written *before* the industrial age.

In commenting on the recent war in Iraq, many military experts have understandably overemphasized the part played by modern technology. While all types of precision-guided munitions, real-time communications, and electronic warfare, for example, were clearly important in bringing about the spectacular military success of the

war, other factors that would have been familiar to Sun Tzu and Clausewitz may have played an even more critical role. Among these were the moral isolation of Saddam Hussein, the political leadership of President Bush, the building of an effective coalition and the maintenance of its cohesion throughout the prolonged crisis and the war, the *psychological* defeat of the Iraqi military and the lack of commitment by the Iraqi people, the effective leadership of the U.S. military, and the role of deception. These and many other elements that explain war can still be best understood through a careful reading of the works of Clausewitz and Sun Tzu. For example, the gap between U.S. military technology and that of North Vietnam was much greater than that between the United States and Iraq. Nevertheless, the superior political leadership, strategy, and national commitment of North Vietnam enabled it to endure and ultimately achieve its objectives. In contrast, Saddam Hussein's relatively advanced arsenal of modern weapons did little for him against a superior U.S. political and military strategy.

Indeed, perhaps future historians will be able to establish a more detailed connection, albeit indirect, between the U.S. military's heightened interest in the works of Sun Tzu and Clausewitz following the Vietnam War and the unprecedented success of the war against Iran. The soul-searching that took place after the failure of U.S. strategy and technology to win the war in Vietnam led to greater emphasis on the study of classical military theory as exemplified by Clausewitz. This in turn eventually led to a much more careful consideration of the connection between politics, policy, strategy, and operations in war.

As war becomes even more complex, the need to explore its fundamental nature is no less important than in the past. In this monograph, Professor Michael I. Handel has prepared the first detailed comparative study of Sun Tzu's *The Art of War* and Clausewitz's *On War*, which remain the most insightful statements on this subject available to the student of military affairs. Whether or not his readers agree with his conclusions, this original study should stimulate lively debate and provide the students of U.S. war colleges and their civilian counterparts with a useful introduction to the basic texts on strategy, as well as with a point of departure for further study.



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PREFACE

Widely acknowledged as the two most important works on strategy and war, *The Art of War* by Sun Tzu and *On War* by Carl von Clausewitz have long been studied on a discrete basis, with the assumption that the theses they advanced were fundamentally at odds. This fact alone tempts the professional strategist to compare these great works in their entirety in order to discover the extent to which they are actually contradictory, similar, or complementary. It is, however, easy to understand why strategists might be reluctant to undertake such a comparison. Surely few scholars are equally accomplished in the fields of Chinese history, culture, and language and European history at the turn of the 19th century; and even if such distinguished scholars were to exist, it is even less likely that they would be professional strategists as well.

In view of such obstacles, this essay adheres to a content analysis of these two texts while avoiding a more general historical, philosophical, cultural or linguistic analysis. Thus, the respective texts are quoted extensively in the interest of allowing Clausewitz and Sun Tzu to speak for themselves. As the reader will see, this approach has yielded some interesting but perhaps unexpected conclusions. Ultimately, though, this study can be justified for the same reason that mountain climbers pursue their activities — the two giants were there and the challenge of comparing them couldn't be resisted.

SUN TZU AND CLAUSEWITZ: THE ART OF WAR AND ON WAR COMPARED

INTRODUCTION

It is generally accepted that in strategy, as in political history or international politics, many fundamental principles and insights into human behavior are universally applicable. In theory of international relations, for example, the assumption that *all* nations share the need to protect their "vital interests" and therefore try to maximize their power vis-a-vis potential adversaries is the type of broadly applicable insight that enables international politics to exist as an autonomous discipline. All decision makers in foreign policy (and strategy) face common problems in assessing their relative power and the intentions and policies of other states; all must learn how to function within a complicated bureaucratic and organizational milieu and how to manipulate public opinion in order to implement their policies. In short, the discipline must assume that despite the variety of approaches to the formation of foreign policy throughout the world, many aspects of the behavior of all states can be reduced to a common denominator. A similar assumption can be made in the study of strategy.

The gap between Sun Tzu's *The Art of War* (3rd or 4th century B.C.) and Carl von Clausewitz's *On War* (1832) could hardly be greater in terms of time, geographic conditions, and culture. Nevertheless, the differences in emphasis and, at times, substance between these two strategists should not be exaggerated. Liddell Hart also held this opinion when he observed that "[Clausewitz's *On War*]...did not differ so much from Sun Tzu's conclusions as it appeared to do on the surface." But even Liddell Hart is off the mark when he argues that "Sun Tzu has clearer vision, more profound insight, and eternal freshness..." or suggests that "Sun Tzu's realism and moderation form a contrast to Clausewitz's tendency to emphasize the logical ideal and 'the absolute'..." Liddell Hart

then adds that if one were "...to pursue the logical extreme [of Clausewitz's line of thought]...the means would lose all relations to the end,"¹; yet this is precisely the opposite of what Clausewitz argued! Liddell Hart is mistaken not so much because he prefers Sun Tzu to Clausewitz but because his conception of Clausewitz as obscure and excessively abstract reflects a superficial acquaintance with *On War*.

This essay endeavors to show that these two seemingly divergent approaches actually have as much in common as what presumably separates them and that their *fundamental strategic logic is often the same*. Indeed, the "logic" or "rational calculus" of the Eastern and Western approaches to warfare is not as different as is sometimes assumed. As Professor John K. Fairbank has observed, "much of China's military experience is directly comparable with experience elsewhere... Comparative studies will no doubt show up the sinological fallacy as to China's alleged uniqueness."²

Among the aspects of *On War* and *The Art of War* to be compared are their methodology and style; frameworks; positions on the primacy of politics in the formulation of strategic policies and the decision to go to war; and analyses regarding the responsibilities and position of the field commander as compared with those of the political leader. Also examined are their evaluations of intelligence and deception; quantitative superiority; the relationship between the offense and defense; friction, chance, luck, and uncertainty in war; the rational calculus of war; and the problem of attrition vs. maneuver. Before proceeding, a word on why the differences between the two military thinkers have been exaggerated is in place:

- Many strategists are more comfortable reading Sun Tzu rather than Clausewitz, whose methodology and style are not as easy to follow. In short, *On War* is frequently misunderstood because it is rarely read in its entirety. This undermines the value of most comparisons.
- Sun Tzu and Clausewitz employ different definitions or frameworks in their studies of war. The wider scope of

Sun Tzu's definition has led many a strategist to unwittingly compare apples and oranges.

- Frequently, *On War* and *The Art of War* approach the same subject or similar subjects from different perspectives (i.e., they discuss opposite sides of the same coin). Like the proverbial blind people examining different parts of the same elephant, this magnifies the *apparent* divergence of opinion without changing the fact that there is actually much in common.

STYLE AND METHODOLOGY

Less than one hundred pages in English translation, *The Art of War* is written "with the aphoristic distinctness of Chinese literature," in the form of brief notes that are "models of austere brevity," and, "the concentrated essence of wisdom on the conduct of war." In contrast, the generally turgid and obscure *On War* can hardly be described as a model of austere brevity, as it is close to six hundred pages in English translation. Comprehension of Clausewitz's analytical framework requires *repeated* reading of *On War* from cover to cover. For example, Chapter One of Book I — "What Is War?" — cannot be understood easily even after several readings; yet this chapter is the key to comprehending Clausewitz's framework and methodology. No such concentrated effort is required for any of Sun Tzu's chapters, each of which can be read independently. Unlike *On War*, *The Art of War* does not offer the reader a systematic explanation or step-by-step reconstruction of the *logical process* through which concepts are developed. From this point of view, *The Art of War* reads more like a manual written as a succinct guide for the "prince" or the high level military commander.³ Thus, while Clausewitz leads the reader through a torturous and tortuous though educationally rewarding reasoning process, Sun Tzu, for the most part, presents the reader with his conclusions. Clausewitz puts it most clearly when he states: "It is precisely that inquiry which is the most essential part of any theory, and which may quite appropriately claim that title. It is an analytical investigation leading to close acquaintance with the subject; applied to experience — in our case, to military

history — it leads through *familiarity* with it."⁴ (*On War*, p. 141.) (Emphasis in the original)

For the reader of *On War*, then, it is the *process of learning* and asking questions that matters most; but for the reader of *The Art of War*, *acceptance* of Sun Tzu's conclusions is the most important requirement. Yet Clausewitz's sophisticated methodology invites considerable misunderstanding because it is not always easy to decipher. Chief among such methodological concepts is his *ideal type method*, closely related to the dialectical method of comparing opposites in general and his ideal types in particular. For example, Clausewitz creates the abstract, ideal type of "total" or "absolute war" (war in theory as he calls it) — a war that is waged with all available forces and resources without any interruption until one side is victorious and can dictate its terms to the defeated. In developing the ideal type of total war, (reflecting the experience of the Wars of the French Revolution and Napoleon⁵), Clausewitz recognized that his ideal type could not exist in reality. He was well aware that wars are never fought with *all* available forces and resources, are frequently interrupted, and more often than not culminate with indecisive results. In short, war in reality is *always limited* to some degree.

As he endeavored to explain how war in reality differed from war "in the abstract," Clausewitz systematically developed his most creative and original insights into the nature of war (e.g., the primacy of rational, political cost/benefit calculations; the value of setting the objectives to be obtained and estimating the national means to be invested in war; the inherent differences between the offense and defense in the interruption and miscalculation in war; the concepts of friction and chance; and the dominant role of uncertainty [i.e., lack of information and intelligence]). Clausewitz's readers have often misunderstood this sophisticated "Newtonian" methodology not only because it is abstract and difficult to follow but also because it moves from one level to the other (i.e., from the ideal to the real and back) without warning. It is not surprising therefore to find Liddell Hart commenting that "... his [Clausewitz's] theory in a way [is] too abstract and involved for concrete-minded soldiers to follow the course of his argument,

which often turned back from the direction it seemed to be taking."⁶ (i.e., Liddell Hart's somewhat naive reference to Clausewitz's dialectical method.) Clausewitz's methodology is therefore the strength as well as the weakness of his work. This explains why the majority of professional military readers and scholars have seldom taken the time necessary to cultivate a deeper understanding of *On War*, preferring instead to pluck out only those quotations that confirm their preconceived ideas. Ironically, therefore, *On War* has more often been read as a manual rather than as the philosophical/educational text that it is. With this problem in mind, the German General Gunther Blumertritt once observed that to give *On War* to the military was like "allowing a child to play with a razor blade." ("*Clausewitz ist das Rasiermesser in das Hand eines Kindes.*")⁷ This does not mean, of course, that Sun Tzu failed to develop many of the same sophisticated concepts. The difference is that some of Sun Tzu's concepts (e.g. friction, uncertainty, etc.) are more *implicit* (or are arrived at intuitively) while Clausewitz's are constructed through an elegant logical process and discussed in much greater depth as part of his general theoretical framework.

Thus, it can be argued that Sun Tzu employs the ideal-type method much as Clausewitz does, only in a less explicit and more limited fashion. Sun Tzu's recommendation that "...in war the best policy is to take a state intact" (*The Art of War*, p. 77) and that "to subdue the enemy without fighting is the acme of skill" (*The Art of War*, p. 77, also p. 79) is certainly an ideal to which any political or military leader should aspire, but not more than that. That this is only an ideal becomes evident not only from Chinese history itself, but also from the fact that most of *The Art of War* is dedicated to a discussion of *how to win by fighting*. Undoubtedly, Clausewitz would in principle agree that if one can win without fighting or bloodshed, so much the better; but he recognizes that this is rarely possible and proceeds forthwith to discuss the alternatives. Those who do not believe that Sun Tzu is also developing an ideal type from which he quickly departs would argue that his statements on the desirability of winning without bloodshed contradict Clausewitz's ideas; whereas in fact the two strategists are approaching the same issue from different perspectives. In

other words, many of the perceived disagreements between Clausewitz and Sun Tzu on important issues can often be attributed to differences in emphasis, not substance.

Sun Tzu and Clausewitz would probably agree on the fundamental methodological assumption that war is an art not a science — that each military problem has many potentially correct solutions (not just a single optimal solution) which are derived from the imagination, creativity, and intuition of the military leader. They also agree that "the endless complexities" inherent in the study of war make it impossible to formulate a positive theory of war even if certain "laws" or maxims are suggested (i.e., in the end, their use depends on the subjective interpretation of each leader). Clausewitz, however, raises this critical issue in a much more explicit way since he devotes all of Book II (On the Theory of War) to a discussion of the subject. Clausewitz observes, for example, that

efforts were therefore made to equip the conduct of war with principles, rules or even systems. This did present a positive goal, but people failed to take adequate account of the endless complexities involved. As we have seen, the conduct of war branches out in almost all directions and has no definite limits; while any system, any model, has the finite nature of a synthesis. An irreconcilable conflict exists between this type of theory and actual practice. (*On War*, p. 134).

It is only analytically that these attempts at theory can be called advances in the realm of truth; synthetically, in the rules and regulations they offer, they are absolutely useless....

They aim at fixed values; but in war everything is uncertain, and calculations have to be made with variable quantities....

They direct the inquiry exclusively toward physical quantities, whereas all military action is intertwined with psychological forces and effects. They consider only unilateral action, whereas war consists of a continuous interaction of opposites...." (*On War*, p. 136)

Anything that could not be reached by the meager wisdom of such one-sided points of view was held to beyond scientific control: it lay in the realm of genius, *which rises above all rules*. (*On War*, p. 136)

. . .The very nature of interaction is bound to make it unpredictable. (*On War*, p. 139)

Given the nature of the subject, we must remind ourselves that it is simply not possible to construct a model for the art of war that can serve as a scaffolding on which the commander can rely for support at any time. Whenever he has to fall back on his innate talent, he will find himself outside the model and in conflict with it; no matter how versatile the code, the situation will always lead to the consequences we have already alluded to: *talent and genius operate outside the rules, and theory conflicts with practice.* (*On War*, p. 140)

This type of knowledge cannot be forcibly produced by an apparatus of scientific formulas and mechanics; it can only be gained through a talent and judgment, and by the application of accurate judgment to the observation of man and matter. The knowledge needed by a senior commander is distinguished by the fact that it can only be attained by a special talent, through the medium of reflection, study and thought: an intellectual instinct. . . . (*On War*, p. 146)

. . .for in the art of war experience counts more than any amount of abstract truths. (*On War*, p. 164)

Sun Tzu's *The Art of War* (as the title indicates) reaches similar conclusions but does not include a direct, in-depth discussion of the subject. Sun Tzu clearly recognizes that the staggering complexity of war precludes the comfortable possibility of predicting its shape and course through the mechanical application of supposedly immutable formulae. "Now in war there may be one hundred changes in each step." (*The Art of War*, p. 83) "And as water has no constant form, there are in war no constant conditions." (*The Art of War*, p.101) He then employs this beautiful metaphor to explain the infinite complexity of war:

The musical notes are only five in number but their melodies are so numerous that one cannot hear them all.

The primary colors are only five in number but their combinations are so infinite that one cannot visualize them all.

The flavors are only five in number but their blends are so various that one cannot taste them all.

In battle there are only the normal and extraordinary forces, but their combinations are limitless; none can comprehend them all.

For these two forces are mutually reproductive; their interaction as endless as that of interlocked wings. Who can determine where one ends and the other begins? (*The Art of War*, pp. 91-92)

Much like Clausewitz, Sun Tzu recognizes that the complexity and unpredictability of war are created by the process of interaction.

That which depends on me, I can do; that which depends on the enemy cannot be certain.

Therefore it is said that one may know how to win, but cannot necessarily do so. (*The Art of War*, p. 85)

Nothing is constant or predictable in war.

Of the five elements, none is always predominant; of the four seasons, none last forever; of the days, some are long and some short, and the moon waxes and wanes. (*The Art of War*, p. 101)

Thus the principles of war or the keys to success can be understood in theory, but there is no blueprint to guide in their application.

These are the strategist's keys to victory. It is not possible to discuss them beforehand. (*The Art of War*, p. 70)

In the end, Sun Tzu reaches the same conclusion as Clausewitz: "In the art of war there are no fixed rules." (*The Art of War*, p. 93) Both agree that success in war depends on the talent of what Clausewitz terms the military genius — and on his *coup d'oeil* (or artistic intuition) which can be honed through experience but which cannot be developed by those without the innate ability. Both would also agree that the conclusions reached in their respective works have only limited value; for despite their wisdom, they cannot give the military professional concrete advice on how to apply all their insights. Success in war hinges not on a rote mastery of theory but on its judicious application, which in turn depends on the intuition of the military commander.

THE DEFINITION OF WAR: A QUESTION OF THE LEVEL OF ANALYSIS

Perhaps the greatest source of confusion in comparisons between *The Art of War* and *On War* has been the failure to recognize that their authors do not employ the same analytical framework or definition of war to begin with. Sun Tzu devotes considerable attention to concerns that would precede war, considering, at length, various diplomatic strategies as alternatives for achieving the stated objectives; for him, diplomacy is the best means of achieving his ideal of winning without bloodshed and fighting. When advising that the enemy's plans be attacked at their inception (pp. 77-78), Sun Tzu is presumably referring to diplomatic and political bargaining, negotiations, and deception, although he offers no detailed explanation. As the next best step, he recommends disruption of the enemy's alliances. Thus deprived of external support, the enemy might be expected to abandon his plans to resort to war or at least be more rapidly defeated in isolation.

Do not allow your enemies to get together.

... Look into the matter of his alliances and cause them to be severed and dissolved. If an enemy has alliances, the problem is grave and the enemy's position strong; if he has no alliances the problem is minor and the enemy's position weak. (*The Art of War*, p. 78)

Sun Tzu's framework for the discussion of war is thus much broader than that of Clausewitz, who wrote a treatise on the art of waging war itself, not on the workings of diplomacy before, during, and after war. Clausewitz's discussion begins at the point when diplomacy has failed and war has become inevitable. Merely because Clausewitz for the most part omitted diplomacy from the scope of his discussion does not mean that he underestimated or ignored its significance. On the contrary, he plainly states that diplomacy (i.e., politics) continues to play an important role throughout the course of a war.

... We also want to make it clear that war itself does not suspend political intercourse or change it into something entirely different. In essentials that intercourse continues irrespective of the means it employs. . . . Do political relations between

peoples and their governments stop when diplomatic notes are no longer exchanged?" (*On War*, p. 65)

Despite his reputation to the contrary, Clausewitz is aware, perhaps more than any other military thinker, that war is only one of the means (and not even an independent one) of achieving one's objectives when all else has failed. He defines war very clearly in this context: "War is a clash between major interests, which is resolved by bloodshed — *that is the only way in which it differs from other conflicts*." [my emphasis] (*On War*, p. 149) While Sun Tzu is, for the most part, concerned with the conduct of war on the highest strategic level, Clausewitz is primarily concerned with the lower strategic/operational levels of warfare. What can be misleading to the reader is the fact that Clausewitz, who is best known for his ideas on the primacy of politics (i.e., war on its highest level), in fact devotes relatively little space (only two out of eight books in *On War*) to the discussion of war on the highest level. Unlike Sun Tzu, he is not concerned with the diplomatic or economic environment in which warfare takes place. For Clausewitz's military leader, the involvement is a "given" within which he must strive for victory on the battlefield itself. In this sense, it is therefore irrelevant to compare Clausewitz's narrower discussion of war with the broader one of Sun Tzu.

Clausewitz has also been accused of ignoring the economic and logistical dimensions of war. This criticism is not without validity since logistics and economics are inextricably linked to strategy and war. Yet once again one must remember that Clausewitz confines his discussion to the conduct of war on the battlefield itself, with the assumption that the necessary economic and logistical support will be made available to the military leadership.⁸

The conduct of war has nothing to do with making guns and powder out of coal, sulphur, saltpeter, copper and tin; its given quantities are weapons that are ready for use and their effectiveness. Strategy uses maps without worrying about trigonometric surveys; it does not inquire how a country should be organized and a people trained and ruled in order to produce the best military results. It takes these matters as it finds them in the European community of nations, and calls attention only

to unusual circumstances that exert a marked influence on war.
(*On War*, p. 144)

One would not want to consider the whole business of maintenance and administration as part of the *actual* conduct of war. While it may be in constant interaction with the utilization of the troops, the two are essentially very different.
(*On War*, p. 129)

(But on his awareness of the logistical and economic preparations for war, see Book 5, Chapter 14, "Maintenance and Supply," pp. 330-340.)

Despite Clausewitz's recognition of the primacy of politics, his study of war is concerned primarily with that which occurs once hostilities have commenced. According to him, it is possible, even advisable, to distinguish between the preparatory, as opposed to combat and operations, phases of warfare.

. . . We clearly see that the activities characteristic of war may be split into two main categories: those *that are merely preparations for war, and war proper*. The same distinction must be made in theory as well. . . . The knowledge and skills involved in the preparations will be concerned with the creation, training and maintenance of the fighting force. . . . The theory of war proper, on the other hand, is concerned with the use of these means, once they have been developed, for the purposes of the war. All that it requires from the first group is the end product, an understanding of their main characteristics. That is what we call "the art of war," or "the theory of the use of the fighting forces." For our purposes, they all mean the same thing. That narrower theory, then, deals with the engagement, with fighting itself, and treats such matters as marches, camps, and billets as conditions that may be more or less identical with it. It does not comprise questions of supply, but will take these into account on the same basis as *other given factors*.

The art of war in the narrower sense must now in its turn be broken down into tactics and strategy. The first is concerned with the form of the individual engagement, the second its use.
(*On War*, pp. 131-132; see also p. 127) (Emphasis in the original.)
(Note that what Clausewitz refers to as *strategy* is today considered to be the lower operational level of war.)

Sun Tzu, on the other hand, views the political, diplomatic, and logistical preparations for war *as well as* the fighting as integral parts of the same activity. As a result, he devotes as much attention to the environment in which war takes place as to the battle itself. Clausewitz's more limited definition of war explains, in part, why it was so easy for his followers to forget that war is the continuation of politics by other means. By drawing an arguably artificial distinction, Clausewitz tends to overemphasize the centrality of combat at the expense of political preparations; his assumption that the logistical or economic dimensions of war would somehow take care of themselves, or his implication (as some of his followers thought) that the imperatives imposed by economic factors can be outflanked by success on the battlefield, is indeed risky as the Germans discovered in the First and Second World Wars. Such a narrow definition is even more dangerous today, when technological innovation and scientific discoveries, as well as the production and distribution of fuel, food, weapons, and ammunition are as important as one's performance on the battlefield. In this respect, Sun Tzu's comprehensive framework for the analysis of strategy and war is much more relevant to our own time than that of Clausewitz.

THE PRIMACY OF POLITICS AND THE MILITARY COMMANDER

War, as Sun Tzu comments in the opening sentence of *The Art of War*, "...is of vital importance to the state; the province of life and death; and road to survival and ruin. It is mandatory that it will be thoroughly studied." (p.63) Hence, war is not a ritual or purposeless activity, but one which must serve the interests of the state rather than the wishes of a single individual.⁹

If not in the interests of the state, do not act. If you cannot succeed, do not use troops. If you are not in danger, do not fight. (The Art of War, p. 1)

A sovereign cannot raise an army because he is enraged, nor can a general fight because he is resentful. For while an angered man may again be happy, and a resentful man again be pleased, a state that has perished cannot be restored, nor the dead be brought back to life.

Therefore, the enlightened ruler is prudent and the good general is warned against rash action. Thus the state is kept secure and the army preserved. (*The Art of War*, pp. 142-143)

Sun Tzu clearly recognizes the supremacy of *raison d'etat* over all other considerations. War is a rational activity of the last resort (the *ultima ratio*) that correlates ends and means to enhance the vital interests of the state: it is a *political activity* as we understand it in the modern world. The decision to initiate war is therefore political and must be made by political not military leaders.

And therefore it is said that the enlightened rulers deliberate upon the plans, and good generals execute them. (*The Art of War*, p. 142)

Normally, when the army is employed, the general first receives his commands from the sovereign. . . .

He receives the sovereign's mandate and in compliance with the victorious deliberations of the temple councils *reverently executes* the punishments ordained by Heaven. (*The Art of War*, p. 102)

The ideal military leader is he who holds his personal interests in abeyance while wholeheartedly serving his political leaders and a political purpose.

And therefore the general who in advancing does not seek personal fame, and in withdrawing is not concerned with avoiding punishment, but whose only purpose is to protect the people and promote the best interests of his sovereign, is the precious jewel of the state. . . . Few such are to be had. (*The Art of War*, p. 128)

Clausewitz is well known for his emphasis on the primacy of politics in the conduct of war, which is a rational instrument of the state *only* if it serves a political purpose. The following are some of his elegant though less quoted aphorisms on the subject:

When whole communities go to war — whole peoples, and especially civilized peoples — the reason always lies in some political situation, and the occasion is always due to some political object. War therefore is an act of policy. Policy. . . will permeate all military operations, and, in so far as their violent nature will admit, it will have a continuous influence on them. . . . War is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried out

by other means. The political object is the goal, war is the means of reaching it, and means can never be considered in isolation from their purpose. (*On War*, pp. 86-87)

Politics is the womb in which war develops — where its outlines already exist in their hidden rudimentary form, like the characteristics of living creatures in their embryos. (*On War*, p. 149)

War is only a branch of political activity, that is in no sense autonomous. . . . The only source of war is politics — the intercourse of governments and peoples. . . .

War cannot be divorced from political life; and whenever this occurs in our thinking about war, the many links that connect the two elements are destroyed and we are left with something pointless and devoid of sense. (*On War*, p. 605)

At the highest level the art of war turns into policy but a policy conducted by fighting battles rather than by sending diplomatic notes. . . . No other possibility exists, then, than to subordinate the military point of view to the political. (*On War*, p. 607)

As these excerpts demonstrate, Sun Tzu fully comprehended the political nature of war (the primacy of political over military/operational considerations) two millennia before Clausewitz. The concepts for which Clausewitz is most renowned are all stated in *The Art of War*, although Clausewitz analyzes them in more detail and may express them in more eloquently worded aphorisms. Although the theoretical frameworks of *On War* and *The Art of War* agree that, ideally, politics should always be in command, both also acknowledge that the unique nature of warfare often makes this impossible. In an age when real-time communication was impossible, the need to make quick decisions, exploit opportunities, or avoid defeat often caused local military developments to overrule remote political control. (From the point of view of communication, control and hence, also, command, it should be emphasized that despite the greater gap in time, the environment of war at Sun Tzu's time was closer to that of Napoleon and Clausewitz, than that of Napoleon and Clausewitz is to our own time.) Like politics, command on the battlefield is *the art of the possible* which requires the exploitation of fleeting opportunities or the avoidance of

imminent disaster. (With modern communications this is true to a lesser extent.) The negative consequences of Hitler's interference in Rommel's decisions or in the battle of Stalingrad, for example, are well known. Another famous yet possibly apocryphal example was President Carter's direct intervention in the aborted raid in Iran.

Accordingly, both Sun Tzu and Clausewitz recognize that under exceptional circumstances, the military commander in the field can and must overrule political orders. In this, Sun Tzu is perhaps even more emphatic than Clausewitz.

No evil is greater than commands of the sovereign from the court. (*Art of War*, p. 81)

He whose generals are able and not interfered with by the sovereign will be victorious.

To make appointments is the province of the Sovereign; to decide on battle, that of the general.

To put a rein on an able general while at the same time asking him to suppress a cunning enemy is like tying up the Black Hound of Han and then ordering him to catch elusive hares. (*Art of War*, pp. 83-84)

There are occasions when the commands of the sovereign need not be obeyed.

When it is expedient in operations the general need not be restricted by the commands of the sovereign.

When you see the correct course, act; do not wait for orders.

... A general prizes opportune changes in circumstances.

The orders of a sovereign, although they should be followed, are not to be followed if the general knows they contain the danger of harmful superintendence of affairs from the capital. (*The Art of War*, pp. 112-113)

If the situation is one of victory but the sovereign has issued orders not to engage, the general may decide to fight. If the situation is such that he cannot win, but the sovereign has issued orders to engage, he need not do so. (*The Art of War*, p. 128)

Although Clausewitz devotes somewhat less attention to this problem, he also notes that at times, operational considerations must take precedence over the primacy of politics. To paraphrase Clausewitz's famous metaphor, the

grammar (i.e., lower-level military considerations) will dictate the logic (i.e., political objectives).¹⁰

That however does not imply that the political aim is a tyrant. It must adapt itself to its chosen means, a process which can radically change it; . . .

War in general, and the commander in any specific instance, is entitled to require that the trend and designs of policy shall not be inconsistent with these means. That of course, is no small demand: but however much it may affect political aims in a given case, it will never do more than modify them. (*On War*, p. 87)

Policy, of course, will not extend its influence to operational details. Political considerations do not determine the posting of guards or the employment of patrols. But they are more influential in the planning of war, of the campaign, and often of the battle. (*On War*, p. 606)

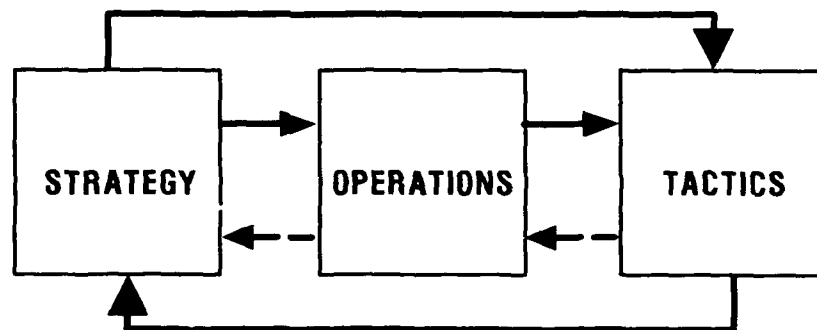
Only if statesmen look to certain military moves and actions to produce effects that are foreign to their nature do political decisions influence operations for the worse. In the same way as a man has not fully mastered a foreign language sometimes fails to express himself correctly, so statesmen often issue orders that defeat the purpose they are meant to serve. Time and again that has happened, which demonstrates that a certain grasp of military affairs is vital for those in charge of general policy. (*On War*, p. 608)

When to disobey a direct political order is the most critical decision a military commander must at times make, yet Sun Tzu and Clausewitz do not develop any criteria under which such decisions can be taken. Factors the commander should consider are local circumstances; the risks involved; the degree to which military control is centralized; the quality of communications; and his intuition and experience. The leader, on the other hand, should distinguish between political considerations and professional military ones, and must learn to resist the temptation to impose his views in situations calling for "purely professional" decisions. This is what Professor Samuel Huntington refers to as *objective control* as contrasted with *subjective control* (i.e., political noninterference vs. interference in professional military questions).¹¹

Sun Tzu and Clausewitz recognize that the ideal of political considerations remaining in command is not always possible to achieve. In reality, lower-level technological, operational, or even tactical considerations may hold sway in the heat of battle, adversely affecting strategic objectives and political policies on the higher level. While such situations are undesirable, the realities of war are such that the "grammar of battle" will frequently dictate modifications in the political objectives of war.

The complexity, interrelationship, and nonhierarchical nature of the links between the three levels of war are made more clear by the following chart.

THE THREE LEVELS OF WAR



THE PROBLEM OF THE "TACTICTIZATION" OR "OPERATIONIZATION" OF STRATEGY

THE RATIONAL CALCULUS OF WAR: CORRELATING ENDS AND MEANS

If war is a *means* of achieving political objectives, the attainment of these objectives requires the careful, continuous correlation of means and ends. The need for such political (and military) calculation is recognized by both Sun Tzu and Clausewitz. Sun Tzu approaches this issue through the development of what modern literature refers to as the "pure rational decision-making model."¹²

Now the elements of the art of war are *first*, measurement of space; *second*, estimation of quantities; *third*, calculations; *fourth*, comparisons; and *fifth*, chances of victory.

Quantities derive from measurement, figures from quantities, comparisons from figures, and victory from comparisons. (*The Art of War*, p. 88)

In this highly systematic decision-making process, such factors as objectives, considerations of relative strength, and the comparison of opponents lead to the weighing of different courses of action and to estimating the probability of victory.

Clausewitz argues that:

No one starts a war — or rather, no one in his senses ought to do so — without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it. (*On War*, p. 579)

He [the belligerent] would act on the principle of using no greater force, and setting himself no greater military aim, than would be sufficient for the achievement of his political purpose. (*On War*, p. 585)

Clausewitz then makes it clear that the "rational calculus" of war is an ongoing process:

Of even greater influence on the decision to make peace is the consciousness of all the effort that has already been made and of the efforts yet to come. Since war is not an act of senseless passion but is controlled by its political object, the value of this object must determine the sacrifices to be made for it in *magnitude* and also in *duration*. Once the expenditure of effort exceeds the value of the political object, the object must be renounced and peace must follow. (*On War*, p. 92)

Perhaps because of his greater belief in the value of intelligence or his faith in the benefits derived from following the proper religious rituals, Sun Tzu is more certain than Clausewitz that rational calculations will bring about the intended results. In *The Art of War*, rational calculations are practically considered a guarantee of success. (For a detailed discussion, see below in the section on intelligence.)

On the possibility of rationally calculating the outcome of a war, Clausewitz is much more pessimistic and realistic.

To discover how much of our resources must be mobilized for war, we must first examine our own political aim and that of the enemy. We must gauge the strength and situation of the opposing state. We must gauge the character and abilities of its government and people and do the same in regard to our own. Finally, we must evaluate the political sympathies of other states and the effect the war may have on them. To assess these things in all their ramifications and diversity is plainly a colossal task. Rapid and correct appraisal of them clearly calls for the intuition of a genius; to master this complex mass by sheer methodological examination is obviously impossible. Bonaparte was quite right when he said that Newton himself would quail before the algebraic problems it could pose.

The size and variety of factors to be weighed, and the uncertainty about the proper scale to use are bound to make it far more difficult to reach the right conclusion. (*On War*, pp. 585-586)

Both Sun Tzu and Clausewitz view war as an essentially rational activity involving the careful and continuous correlation of ends and means. At the same time, they fully recognize the pivotal influence of nonrational factors such as morale, motivation, and intuition. Clausewitz, however, appears to be much more conscious of the difficulty of relying on rational calculations. As a result, he assigns a more central role to the intervention of unexpected forces such as friction, chance, unreliable intelligence, and sheer complexity. In his more limited expectations of the benefits to be derived from rational calculations, Clausewitz is considerably more sophisticated and realistic than Sun Tzu.

THE PARADOXICAL TRINITY OF WAR

In summarizing his political framework for the study of war, Clausewitz developed his famous *paradoxical trinity* (*eine wunderliche Dreifaltigkeit*): the *people* (primordial violence, the mobilization and commitment of the people); the *commander and his army* (which provide the creative management of risk, chance and probability, the planning and execution of military operations); and the *government* (determining the rational policies and objectives of war and reexamining these in light of the expected costs and benefits). He believed that victory could be secured only if the proper equilibrium was achieved among these three dimensions, each with its autonomous logic of operation.

These three tendencies are like three different codes of law, deep rooted in their subject and yet variable in their relationship to one another. A theory that ignores any one of them or seeks to fix an arbitrary relationship between them would conflict with reality to such an extent that for this reason alone it would be totally useless.

Our task is to develop a theory that maintains a balance between these three tendencies, like an object suspended between three magnets. (*On War*, p. 89)

There is no doubt that Sun Tzu, like Clausewitz, appreciated the importance of the three dimensions that comprise Clausewitz's political framework. We have already seen that in *The Art of War* he recognizes the primacy of politics in all major strategic decisions concerning the initiation, conduct, and termination of war; and no less than Clausewitz, he pays careful attention to the second dimension, which includes the role of military men in all the technical details of preparing plans and leading troops in battle according to their best professional judgment. What remains to be shown is that Sun Tzu is also aware that mobilization of popular support is necessary for success in war.

By moral influence I mean that which causes the people to be in harmony with their leaders, so that they will accompany them in life and unto death without fear of mortal peril.

When one treats the people with benevolence, justice, and righteousness, and reposes confidence in them, the army will be united in mind and all will be happy to serve their leaders. (*The Art of War*, p. 64)

Sun Tzu is particularly sensitive to the problem of losing popular support in prolonged wars.

Where the army is, prices are high; when prices are high the wealth of the people is exhausted. When wealth is exhausted the peasantry will be affected with urgent exactions.

... With strength thus depleted and wealth consumed, the households in the central plains will be utterly impoverished and seven-tenths of their wealth dissipated. (*The Art of War*, p. 74)

If war drags on without cessation men and women will resent not being able to marry, and will be distressed by the burdens of transportation. (*The Art of War*, p. 74)

Hence Sun Tzu's insistence that wars should be as short as possible, for clearly the longer a war continues without decisive results, the more difficult it becomes to maintain the support of the people.

Although both treatises underscore the necessity of striking the proper balance among the people, the army, and the government, Sun Tzu's discussion of these three elements is scattered throughout *The Art of War* while Clausewitz's analysis is once again much more concentrated, systematic, and explicit.

THE IDEAL AND THE REAL: VICTORY WITHOUT BLOODSHED AND THE SEARCH FOR THE DECISIVE BATTLE

For to win one hundred victories in one hundred battles is not the acme of skill. Your aim must be to take All-under-heaven intact. (*The Art of War*, p. 77)

... Those skilled in war subdue the enemy's army without battle. They capture his cities without assaulting them and overthrow his state without protracted operations. *The Art of War*, p. 77)

Kind-hearted people might of course think there was some ingenious way to disarm or defeat an enemy without too much bloodshed, and might imagine this is

the goal of the art of war. Pleasant as it sounds it is a fallacy that must be exposed. . . . (*On War*, p. 75)

Everything is governed by a supreme law, the decision of arms. . .

. . . The *violent resolution of the crisis*, the wish to annihilate the enemy's forces, is the first-born son of war. (*On War*, p. 99)

The preceding quotations from *The Art of War* and *On War* are generally thought to embody the essence of their authors' philosophies of war. At first glance they may appear to be in conflict, but Sun Tzu and Clausewitz do not differ as much as is often assumed regarding the need to resort to the ultimate means of battle and bloodshed. Moreover, they agree that the most rational way of waging war is usually to fight for the shortest possible duration and win as decisively as possible. Any other types of prolonged and indecisive battles are to be avoided.

Both *The Art of War* and *On War* were written during historical periods characterized by widespread resort to the use of military force. Each appeared at a time when earlier forms of ritualistic or limited warfare had given way to more virulent forms of intensive or total war. In China, the transition from the ritualistic warfare of the Spring and Autumn period (722 B.C. to 481 B.C.) to the unremitting warfare and political confusion of the Warring States period (403 B.C. to 221 B.C.) was far more gradual than that which took place in Europe from the limited wars of the 18th century to the French Revolution and Napoleonic wars of the 19th.¹³ Both of these strategists lived during times when the use of force was the norm and were aware that it is usually necessary to break eggs (i.e., resort to war) in order to make an omelet (i.e., achieve the political ends of a state in a system of independent states). Why, then, does Sun Tzu, in apparent contrast to Clausewitz, commend the virtues of winning without having to do battle, and to what degree does he recognize that this is rarely possible in practice?

Sun Tzu's *emphasis* on the use of force only as a last resort reflects Confucian idealism and the political culture which it

spawned. In Professor Fairbank's words, Sun Tzu "shares the early Confucian assumption as to the primacy of mental attitudes in human affairs. Like other classics produced by idealists amid the disorder of the Warring States period, it bequeathed its doctrines to the far different imperial age."¹⁴ Far from glorifying physical coercion and warfare, Confucius taught that "the superior man, extolled in the classics as the highest product of self-cultivation, should be able to attain his ends without violence."¹⁵ These values were seen as *the ideal* that should find its purest expression in the person of the emperor.

For the emperor to resort to violence was an admission that he had failed in his own conduct as a sage pursuing the art of government. The resort to warfare (*wu*) was an admission of bankruptcy in the pursuit of *wen* (the arts of peace). Consequently it should be a last resort, and it required justification both at the time and in the record.¹⁶

Within such a system, there was no place for the dichotomy between public and private morality so familiar in the Western concept of *raison d'etat*, which clearly distinguishes between individual ethics and those of the state or of leaders charged with the welfare of the state.

This lack of difference between private and public morality and the view that resorting to war signified the emperor's personal failure may also explain why the emperor typically left the actual fighting to the military. "Chinese youth were given no equivalents of Alexander, Caesar, or Napoleon to admire or emulate. There was no youthful worship of heroism like that in the West."¹⁷

On the other hand, Clausewitz, for whom Fredrick the Great and Napoleon were models of the "military genius," argues for the unity of the political and military direction on the highest level of warfare.

To bring a war, or one of its campaigns, to a successful close requires a thorough grasp of national policy. On that level, strategy and policy coalesce: the Commander-in-Chief is simultaneously a statesman. (*On War*, p. 111)

Sun Tzu's idealized preference for the use of all other means short of war — whether politico-diplomatic, economic, or ideological — also explains why the military arm was not the preferred means of government and hence why the military needed to be under firm political control.

Operations on so many levels. . . were beyond the capacity of a purely military man. They were the natural province of the trained Confucian bureaucrat, who knew how to employ military force within the repertoire of statecraft. This fact alone kept the military in their place.¹⁸

In old China, war was too complex a matter to be left to the fighting man, however well trained he might be. Its objective was not victory but the reestablishment of order, and for this the arts of peace were equally necessary.¹⁹

This does not mean that there were fewer wars in Chinese history or that once war broke out (as it often did) that the logic of war in China differed markedly from that in the West.²⁰ As the case often is, a yawning gap existed between the ideal and the real, between theory and practice.

How is this Confucian idealism expressed in *The Art of War*? As noted earlier, Sun Tzu repeatedly emphasizes that ". . . those skilled in war subdue the enemy's army without battle" and that "the best policy in war is to take a state intact." The Confucian reluctance to use force is also evident in the desire to minimize the casualties and costs associated with war once it has begun; Confucian idealism searches for a military solution—for nonmaterial "force multipliers" that will facilitate victory with a minimal use of force. It strives to create situations in which "the force applied is minute but the results enormous." (*The Art of War*, p. 95) In sharp contrast, Clausewitz warns: "Since in war too small an effort can result not just in failure but in positive harm, each side is driven to outdo the other, which sets up an interaction." (*On War*, p. 585) And, therefore, the more force one concentrates from the very start, the less force he will have to employ later on and the shorter the duration and the cost of war will be. This is why Clausewitz has emphasized that the highest and simplest law of strategy is that of "keeping one's forces concentrated, . . . to be very strong; first in general, and that at the decisive point." (*On War*, p. 204.)

To paraphrase Clausewitz's sarcastic definition of maneuver, Sun Tzu's force multipliers "carry the idea of an effect created out of nothing." (*On War*, p. 591) Among the force multipliers recommended by Sun Tzu are heavy reliance on intelligence; the extensive use of deception and diversionary measures in order to achieve surprise; the "indirect approach"; the use of psychological means to reduce the enemy's will to fight; and maneuver. (All of these, particularly intelligence and deception, are important elements in *The Art of War* that receive far less attention from Clausewitz, who for the most part considers them unreliable and impracticable.)

The Art of War offers this advice on the indirect approach:

He who knows the art of direct and indirect approach will be victorious. Such is the art of maneuvering. (*The Art of War*, p. 106)

Go into emptiness, strike voids, bypass what he defends, hit him where he does not expect you. (*The Art of War*, p. 96)

Thus, march by an indirect route and divert the enemy by enticing him with a bait. So doing you may set out after he does and arrive before him. One able to do this understands the strategy of the direct and the indirect.

He who wishes to snatch an advantage takes a devious and distant route and makes of it the short way. (*The Art of War*, p. 102)

Unfortunately, neither Sun Tzu (nor Liddell Hart) explains in concrete terms *how* to identify the "best" indirect approach. An indirect approach that is anticipated by the enemy, it paradoxically becomes the direct, and everything that succeeds then becomes the indirect approach. It is like the advice given by the old businessman to his son: "My son, let me give you the secret of my success. Buy cheap, sell high!—and you will succeed." The trouble with such advice is that, like all truisms, it is too vague to be of practical value. In the end, therefore, as Clausewitz emphasized, identifying the best "indirect approach" depends on the creative genius, the *coup d'oeil*, of the military leader. This in turn raises another perplexing question, as we shall see below, of how to identify the "military genius" in peacetime, *before* a war has begun.

Nevertheless, even truisms can make a positive contribution by creating an appreciation for certain attitudes, "formulas," or actions that may not be as obvious they appear at first glance or that may not be easy to put into practice.²¹ The implementation of such advice requires an innate understanding or talent, which makes all of the good advice redundant.

In contrast to *On War*, *The Art of War* stresses psychological warfare; that is, erosion of the opponent's will to fight in order to bring about victory at a considerably lower cost or no cost at all.

Do not thwart an enemy returning homewards.

To a surrounded enemy you must leave a way of escape.

Show him there is a road to safety, and so create in his mind the idea that there is an alternative to death. Then strike.

Do not press an enemy at bay. (*The Art of War*, pp. 109-110)

It is military doctrine that an encircling force must leave a gap to show the surrounded troops there is a way out, so that they will not be determined to fight to the death. (*The Art of War*, pp. 132-133)

Although Clausewitz does not assign the same degree of importance to the indirect approach and psychological warfare, he still cautions the reader against ignoring them entirely:

When we speak of destroying the enemy's forces we must emphasize that nothing obliges us to limit this idea to physical forces: the moral element must also be considered. (*On War*, p. 97)²²

For Sun Tzu, a military leader who would be skilled in the art of command must be able to create a situation in which he leaves his own troops no choice but to stand and fight, or die. The successful military leader knows how to:

Throw them [his own troops] into a situation where there is no escape and they will display immortal courage. . . . (*The Art of War*, p. 135)

Throw the troops into a position from which there is no escape and even when faced with death they will not flee. For if prepared to die, what can they not achieve? Then

officers and men together put forth their utmost efforts. In a desperate situation they fear nothing; when there is no way out they stand firm. (*The Art of War*, p. 134)

It is interesting to note that although Clausewitz assigns the greatest importance to moral factors, to "the strength of will" and numerous other nonmaterial and psychological factors, he does not explicitly discuss the possibility of directly undermining the enemy's motivation to fight as Sun Tzu does. This may be because he sees such a policy as self-evident; indeed, he would probably consider many of the statements quoted from *The Art of War* in this section as too simplistic. Clausewitz's emphasis on the intellectual learning process, the raising of pertinent questions, and guidance of the reader through complicated arguments, seems to avoid the sort of maxims typical of *The Art of War*. Still, *On War* is not free of truisms, even though Clausewitz makes a more serious effort to explain their logical underpinnings. For example, his advice to be strong at the decisive point or his sophisticated development of the concept of the culminating point of the attack or the center of gravity do not, in the end, leave the reader with any more concrete advice on their implementation. The difference between the two is, however, that Clausewitz's systematic framework includes an *explicit* discussion of the role of the military genius, of intuition in war, which provides a practical "solution" for those problems that are not otherwise susceptible to concrete advice.

Perhaps this is also the context in which to mention one more difference between Sun Tzu and Clausewitz. *The Art of War* continuously advises the reader as to how the successful general can deceive and surprise his opponent; and how he can and should undermine the fighting spirit of his opponent and obtain good intelligence. Yet *Sun Tzu seldom alludes to the fact that the enemy can be expected to follow the same advice*. In other words, his one-dimensional analysis seems to assume that the enemy is passive and will not pursue similar stratagems.

Clausewitz, on the other hand, emphasizes the *reciprocal nature of war, the interaction between equally capable enemies*. If both opponents are equally skilled in the art of war, it is more difficult to assume that one will be able to

outmaneuver the other and win without bloodshed or achieve a cheap victory through deception. Clausewitz is wary of overly sophisticated schemes that tend to underestimate the opponent:

If we abandon the weak impressions of abstract concepts for reality, we will find that an active, courageous, and resolute adversary will not leave us time for long-range intricate schemes; but that is the very enemy against whom we need these skills most. (*On War*, p. 229)²³

He therefore assumes, more so than Sun Tzu, that since there are no easy unilateral solutions, is impossible to achieve much by the application of "little strength to achieve much." When reading *The Art of War* with its emphasis on victory without battle, on achieving less costly victories through deception, or weakening the enemy's resistance, one should remember the comments of Frank Kiernan in his essay, "Phases and Modes of Combat in the Early China."

This exaltation of the extraordinary stratagem may be a reflection of the Chinese scholar's (and historian's) repugnance of brute force. However sanguinary, warfare may have been more acceptable to the Chinese literati if it could somehow be represented as a kind of intellectual hand-wrestling, with the harsh facts of discipline, organization, armament, endurance, and bloodshed somehow minimized by that stress upon trickiness. It is only a short step from this to the idea that unusually successful generals are wizards, possessed of a magical power to control nature and circumstance. This removes warfare still more from the everyday, accepted realm of experience, leaving that sphere to the rationalistic Confucian literati. This also, of course, relegates military history to the fabulous and romantic and frees the historian from the onerous and unpalatable task of recording the fleeting, disturbing, and technical facts of warfare. And relegating the military enterprise to the sphere of fantasy encourages the sort of dreamlike armchair strategy which has marked Chinese military thinking so deeply down the centuries, into our own day.²⁴

Clausewitz cannot be accused of any of the above, for *On War* includes many lengthy, realistic descriptions of the horrors of war. Nor does he provide the reader with any neat solutions that could render combat unnecessary.

The decision by arms is for all major and minor operations in war what cash payment is in commerce. Regardless how complex the relationship between the two parties, regardless how rarely settlements actually occur, they can never be entirely absent. (*On War*, p. 97)

... It is inherent in the very concept of war that everything that occurs *must originally derive from combat*. (*On War*, p. 95) (Emphasis in the original.)

There is only one means in war: combat. (*On War*, p. 96)

Clausewitz does concede that there is a possibility of winning without having to engage in combat, but he considers it so remote that it is best confined to the realm of theory:

Consequently, it would be an obvious fallacy to imagine war between civilized peoples as resulting *merely from a rational act* on the part of their governments and to conceive of war as *gradually ridding itself of passion, so that in the end one would never really need to use the physical impact of the fighting forces — comparative figures of their strength would be enough. That would be a kind of war by algebra*. (*On War*, p. 76) [my emphasis]

When one force is a great deal stronger than the other, an estimate may be enough. There will be no fighting: the weaker side will yield at once. (*On War*, p. 96)

Combat is the only effective force in war; its aim is to destroy the enemy's forces as a means to a further end. That holds good even if no actual fighting occurs, because the outcome rests on the assumption that if it came to fighting, the enemy would be destroyed. It follows that the destruction of the enemy's force underlies all military actions; all plans are ultimately based on it, resting on it like an arch on its abutment. Consequently, all action is undertaken in the belief that if the ultimate test of arms should actually occur, the outcome would be *favorable*. (*On War*, p. 97)

POSSIBLE ENGAGEMENTS ARE TO BE REGARDED AS REAL ONES BECAUSE OF THEIR CONSEQUENCES

If troops are sent to cut off a retreating enemy and he thereupon surrenders without further fight, his decision is caused solely by the threat of a fight posed by those troops.

. . . Results have been produced by the mere possibility of an engagement; the possibility has acquired reality. . . .

This shows that the destruction of the enemy's forces and the overthrow of the enemy's power can be accomplished only as the result of an engagement, no matter whether it really took place or was merely offered but not accepted. (*On War*, p. 181. See also p. 386)

The divergence between Clausewitz and Sun Tzu on the issue of winning without fighting is considerable. While Sun Tzu elevates it to an ideal, Clausewitz considers it to be the exception. Indeed, in almost every instance where Clausewitz mentions the possibility of "winning by algebra," he immediately adds the caveat that there are normally no substitutes for combat.

Clausewitz's skepticism as to the possibility of winning cheap and bloodless victories, of using "minute force" to achieve major results, or of resorting to nonmaterial force multipliers as panaceas comes across unmistakably in his cynical comments on miraculous formulas for victory:

Maneuvering the enemy out of an area he has occupied is not very different from this, and should be considered in the same light, rather than as a true success of arms. These means are generally overrated; they seldom achieve so much as a battle, and involve the risk of drawbacks that may have been overlooked. They are tempting because they cost so little.

They should always be looked upon as minor investments that can only yield minor dividends, appropriate to limited circumstances and weaker motives. But they are obviously preferable to pointless battles — victories that cannot be fully exploited. (*On War*, p. 529)

None of this is meant to say that there should be any less activity in warfare. Tools are there to be used, and use will naturally wear them out. Our only aim is clarity and order; we are opposed to bombastic theories that hold that the most overwhelming surprise, the fastest movement or the most restless activity cost nothing; that they are rich mines which lie unused because of the generals' indolence. The final product may indeed be compared to that of gold and silver mines: one looks only at the end result and forgets to ask about the cost of the labor that went into it. (*On War*, p. 322)

That is why governments and commanders have always tried to find ways of avoiding a decisive battle and of reaching their goal by other means or of quietly abandoning it. Historians and theorists have taken great pains, when describing such campaigns and conflicts, to point out that other means not only served the purpose as well as a battle that was never fought, but were indeed evidence of higher skills. This line of thought had brought us almost to the point of regarding, in the economy of war, battle as a kind of evil brought about by mistake - a morbid manifestation to which an orthodox, correctly managed war should never have to resort. Laurels were to be reserved for those generals who knew how to conduct a war without bloodshed; and it was to be the specific purpose of the theory of war to teach this kind of warfare. . . .Recent history has scattered such nonsense to the winds. (*On War*, p. 259)

How are we to prove that usually, and in all the most important cases, the destruction of the enemy's forces must be the main objective? How are we to counter the highly sophisticated theory that supposes it possible for a particularly ingenious method of inflicting minor direct damage on the enemy's forces to lead to major indirect destruction; or that claims to produce, by means of limited but skillfully applied blows, such paralysis of the enemy's forces and control of his will-power as to constitute a significant shortcut to victory? Admittedly, an engagement at one point may be worth more than at another. Admittedly, there is a skillful ordering of priority of engagements in strategy; indeed that is what strategy is all about, and we do not wish to deny it. We do claim, however, that direct annihilation of the enemy's forces must always be the *dominant consideration*. We simply want to establish this dominance of the destructive principle. (*On War*, p. 228)

and finally:

We are not interested in generals who win victories without bloodshed. The fact that slaughter is a horrifying spectacle must make us take war more seriously, but not provide an excuse for gradually blunting our swords in the name of humanity. Sooner or later someone will come along with a sharp sword and hack off our arms. (*On War*, p. 260)²⁵

THE SEARCH FOR THE DECISIVE BATTLE

Since the ideal of winning without battle is seldom realistic, the strategist must therefore try to determine the most effective way of winning once bloodshed has become unavoidable.

Once Sun Tzu turns his attention to strategy in *practice*, his views on the art of war *do not differ as much as previously thought* from those of Clausewitz. Like Clausewitz, Sun Tzu is searching for the quickest and most decisive victory over the enemy. This can be achieved most directly through numerical superiority in general or absolute superiority at the decisive point of contact with the enemy. It is of course the latter situation in which the qualities of superior generalship are brought to the fore. In order to win despite his numerical inferiority, the "military genius" (to use Clausewitz's apt term) must, for example, understand the potential contribution and limits of intelligence, the most effective way to use deception, and the fundamental differences between the offense and defense; further, he must be aware of the advantages conferred by terrain and weapons technology as well as those which cannot be gained solely through numerical superiority.

Victory is the main object in war. If this is long delayed, weapons are blunted and morale depressed. When troops attack cities, their strength will be exhausted.

Thus while we have heard of blundering swiftness in war, we have not yet seen a clever operation that was prolonged. (*The Art of War*, p. 73)

Hence what is essential in war is victory, not prolonged operations. (*The Art of War*, p. 76)

Determination and speed are essential for winning a decisive victory:

When you see the correct course, act; do not wait for orders. (*The Art of War*, p. 112)

Speed is the essence of war.

That the one thing esteemed is divine swiftness. (*The Art of War*, p. 134)

Therefore at first be shy as a maiden. When the enemy gives you an opening be swift as a hare and he will be unable to withstand you. (*The Art of War*, p. 140)

Clearly, the purpose of such speed and decisiveness is to bring about victory as soon as possible (in order to avoid prolonged wars of attrition); this necessitates only one thing — the search for a decisive battle that will lead to swift results. Unlike Sun Tzu, who scarcely discusses the bloody realities of

war, and does not speak of annihilation or destruction, Clausewitz goes directly to the point.

The immediate object of an attack is victory. (*On War*, p. 545)

The destruction of the army of the enemy is the key to his defeat. (*On War*, pp. 595-596)

In war, the subjugation of the enemy is the end, and the destruction of his fighting forces the means. (*On War*, p. 526)

Victory alone is not everything — but is it not, after all what really counts? (*On War*, p. 291)

We doubt whether Bonaparte in any of his campaigns ever took the field without the idea of crushing the enemy in the very first encounter. (*On War*, p. 261)

The destruction of the enemy must always be the dominant consideration in war. (*On War*, p. 230)

We do claim, however, that the direct annihilation of the enemy's forces must always be the *dominant consideration*. (*On War*, p. 228)

How can a quick victory be achieved? As illustrated in the preceding quotations, Clausewitz believed that overwhelming numerical superiority was one of the few ways that it was even remotely possible to win without battle. As Clausewitz makes clear, numerical superiority, when all other things are held equal, is certainly the simplest way to win decisive victories:

In tactics as in strategy, superiority of numbers is the most common element in victory. (*On War*, p. 194)

...superiority in numbers admittedly is the most important factor in the outcome of an engagement. ...It thus follows that as many troops as possible should be brought into the engagement at the decisive point. This is the first principle of strategy. (*On War*, pp. 194-195)

The first rule, therefore, should be: put the largest possible army into the field. This may sound a platitude but in reality it is not. (*On War*, p. 195)

The best strategy is always *to be very strong*: first in general, and then at decisive point. . . . there is no higher and simpler law of strategy than that of keeping one's forces concentrated. (*On War*, p. 204)

An impartial student of modern war must admit that superior numbers are becoming more decisive with each passing day. The principle of bringing the maximum possible strength to the decisive engagement must therefore rank rather higher than it did in the past. (*On War*, p. 282)

While it must be emphasized that victory is most easily effected through absolute numerical superiority, both Sun Tzu and Clausewitz show that in the art of war what matters most is not absolute superiority, but rather superiority at the *decisive point*, the point of engagement.

Numerically inferior armies with capable leadership can, therefore, emerge victorious through the correct application of this concept. Absolute numbers may not always equate with victory, particularly on the higher strategic level where no direct contact is made, but they are, however, more critical (when all other things are held equal) at the point of engagement.

In a minor engagement it is not too difficult to judge approximately how much force is needed to achieve substantial success, and what would be superfluous. In strategy this is practically impossible, because success cannot be defined and delineated with the same precision. (*On War*, p. 208)

To achieve relative superiority at the point of contact is undoubtedly the highest achievement of the military genius.

Consequently, the forces available must be employed with such skill that even in the absence of absolute superiority, relative superiority is attained at the decisive point. (*On War*, p. 196, also p. 197)

The same idea is also emphasized in *The Art of War*.

If I am able to determine the enemy's dispositions while at the same time I conceal my own then I can concentrate and he must divide. And if I concentrate while he divides, I can use my entire strength to attack a fraction of his. There, I will be numerically superior. Then if I am able to use many to strike few at the selected point, those I deal with will be in dire straits. (*The Art of War*, pp. 98, 99)

The fact that Clausewitz's discussion of force ratios and the superiority of numbers is concentrated in specific chapters of *On War* (Book 3, Chapter 8, "Superiority of Numbers," pp. 194-197; and Book 5, Chapter 3, "Relative Strength," pp. 282-285), while Sun Tzu's comments on these subjects are scattered throughout *The Art of War*, does not indicate that Sun Tzu is any less conscious of their significance. In the end, both maintain that the key to victory lies in relative numerical superiority at the decisive point of engagement, but they differ on how this goal is best achieved. Clausewitz stresses the *positive* approach of *maximum concentration of one's own forces*, but is less concerned with the enemy; Sun Tzu is chiefly concerned with the *negative* goal of *preventing the enemy from concentrating his troops* through reliance on stratagems that divide and disperse his forces. This leads Sun Tzu to a much greater appreciation of the value of deception and diversion in war.

When he is united, divide him. (*The Art of War*, p. 69)

The enemy must not know where I intend to give battle. For if he does not know where I intend to give battle he must prepare in a great many places. And when he prepares in a great many places, those I have to fight in any one place will be few.

And when he prepares everywhere, he will be weak everywhere.

He will be unable to fathom where my chariots will actually go out, or where my infantry will actually follow up, and therefore he will disperse and will have to guard against one everywhere. Consequently, his force will be scattered and weak, and his strength divided and dissipated, and at the place I engage him I can use a large host against his isolated units. (*The Art of War*, pp. 98-99)

Now when a Hegemonic King attacks a powerful state he makes it impossible for the enemy to concentrate. He overawes the enemy and prevents his allies from joining him.

In attacking a great state, if you can divide your enemy's forces, your strength will be more than sufficient.

And in a rare reference to the "positive" approach more typical of Clausewitz:

Concentrate your forces against the enemy and from a distance of a thousand li you can kill his general. This is described as the ability to attain one's aim in an artful and ingenious manner. (*The Art of War*, p. 139)

In comparison, Clausewitz largely ignores the question of the enemy's perceptions and relies instead on the one-sided approach of concentrating his own troops. He asserts that as long as one achieves the greatest possible concentration, success will surely follow (assuming all other factors are held equal). In this respect, he is planning in a vacuum. Moreover, Clausewitz does not offer any further suggestion about *how* relative superiority at the decisive point is to be achieved, and almost entirely disregards the potential of deception, which Sun Tzu believes is key to success. The danger of Sun Tzu's approach, however, is that deception (as well as superior intelligence) can become a panacea that encourages the unrealistic search for quick, cheap victories.

In fact, these two approaches can and should be combined. The possession of superior strength believed sufficient to ensure victory does not preclude recourse to the use of deception, the extensive use of which reduces the cost of victory by saving lives, resources, and time. But human nature being what it is, powerful nations most often rely on direct, brute force to accomplish their objectives, leaving deception and stratagem to those whose weakness (whether perceived or actual) seems to give them no alternative.²⁶

This observation also leads to the conclusion that the readiness to employ deception is more a reflection of strength or weakness than of (in this case) Eastern or Western culture or historical experience. In the Second World War, for example, the Western military tradition and culture shared by the British and Germans clearly did not determine the extent of their enthusiasm for deception. At that time, the British, who were on the brink of defeat and could not mobilize as much military strength as the Germans, resorted extensively and effectively to the use of deception on all levels, while the Germans, complacent in the knowledge of their superior strength and early victories, relied more on naked power than on their wits. Yet when the British were confident of their military might during their colonial war in Afghanistan, the Boer War, or the

First World War, they almost completely ignored deception. And although deception is far from an unknown quantity in Chinese military history, the Chinese did not hesitate to abandon its use and resort to large-scale frontal attacks in, for example, Korea and Vietnam. In much the same way, when the Israelis felt weak and vulnerable (in 1948, 1956, and 1967), they resorted to deception as a matter of course; but once intoxicated by their resounding success in 1967, they later neglected its use (in 1973).

In addition, Sun Tzu discusses the specific force ratios necessary to implement various types of operations, thus distinguishing indirectly between the relative strengths of the offense and defense:

He who understands how to use both large and small forces will be victorious. (*The Art of War*, p. 82)

Consequently, the art of using troops is this: When ten to the enemy's one, surround him;

When five times his strength attack him; . . .

If double his strength, divide him. . . .

If equally matched, you may engage him. . . .

If weaker numerically, be capable of withdrawing; . . .

If the enemy is strong and I am weak, I temporarily withdraw and do not engage. (*The Art of War*, pp. 79-80)

Other conditions being equal, if a force attacks one ten times its size, the result is flight. (*The Art of War*, p. 125)

While Clausewitz develops a more sophisticated discussion of the different natures of the offense and defense, he never tries to establish specific force ratios for undertaking certain defensive or offensive operations. Instead, his analysis remains on a higher methodological and philosophical plane. Nevertheless, Sun Tzu and Clausewitz agree that the defense is the stronger form of war that can be successfully waged with fewer troops; and both warn against depending on numerical superiority alone, despite their emphasis on its importance.

In war, numbers alone confer no advantage. Do not advance relying on sheer military power. (*The Art of War*, p. 122)

There are circumstances in war when many cannot attack few, and others when the weak can master the strong. One able to manipulate such circumstances will be victorious. (*The Art of War*, pp. 82-83)

Clausewitz comments:

Superior numbers, far from contributing everything, or even a substantial part, to victory, may actually be contributing very little, depending on the circumstances. (*On War*, p. 194)

It would be seriously misunderstanding our argument, to consider numerical superiority as indispensable to victory; we merely wished to stress the relative importance. (*On War*, p. 197)

To accept superiority of numbers as the one and only rule, and to reduce the whole secret of the art of war to the formula of numerical superiority *at a certain time in a certain place was an oversimplification that would not have stood up for a moment against the realities of life.* (*On War*, p. 135)²⁷

Both emphasize that inspired generalship can allow a numerically inferior army to win through the concentration of more troops at the decisive point. At the decisive point itself, of course, the concentration of superior numbers is still, all other things remaining equal, the most decisive factor. Outstanding generalship, better command and control over one's forces, deception, stronger motivation and, in modern warfare, superior weapons technology and greater fire power can all more than adequately compensate for numerical inferiority.

In his conception of the ideal type of war, Clausewitz points out from the start that nonmaterial factors are no less important than material means.

If you want to overcome your enemy you must match your effort against his power of resistance, which can be expressed as the product of two factors, viz, *the total means at his disposal* [i.e., primarily his number of troops] and *the strength of his will* [i.e., primarily his motivation to fight but actually all other non-material elements of power]. The extent of the means at his disposal is a matter — though not exclusively — of figures, and

should be measurable. But the strength of his will is much less easy to determine and can only be gauged approximately by the strength of the motive animating it. (*On War*, p. 77.)

DECEPTION, SURPRISE, INTELLIGENCE AND COMMAND AND CONTROL

All warfare is based on deception. (*The Art of War*, p. 106)

. . . . Plans and orders issued for appearances only, false reports designed to confuse the enemy should not be considered as a significant independent field of action at the disposal of the commander. (*On War*, pp. 202-203)

Attack where he is unprepared: sally out when he does not expect you. (*The Art of War*, p. 69)

It is very rare therefore that one state surprises another, either by an attack or by preparations for war. (*On War*, p. 199)

Know thy enemy, know yourself; your victory will never be endangered. (*The Art of War*, p. 129)

Many intelligence reports in war are contradictory; even more are false, and most are uncertain. . . . (*On War*, p. 117)

Deception. In *The Art of War*, the principal method of concentrating one's troops while forcing the enemy to disperse his is that of deception. (Deception and diversion are not, of course, ends in themselves but rather the means of achieving surprise; surprise, in turn, is the ability to concentrate troops where the opponent does not expect them.) By enabling the deceiver to conceal his true objectives, successful deception convinces the enemy to concentrate his forces where no attack will actually take place, thereby weakening himself at the decisive point of engagement. (Deception is also intended to prevent the victim from determining when and where an attack will occur, what means and methods will be used, and so on.)

As any content analysis would be quick to point out, deception is the most frequently discussed theme in *The Art of War*. Sun Tzu's definition of deception is very broad indeed: it includes both active and passive measures (i.e., from the

development of elaborate deception plans, the use of simple baits, and diversion to secrecy and concealment). It must be employed at all times (before and during war) and on all levels, whether diplomatic (to drive a wedge between the opponent and his allies), political (to plant the seeds of suspicion and discord in his army) or military. Deception must be based on a thorough understanding of the enemy's innermost thoughts, expectations, and plans. This, in turn, is derived from good intelligence and the penetration of the opponent's side by one's own spies.

For Sun Tzu, deception is the key to success in war. "All warfare", he emphasizes, "is based on deception." (*The Art of War*, pp. 66 and p. 106) His list of guiding principles for deception is based on eternally valid psychological insights:

... When capable, feign incapacity, when active, inactivity.

When near, make it appear that you are far away; when far away, that you are near.

Offer the enemy a bait to lure him; feign disorder and strike him. (*The Art of War*, p. 66; also pp. 92-93)

Pretend inferiority and encourage his arrogance. (*The Art of War*, p. 67)

I make the enemy see my strengths as weaknesses and my weaknesses as strengths.
... (*The Art of War*, p. 97)

Clearly, Sun Tzu is sensitive to the psychological factors that enable the enemy's perceptions to be manipulated; he understands those convinced of their own superiority and strength are often blind to the need to be on guard against deception. Since most successful deception is based on reinforcing the pre-existing beliefs and wishful thinking of the intended victim, the ruse most frequently mentioned by Sun Tzu is the feigning of weakness. Such "good news" is always welcome to one's enemy, who is gradually lulled into a false sense of security. According to Sun Tzu, deception and diversionary operations on the battlefield should be carried out through controlled actions such as feigned disorder, withdrawals, and noise that can be directly observed by the enemy on or near the battlefield. On a higher level, false information can be "fed" to the enemy through double agents

or by what he terms expendable agents, those who are deliberately supplied with fabricated information and are allowed to be caught by the enemy. (*The Art of War*, p. 146)

Sun Tzu is most certainly concerned about the need to avoid being deceived by the enemy, but unfortunately cannot advise the military leader more specifically than this: "When he pretends to flee, do not pursue." or "Do not gobble proffered baits." (*The Art of War*, p. 109) While this is good general advice, how is a military leader to know, in the heat of battle, whether the enemy is really retreating or is only pretending to withdraw? When in doubt, is he to assume that it is a ruse? Such an interpretation of Sun Tzu's statements is dangerous, for it reinforces the proclivity of many field commanders to avoid risks and make worst case assumptions regarding the enemy's intentions. After all, Sun Tzu and Clausewitz admire the commander who is ready to take high risks. Therefore, such precepts are of dubious practical value, for even those who are successful practitioners of the art of deception cannot avoid being ensnared by their enemy's carefully devised stratagems.

Similarly, Sun Tzu is very conscious of the danger of deception from double agents and spies in general; and while he emphasizes the need to be very cautious in employing them, he gives no reliable advice on how to distinguish between *bona fide* spies on the one hand and enemy-controlled agents on the other. Indeed, the persistent difficulty involved in exposing deception is what makes it such an effective weapon.

In accordance with Sun Tzu's broader definition of war, a vital part of all deception operations takes place *before* the outbreak of hostilities. This type of political and diplomatic deception, which sabotages the enemy's alliances, internal cohesion, and so on, is today referred to as disinformation and a fifth column.

Sometimes drive a wedge between a sovereign and his ministries; on other occasions separate his allies from him. Make them mutually suspicious so that they drift apart. Then you can plot against them. (*The Art of War*, p. 69)

Do not allow your enemies to get together. . . . Look into the matters of his alliances and cause them to be severed and dissolved. (*The Art of War*, p. 78)

Plans and projects for harming the enemy are not confined to any one method. Sometimes entice his wise virtuous men away so that he has no counselors. Or send treacherous people to wreck his administration. Sometimes use cunning deceptions to alienate his ministers from the sovereign. Or send skilled craftsmen to encourage his people to exhaust their wealth. Or present him with licentious musicians and dancers to change his customs. Or give him beautiful women to bewilder him. (*The Art of War*, pp. 113-114)

The weight Sun Tzu assigns to pre-war deception operations of all types also helps to explain why he believes in the feasibility of attacking the enemy's plans at their inception; disrupting his strategy and alliances; and resolving problems before they arise. (See in particular *The Art of War*, Chapter 3)

Clausewitz, however, does not put much faith in the value of deception operations and diversion.

To prepare a sham action with sufficient thoroughness to impress an enemy requires a considerable expenditure of time and effort, and the costs increase with the scale of the deception. Normally they call for more than can be spared, and consequently so-called strategic feints rarely have the desired effect. It is dangerous, in fact, to use substantial forces over any length of time merely to create an illusion; there is always the risk that nothing will be gained and that the troops deployed will not be available when they are needed. (*On War*, p. 203)

Clausewitz sees deception as the last resort of the weak and the desperate, not as the weapon of choice for all.

... Plans and orders issued for appearances only, fake reports designed to confuse the enemy, etc. — have as a rule so little strategic value that they are used only if a ready-made opportunity presents itself. They should not be considered as a significant independent field of action at the disposal of the commander. (*On War*, pp. 202-203)

... The weaker the forces that are at the disposal of the supreme commander, the more appealing the use of cunning becomes. In a state of weakness and insignificance, when prudence, judgment and ability no longer suffice, cunning may well appear the only choice. The bleaker the situation, with everything concentrating on a single desperate attempt, the more readily cunning is joined to daring. Released from all future considerations, and liberated from thoughts of later retribution, boldness and cunning will be free to augment each other to the

point of concentrating a faint glimmer of hope into a single beam of light which may yet kindle a flame. (*On War*, p. 203)

The difference between Sun Tzu and Clausewitz on the value of deception could not be greater. How can Clausewitz's lack of interest in deception be explained? Once again, much of the answer lies in the level of analysis. Sun Tzu is interested in employing of deception on all levels, including the highest political-strategic and operational levels, where it can be very effective; in contrast, Clausewitz analyzes the utility of deception (or cunning as he calls it) primarily from the vantage point of the lower operational and tactical levels, where its effect is not only less certain but also less effective.

Surprise. Convinced that it was practically impossible to achieve surprise on the strategic and higher operational levels, Clausewitz also discounted the importance of deception (which is the most effective means of achieving surprise).

. . . The wish to achieve surprise is common and, indeed, indispensable, and while it is true that it will never be completely ineffective, it is equally true that by its very nature surprise can rarely be *outstandingly* successful. It would be a mistake, therefore, to regard surprise as a key element of success in war. The principle is highly attractive in theory, but in practice it is often held up by the friction of the whole machine.

Basically, surprise is a tactical device, simply because in tactics time and space are limited in scale. Therefore in strategy surprise becomes more feasible the closer it occurs to the tactical realm, and more difficult, the more it approaches the higher levels of policy.

Preparations for war usually take months. Concentrating troops at their main assembly points generally requires the installation of supply dumps and depots, as well as considerable troop movements, whose purpose can be guessed soon enough.

It is very rare therefore that one state surprises another, either by an attack or by preparations for war. . . . Cases in which such surprises lead to major results are very rare. From this we may conclude how considerable are the inherent difficulties. (*On War*, pp. 198-199)

. . . Surprise has lost its usefulness today. (*On War*, p. 246)

The enemy force can never assemble and advance so secretly that the defender's first news of it would come from his outposts. If that were to happen, one could only feel very sorry for him. (*On War*, p. 454)

We say this in order to exclude certain vague notions about sudden assaults and surprise attacks which are commonly thought of as bountiful sources of victory. They will only be that under exceptional circumstances. (*On War*, p. 545)

If surprise cannot be achieved, deception serves no purpose. Once we move from the higher to the lower levels of warfare, surprise may be easier to achieve but its impact is also reduced.

Unlike Clausewitz, Sun Tzu believes that surprise is an unquestionably practical possibility that should be on the mind of the military leader at all times:

The [the experts] make it impossible for an enemy to know where to prepare in attack. They release the attack like a lightning bolt from above the nine-layered heaven. (*The Art of War*, p. 86)

Appear at places to which he must hasten; move swiftly where he does not expect you. (*The Art of War*, p. 96)

Take him unaware by surprise attacks where he is unprepared. Hit him suddenly with shock troops. (*The Art of War*, p. 133)

Sun Tzu's confidence in the possibility of achieving surprise to some extent contradicts his faith in the value of intelligence (which presumably could prevent the surprise from occurring); the ability to control events on the battlefield; and the value of all pre-war calculations. For if one can achieve surprise, the same holds true for his enemy, which in turn limits the potential contribution to be made by intelligence and calculations in war. It is strange that Clausewitz places little faith in the value of intelligence even though he does not believe in the possibility of achieving surprise and is convinced that in many instances intelligence can provide a timely warning. How can this be explained? Once again, the clue is to be found in the different levels of analysis, which in this instance have been reversed. When Clausewitz speaks of the near-impossibility of achieving surprise, he is primarily referring to the higher operational or

strategic levels, whereas Sun Tzu's high estimation of the utility of surprise is mainly in the context of the tactical level of war.

We have already seen that Clausewitz's most important requirement for the achievement of victory was the maximum concentration of troops at the critical point of contact with the enemy. For Clausewitz, therefore, diversions served only to disperse one's own troops without the certainty that they would succeed in deceiving those of the enemy. Convinced that surprising the enemy or dispersing his forces was inordinately difficult, Clausewitz concluded that it was preferable to achieve victory by concentrating one's own troops.²⁸

It could be argued that Clausewitz's lack of interest in deception and surprise was correct for his own time, when it was more difficult to achieve surprise on the higher levels of warfare, and that Sun Tzu might have exaggerated the importance of deception and surprise in the pretechnological era. The achievement of strategic and operational surprise was made feasible by the Industrial Revolution, which led to previously unimaginable improvements in mobility; tremendous increases in firepower; and the development of real-time communications (this in turn made possible the much greater coordination and control of troops separated by vast distances).²⁹ And once surprise had become an integral part of warfare, the value of deception grew accordingly. As a result, Sun Tzu's insistence that all warfare is based on deception suddenly became much more relevant to our own times than Clausewitz's dismissal of its worth. The achievement of surprise on the higher levels of operation (once war is already in progress), which is essential for the concentration of superior forces at the decisive point, now frequently hinges on the successful use of deception. In the modern industrial age, concentration of superior strength at the decisive point depends less on the number of troops and more on such elements as firepower, mobility, and technological and doctrinal surprises. As evidenced by the Allies' successful use of deception during the Second World War, the Germanic-Clausewitzian tradition of underestimating the potential contribution of intelligence in general, and deception in particular, is obsolete, while Sun Tzu's positive estimation

of their indispensability remains eminently applicable to modern warfare.³⁰

Intelligence. Intelligence is another dimension in which Sun Tzu's advice is more relevant for the contemporary military expert. Convinced that intelligence is one of the most important force multipliers available to political and military leaders, he repeatedly emphasizes the need for meticulous intelligence-related preparations before the outbreak of war and preceding each campaign and battle. Throughout *The Art of War* Sun Tzu makes it clear that an appreciation for and the continuous use of intelligence are essential, for good intelligence work can provide more accurate insights into the enemy's mind, intentions, and capabilities as well as into his estimates of one's own dispositions and plans. As a result, intelligence estimates form the basis for military plans that are best suited for exploitation of the opponent's weaknesses — plans that can be tailored to specific conditions rather than formulated in a vacuum. (Conversely, ignoring the intelligence received or neglecting to gather it in the first place courts disaster.) Once again, Sun Tzu's insistence on obtaining the highest quality intelligence must be seen as an ideal that contributes to the educational value of his work. Even if reliable intelligence could rarely be obtained, and uncertainty never eradicated, Sun Tzu's positive attitude toward intelligence would still be important. In contrast, Clausewitz's negative, if not antagonistic, attitude towards the role of intelligence is probably responsible for many of the costly failures of his more dogmatic followers.³¹

Let us now turn to a more detailed examination of Sun Tzu's observations on the critical role of intelligence. "Secret operations are essential in war; upon them the army relies to make its very move An army without secret agents is exactly like a man without eyes or ears." (*The Art of War*, p. 149) It is for this reason that all important intelligence matters must be under the direct control of the leader. "Of all those in the army close to the commander none is more intimate than the secret agent. . . ." (*The Art of War*, p. 147)

The leader must carefully *select and recruit, task and control, critically evaluate, and generously reward* the work of his agents and double agents:

The first essential is to estimate the character of the spy to determine if he is sincere, truthful, and really intelligent. . . . Afterwards, he can be employed. . . . Among agents there are some whose only interest is in acquiring wealth without obtaining the true situation of the enemy, and only meet my requirements with empty words. In such a case I must be deep and subtle. (*The Art of War*, p. 147)

Since the leader is the only one, for reasons of security, who is fully aware of his overall plans, he must therefore task the agents himself. "Secret agents receive their instructions within the tent of the general, and are intimate and close to him." (*The Art of War*, p. 147) Then the leader must carefully evaluate the information received from the agents in order to avoid being deceived; this requires a great deal of experience and intuition on the part of the leader since, as Sun Tzu remarks, how "Delicate indeed! Truly [sic] delicate!" is the problem of separating truth from falsehood. "There is no place where espionage is not used." (*The Art of War*, p. 147) Finally, given the importance assigned to espionage and intelligence, the leader must reward his agents generously.

. . . Of all rewards none [is] more liberal than those given to secret agents. (*The Art of War*, p. 147)

The Sovereign must have full knowledge of the activities of the five sorts of agents. This knowledge must come from the double agents, and therefore it is mandatory that they be treated with the utmost liberality. (*The Art of War*, p. 149)

In fact, one of the most important criteria for evaluating the capability of the commander is his intelligent use of intelligence, without which he cannot excel.³²

He who is not sage and wise, humane and just cannot use secret agents. And he who is not delicate and subtle cannot get the truth out of them. (*The Art of War*, p. 147)

And therefore only the enlightened sovereign and the worthy general who are able to use the most intelligent people as agents are certain to achieve great things. (*The Art of War*, p. 149)

Now the reason the enlightened prince and the wise general conquer the enemy whenever they move and their achievements surpass those of ordinary men is foreknowledge. (*The Art of War*, p. 144)

It is clear that Sun Tzu's generals rely heavily on the work of spies and agents, a quality which appears to complement his often-expressed recommendation that every effort should

be made to secure victory with the least possible expense and bloodshed. Perhaps this also explains his insistence on laying the groundwork for victory even *before* the outbreak of war:

Thus, what is of supreme importance in war is to attack the enemy's strategy. . . . Attack plans at their inception. The supreme excellence in war is to attack the enemy's plans. (*The Art of War*, pp. 77-78)

Only through knowledge of the enemy can one nip his plans in the bud. This can only be accomplished through good intelligence, but unfortunately, there are no easy solutions here either: agents and spies are notoriously unreliable and may do more harm than good. Indeed, as Sun Tzu's detailed discussion of employing agents and double agents suggests, what one can do *to* the enemy can of course also be done *by* the enemy. Sun Tzu's confidence in espionage as an effective means of obtaining useful information about the enemy is therefore considerably exaggerated if not misplaced, and must be viewed as part of his quest for finding less costly, indirect methods of winning in war.

Although Sun Tzu dwells at length on the role of spies, he does not ignore other methods of gathering intelligence that largely pertain to preparations on the lower tactical level. These include basic intelligence (e.g., maps, information on climate, etc.); detailed reconnaissance before battle; and topographical data.

Generally, the commander must thoroughly acquaint himself beforehand with the maps so that he knows dangerous places. . . . All these facts the general must store in his mind: only then will he not lose the advantage of the ground. (*The Art of War*, pp. 104-105)

Therefore, to estimate the enemy situation and to calculate distances and the degree of difficulty of the terrain so as to control victory are virtues of the superior general. (*The Art of War*, p. 128) (See also p. 64.)

Agitate him and ascertain the pattern of his movement.

Determine his dispositions and so ascertain the field of battle.

Probe him and learn where his strength is abundant and where deficient. (*The Art of War*, p. 100)

What are today called "signals and indicators" represent another source of direct and indirect information on the enemy's situation and intentions. Sun Tzu enumerates the following such indicators:

Dust spurting upward in high straight columns indicates the approach of chariots. When it hangs low and is widespread infantry is approaching.

When the enemy's envoys speak in humble terms, but he continues his preparations, he will advance. (A bit of advice that Stalin could have used in 1941 on the eve of Barbarosa!)

When the envoys speak in apologetic terms, he wishes a respite. (Which, as Clausewitz observes, is of course the best time to continue fighting!)³³

When half his force advances and half withdraws he is attempting to decoy you.

When the troops lean on their weapons they are famished.

When drawers of water drink before carrying it to camp, his troops are suffering from thirst.

When the enemy sees an advantage but does not advance to seize it he is fatigued.

When birds gather above the camp sites, they are empty.

When at night the enemy camp is clamorous, he is fearful.

When his flags and banners move constantly he is in disarray. (*The Art of War*, pp. 119-121)

Although more reliable than spies, such indicators are susceptible to deliberate manipulation by the enemy and should not be relied upon without the benefit of thorough corroboration. In the process of gathering the best possible intelligence on his enemy, a successful leader must also prevent his opponent from doing the same. This can be accomplished through two main methods: security and unpredictability. By not discussing his plans and intentions with anyone, a commander denies the enemy access to his secrets:

He should be capable of keeping his officers and men in ignorance of his plans. (*The Art of War*, p. 136)

Set the troops to their tasks without imparting your designs. (*The Art of War*, p. 139)

Once the troops are on the march, the effective commander can still conceal his intentions and plans through deception; he can avoid giving a clear indication of his direction of movement; improvise at the last moment (surely a contradiction to the emphasis Sun Tzu places on meticulous planning *before* the battle even begins. . . .); make himself unpredictable (through misdirection, formlessness, dissimulation, inscrutability, shapelessness); never repeat the same plan twice; and continuously change his military doctrine.

The ultimate in disposing one's troops is to be without ascertainable shape. Then the most penetrating spies cannot pry in nor can the wise lay plans against you.

It is according to the shapes that I lay the plans for victory, but the multitude does not comprehend this. Although everyone can see the outward aspects, none understands the way in which I have created victory.

Therefore, when I have won a victory I do not repeat my tactics but respond to circumstances in an infinite variety of ways. (*The Art of War*, p. 100)

He changes his methods and alters his plans so that people have no knowledge of what he is doing.

He alters his camp-sites and marches by devious routes, and thus makes it impossible for others to anticipate his purpose. (*The Art of War*, p. 137)

Clausewitz does not concern himself with the question of security because he believes that surprise is virtually impossible and that in most cases attempting to conceal troop movements would be futile. Furthermore, the military genius should be capable of intuitively discerning his opponent's objective despite the temporary dispersion of enemy troops. Ultimately, by keeping his troops concentrated and avoiding the temptation to disperse them, the military genius renders the enemy's efforts at security, concealment, and maneuver a waste of energy, if not a form of self-deception.

Unlike Clausewitz, Sun Tzu makes the optimistic, almost positivistic, assumption that good intelligence makes it possible to accurately predict the outcome of a war or battle. There is much less room in his theory on war for uncertainty, friction, and chance. His logic is simple and linear; good

intelligence forms the basis for better planning, and the possibility of controlling events on the battlefield allows the implementation of those plans and the achievement of victory.

Sun Tzu's fundamental belief that the outcome of battles and war can be predicted through careful calculation is made clear by numerous statements.

I will be able to forecast which side will be victorious and which defeated. (*The Art of War*, p. 66)

Now if the estimates made in the temple before hostilities indicate victory it is because calculations show one's strength to be superior to that of his enemy; if they indicate defeat, it is because calculations show that one is inferior. With many calculations, one can win; with few one cannot. How much less the chance of victory has one who makes none at all! By this means I examine the situation and the outcome will be clearly apparent. (*The Art of War*, p. 71)

It is sufficient to estimate the enemy situation correctly and to concentrate your strength to capture him. There is no more to it than this. He who lacks foresight and underestimates his enemy will surely be captured by him. (*The Art of War*, p. 122)

The obvious question is: how is one to know, in a world of secrecy, deception, and subjective perceptions, that his estimates of the enemy's strength are *correct*? Clausewitz comments:

The difficulty of accurate recognition constitutes one of the most serious sources of friction in war, by making things appear entirely different from what one had expected. (*On War*, p. 117)

According to Sun Tzu, the secret of victory lies in thorough prewar calculations that include intelligence and information detailing the strengths and weaknesses of one's own troops as much as those of the enemy. In other words, he is clearly aware of the importance of what is called, in today's intelligence jargon, *net assessment*, (i.e., the comparative evaluation of the strength of *both* sides). Intelligence is thus defined here in the broadest terms, for even flawless intelligence on the enemy is of little use if one overestimates one's own strength and performance. Ironically, *obtaining accurate information on one's own forces is the most challenging part of preparing a net assessment intelligence estimate.*³⁴

Sun Tzu provides us with a classical definition of net assessment.

Therefore I say: know your enemy and know yourself; in a hundred battles you will never be in peril.

When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal.

If ignorant of both your enemy and of yourself, you are certain in every battle to be in peril. (*The Art of War*, p. 84)

It must, however, be recognized that the sound advice to "know one's enemy" remains an ideal that can at best only be approximated. Given human nature and problems of perception, ethnocentrism, and wishful thinking, to name but a few, it is impossible to ever fully understand one's enemy (although one always needs to make the effort). Individuals and nations often don't even know themselves, their own weaknesses and limitations, let alone those of their opponents.

Those capable of arriving at an accurate net assessment of the situation as Sun Tzu describes, will never lose.

Therefore when those experienced in war move they make no mistakes; when they act, their resources are limitless. (*The Art of War*, p. 129)

Command and Control. Once the best possible intelligence has been obtained and the comparative process of net assessment has been completed, the proper plans for war can be prepared and executed. According to Sun Tzu, the outcome can then be predicted with accuracy. This belief is in turn based on the assumption that a successful military commander will be able to implement his plans as they were originally devised, a belief that is diametrically opposed to that of Clausewitz. "And to control many," suggests Sun Tzu "is the same as to control few. This is a matter of formations and signals." (*The Art of War*, p. 90) "Generally, management of many is the same as management of few. It is a matter of organization." (*The Art of War*, p. 90)

Unlike Clausewitz and Tolstoy, who saw the battlefield as an uncontrolled and uncontrollable environment, Sun Tzu argues that:

In the tumult and uproar, the battle *seems* chaotic, but there is no disorder; the troops appear to be milling about in circles but cannot be defeated.

In battle all appears to be turmoil and confusion. But the flags and banners have prescribed arrangements; the sounds of cymbals, fixed rules.

Apparent confusion is a product of good order; apparent cowardice, of courage; apparent weakness, of strength. (*The Art of War*, p. 92)

Sun Tzu's insistence that events on the battlefield can at least to a great degree be controlled helps to explain his observation that "... a victorious army wins its victories before seeking battle." (*The Art of War*, p. 87) If one side were indeed able to procure reliable intelligence on the enemy's capabilities and intentions and then take advantage of this information through careful planning, and if these plans were implemented as originally intended, then it is possible to understand the conclusion that victory can be achieved before the battle has begun.

Clausewitz, who would have found such statements to be untenable and unrealistic, remarks that:

No other human activity is so continuously or universally bound up with chance. And through the element of chance, guesswork and luck come to play a great part in war. (*On War*, p. 85)

... The very nature of interactions is bound to make it unpredictable. (*On War*, p. 139)

Commanders are rarely in control over events on the battlefield. The successful general is not one who carefully implements his original plans (as Sun Tzu idealizes), but is, instead, the one who can intuitively (not necessarily rationally) "read" the chaos on the battlefield well enough to take advantage of fleeting opportunities.

Clausewitz's discussion on the infinite complexity and unpredictability of war on all levels is perhaps his most original and important contribution to the study of war. War is permeated by uncertainty, friction and chance; it involves constant change on the part of the adversaries, who act and react independently without ever having complete information on one another.³⁵ Since war involves an endless number of

variables whose relationship is unclear and continuously shifting, its sheer complexity makes any purely rational calculation or planning impossible by definition. The chaos of war poses problems "worthy of the gifts of a Newton or an Euler." (*On War*, p. 112.)

The deduction of effect from cause is often blocked by some insuperable extrinsic obstacle: the true causes may be quite unknown. Nowhere in life is this so common as in war, where the facts are seldom fully known and the underlying motives even less so. (*On War*, p. 156.)

Since it is impossible to weigh *all* of the relevant factors for even the simplest decisions in war, it is the military leader's intuition (his *coup d'oeil*) that must ultimately be relied upon for effective decisionmaking.

Because "calculations have to be made with variable quantities" (*On War*, p. 136), Clausewitz not surprisingly concludes that intelligence, even if obtained, cannot be trusted particularly given the nature of change on the battlefield. For Clausewitz, then, most intelligence is just another source of noise or friction rather than a source of support for the plans and actions of the military commander.

If we consider the actual basis of this information [i.e., intelligence], how unreliable and transient it is, we soon realize that war is a flimsy structure that can easily collapse and bury us in its ruins. (*On War*, p. 117.)

Many intelligence reports in war are contradictory; even more are false, and most are uncertain. This is true of all intelligence but even more so in the heat of battle, where such reports tend to contradict and cancel each other out. In short, most intelligence is false, and the effect of fear is to multiply lies and inaccuracies. (*On War*, p. 117.)

The only type of intelligence the commander can trust is his own. "The commander must trust his judgment and stand like a rock on which the waves break in vain." (*On War*, p. 117.)

All information is uncertain —

...the general unreliability of all information presents a special problem in war: all action takes place, so to speak, in the twilight, which like fog or moonlight, often tends to make things seem grotesque and larger than they really are. Whatever is hidden from full view in this feeble light has to be guessed at by *talent*, or simply left to chance. So once again for the lack of objective knowledge one has to trust *talent* or luck. (*On War*, p. 140, my emphasis.)

...we must evaluate the political sympathies of other states and the effect the war may have on them. To assess these things in all their ramifications and diversity is plainly a colossal task. Rapid and correct appraisal of them clearly calls for the intuition of a genius, to master all this complex mass by sheer methodical examination is obviously impossible. Bonaparte was quite right when he said that Newton himself would quail before the algebraic problems it could pose. (*On War*, p. 586.)

Sun Tzu regards intelligence as an indispensable means of reducing uncertainty in war, while Clausewitz feels that it is nothing more than yet another source of uncertainty. Whereas Sun Tzu's commander is advised to look to *outside* information to solve his problems, Clausewitz's commander turns *inward* to rely on his intuition and subjective assessment of the situation. While Sun Tzu's solution is rational, Clausewitz's is heroic and romantic. Yet substituting the military genius's intuition for the systematic collection of intelligence is often a recipe for disaster: in this situation, there is nothing to stand in the way of the temptation to indulge in wishful thinking and ignore unpleasant information.³⁶

At this point it is useful to return to the problem of the level of analysis. Unlike Sun Tzu, whose interest in intelligence spans all levels—political, strategic, operational and tactical—Clausewitz is almost exclusively concerned with the lower operational and tactical levels. In the pre-industrial age, without the benefit of real-time communications (i.e., telegraph or radio), information concerning the battlefield became obsolete before it could be put to use. This in large part explains why Clausewitz concluded that intelligence was of little value; yet that which is true of intelligence on the lower operational and tactical levels is not necessarily true on the higher political and strategic levels, which Clausewitz does not discuss. Mistakenly believing that Clausewitz's low opinion of intelligence referred

not only to its applicability on the battlefield, but also on the higher levels of warfare, many military readers of *On War* agreed with his negative estimation of intelligence in general. This tendency was frequently reinforced by the fact that their earlier experience with surprise (while serving on the lower operational and tactical levels) had caused them to arrive at similarly negative conclusions regarding its use. By the time such military leaders had advanced to higher positions—where intelligence could make a much greater contribution—they were already convinced that it had little potential.

Nevertheless, even today friction and a myriad of unpredictable events can rob real-time intelligence of its value on the lower levels of warfare. The availability of almost perfect intelligence on the operational and tactical level is still no guarantee of success. (As illustrated, for example, by the British experience in the Battle of Jutland or in the Battle for Crete.)³⁷ Thus, it is not surprising that Clausewitz introduces the concept of friction immediately following his discussion of intelligence.

Everything in war is very simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war. . . . Countless minor incidents — the kind you can never really foresee — combine to lower the general level of performance, so that one always falls far short of the intended goal.

Friction is the only concept that more or less corresponds to the factors that distinguish real war from war on paper.

This tremendous friction which cannot, as in mechanics, be reduced to a few points is everywhere in contact with chance, and brings about effects that cannot be measured just because they are largely due to chance.

Action in war is like moving in a resistant element. Just as the simplest and most natural of movements, walking, cannot easily be performed in water, so in war it is difficult for normal efforts to achieve even moderate results.

. . . Every war is rich in unique episodes. Each is an uncharted sea, full of reefs. Friction. . . is the force that makes the apparently easy so difficult. (*On War*, pp. 119-121.)

Given the predominance of uncertainty and friction in war in general and even more so on the battlefield, it is easy to see why Clausewitz put far less faith in the benefits to be derived from making and implementing detailed plans in wartime.

In war, where imperfect intelligence, the threat of a catastrophe, and the number of accidents are incomparably greater than any other human endeavor, the amount of missed opportunities, so to speak, is therefore bound to be greater. (*On War*, p. 502.)

Since all information and assumptions are open to doubt, and with chance working everywhere, the commander continually finds that things are not as he expected. This is bound to influence his plans, or at least the assumptions underlying them. If this influence is sufficiently powerful to cause a change in his plans, he must usually work out new ones; but for these the necessary information may not be immediately available. During an operation decisions have usually to be made at once: there may be no time to review the situation or even think it through. Usually, of course, new information and reevaluation are not enough to make us give up our intentions: they only call them into question. We now know more, but this makes us more, not less uncertain. The latest reports do not arrive all at once: they merely trickle in. They continually impinge on our decisions, and our mind must be permanently armed, so to speak, to deal with them. (*On War*, p. 102.)

Clausewitz therefore proposes three types of solutions to compensate for the absence of reliable intelligence. First is the *intuition of the military genius* (already mentioned above); second, *material strength*; and third, *the art of war itself*.³⁸ Material strength is of course the most important factor in war: to put it in an extreme way, even perfect intelligence is worthless without sufficient military force. On the other hand, a powerful and numerically superior military force can win without any intelligence at all, albeit at a probably higher cost. Hence, Clausewitz insists that the first rule of war is to mobilize and field the largest possible force. Astute practitioners of the art of war can further compensate for the lack of adequate intelligence by concentrating superior forces at the decisive point (despite relative inferiority), and by maintaining ample reserves. While the commander may not be able to solve his own intelligence problems, his pursuit of an aggressive strategy can at least increase the enemy's uncertainty and

hinder his ability to acquire reliable intelligence. "With uncertainty (i.e., lack of reliable intelligence) in one scale, courage and self-confidence must be thrown into the other to correct the balance." (*On War*, p. 86.) The drawback to this approach is that it is only one step removed from completely neglecting the potential of intelligence.³⁹ Yet, if the principles of the art of war are to be implemented most effectively, even the intuitive judgment of the military genius must be based upon *a minimum of reliable information and intelligence*.⁴⁰

The most profound differences between Sun Tzu and Clausewitz emerge from comparison of their observations on command and control, intelligence, surprise, and deception. For Sun Tzu, timely and reliable intelligence is essential for the rational planning of military operations and the decision to go to war. His view should not, however, be taken literally. Aware of the difficulties of acquiring reliable intelligence, Sun Tzu does discuss the complexity and uncertain nature of war, although he clearly does not assign friction, uncertainty, and chance the central role that these elements have in Clausewitz's *On War*.

Paradoxically, his recommendation that deception be used whenever possible in effect contradicts his basic assumption that reliable intelligence can be gathered and used effectively. After all, if one's opponent is equally practiced at deception, much of the intelligence received cannot be trusted. Sun Tzu's emphasis on the importance of relying on intelligence must therefore be understood as part of a didactic process, as an ideal and not simply as a description of reality; and the quest for the best possible intelligence should be considered as part of the *normative* desire to make the most rational decisions possible. It reminds political and military leaders that the greatest possible effort should be made to base their strategy and plans on careful preparations *before* engaging the enemy.

The fact that Sun Tzu's discussion of war is, on the whole, wider in scope than that of Clausewitz helps to explain his greater confidence in the utility of intelligence. Since intelligence is of greater value on the political and strategic strata, Sun Tzu projects this positive experience on the lower levels of warfare, where its contribution is more limited and its

use more problematic. The most important point regarding Sun Tzu's positive attitude toward intelligence is, however, that it exemplifies his fundamentally rational and calculated approach to war. (See the following table for further comparisons between Sun Tsu and Clausewitz.)

THE ROLE OF THE MILITARY LEADER

For Clausewitz, the impossibility of procuring reliable intelligence in war is axiomatic. It is the premise upon which much of his theoretical framework is built and from which some of his principal analytical concepts are derived. The absence of reliable information constitutes one of his principal explanations (in conjunction with the role of politics and the inherent differences between the offense and defense) for the discrepancy between the ideal type of absolute war and war in practice. In other words, it is the absence of reliable information on both sides that leads from his theoretical concept of uninterrupted military action to the reality of paralysis and inaction. This makes it impossible *by definition* for political and military leaders to take "purely rational" decisions in war. (*On War*, pp. 84-85) Hence, Clausewitz developed his theoretical concept of the military genius whose intuition must compensate for the absence of accurate intelligence; yet this conceptually pleasing but also problematic solution to intelligence problems (as well as the complexity of war) raises as many questions as it answers. The most potentially damaging consequence of Clausewitz's reliance on the intuition/role of the military genius is that if carried to an extreme, it weakens the incentive to try to collect the best possible intelligence and replaces the systematic search for information with intuition alone.

Sun Tzu also examines the ideal character of a commander and his critical role at some length, and acknowledges that such a leader must draw upon his experience and intuition in exercising his *creative, independent judgment*. Although the military leader's role in *The Art of War* does not acquire the degree of central theoretical and practical significance it is afforded in *On War*, Clausewitz's "*military genius*" and Sun Tzu's "*master of war*" (*The Art of War*, p.87, sec. 11) or "*skillful*

**SUN TZU AND CLAUSEWITZ COMPARED: COMMAND AND CONTROL,
AND THE ROLES OF INTELLIGENCE, SURPRISE, DECEPTION,
AND FORECASTING IN WAR**

	SUN TZU	CLAUSEWITZ
LEVEL OF ANALYSIS.	ALL LEVELS - POLITICAL, STRATEGIC, OPERATIONAL AND TACTICAL.	PRIMARILY LOWER OPERATIONAL AND TACTICAL LEVELS, (THE BATTLEFIELD).
ATTITUDE TOWARDS INTELLIGENCE AND ITS APPRECIATION.	OPTIMISTIC, POSITIVE, RELIABLE INTELLIGENCE CAN BE OBTAINED AND IS A MAJOR KEY FOR SUCCESSSES IN WAR.	PESSIMISTIC; NEGATIVE INTELLIGENCE IS A DISTURBANCE, (A FORM OF FRICTION). IT IS DIFFICULT IF NOT IMPOSSIBLE TO OBTAIN RELIABLE INT.; ITS CONTRIBUTION TO SUCCESS IN WAR IS LIMITED AND OFTEN COUNTER-PRODUCTIVE.
THE POSSIBILITY OF MAKING RATIONAL DECISIONS AND OF FORECASTING.	RATIONAL CALCULATED PLANS (I.E. DECISIONS) CAN BE MADE ON THE BASIS OF RELIABLE INTELLIGENCE. FORECASTING IS POSSIBLE. CAREFUL PLANNING IS AN IMPORTANT KEY TO VICTORY.	WAR IS DOMINATED BY FRICTION, UNCERTAINTY, AND CHANCE; THEREFORE, ALTHOUGH ALL EFFORTS SHOULD BE MADE TO MAKE RATIONAL DECISIONS AND PREPARE CONTINGENCY PLANS - THEY CANNOT BE RELIED UPON. FORECASTING IN WAR IS NEXT TO IMPOSSIBLE.
COMMAND AND CONTROL IN BATTLE.	DIFFICULT BUT POSSIBLE.	VERY DIFFICULT IF NOT IMPOSSIBLE.
DECEPTION.	THE BASIS FOR ALL ACTION IN WAR. THE WEAPON OF CHOICE; KEY TO SUCCESS.	UNIMPORTANT, COUNTERPRODUCTIVE WEAPON OF LAST RESORT.
KEYS FOR SUCCESS IN WAR/BATTLE IN LIGHT OF THE ROLE OF INTELLIGENCE.	MAKE THE UTMOST EFFORT TO OBTAIN RELIABLE INTELLIGENCE; CAREFUL PLANNING; EXTENSIVE USE OF DECEPTION. CONVERSELY, SECURITY AND MEASURES OF DISSIMULATION WILL PREVENT ENEMY FROM ACQUIRING RELIABLE INTELLIGENCE.	FIELDING THE LARGEST POSSIBLE FORCE, CONCENTRATION OF FORCE, THE INTUITION OF THE MILITARY GENIUS, MAINTAINING THE INITIATIVE AND AN OFFENSIVE STRATEGY - THUS INCREASING UNCERTAINTY AS WELL AS AN INTELLIGENCE PROBLEM FOR THE OPPONENT.
PROBLEMS.	EXCESSIVE RELIANCE ON THE AVAILABILITY OF INTELLIGENCE; DECEPTION CAN BECOME A PANACEA; ADHERENCE TO ORIGINAL PLANS AND THE ABILITY TO IMPLEMENT THEM. TOO OPTIMISTIC; ASSUMES GREATER CONTROL OF EVENTS THAN IS POSSIBLE.	IGNORES THE POTENTIAL CONTRIBUTION OF INTELLIGENCE AND DECEPTION; EXCESSIVE RELIANCE ON BRUTE FORCE, IMPROVISATION, AND THE INTUITION OF THE MILITARY GENIUS. TOO PESSIMISTIC, ASSUMES TOO LITTLE CONTROL OF EVENTS.

commander" (*The Art of War*, p. 87, sec. 14) actually have much in common when their superficial differences are stripped away. The issue over which they differ the most is, however, that unlike Clausewitz, Sun Tzu generally emphasizes caution and measured calculation *more* than reliance on the commander's intuition.

According to Sun Tzu, the political leader's choice of a military commander might be the most critical decision he makes.

Now the general is the protector of the state. If this protection is all embracing, the state will surely be strong; if defective, the state will certainly be weak A sovereign who obtains the right person prospers. One who fails to do so will be ruined." (*The Art of War*, p. 81)

. . . The wrong person cannot be appointed to command. (*The Art of War*, p. 82.)

The choice of a military commander is particularly important in Sun Tzu's estimation because of the greater professional independence and the professionally independent position and discretionary power he would grant the military leader on the battlefield.

He whose generals are able and not interfered with by the sovereign will be victorious. . . To make opportunities is the province of the sovereign; to decide on battle that of the general. (*The Art of War*, p. 83. See also pp. 83-84, 112.)

. . . A sovereign of high character and intelligence must be able to know the right man, should place the responsibility on him, and expect results.

The general must exercise his independent, professional judgment within the general framework of the orders he has received from the political leader — but he alone can create the conditions necessary for their implementation.

Having paid heed to the advantages of my plan, the general must create the situations which will contribute to their accomplishments. (*The Art of War*, p. 66.)

The orders of the sovereign although they should be followed, are not to be followed if the general knows they contain the danger of harmful superintendence of affairs from the capitol. (*The Art of War*, p. 113)

When it is expedient in operations the general need not be restricted by the commands of the sovereign. (*The Art of War*, p. 112)

While Clausewitz concentrated most of his discussion on the ideal character of the military genius in one of the longest chapters of *On War* (Book I, chapter 3), Sun Tzu's treatment of the same subject is spread throughout *The Art of War*. Nevertheless, a close comparison of the two texts reveals that many of their observations overlap.

THE TEMPERAMENT OF THE MILITARY LEADER

Sun Tzu does not differ much from Clausewitz in his advice on the temperament of the military leader, although his statements are more often couched in "negative" terms, that is, in terms of what he considers to be inappropriate characteristics or the most effective ways to capitalize on the temperamental flaws of the opponent's general:

Anger his general and confuse him.

... If the general is choleric his authority can easily be upset. His character is not firm.

If the enemy's general is obstinate and prone to anger insult and enrage him, so that he will be irritated and confused, and without a plan will recklessly advance against you. (*The Art of War*, p. 67)

If a general is unable to control his impatience and orders his troops to swarm up the wall like ants, one third of them will be killed without taking the city. (*The Art of War*, pp. 78-79)

It is the business of a general to be serene and inscrutable, impartial and self-controlled.

... If serene he is not vexed; if inscrutable, unfathomable; if upright, not improper; if self-controlled, not confused. (*The Art of War*, p. 136)⁴¹

There are five qualities which are dangerous in the character of a general.

If reckless he can be killed;

... A general who is stupid and courageous is a calamity. ... When people discuss a general they always pay attention to his courage. As far as a general is concerned courage is but one quality. ...

If cowardly, captured.

One who esteems life above all will be overcome with hesitancy. Hesitancy in a general is a great calamity.

If quick tempered you can make a fool of him.

An impulsive man can be provoked to rage and brought to his death. One easily angered is irascible, obstinate and hasty. He does not consider the difficulties.

...What is essential in the temperament of a general is steadiness.

If he has too delicate a sense of honor you can calumniate him.

One anxious to defend his reputation pays no regard to anything else.

If he is of a compassionate nature you can harass him.

He who is humanitarian and compassionate and fears only casualties cannot give up temporary advantage for long-term gain and is unable to let go of this in order to seize that.

Now these five traits of character are serious faults in a general and in military operations are calamitous.

The ruin of the army and the death of the general are inevitable results of these shortcomings. They must be deeply pondered. (*The Art of War*, pp. 114-115)

Sun Tzu most highly values those qualities that enable a general to make rational, calculated decisions under even the worst conditions. Steadiness, resolution, stability, patience, and calmness are the most important. Generals who react without reflection, who are courageous but lose control too easily can be manipulated by the enemy. When untempered by wisdom and rationality, the (necessary but not sufficient!) quality of courage is left free to join unruly impulse in a headlong dash down the path of self-destruction. The fact that courage without reflection is not revered (to say the least) is illustrated by the story of a courageous officer who attacked the enemy on his own initiative "unable to control himself" and was beheaded despite his success. (*The Art of War*, pp. 106-107)

Clausewitz does not necessarily see intelligence or wisdom as the most desirable qualities for a military commander. "Intelligence alone is not courage: we often see that the most intelligent people are irresolute." (*On War*, p. 102) Sun Tzu's comment (quoted earlier) that compassion can undermine the performance of the commander also hints at such problems. Both agree, however, that stability, resolution, and

determination are indispensable. Again Clausewitz points to the fact that "determination proceeds from a special type of mind, from a strong rather than a brilliant one." (*On War*, p. 103) No less than Sun Tzu, Clausewitz also admires ". . . the faculty known as self-control — the gift of keeping calm even under the greatest stress — [which] is rooted in temperament." (*On War*, p. 106) Clausewitz also values "*strength of mind*" or *character* which he sees as

the ability to keep one's head at times of exceptional stress and violent emotion. . . . Strength of character does not consist solely in having powerful feelings, but in maintaining one's balance in spite of them. Even with the violence of emotion, judgment and principle must still function like a ship's compass. . . . (*On War*, p. 107)

Obviously a man whose opinions are constantly changing, even though this is in response to his own reflections, would not be called a *man of character*. The term is applied only to those whose views are stable and constant. (*On War*, p. 107)

The commander [in battle] must trust his judgment and stand like a rock on which the waves break in vain. It is not an easy thing to do. (*On War*, p. 117)

Like Sun Tzu, Clausewitz warns of the danger that

strength of character can degenerate into obstinacy. The line between the two is often hard to draw in a specific case. . . . Obstinacy is not an intellectual defect; it comes from reluctance to admit that one is wrong Obstinacy is a fault of temperament. (*On War*, p. 108)

THE ENVIRONMENT OF BATTLE AND THE INTUITION OF THE MILITARY LEADER

The ideal qualities of a commander in battle appear near the beginning of *The Art of War*.

By command I mean the general's qualities of wisdom, sincerity, humanity, courage and strictness.

If wise, a commander is *able to recognize changing circumstances* and to *act expediently*. If sincere, his men will have no doubt of the certainty of rewards and punishments. If humane, he loves mankind, sympathizes with others, and appreciates their industry and toil. If courageous, *he gains victory by seizing opportunity without*

hesitation. If strict, his troops are disciplined because they are in awe of him and are afraid of punishment.

. . . If a general is not courageous he will be unable to conquer doubts or to create great plans. (*The Art of War*, p. 65, my emphasis)

Another description of the ideal qualities of the skilled leader appears in Chapter Four:

Now, the supreme requirements of generalship are a *clear perception*, the harmony of his host, *profound strategy coupled with far reaching plans*, an understanding of the seasons and *an ability to examine the human factors*. For a general unable to estimate his capabilities or comprehend the *arts of expediency and flexibility when faced with the opportunity to engage the enemy* will advance in a stumbling and hesitant manner, looking anxiously first to his right and then to his left, and be unable to produce a plan. Credulous, he will place confidence in unreliable reports, believing at one moment this and at another that. (*The Art of War*, pp. 87-88, my emphasis)

(The last sentence matches almost word for word Clausewitz's discussion concerning the dilemmas of the commander faced with conflicting intelligence reports, as described in his chapter, "Intelligence in War." (*On War*, Book I, chapter 6, p. 117)

Most of these requirements for military leadership such as clear perception, the ability to understand human factors, and the ability to exploit fleeting opportunities depend largely on the experience and intuition of the master of war. Indeed, Sun Tzu's insistence on the need to make *fast decisions* in order to exploit unique opportunities implies that in such a case the commander must rely on his "gut feelings" because he hasn't the time to ponder an infinite number of ever-changing variables.

According to *On War*, the commander or military genius cannot grapple with the chaos on the battlefield unless he relies on his *coup d'oeil*, which Clausewitz defines as:

. . . the quick recognition of a truth that the mind would ordinarily miss or would perceive only after long study and reflection. (*On War*, p. 102)⁴²

Action can never be based on anything firmer than instinct, a sensing of the truth. (*On War*, p. 108)

Circumstances vary so enormously in war, and are so indefinable, that a vast array of factors has to be appreciated — mostly in light of probabilities alone. The man responsible for evaluating the whole must bring to his task the quality of intuition that perceives the truth at every point. Otherwise a chaos of opinions and considerations would arise, and fatally entangle judgment. . . Yet, even that superb display of divination, the sovereign eye of genius itself, would still fall short of historical significance without the qualities of character and temperament we have described. (*On War*, p. 112)

While Sun Tzu's discussion of the role and importance of intuition is much more implicit and less detailed, he does, however, point out that not every good soldier can be an equally successful military commander. This implies that education and experience alone are not enough and that special qualities (i.e., intuition and genius) are required. The *master of war* can see victory where the ordinary man cannot.⁴³ (See *The Art of War*, pp. 86-87) The skillful commander can rely only on his own genius, his unique reading of a situation, to create favorable circumstances.

Thus, those skilled at making the enemy move do so by creating a situation to which he must conform. . .

Therefore a skilled commander seeks victory from the situation and does not demand it of his subordinates.

. . . Experts in war depend especially on opportunity and expediency. They do not place the burden of accomplishment on their men alone. (*The Art of War*, p. 93)

Clausewitz argues at one point that:

. . . genius. . . rises above all rules. (*On War*, p. 136)

Talent and genius operate outside the rules and theory conflicts with practice. (*On War*, p. 140)

Or again one may appeal to genius, which is above all rules; which amounts to admitting that rules are not only made for idiots, but are idiotic in themselves. (*On War*, p. 184)

Sun Tzu expresses the same idea in these words:

The general must rely on his ability to control the situation to his advantage as opportunity dictates. He is not bound by established procedures. (*The Art of War*, p. 112)

Sun Tzu also underscores the need for creativity (i.e., genius) in the commander, whom he admonishes "not to repeat his tactics but respond to circumstances in an infinite variety of ways." (*The Art of War*, p. 100) On the whole, though, Sun Tzu appreciates the master of war more for his capacity for rational calculation in the face of danger than for his intuition.

And for this reason, the wise general in his deliberations must consider both favourable and unfavourable factors.

He ponders the dangers inherent in the advantages, and the advantages inherent in the danger.

By taking into account the favourable factors, he makes his plan feasible, by taking into account the unfavourable he may resolve the difficulties.

... If I wish to take advantage of the enemy I must perceive not just the advantage in doing so but must first consider the ways he can harm me if I do.

Advantage and disadvantage are mutually reproductive. *The enlightened deliberate.* (*The Art of War*, p. 113)

For Sun Tzu, the genius of the master of war lies in deliberation, and *not as much* in intuition. His general must also be an expert in a wider variety of subjects than Clausewitz deems necessary including:

... Organization, control, assignment of appropriate ranks to officers, regulation of supply routes, and the provision of principal items to be used by the army.

There is no general who has not heard of these five matters. Those who master them win; those who do not are defeated. Therefore in laying plans compare the following elements, *appraising them with utmost care.* (*The Art of War*, p. 65)

Particularly with regard to the highest levels of command, Sun Tzu's position is less romantic and more relevant to the complexities of modern war, while Clausewitz's concept of the military genius remains highly problematic. How can we identify the military genius? How can such experience or talent be cultivated? Do different types of warfare and their various levels require particular types of talent or genius? How do we

know when the military genius has lost his inspiration? Can the experience and genius so successful in one war be as effective in the next? These and many other such questions cannot be rationally or satisfactorily be answered.

On the other hand, this does not mean that Clausewitz's concept of the military genius is useless. Once more, it is important to consider that Clausewitz's primary level of analysis is the lower level of operations. On this level, where there is no time to deliberate on complex decisions, no military leader can succeed without intuition, without the special ability to ask "*De quoi s'agit-il?*" (What is it all about?). The intuitive grasp of the military genius is not irrational, but rather reflects a different mode of rationality in which his intuitive decisions can be rationally explained *ex post facto*. Yet giving intuition the same importance within the higher strata of politics and strategy or relying on it to an excessive degree may, however, lead to irrational behavior.

The role of the ideal military leader is no less crucial to the people and the state in Sun Tzu's *The Art of War* than in Clausewitz's *On War*. This is clearly indicated by Sun Tzu's reference to the *master of war* as the man who carries the heaviest of all responsibilities, the lives of other people.

The responsibility for a martial host of a million lies on one man. He is the trigger of its spirit. (*The Art of War*, p. 108.)

Although... few such [military leaders] are to be had, when they can be found they are... the precious jewel of the state. (*The Art of War*, p. 128.)

He is the respected one. (*The Art of War*, p. 65.)

While the model for Clausewitz's military genius might be a field commander like Rommel, Guderian or Napoleon, Sun Tzu's master of war, reflecting his wider perspective, might be exemplified by a Montgomery, Eisenhower, or Carnot. In as much as no single military leader can possess all of the qualities necessary for all the different demands of war, there will always be a place for both of these valid, complementary models.

BOLDNESS AND CALCULATION

The basic similarities and differences between *The Art of War* and *On War* are never more evident than in their descriptions of the ideal commander's ability to manipulate risk and exploit opportunities. Both Sun Tzu and Clausewitz agree that in this most critical test of military leadership, the ideal commander must combine courage and daring with reflectiveness, but they differ in emphasis. Clausewitz appears to prefer boldness to calculation, while for Sun Tzu the converse holds true.

If courageous [a commander] gains victory by seizing opportunity without hesitation.

...

If a general is not courageous he will be unable to conquer doubts or create great plans. (*The Art of War*, p. 65)

And for this reason, the wise general in his deliberations must consider both favorable and unfavorable factors.

He ponders the dangers inherent in the advantages, and the advantages inherent in the dangers.

By taking into account the favourable factors, he makes his plan feasible; by taking into account the unfavourable, he may resolve the difficulties.

If I wish to take advantage of the enemy, I must perceive not just the advantage in doing so but must first consider the ways he can harm me if I do. (*The Art of War*, p. 113)

Those unable to understand the dangers inherent in employing troops are equally unable to understand the advantageous ways of doing so. (*The Art of War*, p. 73)

It is clear from the foregoing citations that Sun Tzu strongly favors what we would call calculated risks. In addition, he believes there is a place, even a need, for both cautious and risk-taking commanders:

Now the valiant can fight; the cautious defend, and the wise counsel. Thus there is none whose talent is wasted. (*The Art of War*, p. 93)

If one trusts solely to brave generals who love fighting, this will cause trouble. If one relies solely on those who are cautious, their frightened hearts will find it difficult to control the situation. (*The Art of War*, p. 94)

Although seeking a reasonable balance between caution and courage, Sun Tzu ultimately leans toward the prudent, calculating commander rather than the one who is inclined to take greater risk. In terms of game theory, Sun Tzu believes that the master of war should be more disposed to rely on a mini-max strategy (i.e., minimum risk and maximum gains) than a maxi-max one (i.e., maximum gains and maximum risk).

On the other hand, there is little doubt that Clausewitz on the whole prefers the daring, risk-taking general; he admires a type of boldness in commanders that cannot be based on calculation.

Let us admit that boldness in war even has its own prerogatives. It must be granted a certain power over and above successful calculations involving space, time, and magnitude of forces, for whenever it is superior, it will take advantage of its opponent's weakness. In other words, it is a genuinely creative force. (*On War*, p. 190)

Given the same amount of intelligence, timidity will do a thousand times more damage in war than audacity. (*On War*, p. 191)

For Clausewitz, boldness is the quality that produces the great captains of war:

... a distinguished commander without boldness is unthinkable. No man who has not been bold can play such a role, and therefore we consider this quality the first prerequisite of the great military leader. (*On War*, p. 192)

Indeed, what worries Clausewitz the most about the quality of military leadership is the gradual loss of boldness and courage that seems to take place as commanders rise through the ranks.

How much of this quality [boldness] remains by the time he [the commander] reaches senior rank, after training and experience have affected and modified it, is another question. (*On War*, p. 192)

This is the case because the higher the military rank, the greater the degree to which activity is governed by the mind, by the intellect, by insight. Consequently, boldness, which is a quality

of temperament, will tend to be held in check. This explains why it is so rare in the higher ranks, and why it is so admirable when found there. (*On War*, p. 192)

If forced to choose, Clausewitz, who believes that boldness is the more decisive quality, prefers a noble failure to inaction. As he comments, "even foolhardiness—that is, boldness without any object—is not to be despised: basically it stems from daring, which in this case has erupted with a passion unrestrained by thought." (*On War*, p. 190)

Clausewitz seems to be suggesting that calculation without boldness is sterile and has little chance of succeeding. Therefore boldness, which is the quality more difficult to come by in the higher ranks, is the more critical of the two.

With his greater reliance on intuition and temperament, Clausewitz's military genius can manipulate dangerous and uncertain situations to his advantage.

... We should not habitually prefer the course that involves the least uncertainty [i.e., Sun Tzu's preference]. That would be an enormous mistake, as our theoretical arguments will show. There are times when the utmost daring is the height of wisdom. (*On War*, p. 167)

Once again, however, the reader must be reminded that Clausewitz's main concern is the operational — not the strategic — level of decisionmaking (i.e., he is interested in the immediate fate of a battle rather than with longer-range strategic policies. He would no doubt have recommended much greater caution on the strategic level).

Yet which of these two types of generals will be most effective: the cautious-reflective, mini-max general preferred by Sun Tzu or the risk-taking, maxi-max type favored by Clausewitz? Here Clausewitz arrives at a surprising conclusion.

Whenever boldness encounters timidity, it is likely to be the winner, because timidity itself implies a loss of equilibrium. Boldness will be at a disadvantage only with deliberate caution, which may be considered bold in its own right, and is certainly

just as powerful and effective; but such cases are rare. (*On War*, p. 190)

CONCLUSIONS

Sun Tzu's *The Art of War* and Clausewitz's *On War* are often thought to represent diametrically opposed schools of thought. The extent of the cultural and historical gaps separating these two classics, not to mention the apparently contradictory nature of their most well-known dicta, have encouraged the *a priori* conclusion that Sun Tzu and Clausewitz espouse essentially antagonistic theories. Nevertheless, closer scrutiny reveals that while a number of differences do exist, so do a number of similarities and complementary elements. The main points on which Sun Tzu and Clausewitz disagree concern the value of intelligence, the utility of deception, the feasibility of surprise attack, and the possibility of reliably forecasting and controlling events on the battlefield. On the qualities requisite for the military commander and the nature of his critical rate, though, they agree in principle but differ in emphasis: Sun Tzu prefers to rely chiefly on the master of war's skill in making calculated, rational choices, while Clausewitz emphasizes the artistic intuition of the military genius. Finally, their views are similar if not identical regarding the primacy of politics in war, the need to maintain the professional autonomy of the military in action; the overall importance of numerical superiority; and the desirability of securing victory as quickly and decisively as possible once war has become inevitable.

If one were to consider the roles of intelligence, surprise and deception only as outlined in Clausewitz's *On War*, it would appear that these three factors are unworthy of serious consideration. On the other hand, exclusive reliance on Sun Tzu's counsel in *The Art of War* might lead a commander to overrate the importance of intelligence and surprise on all levels, and to view deception as a panacea. The disagreement between these two treatises on this point should not, however, be exaggerated, for Clausewitz draws his lessons primarily from the lower operational level of warfare where uncertainty, friction, and chance are pervasive even today—whereas Sun Tzu analyzes the same factors on the higher operational and

strategic levels, where they are less pervasive, which naturally leads him to reach more positive conclusions.

At times, differences more apparent than genuine have emerged when Sun Tzu's observations were taken too literally because his statement of an ideal was thought to be an unrealistic prescription for practicing the art of war. For example, although Sun Tzu states that the greatest victory one can achieve is that which (ideally) involves no fighting and minimal cost, this must not necessarily be understood to mean that he believes it can be accomplished frequently. Conversely, although Clausewitz declares that winning without fighting or bloodshed is rare, he nevertheless acknowledges that it is not an impossibility. One can therefore square the circle and suggest that both are correct—that each casts light on a different facet of the same issue. Rather than representing mutually exclusive paradigms for the study of war, they actually complement and reinforce one another.

Consequently, the contradictions between *On War* and *The Art of War* do not spring as much from cultural, historical, or even linguistic contrasts as they do from the different levels of analysis chosen by Clausewitz and Sun Tzu as well as from the tendency of some to take their statements out of context. This is not to say that cultural, linguistic, and philosophical factors are unimportant—simply that they were not the focus of this essay. From the point of view of the strategist who is not directly concerned with Chinese or Prussian (or European) history as such, both works transcend the limitations of time and place. Strategists can, as a result, derive many valuable insights from these classics, which remain the greatest and most original studies ever written on strategy and war. The question is not, and never has been, whose approach to the study of war is more valuable. Both are equally relevant for the modern reader. Ultimately, the most important rationale for such a comparative analysis is simply that both works should be examined and compared in order to cultivate a better understanding of war and its place as a rational political instrument. If anything, future research will find even more common ground than this study has between these two great works on war.

ENDNOTES

1. Quoted from B.H. Liddell Hart's foreword to Sun Tzu, *The Art of War*, trans. Samuel B. Griffith, New York: Oxford University Press, 1971, pp. v-vii. All quotations in the text are from this edition, which is the most readily accessible to the modern American reader. Other translations that might be considered are: Sun Tzu, *The Art of War*, trans. Thomas Cleary, Boston: Shambhala, 1988; Sun Tzu, *The Art of War: Military Manual*, trans. Chang Lin, Hong Kong: Far East Book Press, 1969; and Sun Tzu, *The Art of War*, trans. Lionel Giles, London: Luvzac, 1910, now available as the following reprint, Sun Tzu, *The Art of War*, ed. James Clavell, New York: Delcorte, 1983. Giles' translation of the text (without his comments and notes) was also published in the series of the Military Service Publishing Company in Harrisburg, Pennsylvania in 1944, with an introduction and notes by Brigadier General Thomas R. Phillips.

For the sake of brevity, statements attributed *directly* to Sun Tzu as well as to the traditional commentators included in his text are all referred to as quotations from Sun Tzu; in addition, all references are made to Sun Tzu, rather than to The Sun Tzu, a term which is based on the assumption that *The Art of War* is a compilation of the wisdom of at least several authors over many generations.

2. See John K. Fairbank, "Introduction: Varieties of the Chinese Military Experience," in *Chinese Ways in Warfare*, ed. John K. Fairbank and Frank A. Kierman, Jr., Cambridge, MA: Harvard University Press, 1974, p. 25.

3. This is more similar to Clausewitz's *Principles of War*, trans. and ed. Hans W. Gatzke, Harrisburg, PA: The Military Service Publishing Co., 1943, which Clausewitz wrote for the Prussian Crown Prince Fredrick William while serving as his instructor.

4. All quotations from *On War* are from Carl von Clausewitz, *On War*, ed. and trans. Sir Michael Howard and Peter Paret, Princeton, NJ: Princeton University Press, 1984.

5. See *On War*, Book 8, Chapter 3b, pp. 591ff.

6. Sun Tzu, *The Art of War*, trans. Samuel B. Griffith, Foreword p. vi.

7. In General Gunther Blumentritt, *A Collection of the Military Essays of Gunther Blumentritt*, MS #C-096, Historical Division, European Command, Foreign Military Studies Branch, U.S. Army Europe

(Mimeographed, in German, no date). "Wass Kan uns Clausewitz noch heute bedeuten?," pp. 453-467.

8. See Michael I. Handel, ed., *Clausewitz and Modern Strategy*, London: Cass, 1986, p. 1.

9. From this point of view, the wars conducted by Hitler, Saddam Hussein and most of Napoleon's wars cannot be considered as serving a rational purpose, but rather a personal one.

10. "It's [War's] grammar, indeed, may be its own, but not its logic." *On War*, Book 8, Chapter 6B, p. 605.

11. Samuel P. Huntington, *The Soldier and the State*, New York: Vintage Books, 1964, Part 1, pp. 1-143; see also Samuel P. Huntington, "Civilian Control of the Military: A Theoretical Statement," *Political Behavior: A Reader in Theory and Research*, Glencoe, IL: The Free Press, 1956, pp. 380-385.

12. For a good summary of the purely rational decision-making model, see: Yehezkiel Dror, *Policymaking Reexamined*, San Francisco: Chandler, 1968.

13. See Frank A. Kierman, Jr., "Phases and Modes of Combat in Early China," in Fairbank and Kierman, eds., *Chinese Ways in Warfare*, pp. 27-67.

14. Fairbank, "Introduction: Varieties of the Chinese Military Experience," Fairbank and Kierman, eds., *Chinese Ways in Warfare*, p. 5.

15. *Ibid.*, p. 7.

16. *Ibid.*

17. *Ibid.*

18. *Ibid.*, p. 10.

19. *Ibid.*, p. 11.

20. As Fairbank puts it, "Much of China's military experience is directly comparable with experience elsewhere.... Comparative studies will no doubt show up the sinological fallacy as to China's alleged uniqueness. But still there remains the imprint of a specific geography and history that produced in China specific habits of mind and action." *Ibid.*, p. 25. To Fairbank, that which differentiates the Chinese approach to war includes "(1) a tendency to disesteem heroism and violence, not to glorify it...; (2) A

tradition of land warfare that prefers defense to offense and stresses the exhausting of an attacker or the pacification of a rebel as less costly than their extermination...; [and] (3) A tie-up between militarism and bureaucracy, rather than commercial expansion, least of all overseas." *Ibid.*, pp. 25-26. All of these qualities have also been exhibited by different Western societies throughout history (even if not all simultaneously in a single country).

21. See also Michael I. Handel, *War, Strategy and Intelligence*, London: Cass, 1989, p. 4, for the value of truisms concerning war.

B.H. Liddell Hart describes his strategy of the indirect approach as follows:

Thus a move round the enemy's front against his rear has the aim not only of avoiding resistance on its way but in its issue. In the profoundest sense, it takes the line of least resistance. The equivalent in the psychological sphere is the line of least expectation. They are the two faces of the same coin, and to appreciate this is to widen our understanding of strategy [which is the operational level according to today's definition]. For if we merely take what obviously appears the line of least resistance, its obviousness will appeal to the opponent also; and this line may no longer be that of least resistance.

B.H. Liddell Hart, *Strategy*, New York: New American Library, 1974, p. 327. So much for practical advice and the indirect approach.

22. Compare this statement by Clausewitz with that of B.H. Liddell Hart: "A more profound appreciation of how the psychological permeates and dominates the physical sphere has an indirect value." *Strategy*, p. 328. Liddell Hart then sharply criticizes Clausewitz's (and Foch's) emphasis on the quantitative over the qualitative dimensions of war, his emphasis on the concentration of superior force, and his failure to "penetrate fully [into the deeper truth] that in war every problem, and every principle, is a duality." *Ibid.*, pp. 328-329. This statement reveals Liddell Hart's lack of familiarity with Clausewitz's methodology and ideas. It is ironic that despite his warning "of the fallacy and shallowness of attempting to analyze and theorize about strategy in terms of mathematics," Liddell Hart in the end provides the reader with a series of shallow if not mathematical formulas that add nothing new to what Sun Tzu and Clausewitz had stated long before.

23. A similar idea can be found in Thucydides' *The History of the Peloponnesian War*:

And we are wise, because we are educated with little learning to despise the laws, and with too severe a self-control to disobey

them, and we are brought up not to be too knowing in useless matters—such as the knowledge which can give a specious criticism of an enemy's plans in theory—but are taught to consider that the schemes of our enemies are not dissimilar to our own, and that the freaks of chance are not determinable by calculation. In practice we always base our preparations against an enemy on the assumption that his plans are good; indeed, it is right to rest our hopes not on a belief in his blunders, but on the soundness of our provisions. Nor ought we to believe that there is much difference between man but to think that the superiority lies with him who is reared in the severest school.

Book 1, Chapter 3, Section 84, p. 56. [Thucydides is describing the Spartan character.] See also note 35.

24. Kierman, "Phases and Modes of Combat in Early China," in Fairbank and Kierman, *Chinese Ways in Warfare*, p. 65.

25. The last quotations from Clausewitz stand as a warning regarding the danger of relying too heavily on the indirect approach and the use of stratagem and deception as a panacea in war. At the end of every successful indirect approach and surprise achieved through stratagem and deception, there is still the need for hard fighting.

26. See Michael I. Handel, ed., *Strategic and Operational Deception in the Second World War*, London: Cass, 1987, pp. 1-91.

27. The last quotations from Clausewitz clearly refute Liddell Hart's assertion that Clausewitz overemphasized the importance of numerical superiority and the superior concentration of force. (See note 22.)

28. See Handel, ed., *Strategic and Operational Deception in the Second World War*, p. 1.

29. See Michael I. Handel, ed., *Intelligence and Military Operations*, London: Cass, 1990, pp. 13-15.

30. See Handel, ed., *Strategic and Operational Deception in the Second World War*, pp. 1-92.

31. For a detailed discussion of Clausewitz's attitude to intelligence, see Handel, ed., *Intelligence and Military Operations*, Chapter 1; also Handel, ed., *Clausewitz and Modern Strategy*, pp. 66-69.

32. See Michael I. Handel, ed., *Leaders and Intelligence*, London: Cass, 1989.

33. *On War*, Book 1, Chapter 1, Section 13. For the paradoxical nature of war termination, see also Handel, *War, Strategy and Intelligence*, pp. 43-44.

34. See Handel, ed., *Intelligence and Military Operations*, p. 59.

35. For a detailed discussion of Clausewitz's views on uncertainty as a dominant factor in war, see: Handel, ed., *Intelligence and Military Operations*, pp. 13-21. Interestingly, in *The History of the Peloponnesian War*, Thucydides seems to take a position that is somewhere between those of Sun Tzu and Clausewitz. Like Clausewitz, he states that war is always unpredictable and that all plans are doomed to fall through in practice; but like Sun Tzu, he nevertheless believes that extensive and careful preparations for war can, up to a point, reduce the uncertainties of war.

For if many ill-conceived plans have succeeded through the still greater fatuity of an opponent, many more, apparently well-laid, have on the contrary ended in disgrace; speculation is carried on in safety, but, when it comes to action, fear causes failure. Book 1, Chapter 5, Section 121, p. 78.

The course of war cannot be foreseen, and its attacks are generally dictated by the impulse of the moment [much like Clausewitz]; and where overweening self-confidence has despised preparation, a wise apprehension has often been able to make headway against superior numbers [more like Sun Tzu]. Book 2, Chapter 5, Section 10, p. 106.

Chance, uncertainty, and the lack of control over future events provide a powerful motive to seek peace while one has the advantage:

...And think that war, so far from staying within the limits to which a combatant may wish to confine it, will run the course that its chances prescribe; and thus, not being puffed up by confidence in military success, they are less likely to come to grief, and most ready to make peace. This, Athenians, you have a good opportunity to do now with us [the Spartans] and thus to escape the possible disasters which may follow upon your refusal, and the consequent imputation of having owed to accident even your present advantage.... Book 4, Section 19, p. 263.

...But consider the vast influence of accident in war, before you are engaged in it [more like Clausewitz]. As it continues, it generally becomes an affair of chances, chances from which neither of us is exempt, and whose events we must risk in the dark. Book 1, Chapter 3, Section 78, p. 52.

36. Handel, ed., *Intelligence and Military Operations*, pp. 15-21.

37. *Ibid.*, pp. 40-49.

38. *Ibid.*, pp. 11-21.

39. *Ibid.*, pp. 20-21.

40. *Ibid.*, pp. 15-21.

41. Note the emphasis on self-control in Sun Tzu's text.

Thucydides makes the following similar statement:

For war of all things proceeds least upon definite rules, but draws principally upon itself for contrivances to meet an emergency; and in such cases the party who faces the struggle and keeps his temper best meets with most security, and he who loses his temper about it, with correspondent disaster. Book 1, Chapter 5, Section 122, p. 79.

42. Compare Clausewitz's description of the military genius's *coup d'oeil* with Thucydides' description of Themistocles:

For Themistocles was a man who exhibited the most indubitable signs of *genius*; indeed, in this particular he has a claim on our admiration quite extraordinary and unparalleled. *By his own native capacity, alike unformed and unsupplemented by study he was at once the best in those sudden crises which admit little or no deliberation....* This extraordinary man must be allowed to have surpassed all others in the faculty of intuitively meeting an emergency. [My emphasis] *The Peloponnessian War*, Book 1, Chapter 5, Section 138, p. 91.

43. Thucydides notes the military genius' ability to exploit opportunities on the battlefield by sensing the development of a panic on the enemy's side:

Let us not shrink from the risk, but let us remember that this is just the occasion for one of the baseless panics common in war; and that to be able to guard against these in one's own case, and to detect the moment when an attack will find an enemy at this disadvantage, is what makes a successful general. *The Peloponnesian War*, Book 3, Chapter 9, Section 29, p. 193.

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