NATIONAL DEFENSE UNIVERSITY

NATIONAL WAR COLLEGE

REVOLUTION IN MILITARY AFFAIRS--INFORMATION-BASED WARFARE

A PANEL DISCUSSION WITH CLAUSEWITZ AND SUN TZU

CORE COURSE 2 ESSAY

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The following article is taken from a panel discussion recently conducted for the students of the National War College by Dr Tom Keaney Dr Keaney is Director of a course there entitled "Foundations of Military Thought and Strategy"

Keaney· As we speak, we are experiencing a revolution in military affairs (RMA). This RMA is information-based warfare In the past, information, i e., intelligence, has driven our threat-based preparations for war, and to a lesser extent information, i.e., propaganda and disinformation, has also driven our actual conduct of war In the future, however, information-based warfare will be an even greater combat multiplier on the battlefield. This RMA will drive new developments in materiel, doctrine, training, organization, and personnel

In a lecture delivered on 11 October 1995 at the National War College, Admiral Owens, Vice Chief of Staff, JCS, introduced us to this topic. He postulated that our objective of battlefield dominance is best accomplished if we can "see the battlefield" By "see the battlefield" he implied a capability very similar to that enjoyed until the 18th Century: leaders were able to view not only the actions of their soldiers, but also those of the enemy Based upon what these leaders saw, they then formulated their battlefield tactics. and transmitted their plans to their subordinates for action Therefore, in Admiral Owens' view, success on the battlefield will be defined by how well we can see what is happening on a large battlefield, e g., 200 miles wide and long, and by how well we can transmit appropriate information to weapon system platforms to destroy specific targets. He further postulated that such military theories as espoused by Clausewitz, Mahan, and Sun Tzu may no longer be valid.

Another interpretation of information-based warfare is the use of information—or disinformation—to convince an enemy that he should sue for peace. This assumes that the use of information-based warfare is backed up by an implicit threat of violence-based warfare

To discuss the significance of information-based warfare's RMA and to discuss its relevance to the formulation of future strategy, I have invited two of the all-time leading military theorists to participate in today's panel Please join me in welcoming Clausewitz and Sun Tzu.

Gentlemen and students, in the interests of time, I intend to limit the focus of this panel to the views held by our esteemed guests concerning the means of war and the concepts of center of gravity and Friction vis-à-vis information-based warfare.

Herr Clausewitz, before I ask you my first question, I would like you to know that the translation of your book, On War, that I will reference was translated by Michael Howard and Peter Paret. In chapter one of that book's translation, you begin by writing that "War is thus an act of force to compel our enemy to do our will" (Clausewitz 75). Later you state that "There is only one (means in war) combat" (Clausewitz 95) Would you provide us your views on the utility of information-based warfare as a means for the conduct of war?

Clausewitz: Information-based warfare cannot alone win wars; only combat can win wars. Of course, the enemy must perceive that you have military strength and that you are fully prepared to use it to achieve your desired political ends Therefore, you may see the potential utility of trying to use information to develop the perception in the mind of the enemy of your strength and your willingness to use it. However, what do you do if this effort fails and the enemy does not sue for peace? You must conduct combat operations to compel the enemy to do your will, you must settle for a less desirable political end, or you must capitulate.

As I wrote in On War, " military activity must therefore relate directly or indirectly to the engagement a soldier should fight at the right place and the right time" (Clausewitz 95) Information, e g , intelligence, should set up the combat force for success on the battlefield. Notice that I said should Unfortunately, it did not in my day "Many intelligence reports in war are contradictory, even more are false, and most are uncertain" (Clausewitz 117) Given my pessimism toward intelligence, then you would first have to convince me that this technology, of

which you are so fond, has matured enough since my day to provide the commander with accurate, timely information for his decision-making. Even if you can convince me of this, can you convince the enemy through the use of information-based warfare that he is beaten even before he starts, and that he should therefore capitulate?

You must understand that I believe that you simply have to back up your information-based warfare capabilities with good old-fashioned combat power. Do you really believe that every enemy that you face will be sufficiently civilized to rationalize that he should surrender simply because you show him some high-handed technology, which allegedly proves that you can defeat him? Many of your enemies will not even care that you have this technology. To them, combat will mean real guns and use of whatever means of violence that they need to employ to beat you. Did the Vietcong in South Vietnam turn in their weapons at the sight of U.S. technology? Did the Somalian warlord Aideed turn tail and run when U S. military power was introduced into Somalia? Nation-states or groups with well-defined and highly desired political ends have not been dissuaded from doing battle with United States' technology Why then should information-based technology cause such an enemy to capitulate without a fight? You know, just the expression on the faces of the officers in the audience shows me that I have hit a nerve, you want to fight—not with information but with violence Do you really believe that you will be happy and content to leave the future of your country, for which you are entrusted, in the hands of a bunch of information technogeeks?

Keaney We have adopted your concept of center of gravity into our doctrine, about which you write "Out of (the dominant characteristics of both belligerents) a center of gravity develops, the hub of all power and movement, on which everything depends. That is the point against which all our energies should be directed" (Clausewitz 595-6) What is its relevance in information-based warfare?

Clausewitz: As you know from your study of my book, On War, I specified three centers of gravity the enemy's army, his capital, and his allies (Clausewitz 596) In addition to these, I realize that today there may be others. In some situations these three may not be as relevant as they were in my day However, even in view of my pessimism toward intelligence, I believe that it might be helpful in determining the enemy's center(s) of gravity. Additionally, once combat operations begin, then some form of information could help to ascertain to what degree your operations were achieving your ends. I attempted to make this point in my book when I said:

> It is therefore a major act of strategic judgment to distinguish these centers of
> gravity in the enemy's forces and to identify their spheres of effectiveness. One
> will constantly be called upon to estimate the effect that an advance or a retreat by
> part of the forces on either side will have upon the rest (Clausewitz 486)

Military action can be brought to a standstill by " . imperfect knowledge of the situation" (Clausewitz 84) "...partial ignorance of the situation is, generally speaking, a major factor in delaying the progress of military action and in moderating the principle that underlies it" (Clausewitz 85) If, however, one can gather information and the information that one gathers can be relied upon, then one can "act with utmost speed" (Clausewitz 617) I believe that you Americans previously used the phrase "to get into the enemy's decision cycle" during your Cold War days with the Soviet Union I need not tell you the value of gathering the priority information, analyzing it, deciding what action to take, transmitting that action to the executor, and seeing that action accomplished to standard However, even today that entire process will break down, I believe. due to Friction Your challenge is to figure out how to overcome that Friction.

Keaney In your book, On War , and in this interview you take a very pessimistic outlook toward our concept of Information-based warfare In your book you write '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" (Clausewitz 119) Given

your opinion on this topic, could you please tell us how we can improve the probability that we can successfully implement our concept of information-based warfare?

Clausewitz I thought you would never ask. This term Friction, with an upper case "F", which I will also call General Friction, is something that you Americans have done a superb job of understanding "Four elements make up the climate of war danger, exertion, uncertainty, and chance" (Clausewitz 104) These items combine to produce General Friction Uncertainty and the fog of war are one and the same. By these terms, I refer to the inadequacies and inaccuracies of intelligence, this is the area in which we have dealt primarily today (Clausewitz 101). Chance is inherent unpredictability, similar to that of nature (Clausewitz 85 & 101). Finally, the terms of danger and exertion are called normal friction, this friction is the reaction of soldiers and leaders to danger and exertion on the battlefield (Clausewitz 115). Just how much friction a soldier can withstand is uncertain (Clausewitz 115).

Now that we have these terms defined, let's deal with your question. Although I stated in my book that there is only one thing that will reduce General Friction. combat experience, I realize that the " commander and his army will not always have it readily available . " (Clausewitz 122) To overcome this situation, " .plan maneuvers so that some of the elements of friction are involved, which will train officers' judgment, common sense, and resolution" (Clausewitz 122) By using the technology that you propose in your training, you can create the General Frictions that you will experience during combat. This training will develop your staffs, commanders, and those soldiers whose daily functions will revolve around the use of information-based warfare The picture I see of this training is similar to that which you conduct when you allow computers to drive the tactics on the battlefield in place of the soldiers, sailors, and airmen.

The use of training, however, will likely only improve your ability to use intelligence to do a better job of violence-based warfare, or warfighting Even more challenging is for you to train these same people that information-warfare can asymptotically approach replacement of today's

headknocking warfighting Some of you may foresee a time when computer-age nations that have

fought all-out conventional wars in the past could conceivably agree to operate in this realm.

These nations' experiences in the carnage of recent World Wars and the potential destruction to be

unleashed upon humanity in the event of a Cold War nuclear exchange could be the stimuli This

transition too would not be overnight. First, your visionary and respected leaders would have to

sow the seeds of this movement. They would have to sell to the rest of the military and to the

political leaders the appropriate evolutionary changes in doctrine, training, organizations,

personnel, and materiel. That, however, is one tall order because you would also have to sell the

concept to your potential adversaries. As long as you cannot convince the future enemies of the

world—be they nations or radical groups—that they too should scrap their weapons systems and

abandon their desire for weapons of mass destruction in favor of information-based warfare, then

this evolution will be a slow one, if there is one at all.

Keaney· Herr Clausewitz, although you did not specifically address technology in your book,

are you willing to participate with us in effecting this revolution in military affairs?

Clausewitz I think I will pass I have already died of one infectious disease, I would prefer not

to succumb to a computer virus

Keaney Sun Tzu, you have had the opportunity to listen to Clausewitz's views. As we now

discuss your thoughts on information-based warfare, I will be using as a reference your book

entitled The Art of War, which was translated by Samuel B Griffith. Your book leaves the reader

with the idea that the defeat of an enemy need not be physical, that it can also be psychological

Do you differ with Clausewitz on the utility of information-based warfare?

Sun Tzu "To subdue the enemy without fighting is the acme of skill" (Sun Tzu 77)

Keaney Does that mean that you believe that information-based warfare alone can defeat an

enemy?

Sun Tzu " .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" (Sun Tzu 79) " what is essential in war is victory, not prolonged operations" (Sun Tzu 76) "When the army engages in protracted campaigns the resources of the state will not suffice" (Sun Tzu 73). What is of greatest importance in war is extraordinary speed, one cannot afford to neglect opportunity" (Sun Tzu 69-70)

Keaney· Can information-based warfare win if it is not backed up by a credible threat of violence-based warfare?

Sun Tzu: "...estimates ..indicate victory ..because calculations show one's strength to be superior to that of his enemy" (Clausewitz 71); "Chariots strong, horses fast, troops valiant, weapons sharp—so that when they hear the drums beat the attack they are happy, and when they hear the gongs sound the retirement they are enraged He who is like this is strong" (Sun Tzu 65-6)

Judo is an excellent example of the gentlemanly application of violence-based warfare. With the proper leverage, an opponent is beaten and he and the audience knows it A knockout in boxing, on the other hand, is a brute force application of violence-based warfare, the audience, too, knows that the boxer has been vanquished Information-based warfare need not be refined to be successful or credible It need not be the beauty of the forests as leaves change their color during the autumn season.

Keaney You seem to be very optimistic about the role that intelligence can play in war and in preparation for war

Sun Tzu "Those skilled in war must know where and when a battle will be fought" (Sun Tzu 99) " the skillful commander takes up a position in which he cannot be defeated and misses no opportunity to master the enemy whatever he does insures his victory (Sun Tzu 87) "Therefore

I say Know the enemy and know yourself; in a hundred battles you will never be in peril" (Sun Tzu 84)

Keaney Proponents of information-based warfare will be excited to learn of your support for their theories. In your book, The Art of War, you identified centers of gravity, in order of importance, starting with enemy strategy; then in decreasing order of importance were alliances, the army, and cities, which you stated should only be attacked when there is no alternative (Sun Tzu 77-78). Has your opinion of centers of gravity changed with the introduction of the idea of information-based warfare?

Sun Tzu: "... those skilled in war... capture his cities without assaulting them... now (that) you have massed troops and encircled the enemy .. let them know that an escape route is open and they will flee and disperse. Then any village constable will be able to capture them" (Sun Tzu 79).

Keaney· Are you telling us that you now believe that attacking cities is more desirable today than it was in your day?

Sun Tzu. Cities are not life, just as a forest is not life. Yet in this forest are animals that react to their surroundings They react instinctively when they are threatened The threat may be perceived or it may be real. They do not wait to be gobbled up by the threat When we hunt the deer we know that they will flee away from us when we pursue them. If we know the trails on which they move we can position other hunters along that trail to harvest them Because we know that they like salt we can lure them into our trap. When information is perceived to be credible— either in a positive or a negative sense—people will react as the deer· they will flee—in some predetermined way—or they will be drawn toward something Knowing that the deer will react and knowing how the deer will react means that there will be a venison feast. If you believe that your feast will increase by focusing more of your efforts on the people, then you are ready to be a guide for other hunters who have not yet savored the taste of venison

Keaney· There is much similarity between what you call weaknesses and strengths in your book (Sun Tzu 96-8) and what Clausewitz calls General Friction (119-21). However, you and Clausewitz seem to differ significantly on an army's ability to overcome General Friction Whereas Clausewitz believes that deception or cunning "rarely (has) the desired effect" (203), he may be largely influenced by his belief that with friction " .. one always falls far short of the intended goal ." (119). You, however, seem to downplay the negative effects of this friction when you argue that "All warfare is based upon deception" (Sun Tzu 66). How do your beliefs on the utility of deception change for information-based warfare?

Sun Tzu. Information-based warfare is the ultimate *maskirovka*. Discipline is the condition for success (Sun Tzu 107) "Apparent confusion is a product of good order; apparent cowardice, of courage; apparent weakness, of strength" (Sun Tzu 92). Information-based warfare amplifies an undisciplined enemy's friction as a rock band's loudspeakers magnify the volume of the musical noise. You know, in my day, we would have beheaded at least the leader of such a group for immoral influence

Keaney· If I may I would like to summarize very briefly some lessons provided to us by over 2,500 years of experience as they relate to the utility of information-based warfare Clausewitz, who continues today to remain pessimistic about intelligence, told us that information-based warfare should remain as no more than a subset of violence-based warfare, e g., to be used primarily as intelligence is used today to facilitate the planning and execution of Airland Battle. Let us not forget that Clausewitz's views are based upon a European experience Sun Tzu, on the other hand, believes that information-based warfare is at least an equal partner with physical power as a means to achieve victory over an enemy He, too, however, concedes that the ultimate source of all power is the threat of violence-based warfare, albeit his version of violence may not be as brutal as that of the western world His beliefs are based upon an Asian persuasion. We realize that we cannot—and should not—decide whether to use violence-based warfare or information-

based warfare as our means for achieving victory simply based upon the geographical location and culture of the enemy On the other hand, geographical location and culture are valid considerations that we should simply not ignore either.

Sun Tzu, Herr Clausewitz, on behalf of the faculty and students of the National War College, I would like to thank you for joining us today I would also like to present you with a copy of the United States Army warfighting bible, Field Manual 100-5 As you read through it, you will notice that we have adopted many of your views On War and about The Art of War.

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