A Study of Sun Tzu's *Art of War* and Clausewitz's *On War*

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Abstract:

Sun Tzu and Clausewitz are both known to be most recognised and proficient writers on the subject of war and strategies. Although they wrote in different times and were from different backgrounds, their philosophies on war and strategy are still proven to be extremely helpful and effective in current times. This essay serves to compare both Sun Tzu and Clausewitz's famous texts written on the subject of war: *Art of War* and *On War*, as well as prove how both works are not extremely different even when they were written in a divergent, historical, cultural and technological context. Instead, what both Sun Tzu and Clausewitz tried to express were not diametrically opposed. Hence, any contradiction arises from their own slightly unique points of analysis. While both of them defined war as means to rational policy ends, they were both well aware of the power of moral influence and the paradoxical trinity. This essay also studies how both their works can be applied to today's military applications despite the advanced technology of the modern era.

Keywords: Government, People, Philosophy, Technology, Doctrine, Law

INTRODUCTION

Sun Tzu's *Art of War* and Clausewitz's *On War* are the most studied philosophies on war and strategy. These two texts were written in eras more than 2,000 years apart; technologically, the *Art of War* was written in an era of arrows, swords and cavalry whereas *On War* was written in an era of gunpowder, rifles and railroads. Culturally, one was written in the East and the other, in the West. Given the divergent historical, cultural and technological contexts, analysts have often positioned these two works as diametrically opposed works on the subject of war and strategy.[1]

This essay argues that these two works are not significantly different and they describe essentially 'different sides of the same coin.' Instead of diametrically opposed, they advanced largely similar ideas that operate within degrees of contradiction. Those apparent degrees of contradiction are the result of their different starting point of analysis. The *Art of War* approaches the subject of war at the grand strategy level. *On War* focuses the analysis mainly at the strategic-operational realm, at the point where diplomacy has failed and fighting is unavoidable.[2] While both authors are generally in agreement of war at the strategic level, they differed in the conduct of war at the operational level, with the apparent contradiction in views on the utility of intelligence and deception in war, most pronounced. We will examine the two works in the areas of 1). definition of

war; 2). the meaning of victory and 3). their solutions to the complexity and friction of war.

Although these two texts were written many centuries ago, many of the key concepts on war continue to remain relevant. While the Revolution in Military Affairs (RMA) has created high tech weapons that now kill with greater speed, precision and lethality, the nature of modern war remains fundamentally the same. That is, "a collision of two living forces, with each seeking to impose his will on the other." This will be discussed in the context of wars post World War II (WWII).

Recognising the high cost of waging wars, especially in the form of loss of human lives and treasure, Sun Tzu takes the view that the acme skill of a master strategist is to be able to win without fighting.

DIFFERENT SIDES OF THE SAME COIN

Defining War

The ability of a nation to wage war determines her ability to survive and prosper. Both strategists lived through eras where the use of force was the norm and this seriousness on the topic of war weighed heavily on their minds. Both were unanimously clear that understanding the phenomenon of war was paramount to the survival of a nation.[3]

Force as a Means to Attain Policy Ends

Clausewitz defined war as a duel happening on a larger scale, that "war is thus an act of force to compel

With large off-road tyres and an independent suspension system, the Terrex Infantry Carrier Vehicle can manoeuvre across various types of terrain.

Sun Tzu	Clausewitz
Philosophy of the ruler, Government	Government, People
Elements of nature	-
Terrain	-
Generalship	Military (the commander and his army)
Doctrine/ law	-

Table 1: Comparison of factors to be considered in war between Sun Tzu and Clausewitz.

our enemy to do our will" and a "continuation of policy by other means."[4] War made sense as long as it is an extension of the logic from political action.[5] Already described in Sun Tzu's opening, is the inseparable link between politics and war. This 'symbiotic relationship' must be managed together.[6]

The Character of War – the Paradoxical Trinity

Clausewitz framed his analysis of war on the paradoxical trinity of *people* (representing primordial violence, passion, hate and enmity); the *military* (representing the realm of probability and chance, courage and talent); and the *government* (representing the rational calculus, nexus between ends and means). Victory is only possible when the trinity of these factors are in equilibrium.[7]

In this aspect, Sun Tzu and Clausewitz do not hold opposing views on the influence of the paradoxical trinity on war. Other than the trinity, Sun Tzu considered an additional three factors of nature, terrain and law.[8]

When we compare the factors to be considered in war, both strategists are generally in agreement, with Sun Tzu placing additional emphasis on the natural environment (elements of nature and terrain) as well as the military doctrine.[9] While Clausewitz did not feature nature and terrain in his trinity, this was discussed in his book, *On War*. Since Clausewitz was not concerned with the war preparations,[10] the

military doctrine necessary for training and preparing troops for war naturally did not feature inside his analysis. Please see *Table 1* for a comparison of these factors.

The Meaning of Victory – Only a Variance in the Level of Analysis

Recognising the high cost of waging wars, especially in the form of loss of human lives and treasure, Sun Tzu takes the view that the acme skill of a master strategist is to be able to win without fighting. The master strategist is able to produce the outcome of an engagement without the engagement actually taking place.

He advocates the ideal of capturing the whole intact and of "winning the heart of the enemy."[11] Conversely, Clausewitz emphasised "disarming the enemy" with a full and complete destruction of his fighting forces.[12] He holds the view of "...combat as the only effective force in war; its aim is to destroy the enemy's forces as a means to a further end..."[13] Despite his scepticism of winning without bloodshed, Clausewitz does concede that in exceptions, it is possible to win without fighting.[14]

Clausewitz focused his analysis on the battlefield at the lower strategic-operational realm. He looked at how a military commander brings conflict to successful closure.[15] Other options (diplomatic and economic means) at the grand strategy level were not within

the bounds of his analysis. Hence while possible, a military strategy of winning without fighting becomes so difficult that Clausewitz sees it as an exception than a norm.[16]

Sun Tzu, on the other hand, looked at the level of the grand strategy. He proposed a four-stage strategy of attacking the enemy's plans, then his alliances, then the armed forces and finally conquering his walled cities.[17] We can clearly see Clausewitz's start point of strategy making; in Sun Tzu's view, this is the third order solution—that of eliminating the enemy's armed forces. Clausewitz would likely agree with Sun Tzu that where possible, the ideal victory of subjugating the enemy without fighting should be sought.[18] However, he recognised the practical difficulties of achieving such victories at the lower strategic-operational realm. Hence his analysis was focused on realisable, concrete military goals, which were identified as the enemy's armed forces.

Agree on the complexity of war but differ on the panaceas—Detailed Planning, Intelligence and Deception VS Military Genius, Absolute and Relative Superiority

Fundamentally, both Clausewitz and Sun Tzu agreed that the conduct of war was a complex affair consisting of many infinite unknowns.[19] Sun Tzu employed a metaphor of music, colours and flavours to describe this "infinite complexity."[20]

While both strategists unanimously agreed that war is inherently complex, they propose seemingly different solutions. Sun Tzu takes a more deterministic view that the outcome of war can be predicted. He proposes that the three tenets of 1). Detailed planning and assessment;[21] 2). Possession of reliable intelligence;[22] and 3). Extensive employment of deception to deceive your opponent is critical to the battlefield success.[23]

Conversely, Clausewitz's concept of friction in war led him to place little faith in the ability of making and successfully implementing detailed war plans.[24] In addition, he regarded intelligence just as another source of friction that had to be managed. In Clausewitz eyes, the only trustable intelligence source comes from the intuition of the military commander.[25]

Clausewitz was especially sceptical to the use of deception as it required the commitment of extensive resources with no clear guarantee on the pay-off. Moreover, the use of deception meant less troops and resources at the disposal of the commander for battle at the decisive point. Clausewitz viewed deception as a tool for the weak and should not be the primary choice.[26]

It was interesting to note that despite many differences in the conduct of warfare, both Sun Tzu and Clausewitz concluded that defence was the inherently stronger form of warfare.

On that note, Clausewitz proposed an alternative three solutions: 1). the intuition of the military genius, or the *coup d'oeil* ; 2). possess overwhelming military strength by mobilising the maximum possible amount of resources for the conduct of war; and 3. the ability to gain relative strength at the decisive point despite weaker absolute strength.[27]

The apparent disagreement in solving the complexity in war between the two strategists stemmed from the same fact of differing level of analysis. Sun Tzu analysed war from a wider scope, perspective and at the strategic level.[28] At the grand strategy level, intelligence and deception had significantly more value than at the operational level. That provided him with more confidence on its utility,

whereas Clausewitz was primarily concerned with its utility at the operational level where due to the fluid battlefield situation, the value of intelligence was often fleeting and transient.

Seeing Eye-to-Eye on the Offence-Defence Relationship

It was interesting to note that despite many differences in the conduct of warfare, both Sun Tzu and Clausewitz concluded that defence was the inherently stronger form of warfare.[29] Clausewitz noted that:

"…When one has used defensive measures successfully, a more favourable balance of strength is usually created; thus the natural course in war is to begin defensively and end by attacking…"[30]

This is comparable to Sun Tzu's quote:

"…those who are not able to win must defend; those who are able to win must attack; defend when forces and resources are inadequate; attack when forces and resources are more than abundant…"[31]

IMPLICATIONS FOR MODERN WARFARE IN THIS AGE OF TECHNOLOGY

Modern Warfare and the RMA

Strachan looked at modern wars from the perspective of the means of fighting. He defined modern wars as those that were "fought with the fruits of industrial revolution and technological innovation."[32]

Modern warfare cannot be adequately discussed about without considering the RMA. RMAs often occur in the wake of confluence of three factors; firstly, 'technological development'; secondly, 'doctrinal innovation' to update the process and tactics; thirdly, 'organizational adaptation'.[33] Airplanes and tanks were developed in the period just prior and during World War I (WWI). However, it was only two decades later in WWII that these technological innovations were combined with organisational adaptations by the Germans to advance their new *Blitzkrieg* doctrine.

For the purposes of this essay, we will examine the impact of Sun Tzu's and Clausewitz's philosophies on wars in the post WWII era.

Defining 'Impact'

In T.S Goh's analysis of Clausewitz's impact on strategy,[34] he differentiated impact as either 'influencing' or 'direct'. Where the impact was 'influencing', it provided a model for evaluating strategy. Where the influence was 'direct', it resulted in elements of thoughts from great strategists being translated into specific methods for war. For the purposes of this essay we will focus on the 'influencing' component.

Evolving the Understanding of War—the Material Realm (of Economy and Technology) Adds Context

War in its most primitive form can be described without any reference to the material realm of technology and economy. However, any detailed discussion of war cannot exclude a discussion about the technology of that era. While Sun Tzu did expound on the high cost of raising armies and waging wars on a country's economy, there was no mention of the influence of technology.[35]

In today's warfare where industrial and technological factors play a critical role, it may be necessary for a paradigm shift in Clausewitz's description of war to include a 'material realm' and for Sun Tzu's analysis to include technology. The absence of that material consideration will cause failures in seeing new problems and opportunities that may arise.[36] Moreover, the material realm adds context to the discussion of war in that era.
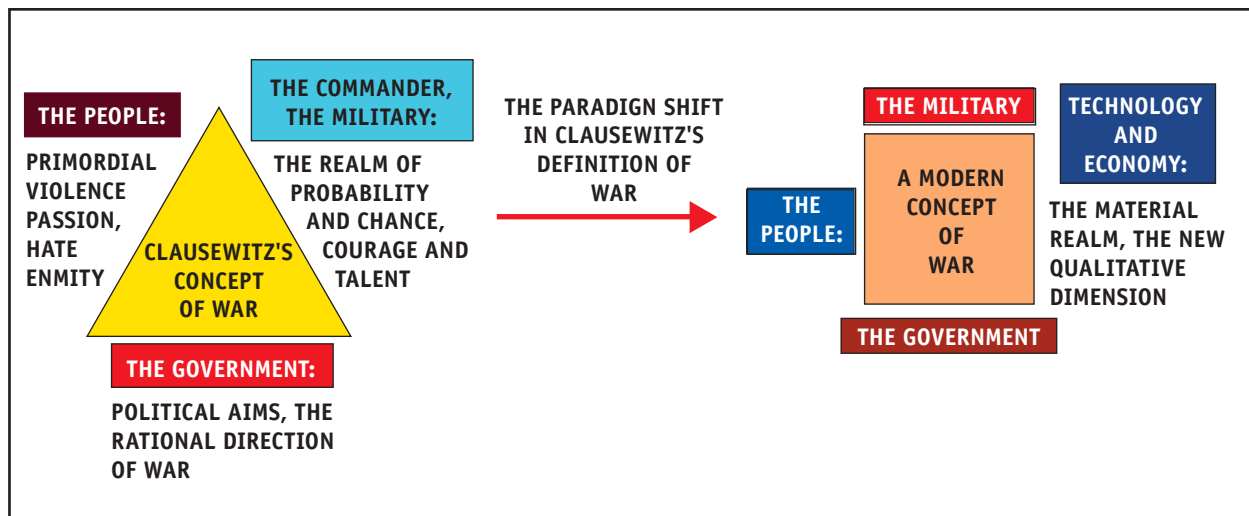
Figure 2: Clausewitz's Description of War Modified – Squaring the Triad[37]

WWII witnessed first-hand the destructive potential of nuclear weapons in the bombing of Hiroshima and Nagasaki. The rapidity in which a nuclear attack can be prosecuted, simplicity compared to conventional warfare, hence requiring 'absolute political control' had made the military redundant. Strategic nuclear wars almost eliminated the military from the trinity to evolve a new trinity involving only *people*, *government* and *technology*.[38] However, the eventual doctrine of non-use prevented actualisation of that situation.

Contemporary wars are largely small scale insurgency wars conducted by non-state actors. Technological advances such as the internet and social media have allowed groups like Al Qaeda to propagate their message, recruit, equip and train their personnel. Technology has enabled these traditionally weaker non-state actors to take on the larger state actors.

The impact of the material realm can again be felt in the military domain of command and control. Communications technology has significantly changed the command and control of the military. Much has been discussed about the phenomenon of 'strategic corporals'. With the ability to see real time information and highly reliable control of precision weapons, this has given rise to a less discussed new breed of 'tactical generals'.[39] This posed command and control challenges for junior commanders on the ground when their tactical decisions are challenged by senior commanders thousands of miles away.

When we look at the Cable News Network (CNN) effect in the Vietnam War and today,[40] and social media platforms such as Facebook, we see that these technologies have amplified the influence of the people (representing primordial violence, emotions) component of the Clausewitz's triad. These platforms provided an effective and efficient avenue for dissenters and rebels to broadcast their sentiments, stoke emotions and even mobilise large scale protests. This is most evident when we look back at the recent Arab Spring uprisings where the internet was

"instrumental in nourishing the connective tissues that bond activists and the citizenry in general."[41] It has made the will, emotions of the people more evident and powerful in the Clausewitz's triad.[42] This also reinforced Sun Tzu's emphasis that any moral influence is the most important factor.

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Deception, Intelligence and Surprise—More of Necessity than Just Mere Friction in this Age of Technology

Technological advancements in surveillance, communications and precision guidance had enabled targets to be engaged with deadly precision in near real time fashion from a command centre thousands of miles away.[44] In this age of technology, with the efficiency of the sensor-shooter loop, the moment you are seen, you will be killed.

This phenomenon has made intelligence and deception a more critical capability than just fiction as described by Clausewitz. Instead of contending with limited information in Clausewitz's time, the converse is now true. In order to avoid the potential 'analysis paralysis' resulting from information overload,[45] the *coup de oeil* of the commander in discerning intelligence from noise becomes even more compelling.

With the efficiency of the sensor-shooter cycle as well as pervasive and persistent sensors, deception becomes vital to the survival of one's own forces. Moreover, the sensors provide significantly improved chances of the enemy seeing your battlefield actions. This increases the return on investment on forces committed for the purpose of deception.

A scout trooper awaiting the signal to launch the Skyblade III.

The Myth of Superiority of the Offence over the Defence

Technology has offered the offensive side a markedly improved superiority. Areas such as strategic mobility, persistent 24-7 surveillance by satellites and unmanned aerial vehicles (UAVs) and massive long range precision firepower made possible by stealth aircraft, cruise missiles and nuclear weapons. All these contraptions which promised destruction of the enemy in a single decisive blow have made the offensive strategy the seemingly stronger one. That single pre-emptive first strike could literally end any war before it began.

Nuclear weapons, while powerful and promising to annihilate the opponent in a single decisive blow, were never used. The reason was that the ensuing victory was empty and accompanied by the end state of mutually assured destruction. That end state has zero political utility to the victorious side. The employment of nuclear weapons was therefore in its

non-use and deterrence effect.[46] Ironically, this made nuclear weapons to be more of a defensive nature. It is a weapon that makes any potential adversary think thrice before launching against any offensive military campaign.

In the Vietnam War and the recent Afghanistan and Iraq wars against terror, the United States (US) had superior technology and overwhelming firepower. However, in the Vietnam War, they lost the war to the significantly backward Viet Cong in what observers termed "tactical victory, strategic defeat."[47] In the Afghanistan and Iraq wars, while the US-led forces were able to secure a swift victory in the military combat phase, a decisive victory in the perspective of policy remains elusive till today as the regions continue to be mired in insurgent warfare and instability.

A recurring theme in the wars that were described was that when the technologically superior attacker was up against a determined defender who was neither
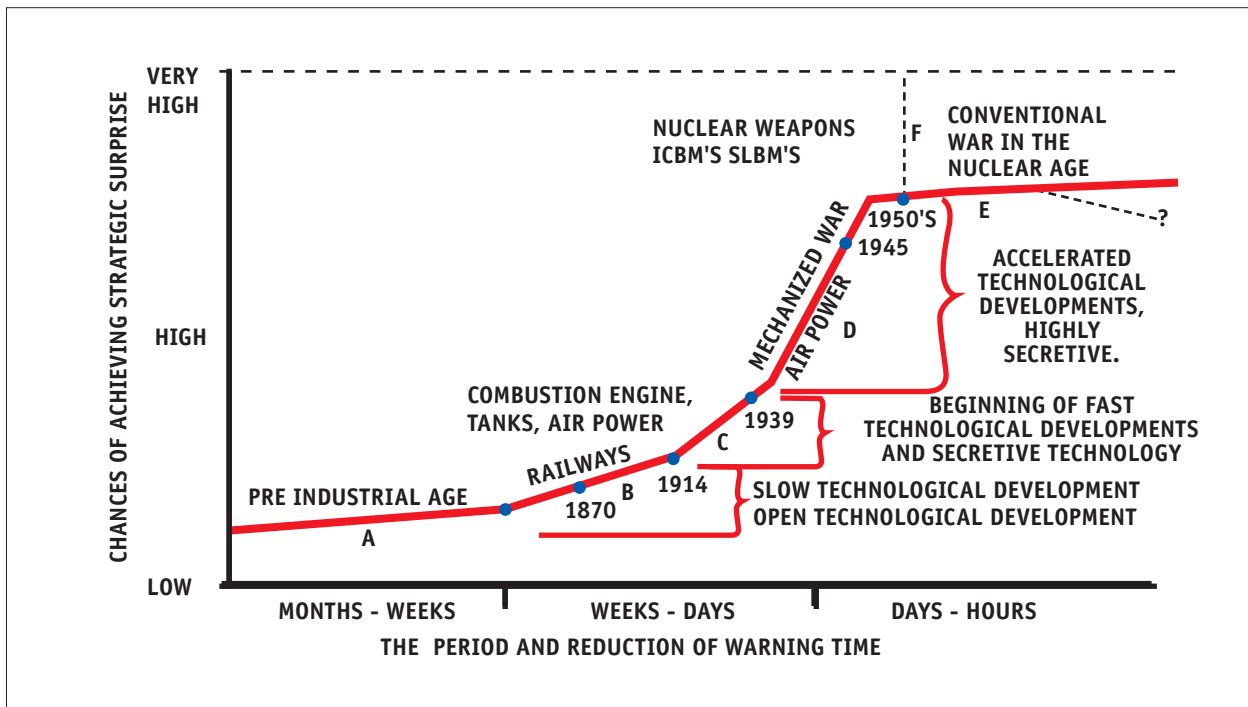

Figure 3: Strategic Surprise in Historical Perspective[48]

SOUTHERN LAOS
Ho Chi Minh Trail
1967

Wikipedia

The Ho Chi Minh trail was used to supply the Viet Cong and sustained the Viet Cong against the United States' superiority in technology.

tied to the need for a swift victory nor restrained by rules of engagement and who had the advantages of a 'home ground', the offensive had no clear advantage.

A Word of Caution on Technology as the 'Silver Bullet'—The OTHER Revolution in RMA

As Clausewitz put it aptly, war is "a collision of two living forces."[49] We should not ignore the fact that while the mainstream military was undergoing RMAs of various sorts, there was an RMA that was brewing on "the other side of the hill."[50] While we have seen how much technology defines the character of war, there are limitations to how much technology can help win

a war. Asymmetry advantages are not just limited to overwhelming strength and material advantages (in the economic and technological realm).[51] It extends into the political and cultural domains where the technologically superior side may actually be more constrained than the inferior one.

Learning from the 1991 Persian Gulf War, Kosovo, and Mogadishu, the other side had a sufficiently complete picture of the RMA by the mainstream military. This formed the basis of his strategic threat assessment and thereafter the conceptual paths to the Other RMA.[52] In this Other RMA, the other side followed three main paths seeking to make the technological advantage irrelevant. Firstly, to be able to withstand the pre-emptive strike; Secondly, the ability to establish a credible deterrence capability; Thirdly, moving away from a strategy of swift and decisive wins to one of attrition, which runs in direct contrast to the West's sensitivity of casualties and losses.[53] September 11th, the Iraq and Afghanistan wars and the 2006 Lebanon War are testimonies to the successes of RMA of the other side.

The Continuing Quest for Victory

Convincing the vanquished that he is defeated cannot be achieved by merely destroying his army. Destruction of his armed forces is only the beginning. As Clausewitz puts it "…in war the result is never final…"[54] A reconciliatory policy of rebuilding and providing the hope of a better future for the vanquished is equally important. For victory to be total and final, the war in the ideological and policy realm had to be won as well.

History has shown that imposition of punitive post-war measures on the vanquished is the best recipe for another war once the vanquished re-emerges from the ashes of temporal defeat. The Treaty of Versailles was the perfect example, as it sowed the seeds for WWII.[55]

Map of ground operations of Operation Desert Storm (first major global conflict implmenting RMA) from February 24-28th 1991. Shows allied and Iraqi forces. Special arrows indicate the American 101st Airborne Division moved by air and where the French 6th Light Division and American 3rd Armored Cavalry Regiment provided security.

It was MacArthur's policy in the reconstruction of Japan and the Marshall Plan in rebuilding post-war Germany that helped return the world to peace after the Axis powers were defeated.[56]

Sun Tzu's age old mantra of 'capturing the whole intact' holds true as we look at the Iraq and Afghanistan wars. While the destruction of the incumbent's army was swift and decisive in bringing about a regime change with minimal casualties, the US was still mired in re-establishing the very political stability that they destroyed.

CONCLUSION

It is interesting to note that despite living in vastly different eras and cultural contexts, the two strategists have framed war in very much the same manner. While both of them defined war as means to rational policy ends, they are very much aware of the power of moral influence and the paradoxical trinity.

The key philosophies proposed by Sun Tzu and Clausewitz are not diametrically opposed and hence not significantly different. The notable differences between the ideas of Sun Tzu and Clausewitz lay in their notions of victory, utility of intelligence, deception and surprise. However, when we analyse deeper, we see that Sun Tzu defined war at the grand strategy level, with more considerations for diplomatic and economic factors. Clausewitz assumed that these factors were already considered and commenced his analysis at the strategic-operational realm, the point

where war was imminent. These two treatises on war and strategy should be seen as a continuation of the discussion of war at the grand strategy level in Sun Tzu's *Art of War* to the strategic-operational realm in Clausewitz's *On War*.

As with all studies of historical texts, the question was the continued relevance of these two strategists in this age of technology. From catapults to cannons to nuclear bombs and cruise missiles, we have seen how technology impacts the way wars are fought. Other than the political and cultural background, wars in any era must be studied with the technology as well. Having said that, the modern day military commander ignores at his peril the effects of technology interacting with the other traditional factors of rational calculus, emotions, chance/uncertainty espoused by the two great strategists. 🌐

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3. "…a matter that is of vital importance to the nation. War determines the death or survival of the country…" (*Art of War*).

   Clausewitz stated "…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*, 260).

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11. Wee, C.H. *Art of War*. Singapore: Prentice Hall, (2003), 4.

12. Howard, M., & Paret, P. *Carl Von Clausewitz: On War*. Princeton University Press (1976), 90.

13. Ibid., 97.

14. "…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…" (*On War*, 181)

15. "…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 means, once they have been developed, for the purposes of war*…" (*On War*, 131-132)

16. Handel, M. I. *Sun Tzu and Clausewitz: The Art of War and On War Compared*. DTIC, 1991. http://www.dtic.mil/dtic/tr/fulltext/u2/a239084.pdf.

17. … Thus the most supreme strategy is to attack the plans and strategies of the enemy. The next best strategy is to attack his relationships and alliances with other nations. The next best strategy is to attack his army. The worst strategy of all is to attack walled cities… (*Art of War*, 5).

18. Handel, M. I. *Sun Tzu and Clausewitz: The Art of War and On War Compared*. DTIC, 1991. http://www.dtic.mil/dtic/tr/fulltext/u2/a239084.pdf.

19. There are only five basic musical notes but their combinations and permutations produce music scores so varied that it is impossible to hear all of them. (*Art of War*, 113).

    As we have seen, the conduct of war branches out in almost all directions and has no definite limits; (*On War*, 134).

20. Handel, M. I. *Sun Tzu and Clausewitz: The Art of War and On War Compared*. DTIC, 1991. http://www.dtic.mil/dtic/tr/fulltext/u2/a239084.pdf.

21. By observing how planning is done, I can predict victory and defeat. (*Art of War*, 31).

22. Thus the enlightened ruler and the capable general are able to secure victories for their military campaigns and achieve successes that surpass those of many others. The reason is because of foreknowledge. (Ibid., 406-407).

    He who knows the other side (the enemy) and knows himself will not be defeated in a hundred battles (Ibid., 77).

23. All warfare is based on the principle of deception (Ibid., 22).

24. "…countless minor incidents – the kind you can never really foresee – combine to lower the general level of performance, so that one always falls short of the intended goal…" (*On War*, 119-121).

25. "…Most intelligence reports in war are contradictory; even more are false, and most are uncertain…The commander must trust his judgement and stand like a rock on which the waves break in vain…" (Ibid., 117).

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37. Ibid.

38. Ibid.

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