

**SUN TZU AND MODERN STRATEGIC THINKING : TECHNOLOGY,
MORALITY AND WAR**

GIFT

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Certificate

This is to certify that Farid Ahmed Bhuiyan has completed his M. Phil dissertation under my supervision. To the best of my knowledge this is his original research and the work either in full or part has not been published elsewhere.

It is further certified that all the necessary formalities for the submission of the dissertation have been fulfilled.

382842

(Professor Imtiaz Ahmed)

Dhaka

Supervisor.

26 December 1999



To my mother,
Halima Khatun

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Acronyms

ABM	Anti Ballistic Missile.
AVG	American Volunteer Group
CIA	Central Intelligence Agency
C ³ I	Command, Control, Communication and Intelligence
HEAT	High Explosive Anti Tank
HMS	Her Majesty's Ship
IAF	Indian Air Force
IDF	Israeli Defence Forces
NLF	National Liberation Front
ORBAT	Order of Battle
SAM	Surface to Air Missile
UN	United Nations
US	United States
USA	United States of America
USSR	Union of Soviet Socialist Republic
VC	Viet Cong

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ABSTRACT

Sun Tzu's "Art of War" is considered the oldest military treatise of the world. It was composed in China during 400 B. C. This study is an endeavour to visualise the socio-cultural atmosphere of the "Warring States" China, whose product is the "Art of War". Its relevance and influence on the modern strategic thinking has also been examined.

In China during the early classical period, warfare was a matter of importance, a topic of philosophic reflection. For our information Chinese philosophy was not logo centric like the West, it was rather tao (the way) centric. The keynote in Chinese philosophy was humanism, ethical and political discussions often overshadowed any metaphysical speculations.

Confucius and Lao Tzu were the two great philosophers of ancient China. They were basically moral philosophers and their influence had profound impact on every spheres of life since the last part of the "Autumn and Spring" period. Some of the Western scholars blame that Sun Tzu with his teaching, *all warfare is based on deception* particularly betrayed these moralist schools. This study clarifies that it is unjust to blame Sun Tzu alone for the societal deviations from the moral ways of Confucius and Lao Tzu. Stratagem in warfare was neither first devised nor introduced by Sun Tzu, it is practically synonymous with warfare itself. The study also uncovers that the moral teachings of Sun Tzu outweigh the amoral ones and from a realist perspective they may be categorised as *dolus-bonus* (good tricks).

In this study the intrinsic relation between technology and war has also been examined. The Sun Tzu text was probably composed during the period of "tools and crafts", though iron was introduced by that time in China and iron tools specially weapons and military equipments were creating a great impact on warfare yet there was no romanticism with technology in that text. It is a reality that outcome of wars are greatly influenced by technology yet technology is not the God of war; probably this was the attitude of Sun Tzu. This attitude was possibly formed under the influence of the extraordinary Confucianist concern for only man and human society.

War is dominated by irrational factors, which have nothing to do with technology, and it has not changed nor will be able to change the functions of war. Sun Tzu probably realised that war is not an exercise in technology where technicians are the soldiers, it is rather a contest between two belligerents where soldiers are soldiers, and hence the principles of its conduct are entirely different. He also realised that every technology has a limit and it is only human mind, which is limitless. That is why he placed mind over material, brain power over muscle power and morale factors over the material ones and based his teachings on the bedrock of military creativity.

It is already discussed that Sun Tzu had a socio-cultural back ground to perceive and deal warfare with philosophical sensibilities. Like all other philosophers of his age he also viewed warfare as the unfortunate last resort in human interactions and repeatedly warned us about the dangers of war. The main objective of Sun Tzu's teachings was the morale element of a strategist. He considered the strength of character, power of mind and creativity along with harmony as the most significant elements of a strategist. The philosophical sensibilities of his teachings and the literary qualities of the treatise along with its size (It contains less than 6200 characters of classical Chinese literary writing) are the reasons why Sun Tzu's text is still popular and relevant today.

Chapter 1

INTRODUCTION

Sun Tzu's "Art of War" was probably written around 400 B.C. in China during the "Warring States" period. It is considered the first written treatise on strategy and military arts. Almost two and a half thousand years have passed since it was composed and the treatise has travelled through the hands of more than a hundred generations yet it has not lost its appeal. There are serious people involved in the business of war who consider that teachings of Sun Tzu is valid even for today.

There is an intrinsic relation between technology and war. One probably drives the other. In plain, wars have pushed the technology to advance, at the same time advanced technology also pushed people towards war. Technology has a constant drive within to eliminate errors, inefficiency, redundancy and slackness. This drive never allows a technology to be static, it is continuously progressing. That is why we find that the place of a muzzle loading musket was taken over by a breach loading rifle which in future will be again replaced by a rifle firing caseless cartridges. A technology, which today seems to be the ultimate, will be rejected tomorrow as invalid. When change is the unchangeable characteristics of technology and it has an intrinsic relation with war, how a book on the art of war written almost two and half thousand years have remained valid till today?

Rationale of technology is not the logic of war, when technology is a matter of head, war is a matter of heart and an irrational one. Any amount of technological development will not be able to change the functions of war. People living within the information age and on the most developed part of the earth have used the butter knives to slaughter their enemies in the name of ethnic cleansing which is nothing but grabbing land at the expense of human beings. In the light of Popperian falsificationist science we may claim that the rationale of technology is the reflection of human attitude which can be called scientific. According to Clausewitz the prime objective of war is the destruction of the enemy forces and that can be achieved only by fighting.

If we want to do that scientifically, we must procure a technology which will finish greater number of enemy with lesser possible effort. This tendency has pushed human beings toward their utmost limits and they invented chemical, biological and nuclear weapons. But with astonishment we discover that the chemical and biological weapons have been rejected and nuclear weapons have been categorized by the same human beings as the weapons of deterrence not the weapons of war. There is always a conflict between the rationale of technology and the logic of war, in that tussle of the head and the heart it is the beacon of morality, which shows the correct path to the human beings.

The contention of this dissertation is that, in war technology and human spirit often created a tension and produced dilemmas where morality worked as the ultimate guide, Sun Tzu's "Art of War" though written almost two and a half thousand years back during the age of "tools and crafts" but was the product of a culture and time where philosophical sensibilities were considered crucial in warfare, reflection of this positive attitude in its teachings has kept the treatise valid even for today.

Sun Tzu's "Art of War" is considered not only valid but quite a popular one amongst the intellectuals, students of war studies and the scholars of business administration. According to the Alexandrian poet Callimachus, "*a big book is a big evil*", Sun Tzu's treatise is a smaller one in this regard and it seems to be one of the basic reasons of its popularity. Aesthetics and communication were the prime concerns of Sun Tzu's literary style which has survived translation, "many passages use communication at the aesthetic level and the detailed precepts are stated with such simplicity that they are easy to transpose into a modern idiom"[Simpkin, 1985 : 3]. In the very first line of his treatise Sun Tzu warns us that war is a matter of life and death and it is to be taken seriously, yet he poetically kept on describing the nature of war, "all warfare is based on deception. Therefore, when capable, feign incapacity; when active, inactivity. When near, make it appear that you are far away; when far away, that you are near". These were like the last two line couplets of a Shakespearean sonnet, even detached, neither lose the flavour nor the meaning. Military strategy, like any other arts can be used as a source of metaphors, naturally "The Art of War" came handy to the people involved in intellectual enterprises. This is also a reason for its popularity.

Sun Tzu realized that every technology has a limit, it is the human mind, which is only limitless. He grasped that technology is a factor of war, but the logic of technology is not the logic of war. Hence Sun Tzu mainly worked with the morale factors and tried with his treatise to construct a mind frame for the future strategists with creativity and character as the two main ingredients. Another reason for the relevance of Sun Tzu's teachings is that they are based on the bedrock of military creativity. According to Marshal von Moltke, theoretical knowledge alone does not suffice in war due to its very uncertain nature. "What is required is a free, practical, artistic development of mind and will, based of course on a previous military culture and guided by experience – either by experience derived from the study of military history, or by experience acquired in the course of one's own existence"¹.

The subsequent chapters of the dissertation will trace the spirit of "The Art of War" which still appeals to the warriors and scholars who consider the teachings of the treatise ageless. The inquiry has been made in the following manner:

- Chapter – 2 Sun Tzu as a historic person and the Sun Tzu text.
- Chapter – 3 Strategy : Different aspects of strategy and strategic thought, Sun Tzu's influence on modern strategic thinking and the Revolutionary school of modern strategic approach.
- Chapter – 4 Technology : The relation between science and technology, civilisation, science and technology in China specially during the "Warring States" period.
- Chapter – 5 Morality : Problems of morality and war, humanism in Chinese philosophy and two great moral philosophers of China, the intimate relation between wisdom and warfare, deception and the distorted image of Sun Tzu, moral and amoral teachings of Sun Tzu, his objective.
- Chapter – 6 War : Studies of few important wars from the "Communist Seizure of Power in China" to the latest Gulf War in the light of Sun Tzu's teachings.

¹ Helmut Karl von Moltke is an important personality of the Prusso-German school and was chief of the General Staff of the Prussian army from 1857 to 1888. He played an important role in the rise of the German General Staff. To orient oneself with the Prusso-German school, Hajo Holborn and Gunther E. Rothenberg's articles on Moltke may be considered as brief guides.

One might ask about the relevance of this study at a time when people are sceptic about the future of war itself. The debate whether war has a future or not is yet to be settled. In fact, in the post Cold War era the nature of conflict is under going changes and interstate conflicts are being replaced by intrastate conflicts. In South Asia war is a living reality, Pakistan and India is involved in an undeclared and a perpetual war. Recently both the countries have carried out declaratory nuclear tests and after that violating all the norms these nuclear powered neighbours irresponsibly got entangled in a limited border war in the heights of Kargil. At present other neighbouring South Asian countries appear to be fertile grounds for the proxy wars of these two contending nuclear powers. In the recent past India was involved in a war in Sri Lanka; at present there are internal wars in the North Eastern states of India, Punjab and Kashmir. Today, Sri Lankan war with the Tamil Tigers is respectfully called the “Cyanide War”. Bangladesh got its independence through a war and yet few days back she was unable to reject the use of force in settling issues in her Hill Districts (a peace treaty has been signed recently with the tribal insurgents and the conflict has come almost near to an end). This research project was undertaken from a realist perspective, asserting that military elements of power is an intrinsic part of the sovereign state; attempts to formulate strategies without taking it into consideration is an utopia. We should make an endeavour to manage it properly, artfully and successfully, so that wars, both inter-state and intra-state can be avoided, if that is not possible and it ever becomes a cruel necessity that should be economic and as profitable as possible for us. In this endeavour philosophical sensibility is an essential commodity, which is in abundance in Sun Tzu.

Chapter 2

SUN TZU AND “THE ART OF WAR”

- 2.1 Sun Tzu as a Historic Person
- 2.2 The Sun Tzu Text
- 2.3 Sun Tzu’s Popularity
- 2.4 Conclusion

Sun Tzu drilling the beautiful concubines in front of King Ho Lu is an interesting story. For its sex appeal it is included in almost all the translations of Sun Tzu though it is not a part of the “text”. It is probably based on the biography published by the grand historiographer Szuma Chien in *Shi Chi* (Historical Records or Records of the Historians). Many scholars doubt the reliability of the Szuma Chien’s biography for various reasons. There exist doubts amongst scholars and researchers about the author as well as the “text”. There are claims that the “Thirteen Chapters” were compiled during the “Autumn and Spring Period” (771– 481 B.C.), there are also counter claims that they were the products of “Warring States Period” (453 – 221 B.C.)¹. Some people doubt whether the text was written by Sun Tzu himself or Sun Bin, a descendent of Sun Tzu. There exist doubts whether the “Thirteen Chapters” were written by a single person, at the same time there exist claims that these were probably fabrications of disputatious sophists of the “Warring States Period”.

The Second chapter with the title, “Sun Tzu and The Art of War” deals mainly with the historical aspects and problems of Sun Tzu and his “Thirteen Chapter” text; it also enquires about the reasons of its popularity. This chapter is divided into three sections.

The first and the second sections with the titles, “Sun Tzu as a Historic Person” and “The Sun Tzu Text” respectively deals with such questions, what do we mean by the Sun Tzu as a text or even Sun Tzu as a historical person. In answering them we got to understand that our modern concept of “text” and “single authorship” and its imposition on the classical Chinese artifact has

infact complicated the matter. By that we miss the process how a text would actually come into being. We got to realise that in ancient Chinese culture oral transmission was a significant factor and in which authorship tended to be cumulative and corporate.

The third section, “Sun Tzu’s Popularity” is an inquiry about the truth which carried the treatise beyond centuries through the hands of almost one hundred generations. It is probably the literary qualities of the treatise, which is responsible for its enormous popularity.

2.1 SUN TZU AS A HISTORIC PERSON

Concubines and the Shock Treatment

Almost all the popular translations of Sun Tzu's "Art of War" contain the story how Sun-Tzu impressed “Ho-Lu” the king of “Wu” and became a general in his army. Sun Tzu’s personal name was “Wu” and he was a native of the “Ch’i” state. His treatise "The Art of War" brought him to the notice of King Ho-Lu. Once in a meeting the king informed Sun Tzu that he had carefully studied the Thirteen Chapters written by him and wished to put his theory of managing soldiers to a slight test. The proposal was gladly accepted by Sun Tzu and the king immediately placed 180 concubines from the palace under his command to carry out the test.

Sun Tzu went ahead and divided these young ladies into two groups and placed one of the king’s favourite concubines at the head of each group. He then made them all take spears in their hands and ordered them to do simple, left, right and about turns. Though the ladies thoroughly understood the orders but they did not react, instead they burst into laughter. Seeing this, Sun Tzu patiently said, "if words of command are not clear and distinct, if orders are not thoroughly

¹ Modern and orthodox Chinese scholars differ about the beginning of both the periods. Years shown here have been taken from Griffiths, *Sun Tzu : The Art of War* which are based on the preferences of the modern scholars.

understood then the general is to blame". After this he again started drilling them with clearer words of command but the situation did not improve and the ladies once more burst into fits of laughter.

The king was seating nearby and enjoying the fun. But this time Sun Tzu said, "if words of command are not clear and distinct, if orders are not thoroughly understood, the general is to blame. But, if his orders are clear and the soldiers nevertheless disobey, then it is the fault of their officers". So saying, he ordered the leaders of the two groups to be be-headed. King Ho-Lu was alarmed seeing the developments and tried in vain to save the lives of his favourite concubines. Sun Tzu turned down his request by uttering, "having once received His Majesty's commission to be general of his forces, there are certain commands of His Majesty which, acting in that capacity I am unable to accept"². After this the two concubines were immediately be-headed and replaced by the pair next in order to lead the two groups. The cruel incident worked like a magic on the young ladies and they went through all the evolution, turning to the right or to the left, marching ahead or wheeling about, kneeling or standing with perfect accuracy and precision, not venturing to utter a sound. After this incident, bitter but the impressed king Ho-Lu appointed Sun Tzu as a general in the Wu army [Griffith, 1963:37].

From the same story we come to know that the appointment was made in 512 B.C. and then onward for almost two decades the armies of Wu remained victorious over their hereditary enemies, the kingdom of Yueh and Ch'u (Szuma Chien, 1979 : 29). Sometime within this period Sun Tzu died. His patron, King Ho- Lu was killed in a battle in 496 B.C. For a few years his descendants followed the precept of Sun Tzu and continued to be victorious and then they forgot. In 443 B.C. the armies of Wu were defeated and the kingdom perished.

If the biography published by Szuma Chien in *Shih Chi* (Historical Records or Records of the Historians) was correct then Sun Tzu probably lived in the century of Pythagoras (c. 600

² This type of views are still causing serious troubles in civil-military relations of many Third World countries. This sort of attitude is the product of a very old belief that unity was the key to military success. The soldiers were united only if the commander was the unchallenged ruler in his own sphere. If the commanders were controlled by the ruler, then the army would possess 'two minds' and cease to be an all powerful 'single body'. All the military treatise of classical period emphasized on the importance of the commander.

B.C.), Confucius (550 B.C.), Gautama Buddha (560 B.C.) and Mahavira (560 B.C.). His life span would have overlapped with many important political events like the fall of Babylon to Cyrus (538 B.C.) and the invasion of Punjab by Darius (512 B.C.). But many scholars doubted the reliability of the Szuma Chien's biography on various ground and most of them suggest that it was probably written in the fourth century B.C. during the "Warring States" period (450 – 221 B.C.). For our information the Greeks checked Iranian expansion westward in 480 B.C. and in the middle of the 5 th century B.C. the Athenian Parthenon was erected. During the concluding phases of the "Warring States" period the outside world witnessed many important historical events, such as the conquest of Alexander the Great (327 B.C.), the foundation of the Maurya dynasty in India and the beginning of the reign of Asoka (300 B. C. and 274 B.C. respectively). The Punic Wars in the Mediterranean (250 – 150 B.C.) overlaps with the first unification of China under "Chhin Shi Huang Ti" the emperor who burnt books with the desire that the history of China should start from him, from the period of his rule.

The concubine's story is enough for today's feminists to throw away Sun Tzu forever. The cruel incident is bound to shock anyone. Only to get a position in the "Wu" army, Sun Tzu murdered two beautiful women for being in a playful mood. He sacrificed two lives only to prove that his theories work. It was stupid on the part of the king to place 180 young ladies as the guineapigs, yet he was sensible enough to intervene at the last moment with an intention to save those two lives; but the cruel theorist succeeded in executing them with a very strong plea which even forced the king to retreat. The story is meant to undermine the woman folk as a whole. It openly indicates that the domain of warfare solely belongs to the men. Both King Ho Lu and Sun Tzu subscribed to this idea, yet they differed. The king believed that the irresponsible, playful and pretty women are by nature chaotic, ill disciplined and the concubines are bound to prove this simple truth. On the other hand Sun Tzu though had the same feeling as the king yet he believed that if treated properly they could very well be controlled and even choreographed for action.

Fear is the key is not only true to the women folk, it is also true to the men, yet in the above mentioned story it has been shown that the irresponsible and comfort-loving concubines had the

right treatment. "Women are colonised by being denied control over their own bodies" [Summers, 1975:200]. Feminists say,

We cannot completely understand any war, its causes, its paths, its consequences unless male soldier's sexual abuse of women on all sides taken seriously, described accurately, explained fully, and traced forward as well as backward in time [Enloe, 1993:240].

The cruel incident of murdering the two concubines contradicts the image of Sun Tzu which was made by such sayings as, "supreme excellence consists in breaking the enemy's resistance without fighting", or "the best thing of all is to take the enemy's country whole and intact, to shatter and destroy it is not so good" (see appendix-2 and appendix-3). The answer of this problem lies in the fact that the story about Sun Tzu and the concubines of King "Ilo Lu" is not the part of the Sun Tzu text though it is narrated colourfully in almost all the translations while mentioning his biography. There are historians and scholars who considered that the concubine's tale is fantastic and not worthy of belief among them the "Ch'ing" critic Yao Chi-heng is an influential one [Griffith, 1963:2]. He even doubted the authenticity of Sun Tzu. His doubt was based on some strong points, according to him, how a man like Sun Tzu with such dazzling military achievements could be ignored by Tso-Ch'in ming in his commentary, who was so elaborate about the affairs of Wu state.

Many scholars have carried out research with the literary works of classical periods in China. Their major objective was to confirm or more often to disprove traditional claims relating to the authenticity of the works in question. Sun Tzu's "Art of War" has also undergone such scrutiny by dozens of scholars. They are divided in their findings and opined in the following manner,

- Grand historiographer Szuma Chien's claim that the Thirteen Chapters were composed around 500 B.C is supported by very few people.

- Majority of the scholars consider that those chapters could not have been composed about 500 B.C. They were probably composed one hundred years later during the “Warring states” period (453-221 B.C.).
- A group believes that a single person did not write the thirteen chapters, they were probably fabrication of disputatious sophists of the “Warring States” period.
- One scholar believes that Sun Tzu might have lived in the Wu state or at least visited the place yet the thirteen chapters were not written by him. These were composed later on during the “Warring States” period by those who discussed military matters but somehow were attributed to him.
- Another group claims that the thirteen chapters were in fact written by “Sun Bin” a descendent of Sun Tzu but later on attributed to him.

Sun Bin and his “The Art of War”

Who was this Sun Bin and how the confusion arose? Sun Bin was born in the fourth century B.C. during the Warring states period (475-221 B.C) a time marked by continuous struggle as seven kingdoms fought to enjoy and establish hegemony over the rest of China. Sun- Bin studied the art of war from a Daoist hermit who styled himself as “Master of the Ghost valley”. He had a fellow disciple named Pang Juan, who left the master to serve as a senior general in the kingdom of “Wei”, but was always afraid of the superior ability of his former classmate. Pang Juan invited Sun Bin to the court of Wei with an evil design in his mind. Upon arrival Sun Bin was falsely implicated for an act of treachery and by the harsh justice of the day, his kneecaps were cut off and his face was tattooed. Pang Juan hoped thus to prevent Sun Bin from appearing in public or serving in the court of any foreign state. Prison wardens were ordered to keep watch on Sun Bin night and day to prevent his escape. However Sun Bin could secretly establish contact with a visiting diplomatic envoy and subsequently escaped to the kingdom of “Qi”, Wei's powerful rival to the East. There he

was introduced to General Tian Ji³, who recognised his talent and appointed him as the senior military adviser to Qi.

Later on Sun Bin defeated Pang-Juan twice in battle by adopting clever indirect approaches. In the last battle, ambushed Pang-Juan, exclaimed in frustration, "I have fallen into the trap of that lame and tattooed-faced traitor! I should have killed him before" and with that he committed suicide by cutting his throat with his own sword [Hlaichen, 1991:11]. The expression "Besiege Wei to save Zhao" remains in the Chinese military lexicon more than 2000 years after the battle of Guiling, where Pang Juan was defeated first time by Sun Bin and was taken prisoner.

China's earliest dynastic records noted a work on military art written by Sun Bin. Since it was never mentioned in later historical annals, scholars concluded that the treatise was either the same as Sun Tzu's or had been lost. However in 1972, while excavating two early Eastern Han-dynasty (206 B.C - A.D 24) tombs in Eastern China, archaeologist found Sun Bin's original "Art of War" written on more than 440 bamboo strips [Eikenberry, 1991 : 51].

What do we Mean by Sun Tzu As a Historic Person?

Samuel B. Griffith in his research drew a conclusion about the authorship of Sun Tzu's " Art of War" in an inconclusive manner. He placed Sun Tzu in the category of "authorship unsettled" [Griffith, 1963 : 12].

In 1972 a new text of Sun Tzu was uncovered in an archaeological find in Shantung province, containing not only large sections of the thirteen chapters work that has come down to the present day but also portions of five lost chapters of Sun Tzu's "Art of War". All of these materials, previously unavailable to the students of the Sun Tzu's text, were entombed as burial items

³ There is an interesting story in *The Wiles of War: 36 Military Strategies from Ancient China* that Sun Bin impressed general Tian Ji by providing him with a strategy to win a horse race. Tian Ji was very fond of horse races and often used to bate heavily with the young lords of Qi and loose. That was the first time he could win by using that simple strategy, changing the order of horses. his 3rd one with their best one, his best one with their second best and his second best with their third one raced and Tian Ji lost one race but won two.

sometimes between 140 and 118 B.C. After taking these into considerations what Roger T. Ames said in his book is very important :

There is a real danger here, however, of pursuing the wrong questions and in so doing, losing sight of what might be more important insights. We really must ask, for example; what do we mean by the Sun Tzu as a text, or even Sun Tzu as a historical person? The quest for a single text authored by one person and a pre-occupation with historical authenticity is perhaps more a problem of our own time and tradition. There is a tendency on the part of the contemporary scholars to impose anachronistically our conception of "text" and "single authorship" on the classical Chinese artifact and by doing so, to overlook the actual process whereby a text would come into being. This is a particular concern in dealing with cultures where oral transmission was a significant factor and in which authorship tended to be cumulative and corporate [Ames, 1993 : 21].

It has not only happened in the Chinese society, this tradition was there even in the western society. The most famous Greek philosopher Socrates was born in Athens in about 470 B.C. He left no writings of his own, and that we know of him, is contained in the records of his great pupil Plato, and of the historian Xenophon. The Pythagoreans also did the same but they did it to observe a rule of secrecy. This rule, together with the practice of crediting the founder of an order with any discoveries made or doctrines adopted, by its members, makes it difficult to say what elements of Pythagoreanism are due to Pythagoras himself [Vesey, 1990 : 243].

2.2 THE SUN TZU TEXT

Sun Tzu text is also not trouble free. Father J. J. M. Amiot first published his interpretation of Sun Tzu's "Art of War" in 1772 in Paris. It is claimed that a copy of Father Amiot's translation reached Napoleon and he had the opportunity to read it. But Sun Tzu's text reached the English speaking world only recently. Captain E. F. Calthrop made the first prominent English translation in 1908. It came under attack for its inadequacy from Lionel Giles a well-known Sinologist and an assistant curator of the British Museum. Giles published his own translation of Sun Tzu in 1910. Brigadier general Samuel B. Griffith of the US Marine Corps came up with his translation in 1963,

it was better than all the previous efforts. All these translations were based on the Sung Dynasty edition of the “Thirteen Chapters”.

After 1972’s archaeological discovery in Shantung province Roger T. Ames and J. H. Huang published their two translations in 1993 incorporating the lost five chapters. In the same year Ralph D. Sawyer published an anthology of military classics of ancient China where he has included a similar version of the Sun Tzu text. These new translations are based on the text which was entombed at Yin-ch’ueh-shan between 140–118 B.C. The newly discovered text is thousand years older than those on which previous translations were based. In general both the “Thirteen Chapters” are similar and additional chapters have not changed the image or the spirit of Sun Tzu we are accustomed with, they have rather reinforced them.

2.3 SUN TZU’S POPULARITY

Anatole France, the French novelist and critic once advised his fellow writers, “if you want to travel long, you must travel light”. Clarity and simplicity were the trademarks of his elegant style. France never burdened his readers with heavy and sombre treatise of wisdom. His advice was practical, with a heavy load, a traveller can’t go far, he is bound to collapse near his home. Hence, a writer must travel light if he wants to travel beyond centuries. Such an opinion is not an undisputed one yet it has been found correct in the case of Sun Tzu’s “Art of War”. The treatise has come through a long journey of two and a half thousands years passing through the hands of more than a hundred generations yet remained attractive. It was possible for the literary qualities of the treatise. War is such a serious matter that Sun Tzu referred it as the province of life or death, the road to survival or ruin, should a writer adopt a lighter method in writing a treatise on war? Sun Tzu’s “ Art of War” is not comic, simplicity, clarity and elegance are the trademarks of its literary style.

Sun Tzu adopted a methodology, which he considered appropriate for his treatise “The Art of War”. The method remains internal to the work itself. Communication is central to the

methodology in Sun Tzu's treatise. Its literary qualities survive translation, many passages use communication at the aesthetic level and the detailed precepts are stated with such simplicity that they are easy to transpose into a modern idiom. In the very first line of his treatise Sun Tzu warns us that war is a matter of life and death and it is to be taken seriously, yet poetically he kept on describing the nature of war, "all warfare is based on deception. Therefore, when capable, feign incapacity; when active, inactivity. When near, make it appear that you are far away; when far away, that you are near". These are like the last two line couplets of a Shakespearean sonnet, even detached, they keep on expressing their own meaning. Military strategy, like any other arts can be used as a source of metaphors, naturally "The Art of War" came handy to the people involved in intellectual enterprises. This seems to be the primary reason for its attraction.

People made analogy between the world of business and that of the battlefield, tension in US – Japan Trade relations have always been portrayed by the media as US – Japan Trade War. Its repeated use in the post cold war era frightened some of the realists like Lawrence Freedman that people might take it as the ultimate form of war. They immediately clarified that Trade Wars were always prelude to the genuine wars and cannot be their replacement. In the business world now a days people are increasingly turning towards militaristic phrases. Indeed, various studies relating the application of military strategies to business practices have also been undertaken, recently Ries and Trout published their *Marketing Warfare* (1986), relying on the works of the German general Karl von Clausewitz. Similarly, seventeenth century Japanese warrior-strategist Miyamoto Musashi's *A Book of Five Rings* has been translated by Victor Harris and being used as a text book in the Harvard Business School. Wee Chow Hou et al, in *Sun Tzu : War and Management – Application to strategic management and thinking* (1991), proposed that the achievement of Sun Tzu's *Art of War* transcends the military context and offers the basis for an insight into the nature of modern business practices. Foo Check Teck and Peter Hugh Grinyer in their *Sun Tzu On Management : The Art of War in Contemporary Business Strategy* (1995) have tried to relate metaphorically relevant segments of Sun Tzu's "Art of War" in presenting the insights gained from an empirically based, large scale study of strategic planning. It seems that Japan's emergence as an economic superpower and militarization of her business practices has turned the ancient military treatise into textbooks in different business schools. Is it so that the original purpose of this treatise

has been lost? Sun Tzu's "Art of War" is no longer relevant in teaching warfare? Can war be learned from a book?

Plato once said, "books are like statues, they look alive but if you ask them a question, they do not answer; in fact they are dead". Socrates never wrote a book, we only know him and his teachings through his disciples (mentioned in the previous section). At the same time Pythagoreans also never relied on books. They did it not only for secrecy but also for their belief that it is a dead method of transmitting their wisdom. Texts were oral in that society, transmitted from the master to the disciple usually following a live dialectical method. On the other hand war is an art but an art, wholly of execution. According to Foch, in war, a fact has priority over an idea, action over talk, execution over theory. When war is a truly unlimited ground and books have such limitations, the idea of learning the art of war from a book, that too written about two and a half thousand years back seems puzzling. Yet people did not remain confined to the saying that war can only be taught through war. They tried to learn it during the peacetime and in that effort with many other things they also used and abused books and in that process military treatise came handy.

Ruses and stratagems in their negative connotations became the trademarks of the Orient. Their prominence in the West has varied throughout history in relation to the influence of chivalry and of advocates of direct use of force. The western military tradition typically emphasises heroic action compatible with concepts of honour (e.g., direct confrontation, superior numbers, and firepower). Under the intoxicating influence of the Orientalism, many scholars were drawn towards the oldest Oriental treatise on war. What inspired Father J. J. M. Amiot to translate the oldest military treatise of the world, Sun Tzu's "Art of War" and publish it in Paris in 1772. It had happened during a period when the imagination of French artists, intellectual, and craftsmen had been significantly influenced by the newly discovered and exciting world of Chinese arts and letters. This sort of romanticism is another major cause of Sun Tzu's popularity in the West.

"All warfare is based on deception", is it valid today? Though defence forces are usually organised to fight a war but their primary objective is to prevent a war by deterring the enemy. Once deterrence fails defence should start functioning. Deterrence is psychological and defence is

physical. In deterrence theory communication between the enemies is an important factor, each side projects its capability to the other so that it is neither misunderstood nor undermined. In this regard any attempt to deceive the enemy may be counter-productive. Under such circumstances it seems that as if Sun Tzu's above quoted saying along with many others have lost their relevance today, but many scholars and students of strategic studies often disagree with it. Nazareth is one of them; who claims that Sun Tzu's "Art of War" deals with the principles and fundamentals of warfare, which are ageless : "The military wisdom it contains is in a highly distilled form, but it is up to date even for the conditions of modern warfare". This seems to be the main reasons why it attracts serious people like professionals involved in the business of war.

Technology is the single most important factor in all spheres of modern life and also to talk about the modern warfare. There is an intrinsic relation between technology and strategy and thus with warfare. Sun Tzu lived in the age of tools and crafts and did not see the information age. If he could have seen today's technology then would his treatise remained the same? I think much would not have also changed. Sun Tzu realised that every technology has a limit and it is the human mind, which is only limitless. He grasped that change is the unchangeable characteristics of technology. Technology is a factor of war, but the logic of technology is not the logic of war, when rationale of technology is a matter of head, war is a matter of heart and an irrational one. Hence Sun Tzu mainly worked with the divine factors and tried with his treatise to construct a mind frame for the strategists with creativity and character as the two main ingredients. Though apparently it seems that technology with its miracles outdates Sun Tzu's treatise but it remains very much valid. The main reason for the relevance of Sun Tzu's teaching is that it is based on the bedrock of military creativity. According to Marshal von Moltke, theoretical knowledge alone does not suffice in war due to its very uncertain nature, "What is required is a free, practical, artistic development of mind and will, based of course on a previous military culture and guided by experience – either by experience derived from the study of military history, or by experience acquired in the course of one's own existence. This is true for Sun Tzu's wisdom as well.

2.4 CONCLUSION

Many scholars have carried out research with the literary works of classical period in China. One of their major objective was to prove or disprove the traditional claims relating to the authenticity of the works in question. Sun Tzu's "Art of War" has also undergone such scrutiny by dozens of scholars. After going through all these scrutinise Griffith concluded his research in an inconclusive manner, he placed Sun Tzu in the category of "authorship unsettled". Sun Tzu's "Art of War" was probably composed during the "Warring States Period". Reference of a work on military art written by Sun Bin was there in China's earliest dynastic records, but nothing was mentioned about it in later historical annals, this made the scholars to believe that the treatise was the same as Sun Tzu's. However in 1972 archaeologist found Sun Bin's original "Art of War" written on more than 440 bamboo strips from two early Eastern Han dynasty tombs in Eastern China. Sun Tzu mystery was best solved by Roger T. Ames by stating, "There is a tendency on the part of the contemporary scholars to impose anachronistically our conception of "text" and "single authorship" on the classical Chinese artifact and by doing so, to overlook the actual process whereby a text would come into being. This is a particular concern in dealing with culture where oral transmission was a significant factor and in which authorship tended to be cumulative and corporate".

Sun Tzu text is also not trouble free. There are two texts. One is based on the Sung dynasty edition of the "Thirteen Chapters" and the other is based on the 1972's archaeological discovery in Shantung province. The newly discovered text is thousand years older than those on which previous translations were based and included the lost five chapters. The new discovery has not altered the image of Sun Tzu, rather reinforced it.

Sun Tzu text has travelled a long way through the hands of more than a hundred generations yet remained attractive. It was due to the literary qualities of the text. Its literary quality survives translation, many passages use communications at the aesthetic level and the detailed precepts are stated with such simplicity that they are easy to transpose into a modern idiom. Military strategy,

like any other arts can be used as a source of metaphors, naturally “The Art of War” came handy to the people in intellectual enterprises, this seems to be the main reason for its popularity.

Chapter 3

STRATEGY

- 3.1 On Strategy
- 3.2 Hierarchy of Combat
- 3.3 Abstract and Concrete planes of Strategy
- 3.4 Sun Tzu's Influence on Modern Strategic Thinking
- 3.5 Sun Tzu and the Revolutionary School - Modern Strategic Approach
- 3.6 Conclusion

Traditionally the term “strategy” had a military flavour, with the increasing complexity, many non military factors had to be included in the formulation and application of strategy, as a result it no longer remained merely a concept for warfare but an inherent element of statecraft. The chapter is divided into five sections. In the first section, under the heading, “On Strategy”, definitional problems as well as the broadening of the meaning of “strategy” has been discussed. There is no universal definition of the term “strategy”. It is being used broadly to describe the use of available resources to gain any objective, from winning at games to selling soap.

The second section, “Hierarchy of Combat” deals with the relations of the different levels of combat and war. To have an understanding of the levels of war one has to know the “hierarchy of combat”. Tactics is fighting and strategy is planning where and how to fight. Again strategy and tactics are actions at different levels, but they mutually permeate each other in space and time. The same action may be both strategic and tactical. On the other hand policy in the usual sense is the level of overall national strategy, decided by those who command generals, combining political, social and economic objectives with military priorities. Also hierarchical in nature is a threefold conceptual division of the process of waging war, namely tactical, operational and strategic.

The third section, “Abstract and Concrete Planes of Strategy”, explains the relationship of the abstract and concrete planes. Strategy occupies two distinctive but inter related planes, one

abstract and the other concrete. The former is peopled with strategic philosophers and theorist, the latter with practical planners. To some people one is the sanctuary of the civilians and the other is practitioner's domain, which is usually occupied by the military persons. Such a division seems too simplistic. Who occupies what, is not of much importance; the important thing is to realise the relation of the abstract and concrete planes. It may be defined as intrinsic. Sometime the creative thinkers may impress the doers, again the creative doers may also ignite the imagination of the thinkers.

The fourth section with the title "Sun Tzu's Influence on Modern Strategic Thinking" explains the limits of the modern strategic thinking. The Western Capitalist System by its constant domination gradually absorbed other systems which were functional at different corners of the world. This domination had a wide embracing effect all over the world. In the field of strategy, the Western strategic thought became dominant. Western ways of war is heavily technology dependent. Reliance on superior technology usually to compensate inferior numbers became the foundation of modern Western military thought. Today every nation-state wants to procure advance military technology, failure to do is bound to be fatal. This has forced everybody to be West bound and the process has forced them to abandon everything else. To be a modern thinker, everyone keeps on looking towards the West, such a dependency has transformed the Western strategic thought and made it hegemonic.

Though Sun Tzu's "Art of War" is the oldest military treatise of the world, it only reached the West in 1772. A Jesuit missionary, Father J. J. M. Amiot who was assigned to Beijing published his interpretations in that year in Paris. It is claimed that young Napoleon read this treatise at that time. It is embarrassing to say that either Napoleon failed to grasp Sun Tzu or Sun Tzu failed to impress Napoleon. We do not find any trace of Sun Tzu's influence either on the Napoleonic warfare or in the writings of Jomini and Clausewitz which were mainly based on the Napoleonic exploits. It was Liddel Hart, who created the "Sun Tzu craze" amongst the students of strategic studies during the post World War period. He did it at the beginning of the cold war not from the

urge to know the enemies of the coming shooting wars in East and South East Asia but from the sincere desire to bring a qualitative change in the Western strategic thought.

The fifth section, “Sun Tzu and the Revolutionary School – Modern Strategic Approach” shows the impact of Sun Tzu’s teachings mainly on the unconventional revolutionary school. “Continental, maritime and aerospace” schools of modern strategic approach are conventional; only the “revolutionary” school is unconventional. Though the influence of Sun Tzu’s “The Art of War” on all the three conventional schools cannot be denied but the unconventional “revolutionary school” was influenced as well benefited most; its greatest proving ground was China itself, the land where the text was composed.

3.1 ON STRATEGY

Generals and Showmanship

Field Marshal Montgomery while commanding the 8th Army made it a practice not to accept hospitality from any of his subordinates. While visiting them, if necessity arose, he used to take an austere sandwich and lemonade usually sitting in his car. These plain meals were always carried from his field mess. He even did not break this routine while accompanying Prime Minister Churchill to a field tour. They were visiting the New-Zealander formation at El Alamein and a lunch was arranged by the formation commander. There, the Prime Minister was having lunch inside the mess tent but the Field Marshal as usually took his routine lunch sitting in his car parked outside the mess premises. Churchill recorded the incident in following manner :

Freyberg went out to salute him and told him his place had been kept and that he was expected to luncheon, but Monty as he was already called, had, it appeared made it a rule not to accept hospitality from any of his subordinate commanders. So he sat outside in his car eating a sandwich and drinking his lemonade with all formalities [Churchill, 1950 : 517].

The special black beret with two badges on it, the dogs named "Hitler" and "Rommel", the canaries, the unusual kit, everything of Montgomery got special publicity. The Sandwich lemonade affair had also its share and helped him to turn into a legend. But the truth behind this peculiar habit was something else. It was not a wilful act, rather an enforced one by Monty's health condition. He had a gall-bladder stone, and he did not know its existence. It was later on discovered by a radiologist named Dr. Eric Sammuell when the Field Marshal was undergoing a medical check-up immediately after an aircraft accident, where his back appeared to be injured. The gallstone was probably there for a prolonged period without causing serious trouble, but it had a continuous effect on Monty's digestive system. His Chief of Staff Major General Francis De-Guingand described, "if he eats pig, shell fish or eggs they were apt to disagree with him" [Guingand, 1964 : 97]. Naturally he had to be careful and put himself under a strict dietary restriction. Even after the discovery of the gallstone Monty could not be operated upon due to heavy commitments and the "sandwich-lemonade" affair turned a part of his conscious showmanship. Francis De-Guingand mentioned, about this side of his Commander,

Many of the things which have gained him special publicity of which the black beret, the dogs, the canaries, the unusual kit are examples came quite naturally into being. I don't say, however, that Montgomery did not subsequently see and exploit their value, in order to further his aims [Guingand, 1963 : 146].

Montgomery was a good psychologist and an intelligent commander. He covered his physical limitations behind a colourful mask and transformed weakness into strength. The act did not harm any of his subordinates, rather it was badly needed at that crucial juncture of war. Montgomery was fighting the legendary German commander Field Marshal Rommel and had to promote himself also to a legend by some showmanship.

During the Second World War the United States of America had to create a new five star rank under special circumstances. In the army this five star rank is called "General of the Army". Only five generals were promoted to this newly created rank. They were Generals George C.

Marshal, MacArthur, Eisenhower, Happy Arnold¹ and Omar Bradley. Amongst these generals, MacArthur was the most colourful, charismatic and known as the American Caesar. He was a brilliant commander and fought the three great wars of this century as a general officer. First World War as a brigadier general, Second World War as a four star and a five star general and the Korean War as a five star general. He was handsome, dashing, and eloquent.

Mac Arthur was appointed supreme commander in the South-West Pacific in 1942 and he kept on fighting the Japanese forces till they surrendered. On 2 September 1945 he received the official surrender of Japanese Foreign Minister Shigemetsu. On that day the Japanese delegation came aboard the battleship USS Missouri in Tokyo Bay to sign the surrender documents. It was a Sunday morning and the Japanese delegation of diplomats and military officers arrived at 8:55 A.M. There were the representatives of USA (General "Vinegar Joe" Stilwell, George C Kenny, Admiral "Bull" Halsey), Great Britain, China, Holland, France and the Soviet Union. All of them were in ceremonial dress. The eleven members of the Japanese delegation were also properly dressed, either in morning coats or heavily medaled military uniforms. When everybody took their places, General Mac Arthur came out of his cabin. With astonishment the distinguished audience saw Mac-Arthur was putting on a simple Khaki uniform, which he had worn throughout the war. He was with an open, tie-less collar, without medals and his five star general's cap at the usual rakish angle. He straightaway walked to the table and signed the documents with five different pens and immediately presented them to some of his friends and beloved institutes.

Mac Arthur had an incredible veneer of showmanship while he was at the same time a recluse. During the World War II he held senior command positions and rarely seen by the troops, but whenever the opportunities came, he presented himself with his style of showmanship which surrounded him with a mystic aura.

¹ Arnold was an army airforce general. Till 1947, US air force had no separate entity, it was under the army. For this historical reason US air force ranks are same as army's. Today almost all the countries of the world want to possess a US modeled army aviation without being conscious about the fact that whatever air power US army possesses has come from the dispossession of 1947.

The crux of his showmanship was a distinctive simplicity. Throughout all of World War II, he was always seen in a plain khaki uniform with an open-necked shirt and sharply pressed trousers. He wore no medals, only the rank of a four-star general, and his rakish hat with the gold braid on the bill. Other than this, his only accoutrements were a corn-cob pipe and a bamboo swagger stick. On other occasions, he smoked cigarettes in a uptilt position in a long black cigarette holder, swinging a brown, curve-handle cane. [*Puryear, 1971* : 141].

There were many other generals who considered showmanship as an important factor in commanding troops. General Patton was an extraordinarily well-dressed officer, who used to check the uniforms of his troops whether they were properly pressed or not even in the battlefield. With this sort of showmanship, bold and gallant actions he has shaken the European Theatre and died in an auto-crash in Germany just after the end of the war. General Omar N. Bradley led simpler life than Mac-Arthur and Patton, yet he had also his brand of showmanship. While commanding armies in Europe he always carried a rifle in his hand as a personal weapon to impress his under-command troops. After the war President Truman promoted him to a five-star-general. All these people were leaders in uniform and they had to inspire their troops in making the supreme sacrifice and they believed that showmanship helped them a lot in this regard.

It was also showmanship, which prompted Field-Marshal Wavell to generate a debate whether to a general tactics is more important than strategy. He answered the question in the following manner,

I hold that tactics, the art of handling troops on the battlefield is and always will be a more difficult and more important part of the general's task than strategy, the art of bringing forces to the battlefield in a favourable position. A homely analogy can be made from contract bridge. The calling is strategy, the play of the hand tactics. I imagine that all experienced card-players will agree that the latter is the more difficult part of the game, and gives more scopes for the skill of the good player. Calling is to a certain degree mechanical and subject to conventions. So is strategy, the main principles of which are simple and easy to grasp... But in the end it is the result of manner in which the cards are played or the battle is fought that is put-down on the score sheets or in the pages of history. Therefore I rate the skilful tactician above the skilful strategist, especially him who plays the bad cards well [Wavell, 1953 : 47].

Wavell was rated one of Britain's top generals at the outbreak of World War II. No doubt he was a soldier-intellectual. As a subaltern he made an unusual move to take a year's leave of absence to live in Moscow and study Russian. He wrote quite a few books while serving in the Army. After the Second World War when many of his contemporary generals published books under their own names with the help of ghost-writers, none doubted the intellectual ability of Wavell². He also had the pedigree, his father, grandfather, and great-grand father all had been major-generals. Yet he misperceived the division of labour between a strategist and a tactician. Well, there is a problem with a strategist, if he is a military person, he is first a tactician then a strategist. On the other hand if he is a civilian, he is a strategist without ever having been a tactician and is not bound by ties to a service or to a services position [Killebrew, 1984 : 47]. Due to the pyramid like structure of the military organisations very few tacticians can proceed to a strategist's position.

Again many of those lucky few who can reach that position are unable to elevate themselves to a genuine strategist. This is natural, because their formative years and major portion of the service is spent at lower ranks in a tactician's position and the flavour of that life has a fixation on their personality. Wavell did not belong to this group, from the birth he was an aristocrat and an elite, not a commoner. His distinguished performances as a soldier repeatedly proved that fact, yet he tried to be with the commoners in his expression about the importance of tactics over strategy. Everybody likes to see his work important, and majorities of the military commanders are tacticians. Wavell wanted to be with the majority by claiming that their work is more important than the minority, the strategist. It was a different kind of showmanship, not a physical one like Montgomery or Mac Arthur, it was an intellectual one, aimed towards the leaders at lower level. However, the one fatal mistake Wavell made in his military career involved an error in strategic judgement. In the early part of 1941, only one year before he wrote the passage quoted above he gave his military approval to the British expedition to Greece and committed a considerable portion of his forces to it, without having first disposed of Rommel in the desert.

² Wavell is the author of *Allenby: A study in Greatness* (1940), *General and Generalship* (1941), *Allenby in Egypt* (1943), *Generally Speaking* (1946), and *The Good Soldier* (1948). He also had a book of poems named *Other Men's*

When the German airborne forces sealed the fate of Crete, evacuation of British forces began but only 15,000 could be rescued, 13,000 British and 5,000 Greek soldiers were left behind. During this evacuation, the German Afrika-Korps in the Western desert under General Rommel was being strengthened and launched the offensive. Within months Rommel captured most of the territory taken in Wavell's first campaign. Churchill blamed Wavell for the defeat and on 21 June 1941 he was removed from his Middle East Command and was appointed Commander in Chief of the British forces in India.

Wavell's claim that tactics is more important for a general than strategy is an unnecessary one. Both tactics and strategy are important in a war but their concern varies from level to level. In fact Wavell, while making the comment could not overcome the level of analysis problem.

Unnecessary Conclusions & Strategy

It was not only Wavell who made an unnecessary conclusion about strategy. There were other people who also made comments of similar nature, some of these are,

"Because of certain recent developments strategy was gaining in importance at the expense of tactics". [Brodie, 1959 : 12]

The systematic study of strategy and long range planning, with its overtones of "book soldiering", has never caught on. The US military tradition has been to emphasise the doer, not the thinker; the operator not the planner. "Any damn fool can make a plan" the saying goes, "the problem is in execution". [Killebrew, 1984 : 46]

"Twentieth century experience further reinforced the belief that industrial production, rather than skill at strategy, determined national security". [Metz, 1984 : 13]

"The limited war military strategies of the Vietnam era were written by civilian academics and strategists." [Killebrew, 1984 : 45]

"In the wake of the First World War, war was seen as too important to leave it to generals, and it was taken over by the politicians. They having done little better in the Second World War, left the field to the academics". [Mec Gwire, 1985 : 55].

"The Democratic Rule : Everyone strategist and the Colonial Rule : Teach tactics only, especially Kamikaze tactics, make strategy, and indeed the very idea of strategy, a secret never to be revealed." [Wilden, 1987 : 237]

Above conclusions and comments generate interest in our mind to know the meaning of strategy, its relation with tactics and policy.

Widening of the Term "Strategy"

The term strategy is of Greek origin and had a grandiose meaning. In ancient Greece 'Strategos' meant a general. The word 'Strategy' derives from 'Strategia' which meant the 'art of a general'. Though originally the term 'strategy' only concerned art of land warfare conducted by generals but gradually it widened itself to accommodate admirals with their art of naval warfare and finally air marshals with air warfare. It is interesting to note that although the mankind had been fighting on, in and over the water almost as long as they had on land but it took time to develop a distinct form of the naval warfare, until then they were conducted like land warfare. On the other hand, though the French Aero-static Corp. was raised in the late 18th century, in true sense the third dimension of warfare only became distinct since the First World War. Hence, the addition of the art of air-marshals was a twentieth century addition to the meaning of the term strategy.

Traditionally the term 'strategy' had a military flavour, with the passage of time and various developments in socio-political field its meaning has undergone a transformation and now a days it stands for something much more than the management of troops in the battlefield. With the increasing complexity, it became necessary to include non-military factors such as political,

economic, technological, social, psychological and moral aspects in the formulation and application of strategy. "As a result, strategy is no longer merely a concept for warfare but an inherent element of state craft" [Sude, 1993 : 2573].

Since Clausewitz, the concept of strategy has developed in three respects. In its first extension, the concept of strategy went beyond the use of armed violence to cover the whole arsenal of means of policy, including the political, economic, ideological, and techno-scientific. It has been already discussed how the strategy of warfare has been transformed into the strategy of war. In its second extension, the concept of strategy has gone beyond war to include military activity in peacetime. The third development of the concept which, however, is not very widely accepted has introduced an extension of both the means and the ends : strategy has sometimes been defined as the use of the entire state power for attaining the whole of its political goals[Lider, 1983 : 193].

It is a fact that the concept of 'strategy' has proven notoriously difficult to define. It is easy to find out the origin of the word and its denotation, it is also comparatively easier to discover the widening of the term by studying the evolution of warfare and society, but it is really difficult to define the term in few sentences. There is no universal definition or even approximation of a consensus. 'To-day the term "strategy" is used altogether too loosely. Some call a line drawn on a map a strategy. Others believe a laundry list of national objectives represents a strategy' [Lykke Jr., 1989:3]. In fact, now a days the term is "generally used to describe the use of available resources to gain any objective, from winning at bridge to selling soap" [Howard, 1983:36]. In its glossary of military terms, the U.S. Army war college lists eight definitions of military strategy only. During a visit to the US Army war college in 1981, General Maxwell D. Taylor characterised strategy as consisting of objectives, ways and means. The relation between them may be shown in an equation,

$$\text{Strategy} = \text{Ends} + \text{Ways} + \text{Means}$$

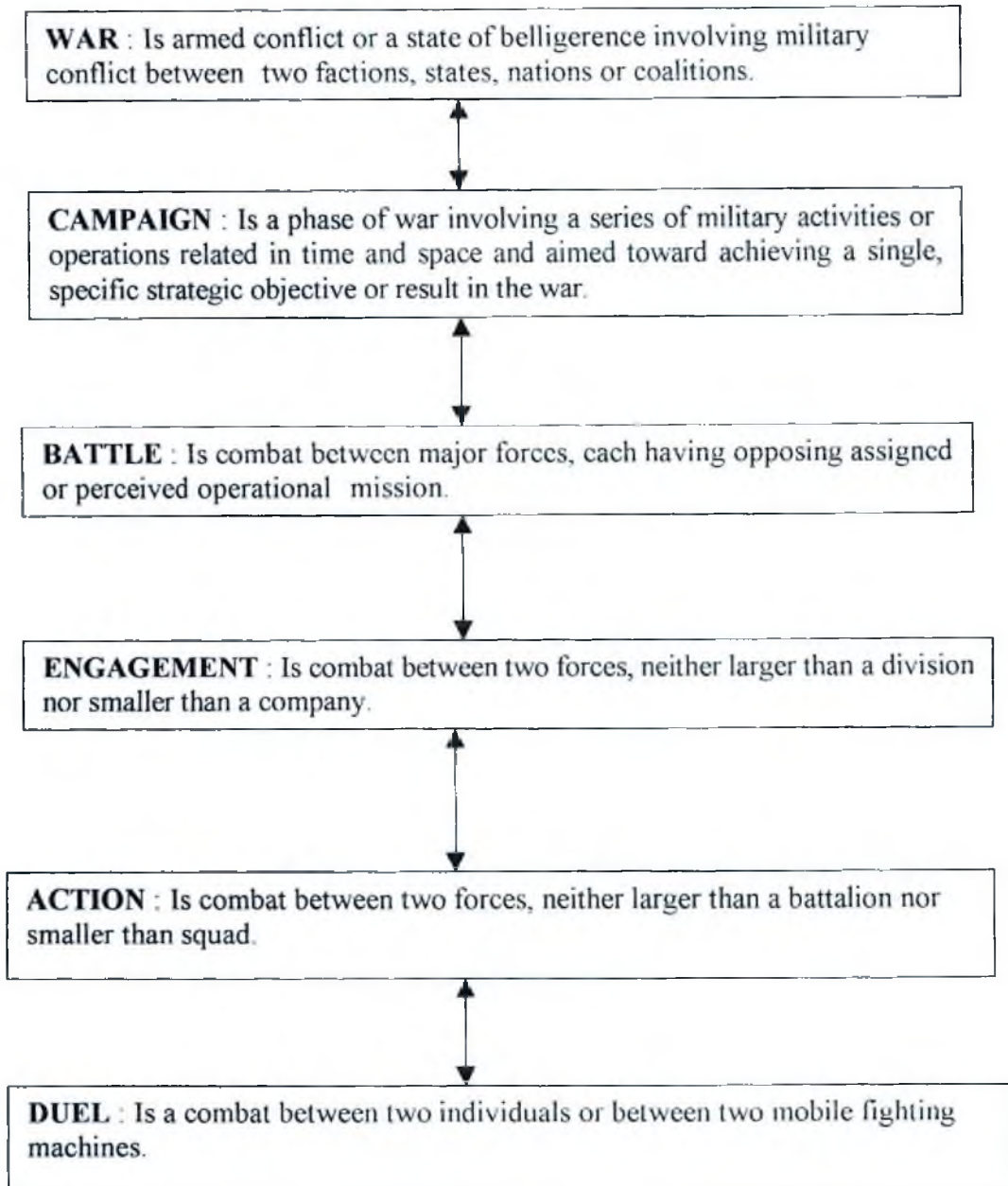
It is claimed that this general concept can be used as a basis for the formulation of any type of strategy, military, political, economic and so forth, depending upon the element of national power employed [Lykke Jr., 1989:3]. Turning complete definitions into an all-encompassing mathematical formula is nothing but a positivist expression.

Gertmann Sude's definition seems logical where it is claimed that the term strategy has a general meaning : the design and implementation of a concept for the co-ordinate employment of resources to attain certain objectives. Only when modified by an adjective does the term assume a specific meaning (e.g., *Grand Strategy*, *Security Policy Strategy*, *Foreign Policy Strategy*, *Economic Strategy*, *Military Strategy* etc.).

3.2 HIERARCHY OF COMBAT

Things will be easier for us if we can use hierarchy of combat to relate all aspects of war from the highest of governments to the lowest details of tactical combat. The hierarchy of combat is in the following order; war – campaign – battle – engagement – action – duel.

Figure 3.1
Hierarchy of Combat



Source : Composed from Bongard, 1993 : 1171 - 1172

Tactics, Strategy and Policy

Tactics is the science and art of manoeuvring troops, ships, or aircraft on a battlefield in preparation for, and in the conduct of combat. It is the detailed means for carrying out the directions set for a military force by the strategy to which it is bound. A general's strategy may require a division to capture a town. The divisional commander makes the tactical decisions such as which battalion to send by which route to take which intermediate point and how to support them with armour and artillery [Robertson, 1987:301] The term "tactics" is only definable in the defence context in contrast to "strategy".

A T Mahan proposed a distinction between tactics and strategy, the fact of "contact". Tactics thus refers to the localised hostilities that occur where opponents are in contact, whereas strategy refers to the basic dispositions of strengths that constitute the entire conduct of a campaign or a war. One can say in laymen that tactics is fighting and strategy is planning where and how to fight [Brodie, 1959 : 281].

Strategy and tactics are actions at different levels, but as Clausewitz says, they "mutually permeate each other in space and time. The same action may be both strategic and tactical. Strategy without tactics is imaginary; tactics without strategy is impossible". [Wilden, 1987 : 237]

Policy in the usual sense is the level of overall national strategy, decided on by those who command the generals, combining political, social and economic objectives with military priorities. It includes the creation and maintenance of alliances and the organisation and protection of the natural resources, the technology, the productive capacity and the personnel required to fight the war. Clausewitz's "On War" has been analysed and interpreted by a wide spectrum of scholars. Majority of them would probably agree that he made the following major points concerning policy making:

- War is a political act executed as an extension of a national policy.
- War strategy is conducted according to a central plan to achieve a specific policy, that is, political objective.
- The plan is based on an objective, which is attainable by given physical and moral capabilities of the state.

Clausewitz saw the role of the 'Cabinet', that is, the political leadership as forming national policy and providing political guidance. He considered that war is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means [Howard, 1976 (1984) : 87].

Tactics, then, is subordinate to strategy; strategy is subordinate to policy and policy is a political determination. Tactics adjusts itself with needs of strategy and on the other hand strategy adjusts with the policy, but the policy remain steady as political determinants.

Levels of War

Also hierarchical in nature is a threefold conceptual division of the process of waging war, namely tactical, operational and strategic. We have already examined the relation between tactics and strategy but to examine the location of operations in that relation we will go through the brief definitions again. Tactics, as distinct from operation or strategy, may be defined as the technique of deploying and directing military forces - troops, ships or aircraft or combinations of these and their immediate supporting elements in co-ordinated combat activities against the enemy in order to attain the objective designated by strategy or operations. The combat operations of units smaller than divisions are usually considered tactical in nature.

Strategy, in its broadest sense (national strategy), is the planning and management of a nation's total available resources - economic, social, political and military in order to achieve the goals of national policy, and in war time, to maximise the chances of victory. In a narrower military sense, strategy is the art and science of planning and directing military movements and activities so as to achieve victory or, in the words of Clausewitz, "the use of engagement to attain the object of war". Properly used, then, the term "strategic" should apply only to the broader goals of war and describes the activities of entire national armed forces.

"Though Clausewitz sometimes reached the conclusion that there should be a third military level between strategy and tactics, but he did not define a new one below strategy. There, with him strategy remained connected upward with policy and downward with tactics"[Sude,1993 :2575]. The operational level is an intermediate category of military activity between strategy and tactics. The concept is yet win universal acceptance amongst the military circles. It was originally developed by the Germans during the First World War. They saw operations as a lower level of strategy pertaining to the activities of large ground forces, usually armies or army groups, in a discrete theatre. Later on the Soviets adopted this concept, modifying and applying it to the activities of armies and army group. They called it "Operational Art" [Wardak, 1989 : 86]. The United States Army adopted a concept similar to that of Soviets in 1982. "The combat activities of divisions, corps, armies, and army groups are operational, and the operational level of war, therefore, covers large scale battles and campaigns" [Bongard, 1993 : 1172].

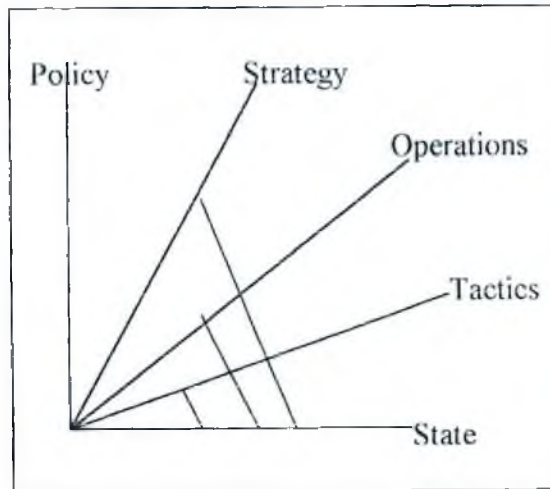
Figure 3.2
Three Levels of War

Strategic Level	Upper end of the military strategy at the national capital.
Operational Level	Lower end of the strategy at the discreet theatre level.
Tactical Level	Combat operations of units below divisional level.

Source : Composed from Bongard, 1993 : 1172 - 1173

The military commander has a voice in the formulation of policy by placing demands on a nation's military power.

Figure 3.3
Relation amongst Policy, Strategy, Operations and Tactics



Tactics is subordinate to operations, which is also subordinate to strategy and the policy stands on top of them all. Tactics adjusts itself with the needs of operations and operations in turn adjust with the strategy, where as strategy places itself within the limits of policy and policy remains steady as the political determinants.

3.3 ABSTRACT AND CONCRETE PLANES OF STRATEGY

Strategy occupies two distinctive but inter-related planes, one abstract, the other concrete. The former is peopled with strategic philosophers and theorists, the later with practical planners [Collins, 1973:14]. Some students of strategic studies make plain divisions like “strategic thinking” and “strategic studies”. They consider that strategic thinking usually gives the practitioner's perspective in contrast to its academic counterpart, applied for strategic studies. According to them the distinction is required due to the divergence between the practitioner or actual strategist who are usually military persons and academic strategist who are usually civilians. They of course acknowledge that there are exception to this simple division, in some cases both converge in one person. Henry Kissinger is the most prominent example of this type [Khan, 1984 : 117].

Dividing the planes, on the basis whether the strategist is a civilian or a military person seems to be too simple and unsound. According to this division Sun Tzu will fall into the planes of “strategic thinking” with his "Art of War" since he was a general in the army of king “Ho Lu” of “Wu” state; on the other hand Machiavelli with his "Art of War"³ will fall into the plane of “strategic studies” since he was a chancellery official, a civil servant in the Italian City state of Florence. What about Napoleon, he brought revolutionary changes in the 19th century warfare yet did not leave behind a treatise on war, his "maxims" is nothing but a collection of his instructions, letters and sayings gathered by someone else. "He never wrote a comprehensive account of his ideas on war" [Paret, 1986:123]. On the other hand both Jomini⁴ and Clausewitz wrote their treatise "Precis de l'art de la guerre" and "Vom Kriege (On War)" basing on the Napoleonic warfare. Napoleon was a great captain, a creative doer not a theorist; whereas both Jomini and Clausewitz were generals yet not great captains but theorists. They brought changes in the philosophy of war, ideas of war. Should we place Napoleon in the plane of “strategic thinking” and both Jomini and

³ Machiavelli is best known for his realist text *The Prince* but he also had *The Art of War* in his credit.

⁴ Antoine Henri Jomini in his *Precis* advanced his belief that war was governed by immutable principles. He was convinced that war was a rational act.

Clausewitz in the “strategic studies”? Or Jomini and Clausewitz to the domain of “strategic thinking” since they were military personnel?

There is a reason behind this sort of things; in the past either a king, a prince, a minister or someone close to the rulers family used to become the military commander. Hence, maximum of the great captains came from the aristocrats till the age of professionalism arrived. These aristocrats remained so busy with their commands, they had neither time nor the scholarship to write treatise on war. They were never known as a society of scholars. It was only Marshal de Saxe an aristocrat who wrote his "Rivieries upon the Art of War" in his youth, during a period of illness when he could do nothing else, and did not write anything in his later life [Brodie, 1968:282].

If General Donn A. Starry's brainchild is the doctrine of "Air-land Operations", general Collin Powel as well as general Norman Schwartzkoff materialised it in the Gulf War. Again, civilians Alvin and Heidi Tofflers brain child the “Third Wave warfare” will be materialised in future by a different brand of professionals. It is not the question of civilian strategist or military strategist, it is the relation between the abstract and concrete planes of strategy. Their relation may also be defined as intrinsic. With their insight and reflection strategists belong to the abstract plane may contribute something which will be followed by those who belonged to the concrete planes. Again the creative doers of the concrete planes may inspire those of the abstract planes. I mean the input may come from the abstract plane to concrete plane or vice versa. Sun Tzu's "Art of War" is the first treatise on war. Sun Tzu not only falls in the abstract plane of strategy, he is one of the founder father of the tradition, though he might have lived in the concrete plane.

3.4 SUN TZU'S INFLUENCE ON MODERN STRATEGIC THINKING

Modern World System & Strategic Thinking

Pauline Marie Rosenau in her book, *Post-modernism and the Social Sciences : In sights, In roads and Intrusions* has elaborately discussed the post modernism and its impact on the social sciences. Discussion of post-modernism without reference to the modernism is almost impossible, hence there was an effort to identify the modern age. We are informed that there is a debate amongst the post-modernists, whether the post-modern era can be clearly differentiated from the modern era or one overlaps the other. It is almost agreed that the modern era starts from the 15th century and lasted upto the last of the 1960s; but it is debated whether the post-modern era started only three decades earlier or not. Some of the post-modernists claim that post-modernism started 150 years back , on the other hand most of them agreed that it has come up as a revolt against modernism only in the late 1960s and early 1970. [Rosenau, 1992 : 3].

According to Immanuel Wallerstein the capitalist world economy emerged from Europe out of a crisis of feudalism which occurred between 1300 and 1450 A.D. He claims that the growth of the modern world system has occurred in four stages; the first stage continued from 1450 to 1600. During this period the European world economy rises and survives the attempt of Charles V to turn it into a world empire. The capitalist world economy had relations with other world systems, such as Ottoman and Russian world empires and the Indian Ocean world economy. It was the growth of agricultural capitalism. The second stage continued from 1600 to 1750. During this period there was a recession in the world economy and a struggle within the core, seen in mercantilism. The third stage from 1750-1917 can be identified as the age of industrial capitalism, which was both a sign and cause of England becoming dominant in the core. At this stage the whole world was incorporated, including the Russian world system and in the nineteenth century Asian and Africans systems. The fourth stage has begun from 1917 with the consolidation of the industrial capitalist

economy. In the process USA has replaced Great Britain as the prime core during the period 1945-65 [Pearson, 1988 : 14]

Wallerstein's growth of modern world system shows how the Western capitalist system came out of Europe and by its constant domination gradually absorbed other systems which were functional at different corners of the world. This domination had a wide embracing effect all over the world. In the field of strategy, the Western strategic thought became dominant. Western way of war is heavily technology dependent. Reliance on superior technology usually to compensate for inferior numbers became the foundation of western military strategy. Today every nation wants to procure military technology; the failure to do so can be fatal. This has forced everybody to be West bound, losing their own ways. To be a modern thinker everyone keeps looking towards the West thus the Western strategic thought became hegemonic and of late "strategic studies" turned an English speaking discipline [Klein, 1994 : 27]

Jesuit Missionary & The Art of War

Although Sun Tzu's "Art of War" is the oldest military treatise in the world, it only came to the notice of the West in 1772. A Jesuit missionary, Father J.J.M. Amiot, who was assigned to Beijing, published his interpretations of "The Art of War" in Paris that year and first brought it to the attention of the Western World. What made a missionary like a father Amiot to proceed in translating a Chinese treatise of War? Probably it was the "China-Craze" amongst the French intellectuals of that time motivated him. It was "a period during which the imagination of French artists, intellectuals and craftsman had been significantly influenced by the newly discovered and exciting world of Chinese arts and letters"[Griffith, 1963 : X]. Probably Napoleon read the treatise at that time

Even if young Napoleon had an opportunity to read Sun Tzu's "Art of War", probably he read it casually as a fashion of the day. It is embarrassing to claim that Sun Tzu failed to impress Napoleon or that the later had failed to grasp Sun Tzu. Contributions of Napoleon in bringing

revolutionary changes in warfare are un-deniable, but these contributions were mainly of practical nature. Like all other great captains, he also failed to produce something theoretical out of his valuable practical experiences. However, Jomini and Clausewitz's theoretical exploits are mainly based on the practical Napoleonic exploits. And there is neither evidence nor any indication in the written works of these people that they were ever influenced by Sun Tzu.

Liddel Hart gave a suitable explanation of the situation. According to him the summary translation of Sun Tzu's "Art of War" by the French missionary was introduced to the West shortly before the French Revolution and

Although it appealed to the rational trend of eighteenth century thinking about war, its promise of influence was swamped by the emotional surge of the revolution and the subsequent intoxicating effect of Napoleon's victories over conventional opponents and their too formalised tactics. Clausewitz began his thinking under the influence of that intoxication, and died before he could complete the revision of his work, so that this lay open to the "endless mis-conceptions", he had foreseen in his testamentary note. By the time later translations of Sun Tzu were produced in the West, the military world was under the sway of Clausewitz extremists, and the voice of the Chinese sage had little echo [Griffith, 1963 : vi].

Carl Von Clausewitz's (1780-1831) soldier life was mostly influenced by the Napoleonic campaigns and expeditions. He was a military theorist and his treatise, "On War" is of immense importance and is considered the "central sun" of the Western strategic thought.

Although Sun Tzu was first introduced to the West by Father Amiot amidst a "China-craze" but it was Liddel Hart who created a "Sun Tzu craze" amongst the students of strategic studies in the post-world war period. During the Second World War, Liddel Hart suggested the Chinese military attaché that one little book of Sun Tzu contained almost as much about the fundamentals of strategy and tactics he had covered in more than twenty books. After the Second World War when this suggestion became public, Western scholars had to pay their attention. With such a strong testimonial from Liddel Hart, Sun Tzu not only infiltrated into the discipline of "strategic studies" but also secured a rightful high position.

Interactions of Pole apart Mentalities

In early 1943 a two-word formula was produced at the Casablanca meeting between President Roosevelt and Prime Minister Churchill. It was a condition set to end the Second World War. According to Liddel Hart, though this two-word formula looked neat and simple but it made things really complicated. It prolonged the war, increased the loss of lives and jeopardised the chances of Europe's recovery. What was that formula, which became indirectly responsible for the undue exhaustion of Britain and emergence of USSR as the most influential power on the continent and gravely weakened the countries of the Western Europe. It was "US" the abbreviated form of "unconditional surrender" [Liddel Hart, 1950:52]. The term set by the allied forces evaporated all hopes and the Germans fought out of desperation. The situation not only ensured the destruction of Germany but also exhausted Britain and other West European powers and allowed USSR to surface as the most powerful in Europe.

Liddel Hart blamed that the unfortunate situation occurred due to the over-whelming influence of Clausewitzian spirit on the Western strategic thought. According to him influence of Sun Tzu could have saved the situation.

"Destruction of the enemy forces is the over riding principles of war, and so far positive action is concerned the principal way to achieve our object. Such destruction of forces can usually be accomplished only by fighting"- Clausewitz.

"The best thing of all is to take the enemy's country whole and intact, to shatter and destroy it is not so good, so, too it is better to capture an army entire than to destroy it, to capture a regiment, a detachment or a company entire than to destroy them" - Sun Tzu.

Above quoted views of these two thinkers reflect characteristical perceptual differences of the East and the West (see appendix 2 and appendix 3). At the beginning of the Cold War Liddel Hart

could very well foresee the coming Asian shooting wars. His involvement in the study of Sun Tzu was not solely motivated by the necessity to know the enemies of East and Southeast Asia. Rather it was motivated by a sincere desire to share the wisdom of Sun Tzu with the West to enrich the Western strategic thought. His aim was to bring basic qualitative changes in the Western strategic and military thinking.

Many scholars thought that the change was essential, because they hold that Clausewitz's theories of absolute war and war as a viable tool of national policy is almost obsolete. They feel that it is incongruous with today's Western strategy of preservation of peace and the policy of containment of conflicts. Technically also it will not be feasible to materialise them. In a nuclear age the tendency toward the last resort, which according to Clausewitz is inherent in war, is said to be inconsistent with any sensible political objective [Hlobe, 1981:57].

Western hegemonic powers have spent half of this century fighting wars in East and South East Asia. Americans with their western allies fought against the Chinese communists, Japan, Korea and Vietnam; there they encountered enemies who were directly or indirectly influenced by Sun Tzu. In fact their strategies had encountered strategies influenced by the Chinese lineage headed by Sun Tzu and ended by general Giap. Human beings learn quickly from their enemies, hence the West also practically learned from all those costly experiences of conflict. These lessons have profoundly influenced their modern strategic thinking. Its greatest proof is the last Gulf War where Clausewitzian U.S. military commanders wanted to chase retreating Iraqi military forces even within Iraq with an intention to destroy them but the political leadership prevented the action. Though at first the decision generated tension between the military commander in the field and President Bush but later on it was found to be appropriate. In making the decision the political authority was obviously influenced by the wisdom of Sun Tzu. For information, President Bush is the only President of USA who had the rare opportunity of living in China for thirteen months. He served as the head of the US liaison office in Beijing. There is nothing wrong if he has enlightened himself with Sun Tzu's wisdom, "there has never been a protracted warfare from which a country has benefited. Generally in war the best policy is to take a state intact, to ruin it is inferior to this".

3.5 SUN TZU AND THE REVOLUTIONARY SCHOOL – MODERN STRATEGIC APPROACH.

Different Schools – Modern Strategic Approach

There are three conventional and one unconventional schools of military thought. The three conventional schools are continental, maritime and aerospace schools⁵. There are considerable overlaps amongst them. All the three schools for example ultimately depend on land bases, but even so the adherence of each customarily think in terms of geographically different environments and consequently they assail strategic problems in sharply different ways [Collins, 1973 : 100]. The fourth school is unconventional in character, it has cropped up in the recent past and been expounded by people like Marx, Lenin, Mao Ze Dong, Ho Chi Minh, Che-Guevara and Giap. When land, naval and air warfare are mainly military, at that time revolutionary war is primarily political, social and psychological. It exploits the indirect approach and cumulative strategies, rather than sequential ones. Revolutions rarely produce any such thing as Clausewitzian grand battles. Dien-Bien Phu, general Giap's 1968 Tet offensive⁶ and Hanoi's invasion of South Vietnam in 1975 were exceptions that prove the rule. Territory is not much of importance here, it is the people's mind which is considered the main battleground.

⁵ Continental school is the land-power proponent, they consider land forces to be the central in war, navy and air force exist only to transport them to the place of action. On the other hand maritime school thinks that powerful navies only have global reach and control of the seven seas, they decide the issues ashore. Aerospace school believes air power alone is enough, supporting ground forces is their secondary task.

Nature of Revolutionary Warfare

We often confuse revolutionary war with guerrilla warfare. It happens since revolutionary war includes guerrilla warfare. But the guerrilla tactics of hit and run, avoiding costly pitched battles, eluding enemy pursuit by hiding in the hills, in forests or among the populace, are simply one means of carrying out revolutionary wars. Others range from non-violent political mobilisation of people, legal political action, strikes, agitation, and terrorism, to large scale battles and conventional military operations. Guerrilla operations on the other hand may have no revolutionary aim. The most important aspect of the definition of revolutionary war is the existence of revolutionary objective, the specific means to be employed in that war is a secondary matter.

Revolutionary war is not an international war or a war between nations. Revolutionary war usually occurs within a nation-state, and has as its aim the seizure of state power. But things do not remain so simple, more often than not one or several "foreign" powers intervene in a revolutionary war, changing its course and often its outcome. A group of theorists argue that revolutionary war has flourished in the nuclear age precisely because new weapons have made war between great military powers impossible or too dangerous. Subsequent arguments are that the great powers, ponderously armed for a big war, have left themselves vulnerable to the tactics of revolutionary war [Shy, 1986 : 817].

Sun Tzu's Influence

Contrary to the argument that modern concept of revolutionary war has appeared recently, students of Asian cultures have argued that more than two millennia ago Sun Tzu formulated the strategic principles of revolutionary warfare by uttering "attack weakness, avoid strength, be patient". While examining Mao Ze Dong's "strategy of protracted people's war", we find how these

⁶ Tet offensive was an all out assault launched on the South Vietnamese cities in 1968 by North Vietnam. Militarily the offensive proved disastrous for the North Vietnamese army as well as Vietcong guerrillas.

wisdom of Sun Tzu has influenced his thought. Mao diverged in other respects as well, especially in the values given to “time and space”. In the Western tradition, epitomised by Napoleon, military victory was to be achieved quickly, and the seizure or defence of territory was central to the very purpose of warfare. For Mao, long without the means either to seize and hold territory or to win a quick victory, space and time became weapons rather than goals. "Protracted struggle" promised to exhaust the enemy, if not militarily than at best politically, as he failed to achieve the quick victory demanded by the Western tradition. Similarly, trying to hold territory could be suicidal for guerrilla forces, but by operating in vast or difficult terrain, better known to them than to their enemy, they could entice, mislead and wear him down, creating chances for surprise attacks. These were key Maoist ideas centring on politics, time and space. As early as 1930, Mao wrote :

Ours are guerrilla tactics Divide our forces to arouse the masses, concentrate our forces to deal with the enemy.... The enemy advances, we retreat; the enemy camps, we harass; the enemy tires, we attack; the enemy retreats, we pursue.

These ideas were based on the wisdom of avoiding strength and attacking weakness and turning weakness into strength and definitely this virtues were taken from Sun Tzu.

Though the influence of Sun Tzu’s “Art of War ”on all the three conventional schools (e.g. continental, maritime and aerospace schools) of present day warfare cannot be denied yet it is the un-conventional revolutionary school which has been influenced and benefited most from it. The wisdom of those teachings has also been tested in various other places of the world but it had the greatest success in Asia, that too in Sun Tzu's own place, China.

3.6 CONCLUSION

From the above analysis we can see that the term strategy has a general meaning, the design and implementation of a concept for the co-ordinated employment of resources to attain certain objectives. Only when modified by an objective does the term assume a specific meaning, *Grand*

strategy, *Security Policy* strategy, *Foreign Policy* strategy, *Economic* strategy, *Military* strategy, etc. Since Clausewitz the concept of strategy has developed in three respects. First, it went beyond the use of armed violence to cover the whole arsenal and means of policy. Second, it has gone beyond war to include military activity in peace time. Third, it has introduced an extension of both means and ends.

The threefold conceptual division of the process of waging war namely tactical, operational and strategic is hierarchical. The combat operations of units smaller than divisions are usually considered tactical in nature. The term strategic applies only to the broader goals of war and describes the activities of entire national armed forces. The operational level is an intermediate category of military activity between strategy and tactics. The combat activities of divisions, corps, armies and army groups are operational. The concept of the operational level has not won universal acceptance. Tactics is subordinate to operation, again operation is subordinate to strategy, policy stands above strategy and contains them all.

Translations of Sun Tzu's "Art of War" reached the West in 1772. Napoleon probably read the treatise at that time but we do not find any trace of Sun Tzu's influence on Napoleonic warfare. We also do not find trace of Sun Tzu's influence on Jomini and Clausewitz whose theoretical exploits were based on the practical Napoleonic exploits. It was Liddel Hart who popularised Sun Tzu in the West during the post Second World war period.

There are three conventional and one unconventional schools in modern strategic approach. They are the *continental*, *maritime*, *aerospace* and *revolutionary* schools. The unconventional revolutionary school has been benefited most from the teachings of Sun Tzu, and the proving ground was China itself.

Chapter 4

TECHNOLOGY

- 4.1 Technology and Science : A Conceptual Orientation
- 4.2 Intrinsic Relation between Technology and Strategy
- 4.1 Civilisation and Science in China : Sun Tzu's Period
- 4.2 Technology, Science and Hierarchy of Combat : Sun Tzu's period
- 4.3 Conclusion

The term “technology” has come from the Greek word “techne”. The Greeks used to believe that all crafts were invented in the heaven and taught to men by gods. Technologies have helped people in gaining control over nature and build a civilised way of life. Of course it has its negative side also and for that human beings are to be blamed. Technology has no meaning apart from its relationship with human beings.

This chapter is divided into four sections. The first section, “Technology and Science : A Conceptual Orientation”, orients us with the relation and distinction of science and technology. Science has contributed much to modern technology yet all technologies are not based on science nor science is necessary to all technologies. Science attempts to explain how and why things happen and technology is concerned with making things happen. Technology stimulates science and science acts as spur to technology. Social progress depends on both technology and science but both of these also depend on man’s basic desire to live a life that is both physically and intellectually rich and fuller. In this section also discussed is the nature of different technologies e.g., civilian, military and infrastructural technologies and their mutual relations. Varied impact of technologies on different hierarchies of combat and levels of war is also evaluated here. So far impacts of technology is concerned, tactical, operational and strategic levels are no watertight compartments. Technologies in general effect all levels of war, but some technologies have a greater impact on a particular level than others. Again a direct impact at one level may also create indirect impact on other levels.

In the second section under the heading “Intrinsic Relation between Technology and Strategy” questions are raised whether weapons gave rise to the war or it was war that gave rise to the weapons. Two probably evolved together each one being driven by the other. In fact there is an intrinsic relation between the weapon and war. Similar relation also exists between technology and strategy.

The third section of the chapter under the heading “Civilisation and Science in China : Warring States Period”(453 – 221 B.C.) contains the answers of such questions, Was there any technology at all in China during Sun Tzu’s period? Was there anything called science in that society? The saying, “*necessity knows no bound*” was also true for that period and people invented technologies to fulfil their needs. According to Van Creveld, Sun Tzu lived in the “Age of Tools”. On the other hand, Sun Tzu falls within the “Agrarian Age” in Tofflerian super cultural waves. Historically, Sun Tzu lived in the “Warring States Period”, a Chinese historical era when “Hundred Schools of Thought” thrived. Mo Tzu, Mencius, Chuang Tzu, Hsun Tzu all lived in this period. Some of the philosophical schools were anti science, again some were interested in science. For example, Confucianism was anti science and inclined only towards human affairs and concerned with social order, whereas Taoism with its complex and subtle set of conceptions formed the basis of all science.

In the eighth century B.C., China was still technologically behind West Asia, but by the end of the period it had largely caught up. Bronze casting by the piece-mould processes, different from the method used in ancient West Asia made its appearance in China by the middle of the Second Millennium B.C. Iron, which had appeared about a millennium earlier in the West, became common in China by the fifth century B.C. Iron replaced bronze for weapons, and iron farming tools and the ox-drawn plough brought an agricultural revolution to China. It is surprising that there is hardly any references of technology in the “Thirteen Chapter” text of Sun Tzu; neither much of military technology nor technology in general has been discussed. If something discussed, it was neither to glorify nor to explain its position in battle drills, rather the discussion came up in some other context. Probably Sun Tzu shared the Confucianist attitude towards science.

The fourth section, “Technology, Science and Hierarchy of Combat : Sun Tzu’s Period” deals with the scientific and social conditions and its product the hierarchy of combat. The elitist-royalist command structure was being replaced by a specialist-eagalaritarian professional one. The doctrine of collective responsibility in battle was probably first developed during this time. About the civil – military relations, if a person entrusted with the responsibility of command, he performed his command responsibility without any intervention even from his own sovereign. This provision emphasised on the importance of the commander. We do not find any clear divisions like today’s levels of war from the Sun Tzu’s text. Although there was strategic planning but its reflection at tactical level was rarely felt.

4.1 TECHNOLOGY AND SCIENCE : A CONCEPTUAL ORIENTATION

Necessity Knows No Bound

There is a story in Lucien that a powerful Roman fleet came to invade Syracuse, the principal city-state of Sicily and was waiting in the nearby harbour. This caused great worry amongst the Syracuseans. But soon they were relieved by a scientist who came forward with a newly contrived device and solved the problem within no time. The scientist was none but Archimedes, the most famous ancient Greek mathematician and inventor. He set the Roman fleet on fire from the shore with an arrangement of mirrors and lenses¹. Otherwise, numerically and physically superior Roman forces were totally surprised by this newly invented technology and had to succumb to the devastating ray reflected from the shore [Nazareth, 1987 : 87]

In 1776, during the American war of independence, a mighty British force was being massed in New York harbour to launch an offensive against the rebels. Well over forty thousand

¹ In 1973, Ioannis Sakkas, a Greek expert on solar energy, proved that Archimedes could have achieved what was claimed. With the aid of the Greek Navy, Sakkas arranged for 70 sailors bearing mirror to focus the reflected sunlight on a row of boat which was 50 meters offshore. The boat caught fire within 5 seconds.

professional soldiers and sailors waited on board the invasion fleet of 350 ships. Americans were fighting for national independence against the overpowering war machine of the colonial occupiers relying on their daring and ingenuity. In this grave situation they also came up with an Archimedes like solution and used an entirely new weapon against the British fleet. World's first sub-marine, the tiny "American Turtle" designed and built by David Bushnell of Connecticut made an underwater attack with a torpedo on the "HMS Eagle" the fearsome 64-gun flagship of Admiral Lord Richard Howe. Though the copper sheathing of the ship frustrated the attack and it remained unharmed, but the explosion caused such a confusion that alarmed officers slashed anchor cables so their ships could drift away from the unseen attacker towards the open sea. The new technological innovation, the submarine completely surprised the British Navy, who had awesome power on the surface of the sea but suddenly found themselves vulnerable in front of an underwater threat [Deacon, 1978 : 13].

During the 1930s considering the developments in air-warfare as well as the political developments in Europe, the British Air-Ministry rushed to a scientist named Dr. Robert Watson Watt. He was head of the radio department of the National Physical Laboratory. The Air Ministry requested Dr. Watson Watt to investigate the possibility of a "death-ray" which could damage the engines of an approaching aircraft or affect the blood of its pilot. Watson Watt could not materialise the dream of the Air Ministry but presented them with something new ; using the principles of radio location, he invented a new machine called Radar, which was successfully tested on 26 February 1935 in locating a flying aircraft. By 1937 the first of "Chain Home" (CH) stations intended to give warning of aircraft approaching the coast at a distance of 40 miles was in operation [Parkinson, 1977 : 135]. Further stations were working by 1939, playing a vital role in the "Battle of Britain". Radar, the new gift of science revolutionised Britain's air-defence system and ensured the defeat of the invading "Luftwaffe" the German airforce. Prime Minister Churchill overwhelmed by the victory of the Royal Air Force acknowledged the performance of the RAF pilots by making the historic statement, "so many is indebted to so few". These so few cannot and will not deny their debt to the newly invented Radar.

Necessity is the mother of invention. Archimedes, Bushnell and Watson Watt all tried to fulfil the pressing necessities of their time. Through the ages, people invented tools, machines,

materials and techniques to fulfil their necessities and make life easier. The necessity of survival and freedom by defeating an enemy was of utmost importance to human beings. To ensure that they often resorted to various indirect means and amongst them technological innovations always occupied a central position. Technology has a definite influence on the evolution of warfare. There is an intrinsic relation between technology and strategy.

Pre-Science to Scientific Technology & Alternative Sciences

The term “technology” has come from the Greek word “Techne”. The Greeks used to believe that all crafts were invented in heaven and taught to men by gods².

Technology refers to all the ways people use their inventions and discoveries to satisfy their needs and desires ever since people appeared on earth, they have had to work to obtain food, clothing and shelter. They have also had to work to satisfy their desire for leisure and comfort. Through the ages, people invented tools, machines, materials and techniques to make work easier. They also discovered waterpower, electricity, and other sources of power that increased the rate at which they could work. Technology thus involves the use of tools, machines, materials techniques and source of power to make work easier and more productive [Kranzberg, 1989 : 76].

Technologies have helped people in gaining control over nature and build a civilised way of life. Of course it has its negative side also but for that, human being are only to be blamed. Technology is neutral ; it is human being who use them for negative purpose. For example, a knife may be used for various purposes, a murderer use it to end a life whereas a surgeon uses it to save one. Laser technology can be used both in weapon system as well as in delicate surgeries. There is nothing wrong with a knife or the laser technology, it is the human being with whom the responsibility of using them lies. Technology has no meaning apart from its relationship with human beings.

² It is not only the Greeks but followers of many other religions also believe that the first man was taught everything by God in heaven.

Today's complex and advanced technologies like nuclear, space and information technologies are all science dependent but it was not same in the past. In ancient societies people made swords, ploughs, spears and many other things with iron without knowing the metallurgical aspects of it, they did not bother for the science at that time. Science has contributed much to modern technology yet all technologies are not based on science nor science is necessary to all technology. Science attempts to explain how and why things happen and technology is concerned with making things happen. Around 2500 B.C., the great Chinese, Indian, Sumerian, and Egyptian civilisations all possessed a great variety of tools made of naturally occurring materials; almost all of these tools were pre-scientific and provided the foundation of their material life.

Today science has taken up a god like posture in our life. It has contributed enormously in making things easier for us, yet we find it difficult to find out a single definition or purpose of science. It varies from philosopher to philosopher, scientist to scientist and from man to man. According to John L. Casti the term Science seems to be used interchangeably in general conversations in at least three quite distinct and inequivalent ways [Casti, 1989 : 11]:

$$\text{Science} = \left\{ \begin{array}{l} 1. \text{ A set of facts and a set of theories that explain the facts.} \\ 2. \text{ A particular approach, the scientific method.} \\ 3. \text{ Whatever is being done by institutionally carrying on "scientific" activity.} \end{array} \right.$$

On the other hand according to Allen Chalmers, the philosophy of science suggests that there is no single understanding of science, but several alternative sciences; the *naïve-inductionist science*, *Popperian falsificationist science*, *Kuhnian paradigmatic science* etc.(Chalmers, 1982 : 1-122). Instead of going into the philosophical debates about science, it is better that we remain confined in identifying the relation as well as the difference between science and technology. "Technology stimulates science and science acts as spur to technology. Social progress depends on both technology and science but both of these also depend on man's basic desire to live a life that is both physically and intellectually richer and fuller" [Kranzberg, 1989 : 76].

Civilian, Military and Infrastructural Technology

Like today, in early societies there was no marked differences between civilian and military technology. In fact there was nothing known as technology in those days. There were only tools and crafts to fulfil the basic needs and those were unspecified for either military or non-military purpose. Warfare as an organised act was also unknown during that period. Simple tools were used for dual purposes. A stone hand axe, which was usually used, for chopping food must have come into use in crushing an enemy's skull. According to Martin Van Creveld:

If the customs of stone-age people who have survived into the present world constitute any guide, then activities such as warfare, the pursuit of personal quarrels, hunting, and even certain kinds of ceremony and sport overlapped, with the result that tools employed in one for the most part also served in each of the other [Creveld, 1991 : 10].

It is important to note that the dual use of technology started from a very early age and it is still continuing. Alfred Noble, the Swedish scientist was well aware of this trend and cunningly utilised it. He had 355 patents of various inventions and discoveries, but he became famous for his expertise in inventing and developing explosives. He publicly declared that he worked with explosives for its potentials in positive human uses like, blowing mountains to construct roads, demolishing unnecessary constructions and mining etc. But during his lifetime he had to see the abuse of those explosives by men. They used them against fellow human beings as weapons of war. This produced a guilty feeling in Alfred Noble and the burden of guilt forced him to introduce the Noble prize³.

However, there was no reason for Alfred Noble, not to visualise the abuse of his inventions in future. From his biography we come to know that, his passion for explosive was in his blood. His father Immanuel Noble was a technician and an inventor; he was also involved in explosive research. In 1842 Immanuel left for St. Petersburg in Russia, where he was involved in making

torpedoes and mines for the Russian navy. From there he kept on pushing young Alfred to different places of Europe and America to learn business. In 1859 Immanuel Noble returned to Sweden and established an explosive factory. Alfred Noble joined his father's factory as an assistant and was carrying out research with nitro-glycerine. In 1864, there was an accidental explosion in that factory and it was completely destroyed. One of his brothers died in the accident¹. Immediately after this incident there were quite a few accidents with nitro-glycerine, people held young Alfred responsible for them and in general kept on considering him as an enemy of the people. This pressure ultimately led him towards the invention of a more stable explosive, which could be carried from place to place safely. He could finally establish a huge and centralised industrial empire and made a huge amount of money. Without any formal training in Chemistry, Alfred Nobel started working with explosives and through hard work he reached the position where we can see him today. But it will be too naïve to believe him that with his experience and background he could not foresee the possibility of the abuse of his inventions.

Technology with slightest military potential is also fully exploited in war. Egypt secretly purchased 100 powerful water pumps from the "Mazirus Deutze Fire Protection Technique limited" of Germany. Suppliers thought, these would be used in fire fighting, but on arrival they were straight away issued to the Corps of Engineers of Egyptian Army instead of the Fire Brigade. Egyptian Army used them in punching holes in the sand embankment of the Barlev line to push their infantry and armoured columns to the Sinai front after the Suez crossing in 1973. Innovative application of this civilian technology in solving a military problem had upset the Israeli time and space calculation and put them in an awkward condition.

Besides the use of such technology in war, there are certain kinds of technologies, which are meant for civilian use and never utilised in combat role yet they have direct influence on warfare. For example the railway, telegraph and other means of transportation and communication, which provides mobility and thus flexibility to affect the war. That is why they are called the

³ Originally five fields were chosen for the prize, they were physics, chemistry, physiology or medicine, literature, and peace. Later on in 1969, economics was added with the endowment of the central bank of Sweden and the award was named as the Noble memorial prize.

⁴ Alfred's brother 'Emil' died in that explosion.

infrastructural technology. They are developed and used for civilian purpose, yet their influence is tremendous on the outcome of the war [Macksey, 1989 : 33].

Science and technology has helped man in finding more effective ways to wage war. Technology can offer more efficient ways to kill, better protection from an enemy, easier manufacturing processes of weapons, faster delivery system, greater control of battles, and the myriad enhancement that make the difference between victory and defeat [Garden, 1993 : 2697]. A full understanding of the military technology must nevertheless acknowledge the extensive and fundamental links that connects it to civil sector. Despite its distinctive elements, the revolution in military technology needs to be seen, not as a thing apart but as an integrated element of a broader revolution in science, technology and the human condition as a whole [Buzan, 1987 : 26].

Levels of War And Varied Impact of Technology

Some technologies have led to fundamental changes in the conduct of war; other, despite their seemingly promise have not. Different technologies had different impact at different levels of hierarchy of combat. For example the impact of gunpowder on warfare made itself felt in the field of tactics above all. Its effect on organisation, logistics, communication, intelligence and obviously on strategy was much less and for the most part indirect [Crevelde, 1991 : 111]. Whereas the invention of steam engine had a broader and direct impact on both tactical and strategic levels. At sea the development of steam power made sail obsolete for warships. The attacker was no longer at the mercy of the wind, she could attack from any direction at the same time control her speed, and she had the winning advantage. This demanded a new logistical support system of coaling stations. Similarly, on land the advent of the steam railway brought new and war winning mobility to armies and their logistical systems.

On the other hand, nuclear technologies had impact mainly on the strategic levels. It had hardly any impact on tactical level. Arrivals of nuclear weapons have altered the classic “great powers” structure of international relations. While development up to the end of the Second World War reinforced the power of the economic giants, technological innovations since have changed

this. The power of nuclear weapons has made war between the major nations much less likely and in the era of limited war a concept of proxy war came up. Nuclear weapons proved its worth as a coinage of power⁵ [Garden, 1993 : 2697]. According to Van Creveld,

War is impacted by technology in all its forms; with the result that, subject only to the limits of the available space, all will have to be taken into account. To use a simple analogy, military technology affects warfare like waves spreading from a stone thrown into a pond. The disturbance is strongest at the point of impact; the further the ripples spread the weaker and less noticeable they become. And the further they go, the more likely they are to lose their identity by becoming intermixed with ripples thrown up by other stones or reflected back from the pond banks. Similarly, weapons and weapon systems make their power felt principally during combat, but war consists of much else besides. Apart from tactics there are operations, strategy, logistics, intelligence, C³I (Command, Control Communication and Intelligence), and organisation to mention but a few. Naturally, all of that are affected by weapons, but all are also strongly influenced by other kinds of hardware, as well as by technology in its abstract sense [Creveld, 1991 : 2].

We have already examined the hierarchy of combat and levels of war. We shall now examine whether a technological change affects the tactical and operation level more than the strategic level or vice-versa.

It is widely believed that technological innovation or changes have been affecting the tactical levels more than the Operational and Strategic level. There are difficulties in agreeing with such belief. So far impacts of technology is concerned tactical, operational and strategic levels are no watertight compartments. First, the arrival of the gun amidst the warriors equipped with swords and spears had an immediate effect in the battle field but no one can deny that it had drastically changed the pattern of warfare thus had an impact on the strategic level. The way railway and telegraph has changed the pattern of warfare, gun could not do that. Railway facilitated the movement of huge bodies of troops and the telegraph provided communications to the commanders, which together provided a sort of flexibility in concentrating troops. It brought revolutionary

⁵ According to the "Paradigmatic Science" of Thomas S. Kuhn arrival of nuclear weapon should be viewed as a paradigm shift in warfare. It radically changed the ways of international politics and strategy.

changes in warfare, in the past, war used to remain confined to a particular front and now the war no longer remained localised, technology allowed the frontage to be expanded. Hence railway and telegraph as technologies, affected the strategic level more than the tactical one. On the other hand, invention of anti-tank mines had hardly any effect on the strategic level; whereas nuclear weapons had primary impact on the strategic level. Helicopters are of great value at the tactical level but B-52 and B-2 bombers have strategic value. Technologies in general affect all levels of combat, but some technologies have a greater impact on a particular level. Again, a direct impact at one level creates indirect effect on others.

4.2 INTRINSIC RELATION BETWEEN TECHNOLOGY & STRATEGY

While answering the question whether it was warfare that gave rise to weapons or weapons that were responsible for the emergence of warfare or when we say that the two probably evolved together each one driving the other, we in fact accept the intrinsic relation between weapons and war. Similar intrinsic relation exists between technology and strategy, whether it is military technology and military strategy or infra-structural technology and strategy in a broader sense.

If we go back to the stories of Archimedes, the submarine and the radar, it will be easier for us to see that intrinsic relationship clearly. Archimedes lived on this earth almost 2300 years back (287-212 BC) yet far more details survive about his life than about any other ancient scientist but they are largely anecdotal, reflecting the impression that his mechanical genius made on the popular imagination. Though in 1973 a Greek expert on solar energy named Ioannes Sakkas with the help of the Greek Navy could achieve what was claimed about Archimedes and the Roman fleet, yet the story remained apocryphal [Nazareth, 1987 : 87]. It might have originated from Archimedes' real interest in "catoptrics" (the branch of optics dealing with the reflection of light from mirrors, plane or curved) [Robert, 1993 : 372]. However, from the story we come to know that the primitive but devastating laser technology of Archimedes had a definite impact on the invading Roman general Marcus Claudius Marcellus. He had to change his strategy of direct approach to an indirect one. Instead of attacking the technologically superior Syracuseans, he planted agents inside the city to achieve his mission. Finally the besieged city of Syracuse succumbed to the treacherous internal

pressure, not to the external military strangle hold⁶. Too much of dependence on technology might have weakened the people of Syracuse internally.

The invention of the submarine definitely had an impact on the strategy. But due to the complex technology, it took time to show its impacts clearly. Primarily it influenced the existing naval strategies. Suddenly large capital ships became vulnerable in front of a small submarine. During the Second World War the German strategy was to starve the Allies by cutting the sea-lane from North America to Britain by sinking allied supply convoys in the Atlantic. Submarines carried out these raids. During this period the Germans developed their famous "Wolf Pack Tactics". This was imitated from the wolves hunting in packs. It was a way of locating, co-ordinating, and delivering an attack on a convoy of ships by a pack of U-boats. These attacks were mainly controlled by shore based operation centres through short-wave radio communications. This way of patrolling and convoy raiding totally upset the British Strategy [Stafford, 1966 : 193]. The German high Sea fleet was deliberately dismantled after the Versailles treaty, Hitler coming to power wanted to raise it again but discovered that building capital ships is a Herculean task. German shipyards were not in a position to deliver a high sea fleet within a short span of time, which could face the Royal Navy. So he had to take up the alternative, the submarine. Beside a small but powerful surface navy Germany went all out to raise a powerful under water navy with newly developed "Under Sea Boats (The U boat)". When the developments of the boats were complete a suitable doctrine was developed to employ them in a suitable organisation. These all were done to fulfil the ends of a strategy, to starve the island country Britain by sinking its logistical convoys coming from America..

When the war started, the Allied convoy losses were so high that the British navy had to set it a first priority to sink the U Boats. Thus anti submarine warfare developed very fast and ultimately the German U-boats were neutralised. Fast developing technologies in the hands of innovative people and the desperate conditions of war out-manoeuved them by exploiting their vulnerabilities. On the other hand, the under-water arm of the German Navy grew up at the cost of

⁶ Though after the fall of Syracuse Marcellus ordered not to kill Archimedes but a Roman soldier killed him by mistake while he was engrossed in a mathematical problem.

the surface arm and hampered its symmetric growth. Thus the surface navy failed to support the underwater navy in time.

During the mid fifties came the nuclear powered submarines with their unlimited power and endurance. Jules Verne's dream of the underwater journey portrayed in "*20,000 Leagues under the Sea*", was finally materialised. The US Navy's nuclear powered submarine USS Triton finally could travel the world under-water following the *Magellan track* without even surfacing once. Nuclear submarines were ultimately transformed into ballistic missile submarines. A structure of the nuclear strategy was already there and they became an integral part of that structure. Nuclear powered ballistic missile submarines became part of the nuclear triad and greatly influenced the super power strategy in general.

Radar as a defensive weapon on its arrival made a deep impression on the air power doctrine of Guilio Douhet. It was based on the assumptions that aircraft had an incomparable potential for the offensive and against them no effective defence could be foreseen and civilian morale would be shattered by air bombardment of population centres [Brodie, 1959 : 71]. Innovation of radar did not allow the materialisation of the dream of Douhet and we have seen how the civilian population of London city was saved by the early warnings of air raids. Instead of submitting themselves to the mercy of the "Luftwaffe" (the German airforce) they raised against them. On the other hand, air combats could be controlled more effectively from the radar equipped ground control centres. Today it has gone one step higher, and air-combats are controlled from the AWACS (Air borne warning and control System). Besides, there were great impact of radar on the naval warfare and naval strategy. Radar controlled weapon systems, with their accuracy have also influenced the land warfare as well as strategy.

4.3 CIVILIZATION AND SCIENCE IN CHINA : SUN TZU'S PERIOD

Technological Contributions by China

The Chinese contribution to technology has been immense. Many important inventions, which we consider to have originated in the Western societies, were, in fact, importation from the East. They include among many other notable advances - the mechanical innovations embodied in certain types of pumps, water mills, looms and bellows, the wheelbarrow, the horse collar, the kite, the cross-bow, gunpowder; the magnetic compass; paper; movable-type printing; and porcelain ceramics. But all these things did not come from China together at a time; they reached Europe and other regions at times varying between the 1st and the 18th century A.D. What was the condition of China during Sun Tzu's time, even if "The Art of War" was composed during the "Warring States" period, almost two and a half thousand years back? Was there any technology at all in China in that period? Was there anything called science in that society? Well, the saying, "necessity knows no bound" was also true in Sun Tzu's period and people invented technologies to fulfil their needs at that time also.

Socio-Cultural Characteristics of Sun Tzu's Period

Martin Van Creveld in his book *"Technology and War: From 2000 B.C. to the Present"* divided the human civilisation into four different phases. They are "the Age of Tools" (from earliest times to 1500 A.D.), "the Age of Machines" (1500 to 1830), "the Age of Systems" (1830 to 1945) and "the Age of Automation" (1945 to the Present). According to Creveld the Age of Tools can be sub-divided in many ways but it is dominated by a single unifying theme; most technologies including the military technology derived energy from muscle power of animals and men. The age of machines started with the Renaissance and ended around 1830. Its unifying theme is that technology with military technology in the van had reached the point where a dominating role began to be played by machines deriving their energy from inorganic sources such as wind, water, and of course gun-powder. In the Age of Systems, there was the rise and employment in war of technological systems, pioneered by the railway and telegraph. Instead of operating on an individual

basis as before, machines came to be integrated into complex interacting groups. Technology itself became subject to the phenomenon loosely known as organisation which previously had been applied only to human beings. The fourth phase, the Age of Automation is characterised by the arrival of wars waged with the aid of machines that are not only linked to each other in systems, but are capable, within limits, of themselves detecting changes in their environment and of reacting to those changes. In Van Creveld's division Sun Tzu will fit into the Age of Tools since it starts from slightly before 2000 B.C. and continued upto 1500 A.D. and Sun Tzu composed his treatise around 500 B.C.

Table 4.1
Creveld's Four Ages

<p>The Age of Tools (From Earliest Time to 1500 A. D.)</p>	<p>Most tools and technologies derived energy from the muscle power of animals and men.</p>
<p>The Age of Machines (1500 – 1800)</p>	<p>Dominant role played by machines deriving their energy from inorganic sources like wind, water and of course gun powder.</p>
<p>The Age of Systems (1830 – 1945)</p>	<p>Machines were integrated into complex interacting groups. Technology itself became subject to the phenomenon loosely known as <i>organization</i>, which previously had been applied only to human beings.</p>
<p>The Age of Automation (1945 to the Present)</p>	<p>War waged with the aid of machines that are not only linked to each other in system but are capable, within limits of themselves detecting changes in their environment and reacting to those changes.</p>

Source : Composed from Creveld, 1991: 2

On the other hand, Alvin and Heidi Toffler in their book “*War and Anti War*” divided the human civilisation into three super cultures. They are named as the Agrarian Age, the Industrial Age and the Information Age. According to Tofflers, the mode of production has a close connection with the mode of destruction. They divided the whole human civilisation on the basis of the dominant mode of production. It was done to examine the mode of destruction or the nature of warfare in different ages along with all connected factors where technology is also there. According to them the Agrarian Age begins from 8000 years and continues up to the Industrial Revolution. The Industrial Age starts from the Industrial Revolution and ends in the 1960s. Then came the Information Age which is still continuing. According to Tofflers, Sun Tzu is supposed to belong to the Agrarian Age culturally and technologically for the same reason mentioned earlier. To have a complete view of the socio-political condition of Sun Tzu’s period we got to go a little rear ward.

Table 4.2
Tofflerian Waves

Wave	When Developed	Mode of Production
First	8000 B.C.	Agro based
Second	1690 A.D.	Industrial based
Third	Current	Knowledge based

Source : Composed from Bunker, 1995 : 99

The fertile region of the Northern China, watered by Hwang Ho and the Yellow rivers was the base of the ancient Chinese civilisation⁷. In this area and the south-eastern coast occurred the first switch over from hunting-gathering methods of food collection to an agricultural way of life in China sometime during the 6th to 5th millennium B.C. These developments occurred independently of Near Eastern Neolithic revolution.

Chinese Neolithic period is divided into two broad phases, the “Yangshao” and the “Longshan”. During the Yangshao period (c. 5000 – 2500 BC) farmers employed primitive techniques of cultivation, frequently shifted their villages as the soils became exhausted, and lived in semi-subterranean houses in the region of modern central China. Their hand crafted, painted pottery occasionally bears a single incised sign that may be a forerunner of Chinese writing. During the Longshan period (c. 2500 – 1000 B.C.) which was also known as the age of the “Black Pottery”, agriculture became more advanced. Farmers started living in more permanent settlements and began a wide-spreading cultural expansion into the eastern plains, Manchuria, Central and South China.

The Yangshao and Longshan cultures formed the basis of the first true Chinese civilisation, the Shang dynasty (1600 – 1027 BC). It controlled a loose confederation of settlement groups in the northern region of China. Shang civilisation was characterised by an advanced system of writing, a sophisticated bronze metallurgy, the first calendar, and cities. Until recently it was believed that many of the characteristic elements of the Shang, such as bronze making and writing, were importation from the Near East and other places. It now appears that like the Chinese development of agriculture, these were invented independently and that the emergence of civilisation in China was thus largely indigenous.

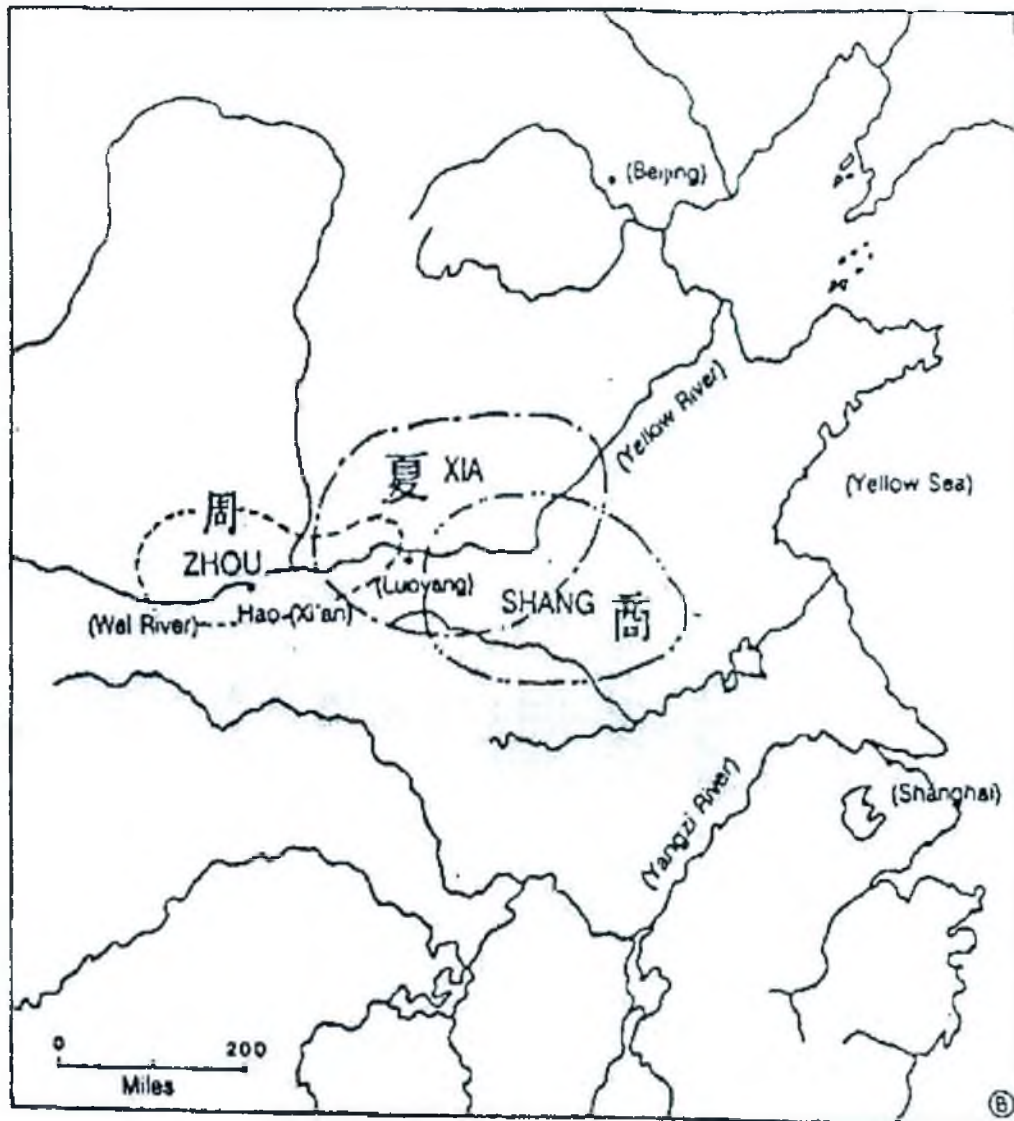
The “Zhou” conquered the Shang dynasty some times around 1027 B.C. Their conquest of Shang area, occurred at a time fairly close to the Aryan conquest of India. “But though the Aryans were also Bronze Age chariot users, there is no evidence that the Zhou came from anywhere west of China proper” (Needham, 1954 : 90). Zhou was a people who came from the western region of modern Xian and were less advanced culturally than the Shang, whom they admired. The early Western Zhou rule (c. 1027 – 771 B.C.) does not represent a sharp break with the immediate past. They continued the Shang traditions of bronze working, pottery and textiles, and took further steps in the developments of the written language. Though possibly of pastoral antecedents, they quickly adopted the thoroughly agricultural character of the unfolding Chinese civilisation. Much like their Shang predecessors, the Zhou kings, parcelled out territories among family members and favoured subordinates. The emphasis was on personal loyalties, the military obligations owed to lords by

¹ Ancient Chinese civilisation was also a river based one like the “civilisation between the two rivers”.

vassals, and a chivalric code of conduct in battle. This code also had a parallel in civilian life in the form of complex rules of social etiquette and personal deportment called “li”. Those who practised “li” were considered civilised those who did not, such as the people beyond the Zhou domain were considered barbarians.

The military pressure of one of these barbarian peoples in concert with a rebellious Zhou vassal forced the Zhou to move the capital eastward to Luoyang (modern Henan province) in 771 B.C. thus beginning the period of Eastern Zhou (770 – 256 B.C.). From then onward political and military control of the Zhou kings was reduced over their semiautonomous vassals. During the next few century the domain actually ruled by Chou Emperor was very small indeed, and twenty-five feudal semi- independent states, acknowledging but a shadowy authority from Loyang contended among themselves for the hegemony. The first to win this leadership, which involved the presidency of the princes at the imperial capital, was the state of Chhi in Shantung. This state had a peculiar quality of its own, it was main source of salt, made by evaporating sea water at the coast, and acquired great wealth through the nationalisation of this industry. It also had a leading position in the working of iron.

Map . 1
Ancient Dynasties of China



XIA - - - - -
SHANG - - - - -
ZHOU - - - - -
• Hao Cities
(Beijing) Modern Names

Source : Gabriel, 1994 : 175

Figure. 4.3
Shang Dynasty Weapons



SPEAR
(MAO)

矛

DAGGER AX
(GE)

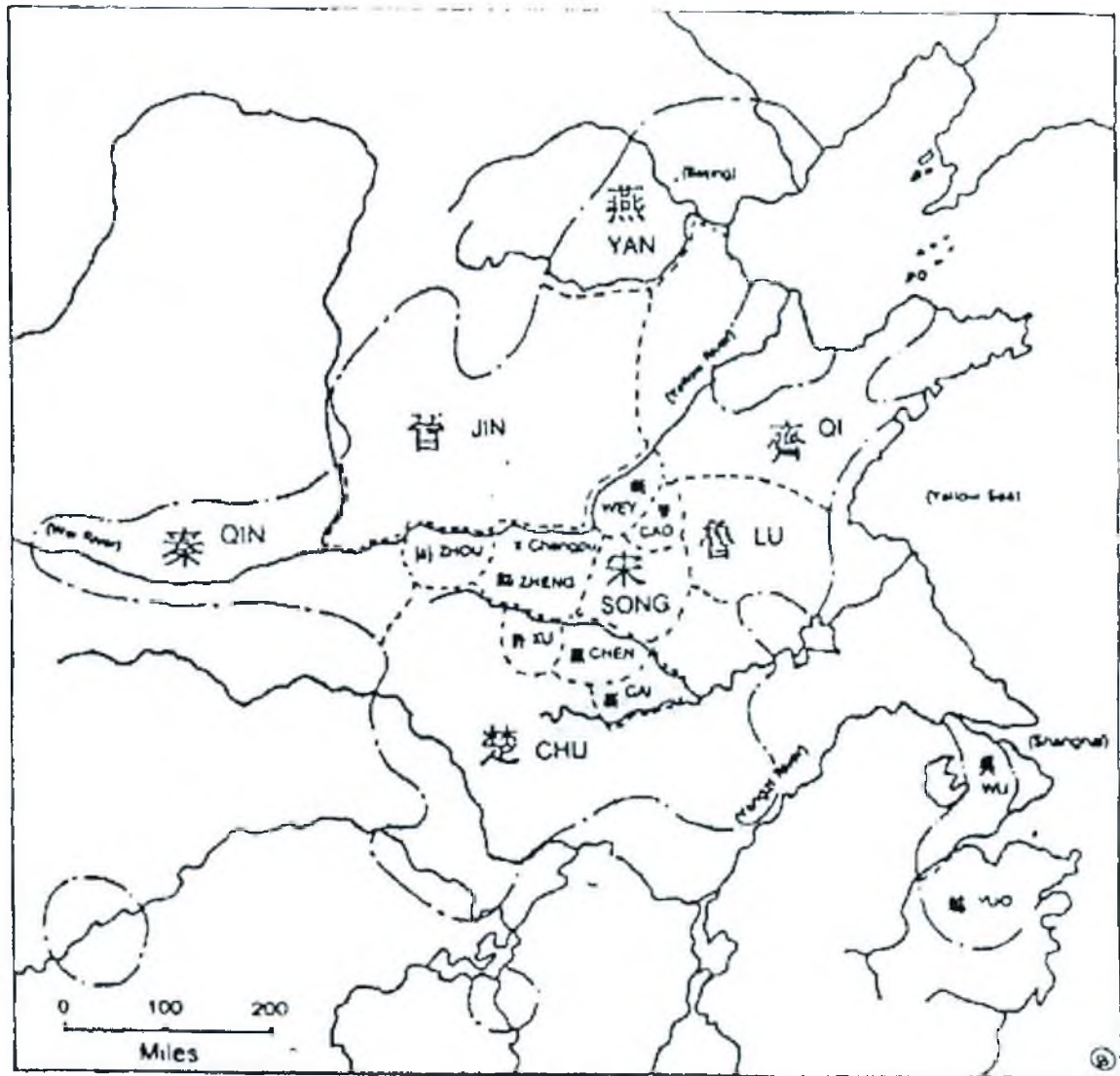
戈

BATTLE AX
(FU)

斧

Source : Gabriel, 1994 : 179

Map . 2
China - Spring and Autumn Era



- Approximate limit of Chinese Civilization
- Approximate state boundaries
- JIN State
- X Chengpu Approximate location of Battle of Chengpu
- (Beijing) Modern Names

Some minor states are not shown.

Source : Gabriel, 1994 : 183

Table 4.4

Chinese Historical Eras - The Classical Period

ca.1600 – ca. 1100 B.C.	Shang or Yin dynasty : Earliest historically and archaeologically documented period.
ca. 1100 – 256 B.C.	Chou dynasty.
1100 – 770 B.C.	Western Chou dynasty.
770 – 249 B.C.	Eastern Chou dynasty.
722 – 481 B.C.	Spring and Autumn Period : Lao Tzu and Confucius lived in this period and iron was Introduced
403 – 221 B. C.	Warring States Period : Sun Tzu’s Text composed, “Hundred Schools of Thought” thrived and copper coins introduced.
221 – 206 B. C.	Ch’in dynasty : unification of China under first imperial state; harsh regime of Ch’in Shih-huang-ti the first Emperor of Ch’in, rule based on ideas of Legalism; building of the Great Wall and burning of the Confucian books occurred.

Source : Composed from Ebrey, 1981 : XXI and Gabriel, 1994 : 176

Use of iron begun and spread quickly about the middle of the Chou dynasty or somewhat before, and it seems therefore probable that it was one of the most important factors in disintegrating early Chou feudalism, and favouring rise of independent states. The fact that the first state to achieve the hegemony was also the first to be associated with iron working, a process not available exclusively to the imperial power, may thus be rather significant. In course of time, the knowledge of the process involved spread widely, rendering the states more uncontrollable than ever. As for Chhi , it always retained a definitely magical - scientific tradition.

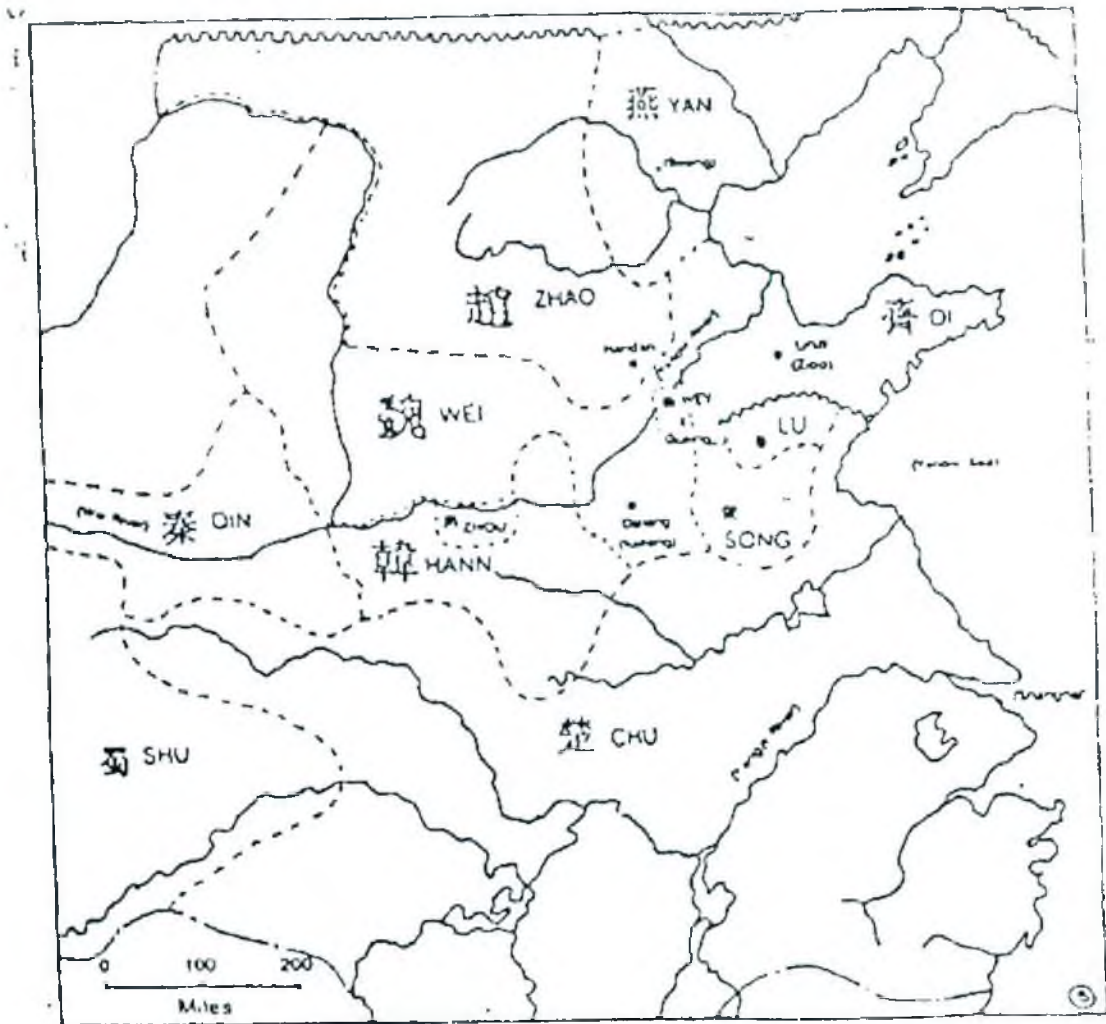
Beginning in the 5 th century B.C. warfare among the states became endemic, serving to increase centralisation and administrative efficiency within individual states, for only the strongest could survive. Griffith described the social conditions in following manner,

This was one of the most chaotic periods in China's long history. The forested hills, the reed-bordered lakes, the many swamps and marshes providing hiding places for the bands of robbers and cut-throats who raided villages, kidnapped travellers, and exacted toll from merchants unlucky enough to fall into their hands. Many of these outlaws were peasants who had been forced into brigandage to survive. Others were escaped criminals, deserters from the army, and disgraced officials. Altogether they constituted a formidable challenge to the so-called forces of law and order. The vendettas of the great families were conducted by bands of professional swordsmen recruited from the lower ranks of a dissolving hereditary aristocracy [Griffith, 1963: 21].

This period, known as the "Warring States" (403 – 221 BC) in Chinese history had distinctive characteristics. During this period new elements were propelled to positions of authority, since talent replaced the birth factor as the criterion for employment. During this period of great upheaval, the social structure was greatly effected, relationship of feudal nature based on personal allegiance became outmoded, a system of contractual relationships began to emerge. Bureaucrats, the forerunners of the Chinese Scholar official class, were given salaries, and peasants were expected to pay taxes to the government on their land holdings. The iron tipped ox drawn plough was introduced during this period. Its introduction along with the development of irrigation system improved agricultural productivity and spurred population growth. A steady improvement in communication led to increased trade, and a money economy began to develop. Though the late "Zhou" period is identified as a period of widespread physical destruction, yet it is also the period of enormous intellectual ferment.

It was during this period China's oldest surviving literature and the Classics were produced. The "hundred schools" of philosophers were at their height between 500 B. C. and 250 B. C. It was China's golden age of philosophy, the most important schools of which were Confucianism, Taoism and Legalism. Without anticipating the careful study, which we must give them, from the standpoint of the history of scientific thought, we may refer to them here in their historical setting. Increasing population pressure, conflicts with the barbarians and among the feudal states themselves, growing unrest among the people and the technological revolution caused by the arrival of iron, all led to a demand for advisers on the part of the feudal lords, who often felt themselves at a loss in unfamiliar situations.

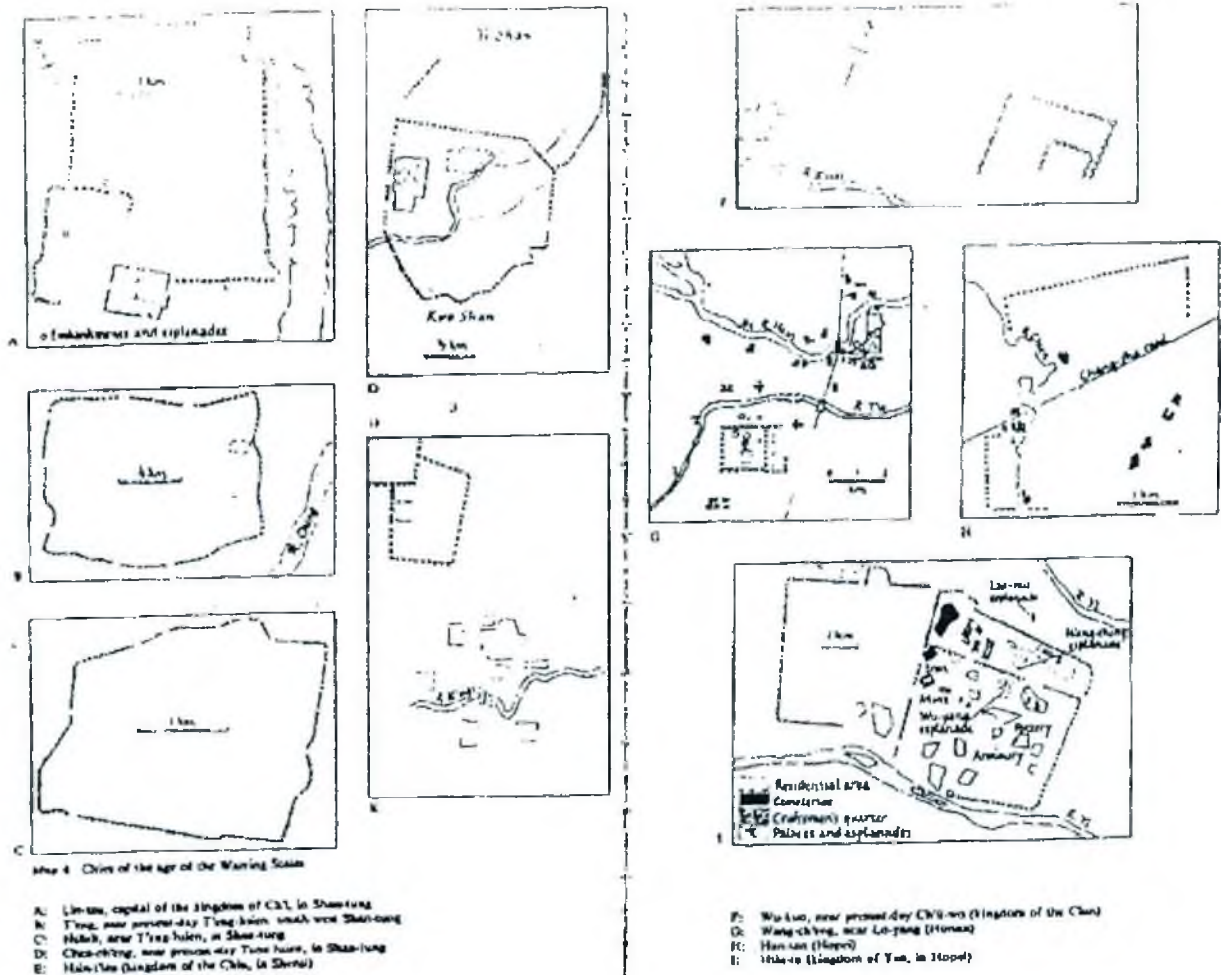
Map . 3
The Warring States



- Approximate limit of Chinese Civilization
- - - - - Approximate state/kingdom boundaries
- Fortified walls
- Major Kingdoms
- Minor States
- Approximate location of capital cities
- () Modern Names

Source : Gabriel, 1994 : 195

Map . 4
 Cities of the Warring States



Source : Gernet, 1972 (1982) : 74-75

Figure. 4.5
Cast Iron Implements from the Fourth - Third Centuries B.C.

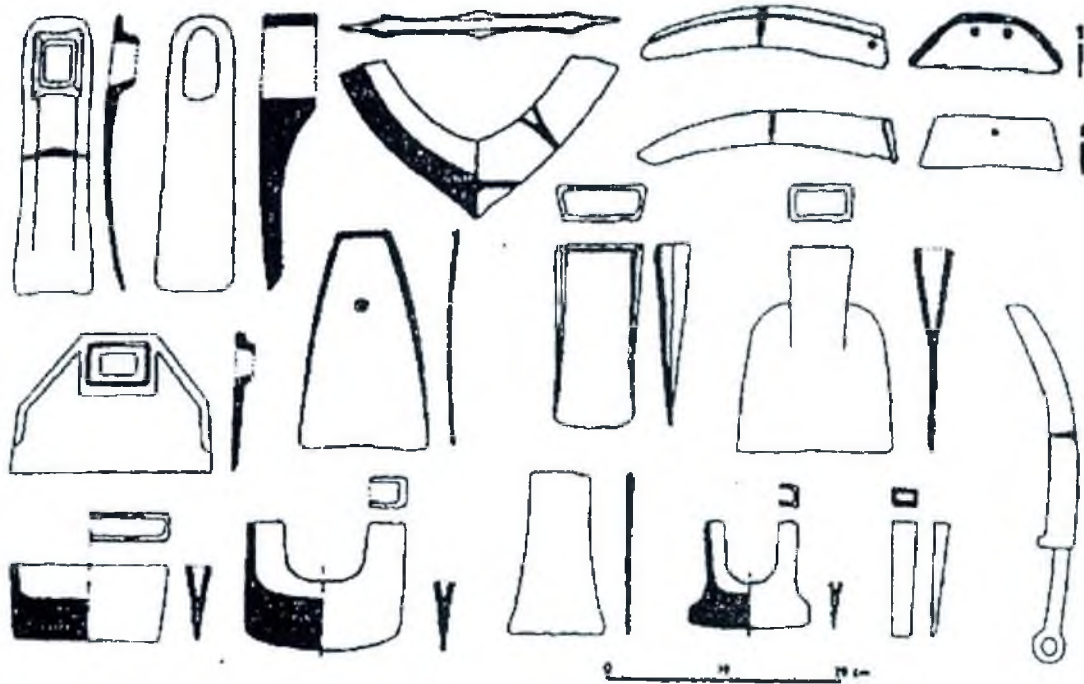


Fig. 4 Cast-iron implements from the fourth-third centuries B.C.: hoes, ploughshare, sickles, axe, and knife

Philosophical Schools and Science

Confucianism was dominating with its concern focussed on the human affairs and the social order. Besides Confucianism there were many other schools; the “Taoist”, with a complex and subtle set of conceptions to which we shall have to give particular attention since it lies at the basis of all subsequent Chinese scientific thought. The “Mohist” with their doctrine of universal love. The “Logicians”, arguing about hardness and whiteness. The “Legalist”, winning the favour of ruthless tyrants by their advocacy of draconic severity in administration and others as well (Needham, 1956: 1-215). The beginning of academies of scholars go back to this very early time in China. The most famous of them was the academy of the Gate of Chi (Chi-Hsia) at the capital of the state of Chi; here scholars from all the other states as well as Chi itself were welcomed and provided with quarters and maintenance.

Confucianism was a doctrine of this-worldly social-mindedness. In so far as social justice could be conceived of within the framework of the feudal or feudal bureaucratic social order, Confucius strove for it. He probably did not believe that the faults of his age could be cured by any system other than feudalism, but rather that there should be a return to what he conceived it to have been in its purest form, the ancient ‘way of the sage kings’. In Confucianism there were two fundamental tendencies which paradoxically helped the germs of science on the one hand and injured them on the other. On the one side, Confucianism was basically rationalistic and opposed to any superstitious or even supernatural forms of religion. But, on the other side, its intense concentration of interest upon human social life to the exclusion of non-human phenomena negated all investigation of Things, as opposed to Affairs. Hence, not for the last time in history, nor only in China, rationalism proved itself less favourable than mysticism to the progress of science. Confucian attitude to knowledge, which never wavered from the standpoint that man and human society were alone worthy of investigation.

The Taoist system of thought, which still today occupies at least as important a place in the background of the Chinese mind as Confucianism, was a unique and interesting combination of philosophy and religion, incorporating also ‘proto’ – science and magic. It is vitally important for the understanding of all Chinese science and technology. Taoism had two origins. First, there were

the philosophers of the Warring States period who followed a Tao of nature rather than a Tao of Human Society and therefore, instead of seeking for employment at the courts of the feudal princes, withdrew into the wilderness, the forests and mountains, there to meditate upon the Order of Nature, and to observe its innumerable manifestations. Two of them we have already met, the hermits, irresponsible from the Confucian point of view. But the philosophers of the Tao of Nature may be said to have felt 'in their bones', for they could never fully express it, that human society could not be brought into order, as the Confucians strove to bring it, without a far greater knowledge and understanding of Nature outside and beyond human society. They attacked 'knowledge', but what they attacked was Confucian scholastic knowledge of the ranks and observances of feudal society, not the true knowledge of the Tao of Nature. Confucian knowledge was masculine and managing; the Taoist condemned it and sought after a feminine and receptive knowledge which could arise only as the fruit of a passive and yielding attitude in the observation of Nature. The observation of Nature, as opposed to the management of Society, requires a receptive passivity in contrast to a commanding activity, and freedom from all preconceived theories in contrast to an attachment to a set of social convictions.

Unlike Confucianism and Taoism, Mohism was completely overwhelmed by the social upheavals at the end of the Warring States period. Its founder Mo Ti's life fell wholly within the period 479 to 381 B.C. His great doctrines, which have made him one of the noblest of China's historical figures, were those of universal love and the condemnation of offensive war. Mohist represented what might almost be called the "chivalrous" element in Chinese feudalism; they preached pacifism only up to a certain point, and trained themselves in military arts, in order to rush to the help of a weak state attacked by a strong one. Indeed, their practice of the techniques of fortification and defence was probably what led them to take interest in the basic methods of science, and to those studies in mechanics and optics which are among the earliest records of Chinese science. If the interest of the Taoist had been directed rather to biological changes, that of the Mohist was attracted to Physics and Mechanics.

The fundamental idea of the Legalists was that of "li". The complex of customs, usages, ceremonies and comprises, paternalistically administered according to Confucian ideals, was "fa",

positive law, particularly “hsien ting fa”, laws fixed beforehand, to which everyone in the state, from the ruler himself down to the lowest public slave was bound to submit, subject to sanctions of the severest and cruelest kind. There is one feature in Legalism, which is of particular interest for the historian of science, namely its tendency towards the quantitative. The word “shu”, which often appears, means not only number but quantitative degree, and even statistical method.

Even if we accept that Sun Tzu wrote his treatise, “The Art of War” in about 500 B.C. he must have come across both Confucianism and Taoism because both were firmly established in China and extending their influence at that time. From the Sun Tzu text we find that he was more inclined towards Confucianism because he viewed the war as a human intercourse and a social institute. His interest has been found meagre about science and technology rather he was interested in humanities and the Art of War. There are traces of Mohism’s influence on Sun Tzu, but it can not be found out whether it was for Mohism itself or not. Legalism came too late for Sun Tzu.

Technology in Sun Tzu’s Writing

To assess the views and attitude of Sun Tzu about crafts and technology we have to go through his text. It is surprising that there is hardly any references of technology in the thirteen chapters; neither much of military technology nor technology in general has been referred to in that book. Even if something is referred, it has not been done to glorify it or to explain its position in battle drills rather they came up in some other context. Few examples from Samuel B. Griffith’s translation of Sun Tzu’s “ Art of War” will clarify the matter. We find the following references:

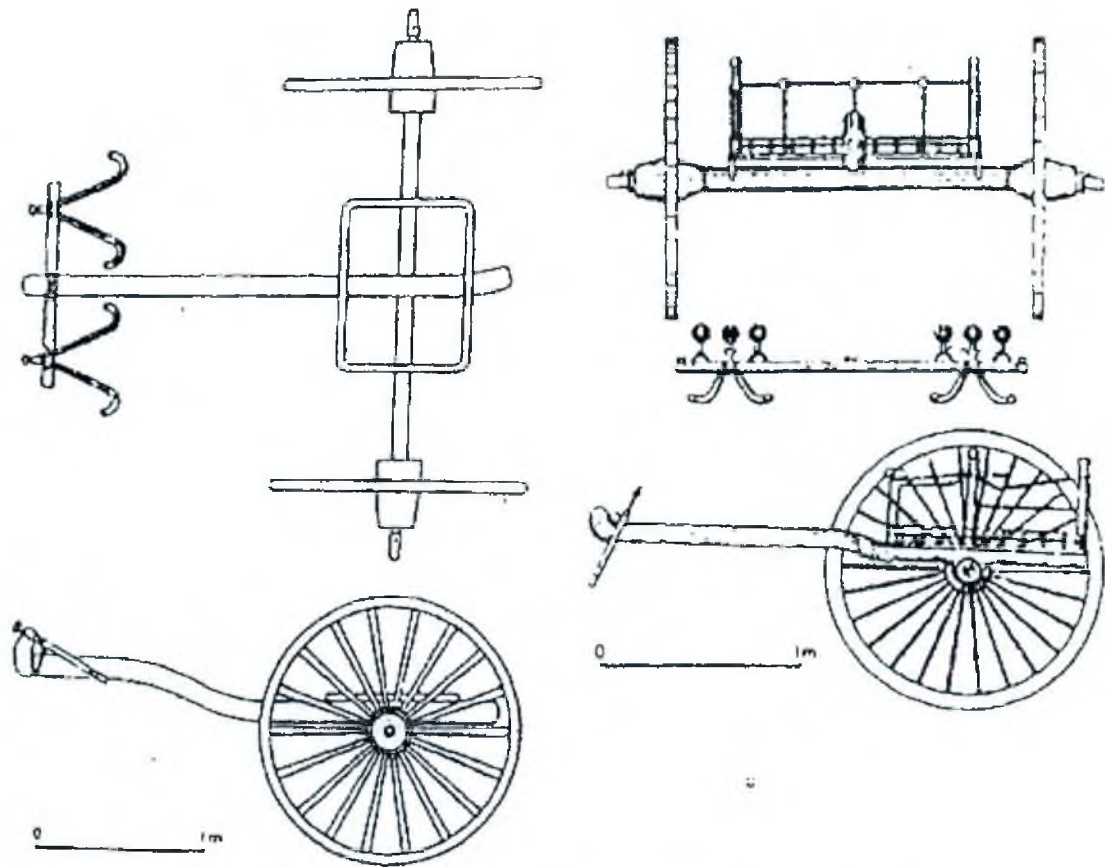
- Chariots were mentioned about eight times.
- Wagons and vans were referred to about four times.
- Crossbows, arrows, triggers and lances were mentioned about five times.
- Armour, shields and helmets came up about six times.
- Drums, bells, flags and banners were referred to in about three places.

Above-mentioned technologies did not come in reference to the battle drills, which was the common practice of that age. They were rather referred to in the following manner:

Chariots

- a. “Generally, operations of war require one thousand fast four-horse chariots, one thousand four-horse wagons covered in leather, and one hundred thousand mailed troops” [Chapter-II, “Waging War”, page-72].
- b. “When provisions are transported for a thousand li expenditure at home and in the field, stipends for the entertainment of advisers and visitors, the cost of materials such as glue and lacquer and of chariots and armour, will amount to one thousand pieces of gold a day. After this money is in hand, one hundred thousand troops may be raised” [Chapter-II, “Waging War”, page-72].
- c. “As to government expenditures, those due to broken-down chariots, worn-out horses, armour and helmets, arrows and cross-bows, lances, hand and body shields, draft animals and supply wagons will amount to sixty percent of the total” [Chapter-II, “Waging War”, page-74].
- d. “Therefore, when in Chariot fighting more than ten chariots are captured, reward those who take the first. Replace the enemy’s flags and banners with your own, mix the captured chariots with yours and mount them” [Chapter-II, “Waging War, page-76].
- e. “Dust spurting upward in high straight columns indicates the approach of chariots. When it hangs low and is widespread infantry is approaching” [Chapter-IX, “Marches”, page-119].
- f. “When the light chariots first go out and take position on the flanks the enemy is forming for battles” [Chapter-IX, “Marches”, page-120].
- g. “When his troops march speedily and he parades his battle chariots he is expecting to rendezvous with reinforcements” [Chapter-IX, “Marches”, page-120].
- h. “It is thus not sufficient to place one’s reliance on hobbled horses or buried chariot wheels” [Chapter-XI, “The Nine Varieties of Ground”, page-136]

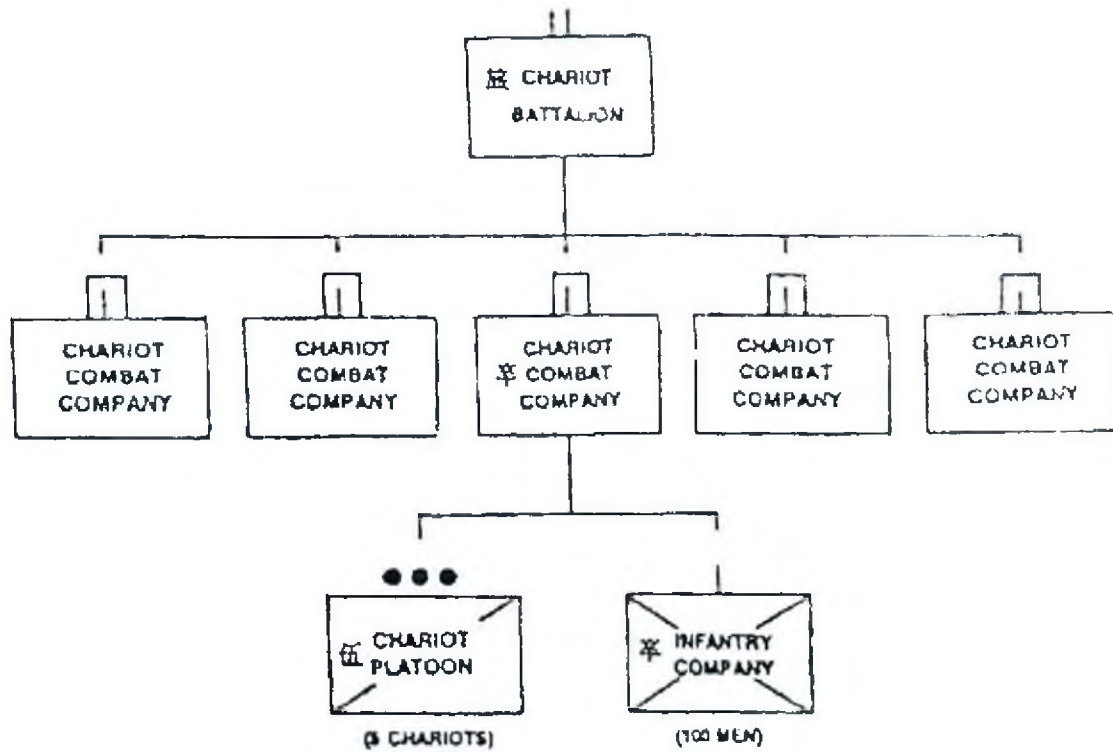
Figure. 4.6
Two Chariots



Left: Diagram of a chariot from the site of An-yang (end of second millenium B.C.)

Right: Diagram of a chariot from the site of Hui-hsien (Honan Province) (fifth century B.C.)

Figure. 4.7
Shang Tactical Chariot Organisation



Source : Gabriel, 1994 : 178

Wagons and Vans

- i. Referred to in sub paragraph a.
- j. Referred to in sub paragraph c.
- k. “To prepare the shielded wagons and make ready the necessary arms and equipment requires at least three months; to pile up earthen ramps against the walls an additional three months will be needed” [Chapter-III, “Offensive Strategy”, page-78].

Cross-bows, Triggers, Arrows and Lances

- l. Referred to in sub paragraph c.
- m. “His potential is that of a fully drawn crossbow; his timing the release of the trigger” [Chapter-V, “Energy”, page-92].
- n. “He leads the army deep into hostile territory and there releases the trigger” [Chapter-XI, “The Nine Varieties of Ground”, page-137].

Armour, Shield and Helmets

- o. Referred to in sub paragraph b.
- p. Referred to in sub paragraph c.
- q. Referred to in sub paragraph k.
- r. “It follows that when one rolls up the armour and sets out speedily, stopping neither day nor night and marching at double time for a hundred li, the three commanders will be captured. For the vigorous troops, will arrive first and the feeble straggle along behind, so that if this method is used only one tenth of the army will arrive” [Chapter-VII, “Manoeuvre”, page-103].

Drums, Bells, Flags and Banners

- s. “The Book of Military Administration says : As the voice can not be heard in battle, drums and bells are used. As troops can not see each other clearly in battle, flags and banners are used” [Chapter-VII, “Manoeuvre”, page-106].
- t. “Now gongs and drums, banners and flags are used to focus the attention of the troops. When the troops can be thus united, the brave cannot advance alone, nor can he

- cowardly withdraw. This is the art of employing a host" [Chapter-VII, "Manoeuvre", page-106].
- u. "In night fighting use many torches and drums, in day fighting many banners and flags in order to influence the sight and hearing of our troops" [Chapter-VII, "Manoeuvre", page-107].
 - v. "When his flags and banners move about constantly he is in disarray" [Chapter-IX, "Marches", page-121].

From the above we find that references of technology in Sun Tzu's writing is really meagre. Whenever it had come, it came under an unusual context breaking the norm of his age. He never tried to burden his treatise with the wisdom of weapon training or about the efficient use of crafts and tools of war posing himself as a teacher. References were only made in strategic context with an intention to create a mind-frame for the strategists of his days. Sun Tzu deliberately side-stepped the issues of crafts and tools and technology which he probably considered limited and ever changing and concentrated on the things more fundamental and unchanging, the subjective element of a strategist.

4.4 COMBAT AND HIERARCHY OF COMBAT DURING SUN-TZU'S PERIOD

Combat in Sun Tzu's Period

"Ssu ma Chien" the grand historiographer in his "*Record of the Historian*" mentioned that "The Thirteen chapters" of Sun Tzu were composed about 500 B.C. But according to the scholars who worked with the Chinese literature of the 'Classical' period' (551 B.C. - 249 B.C.), those chapters could not have been written in that period, but belongs to a later age. Samuel B. Griffith though placed Sun-Tzu in the category of "authorship unsettled" agreed that "The Thirteen Chapters" of Sun-Tzu probably have been written during the "Warring States period" (453 B.C. - 221 B.C.). On the other hand, Roger T. Ames, who had the chance to include the findings of the new text of Sun Tzu uncovered in an archaeological find in Shantung Province in 1972 also agreed

that "The Chapters" were probably composed during the "Warring States period". Of course, Ames shows us that the problem of authorship is in fact based in our modern conception of "Single authorship" where we are unable to imagine oral transmission of literature which often occurred in the past. He also differs about the length of the "Warring States period", according to him it started from 403 B.C. and ended in 221 B.C. [Ames, 1993 : 3].

With the blessings of the media, specially the electronic one like the BBC and CNN we are accustomed with the battlefield scenarios of the 20 th century as well as the future. This effective and one way traffic has created a mind frame within us about warfare. It will be of no use to us rather function as a barrier in visualising the picture of combat in Sun Tzu's period. The origins of war go back to prehistoric times. Some anthropologists have argued that war is a creation of civilised man and that in prehistoric times there was no armed aggression of man against man. Archaeological discoveries of the twentieth century, however, have produced ample evidence that prehistoric man did wage wars. The first recorded images of war date to about 4000 B.C. The conduct of war did not change much for perhaps more than 3000 year. Warfare in the ancient period was different from today for obvious reasons but everywhere it was almost similar. In those days everywhere including China warfare was characterised by close formations, a tradition of citizen-soldiers, and a predominance of thrusting and throwing weapons. Every where the conduct of warfare was the same, first, the enemy had to be found then the battle had to be offered. If the offer was accepted, the armies were deployed in battle order, confronting each other, before the order to attack was given. Sometimes both armies attacked. Sometimes one attacked and the other stayed in a defensive position. Sometimes both sides stayed where they were, waiting for hours in full battle order for the assault of the other side. The impact of the first clash was often regarded as decisive, and horses and even elephants were used to reinforce the effect. Battle, once commenced was not infrequently a chaotic clash, divided into thousands of hand to hand combats in which people tried to capture or kill each other with all means available. It took usually only a couple of hours, and never a full day, before one of lines broke, which led to chaos, flight and surrender.

The nature of war was determined by the way battles were fought, and their characteristics remained the same during millennia of warfare:

- The armies were always small of necessity; it was impossible to sustain a great army for a long period of time.
- The battlefield was small and easy to survey and the killing zones, where the actual fighting took place, were never more than a few metres wide.
- The decisive weapons were all hand weapons, with most of which it was virtually impossible to wound or to kill at a distance of more than one metre.
- The commander-in-chief was present on the battlefield as one of the combatants, usually leading his army from the front line.
- It was a relatively short clash, never lasting longer than one day.

During the “Autumn and Spring period” warfare was almost same in China. While writing about this period Griffith has mentioned,

Until about 500 B.C. war was in a sense ritualistic. Seasonal campaigns were conducted in accordance with a code generally accepted. Hostilities were prohibited during the months devoted to planting and harvesting. In winter the peasants hibernated in their mud huts; it was too cold to fight. In summer it was too hot. In theory at least, war interdicted during the months of mourning which followed the death of a feudal lord. In battle it was forbidden to strike elderly men or further injure an enemy previously wounded. The human-hearted ruler did not ‘massacre-cities’, ‘ambush armies’, or ‘keep the army over the season’, nor did a righteous prince stoop to deceit; he did not take unfair advantage of his adversary [Griffith,1963: 30].

From the above we find that there was a code of chivalry which was religiously followed by every body^{*}. There was a concern amongst the philosophers and kings about the righteousness of a war, an enlightened prince was morally justified in attacking a darkened and rustic country. The armies of the ancient China were the private belongings of the feudal lords. When called upon by the sovereign, members of the nobility used to provide both men and material for the war according to the scale set for each of them before hand. In combat the principal role used to be played by the four-horse chariot manned by a driver, a spearman, and a noble archer. The expendable infantry were grouped about the chariots. Maximum of them was equipped with hooking, cutting or

^{*} The Western tradition of facing an enemy frontally and head on with force and the attitudes towards the Oriental trickery ignores the Eastern traditions of chivalry.

thrusting weapons usually held in hand. Griffith gave a picture of the battlefield of those days in the following manner:

The battles of ancient China were primitive melees which usually produced no decisive results. Ordinarily the two sides encamped opposite one another for several days while the diviners studied the auguries and the respective commanders conducted propitiatory sacrifices. When the auspicious moment selected by the soothsayer arrived, the entire array, whose roars shook the heavens, threw itself precipitately upon the enemy. A local decision was produced speedily. Either the attacker was repulsed and allowed to withdraw, or he broke through the defender's formations, killed those still inclined to offer active resistance, pursued the flying remnants for half a mile, picked up anything of value, and returned to his own camp or capital. Victory was rarely exploited – limited operations were undertaken to achieve limited objective [Griffith, 1963 : 33].

Shortly before 500 B.C. the concepts which had moderated warfare began to change. There were important differences between the “Autumn and Spring period” and the “Warring States period”. During Sun Tzu's time, the feudal structure of the society was being replaced by an entirely new type structure, which offered more opportunity to the talented individuals. This also affected the military. During this period great states formed standing armies replacing the temporary levy system which was unreliable, inefficient and inadequate. These armies were officered by professionals and comprised of disciplined and well-trained troops and conscripts. There were elite or shock troops specially selected for their courage, skill, discipline and loyalty who used to lead the armies in different operations. The day of the brave, or knight, whose fame derived from his individual prowess, was over. Battles had become directed efforts; the valiant no longer advanced unsupported, nor did the coward flee.

Elements of the new armies, capable of co-ordinated movement in accordance with detailed plans, were responsive to systematic signals. The science (or art) of tactics was born. The enemy, engaged by the ‘cheng’ (orthodox) force, was defeated by the ch'i (unorthodox, unique, rare, wonderful) force, or forces; the normal pattern was a holding or fixing effort by the cheng while ch'i groups attacked the deep flanks and rear. Distraction assumed great importance and the enemy's communications became a primary target [Griffith, 1963 : 34].

Iron, which had appeared about a millennium earlier in the West, became common in China by the fifth Century B.C. Iron replaced bronze for weapons, and iron farming tools and the ox-drawn plough brought an agricultural revolution to China [Fairbank, 1973 : 34]. Though iron was known in China before 500 B.C. but it was extremely rare and valuable. Sword making remained as secrets of individual craftsman and the process was ritualistic. Around 400 B.C. these secrets became common property, when the rapid development in iron making begun. It was associated with advances in metallurgy, the introduction of leather bellows, and improvement in the design and construction of furnaces [Griffith, 1963 : 27].

During Sun-Tzu's period there were chariots, crossbow and swords of high quality iron. Before the crossbow there was the composite reflex bow. The crossbow was a Chinese invention of the early fourth century B.C. which fired heavy arrows. In Sun Tzu's time armies were mainly composed of swordsmen, archers, spearmen (or halberdiers), cross bowmen, and chariots. Cavalry did not appear until sometime later, however messengers and scouts used horses without saddle and stirrups. At that time spears were not used as missiles, they were used by foot soldiers for thrusting and slicing. Cross bow was used as missile weapon, because in the crossbows the Chinese possessed a short-range, flat trajectory weapon of great accuracy and tremendous power.

Hierarchy of Combat during Sun Tzu's Period

So far hierarchy of combat is concerned during Sun-Tzu's age, the "Warning States" period (453 B.C. -221 B.C.) was different from the earlier "Spring and Autumn" period (771 B.C. - 481 B.C.). In the "Spring and Autumn" period armies were invariably commanded by rulers, members of their families, powerful vassals, or trusted ministers. The concept of "general staff" originated during the "Warning States" period. The doctrine of collective responsibility in battle was probably first developed during this time. About the division of authority, Griffith said:

Naturally, all generals of the fourth century B.C. did not attain the position by reason of their abilities but by this time it was possible for an able man to rise to command rank without respect to aristocratic origin and to receive at a ceremonial investiture the battle-axe which symbolised his status as commander-in-chief and conferred upon him supreme authority outside the capital. The administration of the army and its operational employment were from this moment his responsibility; when the general crossed the borders there were some orders of the ruler which he might ignore. But with his subordinates the general was amenable to the military law [Griffith, 1963 : 36].

The Germans probably were inspired by the above example and created the new level between strategy and tactics, the 'operational level'. The upper end of the strategy dealt by higher echelon located in the capital is known as strategy, but the discrete theatre commander fell within the operational level, which is the lower end of strategy. However we do not find any such clear division during Sun Tzu's period. There was strategic planning but maximums of the battles were fought tactically.

One very astonishing thing in the above mentioned hierarchy is the relation of the commander – in – chief and the sovereign. The moment he will cross the boundary of his own state he may not obey certain orders of the sovereign. It means that once he is entrusted with the responsibility of command he will perform his command responsibility without any intervention even from his own king. This provision emphasised on the importance of the commander. The practice insisted that the general in the field should not be constrained by commands issued from the capital⁹. This was done because unity was considered the key to military success, the soldiers were united only by absolute faith in their commander, and such faith remained intact as long as the commander remained sovereign within his own domain. His power should extend not only to making strategic and tactical decisions but also to controlling the distribution of rewards and punishments in the field, including the power of summary execution and to distribute lands and

⁹ This view is to be reviewed and reinterpreted in the light of our age and political culture. "War is too serious a matter to be left alone to the generals", prompted Nehru and Krishna Menon to indulge themselves into the micro management of the border war of 1962 and maddening things which ultimately ruined them. On the other hand, "War is too serious a matter to be left alone to the politicians" prompted General Mac Arthur to contradict so loudly with Truman that the whole world could hear it. In fact neither politicians should intervene in the micro management of military organizations and their functions nor the generals should out step the limits set for them in the macro management of their organizations and organized violence.

titles. "If the commanders were controlled by the ruler, then the army would possess two minds and cease to be an all-powerful single body" [Lewis, 1995 : 17]. It is a fact that the army forms a body as a result of extended training. Only such discipline could overcome the diverse sentiments of the individual soldiers and forge them into cohesive units that acted as one at the behest of their officers.

4.5 CONCLUSION

Was there any technology at all in China during Sun Tzu's period? Was there anything called science in that society? From the above analyses it is revealed that the saying "necessity knows no bound" was also true during Sun Tzu's period and people invented tools and craft to fulfil their needs. Sun Tzu's text was composed in a period which has been categorised by Creveld as the "Age of tools", Tofflers as the "Agrarian age", and Chinese historiographers as the "Warring States Period". This period, in Chinese history had distinctive characteristics. By the fifth century B.C. the use of iron became common in China. It replaced bronze weapon, and iron farming tools and the ox-drawn plough brought an agricultural revolution to China. During Sun Tzu's time there were chariots, cross bows and swords of high quality iron. The crossbow was a Chinese invention of the early fourth century B.C. and shot heavy arrows. Cavalry did not appear until sometime later, however messengers and scouts used horses without saddle and stirrups.

The "Hundred Schools" of philosophy were at their height between 500 to 250 B.C. It was China's Golden Age of philosophy, the most important of which were Confucianism, Taoism, Mohism, Legalism etc. On the one side, Confucianism was basically rationalistic but on the other side, its intense concentration of interest upon human social life to the exclusion of non-human phenomenon negated all investigation of things as opposed to human affairs. This type of rationalism with an inclination towards humanities proved itself less favourable to the progress of science. Confucian attitude toward knowledge never shifted from the point that man and human society was alone worthy of investigation. If this fixation is opposed to science than definitely Confucianism was anti science.

The Taoist system of thought, which still today occupies at least as important a place in the back ground of the Chinese mind as Confucianism was, a unique and interesting combination of philosophy and religion, incorporating also 'proto' science and magic. It is vitally important for the understanding of all Chinese science and technology. According to Taoism, Confucian knowledge was masculine and managing. Taoist condemned it and sought after a feminine and receptive knowledge, which could arise only as the fruit of a passive and yielding attitude in the observation of nature. The observation of nature as opposed to the management of society, requires a receptive passivity in contrast to a commanding activity, and freedom from all preconceived theories in contrast to an attachment to a set of social convictions.

Mohists represented what might almost be called the "chivalrous" element in Chinese feudalism. Their practice of the techniques of fortification and defence was probably what led them to take interest in the basic method of science, and to those studies in mechanics and optics which are among the earliest records of Chinese science. If the interest of the Taoist had been directed rather to biological changes, that of the Mohist were attracted to Physics and Mechanics. There is one feature in Legalism, which is of particular interest for the historians of science, namely its tendency towards the quantitative and statistical methods.

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So far hierarchy of combat is concerned during Sun Tzu's age, the "Warring States Period" was different from the earlier "Spring and Autumn Period". In the "Spring and Autumn Period" armies were invariably commanded by rulers, members of their families, powerful vassal or trusted ministers. During the "Warring States Period" a specialist-professional group replaced this elitist-royalist command structure. The doctrine of collective responsibility in battle was probably first

developed during this period. Commanders once entrusted with the responsibilities of command enjoyed sovereignty in the battlefield. This freedom was allowed because unity was considered a key element for military success, the soldiers were united only by absolute faith in their commander and such faith was possible only if the commander was the unchallenged ruler in his own sphere. This environment was probably responsible for the transformation of warfare in China from a noble occupation to a profession and that twilight period of professionalism is probably responsible for the birth of the Sun Tzu text.

Chapter 5

MORALITY

- 5.1 War and Morality : A Theoretical Orientation.
- 5.2 Humanism and Two Greatest Moral Philosophers of Ancient China.
- 5.3 “Deception” and the “Distorted Image” of Sun Tzu.
- 5.4 Moral and Amoral Teachings of Sun Tzu
- 5.5 Sun Tzu’s Objective – Morale Elements of a Strategist.
- 5.6 Conclusion

The topic, “morality and war” is problematic¹. An absolute pacifist who believes that war itself is immoral, with him further discussion of “morality in war” is absurd. This chapter on “Morality” is divided into five sections. The first section, “War and Morality : A Theoretical Orientation” in fact orients us with different aspects of “pacifist” as well as “permissivist” perspectives. Key features of the “Just War Theory” is also defined briefly for the convenience of the study.

In the second section, “Humanism in Chinese Philosophy and Two Great Moral Philosophers of China”, the basic difference between the classical Western philosophers and their Chinese counterpart has been analysed. It is highlighted that Western philosophy had been dominated by the notions of logos (words, account, explanation) whereas in China it was guided by the concept of *tao*; the way. The keynote in Chinese philosophy was humanism; ethical and political discussions have overshadowed any metaphysical speculation. Some of the Western scholars blame that Sun Tzu’s teachings particularly betray the moralist schools of Confucianism and Taoism; how substantive is this blame has been examined in this section. In this section, “The Intimate Relation Between Wisdom and Warfare”, the interdependent relationship between

¹ There is little common ground between the practice of war and the activity of philosophical contemplation upon it. The two are worlds apart.

the philosopher and warrior assumed by the Chinese thinkers is also elaborated.

The third section “Deception and Distorted Image of Sun Tzu” deals with certain misperceived notions like, the Chinese traditions of warfare is indirect, stratagem oriented whereas Western traditions of warfare is direct and based on a code of chivalry. Such notions undermine the spirit of the Chinese code of chivalry as well as the indirect strategies adopted by the West. In this section it is also established that Sun Tzu is not alone responsible for the abandonment of strict code of chivalry and morality from the military thoughts of the “Warring States Period” China.

The fourth section of the Chapter, “Moral and Amoral Teachings of Sun Tzu” mainly contains the justification that Sun Tzu’s amoral teachings may be categorised as “good tricks” following the Stoic concept *dolus – bonus*².

The fifth section, “Sun Tzu’s Objective – Morale elements of A Strategist”, contends that creativity, imagination and character are the most important factors in innovating and applying strategies. Change is the unchangeable characteristics of technology hence every technology is limited. It is the human mind which seems to be limitless. Its possession allowed human beings to have the name “knowing subject”.

² *Dolus-honus* is a legal term, which stands for the concept of just deceit. It was popularized by Greek Sophists of the fifth century B.C. and converted into the Stoic concept of “good tricks”, which advocated stratagem for national defense or public good. Roman Law codified this Stoic concept and thus with St. Augustine’s biblical justification of stratagem, the legitimacy of stratagem passed via Aquinas and Grotius into the modern tradition of international Law.

Two Dimensions of the Problem

While studying “morality and war”, we come across two fundamental questions. Is it ever morally permissible to go to war? If it is, then what is morally permissible to do in war? Answers to these two questions have received the name *jus ad bellum* and *jus in bello*, respectively. Moral reflections on warfare can be separated into two major categories, they are “*morality of war*” and “*morality in war*”. “Morality of war” deals with the question whether engaging in war is ever morally permitted or justified. “Morality in war” answers the questions that once the war has begun, are there any moral restrictions on the way in which it may be fought. Is all fair in war? Are there rules that must be observed in war, if so, where are they to be found [Wakin, 1986 : 220]?

The best-developed and most widely held theory of morality of war is the “just-war” theory. To have a better understanding of the just-war theory we must first analyse two contrasting human attitudes which have been developed into theories: “*pacifism*” and “*permissivism*”.

Pacifism

It is a category of thought and action embracing a broad spectrum of moral and political belief about war and peace. Pacifism rejects war and organised violence and prefers a range of alternatives leading to peace and justice. Amongst various types of pacifism, relevant two are: “*absolute pacifism*” and “*modern-war pacifism*”. Absolute pacifists believe that any kind of killing is never morally permissible. This viewpoint clearly speaks that under no circumstances one has the right to go to war. Once someone believes that war itself is an immoral act at that time asking him about the things morally permissible in a war is definitely illogical. According to Stanley Hauerwas a commitment to pacifism as a life style eliminates the need to decide if war

is ever justified. *The committed pacifist never has to face “the question of whether to use or not use violence as a means of securing some good”*[Hauerwas, 1985 : 277]. The other form of pacifism, which might be called “*modern-war pacifism*”, claims only that the current historical situation is such that no war could in fact meet the criteria which a defensible just-war theory would have to set.

Permissivism

The English proverb, “*All is fair in love and war*” and Cicero’s saying, “*Laws are dumb in time of war*” are nice to hear but are they true? In fact these are the permissivist’s viewpoints on war and they dictate that moral principles cannot be applied to war. This type of moral nihilism is not the only view, which is more permissive than the just-war theory. Permissivist account of the *jus ad bellum* considers that a state is a sovereign entity and it has the right to go to war whenever it likes; this is the doctrine of *Staatsraison* (or *raison d’etat*). Victory is the most dominant factor to a permissivist hence in their account of the *jus in bello* they consider that belligerents (or individual combatants) have the right to adopt any means to win a war. This is known as the doctrine of *Kriegsraison* (or *raison de guerre*). These doctrines are logically independent [Kemp,1993 :1859]. Such a condition produces three possible positions:

- States are sovereign hence they have a right to go to war whenever they want and is entitled to do what ever they fill like to win the war.
- Fulfilment of certain conditions only justify a state to resort to war, but once resorted, a state has the right to adopt any means which will help her in achieving a victory.
- States may go to war whenever they fill like, but there are moral limits on what they may do to win the war.

First type of permissivism is the complete permissivism. Karl von Clausewitz³ and Thomas Hobbes are the two most prominent permissivists of this type. First version of permissivism

³ Karl von Clausewitz is considered the central sun of the Western strategic thought. he is the author of *On War*.

might be drawn from their writings. Clausewitz, in his understanding of the nature of war accepts the doctrine of *Staatsraison*. His famous saying, “war is a continuation of policy by other means” is known to all of us. He also supported the doctrine of *Kriegsraison* very clearly in his writings. Hobbes declares that nations are in a State of Nature relative to one another. The persons (or rulers) in the State of Nature “may seek, and use, all helps, and advantages of war” which indicates his support to both the doctrines of *Staatsraison* and *Kriegsraison* [Kemp, 1993 : 1859].

The second version of permissivism accepts the doctrine of *Kriegsraison*, but not that of *Staatsraison*. It is permissive with respect to military means, but not with respect to political ends. American five star general Douglas MacArthur held this view. According to him, if a war is forced upon a state, there is no other alternative than to apply every available means to bring a swift end to it and in that there is no substitute to victory. For Mac Arthur, war is hell hence waging it requires strong moral justification (thus the doctrine of *Staatsraison* is rejected). But once the hell has been raised by an enemy, it should be put-off as quickly as possible. Even if certain means which appears immoral but would hasten victory quickly are permissible (this asserts the doctrine of *Kriegsraison*)[Kemp, 1993 : 1860].

The third version of permissivism is the political permissivism. It considers war as a morally unproblematic means of achieving political ends, but does insist that war is a rule governed activity. War, in this view, is like a duel or a jousting tournament. It is not like a brawl, where there are no rules. Machiavelli is one of the proponents of this view. According to him, properly conceived, war has the purpose of creating, maintaining, and expanding the political order of the state. Adeptness in carrying out these tasks is the measure of statesmanship and the supreme virtue in a world in which other virtues go unrecognized [Clark, 1988 : 52]. Machiavelli tolerated certain principles of limitation in warfare in conformity with the political purpose of war. Ian Clark in answering the question whether war is a rule governed activity or not has mentioned five sets of rules. They are, rules of military efficiency, rules of political instrumentality and proportionality, rules of utility, rules of positive law and rules of morality

[Clark,1988 : 25]. However political permissivism cannot, in the final analysis, be justified.

The Just War Theory

The most common alternative to the two points of view discussed above is the just war theory, whose origins can be traced back to the Middle Ages. This theory holds that:

- Going to war is not always wrong in principle.
- Staatsraison is not a sufficient reason to go to war.
- Kriegsraison is not an adequate criterion of what one may do in war.

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War, according to this view, could be justified, but only under certain circumstances. The moral foundation of the just-war theory varies from author to author. Walzer relies on a theory of rights; Childress, in his, relies on a theory of prima facie duties; and other authors appeal to Thomistic natural law [Kemp,1993: 1860]. Despite disagreements over the question of moral foundations, there is fairly general agreement among just-war theorists about the necessary conditions of a just war.

Jus Ad Bellum : The *jus ad bellum* has been variously thought to specify those conditions to be met in under taking a just war. In other words it outlines why and when recourse to war is permissible [Toner,1992 : 71-72].

Just Cause: War is permissible only to confront “a real and certain danger,” such as protecting innocent life, preserving conditions necessary for decent human existence, and securing basic human rights. The medieval notion of retributive war is generally regarded as impermissible today in view of the high risks of modern warfare.

Competent Authority: The decision to begin a war must be made by appropriate politically empowered (or constitutionally ordered) officials, not by private groups for

private gain.

Comparative Justice: War is only permissible in the service of justice (e.g., in response to some past or impending wrong committed by others). After careful consideration when it is seen that a war will set the previously committed wrongs right and the result achieved will outweigh the cost and sufferings, only at that time one may resort to a war.

Proportionality: Complementing the idea of “comparative justice” is the tenet of proportionality, meaning that the damage to be inflicted and the costs to be incurred must be balanced or consistent with the good expected by resort to arms.

Right Intention: Right intention is related to just cause. During the conflict, right intention means pursuit of peace and reconciliation, including avoiding unnecessarily destructive acts or imposing unreasonable conditions. This tenet insists that peace and reconciliation are the ultimate aim of the war.

Last Resort : War is not to be undertaken lightly and should therefore be entered into only as a last resort when all other peaceful measures to resolve the conflict have been exhausted.

Probability of Success : A reasonable prospect of success is a condition of a just war. Without such a prospect, the evils of war would simply be added to the evils of the unjust peace.

Jus In Bello: Once someone is convinced that it is morally permissible to wage a war under few conditions at that time the question comes in his mind, “what are the things permissible to do in a war?” Answers of these questions about the conduct in war are known as of *jus in bello*. The principles of *jus in bello* dwells upon the ideas of proportionality and discrimination. The

elements of *jus in bello* can be listed this way [Toner, 1992 :76-77] :

Proportionality: The quantity of force employed or threatened must always be morally consistent to the ends being pursued in and by the war.

Discrimination: Force cannot be applied so that non-combatants and innocents are the deliberate targets of attack. Combatants are the only appropriate targets in war.

Genocide: Is prohibited.

Observation of Laws : The positive laws of law (treaties, conventions, general principles of law accepted as comity, and the writings of publicists broadly accepted) must be observed / obeyed.

The idea of just war repudiates the notion of pacifism. It also repudiates the notion of jingoism, manifesting itself in a crusade mentality.

Critics of just – war theory often claim that it is no more applicable to the modern world, but practically we find that the criteria listed in the theory seem to be exactly the terms in which questions of morality and war continue to be discussed by all parties. According to Ian Clark, “it is a living tradition that has demonstrated considerable persistence and adaptability and should be regarded as a practical body of moral guidelines applicable to real life, not a museum piece to be preserved for its own sake”[Clark,1988 : 31].

5.2 HUMANISM IN CHINESE PHILOSOPHY AND TWO GREATEST MORAL PHILOSOPHERS OF CHINA

Nature of Philosophy in Classical China

Arms are instruments of ill omen, not the instruments of the gentleman. When one is compelled to use them, it is best to do so without relish. There is no glory in victory, and to glorify it despite this is to exult in the killing of men. – Lao Tzu.

Tzu Kung asked about government. The Master said, “Give them enough food, give them enough arms, and the common people will have trust in you”. Tzu Kung said, “If one had to give up one of these . . . which should one give up first?” “Give up arms”. – Confucius: The Analects, Bk XII

In the practical art of war, the best thing of all is to take the enemy’s country whole and intact; to shatter and destroy it is not so good. So, too, it is better to capture an army entire than to destroy it, to capture a regiment, a detachment or a company entire than to destroy them. Hence to fight and conquer in all your battles is not supreme excellence; supreme excellence consists in breaking the enemy’s resistance without fighting. – Sun Tzu

There is a basic difference between the classical Western philosophers and their Chinese counterpart. Western philosophy had been dominated by the notions of *logos* (words, account, explanation) whereas in China it was guided by the concept *tao* (the way, the paths); to show the path to be followed to achieve existence of the individual not as such but the functioning in society in all its facets, from life in the family to the proper organisation of the state.

The keynote in Chinese philosophy is humanism; man and his society have occupied, if not monopolised, the attention of Chinese philosophers throughout the ages⁴. Ethical and political discussions have overshadowed any metaphysical speculation. It must quickly be added, however, that this humanism does not imply any indifference to a supreme power or to nature. Instead, the general conclusion represented in Chinese philosophy is that of the unity of man and

⁴ The Chinese probably are unique among all peoples, regardless of cultural level, in having no cosmogonical myth of a creator external to creation.

heaven. This spirit of synthesis has characterised the entire history of Chinese philosophy. The resolutely pragmatic nature of classical Chinese philosophy resists any severe distinction between theory and application and, as a consequence, philosophising in that culture is not merely theoretical – it entails practice, “doing”.

During the dynastic change, from the *Shang* to the *Chou*, the Chinese society was also transforming. It was transforming from a tribal to a feudal society and entering from the Bronze Age to the Iron Age. As a result of this change a new economy and a new society emerged, which required new talents as well as new tools. Earlier people had prayed to their ancestors for the solution of their problems, but now they turned towards man, though they kept on honouring their ancestors. For an example, instead of praying for rain people developed the irrigation system. Man was in the ascendancy.

Under such circumstances, with the gradual importance of man, it was felt that rewards and punishment depended on man’s virtue, for “Heaven is always kind to the virtuous”. Thus man’s virtue became the determining factor, man could now control his own destiny. The role of religious sacrifices did not diminish in the lives of the people, however its meaning was changing from a magical to an ethical one; that is, from ways to placate spiritual beings to pure expressions of reverence. It was in this atmosphere that the so-called Hundred Schools of Thought emerged (6 th – 3 rd century B.C.)

All most all of these schools came up in response to practical conditions. Their important philosophers kept on roaming from one feudal state to another offering their ideas on social reform, some of them even took up the jobs of government official in materialising their dreams. These scholars expressed their ideas in conversations, official documents, or short treatise, they set the pattern for later philosophers.

The existential character of Chinese philosophy has created the erroneous impression, however, that it is purely ethical and social and devoid of metaphysics. Though seemingly

random and unsystematic, the philosophy of every school was the result of years of serious thinking and formed a coherent and logical whole. It was in each instance built on definite concepts about man and Heaven, whether the latter was interpreted as the Supreme Being or simply as Nature.

The Intimate Relation between Wisdom and Warfare

Why was Cupid a Boy
And why a boy was he
He should have been a Girl
For ought that I can see

For he shoots with his bow
And the Girl shoots with her Eye
And they both are merry & glad
And laugh when we do cry . . .

Twas the Greeks love of war
Turn'd Love into a Boy
And Woman into a Statue of Stone
And away fled every Joy

[William Blake, "Love : The Sexes"]

The Greek city-state itself was a bit like a pressure cooker. It was small, and life was pretty constricted within it. The pressure set up jealousies and envies, both internal and external; this was one reason why these political entities were always fighting with one another and exiling or deposing their own leaders. The Greek city-state was always in danger of being attacked by its neighbour. This was why military training was so much a part of the Greek citizen's life. It is true that some city-states at certain times used mercenaries or hired armies. But in general the later were considered inferior and untrustworthy when the going got tough. The citizen army was at the heart of Greek city-state defence. Socrates did his military service in the Peloponnesian War, saw action at Potidaea and the siege of Delium, and passed up a decoration for valour so that another man might have it [Stockdale, 1987 : 230].

It was the Greeks love of war that curved the bright image and a high position of a soldier in the ancient Western society. Situation in China was altogether different, in classical culture though people bothered about war but it was neither celebrated nor glorified. In that society military heroism was a rather undeveloped idea. The warrior in China did not enjoy the same social status and benefits like their counter parts in the Western society. Even in those Chinese treatise, which deal exclusively with military affairs, we do not find any self promoting militarism, what we find is the same paternalistic concern for the people which is familiar to us from the Confucian literature. In classical China people did not romanticize war it was rather always viewed as an unfortunate last resort.

It is interesting to note that almost all the early Chinese philosophical literature contain extensive discussion of military affairs. The Master Mo, Master Hsun, Master Kuan, the Book of Lord Shang, the Spring and Autumn Annals of Master Lu, the Master of Huai Nan, are the examples. In addition, other central texts such as the Analects, Mencius, Master Han Fei, and the recently recovered Silk Manuscripts of the Yellow Emperor contain extended statements on military thought [Ames, 1993: 39]. With the aforesaid cultural condition one ought to be surprised observing this contrast. It reflects the perceived importance of warfare as a topic of philosophical reflection in China, a concern that is not paralleled in Western philosophical literature

In fact, in the imperial catalogue included in the History of the Han Dynasty, the military writers are listed under the “philosophers” (tzu) classification. It might be fair speculation to say that, in the philosophical literature of the classical period, a text would be perceived as less than complete if the conversation did not at some point turn to an extended discussion of military strategies and even tactics [Ames, 1993:40].

Under this sort of circumstances, how should we explain the intimate as well as interdependent relationship between the philosopher and the warrior assumed by the early Chinese thinkers? Till the late Spring and Autumn period armies were usually commanded personally by the members of the ruling families and high ranking ministers of royal blood. These aristocrats were educated from an early age in both civil and military arts. It is clear from

the profile of Confucius, preserved in Analects by his disciples that he was trained for both a literary and military career. It was only during the Warring States period warfare moved from an honourable occupation to a profession and a real separation emerged between the civil and the military, with mercenaries from lower classes selling their talents to the highest bidder.

Roger T. Ames stated, it is not only that military practices can provide grist for philosophical reflection, and philosophy can be applied as some organising apparatus for military action but the relationship runs deeper. He has suggested that beneath the rather obvious divergence in subject matter between the cultivation of wisdom in one's person and the cultivation of victory on the battlefield, there is an identifiable correlativity. According to Ames there is a peculiarly Chinese model of "harmony" or achieved order (*ho*) both fundamental to and pervasive in the classical culture that is pursued by philosophers and military commanders alike. Chinese have long believed that the superior man should be versatile. To them the quality of character which renders a person consummate and exemplary in the various roles of social, political and cultural leader will also serve him equally well in the role of military commander. Persons of superior character will be exemplary in whatever occupation they turn their hand to [Ames, 1993: 42].

Two Greatest Morale Philosophers of China

War is a supremely practical activity. The destruction of the battlefield, it would seem, is a universe removed from the sedate reflections of the philosopher. As such, war is more appropriately regarded as a realm of action than as a realm of abstract contemplation; if we seek to know about the nature of war, we should immerse ourselves in works of military history, not in works of moral or philosophical theory [Clark, 1988 : 1].

Every school had its own Way, but the Way of Confucius and that of another traditional sage, Lao Tzu, were the most prominent. The last part of the "Spring and Autumn" period of

Chinese intellectual history was dominated by these two philosophers⁵. They were basically moral philosophers and their influence had profound impact on every spheres of Chinese life. It has been already mentioned that throughout the ages of Chinese intellectual history, political as well as military thought has been virtually coterminous with philosophy. Chinese philosophy has not been compartmentalised into the classic divisions of logic, ethics, politics, ontology, and the like. Instead, ethics has been regarded as the individual's application of principles which on extension to society at large become politics; these principles have justified further speculation and learning within a framework of the "good society".

Politics and political thought were both the most useful and the most intellectually compelling of all activities. If the emphasis on history and on classical studies tended to impart a scholastic quality, the unity of the intellectual and political worlds helped to preserve a pragmatic character as well. The same men who were the authorities on the Confucian canon also had to be experts on taxation, relief, and border defence; their political thought seldom became abstract, no matter how much they cited ancient classics for authority.

Lao-tzu is best known for his ideas about the Tao (literally "Way," the Supreme Principle). The Tao is based on the traditional Chinese virtues of simplicity and sincerity. To follow the Tao is not a matter of keeping to any set list of duties or prohibitions, but rather of living in a simple and honest manner, being true to oneself, and avoiding the distractions of ordinary living. Lao-tzu was a type of moral sceptic: he rejected both righteousness and benevolence, apparently because he saw them as imposed on individuals from without rather than coming from their own inner nature. He also emphasised gentleness, calm, and non-violence. Nearly 600 years before Jesus, he said: "It is the way of the Tao . . . to recompense injury with kindness." By returning good for good and also good for evil, Lao-tzu believed that all would become good; to return evil for evil would lead to chaos.

⁵ Probably Lao Tzu lived during 500 B.C. However his *Tao Te Ching* (The classics of the Way and Virtue) made up of 81 brief sections, was probably compiled and revised during the 200 and 100 B.C. Confucius was born in 551 B.C. and died in 479 B.C.

The lives of Lao-tzu and Confucius overlapped, and there is even an account of a meeting between them, which is said to have left the younger Confucius baffled. Confucius was the more down-to-earth thinker, absorbed in the practical task of social reform. When he was a provincial minister of justice, the province became renowned for the honesty of its people and their respect for the aged and their care for the poor. Probably because of its practical nature, the teachings of Confucius had a far greater influence on China than did those of the more withdrawn Lao-tzu.

The teachings of Confucius aim at guiding the people in what is necessary to become a better person, a concept translated as "gentleman" or "the superior man." In opposition to the prevailing feudal ideal of the aristocratic lord, Confucius presented the superior man as one who is humane and thoughtful, motivated by the desire to do what is good rather than by personal profit. Beyond this, however, the concept is not discussed in any detail; it is only shown by diverse examples, some of them trite: "A superior man's life leads upwards The superior man is broad and fair; the inferior man takes sides and is petty A superior man shapes the good in man; he does not shape the bad in him."

One of the recorded sayings of Confucius is an answer to a request from a disciple for a single word that could serve as a guide to conduct for one's entire life. He replied: "Is not reciprocity such a word? What you do not want done to yourself, do not do to others." This rule is repeated several times in the Confucian literature and might be considered the supreme principle of Confucian ethics. Other duties are not, however, presented as derivative from this supreme principle, nor is the principle used to determine what is to be done when more specific duties--e.g., duties to parents and duties to friends, both of which were given prominence in Confucian ethics--should clash.

Confucius did not explain why the superior man chose righteousness rather than personal profit. This question was taken up more than 100 years after his death by his follower Mencius, who asserted that humans are naturally inclined to do what is humane and right. Evil is not in human nature but is the result of poor upbringing or lack of education. But Confucius also had

another distinguished follower, Hsün-tzu, who said that man's nature is to seek self-profit and to envy others. The rules of morality are designed to avoid the strife that would otherwise follow from this nature. The Confucian school was united in its ideal of the superior man but divided over whether such an ideal was to be obtained by allowing people to fulfil their natural desires or by educating them to control those desires.

Sun Tzu's attitude has been already compared with both Confucius and Lao Tzu in chapter four under the heading "Philosophical Schools and Science". Confucian attitude to knowledge never wavered from the standpoint that man and human society were alone worthy of investigation whereas "Taoism" lies at the basis of all subsequent Chinese scientific thought. From this perspective Sun Tzu was more inclined towards Confucianism.

During the "Warring States" period real separation between the civil and military occurred and warfare moved from a honourable occupation to a profession. Sun Tzu was not a philosopher, he was a professional. During the "Spring and Autumn" period philosophers usually dominated the field of military thoughts. In that culture warfare was considered an important matter, so important that it was perceived as a topic of philosophical reflection. Sun Tzu's text is not a book of philosophy, it is full of instructions on the "Art of War" yet not devoid of philosophical reflections. Sun Tzu did not breach the age-old tradition of the Chinese philosophy which centred around humanism. In the subsequent sections of this chapter we will be able to see that his treatise is devoid of militarism and full of teachings reflecting paternalistic concern for human beings which is the trade mark characteristics of both Confucius and Lao Tzu. Sun Tzu was inclined towards Confucius so far the attitude towards the science was concern but from the perspective of moral he was inclined towards both. This section may be concluded with the statement that both Confucius and Lao Tzu's texts include the martial within the cultural whereas Sun Tzu's text includes the cultural within the martial.

5.3 “DECEPTION” AND “DISTORTED IMAGE” OF SUN TZU

“All warfare is based on deception”, Sun Tzu explains succinctly, and the successful commander must therefore cheat not only with his spies but with his soldiers. When strong in the field, pretend weakness, he urges. When near, pretend to be far; when far, near. Use devious routes to take the enemy unaware. Feign confusion, and then hit him suddenly. Assume an air of inferiority and make him over confident. Lure him on with bait and await him in ambush. Goad his generals into acting recklessly – besieged by a ruler at the head of a hundred thousand men, one canny commander sent the aggressive potentate a sealed pot of urine as a gift of “wine”. This so infuriated the monarch that he threw his entire force against the town the practical joker was holding in one continuous, massive onslaught until after thirty days he had lost more than half of his army.[Ping, Ching and Denis Bloodworth, 1971 : 95]

“All warfare is based on deception”, this famous aphorism of Sun Tzu had a critical impact on some of the Western scholars. They claim that this attitude reflects the traditional dependence on ruses and stratagem and the abandonment of a strict code of chivalry during the Warring States period (453 – 221 B.C.). According to them, Sun Tzu’s mystical, metaphysical views circulated through his classic *The Art of War* betray the close connection of military thought with the philosophical schools of Confucianism, Taoism, and Legalism. Strategists and scholars who are brought up in the Western traditions, which typically emphasise heroic action compatible with the concept of honour (e.g., direct confrontation, superior numbers, and fire power) are quite likely to make such mistakes in comprehending the spirit of Sun Tzu’s teachings. In fact with utterances like, the Chinese traditions of warfare is indirect and stratagem oriented and the Western traditions of warfare is direct and based on a code of chivalry, one is liable to make a mistake. Such a statement undermines the spirit of the Chinese code of chivalry as well as the indirect approaches adopted in the Western strategies.

What do we understand by the term “stratagem”? Before going for the meaning of the term, we got to know that there is a perceptual difference about the meaning amongst the Western and the non-western scholars. Basically the term “stratagem” signifies a commander’s ingenious act embracing the use of surprise, deception, trickery, and indirect means in war. Stratagems occur at all levels of military activity e.g., strategic, operational and tactical.

Historically, stratagem may involve ambush, surprise attack, feigned retreat, disinformation, conditioning the enemy to expect a certain pattern of behaviour, technological or tactical surprise, some commando/ special forces operations, and various other tricks or deceptions. Stratagem may also denote inducement of betrayal or treason, bribery, assassinations, some aspects of espionage, use of poison and sophistic interpretation of terms of surrender, truce or treaty. Designating any act a stratagem, however, as opposed to a routine or expected act, can be subjective and moot.

The tradition of indirect approach in the form of stratagem in warfare was neither first devised nor introduced by Sun Tzu; stratagem is practically synonymous with warfare itself. While studying the evolution of warfare in the West, we discover that earliest warriors paid heed to the importance of stratagem in winning a battle. Its prominence has varied throughout history in relation to the influence of chivalry and of advocates of the direct use of force. History tells us that though in the West stratagem was often considered as dishonourable and a favourite means of the weak but it was also considered that it could provide a greater margin of victory by more economic means. In fact many great captains became famous for their shrewdness and stratagems which were mainly based on their creativity and unconventionality.

From anthropological analysis we discover that stratagem probably dominated the earliest warfare. Conflicts between the people of the same culture, or between people of different cultures but living in close proximity, could at times be governed by strict customary rules, often of a religious origin. However these did not prohibit ambush or surprise attack on an enemy's village. There were no rules of conduct in conflicts between cultures, or wars with distant people. Fraud, lies and amoral deeds like treachery and trickery dominated the military thought.

The earliest historical reference to stratagem occurs in the royal archives of Mari in Mesopotamia: by letter the Assyrian king Shanshi-Adad (1813 – 1781 B. C.) advised his son, the ruler of Mari, to beware of enemy stratagems and to devise stratagems against enemy. In fact the second millennium B.C. was an age of stratagem, as seen in the extensive use of ambush, espionage, fifth columns, propaganda, provoking mutiny and rebellion, assassination, diversionary attacks, guerrilla tactics, and ruses of the Trojan horse type. Traditions of pre-state warfare, religious concepts (e.g., holy war), invasions of new people, and a lack

of international standards of conduct all contributed to the prevalence of stratagem in the earliest civilised warfare [Wheeler,1993 : 2331].

Incessant warfare in India during the fourth century B.C. produced its own military thought stressing stratagem. Kautilya's *Arthashastra*, (321 – 296 B.C.) espoused amoral approach to statecraft and contained military chapters emphasizing stratagems⁶. Even the *Mahabharata* and *Laws of Manu* do not consistently prohibit stratagem in the Hindu code of chivalry.

According to Thucydides the great historian of the Peloponnesian War, shrewd generalship and psychological factors, when combined with his amoral attitude, led to the assertion that stratagems produce the greatest fame and success in war. Xenophon and Aeneas Tacticus, stressed the importance of stratagems. According to Xenophon, *deceit against the enemy was not only divinely approved and right but also a form of wisdom*[Wheeler,1993 : 2334]. Deceit brought the most profit in war and the greatest success. Indeed every commander should be an inventor of stratagems. In his military encyclopaedia Aeneas Tacticus similarly emphasised stratagems. Although Alexander the Great returned Greek warfare to the standard of chivalry but by the second century B.C. stratagem ruled the environment of war where observing the rules of conduct was definitely considered poor generalship. Romans exemplified the principle that the most speciously honest are the best deceivers, and they delighted in vilifying opponents as perfidious tricksters (e.g. , Hannibal).The works of Frontinus, Polyaeus, and Vegetius demonstrate that stratagem had become not merely a major motif of ancient military thought but a doctrine⁷.

Classical theory taught that a general should have foresight to predict developments and should first await, then exploit, favourable opportunities. Battle should be avoided except when expedient. Stratagem could facilitate the proper

⁶ Kautilya earned his name from "Kutila"(crooked), which is related to "Kutniti"(the law of the crookedness). It is alleged that with the application of "crookedness" or amoral means he helped to transform a small Mauryan kingdom of northeastern India into one of the greatest empires of ancient India.

⁷ Sextus Julius Frontinus wrote *On Military Affairs* and *Stratagems* in the first century. Two centuries later, Flavius Vegetius Renatus wrote a book also entitled *On Military Affairs* (more generally known as *Military Institution of the Romans*), which was often used as a reference by the military scholars of Medieval Europe.

occasion for battle, win the battle, or become an alternative to battle, since stratagems could bring victory without fighting, with fewer losses in battle, or win a war after defeat in battle. The ideal general of classical military thought in the West worshipped at the shrine of Odysseus [Wheeler, 1993: 2334].

From the above mentioned examples we can come to a conclusion that Sun Tzu is not alone responsible for the abandonment of strict code of chivalry and morality from the military thoughts of the “Warring States China”. It must be mentioned here that the quality of literary style is partly responsible for such a distortion of Sun Tzu’s image. Sun Tzu’s literary style was marvellous, aesthetics and communication were its prime concerns which has survived translation, “many passages use communication at the aesthetic level and the detailed precepts are stated with such simplicity that they are easy to transpose into a modern idiom” [Simpkin, 1985 : 3]. “All warfare is based on deception” is such an example, with the passage of time it has become a popular slogan amongst the students of strategic studies as well the common people which has ultimately victimised Sun Tzu. It created the scope for certain Western scholars to project the distorted image of Sun Tzu. In fact neither the code of chivalry nor the tradition of direct use of force are an exclusive property of the West nor the non-Western military thought specially the Chinese one is only stratagem dependent. It is also incorrect to blame Sun Tzu about the moral degradation of the Warring States society.

5.4 MORAL AND AMORAL TEACHINGS OF SUN TZU

“For to win one hundred victories in one hundred battles is not the acme of skill. To subdue the enemy without fighting is the acme of skill”. This teaching of Sun Tzu is very popular and it reflects the main tune of his *The Art of War*. Some of the Western scholars criticise that Sun Tzu started his treatise with preaching of victory without a battle but rest of his treatise is full of teachings about how to win by fighting. Before going through the treatise one must realise that Sun Tzu was not a pacifist and he had written about the art of war not the art of peace. At the same time one must not forget that sometimes war may also ensure peace and it may become a cruel necessity; it is the realist concept of “armed peace”. One should neither look for fishes in the desert nor camels in the sea, if he does that he is bound to be frustrated. If we go

through the Sun Tzu text from a pacifists perspective we may also be frustrated.

Sun Tzu was not an absolute pacifist, at the same time he was also not a warmonger. He was not a promoter of war and never romanticised it; rather cautioned, “war is a matter of vital importance to the state; the province of life or death; the road to survival or ruin. It is mandatory that it be thoroughly studied.” This saying also projects the moral justification of the study of war. Remaining within a feudal society Sun Tzu warned the feudal lords not to resort to war to satisfy their ego; at the same time war can not be fought for only war’s sake. He said, “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 can not be restored, nor can the dead be brought back to life.” Sun Tzu viewed war as the unfortunate last resort and a cruel necessity. That is why one must not only exhaust all other available means but also seriously assess the possibility of victory before resorting to war. In this regard he says, “If not in the interest of the state, do not act. If you cannot succeed do not use troops. If you are not in danger, do not fight.” “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.”

Should warriors keep on fighting for fighting’s sake or there should be some political objective with political control of the matter so serious to the state? Sun Tzu not only viewed the political control of the military but also felt the necessity of integration of the people with their leaders about the cause of the war and it should be based on strong moral justification. He said, “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.” “Normally when the army is employed, the general first receives his commands from the sovereign. He assembles the troops and mobilises the people. He blends the army into a harmonious entity and encamps it.” “In general, the system of employing troops is that the commander receives his mandate from the sovereign to mobilise the people and assemble the army.” “And therefore it is said that enlightened rulers deliberate upon the plans and good generals execute them.”

We also observe some kind of reflections of morality of deterrence in Sun Tzu's teachings, "It is a doctrine of war not to assume the enemy will not come, but rather to rely on one's readiness to meet him; not to presume that he will not attack, but rather to make one's self invincible". It means that to remain unprepared is to provoke enemy to attacks. To deter such attacks one should remain always prepared and maintain his deterrent value. Today's defence forces are mainly organised to deter enemy, of course they also have the capability to defend.

Sun Tzu was very much concerned about the economic aspect of a war and his suggestions in this regard is definitely based on morality. He cautioned, "Now when an army of one hundred thousand is raised and dispatched on a distant campaign the expenses borne by the people together with disbursements of the treasury will amount to a thousand pieces of gold daily. There will be continuous commotion both at home and abroad, people will be exhausted by the requirements of transports, and the affairs of seven hundred thousand household will be disrupted."

About the "morality in war" (one's conduct in the war) Sun Tzu's teachings of trickery specially adopted for deception apparently look amoral, but if one goes through the teachings he/she will find that there are lots of moral teachings which outweigh the apparent evil teachings of deception in anyway (A consolidated list of moral and amoral teachings of Sun Tzu is given as Appendix-4). For example,

"For there has never been a protracted war from which a country has benefited".

"Treat the captives well, and care for them".

"Generally in war the best policy is to take a state intact, to ruin it is inferior to this (do not put a premium on killing). To capture the enemy's army is better than to destroy it; to take intact a battalion, a company or a five men squad is better than to destroy them".

If we assess Sun Tzu's teachings from a holistic perspective, we will find that such

amoral saying , “All warfare is based on deception”, will have the status of just deceit. The concept of just deceit, popularised by Greek sophists of the fifth century B.C. and converted into the stoic concept of *dolus – bonus* (good trick), advocated stratagem for national defence or the public good.

5.5 SUN TZU'S OBJECTIVE – MORALE ELEMENTS OF A STRATEGIST

According to Sun Tzu, "all war is based on deception" and it is a mind-boggling game, where the mind is the ultimate asset, not the material. Sun Tzu also knew about the limits of deception hence he reminded commanders that if they wish to simulate weakness disorder and cowardice in the face of the enemy, they must first make that their forces are in fact well organised, courageous and strong.

It is the creativity and imagination, which is the most important factor in innovating strategies and executing them. According to Nazareth, Sun Tzu’s “Art of War” is the oldest written military treatise yet remained popular and useful even for today because its teachings are based on the bed rock of military creativity. Following sayings of Sun Tzu is definitely about the necessity of creativity in a commander;

“Generally, in battle, use the normal force to engage; use the extraordinary to win”.

“Now the resources of those skilled in the use of extraordinary forces are as infinite as heavens and earth; as inexhaustible as the flow of the great rivers”.

“For they end and recommence; cyclical, as are the movements of the sun and moon. They die away and are reborn; recurrent, as are the passing seasons”.

“The musical notes are only five in number but their melodies are so numerous that one can not hear them all”.

“The primary colours are only five in number but their combination are so infinite that one can not

visualise them all”.

“The flavours are only five in number but their blends are so various that one can not 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 rings. Who can determine where one ends and the other begins”.

It is difficult even to enjoy the beauty of these compositions and relish them by a person who lacks imagination. Confucius was a skilled Bowman, he always emphasized that accuracy was more important than force in archery; similarly Sun Tzu also tried to teach us that brain power was more important in a war than brute muscle power. With one’s creative ability one has to shape and curve a complete victory.

Creativity has been generally understood in relation to the arts and sciences and creativity has been identified with a tangible or perceptible object like the plays of Shakespeare, the paintings of Michelangelo, the symphonies of Beethoven, the philosophy of Plato, the inventions of Edison and the scientific discoveries of Einstein. However war is neither wholly an art nor can it be called a science. It is basically an intensely competitive activity with the highest possible stakes of life and death, determining the survival or destruction of a nation. In war there is no second prize. Proficiency in war can be enhanced by the study and application of the relevant arts and sciences, but by its very nature war is dominated by subjective factors [Nazareth, 1987 : 2]

According to Nazareth, military creativity is therefore unique. It is the creativity of activity, which may manifest itself not only in tangible products, but also in its influence on events. The means by which military activity is directed is the decision. Therefore, the basic instrument of military creativity is the creative decision. In military hierarchy commanders make decision for the rests and Sun-Tzu in his treatise *The Art of War* tried to develop their minds with immense and endless potentials. Here we come to the question whether original thinkers are merely the products of privileged development or have some ‘gift’ in their make-up, which make them different from ordinary people? " Psychologists cannot give a satisfactory answer to this interesting question in the present state of the subject" [Thompson, 1967 : 184].

Again we come to the conclusion that change is the unchangeable characteristics of technology specially the military technology. Every military technology, every weapon system has a finite life or a life span, in that sense it is limited. It cannot remain effective and efficient after a particular period. To-day, the computer, prime tool of the information age seems to have limitless potentials yet following the nature of the technology some day probably it will also reach its limit. It is only human mind, which is limitless, its potentials boundless. Its possession allowed human beings to possess the name "knowing subject"; on a general level, it means the power of the social being or the subject to 'know', 'learn', 'discover', 'innovate', 'organise', reproduce, etc. in the context of his/her activities or practice in the society [Haack, 1979 : 3291]

It is not true that Sun Tzu had not seen technology. He might not have seen the complex technologies of the information age or the age of machines but definitely had seen the age of tools. It is sure that he grasped the trend of change, the ever-lasting rationale of technology. He could very well realise the truth that every technology has a finite life, hence they are limited. This wisdom prevented him from burdening his treatise, *The Art of War* with unnecessary descriptions and battle drills in using the weapons and military technologies of his days. Again it will be incorrect to say that there was no mention of technologies in Sun Tzu's treatise, there were references of chariots, cross bows, banners, torches, drums, wagons, armour etc. but they came up spontaneously with some principles of war, not as the god of war.

Sun-Tzu considered human beings as the most important and their mind as the most powerful and valuable asset. In this regard Confucian influence on him is visible. Confucius was so engulfed with human beings that he only considered human affairs to be worthy of studying⁸. According to Confucius, "Whatsoever the intellect may attain to, unless the humanity within is powerful enough to keep guard over it, is assuredly lost, even though it be gained". This

⁸ There is a basic difference between the classical Western philosophers and their Chinese counterpart. Western philosophy had been dominated by the notions of *logos* (words, account, explanation) whereas in China it was guided by the concept *tao*, the way: it aims to show the path to be followed to achieve existence of the individual not as such but the functioning in society in all its facets, from life in the family to the proper organisation of the state.

conviction was not without a basis, it had cultural footings.

To understand the close relationship between warfare and philosophy in classical China, we must look to the dynamics of an underlying and pervasive conception of harmony (ho) that, for the classical Chinese worldview, grounds human experience generally. Confucius said, "It is the person who extends order in the world (tao), not order that extends the person". Truth, beauty, and goodness as standards of order are not "given" they are historically emergent, something done, a cultural product [Ames, 1993 : 50]. Such a belief prevailed in that age and must have motivated Sun-Tzu in giving more weightage to the development of a strategist's character, personality, a mind frame with enormous potentials instead of orienting them with ever changing technologies. Such a methodology allowed him to keep his treatises thin and light and it could travel from one century to another with ease. Sun Tzu tried to teach his disciples the unchanging fundamentals of warfare and communicated at an aesthetic level that *The Art of War*, is still charming to go through even after two and a half thousand years.

5.6 CONCLUSION

Sun Tzu is not a pacifist, he is a permissivist who considered war as the unfortunate last resort in human interaction. He is more of a Mac Artherian type of permissivist, who were against protracted wars. Sun Tzu's saying, "no nation has ever benefited from a protracted war" is a proof of it. If we put his teachings into the frames of the principles of *jus ad bellum* and *jus in bello* we will find that Sun Tzu was more than a modern day "just war" theorist. His treatise started with the caution that war is the province of life and death, the road to survival or ruin hence it is a matter of vital importance to the state. These words of caution coincide with the modern "just war" theorist's view that war is not to be undertaken lightly and should therefore be entered into only as a last resort when other measures to resolve the conflict have been exhausted. According to them war must be declared and directed by a legitimate political authority and during Sun Tzu's period kings were such authorities. That is why he mentioned that while employing troops the commander receives his mandate from the sovereign to mobilize the people and assemble the army.

Central to the concept of the “just war” theory is the principle that war should be resorted to only for a just cause which is usually thought to focus upon requirements of self-defence, restitution, or retribution, right to pre-emption and to humanitarian intervention. Sun Tzu’s saying, “by moral influence, I mean 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”, reflects the same thing. “Just war” theorists have insisted upon a reasonable prospect of success as a condition of just war. Without such a prospect, the evils of war would simply be added to the evils of the unjust peace. Sun Tzu in his teachings cautioned about the same thing in following manner, “if not in the interest of the state, do not act. If you can not succeed, do not use troops. If you are not in danger, do not fight”.

“Just war” theorists dwell upon the ideas of proportionality and discrimination about the principle of *jus in bello*. Both of these bounds to the level and nature of force that might be employed in war, by stipulating that the war should not contribute more harm than good and that in its prosecution, the targets of war should be selected in accordance with an intelligible moral principle, predominantly but not exclusively that of combatancy. Sun Tzu’s concept of “complete victory” contains both the ideas of proportionality and discrimination. According to him victories in hundred battles is not a matter of credit, to subdue the enemy without fighting is the ultimate mastery. In this process one’s primary target should be the enemy’s strategy, next the disruption of the enemy’s alliance. After that if required he should attack the enemy’s army, enemy cities should be the last targets. “Thus, 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. Your aim must be to take all under heaven intact. Thus your troops are not worn out and your gains will be complete. This is the offensive strategy”. Sun Tzu’s preaching of restraint was not only based on tactics it was also based on moral considerations. From these findings we can very well say that moral reflections in Sun Tzu’s wisdom is not falling behind the modern “just war” theorists.

Beside the above mentioned moral teachings, there are some amoral teachings also in Sun Tzu’s text. He emphasised the role of intelligence and deception in war and advised to adopt any

means and measure to deceive the enemy and to achieve the enemy's information. He preached to offer the enemy a bait to lure and trap him and also to attack him where he is unprepared. These teachings did come up as the part of the stratagem usually applied in those day's warfare. In this chapter we have seen that the tradition of stratagem in warfare was neither first devised nor introduced by Sun Tzu. Stratagem is practically synonymous with warfare itself. There is a qualitative difference between Kautilya's *Artha Shastra* and Sun Tzu's *Art of War*. The former is full of lessons of statecraft blended with amoral means which fall within the boundaries of perfidy whereas the later is full of military wisdom blended with ruses and stratagem which remain within the limits of *dolus bonus* (Good tricks, permitted for the security of the state and public). Sun Tzu viewed ruses and stratagem as a force multiplier as well an instrument of economising violence, which is definitely a strong moral viewpoint.

“All warfare is based on deception” by uttering this sentence Sun Tzu has transformed the military culture of “Spring and Autumn” period into the “Warring States” culture seems absurd. We have already examined the complex circumstances and multifarious causes of the societal changes in China. There were “Warring States” Confucianists like Mencius and Xiun Tzu, there were also equally prominent Taoists, who all were overpowered by the inertia of social transformation and unable to put the society back to the moral tracks of the “Spring and Autumn” period. Under such circumstances making Sun Tzu only responsible for the betrayal of the moral ways of Confucius and Lao Tzu and pioneering the Chinese way of stratagem-dependent indirect approach abandoning a strict code of chivalry is incorrect. It will also be wrong to conclude that Sun Tzu was also floating with the current. He was not a smoke that the wind could move him in its direction, that is why we can discover the reflections of Confucius and Lao Tzu's wisdom in many of his teachings. Sun Tzu also did not deviate from the humanistic trend of the Classical Chinese philosophy, human beings were at the centre of his thought. After going through the moral and amoral teachings of Sun Tzu one is bound to discover that the dominant positive spirit outweighs the apparent evil teachings and they can be categorised as good tricks according to the Stoic concept of *dolus – bonus*.

Chapter 6

WAR

- 6.1 The Principles of War - A Yardstick for Evaluation
- 6.2 Revolutionary Wars
- 6.3 Localised Wars
- 6.4 Regional Wars with a Super Power's Participation
- 6.5 Findings of the War Studies

What is war? Romantic English poet Percy Bysshe Shelley once said, "War is the statesman's game, the priest's delight, the lawyer's jest, the hired assassin's trade". In these lines he was neither romantic nor poetic about war. Many of us may disagree with the poet yet many of us will definitely agree that war is the most dreadful thing in human affairs. Sun Tzu defined war as the province of life or death, the road to survival or ruin, a matter of vital importance to the state, hence he considered its thorough study mandatory. Naturally war remained central to the Sun Tzu text.

In the previous chapters we have already seen the back ground of the Sun Tzu text, examined the levels of war as well as labelled Sun Tzu's teachings. We have also scrutinised scientific and technological state of the "Warring States" and Sun Tzu's attitude towards them. Compared the moral stand point of Sun Tzu with the modern theoretical structure of the "morality and war", in the process we have come across the interesting questions whether Sun Tzu's views betray the close connection of military thought with the philosophical schools of Confucianism and Taoism, or he can be made responsible for the abandonment of the strict code of chivalry in the "Warring States" military culture. It is time now to examine the "principles of war" as an instrument of evaluation from the perspectives of the different war schools and also to evaluate some important wars of this century in the light of Sun Tzu's "principles" (appropriately called "wisdom").

This chapter contains five sections. In these sections few important wars of this century from the Communist seizure of power in China to the latest Gulf War have been examined. This was carried out to see, if there were any reflection of Sun Tzu's wisdom in these wars.

In the first section, the usefulness of "The Principles of War" has been analysed; in practically fighting a war as well as in evaluating past wars utilising them as a yardstick. This has been done from both the "Science" and the "Art school" perspectives. A critique of the "Reductionist approach" has also been offered for better understanding of the problems posed by the principles of war epitomised and expressed in the form of maxims and slogans.

The second section, "The Revolutionary Wars" includes "the Communist Seizure of Power in China" as well as the "Vietnam Wars". The third section with the title "Localised Wars", contains a bunch of localised conflicts, e.g., Arab – Israeli War (1967), Bangladesh War of Liberation (1971), The Yom Kippur War (1973), Falkland War (1982), and the Iran–Iraq War. The fourth section "Regional Wars with a Super Power's Participation" is about the Korean, Afghan, and the Gulf War-91 (Kuwait Crisis). The fifth section contains few interesting findings of the whole war study, e.g., war's outcome is not dictated by one side which has visible superiority, specially in military technology; it is rather conditioned by dialectical interactions of both the sides. For example, materially superior U.S. military could neither defeat their enemies in Korea nor in Vietnam. Their technology dependent strategy could not transform the battlefield situations in their favour.

6.1 THE PRINCIPLES OF WAR - A YARDSTICK FOR EVALUATION

Constants Within Variables – The Principles of War

Mere looking for fundamental principles in warfare will not make us fundamentalist. We have already examined the intrinsic relation between warfare and technology, we have also assessed

the ever-changing nature of technology and found that with the passage of time everything changes, the society, technology and warfare. Beyond these changes is there anything, which is unchangeable in warfare? Martin Van Creveld answered the question in the following manner,

On both the individual and collective levels, war is therefore primarily an affair of the heart. It is dominated by such irrational factors as resolution and courage, honour and duty and loyalty and sacrifice of self, when everything is said and done, none of these have anything to do with technology, whether primitive or sophisticated. So it was at a time when war was limited to face to face clashes between hide-clad, club-armed cavemen, 50000 years ago; so it will be when laser-firing flying saucers permit it to be fought over interplanetary distance 100, or 500, or 1000 years hence.... Another aspect of warfare that technology has not changed nor will change nor can change is its functions. . . . Whatever the list we care to select, the critical point is that they are rooted in the very nature of war and thus immune to technology and the kind of change which it effects. [Creveld, 1991:314].

According to Creveld, it is difficult to predict how the future wars will be fought but it is possible to identify some elements in war which are imperious to technological changes and remain constant over the ages. He said, “finally, it seems that the logic of conflict, that logic which in turn dictates the essential principles of its conduct, is likewise immutable and immune to any amount of technology that is applied to or used for it”.

“Can war be taught? Does its nature allow it to be taught?” Marshal Foch once asked this question to the students of “Ecole de Guerre”(school of war) in Paris¹[Foch, 1903 : 1]. He even asked the question whether the two words “school” and “war” be associated². Yet war had been taught from the ancient time to the present day. People had been using both history and experience in learning as well as teaching warfare throughout the ages. In the process they discovered certain

¹ Foch lectured in the Ecole de Guerre (school of war) in Paris when he was a Lt. Col and later on those lectures were published in a book with the title, “Des principes de la Guerre” (The Principles of War) in 1903. Those lectures were really interesting and full of philosophical sensibilities. It is astonishing that such a sensible soldier of France could produce such a senseless French doctrine of “attack at all cost without considering alternatives”.

² Foch asked, “How can one conceive that this function, war, which displays itself on battle-fields, in the midst of the unforeseen and of danger, which makes use of surprise and of all the attributes of force, violence, and brutality, in order to create terror, may be prepared by that other function, study, which can only live in calm, in method, in reflection, in discussion, and in reason” [Foch, 1903(1921) : 1].

fundamentals in warfare, which remain unchanged throughout the ages and matters in winning a war; in abstract form they were coined as principles. Today principles of war are considered amongst the students of war studies as a collection of basic experience parameters, rules, or maxims of conventional warfare for the successful conduct of military operations. They are the result of a comprehensive analysis of campaigns and wars. They are used for the training and education of military commanders and for the conduct of military operations[Sude, 1993: 2183]. They are also used as the yardstick for evaluation and assessment of past operations, plans for operations and new concepts. Usually principles of war are expressed in the following manner; as a list of key terms, in a form of sentences, or as text, where an aspect of decisive significance for the winning of military operations is emphasised and explained.

The Positivist School

Positivism is a name originally given to the philosophy of August Comte, but now applied to any set of ideas resembling it. The positivism programme in Comte's philosophy confined all knowledge to what can be observed by the human senses, not only actual colours and sounds, and other such perceptual data, but also their inter-relations. His "law of the three stages", views thought in every field as passing progressively from superstition to science by first being (a) religious, then (b) abstract or metaphysical and finally (c) positive or scientific. Comte contributed in initiating an anti-religious and anti-metaphysical bias in the philosophy of science that passed into the 20th century. In the 1920s Vienna circle, a group of philosophers Carnap, Neurath, Han, Wisemann, Schlick and Reichenbach, who were active in Vienna developed "logical positivism". It is a particular brand of inductivism, its central doctrine is that there are two and only two kinds of significant statement and therefore only two possible kinds of knowledge. They are the empirical assertions of natural science, which must be established by observation, and the analytic propositions of logic and mathematics, which are true by virtue of their meaning alone.

Post-empirical positivists like “Karl Raimund Popper” and “Thomas S. Kuhn” took positivism towards a different direction. According to Popper, to be scientific, a statement must be falsifiable; the more falsifiable it is, the better. According to him science grows through falsification and it is a constant process. On the other hand according to Kuhn, science does not advance gradually through this sort of error elimination, science progress through revolutions, through quantum jumps [Ahmed, 1992:17].

Throughout this century, the positivists remained hegemonic in science, social sciences, everywhere³. They also tried to see warfare as a science with their spectacle of positivism. According to them, science of war is that part of the theory of war that attempts to establish a scientific basis for the decisions that affects the conduct of war. They believe that generalisations based on observations of past events are true for all future events as well as for past events that were unknown at the time the generalisations were made. Following the hard sciences, positivists also demanded that warfare is a science and it must also have scientific principles, adherence of which will bring sure victory⁴. Thus the concept of the "principles of war" emerged. Usually they have derived such principles from a study of campaigns of the great captains of history; occasionally outstanding practitioners have set them down on the basis of personal experience. They even claim that Sun Tzu set forth ten principles [Alger, 1993 :2364].

³ According to Prof. Mohanty feminists claim that for male hegemony the physical sciences have become dominant amongst all the sciences; if women could contribute, biological sciences would have been in the place of physical sciences.

⁴ In fact the later eighteenth century, with its emphasis on rationality in every field of human endeavor, gradually came to distrust art as too vague and intuitive. It preferred to think of war's conduct as a science whose principles could be discovered, laid down in a system and taught in the military academics.

The Art School

Our father Adam sat under the
Tree and scratched with a stick
in the mould,

And the first rude sketch that the
world had seen was joy to his mighty heart.
Till the Devil whispered behind the
leaves, "It's pretty, but is it Art?"

- Rudyard Kipling.

Followers of the Art school, consider war as group violence where the outcome is uncertain. They believe that the outcome of war is not predictable through generalisations based on past wars, hence there cannot be any true science of war. They usually argue that war is an art. Extremists of this school favouring the term "art of war" contend that, while science can be learned from a book (like chemistry or physics), war can only be learned by practice. Some of them claim, "war can only be taught by war", which is an extreme and a difficult proposition. According to Marshal Foch, this cannot be a continuous process, it can neither be opened at will, nor kept going for the benefit of learning. With possibilities of death one cannot continue for long on a live training ground. They argue further that, if war were a science, the "scientific principles" embraced by the war-is-a-science advocates would always be reproduced in all wars for all times.

Thus the "scientific principle" - namely, in order to win, one must gather superior forces at the decisive point - would have no exceptions. Yet there are historical deviations from this so-called principle because numerous human factors intrude in combat.

The gulf between practice and theory is such that whatever general guidelines might be devised for the conduct of war, in terms of idealized sets of principles, must inevitably break down when confronted with real situations. General principles tell us little about conduct in circumstances where competing principles apply or,

indeed, in the grey areas where the general principles imperfectly capture the complexity of reality [Clark, 1988 : 1].

German army does not believe in operating within few rigid formulas or principles. Its basic manual "*Heeresdienstvorschrift 100 / 100*" does not contain a list of "principles of war" [Suede, 1993:2185]. From the days of "Helmut von Moltke" the Germans consider command and control of forces an art, a creativity based on character, skill, and mental power. They believe that success can only be ensured by giving freedom to the commanders to judge and act within the scope of war. However every commander is guided by certain general principles like active defence, fire and manoeuvre, building reserves, proper use of terrain, simplicity, surprise and deception etc.

Principles as Maxims and Slogans – A Critique of Reductionist Approach

Military leaders are men of action, it is not possible for them to roam around in the field with a bundle of books on their shoulder. For this reasons they reduced the large "treatise on war" into their barest minimum and converted them into maxims or as they have come to be called later as the "principles". This was done with the intention of carrying them to the field from the closed-door libraries and schools of war so that the men of action can use them as a beacon. Unfortunately the portions stripped off and left out normally contained the justifications, the qualifications, and the instances of historical application or misapplication. According to Bernard Brodie, these so-called "principles of war" is derived from the work of a handful of theorists, their contributions to living doctrines are not widely known, since their original works are difficult to find and hardly read now a days [Brodie, 1959 : 21]. Naturally the richness of their ideas is but poorly reflected in the axioms which have stemmed from those ideas.

Today "principles of war" consists of a list of maxims, usually numbering from seven to eleven and they are presented in following manner;

- Avoid dispersion of strength in order to maximise the chances for superiority at the decisive point (principle of *Mass* or *Concentration*).

- Choose firmly the course of action and adhere to it despite distracting pressure (principle of the *Objective*).
- Press vigorously any advantage gained, especially after a victory in battle (principle of *Pursuit*).
- Seize the initiative at the appropriate time and exploit it to force a favourable decision (Principle of the *Offensive*).
- Guard your forces and communications against surprise attack, even when on the offensive (Principle of *Security*).
- Make good use of stealth and deception (Principle of *Surprise*).
- Putting to the fullest effective use of all the forces available (Principle of *Economy of force*); and so on.

These reduced and abbreviated forms of the principles of war for their form has become too abstract and generalised. Such generalisation has both advantage and disadvantage, for example it made them applicable also to other pursuit but scanty as guides in war. Their essential barrenness is perhaps suggested by the fact that recent interpreters have often confused the classical meaning of some of the phrases they employ. The term "economy of force", for example, derives from an interpretation governed by the nineteenth century connotation of the word "economy", meaning judicious management but not necessarily limited use. Thus, the violation of the indicated principle is suggested most flagrantly by a "failure to use" to good military purpose forces that are available. Of late, however, the term has often been interpreted as though it demanded "economising" of forces, that is, a withholding of use.

If we wish to avail ourselves of whatever light the wisdom of the past can throw upon our present problems, we must go beyond the maxims, beyond their abbreviated forms. The maxims may be the encapsulated form of wisdom and useful in intellectual enterprises like aesthetic and eloquence but may not be of much use in the conduct of war. At the same time when it becomes a common currency as a slogan it is likely to mislead people. Only through deconstruction we will be able to grasp the original spirits behind the abbreviated maxims.

It is seen that both the “positivist” and the “art school” believe in certain fundamentals, they only differ at the point whether principles are immutable or mutable. Jomini, a follower of the positivist school declared that “methods change, but principles are unchanging”. On the other hand Churchill, a follower of the art school loudly claimed, “the truths of war, are absolute, but the principles governing their application have to be deduced on each occasion from the circumstances, which are always different; and in consequence no rules are any guide to action”. Both the positivist and the art schools claim that the fundamentals of strategy and warfare were first laid out by Sun-Tzu and following are his principles/teachings :

- Invincibility lies in the defence, the possibility of victory in the attack.
- Know the enemy and know yourself.
- Strike only when the situation assures victory.
- Strike the enemy where he is least prepared.
- Weigh the situation before moving.
- Be flexible.
- Recognise the hazards and the weather.
- Deceive the enemy.
- Surprise the enemy.
- Separate the enemy from his allies.

Naming the Treatise-The Art, The Science, The Commerce of War

Sun-Tzu and Clausewitz stand pole apart in their viewpoints about the war yet they have few similarities. Considering warfare not as a science is one of them. Sun Tzu's treatise is the oldest one and it was deliberately named as “The Art of War”, considering warfare as an art. On the other hand Clausewitz thought, “not only objective but also its subjective nature makes war a gamble” and reached a conclusion that warfare is neither science nor art; if anything it resembles, is commerce. Clausewitz named his treatise “On War”. He discussed about the problems of formulating a “positive theory” -

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 [Howard and Peter Paret, 1976 : 134].

He again mentioned about the difficulties in formulating a doctrine.

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 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 [Howard and Peter Paret, 1976 : 140].

Both Sun-Tzu and Clausewitz believed that the object of science is knowledge, and the object of art is creativity. They considered that war is an act of human intercourse and part of man's social existence. Hence in warfare, human beings with their creative ability stands at the centre with all the uncertainty of it.

6.2 REVOLUTIONARY WARS

Protracted Peoples War in China

Notorious, Chinese whore-houses had their toll on the "Flying Tigers", the nom-de-guerre of the American Volunteer Group (AVG) a semi-mercenary organisation of aviators raised by Claire Lee Chennault. He was a retired officer of the U.S. Army Air Corp and was hired by Madame Chiang Kaishek in 1937 to direct the Chinese air defence efforts against Japan [Dupuy, 1992 : 158]. Chennault later on enticed American aviators and mechanics with good pay and promises of

adventure and raised this organisation. Later on he was called back to the active service and subsequently promoted to the rank of a “major general” and was made the chief of the American Army Air Corp elements in China. His volunteers were also merged with the Air Corp and they formed the core of this force. Naturally these adventure seekers became vulnerable to the existing evils in China. These volunteer aviators used to drop their bombs at daylight on the enemies and at night used to get dropped in the Chinese brothels. Soon Chennault discovered maximum of his aircrews grounded due to the venereal diseases. To get rid of the problem he decided to open an official brothel with healthy prostitutes imported from neighbouring India. Accordingly he organised a selection committee with few doctors and despatched them to India by two aircrafts. Chennault did not bother to take prior permission of General Stilwell, who was the commanding general of U.S. forces in the China-Burma-India. Stilwell, a moralist, strict disciplinarian and an un-diplomatic commander, flared up the moment this incident came to his knowledge and reprimanded Chennault for using U.S. Army Air Corps resources for such an immoral adventure.

The relation between Chennault and Stilwell deteriorated, Chennault got along well with Chiang Kaishek but Stilwell's relation with Chiang Kaishek severely deteriorated for various reasons. In late 1944 Stilwell was recalled to the United States [Bader, 1993 : 2553] but Chennault decided to stay in China even after his retirement in October 1945. He rejoined the Nationalists in 1946, and was unhappy with the lack of U.S. Support for their cause and organised various aviation organisations after the Nationalists flight to Taiwan. He only returned to the U.S. for medical treatment and died there in 1958⁵. These incidents give us a view of the US involvement in China prior to the communist take-over of power. From the Chennault saga we discover the desperate Nationalist attempts in procuring a Western modelled air force, a triumph card system in warfare, apparently against the invading Japanese forces but actually against the communist insurgents in the ensuing struggle.

⁵ Chennault and Mac Arthur both left USA in 1937. Chennault came to China as the commander of the American Volunteer Group (AVG) and Mac Arthur went to Philippine as an advisor. Both of them were caught by the fatal attractions of the Orient; Mac Arthur did not return to USA until he was called back from the Korean War in 1951 and Chennault only returned from Taiwan in 1958 to attend the call of death.

The struggles for communist capture of power in China began in 1927 and ended in 1949. Nationalists were led by Generalissimo Chiang Kaishek and the Communists by Mao Ze Dong. The highlight of the early struggle was the communist "Long-March" in 1934-35. The "Second United Front" was formed in 1937 to stop fighting between the two sides so that the common enemy, the invading Japanese army could be fought together. Mao utilised the Second World War period to consolidate the communist power. Once the war was over, hostilities between the Nationalists and Communists re-surfaced. Communists moved in behind the retreating Japanese forces to take over the abandoned countryside. Soon serious war broke out first in Manchuria and later on all over China between the two sides. Finally Beijing fell after a long siege on 22 January 1949 and Chiang withdrew to Formosa.

The Communists under the leadership of Mao seized power in China through a revolutionary war. It is claimed that more than two millennia ago Sun Tzu formulated the strategic principles of revolutionary warfare - attack weakness, avoid strength, be patient [Shy, 1986: 823]. Mao and Sun Tzu both were not only Chinese, but Mao was also deeply influenced by Sun Tzu [Griffith, 1963 : 45]. If it is so, how Mao not only advocated a protracted war but also named his strategy as "Protracted Peoples War Strategy" when Sun Tzu has cautioned us that no nation has ever benefited from a protracted war. In fact Mao had shaped the enemy and innovatively countered their strategy following another teaching of Sun Tzu; "now an army may be likened to water, for just as flowing water avoids the heights and hasten to the lowlands, so an army avoids strength and strikes weakness. And as water shapes its flow in accordance with the ground, so an army manages its victory in accordance with the situation of the enemy".

Mao Ze Dong developed a strategy based on guerrilla warfare that allowed an under-industrialised and primitive-society, lacking modern arms and equipment to adopt a militant - political philosophy based on armed struggle. This was done with an aim to confront the militarily superior forces of a highly industrialised state. It is completely in concordance with the spirit of Sun-Tzu's "Art of War" where abilities of human beings are always upheld. Naturally, within that context, Mao-measured military potential by standards very different from the Western one's. *He*

proclaimed war as a form of politics and revolutionary warfare was nothing if political. He relegated so-called pure-military considerations to the backstage or more accurately made them dependent upon political factors. "Protracted Warfare" and "Strategy in the Guerrilla War Against the Japanese Invaders" reveal that to Mao the decisive factors in war were will (the political will of the society), time (which will exhaust the superior resources of the sophisticated society) and space (essential for the exploitation of time and will) instead of weapon system, logistics and trained manpower [Willmott, 1979 : 56].

According to Mao, the revolutionary's only chance of defeating a superior enemy lies in his ability to raise the population. Once this is achieved, space and manpower provide time. Mao appreciated the need for an industrialised society to force the issue of war quickly, hence he decided to force them to a protracted war, it was done following Sun Tzu's precept to attack the strategy of the enemy. Mao's intention in guerrilla warfare was to avoid decisive battles, so that the enemy could not translate their tactical successes into strategic victory. Hence the war was prolonged to a point, where it became politically and economically unbearable to the enemy. This is the interpretation of the strategy of protracted people's war and the basis of communist faith in ultimate victory in war irrespective of the duration of the struggle.

Mao saw his strategy as a series of three merging phases, the first of which was the mobilisation and organisation of the people in order to maintain the eventual military effort. During the second phase, the military preparations were put in hand in the form of guerrilla action in the attempt to disperse, immobilise and break down the resolve of the enemy, while at the same time building up experience, improving organisation and securing arms. The final phase of protracted war was conventional or positional warfare. Guerrilla warfare in itself could not achieve victory but could only pave the way for it. Victory is secured by regular military formations exploiting the favourable conditions achieved by the first two phases, in the last phase, "the roused country side moving in to engulf the towns".

Sun Tzu and Mao both were not only Chinese, but Mao was also deeply influenced by Sun-Tzu's thought. In the "strategy of protracted people's war", it seems that Mao has ignored Sun Tzu's warning that no-nation has ever benefited from a protracted war. He did it in pursuance of another principle, to shape the enemy (it has been already discussed above), in that process he kept their activities under control and forced them to dance to his tune. He countered his enemy's strategy innovatively, uniting people behind him and making his strategy people oriented. Mao has fulfilled Sun Tzu's teaching of bringing people in harmony with their leaders. At the same time his three sequential phases of the people's war where the first two phases pave the way to victory in the final phase, was designed according to Sun Tzu's preaching to wear down the enemy through a gradual process to ensure an easy victory in the final offensive. Besides, in the conduct of the guerrilla warfare, we see how the teachings of Sun Tzu regarding the value of intelligence, surprise and mobility has been followed. At the same time guerrillas always tried to identify their strength and weakness and made conscious effort to turn their weakness into strength. In Mao's guerrilla war we see the reflection of Sun Tzu's wisdom in allowing the enemy to retreat towards the Formosa island; it was done consciously to take the country intact. The idea of the Second United front between the communists and the nationalists to fight their common enemy Japan was also based on the precepts of Sun Tzu.

It will be incorrect to say that Mao was only influenced by Sun Tzu and not by any one else in writing his "Protracted war" and "Strategy in the Guerrilla War Against the Japanese Invaders". Probably he was influenced by the American 'Swamp Fox' Marion, the British cavalryman, Banastre Tarleton, may be by the Lawrence of Arabia T.E. Lawrence⁶, but it was Sun Tzu, who's influence had been profound on him being the most appropriate for his purpose, circumstances and the environment. In fact, Sun Tzu has been revived and rejuvenated by Mao Ze Dong [Mc Innes, 1988 : 197].

Vietnam War

‘Kill the old guy’ roared Green Beret
and shots hammered out
behind the forest’s green wall
and sky and trees and soldiers stood
in silence, and the boy cried out.
Green Beret stood
in silence, as the boy crouched down
and shook with tears,
as children do when their father dies.
‘Christ’, said one mercenary to Green Beret,
‘he didn’t know a damn thing
We killed the old guy for nothing’.
So they all went away,
Green Beret and his mercenaries.

And the boy knew everything.
He knew everything about them, the caves,
the trails, the hidden places and the names.

-“Green Beret” by Ho Thien [Giddings, 1992 : 321]

The U.S. Army Special Forces, who were often called the green berets for their headgear, was formed in 1952. Originally they were designed to organise guerrilla bands behind enemy lines. The Green Berets operated extensively in Vietnam, where they were based in special camps notably in the central highland area. Besides their mission to train local tribesmen in guerrilla tactics, they were also involved in carrying out intelligence mission, closely co-ordinated with the CIA. In 1969, officers of the Green Beret were blamed for murders in Vietnam. The phoenix programme was part of the accelerated pacification, launched on July 1, 1968 in the wake of the North Vietnamese Army- Viet Cong’s “Tet offensive” earlier that year. The goal of the program was to identify the estimated 70,000 members of the Vietcong (VC) infrastructure – the VC political leaders, other high ranking communist party members responsible for the tens of thousands of assassinations,

⁶ Colonel T. E. Lawrence played a leading role in the Arab revolts against the Turks of the Ottoman Empire in 1916 – 1918. He was made world famous after the war as “Lawrence of Arabia” by the films and lectures of the American war correspondent Lowell Thomas. Lawrence’s *Seven Pillars of Wisdom* was published in 1935.

terrorism, bombings and like activity within South-Vietnam [Summers, 1985 : 283]. The programme required identification of suspected VC by at least three separate sources and then to neutralise them by various means and methods. Green Berets were the military means placed at the hands of an intelligence organisation (CIA) and were abused in eliminating these suspects. Above-mentioned poem reflects how the combined groups of Green Berets, their South Vietnamese collaborators along with the mercenaries performed their roles. It also reflects the determination, sacrifice and the sufferings of the Vietnamese people in a struggle for the unification of their country. Our analysis will remain confined only to the Second Vietnamese war.

In Indo-China, the works of both the principal Vietnamese theorist of revolutionary war, Truong Chinh and Vo Nguyen Giap were heavily based on Mao, although both tended to put greater stress on the mobilisation of international opinion in support of the revolution. Mao and Truong Chinh had similarities. Like Mao, Truong Chinh stressed on the total mobilisation of the masses at all levels in a protracted conflict. He considered the struggle between the Viet Minh and the French colonialist power as the struggle between the Vietnamese political and motivational strength against the French military and technological strength. He was sure that the Vietnamese strength will prevail over the French [Mc Innes, 1988 : 200]. Again both Truong Chinh and Giap re-styled Mao's three phases of the guerrilla war. Truong Chinh called them, "contention, equilibrium, and general counter offensive" instead of "strategic retreat, strategic stalemate and strategic offensive".

Giap, accepted all most all the ideas of Mao; with slight modifications in the idea of the final phase of a guerrilla war, where he considered few conditions as prerequisite for launching a final offensive. He believed that Vietcong had to achieve a marked psychological ascendancy over the enemy and to have confidence in their ability to win in conditions of conventional fighting, while there was a declining offensive spirit in the enemy camp. Giap also considered that an essential requirement had to be a favourable international situation or climate of opinion. Both against the French and the Americans, the communists paid serious attention towards the psychological impact of military actions and both campaigns were characterised by the insidious confidence sapping

psychological offensive against the enemy home land and the population. In both instances the wavering of determination in the effort of the counter insurgents took place before defeat in the field occurred. Giap said, "let one thousand Vietnamese die, yet kill a single American, the dead body inside a body bag will transfer the war into the United States proper, and the result will be decided there instead of the jungles of Vietnam". Actually it happened, Americans had to withdraw from Vietnam not due to the pressure created in the battlefield rather by the pressure of anti-Vietnam movements formed within America itself.

North Vietnamese strategy during the Vietnam War was both simple and effective. Their aim was the conquest and integration of South Vietnam. For this purpose they used both their regular army as well as the Vietcong guerrillas. North Vietnam's overall strategy of 'dau tranh' (struggle movement) consisted of two elements 'dau tranh vu trang' (armed struggle) and 'dau tranh chin tri (political struggle). Many Western scholars claimed that Giap believed more in armed struggle than political struggle in contrast to his former co-author and subsequent doctrinal archrival, Truong Chinh. Practically both armed and political struggles used in concert to achieve the overall objective. Douglas Pike has divided the war into four historical periods.

- The first phase continued from 1959 to 1965. During this phase North Vietnam tried to conquer South Vietnam by using force. It was the "political struggle" phase of the revolutionary warfare.
- The second phase started from 1965 and continued up to the "Tet offensive" of 1968. During this period United States decided to intervene in the war with her ground and air forces. North Vietnamese strategy shifted to "armed struggle" and the decision was made to confront the American military power frontally; this decision had a militarily disastrous result.
- The third phase of the war was from July 1968 to April 1972. In this phase the Vietnamese leadership again shifted towards the "political struggle" relying mainly on the North Vietnamese cadres than the Vietcong. This phase terminated with a return to

the armed struggle during the Easter-tide offensive of 1972. It was another debacle for the North Vietnamese forces.

- From April 1972, and especially after the "Peace treaty in January 1973, the emphasis was on "political struggle" again. This final phase ended with unexpected results for the North Vietnamese in the Spring of 1975. Their limited return to the "armed struggle" had surprising successes, which tempted them to launch the final "blitzkrieg" across the border and win the war.

‘The blending of "armed" and "political” struggles (in Western terms, the co-ordinated application of diplomatic, economic and especially psychological power along with military power) was dramatically illustrated by the North Vietnamese strategy. Their decision to confront American military power head-on had a disastrous battlefield effect. From 1965 to 1972, the North Vietnamese and Vietcong were defeated in every major battle yet their "political struggle" during this period, especially their "actions among the enemy" - involving the manipulation of public perceptions in United States - was strategically decisive in undermining the American will to persist in the war. With the United States thus removed from active combat, the North Vietnamese then concentrated their efforts on the "armed struggle" to strike a decisive blow on South Vietnam’ [Summer, 1985 : 324]. It will be worthwhile to mention the confrontation between a U.S. Colonel and a North Vietnamese Colonel in Hanoi. It happened during the month of April 1975. The American Colonel said to the Vietnamese, "you know, you never defeated us in the battlefield". The North Vietnamese Colonel pondered this remark and replied "that may be so, but it is so irrelevant"[Summers,1982:1].

General Giap was one of the main architects of the Victory in Vietnam. He himself has stated that he was influenced by Sun Tzu as well as by the early Vietnamese guerrilla warrior Trang-Hung Dao, who defeated Kublai Khan’s Chinese in 1287. His art contains Sun Tzu’s stratagems [Giap, 1962 (1974) : IX]. It is claimed that Giap’s thought seems at a first glance to be a synthesis of Lenin and Mao, of Clausewitz and Sun Tzu, it is actually closer to the latter two than to the former two. He is considered to be nearer to the 18th Century Japanese warrior ‘Mushashi’.

Giap's entire strategy was designed to exploit the interaction between the concentration of the enemy's forces and the space in which the revolutionary forces can move. He could conceal his own strength and mark enemy's weak points and then carried out his strikes in order to slip through the enemy lines.

Vietnam War was an asymmetric conflict between a super power and a small, backward Southeast Asian country. Maximums of Sun Tzu's teachings were appropriate for this sort of a situation. One side had a huge material superiority and the other side encountered them with their motivational strength and ingenuity, yet won. They applied Sun Tzu's teachings but won at a very high cost. Douglas Pike, the most knowledgeable Western scholar on North Vietnam and Indo-China stated that Giap had re-defined Mao Ze Dong's "three stages" into the National Liberation Fronts (NLF) "third generations" and that "Mao-Giap" became to revolutionary warfare what Marxism-Leninism to communist theory.

6.3 LOCALISED WARS

Arab-Israel War - 1967

"A big look is a big evil", this saying may not always be found correct, Moshe Dayan's autobiography, "*Moshe Dayan : Story of My Life*", is an example of such a finding. It is a thick one containing six hundred and twenty three pages yet does not appear at all big.

Moshe Dayan, the legendary one-eyed general, was the Chief of Staff of the Israeli army from 1953 to 1957 and later on held offices of the agriculture, defence and foreign ministers of Israel. He led the Sinai Campaign in 1956-57 as the Chief of Staff. Two of the most important wars of Israel, the Six-Day War (1967) and the Yom Kippur War (1973) were fought under his leadership as the defence minister. While holding the office of the foreign minister he performed a pivotal role in signing the "Camp David Peace Treaty".

Moshe Dayan's life was an adventurous journey driven by a purpose which can be identified as positive at least from the modernist perspective, hence the story of his life is full of adventurous stories of cherished actions. He very well knew that actions may not always bring happiness but he also knew that there is no happiness without actions. Dayan's generation had both the opportunity and capability to create the history of Israel and to travel through it. In fact his life got intermingled with the history of Israel and naturally his autobiography no longer remained a personal account, it has also become a chronicle of the struggles of Israel.

Those of us having a pre convinced notion that a general's career should follow a trajectory touching such glorious points as noble ancestry, reputed public school, respectable military academy, illustrious career with an unhindered rise through the so-called professionalism and glamorous retirement as a Viscount, Lord or a Knight of the Garter; might find difficulties in comprehending the extra-ordinary career profile of General Moshe Dayan.

Moshe Dayan was a farmer's son; a boy in a girls high school, a farmer, a hired farm labourer, and a construction worker. He was an informal student of higher mathematics, literature and Hebrew language and an appointed policeman. A volunteer to the self-defence force of the Jews of Palestine and spent one and half a year in a British jail. He served as the commander of a reconnaissance element supporting the allied offensive in Syria during the Second World War. He lost an eye in an action at that time and later on became an intelligence operative running a network of spies for the military intelligence during the rest of the war. Dayan joined the Israeli Army as a professional soldier and became an outstanding Chief of Staff. On retirement enrolled himself as a student of law, a formal student of Jerusalem Hebrew University and studied politics. A powerful politician, an outstanding diplomat, a successful writer, an archaeologist and finally a cancer patient; what an eventful life ! Can this be called a straight lined advancement of career? In fact Moshe Dayan is a product of the Kibbutz movement developed in Palestine during the 1920s; as part of Jewish struggle to establish a Jewish-state and homeland⁷. The Kibbutz movement produced many

⁷ Moshe Dayan's autobiography *Story of my Life* is also a chronicle of the struggle for a Jewish homeland during that period. Dayan's life got intermingled with the history of Israel.

dedicated and outstanding soldiers in Israel, who later on led the Israeli Army, Moshe Dayan was the most prominent and successful amongst them.

General Yigal Allon a comrade of Moshe Dayan, as Chief of Staff of Israeli Army considering its numerical inferiority with enemies mentioned that the strength of Israeli defence forces should lay in organisation, discipline, fighting spirit, unity and that ultimate weapon "the sense of no alternative". General Yigal Yadin another Chief of Staff and a comrade of Moshe Dayan was a student of Liddel Hart's theories and had used his book "Strategy of Indirect Approach" as a text for the courses he taught in Haganah during the years 1940-43. General Allon as a disciple of Liddell Hart dedicated one of his books to him, "The theory and Practice of War : Essays presented to Captain B.H. Liddel Hart on His Seventieth birthday". All these commanders were materials of very high standard. They prepared themselves to be in the leadership of Israeli army and were rightly chosen by the politicians, who themselves were also of outstanding materials. It was done in pursuit of Sun Tzu's teaching, "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".

In 1967 Israel was aware of an impending attack, from Egypt to be assisted by Jordan, Iraq and Syria. In this war Israel could win a brilliant total victory over all these countries in only Six days. It happened largely because Israel launched a pre-emptive attack on the Arab air forces, effectively removing the ability of Egypt and Jordan to provide air cover for the ground forces. In this war Israel took control of Sinai Peninsula and the Gaza strip from Egypt, the Golan Height from Syria and the whole of Jerusalem and the West Bank from Jordan.

Israeli tactics in 1967 were a blend of concepts devised by the three great Chiefs of Staffs of the Israeli army, Yigal Yadin, Moshe Dayan and Itzhak Rabin, all three were the products of the Kibbutz movement. Yadin, the first Chief of the General Staff from 1949 to 1951, developed the triple concept of outflanking, bypassing and surprising. Dayan (1954 – 58) originated the concept of "assault by will power" which stresses that all officers, no matter what rank or what position they hold, must, all times, move in front of their men, setting a personal example for the troops. The

concept also obtained in combat where everyone goes "without sleep or normal food for days until the enemy is crushed", one side has to crack under the strain. Rabin, who commanded in 1967, evolved the "human steamroller" concept [Tsouras, 1994 : 183]. He maintained that the victory is only complete when the enemy has been utterly broken. The infantry was trained to assault enemy positions from the front with sub-machine-guns, grenades and demolition charges,

In 1967 due to the quality of the leadership, Israeli Defence Forces (IDF) were rightly prepared to fight the right war in the right place at the right time. Israeli doctrine was founded on the irrefutable logic that war must come at the time and a circumstance of Israel's choosing. Her enemies were too strong and too many to afford them the priceless advantage of the first blow. Therefore as in 1956, Israel also attacked first and by surprise reduced the odds. This was done according to the wisdom of Sun Tzu, "when torrential water tosses boulders, it is because of its momentum. When the strike of a hawk breaks the body of its prey, it is because of timing. Thus the momentum of one skilled in war is overwhelming, and his attack precisely regulated. His potential is that of a fully drawn crossbow; his timing, the release of the trigger".

Israeli military leaders neither considered military technology as a God of war nor neglected it. They viewed it in its right perspective. They gave the right weightage to the quality of human beings who will ultimately handle the technology. It is already mentioned that one of the greatest weapons the IDF brought to the war field was the self confident and flexible military commanders and their willingness to act on their own responsibility without question. This was nowhere demonstrated than in the planning for the Sinai Offensive. The IDF devised its plans on a crash basis to fit the evolving situation. It was planned that three divisional groups would break the Egyptian defence and penetrate into the Sinai desert during the first stage of the operation. No plan was formulated beyond that point, it was left open to be made as the situation develops. Brigadier General Israel Tal and Brigadier General Ariel Sharon both commanders adopted an indirect approach in exploiting the situation and achieved brilliant victories.

Both mental and physical flexibility under pressure is another asset of the IDF. It proved invaluable on the central front when Jordan unexpectedly entered the war in an attack towards the Tel Aviv. A paratroops brigade boarding transports for a combat drop in the Sinai desert was rushed in civilian buses to Jerusalem. Where a divisional group assigned initially to the Syrian front and a reserve armoured brigade reinforced it. Holes were punched through the Jordanian line and tanks poured through to seize key communication points in the enemy's rear. And on the northern front the Syrian position on the Golan Heights had secured flanks but was reduced by combination of attrition and surprise. A 100-hour barrage allowed careful penetrations through which armour passed to the rear to paralyse communications⁸. These efforts were neither product of centrally controlled bureaucracy nor the result of strict adherence to a particular set of drills. Drills are the most hated things in IDF. Israel's enemies were defeated for such drills. At every stages and phases of battles commanders kept on exploiting the developing situation using their own dynamic military thinking. It has been done following Sun Tzu's teaching, "therefore a skilled commander seeks victory from the situation and does not demand it of his subordinates, he selects his men and they exploit the situation".

There is a photograph of Capt. B.H.Liddell Hart hanging in the Israeli parliament with the caption, "The Captain who taught the Generals". In fact Liddell Hart's teaching especially about the strategy of indirect approach had a profound influence on the Israeli "General Staff". On the other hand from Liddell Hart's own statement we come to know that he was profoundly influenced by Sun-Tzu. He even declared to the Chinese military attaché in London that Sun Tzu's one little book contains what he has written in his twenty books. From this finding we may conclude that Israeli commanders were directly and indirectly influenced by Sun Tzu. They in fact not only reflected Sun-Tzu's wisdom at strategic level but also enacted them at operational and tactical levels, modern military technology instead of restricting rather has helped them in following Sun Tzu. The mindset prepared by Sun Tzu's teachings helped them in using the latest technology innovatively.

⁸ Information passed by Israeli super spy "Eli Cohen" from Damascus in 1965 about the Syrian artillery deployment in Golan Heights proved invaluable in this operation.

Bangladesh's War of Liberation

At the outset, one thing must be made clear- the emergence of Bangladesh is not an outcome of a conspiracy by India. The movement towards an independent Bangladesh was a product of the cumulation of the contradictions inherent in the formation of the state of Pakistan. As we are primarily concerned here with India's role in Bangladesh's war of liberation, we shall refrain from discussing it in detail. Suffice it to point out here that the genocide in Bangladesh in 1971 was but the climax of the overtly national oppression of the Bangalees at the hands of the (West) Pakistani ruling class. Indeed, given the post - 1947 history of domination of the eastern wing of Pakistan (i.e., Bangladesh) and the struggle of the Bangalees, particularly after 1966 under the leadership of Sheikh Mujibur Rahman and his party the Awami League, it was not very difficult to predict the break up of the state of Pakistan. Time was the only factor. And it is on this time issue that India came to play a decisive role in the liberation struggle of Bangladesh [Ahmed, 1993 : 241].

Election in 1970, under a caretaker government gave a parliamentary majority to the Awami League, led by Sheikh Mujibur Rahman. This political party drew its strength from the Bangalees who were exploited by the West-Pakistanis and were asking for greater autonomy in a federal system. The ruling block based in the West Pakistan decided not to hand over power to Sheikh Mujib. This led the Awami League to escalate its demands to full independence of East Pakistan.

Sheikh Mujib was arrested and the Pak-military carried out a genocide with an intention to suppress the Bangalees. These incidents alarmed the whole world. Many Bangalees tried to escape the Pakistan army, millions of refugees crossed the border into India. This is one of the reasons why India got involved in this conflict, which ultimately transformed into a full-scale war, and she had to become a major player. From April to November 1971 a guerrilla war was waged against the Pakistanis by the Bangalee Freedom fighters with active Indian support. The conventional war started on 4 December 1971 with an Indian attack in strength, although some Indian troops had crossed the border into Bangladesh earlier. The campaign lasted only 13 days. The Pakistani commander, General Niazi, surrendered at Dhaka on 16 December. Fighting had begun in the west

with a Pakistani air strike on 3 December, followed by a strong ground offensive mainly directed at points in Jammu and Kashmir which had provided the principal targets in the India-Pakistan War of 1965. Pakistanis failed to sever India's line of communications to Kashmir but the Indian counter offensives advanced quite well in Rajasthan and Sind desert. Pakistani President Yahyah Khan agreed to a cease-fire on 17 December.

During 1971 Bangladeshi's hope, aspirations and interest coincided with the national interest of India. According to the realists interpretation, India's involvement in the conflict of the then East Pakistan was not only motivated by a humanitarian cause to solve the refugee problem; she did it in pursuance of a national objective, to cut Pakistan into a manageable size. In that process she did not remain idle following the Chinese saying, that "watch a fire from across the river", also followed Kautilya's instrument of "Kutniti" and "Danda". According to the Kautilyan preaching attacks should be made precisely against that ruler whose subjects are hostile to him and would not object to a foreign intervention.

Turning the international situation in favour through skillfully executed diplomatic offensive India gradually developed pressure on Pakistan for the settlement of Bangladesh issue. At the same time she was actively supporting the freedom fighters in their guerrilla war to gradually wear down the Pakistani forces so that when she would resort to the military option, there would be an easy victory. India was almost sure that China, the closest ally of Pakistan was not in a position to help her if a war broke out between India and Pakistan due to her internal leadership crises and worsening relation with the USSR. Yet India did not take a chance, she chose the timing of her military action in the winter season so that it would be difficult for Chinese troops to move through the high Himalayan passes due to heavy snowfall. Indian Air Force Chief P.C. Lal's accounts of the efforts made by the I. A. F. reconnaissance squadron is a proof of Indian concern about the movements of Chinese troops before and during the war [Lal, 1986 : 310-313]. India also institutionalised its alliance with USSR by signing a treaty of peace, friendship and co-operation on 9 August 1971 to counter-balance U.S.A. an ally of Pakistan.

For the war India rationally grouped her military forces and prioritised her objectives. She planned and prepared for a decisive action in East Pakistan through an all out offensive and to contain Pakistan in the Western front through a defensive battle. Though ten Mountain Divisions were withdrawn from the Himalayan front but adequate measures were left behind, for any eventuality from the Chinese side. For example when Maj General Lachman Singh was fighting with his 20 Mountain Division in the northern part of Bangladesh his corps commander Lt. General M L Thapan remained deployed in the Sino-Indian border with the remaining troops to tackle any Chinese adventure. India also grouped her air power and maritime assets to fulfil the objectives and they were also orchestrated for a concerted action.

When the Indians launched their attack on the then East Pakistan on 4 th December, Bangladeshi freedom fighters intensified their efforts to hold down the Pakistani army. Out-numbered and out manoeuvred by the Indians, beset by the guerrillas, and despised by the civilian population, the Pakistani army attempted to defend far too much of the country and was spread too thinly. They had intended to hold a series of strong points and river crossings, but were continually by passed by the Indians who reached the Pakistani fall back positions first. Indian control of the air and sea completely cut off the Pakistani forces from relief or escape. Despite a number of sharp engagements, the outcome was inevitable. With the fall of Dhaka on 16 th December, the Pakistani forces surrendered. In the western front Pakistan started the war with pre-emptive air strikes on the India airfields on 3 rd December 1971, which was followed by ground forces attack. The Indian forces foiled these attacks and by counter-attacking. Indian Air Force could achieve air superiority within twenty-four hours. Pakistan Army's ground attacks made only small gains in the Punjab and Kashmir areas and were easily contained by the Indian Army which counter - attacked further south, capturing huge chunk of territory. Upon the fall of Dhaka, the Indian Government initiated a unilateral cease-fire, which the Pakistanis were glad to accept the following day. The Indians took 56,998 regular military and 18,287 paramilitary personnel as prisoners in the fighting. Estimates of Pakistani dead reached as high as 8000 of whom 2980 were killed in East Pakistan.

The effort was a grand success for India⁹. Military element of national power has proved its worth in promoting national interest. India's domestic situation was also favourable, the population did not hesitate to pay the cost of this campaign, and credit goes to the leaders in successfully uniting the people behind them. The success came from careful preparation, both diplomatic as well as military and bold exploitation of the situation. Pakistan fought from a disadvantageous strategic position, forces in East Pakistan were successfully cut-off by India even before the war started and prevented any reinforcement as well as mutual support between the two wings of the country.

There are lot of examples in this war where Sun Tzu's teachings have been innovatively applied. Diplomatic actions went hand in hand with military actions. Diplomatic pressure was being built against Pakistan simultaneously with the increasing intensity of the guerrilla war. At the same time measures in cutting off East Pakistan physically to prevent reinforcement was on. Indian strategists were absolutely right in launching an all out offensive for a decisive action in the East and containing the enemy in the West by defensive actions. Indian offensive in East Pakistan has been termed by DK Palit as "Lightening Campaign" since it was based on the doctrine of manoeuvre emphasising speed while by passing the enemy strong points. For this they used helicopters innovatively and paratroopers traditionally. Indians were economic in carrying out their tasks, instead of destroying the enemy forces in East Pakistan through military actions they used a carrot and stick strategy for their surrender which prevented further bloodshed. At the same time India unilaterally terminated the war in West the moment the main objective was achieved in the East. India embarked on a successful balance of power game by making a military alliance with the USSR before the war started. It was a skilful diplomatic manoeuvre. She also handled the issue in the UN with such a skill that the world body could not become a major obstacle in achieving her objective. India was also careful in choosing the timings of her military offensive when the international environment was favourable.

⁹ General Yahya Khan was a major contributor to this success. He was a product of the Pakistani military tradition, a drink-sodden womanizer, a debauch-descendent of the Mughal harem guards, Kizilbash. This character is indeed a reminder to Sun Tzu's teachings about a general's qualities of wisdom, sincerity, humanity, courage, and strictness.

The Yom Kippur War - 1973

Maj General Albert Abraham (Albert) Mendler was commander of an Israeli armoured division. His division with its 280 tanks was deployed in the Suez Canal front just before the Yom-Kippur War in 1973. Albert Mendler was posted out and was supposed to hand over charge to Brig General Kalman Magen who had come from the "command and staff school". He took farewell from his under command units by 5th October and was about to leave but on 6 October suddenly the war started and he had to rush to the front to face the Egyptian offensive. Within seven days Albert Mendler was dramatically killed in the battlefield and ultimately Kalman Magen replaced him.

Maj General Shmuel Gonen was the commander of the Israeli southern command and a superior officer to Mendler. On 13 October he was coming to see Mendler in the battlefield by a helicopter. From the helicopter he wanted to know the location of their meeting place and Mendler gave him a coded point from the map but within a moment accidentally transmitted in plain "we will meet at Gidi lateral road junction." After few minutes of this wireless transmission the armoured personnel carrier which was carrying Maj General Albert Mendler, had a direct missile hit and he was killed on the spot. This news immediately gave a boost to the morale of the Muslim world at the same time generated a fear amongst the Israelis.

Officer's death in the Israeli army was not an unusual incident. Since officers command their troops staying in front, their death is rather a usual event in the Israeli army, when ten persons die, it is seen that at least five of them are officers. Hence Albert Mendler's death was not abnormal to the Israelis; rather the incident, which killed him, was abnormal. Rumours spread throughout the Israeli army that within a moment of transmitting his location by wireless, an Egyptian artillery salvo killed Mendler. From the incident it appeared that the Egyptian battlefield surveillance was so efficient that they not only intercepted Mendler's transmission, could also disseminate the information to a nearby artillery unit to neutralise the target within a moment.

Maximum of the Israeli commanders did not believe that Egypt could achieve that level of proficiency in battlefield surveillance by procuring high-tech C³I systems. But they could not keep on sitting idle with this belief, their faith on themselves was shaken by the initial waves of the Yom-Kippur War. Maj General Shmuel Gonen took a daring step to investigate the matter next day. He straightaway went to the place where Mendler was killed the day before and kept on transmitting his location in plain through a wireless set [Herzog, 1975(1979) : 204]. However, that day, no artillery salvo came from the Egyptian side. On investigation it was found out that Mendler went on top of a sand dune, which was a registered target and the Egyptian missile crew was lucky enough to shoot an armoured personnel carrier which directly came into their sight with an Israeli general inside it.

In the Yom Kippur war of 1973 Egypt and Syria attacked Israel simultaneously in two fronts. Both the countries achieved tactical as well as strategic surprise. The Israelis discovered that the attacking Arab forces were better trained and better equipped than the previous wars. Israel could finally repulse the attacks, but at great costs. It showed them that there would not be easy victories in future. The cease-fire was allowed by extensive peace negotiations, led by the USA, and finally a formal peace treaty between Israel and Egypt was signed in 1979; this act almost isolated Egypt from the rest of the Arab World¹⁰.

The Egyptian military planners had learnt their lessons from the defeat of 1967. Recognising their soldiers less technological proficiency they made less ambitious plans in 1973. They intended merely to cross the canal, establish themselves on a few miles of territory and dig in. Soldiers practised the necessary operations, such as unloading bridging equipment from trucks, again and again, day after day. It was thought that the creative and innovative nature which is characteristic to the Israeli forces would give them little advantage in this kind of operation.

To deceive the Israelis Egypt moved her armies quite a few times to the canal zones with such preparations that as if an attack was imminent, but withdrew without launching the attack. Every time Israelis mobilised their army and finally discovered that the Egyptian move was in fact

an exercise. In this way when Egypt again moved large forces into the Canal Zone in the fall of 1973 Israelis considered it an usual field exercise and did not bother to mobilise but this time the attack came. This simple but effective deception allowed Egypt to achieve tactical surprise. On the other hand expulsion of Soviet military advisors from Egypt by President Anwar Sadat just before the war helped Egypt in achieving strategic surprise. The Egyptian attack was co-ordinated with a Syrian attack in the Golan Heights, a level of co-ordination the Arabs had not achieved in previous wars, was also a surprise for Israel.

Working with the advantage of surprise, co-ordination and initiative, the Arab armies did well. On the other hand the Israelis suffered from confusion and carelessness endangered by over-confidence. In the north they were able to halt the Syrian offensive, but their counter attack failed in the south. The Israelis were unable to dislodge the Egyptians from the Suez Canal front. Finally, from October 14 onward they could reverse the course of the war by a daring move, crossing the Suez Canal to the Egyptian side and threatening the Egyptian armies already on the western side. However soon both the sides had to accept a cease-fire and the war ended with each side being able to claim some victories.

We have already seen how Israelis followed Sun Tzu's wisdom in conducting the "six days war" in 1967, but in 1973 astonishingly we observe how Egyptians alleviated themselves to a higher level and applied the same wisdom differently. Egyptian planners tried to identify their weakness and the enemy's strength. In the process they had an objective understanding of their enemy and the limitations of their own army and designed their attack around this kernel of common sense. Egyptians followed Sun Tzu in true sense, they attacked the enemy's strategy, but in a different way. They knew that Israeli airforce and the armoured forces were the best in the world, it would be futile to attempt raising such forces in the Egyptian side, hence they looked for something which would cost less but counter them most effectively. Soviet Union came forward with SAM batteries and helped them to organise an effective integrated air-defence system. They also provided them with deadlier man-packed anti-tank missiles and rockets to deal with the boastful Israeli armoured

¹⁰⁰ President Anwar Sadat was assassinated by the radicals for signing this treaty.

forces. Egyptian planners blended these weapon systems with suitable military organisation and doctrines keeping Israeli military capabilities in front. Hence we find the ORBAT of the Egyptian Army crossing the Suez Canal little astonishing, armoured divisions were kept in reserve and the infantry divisions were leading the attack that too with their integral armoured brigades in reserve. Israelis were happy to discover the situation and their tanks came forward to attack the slowly advancing enemy infantry but they were welcomed with deadlier "sager" anti-tank missiles and anti-tank rockets. The Israeli rate of tank loss was so high that they had to devise new security measures; tanks were ordered to maintain a protective distance of 4000 metres from the advancing Egyptian infantry to avoid missile attacks. Israeli armoured forces were mainly trained and equipped to fight tank battles hence they had with them mainly High Explosive Anti Tank (HEAT) shells, but these shells were not very effective against Egyptian infantry from that distance. Only high explosive (HE) shells could be of some effect under this sort of circumstances, but Israel was running shortage of HE shells [Narayan, 1977 : 66]

Israeli air force became so proficient in providing close air support to the ground forces that they were being called the "flying artillery" at the same time the tank heavy Israeli army with their boastful doctrine of "tank only operations" undermined the role of field artillery in ground combats. These misperceptions along with the late mobilisation of whatever artillery they had put them in a disadvantageous position in the Sinai combat zones. As Egyptians extended their integrated air-defence system over the expanding combat zones Israeli airforce was unable to provide ground support to the counter attacking Israeli armoured forces. Thus we find that Egyptian planners with defensive weapon systems devised suitable combat organisations and blended them with simple but effective doctrines which turned their weakness into strength and Israeli ideas of strength into weakness.

The Israelis have had a remarkable record of military success due to the analytical mental inputs forming the tactical and strategic judgements in their military doctrine, but they were trapped by the euphoria of previous success. They have also shown reflections of Sun Tzu's teaching brilliantly by their flexibility and adaptability with the growing realities of the battlefields. When

they discovered that their over-reliance on a doctrine of "unsupported armour" faulty, they quickly changed it amidst the war and kept on employing armour supported by infantry¹¹. They also prioritised SAM missile sites as targets to punch a hole in the integrated air defence system of Egypt so that the Israeli airforce could be brought into play. They found that secretly crossing the Suez Canal and physically destroying the missile sites could do this. Accordingly General Ariel Sharon crossed the Suez Canal and destroyed few SAM sites on the eastern bank and allowed the Israeli air force to fly in through the gap[Herzog, 1975(1979) : 208]. At the same time Israelis were successful in bringing laser guided bombs for the destruction of SAM radar sites from the US weapon research laboratories. General Sharon again proved the value of the strategy of indirect approach by crossing the Suez Canal and threatening the entire Egyptian Third Army.

On the Golan Heights it was a life and death struggle. In the south Sinai desert was a buffer between Israel and her enemies but in the north if Syrians could cross the narrow Golan Heights they would rush to the Israeli settlements in Galilee across the Jordan river. Syrians with their overwhelming armoured forces were about to do that but Israeli counter attack by three divisional groups succeeded in beating them back. Desperate situations forced Israelis to even send single tanks to the battlefield. These tanks could group themselves effectively and fight cohesively. This reflects the adaptability of individual Israeli soldiers to the battlefield. Moshe-Dayan's concept of "assault by will power" which stresses that all officers, no matter what rank or what position they hold, must at all times, move in front of their men, setting a personal example for the troops paid its dividends. The concept also obtained that in combat where everyone goes without sleep or normal food for days until the enemy is crushed, one side has to crack under the strain, Syrians cracked in the Golan Heights. Before the end of the war Israelis not only re-captured what ever they lost but also captured the Syrian holdings. Israel's speedy counter attack allowed them to establish linkages with their isolated strong holds along the "Purple Line". Little delay would have forced them to fall, timely action saved the catastrophe. Attack on the "Mount Hermon" and its occupation just before

¹¹ Battle drills of attacks carried out by armored forces supported by infantry is always complex than the battle drills of attacks carried out by armored forces alone. In Yom Kippur War Israelis had to switch over from the simple to the complex.

the cease-fire shows how effective is the strategy of indirect approach. Other than the Middle East wars nowhere else Sun Tzu's teachings have been applied so effectively and innovatively.

Falkland War - 1982

The Falkland Islands consists of two large and about two hundred smaller islands. They have been under British rule since the 1930s. Argentine governments had disputed British claim to the Falkland Islands for sometime. The trouble started when a number of Argentine scrap merchants illegally landed on South Georgia, an administrative dependency of the Falkland Islands. Then on 2 April 1982 Argentina invaded Falkland without warning [Goldstein, 1992 : 203].

Thatcher government was criticised for underestimating the Argentines, the withdrawal of the armed survey vessel HMS Endurance from service in the South Atlantic prior to this incident was also criticised. Britain decided to go to war and a British Task Force sailed for the Falkland Islands. It was a costly war, fought in the glare of press, radio and TV coverage. Britain lost quite a number of battle ships to the Argentine air and missile attacks; amongst them were HMS Sheffield, Ardent, Antelope and Sir Galahad, as well as the supply ship, Atlantic Conveyor¹⁷. Many other ships were severely damaged. There was a ferocious land battle at Goose Green, and British troops came under air attack at Bluff cove. The Argentine forces surrendered on 13 June 1982.

Falkland War was unique for few reasons. Britain had to wage and conduct this war from a distance of 8000 miles. It was a cumbersome task to maintain a logistics lifeline of 8000 miles long. The hostilities were kept confined within the two hundred miles radius of the Falkland Islands; No attacks were carried out on the mainland Argentina. British nuclear powered submarines

participated in this war with their conventional weapons; Argentine navy's pride the battleship General Belgrano was sunk by a British nuclear powered submarine. Britain took the advantage of its NATO position and received intelligence gathered by sophisticated US Space Intelligence system. Some of the experts compare the Israeli campaigns of 1956 and 1967 with the British experience in the Falklands as textbook cases of exemplary professionalism.

The British expedition to recapture the Falkland Island was launched under the overall responsibility of the Royal Navy. The Argentine garrison on the Falkland Island consisted of more than 12000 combatants. Against them Britain sent a landing force of total 9000 men including the Royal Marines. "From the initial landings at San Carlos bay to the final storming of the hills around Port Stanley, the British Army responded like a supple beast of prey, animated by a vigorous energy, suffused with determination, and having as much advantage as daring and ingenuity could devise. It needed every ounce of advantage, for it was fighting two enemies, the Argentineans and the Falkland's terrain itself" [Tsouras, 1994 : 236]. Out of these two, the islands proved to be the most difficult, so far infrastructural facilities are concerned they had no similarities with the developed Northwest Europe. There were no roads to move neither mechanised columns nor transports. Severe cold and wet condition of the islands made the marches really difficult and arduous. An immediate demand was made on the health and vigour of the infantry. They could not be helped with the helicopters; the too few helicopters were fully occupied in the insertion of special operation teams and ferrying artillery, supplies and casualties.

In the land campaign British troops fought extraordinarily. In a hostile terrain under adverse climatic condition they were trying to do their best, it was of very high professional order. Throughout the campaign the British forces had reflected their superiority by showing an innate understanding of speed, surprise and initiative. Despite all the odds their morale remained high and they were undaunted in attacking a numerically superior and entrenched enemy.

¹² HMS Sheffield and the supply ship Atlantic Conveyor was sunk by the French sea skimming Exocet anti ship missiles. Rests of the ships were sunk by ordinary bombs of the WW II vintage. If Argentina had few more smart

British career based air element played an important role in the Falkland War. Long range Vulcan bombers were also used for strategic bombing. On the other hand Royal Navy could sink the Argentine Battle Ship "General Belgrano" and capture the Argentine submarine "Santa Fe" by a daring helicopter raid on South Georgia Island. Argentine army was commanded by General Mendez a soldier of high reputation. The conscript army had severe training, leadership and morale problems, even then they were a tough opponent in a defence. Argentine air force pilots were the most courageous, due to the limited endurance of their aircrafts while attacking from the land bases, which were at least three hundred miles away they could remain airborne only for few minutes on the islands, yet they devastated the Royal Navy by their gallant attacks. Argentine navy played an insignificant role in the war.

In conducting the combat there were reflections of Sun Tzu's wisdom especially in the British side. But at policy and strategic level we hardly find any trace of Sun Tzu's teachings especially in waging and managing the war. Both the sides toyed with the idea of war. Internal compulsion of both the countries pushed them towards this avoidable war. On the Argentine side the military junta was unable to contain the internal uprisings and looked for a diversion in war. In the British side it was a face saving show for the Iron Lady Margaret Thatcher, who had an election in front. Sun Tzu though never denied the usefulness of military means as an extension of policy but always advised that it should be viewed as the unfortunate last resort. The Falkland war was costly for both the sides though at individual level there were heroism, selfless acts etc but they were nothing but "right deeds for a wrong reason". The benefits of this avoidable war must be weighed with its cost. British casualties included 255 dead and 777 wounded where as Argentineans lost around 1000 men. British forces took more than 11000 prisoners. According to Sun Tzu, "a sovereign can not 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 can not be restored, nor can 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".

weapons like those Exocet missiles, it would have been devastating for the Royal Navy.

Iran-Iraq War

Iran-Iraq War was a lengthy one which continued for almost a decade. It started in 1980 and ended in 1988. The rivalry between these two states is more than three hundred years old. Within this period each tried to gain upper hand when the other was weak. But great unease shadowed their relation since the overthrowing of the monarchy in Iraq by a coup in 1958 and its radicalization in 1963. These developments in Iraq was threatening the next door Iranian monarchy. While the Shah was in power, situation was in Iran's favour, as the events between 1960 and 1975 have shown, Iraq lost the race for Gulf leadership to Iran.

The war was started by an Iraqi offensive launched against Iran on September 22, 1980. Above mentioned longstanding regional as well as Arab-Persian rivalries are the cause of this war. The issue of Arab, non-Arab, the question of Sunni and Shiite came up as sources of conflict between these two Islamic states. Iraq is an Arab state and ruled by a Sunni elite although majority of its population is Shiite. While Iran is a non-Arab state and ruled by the Shiite majority; the religious complexities of Islam made a clash between the two states inevitable. The Iranian revolution which put Ayatollah Khomeini in power was a Shiite fundamentalist movement while the Iraqi regime was dominated by the Sunni Sect. Therefore Iran's call for Muslim unity threatened Saddam Hussains control of his people, and was also an alternative to his own, originally more secular call for Arab Unity. In plain, Ayatollah Khomeini was after the secularist Baathist regime in Baghdad and Saddam Hussein feared that the Shiite Islamic revolution will corrupt the loyalty of his Shiite subjects.

However formal *causis belli* was the boundary issue over the Shatt Al Arab waterway. Iraq wanted reversal of the 1975 settlement of the frontiers on the Shatt Al-Arab. Iraq's president, Saddam Hussein was provoked to attack Iran by the idea that Iran's military strength might have been greatly reduced by the 1979 Islamic revolution. After the fall of Shah, the

Islamic revolutionaries purged out the Shah loyalists from the Iranian military and in the process shattered the whole structure. They also raised parallel military forces with religious and political motivation to serve as the vanguard of the revolution. Their high handedness also demoralized the military forces. These developments must have forced Saddam to believe that he would be able to achieve an easy victory over Iran, regain Iraq's position on the Shatt Al-Arab, and perhaps establish a new regime in the Iranian province of Khuzistan.

Saddam could soon discover the realities and found that his ideas were wrong. At the beginning of the war his forces could achieve some successes but soon Iran reversed the situation by forming new armies and seizing the initiative and launched counter-offensives. By 1982 Iran could push back most of the Iraqi troops from the Iranian soil but did not stop at that point. Iranian leaders were neither satisfied with this achievement nor ready to exploit the possibilities of peace, they continued with the offensive. Other than punishing Iraq, Iran's war objective was not very clear from this point onward.

From 1982 to 1987 Iranian offensives were mounted all along the frontier, in the south, they tried to capture Al Basrah. These offensive operations were nothing but human-wave assaults on well entrenched Iraqi positions, which were repulsed by superior Iraqi firepower. Tactics along with battle field conditions went back to the days of the First World War and desperate Iraq had to resort to gas warfare. With the financial help from Arab states in the Gulf region, and supplies of weapons, mainly from Soviet Union and France, Iraq kept on resisting the Iranian assaults stubbornly, at the same time her air force kept on attacking Iranian cities, oil installations, and tankers in the Gulf of Arabia. Iran had no other way than retaliating against the shipping of those states which supported Iraq.

As a way out finally Iraq could seek involvement of outside powers in the conflict, and eventually in 1987 the United States and other powers assumed responsibilities for protecting

shipping in the Gulf. By 1988 Iran was exhausted and finally lost the steam as well as the will to continue; Iraqi forces tried to resume the offensive, and on July 20, 1987, Iran accepted United Nations peace resolution. Peace was finally made in August 20, 1990, during the Gulf War, on the basis of the *status quo ante bellum*.

According to Chubin and Tripp, in fighting this war Saddam Hussein had to pay careful attention to two different “fronts”, the first is the battle front and the second is the home front. “Here the crucial consideration has been the maintenance of sufficient control to guarantee the absolute disposal of the country’s resources as Saddam Hussein thinks fit, and ultimately, to guarantee his own survival as supreme ruler. Understandably the two are interconnected, since the future of Saddam Hussein is at stake in both area”[Chubin, 1988 : 53]. At the beginning, the Iraqi objective of the war was the demonstration of power. Such demonstrative wars have inherent limitations and Iraqi leaders had to direct the war within these limitations. Actions of the military commanders deployed in the fields were also conditioned by these circumstances.

The war was started by a Iraqi land attack. This attack was carried out across the Iranian border at four points. Iraqi air force also executed a pre-emptive air strike against the Iranian air force, but it was a poor show. During the first phase of the war there was a conscious effort to spare Iranian economic and civilian installations located beyond the combat zone and there was no effort or attempt by Iraqis to bring the bulk of the Iranian armed forces to battle with the intention to defeat them decisively. Iraqi units had a tendency of coming to an abrupt halt when they faced stiff resistance from the Iranian side. Probably this had happened due to an uncertainty about what exactly their attitude should be towards the enemy. According to Chubin, Saddam Hussein had instructed his military commanders to project an impressive show of force in Iran, demonstrating the capacity of the Iraqi armed forces to occupy territory, and while doing so to remain relatively intact and to suffer minimum casualties. This seems to be quite likely in a war which was largely regarded in Baghdad not as a “struggle for survival” which could take the form of “fight unto death”, but simply as a way of power projection with the objective of compelling the Iranian leadership to formally recognize the Iraqi might.

After June 1982 when the battle field situation was reversed and Iran was on the offensive at that time Saddam Hussein complained that the Iranian leadership had perversely refused to abide by the anticipated rules of war: "Despite its military defeat in 1980, the Teheran regime insisted on its aggressive stands and expansionist trends". This juncture was critical, since it marked a forced reappraisal by the Iraqi leadership of the nature of the war, its utility, the goals achievable through the continued use of force, and the strategies which might be used to achieve them. With that the nature of the war was transformed from the "war of demonstration" to the "war of survival".

Iraq's thorough defensive preparations and successful repulsion of the Iranian assaults during 1982, gave a boost to the morale of the Iraqi leadership. They were so encouraged that they even started believing that the war might be brought to an end by this means. As an example, after the attack on Basra was repulsed, thrilled Sa'dun Hamadi stated that the failure of the Iranian offensive could be considered an end to the war since it would cause deterioration of morale in Iran, and its leaders would be compelled to end the war. Hamadi also speculated that skirmishes might continue, but the war was as good as over. Soon Hamadi was proved wrong, for the next five years, Iraq had to remain almost entirely preoccupied with thwarting repeated Iranian land offensives.

At a crucial time Saddam Hussein came to the conclusion that if Iranians pay a high price in human lives that would not only turn the battle field situation in Iraq's favour but also create a division between the Iranian leadership and the Iranian people, jeopardizing the relation between the leaders and the led might create the conditions under which "it will be possible to freeze the war at a certain point and allow it to take the form of small activities, or come to an end". In order to achieve these objectives, "the Iraqi armed forces were permitted, or commanded, to use chemical weapons". At the end of August 1987 Iraq resumed air strikes on maritime targets in the Gulf. This was aimed to assert that it was a strategy dictated by Iraq's military strength and

capabilities, not by a desire to drag foreign powers specially the United States into a war which Iraq herself was unable to end.

It was a brutal war. Although some of the modern military technologies have been used yet it resembled the mass infantry trench warfare of the First World War. While no reliable figures of casualty exist, estimates of perhaps a million on each side are entirely plausible. From the beginning there was stalemate and the total amount of land gained or lost was negligible. In this war the Western nations tended to favour Iraq. Fear of Islamic fundamentalism sweeping the region was the driving force behind this support. There is no permanent friend or foe in politics, it is only interest which is permanent; within a short span of time this saying came true ; within two years of the cease-fire all these nations had to take up arms against the Saddam regime in the Gulf War 91 .

In this protracted conventional war there was hardly any reflection of Sun Tzu's wisdom. Iraq's mis-calculated attack on Iran shows her lack of knowledge about the strength of Iranian will power as well as the capability to resist such an attack; it was a violation of Sun Tzu's teachings about intelligence. Sun Tzu considered war as the province of life or death, road to prosperity or ruin. He warned us to take it seriously and to consider it as the last resort. He advised us not to commit troops in battles unless sure about victory and not to fight unless in danger. Saddam misperceived the nature of the war and ignored the cautions and violated the advice by launching a "war of demonstration" against Iran. Iraq's poorly conducted mobile operations soon turned into seize and trench warfare; it was also contrary to the teachings of Sun Tzu. On the other hand Iran's strategy of attacking with fanatical human waves was against Sun Tzu's wisdom of economy in carrying out violence. Finally the use of chemical weapons by Saddam to face these Iranian human wave assaults took the war to its utmost limit, as far as violence is concerned. With one million casualties on each side both the countries had to fall back to their original borders, they had to come back to the point from where they started. At the same time the adventure ultimately pushed Iraq towards the Gulf War. All these things were contrary to the preaching of Sun Tzu.

6.4 REGIONAL WARS WITH A SUPER POWER'S PARTICIPATION

Korean War

At the end of the Second World War, Korea was divided into Soviet (North Korea) and US (South Korea) zones of occupation along the 38th parallel. When the US occupation forces left and South Korea became an independent state, North Korean communist regime launched a military offensive with an intention to unite both Koreas by force. Thus a war started which lasted from June 1950 to July 1953. It was the first major occasion in which U.S.A. with contingents from 14 other UN members, fought against an established communist power block. Earlier UN attempts to reunite the communist North and the Democratic South had failed. Lacking substantial military forces and weapons, South-Korea was unable to resist the North Korean Army and kept on retreating towards the South, till the U.S. troops arrived. On arrival the United States could only maintain a toehold on the Korean peninsula inside a small perimeter around the port of Pusan. Then on September 15, 1950, in a bold and risky move, General Mac Arthur staged an amphibious landing in the centre of the West Coast of Korea at Inchon.

The landing was successful and the US and its allies were able to drive in from Inchon towards the capital, Seoul, trapping the North Korean forces as re-enforced UN troops broke out of the Pusan perimeter. The success of this move reversed the fortunes of the war and encouraged US leaders to consider a more ambitious aim than the one they started with which was merely the expulsion of the North Koreans from the South. The United States now decided to push on across the 38th parallel and re-unite the entire country by force. But in November 1950 China intervened. A very large Chinese army pushed the UN forces back into South Korea, with Southern capital, Seoul being captured for the Second time¹³. Eventually the UN forces, dominantly American, were able to drive the communists back across the 38th parallel, where the war fell into a stalemate. The

cease-fire line agreed in 1953 roughly followed the 38th parallel, and a demilitarised zone, supervised by UN forces, separates the two countries. In this war, casualties were very high, with over 140,000 Americans (and 17,000 from other UN contingents) killed compared with 55,000 in the Vietnam War.

Korean War may be divided into three separate and distinctive phases. They are the decision to repel the North Korean attack; the decision to cross the thirty-eight parallel; and Mac-Arthur's drive to the Yalu River that provoked the Chinese intervention. According to John C. Stoesinger, the first decision was correct, the second dubious, and the third disastrous [Stoesinger, 1985 : 78].

Korean War was an avoidable one, hence the whole crisis, which led towards the war, was ill managed and Sun Tzu's teaching, "to subdue the enemy without fighting is the acme of skill" was denied. There was neither a clear victor nor a vanquished. China remained in her place, America and North Korean also kept on standing on their own ground. It was not a goal of American foreign policy to fight China or to undo the Chinese revolution by force. For the Chinese, war in Korea risked escalation to an attack on China itself, possibly with atomic weapon. Even without escalation the fighting was highly costly to the Chinese side. More important Chinese goals could have been achieved without actual fighting. The conflict resulted from the lack of communication between the two sides. When Sun Tzu paid highest importance to the intelligence, the Korean war escalated from the lack of intelligence, both the sides failed to read each other's intention as well as could not gather the true picture of the battlefield. Chinese troops were concentrated secretly avoiding the eyes of the U.S. reconnaissance planes and spies. At the same time Chinese leaders were also not aware of the situation that Mac Arthur was authorised to wage war in North Korea only as long as there were "no entry in North Korea" by major Soviet and Chinese forces. The way Chinese leaders kept their war efforts secret from the enemy, similarly Mac Arthur also never mentioned publicly about the limitations imposed upon him. Both could have prevented the un-necessary war.

¹³ President Truman relieved General Mac Arthur of his dual command of UN and US forces in the Far East on 11 April 1951. Mac Arthur could not reconcile with the policy of limiting the war to the Korean Peninsula and was

In this war "strategy of indirect approach" was adopted at operational level by both the sides following Sun Tzu's precepts; amongst them Inchon landing is the most remarkable. It is astonishing that the Chinese leaders who were very much aware of the teachings of Sun Tzu and also practised them in their struggle against the Nationalists, adopted a direct strategy to take the enemy frontally in Korea. They launched infantry assaults - concentrated in narrow frontage against technologically superior American which resulted in enormous losses of lives. However, Korean War must be analysed in the context of the Cold War. From that point of view probably the war was neither unnecessary nor the effort went in vein. In that case it will not be incorrect to say that Chinese leaders have followed Sun Tzu in attacking American strategy instead of attacking them. Just after the Second World War maximum of the US conventional forces were demobilised and the strategy of "massive retaliation" was adopted. China probably wanted to prove the ineffectiveness of this strategy at a political level. However in general it may be said that the wisdom and teachings of Sun Tzu was hardly reflected in the Korean War. The U.S. side had enormous advantage in technology but the edge was not utilised innovatively, similarly Chinese side had an enormous advantage of manpower, but due to lack of innovative ideas men power was sacrificed uselessly in the form of the repeated human wave assaults.

Afghan War

Scholars and analysts, those who belong to the radical school believe that the Afghan War was the out come of the Second Cold War [Halliday, 1991 : 78]. In April 1978, the Afghan dictator Lt Gen. Muhammad Daud was killed and the communist Peoples Democratic Party of Afghanistan took power. Within a year an impasse situation was created by the factional disputes. Government's inability to suppress the rebellion in the provinces led by the Muslim Mujahedin guerrilla forces also paid in this regard. Finally in December 1979, with the support of Soviet armed forces, the Afghan president, Hafizullah Amin, was killed in a coup, and replaced by Babrak Karmal. Soviet army rolled into Afghanistan to physically influence the affairs of that country.

On arrival, Soviet military forces got entangled in the fight between the communist regime's loyal Afghan army and the rebel factions with the Mujahedins. Rebels were getting both support and sanctuary from Pakistan. USA also did not waste time to exploit the opportunity offered by the USSR. She backed Pakistan in turning Afghanistan into a Vietnam for Soviet Union. The conflict advanced rapidly in a similar line. As in Vietnam the invading super power was able to control the cities, but lost control of most of the countryside and especially of the mountainous regions. The tactics were similar involving search and destroy mission and the emplacement of heavily defended outposts from which the Afghan and Soviet troops could only venture at great risk. In 1989 President Mikhail Gorbachev finally withdrew the last soviet troops from Afghanistan. The pro-Soviet government left behind remained heavily Soviet dependent and could linger for two more years. After the final demise of the USSR itself, the communist regime in Afghanistan fell in 1992. However civil war continued but now between rival factions of the Mujahedin.. [Robertson, 1993 : 8].

Soviet military forces entered Afghanistan with their mechanised formations and Muslim reservists called from Turkestan and Central Asian military districts[Tsouras, 1994 : 258]. On arrival they could quickly snuff out pockets of resistance. The rebels were momentarily stunned but soon groups formed to fight the previous Afghan communist regime multiplied, Pakistan came forward with direct support as well as sanctuary to the rebels. On the other hand Pakistan also started receiving direct US support in this regard. At this juncture the Soviet military could discover that Afghanistan is not the Central Europe, for which they prepared themselves so long.

The second cold war has drawn USA to the Afghan conflict and she adopted a policy of indirect approach in draining out the Soviet strength. Pakistan decided to play a host country's role in running a low-intensity conflict against Afghanistan with the US support. Guerrilla war continued for a decade and Soviet Union was beaten back. This is a war where we have seen Sun Tzu's wisdom being reflected in many ways. Mujahedins and their supporters quickly identified the weakness of the Soviet-Army and adopted suitable strategy for a victory. The Soviet Army was mainly equipped with mechanised and motorised formations which were unsuitable against the

foot-guerrillas deployed in mountainous terrain. Soviets tried to carry out large sweeps with their heavy formations but failed to achieve any results. Then they tried to use heli-borne blocking forces and used air power to bomb targets as well as to provide close air support to own forces on the ground; this effort became little effective. Finally the Soviet Army made changes in its approach, large sweeps were discontinued and most motorised units were sent back for static security duties. Special forces units (e.g., 'spetsnaz') were employed in light infantry operations. It was very effective, they carried the war to the Mujahedin on their own terms for the first time with heli-borne raids and ambushes. Combined with heavy artillery and air strikes, these operations were severely weakening the Mujahedin who were increasingly becoming off balanced.

Fortunately Mujahedins could free themselves from this strangle hold very quickly. Continued US and Pakistani support and the heavy commitment of US 'stinger' and British 'blow pipe' shoulder controlled SAMS brought this successful approach to a halt¹⁴. Within no time the SAMS deprived the air support off Soviet troops in the field. Close tactical air support and the use of helicopters for troop transportation and attack in special operations was particularly hobbled. To avoid the SAMS, Soviet fighter-bombers delivered their ordnance from such a high altitude that, they were totally ineffective [Tsouras, 1994 : 298]. Gradually the Soviet leadership could realise that the war could not be won at a price they were willing to pay and Gorbachev made the political decision to withdraw.

By intervening in Afghanistan, Soviet political leaders toyed with the ideas of war violating Sun Tzu's very first warning that "war is a matter of vital importance to the state, the province of life or death; the road to survival or ruin". The moral cause of the war did not unite the people of Soviet Union rather it created division and resentment amongst them and the war with its growing casualties became extremely unpopular to the Soviet people. From the beginning it was evident that Soviet Army was unprepared for this type of warfare. They were equipped and trained for Central European conditions but sent to Afghanistan. Mujahedins and their supporters could quickly assess the condition of the enemy and formulate a suitable and effective strategy to counter them. Soviet

leaders also ignored the economic consequence of a protracted war violating Sun-Tzu's caution, "no nation ever benefited from a protracted war". Besides these things Soviet military tried to adjust themselves with the local environment by quick learning from the ground and finally could devise an effective counter the Mujahedins. However, the enemy off-balanced them again by introducing effective counter measures to their modus operandi. Guerrillas also used the terrain in their favour. There were ample of Sun Tzu's reflection in their actions.

Gulf War, 1991

Iraq invaded Kuwait on 1 Aug 1990. This invasion started a chain reaction that led to one of the largest conflicts of the modern era. In this war actual fighting continued for 43 days but that involved massive air and armored operations and the widespread use of new military technologies. The war also marked a major shift in East – West relations and within the developing world itself. It was an asymmetric conflict, a contest between a regional power and broad coalition of UN forces, led by the lone super power United States which had the political support of the Soviet Union.

Apparently Rumalia oil field was the bone of contention between Iraq and Kuwait. Before the invasion Iraq claimed that Kuwait was violating its oil quotas and improperly draining oil from this oil field. Rumalia was a large reservoir whose major portion was in Iraq but the southern tip was in Kuwait. In fact Iraq had never agreed to a quota of its own and most of Kuwait's modest production from the Rumalia field had gone to sales that gone to Iraq during its war with Iran. Besides, Kuwait helped Iraq during the war by giving her billions of dollar in aid. Before the Iraqi invasion Kuwait also agreed to cut off its exports and stop production from the Rumalia oil field.

¹⁴ According to the Soviet military teachings this is how war progress, dialectically.

Iraq at first justified its invasion by claiming that it came to support the uprising of prodemocratic forces in Kuwait and would go back as soon as possible. Practically instead of withdrawing she rather annexed Kuwait and sent forces to her southern border with Saudi Arabia. The Iraq's justification of the invasion then transformed into a claim that she was simply liberating territory stolen from her by Britain. In fact Iraq had no claim to Kuwait as a successor state. The true cause of Iraq's invasion were a mixture of economic problems and the ambitions of Saddam Hussein. Iraq spent more than 60 billions US dollars in arms procurement during 1980 – 88. War with Iran had cost as much as one-third of its domestic product. Further, Iraq was spending additional billions of dollars on missiles, and biological, chemical, and nuclear weapons. She was continuously expanding her military machine since the cease-fire in August 1988. These efforts put Iraq with a foreign debt of some 80 – 100 billions US dollars when the oil prices were depressed. As a result Iraq was neither capable of paying for its military machine nor capable of paying its debts. She was also unable to fulfill the aspirations of common people regarding the economic development and reconstruction after the end of the war with Iran. Thus invasion of Kuwait came as a diversion.

Kuwait's potential source of vast wealth and the strategic asset of a deep water port on the Persian Gulf attracted Iraq for such an act of diversion. Kuwait was capable of adding at least 2 million barrels a day of oil to Iraq's export of roughly 3.5 million, and it offered the opportunity to increase Iraq's total oil reserves from 100 billion to 198 billion barrels, a total of nearly 25% of the world's total reserves [Cordesman, 1993 : 1111]. Occupation of Kuwait also allowed Iraq to deploy its forces on Saudi Arabian border which gave her political and military leverage over nations that possessed an additional 28 percent of the world's total oil reserves.

Iraq expected that her actions would frighten and paralyze Saudi Arabia and United States would neither send forces nor be willing to go to a war at that crucial juncture of post cold war era. She was proved wrong, Saudi Arabia immediately gave the Kuwaiti government-in-exile its full support and sought United States help to diffuse the threat posed by the Iraqi forces

in her border. Saudi Arabia also immediately obtained the support of other Gulf Cooperation Council states. President Bush of the United States also acted immediately to check Iraqi aggression. He pledged the commitment of massive military forces to defend Saudi Arabia. At the same time United States took initiative to freeze Iraqi assets and to obtain UN support for a naval blockade of Iraq and an embargo on all Iraqi imports and exports other than medicine and food for humanitarian purpose. Most of the rest of the world proved equally decisive. Britain, France, the other members of the North Atlantic Treaty Organization, Japan, most East European nations and the Soviet Union immediately joined in condemning Iraq's action. Most of the Arab world proved equally firm.

On 3 August 1990, the Arab League Council voted to condemn Iraq and demand its withdrawal from Kuwait. Egypt and Syria strongly opposed Iraq and sent military forces to defend Saudi Arabia and liberate Kuwait. Other states including Algeria did the same thing. It was only Jordan, Libya, Mauritania, the PLO, the Sudan, and Yemen supported Iraq during the crisis. On 2 August 1990, the Security Council voted 14 to 0 (Resolution 660) to demand Iraq's immediate and unconditional withdrawal from Kuwait. The Security Council then passed resolution that ordered a financial and trade embargo against Iraq, declared Iraq's annexation of Kuwait null and void, demanded that Iraq free all the hostages it had taken, established an international naval blockade, halted all air cargo shipments, declared Iraq liable for all war damages and economic costs, and authorized the nations allied with Kuwait "to use all necessary means" if Iraq did not withdraw from Kuwait by 15 January 1990.

The United States gradually built its strength to a massive land-sea-air forces of 527,000 men and women, including over 110 naval vessels, 2000 tanks, 2200 armored personnel carriers, 1800 fixed-wing aircrafts, and 1700 helicopters. In this war there was the largest set of opposing forces since the Korean War, and the largest mix of modern armor and air units since the Second World War. The US led coalition had well over 600,000 land troops to Iraq's 545,000; 3,360 tanks to 4,230; 3,633 artillery pieces to 3,110; 4,050 other armored vehicles to 2,870; 1,950 helicopters to 160; and some 2,700 aircraft to 770 [Cordesman, 1993 : 1112]. Moreover, the US

led coalition had a massive technological advantage in everything including the communication, command and control. It also had an effective monopoly over photo, signal and electronic intelligence.

The 1991 Gulf War started on 17 January 1991 with air attacks on the Iraqi integrated air defence system. On the third day of the war, air attacks were shifted to such strategic targets as key headquarters, civil and military communications, electric power plants and Iraq's plants and facilities for the production of biological, chemical and nuclear warfare. In these attacks the coalition took full advantage of its monopoly on long range reconnaissance, photo and signal intelligence from satellites, electronic intelligence aircraft, refueling capability, air control and warning aircrafts and sophisticated targeting aircraft. This gave it further advantages in both air to air and air to ground combat. At the second week of the air war, coalition air forces shifted their focus and began attacking the Iraqi field army in the Kuwaiti theater of operations. This phase of operation continued for the next 26 days.

From the beginning of the war Iraq realized that it was not possible on her part to retaliate against the coalitions attacks except to launch her long range modified Scud missile. She began this missile strikes by attacking Israel and Saudi Arabia on the second day of the war and continued till the cease-fire. One of the main objective of these attacks was to provoke Israel into retaliation. The United States could realize the graveness of the situation and rushed with her "patriot" anti ballistic missile system to both Israel and Saudi Arabia. Though Iraq could launch a total of 40 Scud variants against Israel and 46 against Saudi Arabia but could not succeed in doing any major military damage due to the "patriot" system. This missile shield also diffused the Iraqi chemical and biological threat, it gave a great boost to the public confidence.

By the time the ground war started on 24 February 1991, Iraqi forces were already shattered by more than 40,000 air sorties. According to the coalition air power's claim beside the destruction of almost all the nuclear, chemical and biological facilities they also destroyed 60 percent of Iraq's major command centres, 70 percent of its military communications, 125

ammunition storage revetments, 48 Iraqi naval vessels and 75 percent of Iraq's power generation capability [Cordesman,1993 :1113]. Logistic supply to the theater had been cut by up to 90 percent and the U.S. command estimated that at least 1300 Iraqi tanks, 800 other armored vehicles, and 1100 artillery pieces had been destroyed from the air.

Once the ground phase of the war began, it proved to be extraordinarily quick and decisive. The coalition not only attacked a gravely weakened Iraqi forces and had a massive advantage in intelligence and virtually every area of technology. It also applied superior tactics. The coalition forces used the "air-land battle" concept, which the United States had developed to meet her adversaries in Europe. While coalition land forces did not enjoy a significant superiority in weapons strength and manpower over Iraq they consist largely of highly motivated professionals whereas the majority of Iraqi forces were poorly trained conscripts who seemed to have poor morale and little motivation.

During the land battle phase commanders of the coalition forces could move their major forces to the respective positions undetected by various efforts and could achieve surprise in their attacks. This surprise played an important role in bringing the war to a speedy end. Land forces attacks combined with the relentless air and cruise missile attacks shattered the remaining organization, morale, and war fighting capability of the Iraqi army, while the Republican Guards remained pinned down outside Kuwait.

The war ended with a devastating series of engagements where Iraqi forces were able to put up only limited resistance. The thermal sights and superior fire control systems of coalition tanks allowed them to achieve massive kills against Iraqi armor, backed by lethal system like the AH-64 attack helicopter and Multiple Launch Rocket System. The coalition's vastly superior intelligence and night vision devices, combined with the use of new navigation aids that provided precise location data from global positioning satellites, gave its land forces control of both the desert and the night.

Coalition forces had destroyed nearly 4,000 Iraqi tanks, more than 1,000 other armored vehicles, and nearly 3,000 artillery weapons. In contrast, the coalition suffered combat losses of four tanks, nine other armored vehicles, and one artillery weapon [Cordesman,1993 : 1116]. Although coalition airforce flew a total of 109,876 sorties by the end of the war, it lost only 38 aircraft. U. S. intelligence issued rough estimates after the war that 100,000 Iraqi soldiers died in combat whereas allied casualties totaled less than 200.

There is no doubt that the coalition scored a major victory in grand strategic terms. It liberated Kuwait, it destroyed Iraq's ability to invade or use military pressure against its neighbors, it destroyed most of Iraq's capability to build and use weapons of mass destruction, and it forced Iraq to agree to cease-fire terms that promised to steadily weaken its military capabilities of years to come. The importance of superior technology was evident. The war marked the dawn of a new technological era. There were precision guided munitions, cruise missiles, antiballistic missile defenses, advanced reconnaissance systems, F-117 stealth aircraft, and Apache helicopters were all used successfully for the first time major combat..

In this war latest, state of the art technologies have been used, especially by the allied forces, their judicious use paved the path of victory. There were reflections of Sun Tzu's teachings all over the war. There was a just cause, powerful enough to mobilise mass support for the war. Actions preceded the coalition offensive was in accordance with the sequence prescribed by Sun Tzu where he suggested that enemy's plan should be the first target, second should be his alliance, once the enemy is isolated from his allies only at that time if required an attack on his army in the field can be carried out. Hurried deployment of U.S. forces in Saudi Arabia had foiled the Iraqi plan to coerce Saudi Arabia. Sanctions accorded by the UN and the naval blockade physically isolated Iraq where as simultaneous efforts were made to isolate her diplomatically by isolating her from her allies. Though Iraq tried her level best to manoeuvre and at the last minute signed a friendship treaty with Iran but coalition diplomacy could ultimately keep Iran inactive throughout the war.

Sun Tzu's teaching about the importance of intelligence was reflected most in this war. U.S.A. used its space age C³I (command, control, communication and intelligence) system so effectively, that Iraqi soldiers could not move even at the dark hours of night. On the other hand, used the air power and missile forces to destroy civilian and military infrastructure, neutralised the Iraqi Scud missile threat by effectively deploying "Patriot missiles"(ABM), an anti-missile weapon system. By using different elements of military power, when the commanders were almost sure that the victory was not far away, at that time only land forces were unleashed and within 100 hours the war was over. Following Sun Tzu's precepts greatest economy of effort was shown in this war; even a chase behind the retreating Iraqi forces to Iraqi land was prevented by President Bush, who was in China as an ambassador for quite a few months [Tsours, 1994 : 320].

6.5 FINDINGS OF THE WAR STUDIES

Most of the past wars have supported the point that war is a means by which political conflicts are solved. Politics usually has at its disposal both military and non-military means. "Ideally warfare should therefore relate to the whole political process of war, to the process of pursuing political goals through war, as a part of the whole, and as means to ends" [Lider, 1977(1983) : 359]. It is seen that there exists some proportionality between the political goals at a stake and military goals adopted. The more important the political ends, the more violent the means chosen and used. For example in WW II the destruction of Nazis became the political goals which set the unconditional surrender of the German forces the military objective. It is interesting to note that usually the proportionality exists in the beginnings of a war but often tends to disappear during the hostilities. When the military process occupies the centre stage the political considerations are often pushed to the backstage and "military victory at any cost" becomes the motto. Under this circumstances the level of violence begins to be conditioned more by military objectives than by the original political goal.

In some wars, the military aspect had such an impact on the political that the original dispute was lost sight of. The logic of military strategy in dictating a level of violence out of proportion to the political goals, in pursuit of which war was originally started, had not only led to a full-scale war but also created pressure for unlimited political goals. In other words, the military process, or warfare, has more and more frequently influenced the political process by stimulating the expansion of political goals of more offensive character: the part had often changed the whole, the means had modified the ends. What is more, the military process had sometimes led an existence independent of the political process [Lider, 1977(1983) : 360].

We got to agree with Lider and admit that the great diversification in the kinds of war, from the modern conventional wars to the wars of the information age and the guerrilla wars makes it difficult to put them in one theoretical framework, e.g., the formula on war as a political act identical for all kinds of war; the interrelation between the two processes, military and political, may be different in different wars.

Besides above, one of the major findings of this war studies is that, the war's outcome is not dictated by the one side which has visible superiority, specially in military technology, it is rather conditioned by dialectical interactions of both the sides. For example, in the First World War, Germans were very much aware of the advantage and disadvantages of the mobile warfare yet it did not help them. They tried to finish the war hurriedly by launching an offensive according to the Schlieffen plan but the attitude and actions of the enemy did not allow them to achieve the conditions they wanted and ultimately the war proceeded towards a stalemate and turned into a static protracted one. During the Second World War Germans materialised their "manoeuvre theory" in brilliant "Blitzkrieg" actions yet they were bogged down in attrition processes in Russia as well as Africa due to the conditions created by the enemy.

Materially superior U.S. military could not defeat their enemies in Korea as well as in Vietnam. Their technology dependent strategy could not transform the battlefield conditions in their favour. It was the enemy's artful use of simple but effective methods, which turned the situation

against them. Similarly Iraq's manoeuvre warfare with mechanised formations against Iranian infantry forces has not only failed, also ended in trench warfare like the First World War, where chemical weapons had to be used.

Again in Middle East we find Israel placed highest premium on the quality of human beings and leadership. Which in turn placed technology in its right perspective. Israeli leaders neither neglected military technology nor considered them above human beings. They refused to make unnecessary comparisons and draw absurd conclusions like the traditional military leader's showmanship. They always tried to discover things in their true perspective. "Which one is important, is it the man behind the gun or the gun in front of the man?" In answering this question traditional soldiers are bound to place one above the other but Israelis took up both. To them both man and guns are important. Israelis prepared themselves for the right type of war in right place at right time, in that they placed the "Knowing Subject" above every thing.

Americans behaved similarly in the Second Gulf War and had an easy victory over Iraq. They have changed a lot since the Vietnam War, they have the realisation that technology alone can not bring victory in a war. Soviet Union took time to realise the fact during the Afghan War. Her large motorised divisions with sophisticated military technology ultimately had to take up static security duties around the cities, their large scale manoeuvres failed against the Mujahedeens in the hilly terrain of Afghanistan and the dialectical interaction forced Soviet Army to resort to original light infantry tactics supported by helicopters.

Finally we find that the developments in military technology is no obstacle in implementing Sun Tzu's teachings and wisdom, it is rather helpful. Rationales of technology, error elimination and constant endeavour for efficiency, to reach an error free condition alone can not bring victory, innovative application of technology may help in achieving victory and that may only occur if we have a right mind frame. Military technology if utilised innovatively and properly may function as deterrence, and help in achieving victories without going into the battlefield. For example American "ballistic missile submarine fleet" functioned as a triumph card weapon system during the Cuban

missile crisis and helped America to win over the USSR without going into a war. Sun Tzu has taught us the value of intelligence in a war. Americans practised it in the Gulf War by innovative use of space technology, through their space intelligence system, spy planes and human elements equipped with sophisticated technologies. They confused Iraq's integrated air defence system by electronic counter measures and ensured its collapse at the beginning of the war. They carried out the violence in economic manner by using precision guided munitions against the Iraqi civilian and military infrastructure. Americans used almost similar technologies in Vietnam but placed technology in a prophetic role undermining the ability of human beings. With little bit of Sun Tzu's teaching they are now capable of handling technology in a more effective way in materialising Sun-Tzu's wisdom in warfare. In fact in the conduct of war advanced technology and human beings are neither mutually independent nor competitive; they are rather dependent and co-operative. Advanced technology does not diminish the position of human beings in war. Rather, it makes them more important since the military force's success is more dependent upon correct, timely and precise application of advanced technology by human participants. From this point we can very well conclude that the way Sun Tzu's wisdom benefited human beings in the past will also do the same in the future.

Chapter 7

CONCLUSION

Sun Tzu said, “To subdue the enemy without fighting is the acme of skill” yet rest of his treatise is full of teachings about “how to win by fighting”. This seems little confusing to some of the Western scholars. It reminds us of Voltaire’s “A conversation with a Chinese”¹; which occurred in 1723 in a bookshop in Holland. The conversation between the learned Chinese trader and few Western intellectuals gradually turned a conversation between two deaf and dumb persons once the Chinese discovered that his Great Empire was not properly portrayed in Bossuet’s “Universal History”. It is a vivid picture of the meeting of two great but self-satisfied civilisations [Thomas, 1928 : 1].

The first correct account of China was given to the world by the Venice born celebrated traveler Marco Polo. In 1271 he had begun a journey through Asia and finally reached China in 1275. It was at that time known in Europe as Cathay. He was received by the Emperor of China and later on made the governor of a large city. After serving in that capacity for three years when Marco Polo wished to return the emperor would not allow him to do so since China was closed to all foreigners, and for sixteen years he had to stay there as an honoured prisoner of the emperor. However, finally he could escape to Persia by a ship which was carrying the emperor’s daughter. After a nine months journey through Persia and the Black Sea finally he could return to Venice in 1295. By this time he had almost forgotten his native language, and his friends would not believe his story, even when he showed them the rich presents he had received from the Emperor of China. Marco Polo entered the navy, and was taken prisoner in a war with Genoa; during the five years captivity he prepared an account of his travels, and gave to the world the first correct description of China. This created an immense excitement amongst the learned men, who did not hesitate to affirm it to be pure fiction. After his release when he returned to Venice, he was abjured by his friends, and even on his deathbed was urged to retract his falsehoods. Such was the knowledge of the West about China, at that time to them Cathay was only suppose to

comprise the entire “Far East” of the world [Curto, 1965(1966) :73] . It has now been more than two and a half centuries since Voltaire’s Chinese asked for a book in the Holland Book Shop and more than two centuries since the Sun Tzu text was first introduced in Paris; by this time the West has come to know much about the Chinese history and culture yet lack of understandings of concepts like “victory without battle, without bloodshed” still exist.

Chinese culture is fascinating, its fatal attraction is like a glowing lamp to the insects, they are drawn closer, burnt and reborn from their ashes like the mythical phoenix. Joseph Needham is the world’s leading authority on the history of science in China. He is the author and editor of the monumental *Science and Civilization in China* series. The seven volume work traces in painstaking detail the history of science and technology in China from the earliest times to the 17th century . The series has been compared to Edward Gibbon’s *The Decline and Fall of the Roman Empire*. In 1937, Joseph Needham was 37 years old and already a world-renowned biochemist when three Chinese biochemistry research students came into his Cambridge University laboratory. Needham became fascinated with their approach to science. When he offhandedly asked one of these students about the reasons why China had apparently done so little in terms of scientific discovery, the student exploded and explained that China had once led the West in numerous scientific developments and it was ridiculous to think that the West alone had developed science. This incident had a great impact on Needham for which he became interested in Chinese culture and fascinated by what he heard about Chinese culture decided to learn the language. This ultimately took him to China. During World War II, Needham’s mastery of Chinese made him an obvious choice to head a British scientific mission in China. The four years he spent in China afforded him the chance to amass an incredibly varied and intimate knowledge of the country, its people and their culture. This was so fascinating that he never returned to his biochemistry laboratory and transformed himself from a biochemist to a Sinologist. Needham became the world’s leading authority on the history of science in China and his final volume of *Science and Civilization in China* is expected to appear in about 2000 [Kiener, 1987 : 69].

¹ Voltaire was the pen name of Francois Marie Arouet.

Every culture developed its own way of warfare and the mode of production had a definite impact on the culture of destruction. Societies having plenty of land but shortage of man tended to favour symbolic and ritualised contests where few champions practically fought but the outcome decided the fate of others. It was like the tale of the duel between Isha Khan and Mann Singh², where the fate of the followers of Isha Khan was decided. The “flower wars”³ of the Aztecs and the “amok” combats of the Indonesian islanders caused relatively little bloodshed because they were aimed to seize people rather than territory, to increase each warlord’s available manpower rather than waste it in bloody battles [Parker, 1995: 2]. In the late 18th century West-Africa, local warlord’s sole objective of wars was to procure slaves, they could not trade with Europeans without slaves, and they could not get slaves without fighting; naturally they could not adopt a strategy of annihilation against their enemies. They fought to enslave rather than to exterminate their enemies [Parker, 1995: 5]. But the environment in classical China was altogether different yet the objective of all strategy remained “victory without battle, victory without bloodshed”. Why?

Chinese civilisation is the longest continuation in human history. Roger T. Ames gives us a glimpse of the culture and society of early classical China where warfare was a matter of importance, a topic of philosophic reflection. This helps us to realize why most of the philosophical works of that period contain lengthy treatise on military thought⁴. “In fact, in the imperial catalogue included in the History of the Han Dynasty, the military writers are listed under the “philosophers” (tzu) classification” [Ames, 1993: 39]. The intimate relation between philosophy and warfare can be visualised from the fact that any philosophical literature was considered incomplete if it ended without discussing a military matter. In ancient Chinese culture, warfare was neither glorified nor a celebrated event, it was always viewed as the unfortunate last resort; there was no hero worshipping,

² In fact the Mughal general Mansingh had never advanced up to Dhaka and had never personally met Isha Khan.

³ Flower Wars were ritual conflicts between the Aztecs and their neighbors in the valley of Mexico in the fifteenth and early sixteenth centuries aimed at securing captives for enslavement or sacrifice.

⁴ The Mo Tzu, Hsun Tzu, Kuan Tzu, the Book of Lord Shang, the Spring and Autumn Annals of Lu, the Huai Nan are the examples. In addition, other central texts such as the Analects, Mencius, Lao-Tzu, Han Fei Tzu and the recently recovered Silk Manuscripts of the Yellow Emperor contain extended statements on military thought.

no self promoting militarism yet such an interest in military matter seems interesting. In old military documents it was seen that there was always a paternalistic concern for the welfare of the people.

In those days, military commanders used to come from the royal families and armies were personally led by the members of the ruling families. They were educated from an early age in both civil and military arts. Even Confucius was also trained for both a literary and military career. It was only during the chaotic period and bloody conflicts of “Warring States”, warfare moved from an honourable occupation to a profession. In that critical juncture of history when political survival was at risk, military campaigns were a critical pre-occupation where the full range of human resources, including philosophical sensibilities, could be profitably applied. There is a deeper relation between warfare and philosophy, there is a peculiarly Chinese model of “harmony” or achieved order (ho) both fundamental to and pervasive in the classical culture that is pursued by philosopher and military commanders alike [Ames, 1993: 43].

Sun Tzu text was a product of the classical Chinese culture dominated by philosophers who believed in the term “economy” in its original sense. The way “Kutaniti” is to Kautilya, “elan” to Foch, “fight to finish” to Clausewitz, similarly “indirect approach” to Sun Tzu. “Nothing is more difficult than the art of manoeuvre. What is difficult about manoeuvre is to make the devious route the most direct and to turn misfortune to advantage... one able to do this understands the strategy of the direct and indirect” wrote Sun Tzu. Surprise and deception are two helpful means in the “strategy of indirect approach”. Many Western scholars misunderstood the strategy of indirect approach as the strategy of the weak and interpreted its sublime meaning as the negative connotation of stratagem, the Oriental label of the strategy. This mainly occurred due to differences of viewpoint on war. Following examples will help us in understanding the pole apart mentality of the East and the West:

“The best thing of all is to take the enemy’s country whole and intact, to shatter and destroy it is not so good, so, too it is better to capture an army entire than to destroy it, to capture a regiment, a detachment or a company entire than to destroy them”.- Sun Tzu.

“Destruction of the enemy forces is the over riding principle of war, and so far positive action is concerned the principal way to achieve our object. Such destruction of forces can usually be accomplished only by fighting”. - Carl Von Clausewitz.

“Hence to fight and conquer in all your battles is not supreme excellence, supreme excellence consist in breaking the enemy’s resistance without fighting”. -Sun Tzu.

“We do not like to hear of generals who are victorious without shedding of blood. If bloody battles is a dreadful spectacle, that should merely be the reasons to appreciate war more and not allow our swords to grow blunt by and by through humanism until some one steps in with a sharp sword and cuts our arms off our bodies”. -Carl Von Clausewitz.

“ Promoter of the blood thirsty Prussianism” is the label attributed to Clausewitz but he was not alone responsible for this aroma of the Western strategic thought, long military traditions of ruthless fighting in the West has transformed the meaning of the phrase *bellum romanum*, in to “war without mercy”. Greek city states, the phalanx, and the image of Achilles as an ideal warrior framed a chivalrous code of warfare in the West by the 6 th century B.C. shunning stratagem. Between the Persian wars (490 – 478 B.C.) and the death of Alexander the Great (323 B.C.) revolutionary changes in the conduct of war modified or abolished aspects of this chivalrous code. We find truth in Stockdale’s statement when he says, “I want you to see with me that our whole culture, even what we call Western civilisation itself, is founded on the sufferings and greatness of human societies under pressure” [Stockdale, 1987(1981) : 228].

Western nations in their struggles for resources and hegemony always placed heavy reliance on technology, usually to compensate their inferior numbers. Since the 5 th century B.C., the West hardly failed to muster forces with a fighting potential superior to that of its immediate adversaries. The crucial advantage lay in the ability to compensate for numerical inferiority for whether defending Europe or in subduing the Aztec, Inca and Mughal empires, the Western forces have always been outnumbered by at least two to one and often by far more. The geographic expansion of the Western capitalist economy meant the elimination of other world systems as well as the

absorption of the remaining mini system. This effort produced colonial wars, where Western colonial powers decided the issues with their technological advantages and aggressiveness. “Total defeat and annihilation of the enemy” remained the main objective of the Western aggressors in these wars. That is how ruthlessness and “war without mercy” became the standard military technique of Europeans abroad.

Economy is one of the main teachings of Sun Tzu; he preached to be economic in carrying out organised violence, to view human beings as the most important element, hence to be humane in dealing with them and to look after own man with paternal care. His concern about the economic well being of the kingdom while waging wars is also a proof of his concern with the ultimate welfare of human beings. In fact, he tried to employ philosophical sensibility in warfare. Like all other philosophers of the classical period China Sun Tzu also viewed war as the unfortunate last resort in human interactions, he never believed in toying with the idea of war that is why his treatise begin with the preaching, “ war is a matter of vital importance to the state; the province of life or death; the road to survival or ruin”. If war is unavoidable Sun Tzu has prescribed a hierarchy of actions, their sensibility can be judged from the following quotations with the remarks of Sun Tzu’s commentators:

- Thus what is of supreme importance in war is to attack the enemy’s strategy. (*Ti Mu* : The Grand Duke said : ‘He who excels at resolving difficulties does so before they arise’ . . .)
- Next best is to disrupt his alliances. (*Ti Yu* : Do not allow your enemies to get together . . .)
- The next best is to attack his army . . .
- The worst policy is to attack cities. Attack cities [i.e. fortified places] only when there is no alternative.
- If the general is unable to control his impatience and order his troops to swarm up the wall like ants, one third of them will be killed without taking the city. Such is the calamity of these attacks. . .

- Thus, 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. (*Li Ch'uan* : They conquer by strategy ... During the siege of the 'Yao' rebels at Yuan Wu] the king of Tung Hai spoke to Tsang Kung, saying 'Now you have massed troops and encircled the enemy, who is determined to fight to the death. This is no strategy! You should lift the siege. 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! Tsang Kung followed his advice and took Yuan Wu).
- Your aim must be to take All – under – Heaven intact. Thus your troops are not worn out and your gains will be complete. This is the art of offensive strategy.
- Therefore I say: 'Know your enemy and know yourself and you can fight a hundred battles without disaster.

Wilden summarised the influence of Sun Tzu's teaching on the strategists of all the ages in following manner;

Everyone educated as a strategist and serving their own best interest will follow the humanistic precepts of Sun Tzu. Strategists brought up on Sun Tzu meeting in conflict will never go to war. They will adopt win – win strategies and negotiate, both demonstrating their mastery of the art of strategy by winning without fighting **at all**.

According to Wilden, when Sun Tzu's view would be called today a non-zero-sum or win-win contest, always and everywhere negotiable; Clausewitz's view is a zero-sum or win-lose contest, closer to the policy of unconditional surrender. Many people believe that technically it will not be possible to materialise the Clausewitzian theories of absolute war today. In a nuclear age the tendency towards the last resort, which is according to Clausewitz is inherent in war, is said to be inconsistent with any sensible political objective. Under this circumstances, Sun Tzu's view seems to be the most appropriate. But things may not be as expected by Wilden as avoidance of war is

concerned. Sometime war becomes a cruel necessity; some conflicts may not allow solutions by any other means than by violence.

If the biography published by Ssu-Ma-Ch'ien in *Shih Chi* (Historical Records or Records of the Historians) was correct then Sun Tzu would have been a contemporary of Pythagoras(c. 600 B.C.), Confucius(550 B.C.) Gautama Buddha (560 B.C.) and Mahavira [(of Jainism); 560 B.C.]. His life span would have overlapped with many important political events like the fall of Babylon to Cyrus (538 B.C.) and the invasion of Punjab by Darius (512 B.C.). But many scholars doubted the reliability of the Ssu-Ma-Ch'ien biography and most of them suggest that it was probably written in the fourth century B.C. during the "Warring States" period (453 – 221 B.C.). For information the Greeks checked Iranian expansion westward in 480 B.C. and in the middle of the 5 th century B.C. the Athenian Parthenon was erected. During the concluding phases of the "Warring States" period the outside world witnessed many important historical events, such as the conquest of Alexander the Great (327 B.C.), the foundation of the Maurya dynasty in India and the beginning of the reign of Asoka (300 B. C. and 274 B.C. respectively). The Punic Wars in the Mediterranean (250 – 150 B.C.) overlaps with the first unification of China under "Chhin-Shi-Huang-Ti" the emperor who burnt books with the desire that the history of China should start from him, from the period of his rule.

What to talk about the period, many scholars even doubt the authenticity of Sun Tzu as a historic person. Samuel B. Griffith also could not be sure about it and just concluded "authorship unsettled". Roger T. Ames has warned us about the dangers of pursuing a wrong question, in doing so, we might loose sight of what might be more important insights. He wisely suggested that in answering the questions, "what do we understand by Sun Tzu text or even Sun Tzu as a historic person?" we should not impose our modern concept of "single text" authored by one person on the classical Chinese artifact. In ancient Chinese culture, oral transmission was a significant factor and in that environment authorship tended to be cumulative and corporate. Hence it was not the person Sun Tzu but the Sun Tzu text which was the primary object of this research.

Sun Tzu text is also not without its troubles. It has reached the English speaking world only recently. The first prominent English translation was made by Captain E. F. Calthrop in 1908. It was attacked for its inadequacy by Lionel Giles a well-known Sinologist and an assistant curator of the British Museum, he published his one in 1910. Brigadier general Samuel B. Griffith of the US Marine Corps came up with his translation in 1963, it was better than all the previous efforts. All these translations were based on the Sung Dynasty edition of the “Thirteen Chapters”. In 1972 a new text was found in an archaeological discovery in Shantung province which was not only containing large section of the thirteen chapter work that has come down to the present day but also portions of lost five chapters. Roger T. Ames and J. H. Huang published their two translations in 1993 incorporating those new findings. In the same year Ralph D. Sawyer published an anthology of military classics of ancient China where he has included a similar version of the Sun Tzu text. These new translations are based on the text which was entombed at Yin-ch’ueh-shan between 140–118 B.C. The newly discovered text is thousand years older than those on which previous translation were based. In general both the “Thirteen Chapters” are similar and additional chapters have not changed the image or the spirit of Sun Tzu we are accustomed with, they have rather reinforced them.

Reference of technology is really meagre in Sun Tzu’s text; the reason behind is not that he lived in the age of tools and craft rather he had the sense to grasp the general characteristics of technology. He realised that change is the unchanging characteristics of technology; muzzle loading muskets were replaced by bolt action rifles, they were also replaced by light automatic assault rifles which will soon be replaced by a new generation of lighter and accurate rifles, firing case-less cartridges. Today’s latest weapon systems will be obsolete tomorrow that is the universal trend. A constant drive for error elimination, perfection and efficiency never allows a technology to be static. In fact it is a human attitude reflected within technology, which has been identified by Popper as scientific. Sun Tzu correctly realised that it is the human mind which is the driving force behind all technologies. He had an inclination towards the unchanging than the changing, yet we do not find a list of “principles of war” in his treatise. It is a twentieth century positivist trend to consider warfare as a science. Positivists attempted to formulate its principles like the physical sciences, believing

that adherence to these principles will ensure victory. When Jomini preached “methods change but principles are unchanging”, Churchill differed, “the truths of war are absolute, but the principles governing their application have to be deduced on each occasions from the circumstances which are always different, and in consequence no rules are any guide to action”, Sun Tzu neatly considered command and control of forces as an art, a creativity based on character, skill and mental power. In his treatise he considered mind over matter, brain over muscle and moral factors over material ones. Objective of his teachings was to create a mind frame for a strategist, which would be the source of strength in facing all types of situations. To understand this thing we got to understand the classical Chinese cultural concept of “harmony” or achieved order (ho). According to this concept there is an intimate relation between wisdom and warfare; the quality of character which renders a person consummate and exemplary in various roles of social, political and cultural leader will also serve him equally well in the role of military commander. According to Confucius, “The exemplary person is not a functionary (ch’ i). The exemplary person pursues harmony (ho), not sameness”. According to Ames, what it means to be exemplary, is not determined by what function one serves or by what specific skills one possesses, but by one’s character. Its plain meaning is that persons of superior character will be exemplary in whatever occupation they adopt. Students of history are often surprised, how a violent Turk like Babar possessed such a sense of beauty, taste for literature and attraction for art. Similar question comes in our mind while studying the life of the 17 th century Japanese samurai Miyamoto Musashi, a skilled-ruthless killer as well as an artist of high reputation. In fact it was a matter of harmony, achieved by these people. In this regard Musashi’s saying is worth quoting :

Do not think dishonestly.

The Way is in training.

Become acquainted with every art.

Know the Ways of all professions.

Distinguish between gain and loss in worldly matters.

Develop intuitive judgement and understanding for everything.

Perceive those things which cannot be seen.

Pay attention even to trifles.

Do nothing which is of no use.

When you have attained the Way of strategy there will be not one thing that you can not understand.

You will see the Way in everything.

This concept of harmony can be compared to a methodology with which universal scholars hovered over different compartments of knowledge and attempted to see things in their totality. In today's world of specialisation this sort of a proposal seems absurd, people only want to see his portion not the whole, under this circumstances it is more important that a strategist must use all kinds of philosophic sensibilities while making decisions about issues which will either ruin the state or lead it to prosperity. It is a fact that today good work on national security strategy—unlike most intellectual endeavours demands good character. Charles Ikle has highlighted the need in following manner;

The demands on intellectual integrity are so exacting because in the development of security strategy the contradiction outweighed the harmonies, the uncertainties overwhelm the established facts, the proofs remain utterly incomplete, and yet the stakes exceeds all earthly objectives. The strategist has to incorporate into his work the rich and precise facts of physics, engineering, geography, and logistics; he has to allow for the swirling currents and blurred edges of psychology, political science, and history; and he needs to fit all this into the dynamic of international conflict among nations – a dynamic of opposing objectives and clashing forces that is driven as much by human stubbornness as by human error.

Under this circumstances we can very well see whether the spirit of Sun Tzu's "The Art of War" is valid or out dated today.

We have seen how Sun Tzu's teaching could have prevented the unnecessary Korean War. At the same time we have seen how it has helped the "Protracted Peoples War" in China and the "Vietnam War". We have also observed that the Middle East Wars between Israel and the Arabs are the best examples of modern wars where Sun Tzu's precepts have been most appropriately and

innovatively applied. Latest Gulf War is the ideal example where the sequence of Sun Tzu's offensive strategy was followed and there were reflections of economy and the strategy of indirect approach at operational level. Teachings of Sun Tzu's "The Art of War" is very much valid today, even for handling our Chittagong Hill Tracts problem. What about tomorrow, will it remain valid in future? One typical thing about working with military classics is that one has to look continuously backward, there is hardly any scope to look forward other than examining their future relevance and implications; now the time has come and we are going to do that.

Just before the collapse of the Soviet Union a group of Western intellectuals began to argue that the shape of tomorrow would essentially be determined by economic, not military, warfare. Richard Rosencrance in *The Rise of the Trading State*, contended that nations were becoming so economically interdependent as to lessen their tendency to fight one another. Trade, not military might, is now the path to world power. Paul Kennedy similarly counterpoised economic and military strength in *The Rise and Fall of the Great Powers*. Strategist Luttwak argued that military might would decrease significantly in a new era of "geo-economics". C. Fred Bergsten, echoed the same theme, asserting the "primacy" of economic over security issues in the new global system. Economist Lester Thurow suggested that a military confrontation will be replaced by an economic contest. According to him in future the real competition among countries will revolve around which one can make the best products, raise standards of living, and develop the "best-educated and best-skilled work force". But what is happening today, geo-economics began to look less and less persuasive as violence flared all around us today. Warmongers are always not concerned about economic pluses and minuses; they calculate their chances of seizing, expanding and retaining political power. Geo-economic war is not a substitute for military conflict; it is, all too often, merely a prelude, if anything a provocation, to actual war.

Tofflers believe that we have already entered the "information age", and there is a qualitative difference between the wars of industrial age and the information age. In the next century wars will be waged and won by the power of information. Weapons will be developed to function smartly with the help of information to reduce the collateral damage and enemy's data-bases,

information and communication centres along with the command posts will be the targets rather than the military forces. There will not be any linear frontage. In future, wars will be more sanitised than the present ones. If that happens Sun Tzu will be of real help because throughout his treatise he tried to teach civilised wars. This raises a question in our mind, “can war be civilised?” Under this circumstances another question pops up, should war be always a war without mercy, a fight to finish affairs?”

On the other hand Martin Van Creveld believes that in future, wars will not be fought between states by their uniformed armies, it will be rather fought between groups and organization and states will soon perish. Under these circumstances military forces with their heavy equipment like aircrafts, battle ships, submarines and tanks will become totally irrelevant. According to him the wars of the next century is Bosnia, Chechnia, Somalia, Rwanda, Kurdistan, Afghanistan, Sri Lanka etc. Well if that is the future scenario Sun Tzu will be really of use to all the parties, since in such chaotic situations philosophical sensibility must be utilised to its fullest extent. For example to face our Chittagong Hill Tracts problem we should ask ourselves whether we want the land and its resources or we want the people or both? In finding the answers we must review the historic situations for an insight, how a wrong strategy led to the disastrous ending of united Pakistan in 1971.

Clausewitz postulated the truth that war is the instrument of policy, hence military is subordinate to politics and generals carry out the directives of the politicians. It is therefore the serious responsibility of the political leaders to understand war in its relation to national affairs. War is too serious a business to be left to soldiers and yet when the soldier has won the war it is the political leaders who destroy the foundations of peace because they do not understand war. It happened in many a places in history. “It is that the leader – whether politician, diplomat, or soldier-bereft of ethical values is likely to commit heinous acts of butchery or barbarity in the name of political expediency. And more : that the leader – whether politician or diplomat, or soldier- bereft of practical values is liable, ironically, to condone heinous acts of butchery or barbarity in the name of moral purity” [Toner, 1992 : 1].

Circumstances often force the Third World politicians to work under the most intense pressures. When a crisis occurs they have little time for reflection hence they tend to focus on narrow issues without looking at large long-term choices; they see some of the trees but miss the forest. Many of them can not express their ideas in writing or even face to face. Most merely react to events rather than mould them to their purpose. While going through the classical political philosophy we find that they were concerned in part, with morality and statesmanship.

Aristotle explicitly and Thucydides implicitly explored the relationship between the practical action of the statesman and morality in political life. Each was concerned with what constituted good or proper statesmanship, both within and beyond the boundaries of the city. According to Aristotle, Moral virtue is a mean . . . between two vices, one of excess and the other of deficiency, and it is such because it aims at hitting the mean point in feeling and action. Accordingly, the prudent statesman should reflect these virtues, most notably justice, moderation, courage, liberty, honour, and proper ambition. The statesman must also balance the practical or national interests of the state with those moral principles upon which the regime is established. Thucydides opposes excess and advocates moderation in statecraft, even during war. Prudence is viewed as a check on unrestrained ambition [Shultz, 1997 : 15].

Like politics, strategy is the art of the possible; but few can discern what is possible. When a leader reaches a high position from where he makes decisions of the state it is taken guaranteed that he has prepared himself to come up to that position. There is no short cut of prior preparation and education for a political leader. The term education does not mean just schooling. Though schooling is important, but the idea of education is definitely broader. Schooling is a necessary element of education, but it is not everything. "Marriage and family life are education. Sport, play, and entertainment are education. Religious training is education. Friendship is education. Military service is education. Any and every encounter with nature and society is education" [Stockdale, 1987 (1981) : 224 – 225]. Some social scientists call education in this comprehensive sense "acculturation", Stockdale preferred to call it simply as "experience". "Education should take care to illuminate values not bury them amongst the trivia. . . . When supported with education, a person's integrity can give him something to rely on when his perspective seems to blur, when rules and

principles seem to waver, and when he's faced with hard choices of right or wrong. It is something to keep him on the right track, something to keep him afloat when he's drowning" [Stockdale, 1986(1978) : 12]. A leader must be educated in the broader sense so that when he reaches the highest position he can participate in the decision making as an effective player rather than as a toy in the hands of experts and bureaucrats (none should doubt the patriotism of bureaucrats and experts). When things will go wrong it is the politicians who will pay dearly neither the experts nor the bureaucrats. After the 1962 border debacle politicians responsible for it could escape successfully shifting their responsibility on the Indian army but at a personal level both Nehru and Krishna Menon could never come out of it. Academics, politicians, diplomats, bureaucrats all will find Sun Tzu extremely helpful in educating themselves in strategy.

Appendix I

CHRONOLOGY OF MILITARY TECHNOLOGY

- c. 4000 B. C. : Metallurgy developed – beginning of the Bronze age.
- c. 3000 B. C. : Writing invented.
- c. 2500 B. C. : Bow and arrow used in warfare.
- c. 2000 B. C. : War chariot invented.
- c. 600 B. C. : Coinage invented.
- c. 400 B. C. : First use of catapults.
- c. 320 B. C. : Euclid writes *Elements of Geometry*.
- c. 250 B. C. : Archimedes makes advances in physics and siegecrafts.
- c. 110 A. D. : Aelian composes *Tactic*.
- 270 : Use of Compass in China.
- 390 : Vegetius composes *Concerning Military Matters* (revised c. 440).
- c. 675 : ‘Greek fire’ invented.
- c. 700 : Stirrups reach the West.
- c. 850 : Crossbow in use in France, gunpowder invented in China.
- c. 1200 : Compass introduced in the West.
- c. 1250 : Introduction of plate armour.
- c. 1320 : First use of gunpowder artillery in Europe.
- 1346 : English longbows defeat the French at Crecy.
- c. 1350 : Development of shipborne artillery.
- c. 1350 : Development of hand-held gunpowder weapons.
- c. 1430 : Development of ‘full-rigged ship’.
- c. 1430 : Development of ‘corned gunpowder’.
- c. 1450 : Development of the matchlock musket.
- c. 1490 : Rifled barrel invented.
- 1497 : Vasco de Gama circumnavigates Africa.
- 1511 : First sailing warship launched in Scotland.
- 1515 : First full artillery fortress (at Civitavecchia).
- 1519 : Magellan’s ships circumnavigate the globe (to 1522).
- 1537 : Nicolo Taraglia develops science of ballistics.
- c. 1590 : Dutch army develops volley fire and drill.
- 1600 : Formation of the English East India Company.
- 1601 : Formation of the Dutch East India Company.
- 1607 : Jacques de Gheyn publishes first illustrated drill book.
- 1616 : Count John of Nassau opens first military academy at Siegen in western Germany.
- c. 1620 : Flintlock musket invented.
- c. 1690 : Socket bayonet in general use.

- 1807 : First successful steamboat voyage.
- 1825 : First railway line opened.
- 1826 : Invention of the 'needle gun'.
- 1833 : Electric telegraph developed.
- 1852 : Repeater rifle arrives.
- 1855 : Cowmen's armoured fighting vehicle arrived and refrigeration invented.
- 1859 : First 'ironclad' frigate built.
- 1860 : Magazine rifle arrived.
- 1861 : Pasteurised food arrives.
- 1862 : Richard Gatting develops first viable manually powered machine gun.
- 1865 : Arrival of antiseptic.
- 1866 : Locomotive torpedo was invented.
- 1867 : Type writer arrived.
- 1874 : Barbed wire.
- 1876 : Invention of the telephone; four-stroke petrol engine and torpedo boat.
- 1877 : Dynamo.
- 1882 : Armoured steel.
- 1884 : Hiram Maxim invents automatic machine gun; also came four wheeled motor carriage and smokeless powder.
- 1885 : First naval submarine built.
- 1887 : First successful automobile.
- 1888 : Portable roll-film camera.
- 1895 : Invention of wireless telegraph.
- 1899 : Development of armoured car.
- 1900 : Petrol-electric submarine.
- 1901 : Transatlantic radio link.
- 1903 : First airplane flight.
- 1904 : Radio direction finding.
- 1906 : British launch the battleship *Dreadnought*.
- 1910 : Aerial bombing, armed aircraft, ship-borne aircraft were developed.
- 1911 : Seaplane was developed.
- 1916 : First use of the tank in battle.
- 1917 : First use of aircraft for strategic bombing and Germany resumes unrestricted Submarine warfare. Aircraft carrier and sonar developed.
- 1920 : France begins construction of the Maginot line.
- 1921 : Tele-printer arrives.
- 1925 : Short wave, crystal controlled radio arrived.
- 1926 : Liquid fuel rocket launched.
- 1927 : Radio-beacon navigation begins.
- 1935 : Radar used to detect aircraft.
- 1937 : Radio-beam navigation starts.
- 1939 : First helicopter flights; test flight of turbo-jet airplane.
- 1940 : First use of paratroops in battle (Netherlands).

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| 1941 | : First launch of V-2 missile; atomic chain reaction achieved. |
| 1943 | : Infra-red night vision arrived. |
| 1944 | : First combat use of jet aircraft. |
| 1945 | : Atom bomb dropped on Japan. |
| 1946 | : First workable computer developed. |
| 1953 | : Hydrogen bomb. |
| 1954 | : First atomic powered submarine launched, first use of inertial navigation. |
| 1957 | : Soviet Union launches first man made satellite. |
| 1960 | : Development of intercontinental ballistic missiles begin., laser and microchip arrived. |
| 1972 | : First use of laser-guided bombs ('smart bombs'). |
| 1980 | : Deployment of cruise missile begins. |
| 1991 | : Gulf war sees first combat use of cruise missiles , stealth aircraft and anti ballistic Patriot missiles. |

Source: Composed from Parker, 1995 : 377-380 and Macksey, 1991 : 356-360

Appendix 2

**ANTHONY WILDEN'S COMPARISON
BETWEEN SUN TZU AND CLAUSEWITZ**

Sun Tzu defined the five virtues of the general as wisdom, sincerity, humanity, courage, and strictness. Clausewitz defined fourteen qualities or types of qualities required of the military commander. Let us continue to take war as a metaphor, and apply both Sun Tzu's and Clausewitz's definitions of character not to the general but to the citizen, on the democratic principle of 'Everyone a strategist'.

But first a comparison between these two radically different strategists so that we can understand each in the light of the other.

Sun Tzu's theory of war is poetic, holistic, organicist, existentially realistic, moderate, dominated by common-sense, oriented to persuasion rather than killing, and primarily concerned not with the destruction or subjugation of armies or states in conflict but with the resolution of conflict by any means other than war whenever possible. As he says: 'Weapons are ominous tools to be used only when there is no other alternative'.

Although often subtle and always logically and philosophically interesting, Clausewitz's theory of war is atomistic, mechanistic, logically extreme, absolutist, dominated by rationalism, oriented to killing rather than persuasion, and primarily concerned with violence and destruction as the inevitable means of resolving conflict. As he said, and his disciples repeated after him: 'To introduce into the philosophy of war a principle of moderation would be an absurdity – war is an act of violence pushed to its utmost bounds'.

Sun Tzu's view would be called today a non-zero-sum or 'win-win' contest, always and everywhere negotiable. Clausewitz's view is a zero-sum or 'win-lose' contest, closer to the policy of unconditional surrender.

Sun Tzu's view is dominated by the limitless combinations, interpretations, and interchanges of the direct and the indirect approaches (Cheng and Ch' i, the 'ordinary' and the 'extraordinary' forces), and evoked by phrases such as 'swift as the wind', 'as calmly majestic as the forest', 'plundering like fire', 'flowing like water', 'steady as the mountain'.

Clausewitz's view is dominated by metaphors of mechanical assemblies, well-oiled cogs and gears, inertia, friction, mechanical forces, equilibrium, and Newtonian rest and motion.

Sun Tzu's theory of war is dominated by metaphors of subtlety, intimacy, relationships, ebb and flow (yin and yang), continuity, topology, shaping, imagination, and creation.

Clausewitz's view is dominated by metaphors of collision, separation, entities, action and reaction, discontinuity, geometry, forcing, rationality, and destruction.

Sun Tzu remains the philosopher of the traditional Chinese golden means; Clausewitz remains the disciple of Napoleon and the philosopher of 'total war', foreshadowing by some thirty years the huge increase in killing and destruction in the first great war of industrial capitalism, the American Civil War (1861-65).

Liddel Hart says of the two men in his introduction to Samuel B. Griffith's translation of Sun Tzu:

Sun Tzu's essays on 'The Art of War' from the earliest of known treatise on the subject, but have never been surpassed in comprehensiveness and depth of understanding. They might well be termed the concentrated essence of wisdom on the conduct of war. Among all the military thinkers of the past, only Clausewitz is comparable, and even he is more 'dated' than Sun Tzu, and in part antiquated,

although he was writing more than two thousand years later. Sun Tzu has clearer vision, more profound insight, and eternal freshness.

He goes on to say

*Civilisation might have been spared much of the damage suffered in the world wars of this century if the influence of Clausewitz's monumental tomes *On War*, which moulded European military thought in the era preceding the First World War, had been blended with and balanced by a knowledge of Sun Tzu's exposition on "The Art of War".*

Appendix 3

**HANDEL'S COMPARISON OF SUN TZU AND CLAUSEWITZ
AS OPPOSING PARADIGMS OF WAGING WAR**

	Sun Tzu	Clausewitz
THEIR PERSPECTIVE ON WAGING WAR	A <i>broad</i> perspective that includes a large variety of non-military means (e.g., diplomatic, economic, and psychological).	A <i>narrow</i> emphasis on the use of military means. Although the importance of other means is recognised, they are not the concern of the military leader.
THE ROLE OF FORCE	Force should be used sparingly and as the last resort.	The use of force is often both necessary and the most effective (i.e., preferred) method of achieving the political goals of the state. The maximum available force should be used from the outset to achieve decisive results in the shortest possible time.
THE IDEAL VICTORY	The greatest achievement is to win without fighting, to convince the enemy's forces to yield and if possible switch sides rather than be annihilated.	The shortest way to achieve one's political objectives is by the destruction of the enemy's forces in a major battle. (The principle of destruction) Other, non-military methods of winning are recognised but are rarely effective.
PREFERRED METHOD OF WINNING	Extensive use of deception. Psychological war, non-violent methods. The centre of gravity is the enemy's will and alliance system.	The maximum concentration of force at the decisive point of engagement. The centre of gravity is the enemy's army.
ADVANTAGES AND DIS-ADVANTAGES OF THE THEORY	An idealised paradigm encouraging the strategist to achieve the least costly victories. This approach may lack realism and ignores the inevitable presence of violence in war. War can become an 'intellectual' or 'metaphysical' exercise. Deception or intelligence can become a 'panacea'.	Realistic, relevant for most types of war. Greater awareness of the material and violent nature of war. Excessive reliance on the use of force can be more costly; may underestimate some non-material aspects of war (e.g., deception, intelligence).

Source : Handel, 1992(1996) : 19

Appendix 4

MORAL AND AMORAL TEACHINGS OF SUN TZU

[Following teachings have been gathered from Samuel B. Griffith's translation *Sun Tzu : The Art of War* published by Oxford University Press, London, 1963 (1971).]

Morality of War

Chapter I (Estimates)

1. War is a matter of vital importance to the state, the province of life or death; the road to survival or ruin. It is mandatory that it be thoroughly studied

4. 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.

Chapter II (Waging War)

7. For there has never been a protracted war from which a country benefited. (Li Ch'uan: The Spring and Autumn Annals says: 'War is like unto fire; those who will not put aside weapons are themselves consumed by them.)

Chapter VII (Manoeuvre)

1. Normally, when the army is employed, the general first receives his commands from the sovereign. He assembles the troops and mobilises the people. He blends the army into a

harmonious entity and encamps it. (Li Ch'uan : He receives the sovereign's mandate and in compliance with the victorious deliberations of the temple councils reverently executes the punishments ordained by Heaven).

Chapter VIII (The Nine Variables)

1. In general, the system of employing troops is that the commander receives his mandate from the sovereign to mobilize the people and assemble the army.

16. It is a doctrine of war not to assume the enemy will not come, but rather to rely on one's readiness to meet him; not to presume that he will not attack, but rather to make one's self-invincible. (Ho Yen-hsi : . . . The 'Strategies of Wu' says : 'When the world is at peace, a gentleman keeps his sword by his side'.)

Chapter XI (The Nine Varieties of Ground)

35. My officers have no surplus of wealth but not because they disdain worldly goods; they have no expectation of long life but not because they dislike longevity (Wang Hsi When officers and men care only for worldly riches they will cherish life at all costs)

Chapter XII (Attack by Fire)

16. And therefore it is said that enlightened rulers deliberate upon the plans, and good generals execute them.

17. If not in the interest of the state, do act. If you can not succeed, do not use troops. If you are not in danger, do not fight.

18. A sovereign can not 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 can not be restored, nor can the dead be brought back to life.

19. 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.

Chapter XIII (Employment of Secret agents)

1. Now when an army of one hundred thousand is raised and dispatched on a distant campaign the expenses borne by the people together with the disbursements of the treasury will amount to a thousand pieces of gold daily. There will be continuous commotion both at home and abroad, people will be exhausted by the requirements of transport, and the affairs of seven hundred thousand households will be disrupted. (Ts'ao Ts'ao: Anciently, eight families comprised a community. When one family sent a man to the army, the remaining seven contributed to its support. Thus, when an army of one hundred thousand was raised those unable to attend fully to their own ploughing and sowing amounted to seven hundred thousand households.)

Morality in War

Chapter I (Estimates)

7. By command I mean the general's qualities of wisdom, sincerity, humanity, courage, and strictness. (Li Ch'uan : These five are the virtues of the general. Hence the army refers to him as "The Respected One". Tu Mu: If wise, a commander is able to recognise 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, sympathises 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. Shen Pao-hsu . . . said : 'If a general is not courageous he will be unable to conquer doubts or to create great plans'.)

17. All warfare is based on deception

18. Therefore, when capable, feign incapacity; when active, inactivity.

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

20. Offer the enemy a bait to lure him; feign disorder and strike him. (Tu Mu : The Chao general Li Mu released herds of cattle with their shepherds; when the Hsiung Nu had advanced a short distance he feigned a retirement, leaving behind several thousand men as if abandoning them. When the Khan heard this news he was delighted, and at the head of a strong force marched to the place. Li Mu put most of his troops into formations on the right and left wings, made a horning attack, crushed the Huns and slaughtered over one hundred thousand of their horsemen.)

21. When he concentrates, prepare against him; where he is strong, avoid him.

22. Anger his general and confuse him. (Li Ch'uan: If the general is choleric his authority can easily be upset. His character is not firm. Chang Yu: If the enemy 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.)

23. Pretend inferiority and encourage his arrogance.

24. Keep him under a strain and wear him down.

25. When he is united, divide him.

26. Attack where he is unprepared; sally out when he does not expect you.

Chapter II (Waging War)

3. 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.

4. When the army engages in protracted campaigns the resources of the state will not suffice.

5. When your weapons are dulled and ardour damped, your strength exhausted and treasure spent, neighbouring rulers will take advantage of your distress to act. And even though you have wise counsellors, none will be able to lay good plans for the future.

7. For there has never been a protracted war from which a country has benefited.

9. Those adept in waging war do not require a second levy of conscripts nor more than one provisioning.

10. They carry equipment from the homeland; they rely for provisions on the enemy. Thus the army is plentifully provided with food.

11. When a country is impoverished by military operations it is due to distant transportation; carriage of supplies for great distances renders the people destitute.

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

13. With strength thus depleted and wealth consumed the households in the central plains will be utterly impoverished and seven-tenths of their wealth dissipated.

14. As to the government expenditures, those due to broken-down chariots, worn-out horses, armour and helmets, arrows and crossbows, lances, hand and body shields, draft animals and supply wagons will amount to sixty percent of the total.

15. Hence the wise general sees to it that his troops feed on the enemy, for one bushel of the enemy's provision is equivalent to twenty of his; one hundredweight of enemy fodder to twenty hundredweight of his.

16. The reason troops slay the enemy is because they are enraged.

17. They take booty from the enemy because they desire wealth.

18. Therefore, when in chariot fighting more than ten chariots are captured, reward those who take the first. Replace the enemy's flag and banners with your own, mix the captured chariots with yours, and mount them.

19. Treat the captives well, and care for them.

20. This is called 'winning a battle and becoming stronger'.

21. Hence what is essential in war is victory, not prolonged operations. And therefore the general who understands war is the Minister of the people's fate and arbiter of the nation's destiny.

Chapter III (Offensive Strategy)

1. Generally in war the best policy is to take a state intact; to ruin it is inferior to this. (Li Ch'uan: Do not put a premium on killing.)

2. To capture the enemy's army is better than to destroy it; to take intact a battalion, a company or a five-man squad is better than to destroy them.
3. For to win one hundred victories in one hundred battles is not the acme of skill. To subdue the enemy without fighting is the acme of skill.
4. Thus, what is of supreme importance in war is to attack the enemy's strategy;
5. Next best is to disrupt his alliances;
6. The next best is to attack his army.
7. The worst policy is to attack cities. Attack cities only when there is no alternative.
10. Thus, 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.
11. Your aim must be to take All-under-Heaven intact. Thus your troops are not worn out and your gains will be complete. This is the art of offensive strategy.
31. Therefore I say: 'Know the enemy and know yourself; in a hundred battles you will never be in peril.
32. When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal.
33. If ignorant both of your enemy and of yourself, you are certain in every battle to be in peril.

Chapter IV (Dispositions)

1. Anciently the skilful warriors first made themselves invincible and awaited the enemy's moment of vulnerability.

6. One defends when his strength is inadequate; he attacks when it is abundant.

10. Anciently those called skilled in war conquered an enemy easily conquered.

11. And therefore the victories won by a master of war gain him neither reputation for wisdom nor merit for valour.

15. Those skilled in war cultivate the "Tao" and preserve the laws and are therefore able to formulate victorious policies. (Tu Mu: The 'Tao' is the way of humanity and justice; 'laws' are regulations and institutions. Those who excel in war first cultivate their humanity and justice and maintain their laws and institutions. By these means they make their governments invincible.

Chapter V (Energy)

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

Chapter VI (Weaknesses and Strengths)

29. And as water has no constant form, there are in war no constant conditions.

30. Thus, one able to gain the victory by modifying his tactics in accordance with the enemy situation may be said to be divine.

Chapter VII (Manoeuvre)

1. Normally, when the army is employed, the general first receives his commands from the sovereign. He assembles the troops and mobilises the people. He blends the army into a harmonious entity and encamps it.

12. Now war is based on deception. Move when it is advantageous and create changes in the situation by dispersal and concentration of forces.

14. When you plunder the countryside, divide your forces. When you conquer territory, divide the profits.

Chapter VIII (The Nine Variables)

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

14. He who intimidates his neighbours does so by inflicting injury upon them. (Chia Lin: Plans and projects for harming the enemy are not confined to any one method. Sometimes entice his wise and virtuous men away so that he has no counsellors. Or send treacherous people to his country 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.)

Chapter IX (Marches)

48. Thus, command them with civility and imbue them uniformly with martial ardour and it may be said that victory is certain.

50. When orders are consistently trustworthy and observed, the relationship of a commander

with his troops is satisfactory.

Chapter X (Terrain)

14. When the general is morally weak and his discipline not strict, when his instructions and guidance are not enlightened, when there are no consistent rules to guide the officers and men and when the formation are slovenly the army is in disorder.

18. 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 can not win, but the sovereign has issued orders to engage, he need not do so.

19. 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. (Li Ch'uan : Such a general has no personal interest. Tu Mu : Few such are to be had.)

20. Because such a general regards his men as infants they will march with him into the deepest valleys. He treats them as his own beloved sons and they will die with him.

21. If a general indulges his troops but is unable to employ them; if he loves them but cannot enforce his commands; if the troops are disorderly and he is unable to control them, they may be compared to spoiled children and are useless.

Chapter XI (The Nine Varieties of Ground)

31. Plunder fertile country to supply the army with plentiful provisions.

33. 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 do 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. Deep in a hostile land they are bound together, and there, where there is no alternative, they will engage the enemy in hand to hand combat.

37. But throw them into a situation where there is no escape and they will display the immortal courage of Chuan Chu and Ts'ao Kuei.

42. It is the business of a general to be serene and inscrutable, impartial and self-controlled. (Wang Hsi : If serene he is not vexed; if inscrutable, unfathomable; if upright, not improper, if self-controlled, not confused.)

47. To assemble the army and throw it into a desperate position is the business of the general.

48. He leads the army deep into hostile territory and there releases the trigger.

49. He burns his boats and smashes his cooking pots; he urges the army on as if driving a flock of sheep, now in one direction, now in another, and none knows where he is going.

50. He fixes a date for rendezvous and after the troops have met, cuts off their return route just as if he were removing a ladder from beneath them.

55. Set the troops to their tasks without imparting your designs; use them to gain advantage without revealing the dangers involved. Throw them into a perilous situation and they survive; put them in death ground and they will live. For when the army is placed in such a situation it can snatch victory from defeat.

56. Now the crux of military operations lies in the pretence of accommodating one's self to the designs of the enemy.

60. The doctrine of war is to follow the enemy situation in order to decide on battle.

Chapter XII (Attack by Fire)

1. There are five methods of attacking with fire. The first is to burn personnel; the second, to burn stores; the third, to burn equipment; the fourth, to burn arsenals, and the fifth, to use incendiary missiles.

Chapter XIII (Employment of Secret Agents)

4. What is called 'foreknowledge' cannot be elicited from spirits, nor from gods, nor by analogy with past events, nor from calculations. It must be obtained from men who know the enemy situation.

13. He who is not sage and wise, humane and just, can not use secret agents. And he who is not delicate and subtle can not get the truth out of them.

14. Delicate indeed! Truly delicate! There is no place where espionage is not used.

15. If plans relating to secret operations are prematurely divulged the agent and all those to whom he spoke of them be put to death.

16. Generally in the case of armies you wish to strike, cities you wish to attack, and people you wish to assassinate, you must know the names of the garrison commander, the staff officers, the ushers, gate keepers, and the bodyguards. You must instruct your agents to inquire into these matters in minute detail.

17. It is essential to seek out enemy agents who have come to conduct espionage against you and to bribe them to serve you. Give them instructions and care for them. Thus doubled agents are

recruited and used.

23. 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. Secret operations are essential in war; upon them the army relies to make its every move. (Chia Lin : An army without secret agents is exactly like a man without eyes or ears.)

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