Master Sun's Art of War



Master Sun's Art of War:

A Classic Text for the Modern Martial Artist

Translation and commentary by

Patrick Edwin Moran

This classic of military art and science is presented with the original Chinese text, line by line translations, and, where appropriate, brief commentaries.

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Description

Sun Wu, Sunzi, 6th cent. B.C. [Sunzi bing fa. English] Master Sun's art of war: translation, commentary, and appendices by Patrick Edwin Moran, Sun Wu, et al.

Includes Chinese text of the original, text of the George Kennan telegram to the U.S. Department of State, 22 February 1946, an explanation of Fingerspitzengefühl, and another appendix on the particular characteristics of Sun's approach to military strategy.

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- 1. War Early works to 1800.
- 2. Military art and science Early works to 1800.

Dedication:

To all my teachers, but especially to my lao shi in Taiwan:

陳開山 Chén Kāi-shān 陳眉壽 Chén Méi-shòu 衞笑堂 Wèi Xiào-táng

Their generosity and kindness to students over many generations and from many lands knew no bounds.

Acknowledgements:

The cover picture is a depiction of an earlier military figure of great importance, King Wu of the Zhou dynasty. It was painted by the Song dynasty artist Ma Lin (馬麟). The original scroll is located in the National Palace Museum, Taipei. The photograph of this painting was downloaded from Wikipedia Commons.

The section headings follow the organization of Wei Ru-lin's book on Master Sun's Art of War. The same general organization is also seen in some web sites.

I have tried to weed out any obvious mistakes in my translation of this text by comparing it with the translations into English and vernacular Chinese of many authors. However, there are points at which I must disagree with them.

Note:

Textual variants are noted by <text a> indicating a generic version of the text and [text b] indicating a wording favored by Wei Ru-lin in his analysis.

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Introduction

According to tradition, Sun Wu (孫武), generally called Sun Zi (孫子) in Chinese and Master Sun in English, was a contemporary of Confucius and lived from 544 to 496 B.C. The book that bears his name is the product of an intelligent mind, and of someone with considerable experience. It is regarded as a classic of military science.

Study of this early Chinese text has played a great part in the development of such military authorities in the U.S. as Col. John Boyd (USAF). My translation rests largely on the work of Wei Ru-lin, a prominent military figure and military historian in the Republic of China where Sun's work is still highly regarded.

Reading an ancient text that was written for an audience that shared a cultural context with the author is always problematical. The ultimate test of one's interpretation is that when concrete it should match known facts and that when abstract it should not be selfcontradictory. Some translations have made Master Sun into a brash and striving figure, one who resembles Hitler more than Churchill. Others have depicted him as a rational leader greatly concerned with how best to preserve all of the resources of his nation, but especially concerned not to waste human life. The matter is complicated, I believe, because Master Sun was often concerned with how to preserve the lives of troops who had not been thoroughly indoctrinated and well trained. Rather, many of them must have been simple farmers conscripted into the service of the state. Therefore Master Sun sometimes advised policies that, viewed out of context, must be regarded as manipulative and even cynical. However, I believe his policies can best be understood as the moral equivalent of not shouting: "Fire!" in a crowded theater but devising a stratagem to empty the theater promptly without creating panic. A general may be forced to use unseasoned troops in situations that would break the composure of even crack troops, and under those circumstances the most that can be done on behalf of the troops is to keep them calm so that when the time comes they can make their best response to the horrible circumstances

they may face. Readers may judge for themselves whether Master Sun's methods of forestalling trepidation are wise and humane.

Master Sun's book was originally intended to instruct the reader in all pertinent aspects of conflicts between units of troops rather than between armed or unarmed individuals. Nevertheless, the discerning reader may find single combat applications of some principles that occur at each scale described in these pages.

《孫子兵法》

Master Sun's Art of War

孫武 Sun Wu (544 - 496)

<1>(始)計 第一篇 (The Beginning) [Defense] Strategy Chapter One

孫子曰: Master Sun said:

兵者,國之大事,死生之地,存亡之道,不可不 察也。

Warfare is a major affair of the state, the locus of life and death, the path between existence and destruction, and one cannot fail to make oneself fully aware of these facts.

【PEM: Master Sun is writing for the ruler, but in a democracy he would be writing for all those involved in the decision process.】

故經之以五事,

Truly, one ought to organize analysis of warfare according to five constant elements.

校之以計,

It should be worked out in practice on the basis of strategic plans,

而索其情:

and each action ought to be objectively evaluated by looking at the real conditions and results.

一曰道, 二曰天, 三曰地, 四曰將, 五曰法。

The first constant element is one's Way. The second constant factor is the phenomena seen in the sky (meteorology). The third constant factor is geography and terrain. The fourth constant factor is military leadership. The fifth constant factor is the military code of law.

Five constant elements clarified =

道者,令民與上同意,可與之死,可與之生,而 民不畏危也。

The Way: If one leads the ordinary citizens and their superiors to have consistency in intent, then even though the population be faced with life and death crises, the people will not quail before dangers (they will see the need for sacrifice).

【PEM: What would the modern or Western term for "Way" be? What brings the many elements of our society together and gives that society a common purpose?】

天者, 陰陽、寒暑、時制也。

The factors seen in the sky include those of [yearly or daily] cyclical waxing and waning (Yin and Yang), cold weather and hot, and the regulating factors imposed by the seasons:

地者,{高下}、遠近、險易、廣狹、死生也。 "Geology and terrain" means factors of {highness and lowness}, distance and propinquity, hazardous travel and smooth going, wide concourses and narrow constrictions, and deadly and life-giving circumstances. 【 PEM: Many texts do not have the first two contrasting factors.】

將者,智、信、仁、勇、嚴也。 Generalship involves wisdom, trust, benevolence, bravery, and sternness.

法者,曲制、官道、主用也。

The military code of laws pertains to organizational forms, levels of authority, and proper management of expenses for maintenance, logistical factors, etc.

【PEM: This list need not be considered complete. The general intent seems to be to draw attention to all pertinent matters that could come under laws, rules, and regulations.】

凡此五者,將莫不聞,知之者勝,不知[之]者不勝。

The military leadership must not fail to inform itself fully of all of the above five factors. If they are understood there can be victory, and if they are not understood there will be no victory.

【 PEM: Master Sun could do a better job of explaining that lacking a single factor can ruin a process, but merely possessing one or all of several needed factors cannot guarantee success.】

= Evaluation needed prior to any war =

故校之以計,而索其情。

Truly, assessments on the basis of the five listed factors should be worked out in advance through careful strategical plotting, and their consequences as seen in real experiences are to be sought out [later].

曰:主孰有道;將孰有能;天地孰得;法令孰行;兵眾孰強;士卒孰練;賞罰孰明;

[Master Sun] said: Among the lords, who has a Way? Among the military leadership, who actually possesses competency? As for the factors seen in the sky (time, meteorological factors, etc.) and the terrain and geographical factors, who gains possession of the advantages they can provide? As for military law and orders, who carries them out well? As for soldiers and the support personnel, which army is the stronger? As for officers and troops, which army is better trained? As for rewards and punishments, which general is wiser in their use?

吾以此知勝負矣。

By these considerations I can tell who will win and who will lose.

將聽吾計,用之必勝,留之;

Should military leaders obey my strategies, then by using them one must win. Keep them.

將不聽吾計,用之必敗,去之。

Should military leaders not adhere to my strategies, then by using them one must lose. Get rid of them.

計利<而>[以]聽,乃為之勢,以佐其外。

When a strategic evaluation is beneficial and is obeyed, that will improve one's power configurations and can be used to provide external aids to one's cause.

【 PEM: Examples of these "externals" would be intelligence and alliances that can set up relationships that benefit us.】

勢者,因利而制權也。

Power configurations are constituted by depending on contingent beneficial factors to tip the balance of power.

【PEM: Note that the same connection between 勢 shì and 利 lì is seen in the Dao De Jing where it is clear that the character lì should indeed have the earth radical given it in the earliest writings. The word 利 lì has three components of meaning. One is the idea of the sharpness of a sickle (shown in the right half of the ordinary Chinese character, dāo 刂, a picture of a knife).) The second is the benefit to humans derived by harvesting grain (shown in the left part of the character, hé 禾). The third component is not seen in Chinese characters as they are currently written. That component is tǔ \pm , the earth that supplies the matrix of factors necessary for the supply of water, nutrients, etc. needed by the plant that produces the grain. At the most abstract level shì is force and lì is solid stuff that the power is directed through or around. To give an example, consider a simple rocket engine made by a cylinder filled with compressed gas. If the cylinder were to disappear or be shattered, the compressed gas would expand in all directions and not provide a useful effect. But if the cylinder is given a nozzle in one end, then when that orifice is opened the cylinder will move. The energy in the compressed gas is one component, and the metal in the cylinder is the other component. Together they form the shì that we call a rocket engine.]

= Technologies of deception =

兵者,詭道也。

Warfare is a way that uses deception (stratagems, misdirection, sleight of hand, etc.).

故能而示之不能,用而示之不用,近而示之遠,遠而示之近。

So when one is able, one must evince inability. When one intends to utilize something, one must indicate to others that it is not intended to be utilized. When one is [going somewhere] nearby, one must make oneself appear to be [going somewhere] distant, and, when one is [going] far away, one must create the impression that one is [going somewhere] nearby.

利而誘之,

Benefit and thereby seduce them.

亂而取之,

Disorder and thereby take them.

實而備之,

Plump them up and thereby prepare against them.

【PEM: In so doing one takes their edge off, makes them engage with their internal affairs, and thereby give oneself time to make one's own defensive preparations.】

強而避之,

Strengthen and thereby avoid them.

T PEM: The motivations behind some actions in warfare may not make sense to observers on the sidelines. "Why did our general not actively pursue the fleeing enemy at this crucial juncture? Victory would have been assured!" But perhaps the general perceived that his troops were in a "one step before the drop-off" situation, and without filling their canteens or getting fresh supplies of ammunition any contact with the enemy could mean a victory, but it could also mean a devastating defeat if the battle could not be won is a very short time. Therefore the general, mindful of the welfare of his troops and the overall battlefield conditions, elected to pause to strengthen the combat capabilities of his troops. An opposing commander, offered and accepting the opportunity to recuperate, can give one a way to sneak out of his reach.

怒而撓之,

Anger and thereby incite them.

卑而驕之,

Chasten and thereby make them [act] arrogantly.

佚而勞之,

Make them indolent and thereby make work for them.

【PEM: Indolent troops get careless and fail to make steady progress toward setting up defenses, etc. Then, when attacked, they must rush to make up for lost time.】

親而離之,

Let them [believe themselves to be] close to you and thereby get away from them.

TPEM: On the surface, this idea sounds rather silly. But Master Sun may have in mind a situation in which one's army is being pursued by a stronger force. His idea may be to maintain a group of crack troops accompanying chariots at the rear, one that moves forward on foot at the minimum speed, keeping the chariots well enough forward not to be observed, impeding the enemy force as much as possible, perhaps occasionally leading the enemy into ambushes, all with the intent of letting the slower infantry and supply divisions get well ahead (perhaps even taking a well-disguised side path). When the front units have escaped, the rear units can then

mount their chariots and speed off to an assigned rendezvous point.

攻其不備, 出其不意。

Attack where they are not prepared, and emerge from where they do not expect you to be.

此兵家之勝,不可先傳也。

These are the sources of victory for the military strategists, and one cannot telegraph them beforehand.

TPEM: Wei Ru-lin's book has a chart that, to me, is correct yet does not support some of his own interpretations as expressed in his vernacular Chinese translation. (See his page 78f.)

When the enemy gets	Our side will then	(objectives)
Given benefits	seduce hem	attack
Made disordered	take hem	attack
Plumped up	prepare against them	defense
Strengthened	avoid hem	defense
Angered	incite them	attack
Chastened	make them arrogant	attack
Put at their ease	make hem busy	attack/avoid

I take as my central premise that Master Sun intends to take the initiative regardless of what fortune brings his way, not to react to actions directed

against him by the enemy. He would rather forestall the enemy. Some of these manipulations would set the enemy up for an attack, some are primarily defensive in their utility, and some could serve either kind of objective. Wei's chart is laconic, making it subject to other interpretations. For instance, the first column actually lists only: "Benefit, Disorder, Substantial, Strong, Angry, Lowly, Ease, Close." Above the whole list is says, "Take advantage of the enemy's [being]...," or perhaps it could better be interpreted to mean, "When the enemy [gets]..." This must take account of the enemy's perception of their own situation, and then add something to that perception to manipulate them into a situation more advantageous to their foe. \mathbb{I}

Figuring =

夫未戰而廟算勝者,得算多也;

Those who plan their victories (i.e., make winning plans by devoting ample time to planning) in the halls of their ancestors before going to war will more often achieve their objectives.

未戰而廟算不勝者,得算少也。

Those who plan their defeats (i.e., make losing plans by failing to use ample time for planning) in the halls of power before going to war will less often achieve their objectives.

多算勝,少算不勝,而況[於]無算乎!

Those who make ample calculations win. Those who make scant calculations do not win. So what, then, is to be expected in the case of those who fail to make any calculations whatsoever?

吾以此觀之, 勝負見矣。

I look at things in these terms. By them one can see who will get victory and who will experience defeat.

<2>《孫子兵法》

作戰篇第二 Going to War Chapter Two

孫子曰: Master Sun said: 凡用兵之<道>[法], 馳車千駟, 革車千乘,帶甲十萬,千里饋糧; In all cases the method for using military force includes providing for a thousand rapid attack chariots, a thousand sets of light armored vehicles, one hundred thousand armored soldiers, and maintaining a supply line of a thousand li.

【PEM: One li is equal to about 1/3 English mile.】

= Breakdown of expenses =

則內外之費,

Thus expenses include: the quartermaster services in the front lines and the supply lines for an army of 100,000 involve internal and external expenses,

賓客之用,

the use of expensive consultants (diplomatic and intelligence specialists),

膠漆之材,

the materials used for maintenance of equipment (glue, lacquer, etc.),

車甲之奉,日費千金, 然後十萬之師舉矣。 the provision and maintenance of vehicles and armor, and so one will experience daily expenses of thousands of pieces of gold as a condition for fielding an army of 100,000.

【PEM: The amounts of money involved cannot be exact. The Chinese expression used is imprecise as to which precious metal is involved.】

| Consequences and costs in other terms |

其用戰也, 貴勝, 久則鈍兵挫銳,

When engaging in warfare, make victory the highest priority. If warfare goes on for a long time the troops will lose their edge.

攻城則力屈.

If city walls are besieged, then one's energies will be entangled.

久暴師則國用不足。

If one exposes one's army to danger for a long period of time, then the resources of the nation will eventually fall short.

夫鈍兵挫銳,

Now when one allows one's troops to lose their edge,

屈力殫貨,

when one's energies are entangled and one's stocks are exhausted,

則諸侯乘其弊而起,

then the lords [with their regional militias] will arise by taking advantage of one's lowered readiness,

雖有智者,

and even though one may obtain wise counsel,

不能善其後矣。

there will ultimately be no way of getting a good result.

故兵聞拙速,未睹巧之久也。

Truly, I have heard of cases when armies suffered due to their inelegant haste, but not of armies long enduring through serendipity.

【PEM: Things eventually go wrong.】

夫兵久而國利者, 未之有也。

Now never have nations been benefited when warfare is prolonged.

故不盡知用兵之害者,則不能盡知用兵之利也。 So those who fail to completely take cognizance of the liabilities of using warfare, may [in the end] miss out on the benefits of using warfare.

【PEM: Wei Ru-lin has a good observation at this point that is worked into his vernacular Chinese translation. His basic point is that sometimes any way in which an objective is obtained will result in some damages, and it is not really possible to predict which way will produce the least harm. In those circumstances the necessity of a timely response overrules the felt need to be cautious. Do not spend minutes calculating the time needed to escape a burning building by either of two available routes.】

| Ways around some of the costs |

善用兵者,役不再籍,糧不三載,取用於國,因糧於敵,故軍食可足也。

Those who are good at using warfare do not impress individuals for service over and over again. They do not make multiple exactions on the population for grain and other supplies. Secure one's own weapons and other needed utilities within one's own nation, and depend on enemy territories for grain and other resources when abroad. In that way there will be sufficient food and similar resources for the troops.

The bill

國之貧於師者遠輸, 遠輸則百姓貧。

When a nation's resources are depleted by its troops, that is because of long supply lines. When there are long supply lines, the ordinary people become impoverished.

近[于]師者貴賣,

When troops are stationed nearby, then commodity prices rise.

貴賣則百姓財竭,

When commodity prices rise, the ordinary people are driven out of the market.

財竭則急於丘役。

When the resources of the ordinary people are exhausted [by paying the high prices, taxes, etc.], that will create a furor over impositions.

力屈財殫,中原內虛於家。百姓之費, 十去其七; When one's energies are tied up and one's wealth is exhausted within one's nuclear region, then the center of one's own domain becomes a void. The common people will come up short on seventy percent of their ordinary living expenses.

公家之費:破車罷馬,甲冑矢弩,戟盾蔽櫓,丘 牛大車,十去其六。

As for the expenses of the establishment families, there are wrecked vehicles, infirm horses, [damaged or destroyed] armor, helmets, arrows, crossbows, lances, bucklers, and paveses, not to mention oxen and heavy freight wagons. Losses will amount to six parts in ten.

故智將務食於敵。食敵一<鐘>[鍾],當吾二十<鐘>[鍾];<艸+忌=萁>稈 一石,當吾二十石。[1 鍾 \cong 640 liters (豆)。]

Therefore wise generals will put burdens for foodstuffs on the enemy. Eating one unit of the enemy's food will save the expense of twenty units of one's own food. Feeding one unit of hay or fodder of the enemy's will save the expenditure of twenty units of one's own forage.

F The pursuit of goals =

故殺敵者, 怒也; 取敵之利者, 貨也。

Truly, killing the enemy is a matter of wrath; on the other hand, the taking of profits from the enemy can be done with the [utilitarian, rational] intention of giving one's soldiers their booty.

故車戰,得車十乘以上,賞其先得者,而更其旌 旗,

So, as for chariot warfare, one should reward those who first take more than ten [enemy] chariots, and give them a new banner [for the captured chariots]. 車雜而乘之,卒善<以>[而]養之,是謂勝敵而益強。

By thus forming an irregular collection of chariots, and by treating the captured soldiers well, one may win against the enemy and supplement one's own strength [in the process].

故兵貴勝,不貴久。

Therefore in warfare value victory, negatively value taking a long time at getting it.

知兵之將, 民之司命, 國家安危之主也。

The general who has a good knowledge of warfare serves as the lord of life and death for the people and is the master of the nation's peace and the perils. <3>《孫子兵法》第三篇 謀攻 Master Sun's Art of War Planning Attacks Chapter Three

孫子曰:

Master Sun said:

凡用兵之法,

In all cases, the principles for the use of warfare are as follows:

全國為上,破國次之;

Maintaining the integrity of the [target] nation is more valuable than destroying it.

全軍為上,破軍次之;

Maintaining [a target] army whole is more valuable than destroying it.

全旅為上,破旅次之;

Preserving an entire battalion is of greater importance than destroying it.

全卒為上,破卒次之;

Maintaining a company is of greater importance than destroying it.

【PEM: The standard strength of a company was 100 soldiers.】

全伍為上,破伍次之。

Maintaining the existence of a squad is more important than destroying it.

【 PEM: The standard strength of a squad was 5 soldiers.】

是故百戰百勝, 非善之善者也;

For the above reasons, to achieve one hundred victories in one hundred engagements is not the highest good.

不戰而屈人之兵, 善之善者也。

To not engage and yet to subjugate the other side's soldiers is the highest good.

TPEM: If you can avoid fighting the obstreperous troops of other countries, then they may fight among themselves, leaving your own situation un-degraded but leaving them both in much worse condition. The desideratum is always to control the enemy, not to destroy the enemy. The military unit of the other side that is under one's own indirect control can be used for one's own purposes.

【PEM: During the Korean War, Chinese forces used brainwashing techniques on captured UN forces. Their primary objective in so doing was to foil organized resistance, thus permitting them to use troops on the battlefield that would otherwise have been needed to maintain control of the prisoners in military prison camps.】

Different kinds of attacks

故上兵伐謀, 其次伐交, 其次伐兵, 其下攻城。 攻城之法為不得已。

For that reason, the highest level of warfare attacks the enemy's planning. The next level attacks the enemy's communications or alliances. The next level attacks their soldiers. At the level below that one attacks their fortifications. Attacking fortifications is only to be done when there is no other alternative.

【PEM:The Chinese text that I have translated as "fortifications" literally means "walled city."】

Besieging a walled city

修櫓轒轀,具器械,三月而後成,

The preparation of paveses, mantlet wagons, and all the siege tools necessary for attacking fortifications requires three months.

【PEM: A pavese is an extremely large shield for (usually) a single archer or other soldier to take shelter behind. A mantlet is a multi-soldier shield. The Chinese made four-wheeled vehicles that had canopies made of rough lumber covered with rawhide. These vehicles were used to shield workers bringing loads of earth to the edge of fortifications to build up attack ramps.】

距閩又三月而後已。

Piling ramps against the enemy's walls will require an additional three months.

將不勝其忿,而蟻附之,殺士卒三分之一,而城 不拔者,此 攻之災也。

Supposing that the general could still not slake his fury (after the time required to make the aforesaid preparations), and required his troops to swarm over the walls like ants pouring out of their ant hill, and for that reason killed off one third of his officers and common soldiers, and was yet unable to take out the fortifications of the opposition, that would be a calamity brought on by his own attack.

| Rather than going to that extreme... |

故善用兵者,

So those who are good at warfare:

屈人之兵而非戰也。

Subjugate the other side's soldiers without fighting.

拔人之城而非攻也,

Take out the other side's fortifications without making an attack.

毀人之國而非久也。

Destroy the other side's nation without a prolonged fight.

必以全爭於天下,故兵不頓而利可全,此謀攻之 法也。

Ultimately, one must make a complete engagement with all under Heaven, so in this way one's soldiers will not lose their edge and yet benefits can be maximized. This is the method of attacking [solely] through the use of planning.

【PEM: The character-by-character translating of the first phrase would be: "Must use all/complete

struggle/contend in heaven below." Some take this statement to mean that one must use keeping whole as one's principle while contending against the world, and some take this statement to mean that one must use an all out struggle against the world. If the only issue were keeping one's army with the least possible losses, something that Master Sun indeed advocates, there would be no need to mention the world (i.e., "all under heaven"). Taking the second alternative, Griffith, p. 79, translates, "Your aim must be to take All-Under-Heaven intact." But that interpretation suggests a military campaign to conquer the world, an undertaking that would be bloody and costly under the best of conditions. The surface meaning suggests that Master Sun was talking about 全面戰爭, quán miàn zhàn zhēng, all out warfare. But 爭 zhēng can mean "to contend," and it is this broader sense of working out opposing interests that is relevant to Master Sun's real world situation. His country, Wu, was small, was faced by other nations that might want to conquer it, and needed to plan and operate to maintain its own security.

TPEM: Master Sun has in mind the pursuit of a grand strategy. An example of such would be the strategy of containment first put forth by Ambassador George Kennan to deal with the expansive tendencies of the USSR. See Appendix One.

T PEM: One way to understand parts of the text above would make them inconsistent with previous text. He first says that one should fight only as a last resort. subsequently he lists priorities that favor

situations with no-fight no-lose conclusions, but then it appears that he could advocate making a war all over the world as it was then known. If he does not mean to express such an aggressive and unrealistic ambition, then I believe that he has to mean that the best general will have a total battlefield awareness of "all under Heaven" and will wage his struggle entirely on the level of being so well defended and so well prepared that nothing in the world can sink a barb into his nation. Going forward with the aim of contending for and achieving supremacy over all under heaven would, for Master Sun, be a fool's mission.

【PEM: Master Sun cannot hope to minimize losses to his nation without achieving a strategic capacity to anticipate and stymie all potential attacks. And he cannot maintain his capacity to defend his nation over the long run unless he minimizes losses to his troops. To achieve both objectives he must, on the highest plane of planning, maintain an integral web of diplomacy and intelligence over his entire world. The following discussion is on the lower, more specific, scale of inquiry: How can one best maintain one's capability for future military actions while succeeding in currently needed operations? ▶

How to use troops

故用兵之法,

So the method for using troops is as follows:

十則圍之, 五則攻之, 倍則分之;

If your strength is ten to their one, then surround them. If your strength is five to their one, then attack them. If your strength is double theirs then divide them.

【PEM: Later he says that if you surround an army you should give it a way to escape the blockade — the idea being that you would rather have them go back where they came from, or, if they seem not likely to go home and stay home, then a corridor of flight may be offered to them, and it can be a long killing field through which their troops will continue to flee even as the near end of the corridor is being closed off and as they are being culled from both sides as they flee.】

敵則能戰之,少則能逃/守之,不若則能避之。 If one is their worthy opponent, then one can fight them. If one is numerically inferior, then one can (flee them)/(take a completely defensive posture with regard to them). If one is not at all a match for them, then one must strive to become able to avoid them entirely.

TPEM: There are two versions of the text at this point.

【PEM: To "avoid them entirely," one's intelligence service must be equal to the task of telling your soldiers where to go and where not to go.】

故小敵之堅,大敵之擒也。

So by obdurateness a minor combatant can become the captive of a major combatant.

【PEM: Continuing the idea above, why would a numerically inferior army willingly meet a superior force on an equal footing? The only way the numerically inferior army can win is by ambush or other stratagems that prevent more than a small portion of the other army from getting at them.】

| Top leadership dynamics |

夫將者,國之輔也。輔周則國必強,輔隙則國必 弱。

Now a general is an aide to the nation. If his assistance is well rounded, then the nation must be strong. But if his assistance has lapses in it, then the nation must be weak.

故君之所以患於軍者三:

Truly, there are three ways in which a sovereign can be an affliction upon his army:

不知三軍之不可以進而謂之進,

(1) To be unaware that the three armies will be unable to advance and yet order them to go forward, 不知三軍之不可以退而謂之退, 是為縻軍; or to be unaware that the three armies will be unable to retreat and yet order them to do so, is called hamstringing the army.

不知三軍之事,而同三軍之政<者>,則軍士惑矣;

(2) To not know the inner workings of the three armies and yet personally take on the administration of the entire enterprise is to contrive the chaos of the armies and of their officers.

【PEM: According to the regulations of the Zhou Dynasty, the "Son of Heaven" (the king at this time but later called the emperor), was permitted to have six armies, while each duke or leader of a subsidiary feudal domain was permitted to have three armies. The regulation strength of each army was 10,000 soldiers.】

不知三軍之權,而同三軍之任,則軍士疑矣。

(3) To not know the balances of power within the three armies and yet hold responsibility for all of them is to cause the armies and their officers to lose confidence. 【PEM: The king gets involved and disrupts what his general staff has been trying to get done.】

三軍既惑且疑,則諸侯之難至矣,是謂亂軍引勝。

When the three armies fall into chaos and lose confidence, then disaster will come upon one from the lords (i.e., the subsidiary power centers within or near to one's own nation. A typical example would be that of the feudal domains that fought for dominancy in Japan). This is called throwing one's own army into chaos and drawing nigh the victory [of one's opponents.

故知勝有五:

So it is known that victory has five components:

知可以戰與不可以戰者勝,

Those who know when it is all right to go to war and when it is not all right to go to war will have victory.

識眾寡之用者勝,

Those who recognize the way to use both forces that are superior and forces that are inferior in number to the opposition will have victory.

上下同欲者勝,

Those who see to it that those who are superior and those who are subordinate have the same desires will have victory.

以虞待不虞者勝,

Those who will put the forewarned in wait for the heedless will have victory.

將能而君不御者勝。

The generals who have ability and who do not suffer the interference of their sovereigns will have victory.

此五者,知勝之道也。

These five things are the ways by which one may recognize victory.

故曰:

So it is said:

知彼, 知己, 百戰不殆;

Know the other side, and know yourself. Then in one hundred conflicts you will not be in peril.

不知彼,而知己,一勝一負;

If you do not know the other side yet know yourself, you will win some and lose some.

不知彼,不知己,每戰必敗。

If you neither know the other side nor know yourself, then in every battle you must face defeat.

<4>《孫子兵法》第四篇 軍形 Master Sun's Art of War. Military formations Chapter Four

孫子曰: Master Sun said:

昔之善戰者,先為不可勝,以待敵之可勝。不可勝在己,可勝在敵。

Those in antiquity who were good at warfare first made sure that they could not be overcome in order to wait for such time as the enemy could be overcome. Being unconquerable is something that one can arrange on one's own behalf. Their being susceptible to conquest depends on them.

故善戰者, 能為不可勝, 不能使敵必可勝。

Truly, those who are good at warfare can make themselves unconquerable, but they cannot make it so that the enemy must fall in defeat.

故曰:勝可知,而不可為。

So it is said: One can comprehend victory, but one cannot make it happen.

| Invincibility and its contrary |

不可勝者,守也;

Being invincible is a matter of self protection.

可勝者, 攻也。

Vulnerability is a matter of oneself going on the attack.

【PEM In hand to hand combat, "protecting oneself" has at least two aspects. On the one hand, one can wall oneself off from attack by always staying barricaded at home or something of that sort. The problem with that approach is that one becomes one's own prisoner. Going about town in a tank is not much better.

TPEM: Walking down the street one can do much toward self protection by things such as not giving off vibrations, not walking into obviously threatening situations, not flashing a great amount of cash, etc. That kind of protection can go on right up to the moment that an assailant gets to within striking distance. At the point that one's back is to the wall, at the point when there is no way of escape, if the assailant persists in preparations for attack (and those preparatory moves may only take an additional second or so) it is not at all clear that one can be invincible. One's "mistake" was not to have stayed at home, having come to the aid of a damsel in distress, etc.

TPEM: This is the situation that is specific to the training of a martial artist. Many people will have other kinds of preparation to avoid attacks, and their ways will succeed or fail depending on circumstances. Many people will carry a pistol or other defensive weapon. But pulling a pistol puts one in the situation of possibly having to use it — and of then hesitating to use it due to psychological manipulation by one's assailant, awareness of a possible felony charge, etc.

【PEM: Massad Ayoob says to always make sure that any witnesses hear you say: "Don't threaten me! Put that gun down!" etc., not only in the hope that they may intervene but also, in case you hurt your assailant, so that it does not appear to witnesses that you were the felon.

TEM: The key point that Master Sun is making, I think, is that there are disadvantages to going on the attack. The reason, especially in a self defense situation on the street, is that whoever attacks first has to commit and the person who awaits the attack freedom of movement great countervailing momentum to overcome. One the attacker is in motion (or, if the defender is good enough to do a sen no sen defense as soon as the attacker's mind is in motion to attack), then the attacker is committed to one course of action and changing his course of action will require resisting his own inertia. The defender, however, can go to either side, can step back, or can even step forward and totally disrupt most unarmed attacks. The mongoose knows how to defeat the cobra.(A sen no sen or "before

the before" defense is one in which the attacker starts before the defender begins to move, but the defender still makes a counter-strike that connects before the original attack can be completed.)

守則不足, 攻則有餘。

In the case of self protection there may be [a perceived] insufficiency. In the case of attack there may be [a perceived] excess in capacity.

【PEM: Self-protectiveness can be an indication that one does not believe oneself to have tactical superiority. Leaders faced with the need to defend their own territory often fear they may not be able to provide a sufficient defense.

【PEM: Aggressiveness can be an indication that one believes oneself to have the upper hand. On the other hand, it may be bluster. It is easier to overestimate one's capacities when it is the enemy's territory that is perceived as being placed at risk.】

善守者,藏於九地之下;

Those who are good at self protection treasure resources away in all quadrants of the country.

PEM: Resilience.

善攻者, 動於九天之上。

Those who are good at attack move over all the land (as though traveling in the heavens).

【PEM: Mobility.】

故能自保而全勝也。

So [by having the two strengths] one is able to protect oneself and also have complete victory.

【PEM: One is not tied down to any heavy defenses in one's own country but can melt and reform, never far from known caches. In a complementary way one has the mobility to permit one to strike anywhere within or around that domain.】

| What constitutes victory and what constitutes defeat? |

見勝不過眾人之所知,非善之善者也;

The ability to see "victory" does not exceed what the multitudes are able to understand, and it is not the best of all good abilities. 戰勝而天下曰善, 非善之善者也。

When a battle is won everyone on earth says that is good, but it is not the best of all good outcomes.

故舉秋毫不為多力,

Now lifting a hair taken from the winter pelt of an animal is not deemed an extreme of strength.

見日月不為明目,

Seeing the sun or the moon is not credited as having acute vision.

聞雷霆不為聰耳。

Hearing crashes of thunder is not called acute hearing.

Push-overs vs. real fights =

古之所謂善戰者, 勝於易勝者也。

Those in antiquity who were good at warfare won under circumstances where it was easy to win.

故善戰之勝也,無智名,無勇功。

Therefore those who won good wars did not get a name for being wise, nor were they praised for their bravery.

故其戰勝不忒。

So their war victories came from their not making errors.

不忒者,其所措必勝,勝已敗者也。

The plans executed by those who did not err had to have succeeded. They won out over those who were already defeated.

故善戰者, 先立於不敗之地, 而不失敵之敗也。 So those who are good at warfare first establish themselves in an invincible position, and then take care not to let go of the defeat of their enemies [if it is offered to them].

是故勝兵,先勝而後求戰,敗兵,先戰而後求勝。 For that reason, victorious armies will first win and only then seek warfare. Losing armies will first go to war and only later seek [the way to achieve] victory.

| Steps toward victory |

善用兵者,修道而保法,故能為勝敗之政。 Those who are good at using troops will mend their Dao and protect their laws so that they will be able to conduct a governance that wins out over defeat.

TPEM: The Dao or Way mentioned here is probably the same as that mentioned at the beginning of this book. It is the set of beliefs and aspirations that the ruler has nurtured throughout society. In the world of today this Dao is relevant to laws and to standards of international behavior.

兵法:一曰度,

The components of warfare: The first is called a metric.

【PEM: The character 度 dù is used to speak of marks inscribed in some artifact such as a bronze measuring rod. So the primary sense would be a linear measure of something.】

二曰量,

The second is called measure.

【PEM: Knowledge about favorable and unfavorable conditions would be obtained by applying some metric to measure some actual situation. While a dù is a measure of length, a liàng 量 is a measure of volume. There may be some idea of going from abstract characterizations such as length to more concrete characteristics such as the area or the volume of something. Or perhaps the two terms are related in the same general way as distances to travel are related to the volumes of food and water that must be provided for the trip.】

三曰數,

The third is called enumeration (calculation).

TPEM: Planning things out step by step, e.g., how much fodder for the oxen and horses is really required to get from here to there?

【 PEM: Knowing what the conditions really are. Using the metrics and real measures to actually determine what is what, and then setting things in some useful order.】

四曰稱,

The fourth is called weighing and evaluation.

TPEM: This part is operational and is based on the previous three steps being in place. How are things going at each step? Put the measured conditions of

one's troops and the opposition's troops on the balance scale.

五曰勝。

The fifth is called victory.

【PEM: If the above four steps are well handled, one will avoid putting oneself on the offensive when one is not going to be adequately prepared and thereby get defeated.】

地生度,

Geography (lay of the land, the terrain) produces metrics.

【PEM: It imposes a metric somehow. Maybe Master Sun just means that the distance from my capital to their capital determines how far they must come to attack me, and similar such considerations.】

度生量,

Metrics produce measures.

【PEM: In addition to being able to make simple measurements of area, volume, weight, etc., one can measure more abstract conditions such as the current effectiveness range of a certain regiment. If one has a metric, a way to measure conditions, then one can form measures of the conditions of one's army, the opposition's army, etc.】

量生數,

Measure produces enumeration (i.e., calculations).

【 PEM: Once the statistics are in, one can do calculations.】

數生稱,

Enumeration produces weighing [one thing against another in the balance].

【PEM: With the statistics in hand one can do realistic. objective comparisons.】

稱生勝。

Weighing (comparisons at each step for each metric) produces victory.

【PEM: The rule is: Do not attack when one is in an inferior position. Attack only when the enemy has already assured his defeat and one knows it. These judgments must be objective. They must be based on empirical evidence and not on wishful thinking.】

= Prefer overwhelming force =

故勝兵若以鎰稱銖,敗兵若以銖稱鎰。

Truly, using victorious armies resembles weighing a full measure of gold against 1/24 measure of gold. Using losing armies resembles weighing 1/24th measure of gold against a full measure of gold.

【 PEM: This comment validates the notes given above. Master Sun seems to prefer a quantitative superiority, in any battle to be undertaken, of about twenty-five to one.】

勝者之戰,若決積水於千仞之谿者,形也。 The warfare of a victor is like the cutting loose of impounded water over a ravine of a thousand rods depth — the whole thing is thereafter only a matter of the lay of the land.

【PEM: This sentence gives a good example of a 勢 shì (power configuration.) Having water is not enough. Having impounded water is not, in itself, worth much more. But having impounded water in a location that assures that if released it will deliver irresistible force in a particular direction or against a particular point of opposition gives one a kind of real power in the world. Having introduced the idea here, the next chapter discusses power configurations in detail.】

<5>《孫子兵法》第五篇 兵勢 Master Sun's Art of War The power configurations of armies Chapter Five

孫子曰:

Master Sun said:

凡治眾如治寡,分數是也;

In all cases, regulating the multitudes is no different from regulating small groups — it is a matter of dividing the numbers of them up.

【 PEM: Raw power does not itself determine outcomes. Power can be directed against larger or smaller objectives as one choses.】

鬥眾如鬥寡,形名是也;

Taking on a multitude in combat is like taking on a small group in combat — it is a matter of giving form to names.

TPEM: The Daoist view is that no divisions exist in nature. All divisions are imposed by minds. One may at one time see a single army, a much larger entity than one's own army. But by an act of mind one can see the one-fourth part of the enemy's army that has crossed the river as one army, the army to be

demolished by one's own larger army, and the three-fourth part of the enemy's army effectively isolated by the river as another army to be dealt with at some later time. Asymmetrical warfare often works by small and highly mobile forces taking on isolated enemy objectives and then quickly melting away.

三軍之眾,可使必受敵而無敗者,奇正是也; The multitudes composing the three armies can be required to accept enemy [assaults] and yet will suffer no defeats — it is a matter of deception complementing uprightness.

兵之所加,如以碫投卵者,虚實是也。 When soldiers pile on, it is [or should be] like

throwing a whetstone on eggs - a matter of solids versus voids.

凡戰者,以正合,以奇勝。

In all warfare, engagements occur on the up and up, but it is by deception or misdirection that one wins.

故善出奇者, 無窮如天地, 不竭如江河。

So those who are good in the ways of deception are boundless like Heaven and Earth, inexhaustible like the Yangtze and the Yellow Rivers.

終而復始,日月是也。死而復生,四時是也。

Coming to the end, they begin again, just as do the days and months. Dying, they come to life again, just as do the four seasons.

Five phase cycles

聲不過五, 五聲之變, 不可勝聽也。

There are no more than five notes in the musical scale, but the changes that can be rung on those five notes are infinite in our hearing.

【PEM: By a kind of analogy to the five visible planets (regarded as gods in China as in the ancient Western world), the Chinese listed fives of other kinds of things that were keyed to the lists of the planets. So Mars and the color red were associated, for instance, and the pentatonic scale was explained as a parallel to the other sets of five.】

色不過五, 五色之變, 不可勝觀也。

There are no more than five colors, yet the changes that can be produced among them exceed our powers of discrimination.

味不過五, 五味之變, 不可勝嘗也。

There are only five flavors to our palates, yet the changes among them exceed our powers of taste.

F Two phase cycle =

戰勢不過奇正, 奇正之變, 不可勝窮也。

The power configurations of warfare do not exceed the deceptive and the straightforward, yet the changes that can be rung on these two are inexhaustible.

奇正相生,如循環之無端,孰能窮之哉?

Deception and straightforwardness produce each other, like the endlessness of a circulatory system. Who could terminate such a loop?

激水之疾,至於漂石者,勢也;

When sufficiently agitated, water can carry away stones. This is an example of a power configuration (i.e., a configuration that channels power into a target in an effective way).

鷙鳥之疾,至於毀折者,節也。

The ferocity of raptors can rise to the point of destruction [of their prey]. This is on account of sections (i.e., inflections).

\(\) PEM: Bamboo has sections. In what sense do raptors have "sections"? Their actions involve sudden changes in directions that are under their control. For instance, the fastest falcons glide in circular patterns until they spot something, dive at terrific speeds, seize their prey at speed, and yet manage not to crash into the ground. The sudden changes in direction are like the changes in density between the hollow part of a section of bamboo and the solid "caps" at each end of a section.

TPEM: The g-force experienced by a falcon pulling out of a power dive at about 300 mph is about three times that experienced by a fighter pilot executing a similar powered maneuver.

Power configurations =

是故善戰者,其勢險,其節短;

For this reason, those who are good at warfare keep their power configurations abrupt and cause the inflections of their movements to occur over short periods of time.

T PEM: In other words, changes at least metaphorically involve sharp turns at high speeds.

Fighter pilot and (later) military strategist John Boyd (USAF) was the first to recognize that, assuming general speed equivalence, the plane that could turn more sharply and also both decelerate and accelerate more rapidly was superior in a dogfight.

勢如彍弩, 節如發機。

A power configuration is like a drawn crossbow. An inflection is like the firing of it.

(礦 is a variant of 彉 which has the same meaning as 張.)

【PEM: In drawing a crossbow, energy is added to a mechanical system by slowly pulling, or even cranking, the bowstring back until it engages with the trigger mechanism where it is held in readiness to be released over a very short period of time and in a particular direction. Note that in the beginning force is directed away from the arrow point, and at the inflection point force suddenly begins to be directed toward the arrow noch. The crossbow has parts that are arranged to direct power along a definite configuration or path, and a trigger that is a movable lever with no great mechanical advantage or strength of its own but is yet something that touches off a great change of state in a short time.】

紛紛紜紜鬥亂,而不可亂也。渾渾沌沌形圓,而 不可敗也。

In the fog of armed struggle and disorder, one cannot permit oneself to become mentally disordered. One must be indefinite in outline, chaotic in appearance, and yet inherently cohesive, so that one cannot be defeated.

【PEM: Metaphorically, one always wants to be like a crossbow bolt that quickly shoots into action. One does not want to be like a crossbow that shatters and releases its pent up energy futilely in all directions.】

Deception =

亂生於治, 怯生於勇, 弱生於強。

Disorder is produced out of order. Cowardice is produced out of bravery. Weakness is produced out of strength.

【PEM: Is he talking about real or simulated disorder, etc.? Regardless, one cannot have disorder unless there is something that was originally well ordered, and entropy will eventually produce disorder unless repairs are made on a timely basis.】

治亂,數也; 勇怯,勢也; 強弱,形也。

Bringing order to disorder is a matter of imposing regularity through strength of mind. Producing bravery out of cowardice is a matter of [the proper use of] power configurations. Bringing strength out of weakness is a matter of structuring things.

【PEM: What he means about bravery is that people, even bold people, are not brave in the abstract. A brave act occurs when there is no choice about the danger faced, yet there is a decision as to whether to flee or to act. Troops, fortifications, etc., can be configured just as impounded water can be directed down a flume.】

故善動敵者,形之,敵必從之;

Truly, those who are good at moving their adversaries around do so by giving a form to things such that the enemy must follows those structures.

【PEM: The enemy army is a source of energy in itself. Originally that energy is being directed in ways intended to be hurtful to the defender. The defender, however, can create structures (sometimes little more than illusions) that channel the enemy's energy the way dikes and dams channel the energy of a river.】

予之, 敵必取之。以利動之, 以卒待之。

If I offer something, the enemy must take it. That is using benefit to move him. But one has soldiers in wait for him.

TEM: The Zhuang Zi mentions a general Daoist strategy called 兩行 liǎng xíng. Literally those words mean "two displacements," i.e., going by two different ways. At a deeper level it means doing something that will have two potential outcomes. Both outcomes depend on what one's counterpart does. Consider two different examples. (1) A house is discovered to have been booby-trapped by installing bomb triggers in random places in the cellar. After discovery, the bombs are secretly removed, but the police would like to know which of several aides to the owner of the house has planned the assassination. Questioning anyone would reveal that the plot has been discovered. So the owner of the house is instructed to invite each of the aides to come to dinner with his wife and children on a particular night. Each time, the family dog is in an adjacent room. It has been taught to bark incessantly as soon as people come into the dining room. So soon after dinner starts the host calls out to the housekeeper, "Martha, please put Fido down in the basement." (2) In an unprovoked fight the defender notices that the attacker has a pattern of using a left jab as a feint and following with a solid right. Defender therefore throws a left jab. The opponent then has a choice of treating it as a feint and immediately going in for the kill, or defending. If the left jab is indeed blocked, defender has lost nothing. If, however, the jab is not blocked (perhaps defender made it appear to be a half-hearted attempt), following through will strike the attacker. One does not have to have mastered a three inch knockout blow to create enough damage to permit escape from the whole situation, or at least set one's opponent up for a strong counter attack with the opposite hand.

故善戰者, 求之於勢, 不責於人, 故能擇人任勢。 So those who are good at warfare seek it through power configurations and do not put the onus on individuals. They are therefore able to select individuals to take charge of those power configurations.

【 PEM:—Like the man whose finger pulls the crossbow trigger.

【PEM: One example of what Master Sun is talking about in this section might be optical illusions. If objects are used, they may be real objects. If lines are drawn they will be real lines. However, the conclusions that eyes draw from optical illusions are incorrect. The arrangement of components forces the eyes to see what is not really there.】

任勢者, 其戰人也, 如轉木石。

Those who are given responsibility for operating a power configuration are warriors, and they are like rotating wood or stone (in the trigger mechanism of the crossbow).

木石之性,安則靜,危則動,方則止,圓則行。 The natures of wood and stone are to be still if things are at peace, but to move if they are under duress. If they are square, then they will not turn, but if they are round then they will move.

【 PEM: The trigger mechanism of a crossbow is formed of rectangular elements that are designed to retain their positions in resistance to considerable force, and curved elements that are designed to move without having to be subjected to much force.】

故善戰人之勢,如轉圓石於千仞之山者,勢也。 Therefore those who are good at the power configurations of war are like those who can set a round stone that is poised on the top of a thousand rod mountain to rolling — it is a matter of power configurations. 【PEM: The stone must be round if it is to be easily rolled off its stable perch, but the lever and the fulcrum need to be "square" so that they will hold their positions as force is applied.】

<6>《孫子兵法》第六篇 虛實 Master Sun's Art of War Void and Substance Chapter Six

【 PEM: The material in the preceding chapter introduces the main idea of the next section. Even the most basic trigger movement consists of a bar with a round void in it that goes over a very substantial round peg upon which it turns.】

孫子曰:

Master Sun said:

凡先處戰地而待敵者佚 後處戰地而趨戰者勞。 It is always the case that those who first occupy the battlefield and await arrival of the enemy have ample time on their hands, whereas those who arrive later and must scramble to engage will endure toil.

【PEM: Note that the ideal situation for meeting the enemy may be a pass or other such opening leading to an open space where a strongly shielded ambush has been laid.】

故善戰者,致人而不致於人也。

So those who are good at warfare will draw in the enemy and will not permit themselves to be drawn in by the enemy.

能使敵自至者,利之也;

If one is able to cause the enemy to arrive, that is done by offering him some benefit.

能使敵不得至者,害之也。

If one is able to cause the enemy to be unable to arrive, that is done by offering him injuries.

【PEM: The Sichuan Basin was one part of China that was never conquered by the Japanese during World War II. The reason was that Sichuan was entirely surrounded by mountains except for the water route provided by the Yangtze River. The water flow was very rapid, and the sides of the channel were precipitous. Therefore any forces trying to enter would have had to to go upstream and through miles of ambushing forces on higher ground. 】

Offensive moves

故敵佚能勞之,飽能飢之,安能動之。

So if the enemy is at ease one can cause him to toil, if he is well fed, one can cause him hunger, and if at rest one can cause him to have to be on the move. 出其所必趨, 趨其所不意。

[To do so,] appear out of the places to which the enemy must hasten to defend, and hasten to the places where you will not be expected.

行千里而不勞者, 行於無人之地也。

Those who go for a thousand li without toil are those who pass through areas where there are no people.

【PEM: During the Pacific campaign in World War II, one prominent motto (associated with General MacArthur) was: "Hit 'em where they ain't!" Well defended islands were not attacked, but were cut off from being resupplied. Poorly defended islands were captured when useful to the Allies for any purpose. Otherwise, the fleet moved through the open waters.】

攻而必取者, 攻其所不守也。

In cases where one must succeed in an attack, strike the points at which the enemy has no defenses.

守而必固者,守其所不攻也。

In cases where one must firmly defend a position, defend a position that the enemy will not attack.

【PEM: Peaks are easily defended. With preparation, mountains can be hollowed out to provide living spaces for entire armies.】

故善攻者, 敵不知其所守。善守者, 敵不知其所 攻。

So in the case of those who are good at attack, their enemies will not know where their defenses ought to be located. And in the case of those who are good at defense, the enemy will not know where they ought to attack.

TPEM: One of the difficulties in guerrilla warfare is that insurgents disappear among the ordinary farmers and other citizens. They have no fortress to attack, no camps to overrun. One alternative to highly concentrated emplacements in mountains and manmade fortifications is to disperse troops so widely that no one point of attack is better than any other. Between these extremes are defenses such as the tunnels constructed by the Vietcong that were hard to find, and sometimes so extensive that defenders could leave by another portal when attackers made entry at any point. This strategy is probably millions of years old. Some trapdoor spiders maintain parallel vertical tunnels, one with the "front door" covered by a carefully constructed plug-like, hinged door, and the other, joined to the first by a short horizontal tunnel with its own door near the bottom and a false top such that the spider would need to dig the last bit through to the surface to escape via the second tunnel.

微乎微乎,至於無形;神乎神乎,至於無聲,故能為敵之司命。

Subtle, oh subtle, to the point of being formless. Spirit-like, oh spirit-like, to the point of being inaudible. Thereby one is able to function as the grim reaper of the enemy.

進而不可禦者,衝其虛也;

To advance without the possibility of defense, attack the enemy's voids.

退而不可追者,速而不可及也。

To retreat without the possibility of pursuit, be too rapid to be caught.

故我欲戰,敵雖高壘深溝,不得不與我戰者,攻 其所必救也:

Truly, if I desire to fight, then even though the enemy has high fortifications and deep moats, he will have no choice other than to fight with me, for I will attack the points that he has no choice but to try to rescue.

我不欲戰,雖畫地而守之,敵不得與我戰者,乖 其所之也。

If I do not desire to fight, then even though I may only have sectioned off my camping area as the full extent of my "defenses," the enemy will be unable to engage me in a fight because I have stymied his arrival.

【PEM: On the surface this part seems improbable. Maybe the idea is to create a false line of travel and lead the enemy to attack an empty camp. Otherwise, following Wei's interpretation, p. 130f., my side may have done something to greatly hinder the enemy's arrival. For instance, my side may have created an avalanche, it may have breached a levee and flooded the land between the two armies, etc. 】

故形人而我無形,則我專而敵分;

So I shape other people up as I wish and yet I have no form, and in that way I cohere and the enemy is split asunder.

我專為一,敵分為十,是以十攻其一也,則我眾 而敵寡; 能以眾擊寡者,則吾之所與敵者,約 矣。

If I cohere as one, but the enemy is divided into ten separate forces, then that will mean my ten (out of ten, i.e. all my forces) attacking his one (out of ten), and I will be many while the enemy is few. If I can use a multitude to strike a small force, then what choices I give to the enemy are highly restricted.

吾所與戰之地不可知;不可知,則敵所備者多; 敵所備者多,則吾之所戰者寡矣。

The places where I intend to give battle must be made unknowable. If they are unknowable, then the points where the enemy must prepare defenses are many. If the places where the enemy must prepare defenses are many, then the forces at whichever point I actually attack will be few.

故備前則後寡,備後則前寡;

So if they prepare to defend the front then their rear defenses will be sparse, and if they prepare to defend their rear then their front defenses will be weak. <故>備左則右寡,備右則左寡;

<Then> if they prepare on the left flank, their right will be weakly defended, or if they prepare on the right flank then their left defenses will be sparse.

無所不備,則無所不寡。

If there is nowhere they fail to prepare defenses, then everywhere will be weakly defended.

寡者, 備人者也;

The ones who are short-handed are the ones who must make preparations against others.

眾者, 使人備己者也。

The ones who are not short-handed are the ones who force others to prepare [multiple] defenses against them.

【PEM: Asymmetrical warfare.】

Place and time for maximum effect

故知戰之地,知戰之日,則可千里而會戰。 So if one (knows =) determines the location of a clash and (knows =) determines the time of a clash, then one can join battle even over a distance of one thousand li.

不知戰之地,不知戰之日,則左不能救右,右不 能救左,前不能救後,後不能救前,而況遠者數 十里,近者數里乎?

If one does not know the place of warfare, and/or does not know the time of warfare, then those on the left cannot come to the aid of those on the right, and those on the right cannot come to the aid of those on the left, those is front cannot come to the aid of those at the rear, and those at the rear cannot come to the aid of those at the front. How much the less could those distant forces who are several tens of li away, or even nearer forces that are still several li away, be able to give succor?

TPEM: I think he may be talking about coming to the aid of your own forces. If you are spread out far from left to right, and sparse at that, then when attacked on the left the ones on the right might not even know about it. The good general can start from hundreds of miles away yet attack with a cohesive army. Those

who are attacked out of nowhere will be incoherent even if their troops are not widely dispersed. The army that gets attacked unexpectedly will necessarily be faced with this problem. The worse that army's internal communications are, the greater will be their lack of unity and cohesion in battle.

以吾度之,越人之兵雖多,亦奚益於勝哉?

By my estimate, although the forces of the state of Yue are many, of what benefit will that be toward their victory [over the state of Wu]?

【PEM: Master Sun made strategy for the state of Wu. One nearby state, and potential enemy, was the state of Yue. The above evaluation is out of place in a general treatment of strategy and is probably some kind of intrusion.】

故曰:勝可為也。敵雖眾,可使無鬥。

So I would say: Victory can be achieved. Although the enemy is many, he can be caused not to contend.

TPEM: Here Master Sun presents us with a concrete example of how to "contend with all under heaven." He realizes the strategic disadvantages of his own smaller country. Rather than advocating a preemptive strike against Yue, he advocates moves on the chess

board of battle that will stymie the enemy. He wants a stalemate, not a traditional victory over the world.

| Pushing their buttons to achieve the abovementioned state of affairs |

故

Truly:

策之而知得失之計,

By giving them the whip, one can learn of the opponent's strategies.

作之而知動靜之理,

By arousing them to action one can learn of their patterns of movement and repose.

形之而知死生之地,

By making them take shape, one can learn to recognize the safe places and the kill zones.

TPEM: This sentence and the previous one have parallel structures, so it is clear that the author wants to make a parallel to "arouse them" in "form them." If one encounters enemy troops that are not in action, they may be in their tents, eating, or resting. It may be difficult to get any idea whatsoever as to whether

they have hidden defenses prepared, what their state of morale may be, etc. So in order to assess these matters it may be helpful to do something that will make them begin to put their defensive plans into operation, and to take careful note of what they do. Thus one will probe the enemy with feigned attacks and create other alarms.

角之而知有餘不足之處。

By probing them one can differentiate the opponent's places of ampleness and insufficiency.

故形兵之極,至於無形;無形,則深間不能窺, 智者不能謀。

So at the extreme of giving form to armies, one can arrive at formlessness for oneself. Without form, then even spies in the depths cannot descry anything, and so those who are knowledgeable cannot make any plans [against us].

因形而措勝於眾,眾不能知;人皆知我所以勝之 形,而莫知吾所以制勝之形。

Because of forms one is able to contrive victory over superior forces. The multitudes cannot [be permitted to] know what is happening to them. Everyone knows the configurations by which I achieve victory, yet none know the method by which I create the configurations that give victory.

故其戰勝不復, 而應形無窮。

So my military victories are not repeated, and the forms by which I respond (to the contingent realities encountered in warfare) are boundless.

|= Mutability and inconstancy should be constant =|

夫兵形象水,水之形避高而趨下,

Now the disposition of troops must resemble the form of water. The form of water is to avoid the heights and rush toward the low places. 兵之形避實而擊虛,水因地而制流,兵應敵而制勝。

The form of troops is to avoid the solids (hard defenses) and attack the voids. Water's flow is controlled by topography, and an army's victory is controlled by responding to enemy emplacements and their dynamic responses.

故兵無常勢,水無常形,能因敵變化而取勝者,謂之神。

So an army ought not to have a constant power configuration just as water does not have a constant form. The ability to respond to the changes of the enemy and thereby secure victor is called being spirit-like.

Fermutations =

故五行無常勝,四時無常位,日有短長,月有死 生。

Truly, the five phases have no constant winner among them, the four seasons do not fail to change phase from one to the next, the days have variations in length, and the moon waxes and wanes. **T**PEM: It would be a mistake for the general ever to assume that environmental factors are going to remain constant for long. Similarly, one cannot be inflexible in responding to enemy forces.

【PEM: The five phases are the influences felt from the five planets, or any analogous series of five interrelating influences.】 <7>《孫子兵法》第七篇 軍爭 Master Sun's Art of War Military Struggle Chapter Seven

孫子曰: Master Sun said:

凡用兵之法, 將受命於君, 合軍聚眾, 交和而舍, 莫難於軍爭。

In all cases, the method of using troops is to take one's commands from the sovereign, assemble the troops and call together their supporting elements, cause them all to blend together and take up common residence. There is nothing more difficult than military struggles.

軍爭之難者,以迂為直,以患為利。

What makes military struggles difficult is how to contrive that things that are convoluted are taken to be straightforward, and that things that are disadvantageous are made to become beneficial. 故迂其途,而誘之以利,後人發,先人至,此知 迂直之計者也。

So if one makes the opposition's line of travel become convoluted and seduces them [out of their most advantageous and originally intended path] by offering them inducements, though one be later to set off than the opposition, one will yet arrive before they do. To do this kind of thing means understanding the plotting out of the convoluted and the direct.

【PEM: When speaking in abstract terms about the maneuvers of armies, some things may seem entirely mysterious and paradoxical that can be demonstrated more easily in concrete terms descriptive of single combats.

T PEM: Arriving before somebody else, who departed earlier, may seem improbable on the battlefield, but in karate one of the ideals is the technique that displays "sen no sen" (lit. the before of before). It refers to the ability of trained fighters to react to some attacker who has moved first and yet to have the counterattack take effect early enough to disrupt the attack. A simple movement by the defender can make the attacker's movement convoluted over time.

TPEM: In the 1970s I observed a teaching interaction between a black belt instructor in Taekwondo and a junior student. The format was that the student would attack with a single punch, the teacher would block and counter attack, and then they would repeat this process a predetermined number of times.

TPEM: Since Attacker and Defender started at a certain distance from each other, in order to strike Defender, Attacker had to step forward. At mid-stride, at the point that Attacker had moved to the point that his knees and feet were closest together, Defender had already moved a full step back, and he had shifted his center of gravity (i.e., his torso) back nearly over the rear foot. At this point it would have been extremely difficult for Attacker to counter his own momentum and not continue to move forward. So Attacker, still intending to carry through with his attack, had to step forward. However, when he launched his punch he discovered that his target was just out of reach. At this point, Defender shifted his body weight and was in perfect position to make his punch connect.

【PEM: So even though Attacker had started first, Defender was the first to connect with a blow.】

| Positives and negatives |

故軍爭為利,軍爭為危。

Truly, military struggles can bring benefits, but they also can bring dangers.

舉軍而爭利,則不及。委軍而爭利,則輜重捐。 If one raises troops and only then contends for benefits, then one [often] will not arrive in time. If one uses a partial army and still contends for benefits, then one's supply wagons may be lost.

是故卷甲而趨, 日夜不處, 倍道兼行,

Therefore if we put our armor in supply wagons and rush forth without wearing it (for the sake of speed), stopping neither by day nor by night, and moving at double time,

百里而爭利,則擒三將軍,勁者先,疲者後,其 法十一而至;

and so travel one hundred li in order to contend for benefits, then the three generals will likely get seized. The sturdy troops would get there first, and the fatigued troops would arrive later, according to a ratio of 1 to 10.

五十里而爭利,則蹶上將軍,其法半至;

If one were to contend for benefits at a distance of 50 li away, then one's superior general might be thwarted, and the troops would arrive according to a ratio of half.

三十里而爭利,則三分之二至。

If one were to contend for benefits at a distance of 30 li away, then two out of three would make it.

是故軍無輜重則亡,無糧食則亡,無委積則亡。 So an army will perish without its supply wagons. It will perish without food provisions. It will perish without its stores.

= General intelligence needs =

故不知諸侯之謀者,不能豫交;

Truly, those who do not know the consultations occurring among members of the [other sides'] nobility cannot make (anticipatory combinations =) alliances.

【PEM: In a metaphorical sense, one must know the lay of the land.】

不知山林、險阻、沮澤之形者,不能行軍; Those who do not know about the configurations of mountains and forests, rugged and obstructed terrain, and swamps and marshy terrain, cannot deploy troops. 不用鄉導者,不能得地利。

Those who do not use local guides cannot take advantage of the terrain.

TPEM:This is a repetition of ideas expressed earlier, and probably was repeated here as a commentary from earliest times.

【 PEM: One of the puzzling things about the approach to real or potential conflicts in the far corners of the world is how little credence U.S. officials give to the observations of long-term American, British, and other similar residents in those countries. The most careful and professional of observers can learn little for themselves if led from place to place on a tight schedule by local U.S. military or civil authorities. Local guides can give useful information not only on the physical terrain, but also on the psychological, sociological, and political lay of the land.】

| Inconstant configurations |

故兵以詐立,以利動,以分<和>[合]為變者也。 So armed actions are established on the grounds of deception, moved along in the pursuit of benefit, and forces make their permutations by alternately separating into smaller contingents and then reuniting again later.

【PEM: I think he means that the whole military enterprise is begun knowing that deception or trickiness is a fundamental part of the game. The activities of the armed forces must take into consideration what things will be beneficial and what things will bring harm. The military activities undertaken for the sake of the nation are not to be limited by a rigid approach to the assignment of individual soldiers to larger and larger units of organization.】

= Description of a desirable army =

故 Truly, 其疾如風,

in haste it is like the wind,

其徐如林,

in repose it is like the forest,

侵掠如火,

in invading and plundering it is like the fire,

不動如山,

in remaining immobile it is like the mountain,

難知如陰,

in being inscrutable it is like the yin (the dark side), and

動如雷震。

in action it is like thunder and earthquakes.

| How to use such an army |

掠鄉分眾, 廓地分<守>[利],

Plunder the villages and divide [the spoils] up [among] the masses of troops, enlarge one's boundaries and divide everything up (into holdings for sub-commanders, et al.),

懸權而動,

Weigh things in the balance and only then move.

先知迂直之計者勝, 此軍爭之法也。

Those who first know the plotting out of the convoluted and direct will win. Such are the methods of military conflict.

| Communications under various conditions |

軍政曰: 言不相聞,故為金鼓,視不相見,故為 旌旗。

"Military Administration" says: When verbal communications cannot be heard, then use brass (gongs) and drums. When visual communications cannot be seen, then use banners and flags.

【 PEM:"Military Administration' is a document known to Master Sun.】

夫金鼓旌旗者, 所以一人之耳目也。

Now the gongs and drums and the banners and flags are ways to unify the (ears and eyes =) attention of the people.

人既專一,則勇者不得獨進,怯者不得獨退,此 用眾之法也。

Once the people are thus united, the bold ones will be unable to advance independently, and the timid will not be able to retreat independently. This is the method for employing masses of people.

故夜戰多火鼓 畫戰多旌旗 所以變人之耳目也。 So during night battles one mostly depends on fire signals and drums, but in daylight battles one mostly uses banners and flags. In this way one responds to the differing abilities (under the circumstances) of ears and eyes.

= Responding to environmental changes =

故三軍可奪氣,將軍可奪心。是故朝氣銳,晝氣惰,暮氣歸。

Truly, one can snatch the lifebreath (élan vital, spirit) of the three armies. One can rob the hearts and minds of their generals. [How?] The spirit is sharp and aggressive in the morning. It becomes indolent in the middle of the day, and in the evening it seeks to return to its safe abode.

故善用兵者, 避其銳氣, 擊其惰歸, 此治氣者也。 So those who are adept at using soldiers avoid expressions of the [opposition's] troops' aggressive spirits, and attack during their indolence and desire for respite. This is the way to control the spirits of the troops.

以治待亂,以靜待譁,此治心者也。

Use [our] well trained [troops] to respond to [their] (civil or military) disorder, use [our] tranquility to respond to [their] clamor. This is the way to regulate the minds of the troops.

【PEM: This approach implies training beforehand so that the troops will tend to remain under control and tranquil even in a battle.】

以近待遠,以佚待勞,以飽待飢,此治力者也。 Use [our] resources that are close at hand to treat what is [threatening] at a distance. Use [our] rested condition to deal with [their] fatigue. Use [our] sufficiency to deal with [their] famine. This is the regularizing of power. 【PEM: The basic idea, continuing from the passage above, is to maintain a position where one's own resources are close at hand, and then attackers from far away will be forced to maintain a long supply line. Create situations in which one's own side can get rested whereas the opposition gets fatigued in the process of getting at you.】

無邀正正之旗,無擊堂堂之陣,此治變者也。 Do not join battle with armies that display

perfectly ordered flags. Do not attack those who are beautifully deployed. That is the way to adapt to permutations.

Rules of thumb

故用兵之法,高陵勿向,背丘勿逆,佯<卻>[北] 勿從,銳卒勿攻, 餌兵勿食,歸師勿遏,圍師 必闕,窮寇勿迫, 此用兵之法也。

Truly, the way to use soldiers is not to head toward high places. Do not run counter to [those with] low hills at the[ir] backs. Do not pursue a feigned [all-out] retreat. Do not attack crack troops. Do not bite on troops that are offered as bait. Do not hinder retreating armies. Surrounded armies must be offered a loophole by which to sneak away. Do not corner desperate thugs. These are the laws for using troops.

【 PEM: There is a difference between letting surrounded troops move home en mass and in good order, and letting them slowly straggle homeward. In the latter case it will be difficult for them to regroup, and many soldiers may desert on their way home without supervision.】

<8>《孫子兵法》第八篇 九變 Master Sun's Art of War The Nine Permutations Chapter Eight

孫子曰: Master Sun says:

凡用兵之法, 將受命於君, 合軍聚眾, 圮地無舍, 衢地<交和>[合交], 絕地<勿>[無]留, 圍地則謀, 死地則戰。

According to the way of using warfare, the receive commands generals from their sovereigns, they assemble the armies and bring together the masses. They do not take their abode in harrowing and inhospitable lands, they maintain harmonious communications across areas spanned by concourses, but refuse to remain in places where they can become isolated. If they are in areas that [start to] get surrounded, they will engage in evasive behavior and deceptions, but if they find themselves on deadly land they will fight.

Things to avoid

途有所不由,軍有所不擊,城有所不攻,地有所 不爭,君有所不受。

There are roads that one will not go down, armies that one will not attack, city walls that one will not besiege, areas for which one will not struggle, and commands of sovereigns that one will not accept.

= The General =

故將通於九變之利者,知用兵矣;

Truly, the general who is totally conversant regarding the benefits of the nine classes of permutations is one who knows how to use soldiers.

將不通[於]九變之利[者],雖知地形,不能得地 之利矣;

The general who is not totally conversant regarding the benefits of the nine classes of permutations will not be able to take advantage of the terrain even though he may know its contours. 治兵不知九變之術,雖知地利,不能得人之用矣。

If those who regulate troops are not totally conversant regarding the techniques pertaining to the nine classes of permutations, then even though they know the advantages offered by the land, they will be unable to secure the utility of human beings.

是故智者之慮,必雜於利害。

So the assessments of those who are knowledgeable must take cognizance of both benefits and liabilities.

雜於利,而務可信也;

To the extent that their cogitations are sensitive to considerations of benefit, they may be able to keep faith in regard to their responsibilities.

雜於害,而患可解也。

To the extent that their cogitations are sensitive to considerations of liabilities, it will be possible to extricate themselves from suffering. 是故屈諸侯者以害,役諸侯者以業,趨諸侯者以利。

For this reason, the [resistance of the] nobles is crumpled by subjecting them to injuries. They are enslaved by subjecting them to tasks. They are herded by offering them benefits.

故用兵之法,

So the method of using soldiers [is as follows]:

無恃其不來, 恃吾有以待也;

Do not depend on [the opposition's] not coming. Depend, instead, on having something to meet them with.

無恃其不攻, 恃吾有所不可攻也。

Do not depend of their not attacking. Depend, instead, on one's own invincibility.

Five perils=

故將有五危:

Truly, generals face five perils:

必死可殺 ; 必生可虜 ; 忿速可侮 ; 廉潔可辱 ; 愛民可煩。

Daredevils can get themselves killed. The overly cautious can get captured. A spirit that plunges ahead can lead to getting fooled. Moral fastidiousness can lead to disgrace. Being too sparing of the people can result in vexations.

【PEM: These are all instances of good things taken too far. Boldness is good, but only if tempered by a clear awareness of one's own limitations. Caution is good, but not if one shies from brambles while fleeing for one's life. Even something as laudable as taking good care of the people can be a problem if those people begin to feel that they can take advantage of the leader's good nature.】

凡此五者,將之過也,用兵之災也。覆軍殺將, 必以五危,不可不察也。

The above five items are transgressions that generals make, and the cause of disasters in troop use. The reason for armies to be put to rout and for generals to be killed must be found among those five factors, and one cannot fail to take cognizance of them.

<9>《孫子兵法》第九篇 行軍 Master Sun's Art of War Moving Troops Chapter Nine

孫子曰:

Master Sun says:

凡處軍、相敵,

In all cases of deploying troops to respond to an enemy:

絕山依谷,

Cut [through] the mountains by depending [on the interposed] valleys.

視生處高, 戰隆無登,

Mind the hospitable places, and gain control of promontories, but when battling against troops who themselves have the advantage of such high positions, do not head [directly] upwards [to challenge them].

此處山<上>之軍也。

This is the way to deploy troops in the mountains.

= Water=

絕水必遠水;

If you have cut through a river, get away from it promptly.

客絕水而來, 勿迎於水內,

Don't meet the enemy in the water.

令半濟而擊之,利;

It is better to let the enemy get half way across [before attacking].

欲戰者,無附於水而迎客;

If you want to fight, do not stick close to the water to meet them.

視生處高,無迎水流;

Keep in mind what are actually the advantageous positions, and gain control of high positions; do not meet them in the flowing stream.

此處水上之軍也。

These are the ways of dealing with military encounters on the water.

Low lands

絕斥澤,

To cross through a swamp or a marsh,

惟亟去<無>[勿]留;

the only way is to go rapidly and not stick around.

若交軍於斥澤之中,必依水草,而背眾樹,此處 斥澤之軍也。

If one crosses paths with an opposing army in a swamp or marsh, one must depend on water vegetation and put massed trees at one's back. This is the way to deploy troops in swamps and marshland.

Flat lands

平陸處易, 右背高, 前死後生, 此處平陸之軍也。 In deploying troops on flat land choose easy terrain. One's right [flank should be kept] rearward and higher. Keep any fatal land ahead and safer land behind. This is the way to deploy troops on a plain.

T PEM: When a line of soldiers is exactly perpendicular to the line of travel, having one soldier immediately to the right of a right-handed soldier will

mean that right-handed soldier's actions will interfere with the soldier on his right. A sword wielded with the right hand will be likely to cut anyone standing immediately to the right. Similarly, in modern times, consideration should be given to the trajectory of ejected shell casings. For swordsmen, having all the right-handed ones together and arranged so that each is somewhat behind the one on his left will be the best way to avoid interference and unintentional injuries. Left-handed swordsmen should be grouped on the far left, something Master Sun did not bother to mention.

C PEM: It is better for one's troops to have to move into more difficult terrain when on the attack and have more easily negotiated terrain behind them. That is because having easily negotiated terrain where the enemy is located but difficult terrain behind oneself would tend to bottle up one's troops if they needed to retreat.

凡此四軍之利,黃帝之所以勝四帝也。

The military benefits of these four are that by which the Yellow Emperor overcame the four emperors.

【PEM: The legendary Yellow Emperor faced and defeated four enemies.】

Adapting to natural variations

凡軍好高而惡下, 貴陽而賤陰, 養生而處實, 軍 無百疾, 是謂必勝。

All armies favor the high ground and hate to occupy low positions. They value the sunny and despise the dark and gloomy. They nourish life and take their positions in locations offering them good resources. The army's not being faced with the hundred ailments is regarded as a necessary condition for victory.

【 PEM: Note that Master Sun has noticed the hygienic advantages of high ground and ample ultraviolet radiation.】

丘陵隄防,必處其陽,而右背之。此兵之利,地之助也。

In the case of hills, embankments, and dikes, one must take one's position on their sunward side, and keep the higher ground to one's back and right side, for this is beneficial to the troops and gives them the aid of the terrain.

上雨水沫至, 欲涉者, 待其定也。

When rains increase and the foaming waters threaten, even if one desires to cross [the stream], one must wait until such time as the waters stabilize.

【PEM: These conditions predict a flash flood.】

凡地有絕澗、天井、天牢、天羅、天陷、天隙, 必亟去之,勿近也。

In all cases where lands have dividing mountain streams, natural wells, natural pens, natural nets, natural pitfalls, natural fissures — you must get out. Do not approach.

吾遠之, 敵近之; 吾迎之, 敵背之。

If I keep my distance from these natural hazards but the enemy approaches them, then I can approach the enemy while the enemy troops have their backs to them.

軍旁有險阻、潢井、蒹葭、林木、翳薈者,必謹覆索之,此伏奸之所也。

Whenever our army's flank is in the vicinity of rugged obstructions, ponds and wells, reeds and bullrushes, forests and groves, or screening undergrowth, one must double one's attempts to scout them because these are the places where enemy elements will lurk.

On the lookout

[敵]近而靜者,恃其險也;遠而挑戰者,欲人之 進也;其所居易者,利也。

When the enemy is near and remaining silent, they depend on the ruggedness of the terrain. When the enemy is far and challenging us to war, they desire us to approach their easily defended position. A situation in which the enemy takes up exposed positions is an offered bait.

| Interpreting signs |

眾樹動者,來也; 眾草多障者,疑也;

When there are movements of many trees, it is [a sign of] approaching [enemy troops]. When one is obstructed by heavy growths of vegetation, one must be filled with trepidation.

鳥起者, 伏也; 獸駭者, 覆也;

When birds are flushed it is because people are concealing themselves in ambush. When animals are bounding away, it is because of people under cover [starting to move in on us].

塵高而銳者, 車來也; 卑而廣者, 徒來也; If dust rises high in a narrow cloud, that signals the approach of chariots. If [the dust] forms a low and wide cloud, that signals the approach of foot soldiers.

散而條達者,樵採也; 少而往來者,營軍也。 If dust clouds are dispersed and form separate tracks, that signals their foraging for wood. If dust clouds are minor and come and go, that indicates the making camp of troops.

| Signs of incipient action |

辭卑而益備者,進也; 辭<詭而>強[而]進驅者, 退也;

If an enemy emissary's words are humble yet give benefit to [his growing] preparedness, he intends to advance. If their words are full of sophistries and indicate the intent to drive in by force, they will [in fact] retreat.

輕車先出其側者,陣也;

If light chariots first deploy from the sides of their column to take up flanking positions, that signals troop deployments [forward].

【PEM: By deploying rapid attack forces to wing positions, their generals prepare for several eventualities: As the main body of their infantry troops move forward, they might require reinforcement at points where they meet unexpected resistance. On the other hand, the chariot forces could sweep around their opposition's flanks to attack them from the side or from behind.】

無約而請和者,謀也;

Those who request harmony without demanding any preconditions or guarantees by treaty are plotters.

【PEM: In a realistic situation one would expect the opposition to impose conditions and/or seek guarantees. Not doing so indicates that the opponent has never anticipated the agreement running its normal course.】

奔走而陳兵者,期也; 半進半退者,誘也。

When troops are rushing forward to take determinate positions, it is an indication of a definite plan. When troops seem to advance and then to retreat, that is an effort to tempt their opposition [into an ambush or into making a hasty unplanned attack, on account of seeing them milling around].

杖而立者, 飢也; 汲而先飲者, 渴也;

Troops that need to support themselves on staffs or canes are starving. Those who drink immediately upon drawing water are parched with thirst.

見利而不<知>進者, 勞也;

Those who perceive benefit and yet fail to advance toward it are exhausted.

鳥集者, 虚也 夜呼者, 恐也;

Birds flock to places where there is a void. Troops who cry out in the night are afraid.

【 PEM: Crying out at night might include loud challenges being issued by their sentries.】

軍擾者,將不重也;

If the troops are distraught or turbulent, their general lacks gravitas.

【PEM: If this is a new condition it could indicate that the general has lost confidence in himself.】

旌旗動者, 亂也; 吏怒者, 倦也;

If their flags dip and bob around, that is an indication of chaos among the troops. If their officers act indignant, that indicates that their troops are deeply fatigued.

殺馬肉食[者],軍無糧也;懸<甑>[缻]不返其舍者,窮寇也;

If their troops are killing their horses and eating their meat, the troops are without provisions. If the caldrons are not put away after use, they [have degenerated into] being little more than impoverished bandits.

【PEM: Such treatment of ordinary implements of group life indicates an extreme lack of military discipline.】

諄諄翕翕,徐與人言者,失眾也; 數賞者,窘 也;

Those [generals] who are constantly being agreeable and speak gently to people have lost command of the masses. Those who frequently give out rewards are desperate.

數罰者, 闲也;

Those who repeatedly punish their subordinates are in a jam.

先暴而後畏其眾者,不精之至也;

Those who first explode in rage and afterwards stand in fear of their masses have reached this pass as a result of extreme personal shortcomings.

來委謝者,欲休息也。

When individuals come offering insincere blandishments, they [actually] desire a rest.

兵怒而相迎,久而不合,又不相去,必謹察之。 When soldiers become angry and clash, and then for a long time they remain disunited, yet they do not actually break contact, one must carefully investigate this matter.

【 PEM: Apparently Master Sun's experience has taught him that there could be many different causes for this kind of behavior.】

兵非貴益多<也>,惟無武進,足以並力、料敵、 取人而已。

[As for] troops, one is not [to be] concerned about the enemy's augmentation of its troop forces. It is sufficient only that the enemy should make no military advance. It is sufficient for our side to maintain parity, understand the enemy, and then take them.

夫惟無慮而易敵者, 必擒於人。

Now it is only those who do not take due thought and who underestimate the enemy who inevitably will be taken captive by others.

| Psychology of conscript management |

卒未親附而罰之,則不服,

If foot soldiers have not bonded and yet you punish them, then they will not submit to you [willingly].

不服則難用。

If they do not submit to you willingly, then it will be difficult to get anything out of them.

卒已親附而罰不行,則不可用<也>。

If troops have already bonded and their superiors do not use punishments [when merited] then those become troops that cannot be employed.

TPEM: Conditions are entirely different when one is dealing with fresh conscripts and with well indoctrinated troops. The former cannot be punished because they have neither knowledge of what is expected of them nor confidence that their officers are well intentioned toward them. The latter already know both that their officers deserve their respect and that the troops have responsibilities to each other and to their superior officers. So punishing the first group would be unjust, and failing to punish the second group when they have done wrong would be irresponsible.

故令之以文, 齊之以武, 是謂必取。

So command by the ornaments of culture and even out the rough spots by military discipline and then one may take [effective control of] them.

TPEM: Here Master Sun gives his summary account of how to take troops through basic training. In the civilian world it would translate well to the basic philosophy of Confucius who teaches us to elicit feelings of empathy, make youngsters aware when they are failing to pull their own share of the load, model for them the best ways of handling intensely emotional and often conflictual social situations, and teach them how to recognize who is in the right and who is in the wrong in situations of social conflict. Confucius believed that these kindly ways of expanding the awareness of natural human ethical motivations will generally prevent serious social problems. The criminal justice system was to be in place to take care of the situations when despite the best efforts something went drastically wrong and forceful corrective action would have to be taken.

令素行以教其民,則民服。令不素行以教其民, 則民不服。

When those in command have chaste personal deportment and by that means teach their people, then the people will be obedient. When those in command do not teach their people by the means of their own chaste personal deportment, then the people will not be obedient.

令素行<者>,與眾相得也。

Those who have chaste personal deportment and the multitudes with whom they interact both gain. <10>《孫子兵法》第十篇 地形

Master Sun's Art of War

Terrain

Chapter Ten

孫子曰:

Master Sun said:

地形、有

The varieties of terrains include

通者

(1) communicating, (reachable, accessible)

有掛者、

(2) hooked on, hanging suspended, barbed (entrapping)

有支者、

(3) branching, forked, deadlocked, stymied

有隘者、

(4) confined

有險者、

(5) rugged, dangerous, precipitous, and

有遠者。

(6) remote [from one's own encampment or sphere of influence]

= Descriptions of the above six terrains =

我可以往,彼可以來,曰通。

When I can move forward, and the other side can come to me, that is called "communicating" (i.e., reachable, accessible).

通形者, 先居高陽, 利糧道以戰, 則利。

As for communicating (form-ation =) landforms, if one first takes up a position in the high lands and in the sun, and makes improvements in one's supply lines, then one will hold an advantage in warfare.

可以往,難以返,曰掛。掛形者,

When I can move forward, but it is difficult to move back, that is called "barbed." In landforms of this barbed variety,

敵無備,出而勝之, 敵若有備,出而不勝,< 則>難以返,不利。

if the enemy is not completely prepared and one goes forward, one will overcome them. If the enemy is completely prepared and one goes out and does not win, then it will be difficult to retreat, and that is not advantageous.

我出而不利,彼出而不利,曰支。

When it will not be advantageous for me to go (out =) forward, and it will not be advantageous for the opposition to go forward, then that is called "stymied."

支形者, 敵雖利我, 我無出也, 引而去之, 令 敵半出而擊之, 利。

Deployments that occur with landforms of this "stymied" nature are such that even if the enemy offers me an advantage I will not go forth. I will pull back and depart from the enemy, causing the enemy to partially come out, and then I will attack him to my advantage.

隘形者,我先居之,必盈以待敵。若敵先居之, 盈而勿從,不盈而從之。

With landforms that are confined, if I first occupy such a position, then I must fully invest my position and await the arrival of my enemy. If the enemy first occupies such a position and fully invests it, then I must not follow on to attack. Only if he fails to fully invest his position can I then follow on to attack.

險形者,我先居之,必居高陽以待敵;若敵先居之, 引而去之,勿從也。

With landforms that are rugged and precipitous, should I first occupy them, then I must take up a position high and on the sunny side to await the advance of the enemy. Should the enemy get there first, then I will seek to "pull" him by going away, and will not follow him [to attack in the rugged terrain].

遠形者,勢均,難以挑戰,戰而不利。

With landforms that are remote, if forces are equal then it is difficult to provoke the enemy to battle, and even if there is a battle it will not be to our advantage.

【PEM: When contended areas are very peripheral to one's own heartland, holding such a position may not offer enough advantage to matter. 】

凡此六者,地之道也,將之至任,不可不察也。 All of these six involve the way of terrain, and the highest responsibilities of the general, and they must be carefully investigated.

Failure factors

故兵有走者、有弛者、有陷者、有崩者、有亂者、 有北者。

Truly, [problematical] troops include those who are in flight, those who are lax or insubordinate, those who have fallen into pitfalls, those who have been crushed, those who are in disorder, and those who suffer a complete rout.

凡此六者,非天地之災,將之過也。

All of these six cases are not natural disasters but [are due to] the mistakes of their generals.

| Signs of trouble |

夫勢均,以一擊十,曰走。

Now if forces are equal but the general directs one to attack ten, then this portends retreating in flight.

卒強吏弱, 曰弛。

If the foot soldiers are strong but their officers are weak, this portends laxity or insubordination.

吏強卒弱, 曰陷。

If the officers are strong but their troops are weak, this means landing in a pitfall.

【PEM: The pitfall is that the men become physically exhausted, but not their officers, and why is that? Because of failures of command.】

大吏怒而不服,遇敵懟而自戰,將不知其能,曰崩。

If the upper echelon officers are angry and not obedient, and when they encounter the enemy they express their rage by making an attack entirely on their own, and the general is not yet even in a position to know whether they are capable of [of winning], that portends getting crushed.

將<懦>[弱]不嚴,教<導>[道]不明,吏卒無常,陳兵縱橫,曰亂。

If the general is weak and is not strict, and if his leadership is not eminent, then there will not be a normal relationship between the officers and the foot soldiers, and the formations of troops will be sloppy and unruly. That is called disorder.

將不能料敵,以少合眾,以弱擊強,兵無選鋒, 曰北。

If the general is unable to comprehend the enemy, if he uses small numbers of troops to come to grips with multitudes of troops, if he uses weakness to attack the strong, and the troops do not have designated probing units, this portends a complete rout.

【PEM: Literally, the text speaks of these troops not having a "choosing point" or a "selecting group on point." The only way for a large group to be effective against a numerically superior force would be for small detachments to repeatedly probe the perimeter of the larger force until a weak point could be found. An indiscriminate attack against superior forces would result in heavy losses for no benefit, and the soldiers would revolt against their lives being wasted.】

凡此六者,敗之道也,將之至任,不可不察也。 All six cases are the ways that lead to defeat. These are matters that are pertinent to the highest responsibility of a general, and they must be given adequate attention and study.

| Handling oneself well |

夫地形者,兵之助也。料敵制勝,計險阨遠近, 上將之道也。

Now the terrain [should serve as] an aid to the troops. Understanding the enemy makes for victory. Plotting out the rugged and the smooth passage, the far and the near, is the way of the best general.

知此而用戰者必勝;不知此而用戰者必敗。 If, knowing this, one uses warfare, then one must win. If one does not know this and uses warfare, then one must lose.

故, Truly, 戰道必勝, 主曰無戰, 必戰可也;

if by the principles of warfare one must win yet the sovereign says not to go to war, then in case warfare becomes unavoidable one may do battle.

戰道不勝, 主曰必戰, 無戰可也。

If according to the principles of warfare one will not win and yet the sovereign says that one must go to war, it is permissible not to do battle.

故進不求名,退不避罪, <惟>[唯]民是保,而 利於主,國之寶也。

So advance without seeking fame, retreat without trying to escape blame. heeding only that the people are to be protected, then that will be of benefit to the sovereign and one will be a treasure to the nation. 視卒如嬰兒,故可<以>與之赴深谿; 視卒如愛 子,故可與之俱 死。

View the common soldiers as though they were infants, and only then can one order them to enter into a chasm. View the common soldiers as though they were your own beloved sons, and only then can you ask them to risk their lives.

【PEM: The point is that the general can never fail to have the highest level of concern for his own troops. He will send them into great danger only if the gravity of the situation is such that he would require his own children to face those dangers. This moral standard is similar to that of Kant.】

厚而不能使,

If a soldier is so personally loyal that he cannot be given any duties, or

愛而不能令,

if a soldier is so beloved that he cannot be commanded, or

亂而不能治,

if a soldier is so disorderly that he cannot be corrected,

譬若驕子,不可用也。

then he is comparable to a spoiled child and may not be employed.

【PEM: This is really a comment on the personal failings of a leader who plays favorites with his subordinates, has a subjective attitude with regard to his subordinates, etc.】

= Evaluation of both sides =

知吾卒之可以擊,而不知敵之不可擊,勝之半也;

To know one's own troops can strike yet not that the enemy troops cannot strike is only halfway to victory.

知敵之可擊,而不知吾卒之不可擊,勝之半也; To know that the enemy troops can strike yet not know that one's own troops cannot strike, is only halfway to victory. 知敵之可擊,知吾卒之可以擊,而不知地形之不可<以>戰,勝之半也。

To know that the enemy can be struck, and know that one's own troops can strike, yet not know that conditions of terrain are such that one cannot engage in battle, is only halfway to victory.

故知兵者, 動而不迷, 舉而不窮。

So those who really know soldiering will move and not get lost, and will take action without running out of responses [to newly evolved circumstances].

故曰: <知己知彼>[知彼知己], 勝乃不殆; 知天知地, 勝乃 可全。

So it is said: By knowing one's counterpart and knowing oneself, victory will not be in question. By knowing the [factors of] heaven and earth, one's victory can be complete.

<11>《孫子兵法》第十一篇 九地 Master Sun's Art of War The Nine Terrains Chapter Eleven

孫子曰:

Master Sun said:

<凡>用兵之法,

In <all> methodologies for using troops:

有散地,

There are positions that are unconsolidated.

有輕地,

There are positions that are lightly held.

有爭地,

There are positions that are under contest. 【PEM: Porkchop Hill】

有交地,

There are positions that are interconnected.

有衢地,

There are positions on a concourse.

有重地,

There are crucial positions.

有圮地,

There are positions that are harrowing and inhospitable (badlands).

有圍地,

There are positions that are surrounded.

有死地。

There are positions that are deadly.

= Characterizations of potential battlefields =

諸侯自戰其地者,為散地。

When the nobles fight among themselves in their own lands, those are called unconsolidated lands.

入人之地[而]不深者,為輕地。

When one has made shallow incursions into the lands of others, those lands are called light(ly held) lands. 我得則利,彼得亦利者,為爭地。

When some land would be beneficial for me to obtain and also beneficial to others should they obtain it, that is called a contested land.

我可以往,彼可以來者,為交地。

Lands into which I can move, and into which others can also come, are called intercomnecting lands.

諸侯之地三屬,先至而得天下之眾者,為衢地。

When lands of members of the nobility who are grouped into several factions are such that some lands can be taken by whomever gets there first, and then [possession of those lands will provide access to the] multitudes of all under heaven, these lands are called concourses.

入人之地深, 背城邑多者, 為重地。

When one has made deep incursions into some land and has at one's back many city walls and principalities, those places are called crucial lands.

山林、險阻、沮澤,凡難行之道者,為圮地。

All lands that are hard to travel through on account of mountains and forests, rugged obstructions and defiles, marshes and swamps are called harrowing and inhospitable lands (badlands).

所<從>由入者隘,所從歸者迂,彼寡可以擊<我>[吾]之眾者,為圍地。

Those places that have narrow access corridors and are hard to get back out of, so that the other side can use a small number of troops to attack multitudes of my own troops, are called surrounded lands.

疾戰則存,不疾戰則亡者,為死地。

When [only] by frenzied warfare can one secure survival, but by less active warfare one will perish, those positions are called deadly.

是故散地則無戰,輕地則無止,爭地則無攻,交地則無絕,衢 地則合交,

For those reasons, in unconsolidated lands one will not fight wars, in lightly held lands one will not tarry, in contested lands one will not make aggressive actions, in concourse lands one will not permit oneself to be cut off, and in the corridor areas one will come together and interact with or form alliances with nearby feudal lords.

【PEM: Later on there are passages where some say Master Sun forbids the making of any alliances. Obviously the above passages casts doubt on those interpretations.】

重地則掠,圮地則行,圍地則謀,死地則戰。 In the crucial lands one will plunder, in lands that are harrowing and inhospitable one will keep moving, in lands susceptible to ambush one will keep up a screen of evasions and deceptions, and in the deadly areas one will fight.

Handling troops

古之所謂善用兵者,能使敵人前後不相及,眾寡不相恃, 貴賤不相救,上下不相收,卒離而不集,兵合而不齊。

In antiquity, those who were good at the use of troops would cause their enemies to be unable to maintain connection between their vanguards and their trailing elements, and make it so that their heavily populated areas and their lightly populated areas could not depend on each other, their crack troops and their common soldiers could not succor each other, their upper and lower echelons could not accept each other, their soldiers remained disunited and unable to flock together, and so that even if their troops became reunited they deployed or could not be otherwise maintained in a regular and smooth way.

合於利而動, 不合於利而止。

When groups come together over mutual benefits then they will go into action. Otherwise, they will grind to a halt.

敢問:「敵整眾而將來,待之若何?」

I dare to ask, "When the multitudes of enemy troops are well ordered and about to come on the scene, how should they be treated?"

曰:「先奪其所愛,則聽矣」

[The master] said: "First snatch away what they love, and then they will obey you ."

| Managing troop activities by controlling circumstances |

兵之情主速,

Speed is the master of the emotions of soldiers.

乘人之不及,

Take advantage of times when one's counterparts have not yet come into contact with you.

由不虞之道, 攻其所不戒也。

Come by unexpected pathways and attack them where they have not been warned.

凡為客之道:深入則專,主人不克。掠於饒野, 三軍足食。

In all cases wherein one moves deeply into the territory of others, then one's troops are single minded, and as a result masters of those lands cannot overcome you. Take plunder only in fertile regions, and the three armies will get enough to eat.

謹養<勿>[而無]勞,<並>[併]氣積力,運兵計謀, 為不可測。

Use cautious nurture and do not toil the soldiers [overmuch]. Redouble their *qi* (lifebreath) and store up their energies. Then, when moving troops one may still use strategies and plots in such a way that one will remain unpredictable.

投之無所往,死且不北,死焉不得,士人盡力。 Impel them forward so that they will have no alternate destination, and in that way they may die without opposing their orders. In order that they will not secure their own deaths, the officers and men will exhaust all their energies.

兵士甚陷則不懼,

When troops and officers are put in unavoidable conflict they will not suffer trepidation.

無所往則固,

When there is no place left to go they will be steadfast.

入深則拘,

When they are in deep then they will stick to it.

不得已則鬥。

When there is nothing they can do about it, when there is no real alternative, then they will fight.

是故其兵不修而戒,不求而得,不約而親,不令而信。

So his troops will be cautious without the need for being pruned back. Their [allegiance] will be obtained without its being solicited. They will stay close by their leader without any oaths being demanded of them. They will be faithful and trustworthy without being so commanded.

禁祥去疑,至死無所之。

Forbid omen taking and so get rid of [causes for] doubts, and they will have nowhere else to go even if faced with death.

| Distant alternatives fade under close fire |

吾士無餘財, 非惡貨也; .無餘命, 非惡壽也。 My officers have no excess of property. It is not that they despise goods. They have no great lifespan. It is not that they despise longevity.

令發之日, 士卒坐者涕霑襟, 偃臥者涕交頤。

On the day that they are commanded to set forth, both the officers and the troops will soak their tunics if they are sitting or their tears will flood their cheeks if they are lying down.

Wei Ru-lin thinks this passage relates to troops who are prevented from going to the battlefield because of minor injuries (so they are sitting up) or because of more serious injuries (that force them to lie down).

投之無所往,則諸劌之勇也。 {曹劌 and 專諸} But throw them into situations where they have no choice and they will exhibit the bravery of Zhuan Zhe or Cao Gui (two exemplary heroes).

A serpent one ought not to enrage

故善用兵者,譬如率然。

Truly, those who are good at using troops are exemplified by the Shuai Ran.

【PEM: The Shuai Ran is a mythical serpent.】

率然者,常山之蛇也。

The Shuai Ran is the serpent of Chang Mountain.

擊其首則尾至,擊其尾則首至,擊其中則首尾俱至。

If you attack its head then its tail will get you. If you attack its tail then its head will get you. And if you attack it in the middle then both ends will get you.

敢問:「兵可使如率然乎?|

May I ask: "Is it possible to make troops be like the Shuai Ran?"

曰:「可」。夫吳人與越人相惡也,當其同舟共 濟而遇風,其 相救也,如左右手。

Answer: Yes. Now the people of Wu and the people of Yue hate each other. But should they share the same boat to attempt a crossing and encounter a wind storm then they will attempt to save each other and they must cooperate with each other as do left hand and right hand.

| Psychological controls are superior to physical restraints |

是故方馬埋輪,未足恃也。

Truly, even though horses be hobbled and chariots have their wheels buried, so doing would provide us with nothing to depend on.

【PEM: If you fetter horses and disable chariots could the troops still not flee?】

齊勇如一, 政之道也,

Regularize their bravery so that it is entirely equal [among all your troops], and that is the way to secure good (governance =) control.

TPEM: This part sounds very cynical, as do the parts that talk about moving troops without giving them any idea of where they are going. But if the troops do

not know where they are going ahead of time then there is no way for that information to be secured by enemy spies. Similarly, if the army is going to have to fight anyway, then it is important to keep it united. If desertion occurs, the fleeing troops will likely be picked off one by one, and those who remain loyal are then at greater risk. From an entirely utilitarian point of view, it is not in the general's interest to unnecessarily lose even a single soldier. It is his responsibility to see the best way to maintain group cohesion, conformity to the strategy, and a fighting morale. How he does this may depend on the level of discipline of the troops he has on hand. A well trained army might see the need to follow orders and for some units to take on hard duties from time to time. A green army might require some degree of manipulation to avoid its falling apart psychologically and getting wiped out as a result.

剛柔皆得,地之理也。

[When] both firm and supple are properly assessed, this work provides the pattern or topography of the land.

also apply to tactics such as strong ripostes and fading back out of harm's way.

故善用兵者,攜手若使一人,不得已也。 So those who are good at employing troops

so those who are good at employing troops are linked to them as though to a single person — unstoppable!

TPEM: A general who is connected to his troops just as the mind is connected to all the parts of the body will, through them, have awareness not only of the lay of the land but also of all that passes through that land, all that threatens his troops, etc.

【PEM: There has to be a connection between the last two sentences. If you know the lay of the land perfectly, and if you can get reports from your troops on a fairly dependable basis, then you may achieve Fingerspitzengefühl, i.e., the mental ability to somehow seem to be in intimate touch with all aspects of a battlefield situation, even during the most intense fog of war. (Please see Appendix Two.)】

| Importance of the control of information |

將軍之事:靜以幽,正以治。

The tasks of a general are to achieve tranquility by use of the hidden, and to achieve uprightness by the use of repairative efforts. [Or maybe it is supposed to be: The tasks of a general are to be tranquil in order to become hidden, and to use uprightness in order to regulate things.]

TPEM: Earlier the general was required to not be subjective in his treatment of individual soldiers or groups of soldiers. Here he is advised on how to maintain this objective frame of mind.

or

The ordinary expectation of a general is to be "commanding," etc. But here Master Sun advises tranquility and uprightness — which are moral virtues (associated with Daoism and Confucianism respectively). **1**

能愚士卒之耳目, 使之無知。

The general is able to stupefy the eyes and ears of the officers and troops and make them unknowing.

易其事, 革其謀, 使人無識。

The general is able to change the things that he does, to alter radically his plots, and so to keep everyone in ignorance about them.

【PEM: Fearing spies, and/or fearing that troops will lose heart and flee in disorder.

【 PEM: Wei Ru-lin says that the troops are to be able to subordinate their own judgment in the service of their military cause.】

易其居, 迂其途, 使人不得慮。

The general is able to change the camps of his troops, and to make convoluted their marches, thereby keeping other people in the dark about them.

帥與之期, 如登高而去其梯。

The leader gives them a predetermined course of action, as though leading them to a high place and then removing their ladder.

The image is clear. The general sends his troops into a certain situation, the dangers of which (and the advantages of which) may not be known by the soldiers. It is their job to follow orders, and then even though some of them might be wavering, when the trigger is pulled they no longer have the option of

wavering because they are in a hot fight. If the general has done his job, he is springing one part of a trap or other operation. His next move may be to order the same unit to retreat, and in retreating they will draw the enemy between ambuscades set up on both sides of the escape route, but it will not be safe to disclose this intention to anybody ahead of time.

帥與之深入諸侯之地,而發其機,<焚舟破釜>若驅群羊。驅而往,驅而來,莫知所之。

The leader has them make deep entries into the territories of the feudal lords and then pulls the trigger, burning boats and crushing caldrons and so functions like a shepherd driving a flock of sheep. Where they are driven they will go, and none know where they will end up.

【PEM: There are stories about Julius Caesar burning both boats and bridges behind him to make his troops aware that there was no alternative to fighting and winning. In 711 Tariq ibn Ziyad burned his ships after landing his troops on the Iberian Peninsula.】

聚三軍之眾,投之於險,此將軍之事也。

When one assembles the masses of the three armies, and throws them into the abyss, this is the act of a general.

TPEM: In response to some kind of invasion or assault, an independent group of defenders might make some aggressive move on their opponents, but it is doubtful that they would know when to continue an assault despite seeming difficulties, or call a strategic retreat despite seeming to have the enemy on the run. Going into a very dangerous situation has to be the reasoned tactic of a general. The general is not truly a general until the moment when all of his previous planning and preparations come to an end and the fate of his army and his nation rests on decisions he must then make in the fog of war. At this time there may be no leisure for consultations with others. The general must "drink from a fire hose" and somehow correctly process all the information coming in to him.

九地之變,屈伸之利,人情之理,不可不察也。

The transformations among the nine kinds of lands, the benefits of shrinking together or stretching out (defensive and offensive postures), and the patterns in the feelings of men, must all be given adequate investigation.

凡為客之道:深則專,淺則散。

The ways for being an interloper upon the lands of others: If one's entry is deep, everyone will be together. If one's entry is shallow, then everyone will fan out.

【PEM: Fanning out can both be a function of there being neither an effective defense against movement in any direction, and also of not discovering anything in particular to take as one's objective.】

去國越境而師者,絕地也;

When one leaves one's own country and crosses over the borders of another while acting as an army, that is to sever a land (i.e., to sever one's connection with home).

四達者,衢地也;

When there is easy access in all four directions, one is in a "concourse" land.

入深者,重地也;

When the entry is perforce deep, that is a crucial land.

入淺者,輕地也;

When one's entry is perforce shallow, that is a negligible land.

背固前隘者, 圍地也;

When one's backing ground is obdurate and one's foreground territory offers only narrow and constrained pathways, one is in a surrounded area.

無所往者, 死地也。

When one is in a place where one has nowhere left to go, that is a deadly zone.

是故

For that reason,

散地, 吾將一其志;

In a dispersed territory, I must then unify their aspirations.

TPEM: There is nothing in the situation to keep the troops together. They will tend to fan out. So the general has to exert control and give them a common

goal. (Remember Dao/Way, the unifying vision of a nation.)

輕地, 吾將使之屬;

In a negligible territory, I must then cause them to come under strict control.

【PEM: Being under no discernible pressure they are likely to act negligently with regard to everything.】

爭地, 吾將趨其後;

In a contested territory, I must rapidly advance the rear [wagons].

【PEM: The supply wagons, being heavier and pulled by draft animals, will tend to plod along. But under these circumstances they will easily get too far from the vanguard and the main body of troops to be protected unless attention is paid to keeping everybody together.】

交地, 吾將謹其守;

In a territory that is well interlaced with connections to other territories, I must make careful defenses to hold it.

TPEM: Even if there is no enemy in sight, the nature of the terrain means that originally distant opposition forces could arrive on the scene rapidly. So defenses

have to be already in place in expectation of that eventuality.

衢地, 吾將固其結;

In a territory that is a concourse for the world, I must consolidate my alliances.

【PEM: In these situations it is already known that there are many actors already on the stage. So they have to be contacted and deals worked out with them whenever possible. At the very minimum one must ascertain what they are all up to.】

重地, 吾將繼其食;

In a crucial territory, I must take care to maintain our supply lines and provisions.

【PEM: Not only is it easier to get cut off, but it is likely to be harder to provision oneself locally.】

圮地,吾將進其途;

As for harrowing and inhospitable territories, I must make [rapid] inroads.

【PEM: Local resources are severely limited, and there is nothing in particular to be gained there, so one should get through these areas as soon as possible.】

圍地, 吾將塞其闕;

As for areas that are surrounded, I will stuff any loopholes.

【PEM: This part is ambiguous. If I am surrounded, then I have to maintain a defensive perimeter and not permit any weak points or loopholes. If I am surrounding someone else then I will not want that army to be able to move in any direction except those that I choose for it.】

死地, 吾將示之以不活。

follow [their leaders].

And as for the deadly zones, I will make it clear to [the opposition] that we will fight to the death.

【PEM: As the old holy man told the bedraggled cobra, "I did not tell you not to hiss."】

故兵之情: 圍則禦,不得已則鬥,逼則從。 So, the feelings of soldiers are such that if they are surrounded they will defend themselves; if they have no choice then they will struggle, and if they are pushed to it then they will

TPEM: If the soldiers perceive (accurately) that their general has their best chance for survival in mind,

then they are going to be well motivated to follow his directions.

| Looking beyond immediate circumstances |

是故不知諸侯之謀者,不能預交。

For those reasons, if one does not know about the plans and plots among the [outsider] nobility, then one will not succeed in making preparatory alliances.

【 PEM: Master Sun is still thinking about the "concourse" situation I believe. With multiple players it obviously will not work to try to make deals with two groups that are unfriendly to each other without keeping their animosities in mind.】

不知山林、險阻、沮澤之形者,不能行軍。

If one does not know the contours of mountains and forests, of rugged and obstructed territories, of swamps and marshes, then one will not be able to execute maneuvers.

【 PEM: True in itself, but this serves also as an analogy for the previous kind of situation.】

不用鄉導者,不能得地利。

If one does not use local guides, then one will not be able to secure the advantages of terrain. <四五>[此三]者,不知一,非霸王之兵也。

Those who fail to know even one of these several things, then can not be counted as the soldiers of a coalition leader.

【PEM: A 霸王 *ba wang* was, at this time, understood as a coalition leader who sought to bring peace to all of China. Only later did the term came to mean a tyrant or a hegemon.】

夫霸王之兵,伐大國,則其眾不得聚,威加於敵, 則其交不得合。

Now the soldiers of a true coalition leader, should they attack a great country, will disrupt the massing together of the legions [of the other country], and their clashing with our invading forces will not be supported by powerful diplomatic alliances in any unified action.

是故不爭天下之交,

For this reason, [if] one does not (struggle =) actively interact in all diplomatic channels in the world,

不養天下之權,

[and if] one does not nurture the power balances in all under heaven,

信己之私,

[if] one believes or puts trust in one's own personal [ideas, preconceptions, subjective interpretations etc.],

威加於敵,

[and if thereafter] one seeks to intimidate the enemy,

<則>[故]其城可拔,其國可墜。

then one's fortifications can be taken out and one's country can fall.

TPEM: My interpretation of this section is consistent with the world view exhibited throughout Master Sun's book, and with Wei Ru-lin's commentary and vernacular Chinese translation. But this passage is translated by the Denma Translation Group, Lionel Giles, John Minford, Ralph D. Sawyer, and others without all of the implicit "if... then..." constructions I have added in square brackets above. They make it seem that Master Sun would abandon his previously stated attention to diplomacy, would not see benefit in maintaining balances of power that work to the advantage of his side, is entirely arrogant and subjective, and moves into the world with the brash

intent of intimidating and overcoming all other countries, larger and smaller than his own. Wei Ru-lin, p. 216ff., supports my interpretation.

施無法之賞, 懸無政之令, 犯三軍之眾, 若使一人。

One may offer unprecedented rewards and issue lawless orders, and in doing so one may task the multitudes composing the three armies as though one were directing a single individual.

投之亡地然後存,陷之死地然後生。

If thrown into a perishing land, then afterwards they shall be preserved. If trapped in a dead zone, then afterwards they shall live

TPEM: This passage is a continuation of what the general would need to make a common understanding with all his troops: The object, when one lands in a desperate situation, is that the group should survive. Cohesiveness is not a guarantee of individual survival, but it is a way to provide the best

survival chances for the group. There can be no personal favorites played. The only consideration is that the loss of a finger does not injure survival probabilities as much as does the loss of a major organ. Master Sun is willing to offer rewards commensurate to the benefits to be gained by the nation when relying on exceptional men to take on unheard of responsibilities at variance with ordinary military and civil practice.

夫眾陷於害, 然後能為勝敗。

Now the multitudes encounter pitfalls and so suffer injuries, and yet afterwards they can carry forth to make victory out of [seeming] defeat.

【PEM: This is Master Sun's summation of the above argument. Losses are inevitable in warfare. Whether troops lose their cohesion and ability to function well or not will depend, ultimately, on how they have been led to understand their functioning as members of a group with a purpose that is linked to their highest interests, the safety of their homes and families.】

故為兵之事,在於<佯順>[順詳]敵之意,<並>[併] 力一向,千里殺將,是謂巧能成事。

Truly, the business of conducting warfare lies in pretending to comply with the intentions of the enemy, coordinating one's strength in one direction, and killing their general [by one's own generalship] from 1000 li away. To be able to do so is said to bring matters to a conclusion by means of skill.

| Implementing plans and springing traps |

是故政舉之日,夷關折符,

For that reason, on the day that matters of policy are to be taken up,

【PEM: Context show that warfare is to be the subject of discussion.】

夷關折符,

secure the passes and smash the tallies.

【PEM: The modern equipment would be to seal off all restricted areas and issue completely new identity documents, passes, etc.】

無通其使;

Do not communicate intentions to their emissaries.

【PEM: On the eve of World War II, the Japanese Ambassador in Washington, D.C. said nothing.】

勵於廟廊之上,

Exhort them (i.e. one's own decision makers) in the halls of the ancestors

以誅其事。

in order to secure their cooperation and support.

【 PEM: 誅 zhu ordinarily means "to execute" in the sense of terminating the life of a criminal. Here it means to require something of someone.】

敵人開闔, 必亟入之,

While the enemy carries out the daily affairs of life, one must drive in with great urgency

先其所愛, 微與之期。

putting before the enemy what they love so that in some small way one gives them hope [of getting something they want].

踐墨隨敵,以決戰事。

Follow the inked line to pursue the enemy and thereby make a decisive move in the battle. 是故始如處女, 敵人開戶, 後如脫兔, 敵不及拒。 So in the beginning one appears to be a virgin, and the enemy opens his door. Afterwards one runs in like an escaping rabbit, and the enemy has no time left in which to fend off the consequences.

犯之以事,勿告以言。犯之以利,勿告以害。 One may put soldiers into unpredictable situations without trying to give them detailed orders, and tell them the good things that could come as a result of these military exploits, but not dwell on the hazards.

投之亡地然後存,陷之死地然後生。 夫眾陷於害,然後能為勝敗。

So [with this kind of psychological preparation] even though they may fall into perilous situations, and even though there may be life and death stakes involved, so that the entire legion hits a injurious pitfall, nevertheless they will make victory from what seemed to be certain defeat. <12>《孫子兵法》第十二篇 火攻 Master Sun's Art of War Incendiary attack Chapter Twelve

【 PEM: Wei Ru-lin maintains that the modern equivalent of the use of fire in warfare would be the use of nuclear weapons.】

孫子曰:

Master Sun said:

凡火攻有五:

There are five kinds of incendiary attacks in all:

一曰火人,

The first is called burning people.

二曰火積,

The second is called burning accumulations.

三曰火輜,

The third is called burning supply wagons.

四曰火庫,

The fourth is called burning storehouses.

五曰火隊。

The fifth is called burning squadrons.

TPEM: Does this mean to attack military formations with fire?

行火必有因,煙火必素具。

If one is going to loose fire, there must be a good reason and means to do so. Smoke and fire [materials] must be in one's unencumbered and concrete possession.

發火有時,起火有日。

Setting fire must have its determined season, and starting fires must have an assigned day.

時者,天之燥也。日者,月在萁、壁、翼、軫也。 凡此四宿者,風起之日也。

The season is when the weather is dry. The day is when the moon is in qí, bì, yì, or zhěn. These four lunar lodges predict the days for a rising wind.

The physics and psychology of fires =

凡火攻, 必因五火之變而應之。

In all cases of fire attack, one must depend upon and respond to the five kinds of manifestations of fire.

火發於內,則早應之於外。

If a fire is set inside, then one must at the earliest time respond to it from the outside.

【PEM: One may commit sabotage internally and make an external attack while they are fighting the fire.】

火發兵靜者,待而勿攻。

If a fire is set and their troops remain quiet, one must wait it out and not attack.

【PEM: In this case the enemy is not acting as one would expect, so they are probably preparing their own ambush.】

極其火力, 可從而從之, 不可從而止。

When the fire reaches its highest power, if one can follow it then one may follow it, but if it impossible to follow it, then remain stationary.

火可發於外, 無待於內, 以時發之。

Fire can also be set on the outside. Do not wait for anything special to happen on the inside. When there is an opportunity, set it off in a timely way.

火發上風, 無攻下風。

When fire is burning upwind, do not attack at a point downwind [where one has the wind and the fire to one's back].

晝風久, 夜風止。

The winds of the daytime can persist for a long time, but the winds come to a stop at night.

【PEM: During the daytime, air rises as it is heated by the sun, which produces breezes that fan fires. Breezes of this type will die down as the sun sets.】

凡軍必知有五火之變,以數守之。

All troops must know that there are five transformations that pertain to fire, and guard themselves according to its regularities. | Thinking through consequences of using fire and flood |

故以火佐攻者明,以水佐攻者強。水可以絕,不可以奪。

So those who use fire to aid in attack are bright. Those who use water to aid in attack are strong. One can cut impounded water loose, but one cannot take control of it afterwards.

夫戰勝攻取,而不修其功者凶,命曰「費留」。 When a war is won and when what was attacked is taken, those who do not (dress =) make good use of their accomplishments are inauspicious. Those people are called "expensive to keep on the payroll."

故曰:明主慮之,

Therefore, the enlightened sovereign concentrates on thinking about things,

良將修之。

and the excellent general perfects things.

TPEM: The excellent general seeks to bring plans of the sovereign to perfection.

When not to go to war

非利不動, 非得不用, 非危不戰。

If it will not be beneficial, one does not go into action. If one will not attain a goal, one will not use military means. If it is not a crisis situation, one does not make war.

主不可以怒而興師,將不可以慍而致戰。

A sovereign should not call up the troops because he has become angry. A general should not go to the extreme of starting a war because he feels indignation.

合於利而動,不合於利而止。

If one's plans are consistent with benefit then one goes into action. If they prove inconsistent with benefit then one stops. 怒可以復喜, 慍可以復悅, 亡國不可以復存, 死 者不可以復 生。

If one is angry at one moment, one may become happy again later. If one is indignant at one moment one may become delighted afterwards. But if one makes one's country perish it cannot be brought back into existence, and those who are dead cannot come back to life.

故明主慎之,良將警之。此安國全軍之道也。

Therefore the enlightened sovereign takes great care of it. and the superior general is heedful of it. This is the way to give peace to the nation and maintain the army whole. <13>《孫子兵法》第十三篇 用間 Master Sun's Art of War The use of intelligence operatives Chapter Thirteen

孫子曰: Master Sun said:

凡興師十萬,出征千里,百姓之費,公家之奉, 日費千金。

In all cases of raising an army of one hundred thousand and setting out on a march of 1000 li, the daily outlay will be 1000 pieces of gold coming from the expenses laid upon the common people and the contributions of the nobles.

內外騷動, 怠於道路, 不得操業者, 七十萬家。 Seven hundred thousand families will be put in an uproar both internally and externally, will be kept from gainful employment by [events on] the roadways, will be fatigued as a result of being on the road, and will be unable to pursue their normal means of livelihood. 相守數年,以爭一日之勝,而愛爵祿百金,不知敵之情者,不仁之至也,

Such a condition may be maintained for several years for the sake of attaining victory on a single day. Yet if, by stinting on the costs of providing noble rank and emolument of one hundred pieces of gold, one prevents oneself from having adequate intelligence about the enemy, that is the lowest level of lack of benevolence.

非人之將也, 非主之佐也, 非勝之主也。

Such a person is not a general of the people, not an aid to the sovereign, and not the master of victory.

| Knowing before doing | Spying before knowing |

故明君賢將,所以動而勝人,成功出於眾者,先知也。

Truly, the means by which the eminent sovereigns and their worthy generals make their moves and overcome others, succeed and rise above the level of the masses, lies in their gaining prior knowledge and forewarning.

先知者,不可取於鬼神,不可象於事,不可驗於 度;必取於 人,知敵之情者也。

Those who have prior knowledge of things do not gain their knowledge from ghosts and spirits, nor do they make auguries from some kinds of events, nor to they inspect them in "metrics." The knowledge must come from human sources, by which means one comes to know the true circumstances of one's enemy.

【PEM: And, as Master Sun has argued forcefully above, the knowledge that only spies can provide cannot be obtained on the cheap.】

= The various kinds of intelligence operatives =

故用間有五:有因間,

Now there are five kinds of spies to be used: Yin ("go to" people) spies,

These are the local sources of information that the master spies will visit to get indications about what is going on. **These are the local sources of information** that the master spies will visit to get indications about what is going on. **These are the local sources of information** that the master spies will be a source of information that the master spies will visit to get indications about what is going on. **These are the local sources of information** that the master spies will visit to get indications about what is going on. **These are the local sources of information** that the master spies will visit to get indications about what is going on. **These are the local sources** of information that the master spies will visit to get indications about what is going on. **These are the local sources** of information that the master spies will visit to get indications about what is going on. **The local sources** of information that the master spies will be a spied of the local source of the local

有內間 inside spies, 【 PEM: These are spies who are "inside" the organizational structures of other states.】

有反間, counterintelligence officers

【PEM: These include both those who detect the spies of other states operating on one's own territory, but also any spies that they turn.】

有死間, dead spies

TPEM: During the Second World War, the body of a dead person was dropped into the Atlantic at a location where it would be apt to be found by Nazi forces. In the clothing of the dead man they put documents that gave false information about where Allied troops would attack the Germans. "Operation Mincemeat," devised by Sir Archibald Cholmondley and Ewen Montagu, used this means to convince the German high command that an attack on Greece or the Balkans was imminent, thus luring them into a massive diversion of military resources from Sicily, which the Allies then captured with relatively light resistance. The cases that Master Sun has in mind, however, probably include still living spies who are believed to have been found out and therefore soon to be killed. A cynic might expect spy masters to deliberately arrange for some of their spies to be captured while bearing false information.

有生間。

live spies.

【PEM: As the contrary of the preceding entry, this category would include all spies whose identities have not yet been found out.】

五間俱起,莫知其道,是謂神紀,人君之寶也。 When all five classes of intelligence operatives are put into operation and nobody knows their ways, this is called godlike planning, and it is the treasure of the rulers of men.

因間者,因其鄉人而用之也。

The "yin" intelligence sources are the people we depend on as our local contacts for information.

内間者,因其官人而用之也。

The internal agents are the other side's (compromised) officials on whom our case officers depend for intelligence.

反間者,因其敵間而用之也。

Counterintelligence officers use the enemy agents they have found out (turned).

死間者,為誑事於外,令吾聞知之,而傳於敵間也。

As for dead intelligence officers, one fabricates events that can be detected out in the open and reported to those who spy on us.

生間者,反報也。

The live intelligence officers are those who return with their reports.

故三軍之事,莫親於間,賞莫厚於間,事莫密於間。

So among the activities of the three armies, there is nothing more central than intelligence operations, and nothing should be given higher rewards than gaining good intelligence. There are no activities more secret than intelligence.

非聖智不能用間,非仁義不能使間,非微妙不能 得間之

If one is not possessed of the most sagely wisdom one cannot make good use of intelligence. If one is not benevolent and just, one cannot make good use of spies. If one is not gifted with the highest subtlety, one cannot gain the substance of intelligence.

微哉!微哉!無所不用間也。間事未發,而先聞者,間與所告者皆死。

How subtle! How minute! There is no work of state to which intelligence does not contribute. And if an intelligence operation is detected before it goes into operation, then the spies and those to whom they were to report are all dead!

【PEM: It is cynical to suspect that this means that one should kill one's own spies. Besides, to do so for no good reason would be irrational, even pathological. The spy of one nation, upon being discovered at work in another nation, would very likely be executed. If that spy were to divulge the identities of the agents from whom he took orders and to whom he gave intelligence, then their lives would be endangered also.】

| Targets of intelligence |

凡軍之所欲擊,城之所欲攻,人之所欲殺,必先 知其守將、左右、謁者、門者、舍人之姓名, In all cases where the objectives are such as: selected military targets, cities that one plans to attack, or people that one desires to kill, one must first know the identities of the generals that protect them, the subordinates who support them, the keepers of their gates, and the staff personnel in their bases. 令吾間必索知之。

Command the five classes of intelligence agents that they must gain knowledge of all of these matters.

必索敵人之間來間我者,因而利之,導而舍之, 故反間可得而使也。

One must detect the intelligence officers of the opposition that are directed to gain intelligence pertaining to us, and subsequently offer them blandishments (both obvious and also realistic temptations), and by that means gain control of their movements and provide them with (housing =) protection. In that way one can gain counter-intelligence [operatives, turned spies] and make proper use of them.

因是而知之,故鄉間、內間可得而使也; Having identified incoming intelligence operatives by the above means, both spies on the outskirts and spies on the inside can be apprehended and made use of. 因是而知之,故死間為誑事可使告敵;

Having identified incoming intelligence operatives by the above means, even dead (or severely compromised) foreign agents can be caused to give false indications and by such means provide disinformation to the enemy.

因是而知之,故生間可使如期。

Having identified incoming intelligence operatives by the above means, even living agents (unaware that they have been compromised) can be made to perform as though by our own scheduling.

【PEM: This sentence may also mean that having turned an enemy agent we can use knowledge gained to protect our live assets and let them return with their needed information.】

五間之事,主必知之,知之必在於反間,故反間不可不厚也。

The five principle kinds of intelligence operations must be known by the ruler, and knowing these five kinds of things must depend on counterintelligence. Therefore the highest importance must be given to counterintelligence and to turned spies.

| Spies in Xia and Shang dynasty times |

昔殷之興也, 伊摯在夏;

In ancient times Yin came to prominence because of Yi Zhi at Xia.

【 PEM: Xia was the earliest dynasty, at least according to legend. The Yin (Shang) dynasty is the next in sequence. It is a dynasty for which there is ample historical evidence. This passage indicates that the Shang used Yi Zhi as a spy to help overcome the Xia.】

周之興也, 呂牙在殷。

Zhou came to prominence because of Lü Ya at Yin.

【PEM: The Zhou overcame the Yin (Shang) dynasty, and Lü Ya helped them by spying against Yin.】

故惟明君賢將能以上智為間者,

So it is only the enlightened rulers and the worthy generals who are able to use the most wise and intelligent individuals as spies

必成大功。

and therefore will inevitably have great achievements.

此兵之要, 三軍之所恃而動也。

These are the essentials of war, that which the three armies depend upon to move.

Appendix One. George Kennan's Telegram

861.00/2 - 2246: Telegram

The Charge in the Soviet Union (Kennan) to the Secretary of State

SECRET

Moscow, February 22, 1946 – 9 p.m. [Received February 22 – 3: 52 p.m.]

511. Answer to Dept's 284, Feb 3 [13] involves questions so intricate, so delicate, so strange to our form of thought, and so important to analysis of our international environment that I cannot compress answers into single brief message without yielding to what I feel would be dangerous degree of oversimplification. I hope, therefore, Dept will bear with me if I submit in answer to this question five parts, subjects of which will be roughly as follows:

- (1) Basic features of post-war Soviet outlook.
- (2) Background of this outlook
- (3) Its projection in practical policy on official level.
- (4) Its projection on unofficial level.

(5) Practical deductions from standpoint of US policy.

I apologize in advance for this burdening of telegraphic channel; but questions involved are of such urgent importance, particularly in view of recent events, that our answers to them, if they deserve attention at all, seem to me to deserve it at once. There follows:

Part 1: Basic Features of Post War Soviet Outlook, as Put Forward by Official Propaganda Machine Are as Follows:

(a) USSR still lives in antagonistic "capitalist encirclement" with which in the long run there can be no permanent peaceful coexistence. As stated by Stalin in 1927 to a delegation of American workers:

"In course of further development of international revolution there will emerge two centers of world significance: a socialist center, drawing to itself the countries which tend toward socialism, and a capitalist center, drawing to itself the countries that incline toward capitalism. Battle between these two centers for command of world economy will

decide fate of capitalism and of communism

in entire world."

- (b) Capitalist world is beset with internal conflicts, inherent in nature of capitalist society. These conflicts are insoluble by means of peaceful compromise. Greatest of them is that between England and US.
- (c) Internal conflicts of capitalism inevitably generate wars. Wars thus generated may be of two kinds: intra-capitalist wars between two capitalist states, and wars of intervention against socialist world. Smart capitalists, vainly seeking escape from inner conflicts of capitalism, incline toward latter.
- (d) Intervention against USSR, while it would be disastrous to those who undertook it, would cause renewed delay in progress of Soviet socialism and must therefore be forestalled at all costs.
- (e) Conflicts between capitalist states, though likewise fraught with danger for USSR, nevertheless hold out great possibilities for advancement of socialist cause, particularly if USSR remains militarily powerful, ideologically monolithic and faithful to its present brilliant leadership.
- (f) It must be borne in mind that capitalist

world is not all bad. In addition to hopelessly reactionary and bourgeois elements, it includes (1) certain wholly enlightened and positive elements united in acceptable communistic parties and (2) certain other elements (now described for tactical reasons as progressive or democratic) whose reactions, aspirations and activities happen to be "objectively" favorable to interests of USSR These last must be encouraged and utilized for Soviet purposes.

(g) Among negative elements of bourgeois-capitalist society, most dangerous of all are those whom Lenin called false friends of the people, namely moderate-socialist or social-democratic leaders (in other words, non-Communist left-wing). These are more dangerous than out-and-out reaction-aries, for latter at least march under their true colors, whereas moderate left-wing leaders confuse people by employing devices of socialism to seine interests of reactionary capital.

So much for premises. To what deductions do they lead from standpoint of Soviet policy? To following:

(a) Everything must be done to advance

relative strength of USSR as factor in international society. Conversely, no opportunity must be missed to reduce strength and influence, collectively as well as individually, of capitalist powers.

- (b) Soviet efforts, and those of Russia's friends abroad, must be directed toward deepening and exploiting of differences and conflicts between capitalist powers. If these eventually deepen into an "imperialist" war, this war must be turned into revolutionary upheavals within the various capitalist countries.
- (c) "Democratic-progressive" elements abroad are to be utilized to maximum to bring pressure to bear on capitalist governments along lines agreeable to Soviet interests.
- (d) Relentless battle must be waged against socialist and social-democratic leaders abroad.

Part 2: Background of Outlook

Before examining ramifications of this party line in practice there are certain aspects of it to which I wish to draw attention.

First, it does not represent natural outlook of Russian people. Latter are, by and large, friendly to outside world, eager for experience of it, eager to measure against it talents they are conscious of possessing, eager above all to live in peace and enjoy fruits of their own labor. Party line only represents thesis which official propaganda machine puts forward with great skill and persistence to a public often remarkably resistant in the stronghold of its innermost thoughts. But party line is binding for outlook and conduct of people who make up apparatus of power — party, secret police and Government — and it is exclusively with these that we have to deal.

Second, please note that premises on which this party line is based are for most part simply not true. Experience has shown that peaceful and mutually profitable coexistence of capitalist and socialist states is entirely possible. Basic internal conflicts in advanced countries are no longer primarily those arising out of capitalist ownership of means of production, but are ones arising from

advanced urbanism and industrialism as such, which Russia has thus far been spared not by socialism but only by her own backwardness. Internal rivalries of capitalism do not always and not generate wars; a11 wars attributable to this cause. To speak possibility of intervention against USSR today, after elimination of Germany and Japan and after example of recent war, is sheerest nonsense. If not provoked by forces of intolerance and subversion "capitalist" world of today is quite capable of living at peace with itself and with Russia. Finally, no sane person has reason to doubt sincerity of socialist leaders in Western moderate countries. Nor is it fair to deny success of their efforts to improve conditions for working population whenever, as in Scandinavia, they have been given chance to show what they could do.

Falseness of those premises, every one of which predates recent war, was amply demonstrated by that conflict itself Anglo-American differences did not turn out to be major differences of Western World. Capitalist countries, other than those of Axis, showed no disposition to solve their differences by joining in crusade against USSR.

Instead of imperialist war turning into civil wars and revolution, USSR found itself obliged to fight side by side with capitalist powers for an avowed community of aim.

Nevertheless, all these theses, however baseless and disproven, are being boldly put forward again today. What does this indicate? It indicates that Soviet party line is not based on any objective analysis of situation beyond Russia's borders; that it has, indeed, little to do with conditions outside of Russia; that it arises mainly from basic inner-Russian necessities which existed before recent war and exist today.

At bottom of Kremlin's neurotic view of world affairs is traditional and instinctive Russian sense of insecurity. Originally, this was insecurity of a peaceful agricultural people trying to live on vast exposed plain in neighborhood of fierce nomadic peoples. To this was added, as Russia came into contact with economically advanced West, fear of more competent, more powerful, more highly organized societies in that area. But this latter type of insecurity was one which afflicted rather Russian rulers than Russian people; for Russian rulers have invariably sensed that their rule was relatively archaic in form,

fragile and artificial in its psychological foundation, unable to stand comparison or contact with political systems of Western countries. For this reason they have always feared foreign penetration, feared direct contact between Western world and their own, feared what would happen if Russians learned truth about world without or if foreigners learned truth about world within. And they have learned to seek security only in patient but deadly struggle for total destruction of rival power, never in compacts and compromises with it.

It was no coincidence that Marxism, which had smoldered ineffectively for half a century in Western Europe, caught hold and blazed for first time in Russia. Only in this land which had never known a friendly neighbor or indeed any tolerant equilibrium of separate powers, either internal or international, could a doctrine thrive which viewed economic conflicts of society as insoluble by peaceful means. After establishment of Bolshevist regime, Marxist dogma, rendered even more truculent and intolerant by Lenin's interpretation, became a perfect vehicle for sense of insecurity with which Bolsheviks, even more than previous Russian rulers, were afflicted.

In this dogma, with its basic altruism of purpose, they found justification for their instinctive fear of outside world, for the dictatorship without which they did not know how to rule, for cruelties they did not dare not to inflict, for sacrifice they felt bound to demand. In the name of Marxism they sacrificed every single ethical value in their methods and tactics. Today they cannot dispense with it. It is fig leaf of their moral and intellectual respectability. Without it they would stand before history, at best, as only the last of that long succession of cruel and wasteful Russian rulers who have relentlessly forced country on to ever new heights of military power in order to guarantee external security of their internally weak regimes. This is why Soviet purposes most always be solemnly clothed in trappings of Marxism, and why no one should underrate importance of dogma in Soviet affairs. Thus Soviet leaders are driven [by?] necessities of their own past and present position to put forward which [apparent omission] outside world as evil, hostile and menacing, but as bearing within itself germs of creeping disease and destined to be wracked with growing internal convulsions until it is given final Coup de grace by

rising power of socialism and yields to new and better world. This thesis provides justifycation for that increase of military and police power of Russian state, for that isolation of Russian population from outside world, and for that fluid and constant pressure to extend limits of Russian police power which are together the natural and instinctive urges of Russian rulers. Basically this is only the steady advance of uneasy Russian nationalism, a centuries old move- ment in which concepttions of offense and defense are inextricably confused. But in new guise of international Marxism, with its honeyed promises to a desperate and war torn outside world, it is more dangerous and insidious than ever before

It should not be thought from above that Soviet party line is necessarily disingenuous and insincere on part of all those who put it forward. Many of them are too ignorant of outside world and mentally too dependent to question [apparent omission] self-hypnotism, and who have no difficulty making themselves believe what they find it comforting and convenient to believe. Finally we have the unsolved mystery as to who, if anyone, in this great land actually receives accurate and

unbiased information about outside world. In atmosphere of oriental secretiveness and conspiracy which pervades this Government, possibilities for distorting or poisoning sources and currents of information infinite. The very disrespect of Russians for objective truth - indeed, their disbelief in its existence — leads them to view all stated facts as instruments for furtherance of one ulterior purpose or another. There is good reason to suspect that this Government is actually a conspiracy within a conspiracy; and I for one am reluctant to believe that Stalin himself receives anything like an objective picture of outside world. Here there is ample scope for the type of subtle intrigue at which Russians are past masters. Inability of foreign governments to place their case squarely before Russian policy makers - extent to which they are delivered up in their relations with Russia to good graces of obscure and unknown advisors whom they never see and cannot influence - this to my mind is most disquieting feature of diplomacy in Moscow, and one which Western statesmen would do well to keep in mind if they would understand nature of difficulties encountered here

Part 3: Projection of Soviet Outlook in Practical Policy on Official Level

We have now seen nature and background of Soviet program. What may we expect by way of its practical implementation?

Soviet policy, as Department implies in its query under reference, is conducted on two planes: (1) official plane represented by actions undertaken officially in name of Soviet Government; and (2) subterranean plane of actions undertaken by agencies for which Soviet Government does not admit responsibility.

Policy promulgated on both planes will be calculated to serve basic policies (a) to (d) outlined in part 1. Actions taken on different planes will differ considerably, but will dovetail into each other in purpose, timing and effect.

On official plane we must look for following:

(a) Internal policy devoted to increasing in every way strength and prestige of Soviet state: intensive military-industrialization; maximum development of armed forces; great displays to impress outsiders; continued secretiveness about internal matters, designed to conceal weaknesses and to keep opponents in dark.

- (b) Wherever it is considered timely and promising, efforts will be made to advance official limits of Soviet power. For the moment, these efforts are restricted to certain neighboring points conceived of here as being of immediate strategic necessity, such as Northern Iran, Turkey, possibly Bornholm. However, other points may at any time come into question, if and as concealed Soviet political power is extended to new areas. Thus a "friendly Persian Government might be asked to grant Russia a port on Persian Gulf. Should Spain fall under Communist control, question of Soviet base at Gibraltar Strait might be activated. But such claims will appear on official level only when unofficial preparation is complete.
- (c) Russians will participate officially in international organizations where they see opportunity of extending Soviet power or of inhibiting or diluting power of others. Moscow sees in UNO not the mechanism for a permanent and stable world society founded on mutual interest and aims of all nations, but an arena in which aims just mentioned can be favorably pursued. As long as UNO is

considered here to serve this purpose, Soviets will remain with it. But if at any time they come to conclusion that it is serving to embarrass or frustrate their aims for power expansion and if they see better prospects for pursuit of these aims along other lines, they will not hesitate to abandon UNO. This would imply, however, that they felt themselves strong enough to split unity of other nations their withdrawal to render ineffective as a threat to their aims or security, replace it with an international weapon more effective from their viewpoint. Thus Soviet attitude toward UNO will depend largely on loyalty of other nations to it, and on degree of vigor, decisiveness and cohesion with which those nations defend in UNO the peaceful and hopeful concept of international life, which that organization represents to our way of thinking. I reiterate, Moscow has no abstract devotion to UNO ideals. Its attitude to that remain organization will essentially pragmatic and tactical.

(d) Toward colonial areas and backward or dependent peoples, Soviet policy, even on official plane, will be directed toward weakening of power and influence and contacts of advanced Western nations, on

theory that in so far as this policy is successful, there will be created a vacuum which will favor Communist-Soviet penetration. Soviet pressure for participation in trusteeship arrangements thus represents, in my opinion, a desire to be in a position to complicate and inhibit exertion of Western influence at such points rather than to provide major channel for exerting of Soviet power. Latter motive is not lacking, but for this Soviets prefer to rely on other channels than official trusteeship arrangements. Thus we may expect to find Soviets asking for admission everywhere to trusteeship or similar arrangements and using levers thus acquired to weaken Western influence among such peoples.

- (e) Russians will strive energetically to develop Soviet representation in, and official ties with, countries in which they sense Strong possibilities of opposition to Western centers of power. This applies to such widely separated points as Germany, Argentina, Middle Eastern countries, etc.
- (f) In international economic matters, Soviet policy will really be dominated by pursuit of autarchy for Soviet Union and Soviet-dominated adjacent areas taken together. That, however, will be underlying policy. As far as

official line is concerned, position is not yet clear. Soviet Government has shown strange reticence since termination hostilities subject foreign trade. If large scale long term credits should be forthcoming, I believe Soviet Government may eventually again do lip service, as it did in 1930's to desirability of building up international economic exchanges in general. Otherwise I think it possible Soviet foreign trade may be restricted largely to own security sphere, including occupied areas in Germany, and that a cold official shoulder may be turned to principle of economic collaboration general among nations.

- (g) With respect to cultural collaboration, lip he service will likewise rendered desirability of deepening cultural contacts between peoples, but this will not in practice interpreted in any way which could weaken security position of Soviet peoples. Actual manifestations of Soviet policy in this respect will be restricted to arid channels of shepherded official closely visits functions, with superabundance of vodka and speeches and dearth of permanent effects.
- (h) Beyond this, Soviet official relations will take what might be called "correct" course

with individual foreign governments, with great stress being laid on prestige of Soviet Union and its representatives and with punctilious attention to protocol as distinct from good manners. Part 4: Following May Be Said as to What We May Expect by Way of Implementation of Basic Soviet Policies on Unofficial, or Subterranean Plane, i.e. on Plane for Which Soviet Government Accepts no Responsibility

Agencies utilized for promulgation of policies on this plane are following:

- 1. Inner central core of Communist Parties in other countries. While many of persons who compose this category may also appear and act in unrelated public capacities, they are in reality working closely together as an underground operating directorate of world communism, a concealed Comintern tightly coordinated and directed by Moscow. It is important to remember that this inner core is actually working on underground lines, despite legality of parties with which it is associated.
- 2. Rank and file of Communist Parties. Note distinction is drawn between those and persons defined in paragraph 1. This distinction has become much sharper in recent years. Whereas formerly foreign Communist Parties represented a curious (and from Moscow's standpoint often inconvenient) mixture of conspiracy and legitimate activity,

now the conspiratorial element has been neatly concentrated in inner circle ordered underground, while rank and file no longer even taken into confidence about realities of movement — are thrust forward as bona fide internal partisans of certain political tendencies within their respective countries, genuinely innocent of conspiratorial connection with foreign states. Only in certain countries where communists are numerically strong do they now regularly appear and act as a body. As a rule they are used to penetrate, and to influence or dominate, as case may be, other organizations less likely to be suspected of being tools of Soviet Government, with a view to accomplishing their purposes through [apparent omission] organizations, rather than by direct action as a separate political party.

- 3. A wide variety of national associations or bodies which can be dominated or influenced by such penetration. These include: labor unions, youth leagues, women's organizations, racial societies, religious societies, social organizations, cultural groups, liberal magazines, publishing houses, etc.
- 4. International organizations which can be similarly penetrated through influence over

various national components. Labor, youth and women's organizations are prominent them. Particular, almost importance is attached in this connection to international labor movement. Moscow sees possibility of sidetracking western governments in world affairs and building up international lobby capable of compelling governments to take favorable to Soviet interests in various countries and of paralyzing actions agreeable to USSR

- 5. Russian Orthodox Church, with its foreign branches, and through it the Eastern Orthodox Church in general.
- 6. Pan-Slav movement and other movements (Azerbaijan, Armenian, Turcoman, etc.) based on racial groups within Soviet Union.
- 7. Governments or governing groups willing to lend themselves to Soviet purposes in one degree or another, such as present Bulgarian and Yugoslav Governments, North Persian regime, Chinese Communists, etc. Not only propaganda machines but actual policies of these regimes can be placed extensively at disposal of USSR

It may be expected that component parts of this far-flung apparatus will be utilized in accordance with their individual suitability, as follows:

- (a) To undermine general political strategic potential of major western powers. Efforts will be made in such countries to disrupt national self confidence, to hamstring measures of national defense, to increase social and industrial unrest, to stimulate all forms of disunity. All persons with grievances, whether economic or racial, will be urged to redress mediation not in compromise, but in defiant violent struggle for destruction of other elements of society. Here poor will be set against rich, black against white, young against old, newcomers against established residents, etc.
- (b) On unofficial plane particularly violent efforts will be made to weaken power and influence of Western Powers of [on] colonial backward, or dependent peoples. On this level, no holds will be barred. Mistakes and weaknesses of western colonial administration will be mercilessly exposed and exploited. Liberal opinion in Western countries will be mobilized to weaken colonial policies. Resentment among dependent peoples will be

- stimulated. And while latter are being encouraged to seek independence of Western Powers, Soviet dominated puppet political machines will be undergoing preparation to take over domestic power in respective colonial areas when independence is achieved.
- (c) Where individual governments stand in path of Soviet purposes pressure will be brought for their removal from office. This can happen where governments directly oppose Soviet foreign policy aims (Turkey, Iran), where they seal their territories off against Communist penetration (Switzerland, Portugal), or where they compete too strongly, like Labor Government in England, for moral domination among elements which it is important for Communists to dominate. (Sometimes, two of these elements are present in a single case. Then Communist opposition becomes particularly shrill and savage.)
- (d) In foreign countries Communists will, as a rule, work toward destruction of all forms of personal independence, economic, political or moral. Their system can handle only individuals who have been brought into complete dependence on higher power. Thus, persons who are financially independent such as individual businessmen, estate

owners, successful farmers, artisans and all those who exercise local leadership or have local prestige, such as popular local clergymen or political figures, are anathema. It is not by chance that even in USSR local officials are kept constantly on move from one job to another, to prevent their taking root.

(e) Everything possible will be done to set major Western Powers against each other. Anti-British talk will be plugged among Americans, anti-American talk among British. Continentals, including Germans, will be taught to abhor both Anglo-Saxon powers. Where suspicions exist, they will be fanned; where not, ignited. No effort will be spared to discredit and combat all efforts which threaten to lead to any sort of unity or cohesion among other [apparent omission] from which Russia might be excluded. Thus, all forms of international organization not amenable to Communist penetration and control, whether it be the Catholic [apparent omission] international economic concerns, or the international fraternity of royalty and aristocracy, must expect to find themselves under fire from many, and often [apparent omission].

(f) In general, all Soviet efforts on unofficial international plane will be negative destructive in character, designed to tear down sources of strength beyond reach of Soviet control. This is only in line with basic instinct that there can compromise with rival power and constructive work can start only when Communist power is doming But behind all this will be applied insistent, unceasing pressure for penetration and command of key positions in administration and especially in police apparatus of foreign countries. The Soviet regime is a police regime par excellence, reared in the dim half world of Tsarist police intrigue, accustomed to think primarily in terms of police power. This should never be lost sight of in ganging Soviet motives.

Part 5: Practical deductions from standpoint of US policy

In summary, we have here a political force committed fanatically to the belief that with US there can be no permanent modus vivendi that it is desirable and necessary that the internal harmony of our society be disrupted, our traditional way of life be destroyed, the international authority of our state be broken, if Soviet power is to be secure. This political force has complete power of disposition over energies of one of world's greatest peoples and resources of world's richest national territory, and is borne along by deep and powerful currents of Russian nationalism. In addition, it has an elaborate and far flung apparatus for exertion of its influence in other countries, an apparatus of amazing flexibility and versatility, managed by people whose experience and skill in underground methods are presumably without parallel in history. Finally, it is seemingly inaccessible to considerations of reality in its basic reactions. For it, the vast fund of objective fact about human society is not, as with us, the measure against which outlook is constantly being tested and re-formed, but a grab bag from which individual items are selected arbitrarily and

tendentiously to bolster an outlook already preconceived. This is admittedly not pleasant picture. Problem of how to cope with this force in [is] undoubtedly greatest task our diplomacy has ever faced and probably greatest it will ever have to face. It should be point of departure from which our political general staff work at present juncture should proceed. It should be approached with same thoroughness and care as solution of major strategic problem in war, and if necessary, with no smaller outlay in planning effort. I cannot attempt to suggest all answers here. But I would like to record my conviction that problem is within our power to solve - and that without recourse to any general military conflict. And in support of this conviction there are certain observations of a more encouraging nature I should like to make:

(1) Soviet power, unlike that of Hitlerite Germany, is neither schematic nor adventuristic. It does not work by fixed plans. It does not take unnecessary risks. Impervious to logic of reason, and it is highly sensitive to logic of force. For this reason it can easily withdraw — and usually does when strong resistance is encountered at any point. Thus, if the adversary has sufficient force and makes

- clear his readiness to use it, he rarely has to do so. If situations are properly handled there need be no prestige-engaging showdowns.
- (2) Gauged against Western World as a whole, Soviets are still by far the weaker force. Thus, their success will really depend on degree of cohesion, firmness and vigor which Western World can muster. And this is factor which it is within our power to influence.
- (3) Success of Soviet system, as form of internal power, is not yet finally proven. It has yet to be demonstrated that it can survive supreme test of successive transfer of power from one individual or group to another. Lenin's death was first such transfer, and its effects wracked Soviet state for 15 years. After Stalin's death or retirement will be second. But even this will not be final test. Soviet internal system will now be subjected, by virtue of recent territorial expansions, to series of additional strains which once proved severe tax on Tsardom. We here are convinceed that never since termination of civil war have mass of Russian people been emotionally farther removed from doctrines of Communist Party than they are today. In Russia, party has now become a great and - for the moment - highly successful apparatus of

dictatorial administration, but it has ceased to be a source of emotional inspiration. Thus, internal soundness and permanence of movement need not yet be regarded as assured.

(4) All Soviet propaganda beyond Soviet security sphere is basically negative and destructive. It should therefore be relatively easy to combat it by any intelligent and really constructive program.

For those reasons I think we may approach calmly and with good heart problem of how to deal with Russia. As to how this approach should be made, I only wish to advance, by way of conclusion, following comments:

- (1) Our first step must be to apprehend, and recognize for what it is, the nature of the movement with which we are dealing. We must study it with same courage, detachment, objectivity, and same determination not to be emotionally provoked or unseated by it, with which doctor studies unruly and unreasonable individual.
- (2) We must see that our public is educated to realities of Russian situation. I cannot overemphasize importance of this. Press cannot do this alone. It must be done mainly by

Government, which is necessarily more perienced and better informed on practical problems involved. In this we need not be deterred by [ugliness?] of picture. I convinced that there would be far less hysterical anti-Sovietism in our country today if realities of this situation were better understood by our people. There is nothing as dangerous or as terrifying as the unknown. It may also be argued that to reveal more information on our difficulties with Russia would reflect unfavorably on Russian-American relations. I feel that if there is any real risk here involved, it is one which we should have courage to face, and sooner the better. But I cannot see what we would be risking. Our stake in this country, even coming on heels of tremendous demonstrations of our friendship for Russian people, remarkably small. We have here no investments to guard, no actual trade to lose, virtually no citizens to protect, few cultural contacts to preserve. Our only stake lies in what we hope rather than what we have; and I am convinced we have better chance of realizing those hopes if our public enlightened and if our dealings with Russians

- are placed entirely on realistic and matterof-fact basis.
- (3) Much depends on health and vigor of our own society. World communism is like malignant parasite which feeds only on diseased tissue. This is point at which domestic and foreign policies meets Every courageous and incisive measure to solve internal problems of our own society, to improve self-confidence, discipline, morale and community spirit of our own people, is a diplomatic victory over Moscow worth a diplomatic notes thousand and communiqués. If we cannot abandon fatalism and indifference in face of deficiencies of our own society, Moscow will profit - Moscow cannot help profiting by them in its foreign policies.
- (4) We must formulate and put forward for other nations a much more positive and constructive picture of sort of world we would like to see than we have put forward in past. It is not enough to urge people to develop political processes similar to our own. Many foreign peoples, in Europe at least, are tired and frightened by experiences of past,

and are less interested in abstract freedom than in security. They are seeking guidance rather than responsibilities. We should be better able than Russians to give them this. And unless we do, Russians certainly will.

(5) Finally we must have courage and self-confidence to cling to our own methods and conceptions of human society. After Al, the greatest danger that can befall us in coping with this problem of Soviet communism, is that we shall allow ourselves to become like those with whom we are coping.

KENNAN

【 PEM: This public domain document was downloaded from Wikipedia Commons. I have corrected a couple of typographical errors. A few other places appear to be wrong, but without the original telegraphic messages it would be difficult to repair any such errors.】

Appendix Two. Fingerspitzengefühl

The German term "Fingerspitzengefühl" has become a term of art in English for a special kind of battlefield awareness associated with military leaders such as Field Marshal Erwin Rommel. The German term means "finger tip feeling," and can be applied to many different and rather mundane activities. But in English it is used to characterize an acute sensitivity for which there is no appropriate English term.

Rommel, and certain other generals at his level of play, hold claim to the ability to keep awareness of all the major features and activities on the battlefield, and even to seem to know the moves of the enemy in advance. This ability may be characterized by saying that the commander who has it seems to have the tips of his fingers on all of the significant occurring on the battlefield. Some people call this ability "instinctive" or "intuitive." These terms are either wrong or merely unhelpful. Warfare and its methodologies are learned not instinctive, and to the extent that it indicates anything at all, "intuition" is a

general and unspecific awareness that grows out of many specific activities that must be sedulously maintained.

The Fingerspitzengefühl attributed to Rommel and others is characterized by the ability of the commander to maintain a dynamic mental map of all of the significant static and dynamic factors on the battlefield, and to keep them updated both by projecting forth what is already known or believed to be the case and by continually modifying this mental map and its many qualifications as to reliability in view of incoming information that sometimes may amount only to the barest scraps.

If appeals to non-empirical means of acquiring knowledge such as extra-sensory perception and similar claimed psychic abilities, instinct, and some kind of "direct perception" called intuition are eliminated, then an explanation for the Fingerspitzengefühl of someone like Rommel may yet be explained by reference to ordinary modalities of perception and information processing in the human mind.

Fighters from Master Sun to John Boyd have emphasized the importance of securing and maintaining incoming channels of information that cover all aspects of events that may occur on the battlefield. For Master Sun that included sufficient intelligence resources in all countries to at least assure him that nothing major was changing in the peripheral areas that previously had offered no substantial benefits or threats to his side. For John Boyd as a pilot, that would ideally have included information from ground-based radar that no additional enemy aircraft were speeding to his location.

In the prelude to a battle, acquisition and processing of information can be slow and incremental. After a battle begins, there will be little time to consciously attend to anything that is not of obvious salience. One danger, in single combat for instance, is that there be a lapse in total situational awareness that permits additional attackers to arrive without being noticed in time. So part of the mind of each participant in a battle needs to be devoted to screening the periphery. Fortunately, the human mind has been well prepared by evolution to handle much of this

task at an unconscious level. During times of relative repose, training needs to be directed toward aiding the individual to heed the warning signals kicked up by the unconscious mind when something threatening is noted on the horizon.

From information that has been acquired in a regular process during times of less intense combat involvement, the mind of each fighter needs to create and maintain a dynamic map of the battlefield so that attention during battle can be directed primarily toward those cases where incoming information has shown that other entities on the battlefield have not behaved as was anticipated. If everything were going at the sedate rate of peaceful intercourse among nations and individuals, then maintaining such a dynamic map would not be extremely difficult. In times of fighting, however, both deliberate attempts obfuscation and deception and inevitable damage to lines of communication will inevitably mean that one's dynamic map of the battlefield will become more and more inaccurate. Every single person faces the same general situation. At best, some people watch from the mountaintop while others

attempt to see through fog or smoke. So what factors would distinguish the accuracy of map maintenance of someone like Rommel from that of an ordinary soldier?

the information acquisition When processing abilities of each individual are under stress, the more successful among competitors will be those who can best use the incoming information and best draw conclusions from scraps of information. Those who ignore incoming information that is crucial to map maintenance, or who draw unwarranted conclusions from the available information will fail. Those who see that a single piece of evidence fills in a previously incomplete picture or else vitiates previously constructed part of the dynamic map and indicates that something radically different must be going on will succeed. A case in point would be the case wherein Sherlock Holmes deduced who the killer was because of the dog that did not bark. One of the reasons that Master Sun insists on securing local guides as part of moving into new territory is that only they will be able to notice anything that is not normal to that time and place.

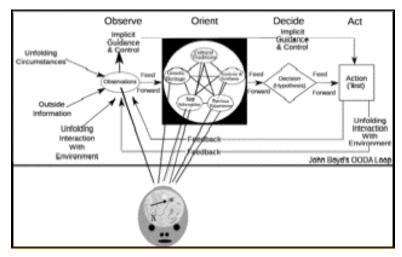
If a general were to construct a very accurate dynamic map of a territory where battle was anticipated to occur, observers would not credit this individual with any unusual ability. In fact, they might be likely to attribute the success of the map to the high quality of the general's support personnel, saying that all that was required of the general was to sit there and read the map prepared for him by others. If the general declare a detachment of enemy troops to be moving from Smallville to Middletown, that would tell the observer nothing more than that the general could read the map at least as well as could those who had prepared it. In fact, the general could claim a complete cognizance of every significant factor on the battlefield on the basis of his being in possession of this map.

If the general's interpretation of the map happened to be incorrect, then the fault for any missteps would lie with his ability as map reader, but if the general had personal knowledge of the battlefield (terrain or human factors) then his interpretation could be superior to that available to other people. I have memory of an account of discussions prior to General Douglas MacArthur ordering the counterattack at Incheon during the Korean War. According to that account, MacArthur had accompanied his father, perhaps while serving as his aide-de-camp in the period from 1904 to 1906, to tour the Incheon coastal area, and on the basis of his memory (and probably his discussions with his father at the time of the tour) he believed that a landing there would be difficult but successful. I have been unable to find the source of this story, so it may be apocryphal.

Transfer the dynamic map to the general's mind, and make the dynamic updating of the map a function of the general's unconscious as corrected by whatever crucial confirming or contradictory information may luckily reach the general through the fog of war, and the ability to read the map may seem almost supernatural to those who do not have this level of mental processing ability.

Largely on the basis of his own experience as a fighter pilot, John Boyd described the ongoing process of creating a mental map and deciding on actions on that basis. It is often reduced to such a simplistic idea that it

amounts to nothing more than what people are already aware of doing in their everyday lives. This simplistic treatment only mentions "observe, orient, decide, and act" (OODA), and ignores the fact that each of these four general steps breaks down into multiple components. Each of these components can supply feedback to earlier stages and can feed forward to later stages. Each component has its own time scale, and in times of intense activity some steps may fall far behind because other components go through many cycles for each cycle of activity they complete. Boyd's full cycle has been adequately discussed elsewhere, so I will not repeat information here, but note that in the original situations that led to Boyd's drawing his diagram, almost all information subsumed under the first two steps must have been maintained in Boyd's mind during combat. The decisions were not made on paper or by committee meeting either, so that part had to be in his mind, and the decisions that he made were typically acted out immediately as piloting and firing decisions.



John Boyd's Mind Updates Mental Map

One important factor that kept Boyd in control during an aerial fight was his ability to visualize all elements of the combat and be able to maintain a projection of where they should be at all moments when they were not in sight. In that way he could appear to have his fingertips on all elements of the combat situation — Fingerspitzengefühl.

Appendix Three. Special Characteristics of Master Sun's Art of War.

I. What is war? Master Sun does not see war as a struggle between two parties, but as a disequilibrium in a single system. The single system can be analyzed into multiple components, but the size, power, etc. of each is variable over time component components interact, so that how any one component fares is dependent on how all other components act. The size and allegiances of every entity delimited in this one system may change over time. None of them may be ignored, although some will loom forward as obviously more important to one's own situation at any particular time.

II. Who directs warfare? Master Sun reflects his own situation in his writing. The sovereign sets overall goals, and the general implements those goals. Master Sun seems to have been dealing with armies that were largely composed of conscripts. He seems to have a largely top-down concept of military leadership that would diminish individual initiative. On the other hand, communications

between leaders and sub-ordinates would have been so slow that subordinates must have take some initiatives to deal with changing circumstances on an interim basis.

III. Two thousand years ago, the possibilities for coordinating widely dispersed troops were very limited, as were the technologies for delivering firepower at any distance behind enemy lines.

IV. Master Sun was an individual who was writing about something that he understood from the inside because he was deeply involved in it. Writing, as he was, at very near to the beginning of expository writing in China, it is entirely possible that he failed to express everything that was actually relevant to him as a military and strategic planner. Therefore it is important for the reader of today to take his written work not as a perfect textbook for his kind of warfare, but as a document to be assimilated and thoroughly run through one's own thought processes, tested against one's own experience, and used to expand rather than limit one's own creativity.

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