

# Intelligence Acquisition in Early China<sup>1</sup>

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China's extensive historical writings and numerous military manuals show it not only has an unbroken, 2500 year tradition of structured intelligence gathering but also conscious study and theorizing about objectives. During the Eastern Zhou period (770– 256 BC), the increasingly lethal internecine warfare witnessed as the states annihilated each other and the western state of Qin gradually subjugated the realm made "knowing the enemy" (知 敵) imperative. Thereafter, the quest for knowledge targeted the highly mobile external peoples in the northern and western steppe regions and the other comparatively "uncivilized" groups that ringed sedentary China in a southern arc. In response, the theory and practice of spycraft continuously developed, resulting in it being fully defined by the first century of the Later Han dynasty (25–225 AD). Nevertheless, innovative measures continued to evolve and theory became incrementally more complex in subsequent centuries.<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> The *Art of War's* infamous chapter, "Employing Spies," can be said to initiate China's contemplation of intelligence concepts and practices and the *Jianshu* (間書 *Book of Spies*), a dedicated spy manual written in 1855, to conclude it. (For a complete translation of the *Jianshu*, see Sawyer, *Book of Spies*.) However, the most sophisticated analyses are contained in the *Bingfa Baiyan* (兵法白言 *Hundred Tactical Terms*) that had

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By the onset of the Warring States period (453–221 BC), intelligence activities were oriented to gaining sufficient information to conduct warfare on a rational basis, manipulate opponents, and thwart plans. *The Art of War (Sunzi Bingfa* 孫子兵法) traditionally attributed to Sunzi<sup>3</sup> provided an important theoretical impulse by saying, "The means by which enlightened rulers and sagacious generals moved and conquered others, that their achievements surpassed the masses, was advance knowledge." <sup>4</sup> Thereafter, achieving victory through wisdom (*zhi qu* 智取)<sup>5</sup> was extolled even though the army's increasing massiveness and the obtuseness of its commanders often prevented full realization.

The other military writings composed during the Warring States period similarly insist upon acquiring thorough knowledge before undertaking any military action.<sup>6</sup> For example, the *Three Strategies* states, "The key to using the army is to first investigate the enemy's situation. Look into their granaries and armories, estimate their food stocks, fathom their strengths and weaknesses, search out their natural advantages, and seek out their vacuities and fissures."<sup>7</sup>

<sup>6</sup> Six of the seven well known Seven Military Classics (武經七書 Wujing Qishu) - The Art of War, Sima Fa 司

appeared three centuries earlier. (Most of the significant intelligence entries are translated in my *Tao of Spycraft: Intelligence Theory and Practice in Traditional China.*)

<sup>&</sup>lt;sup>3</sup> Whether the historical Sunzi was the author or not is largely irrelevant because the *Art of War* had become an important, widely read military text by the late Warring States period, roughly the third century BC.

<sup>&</sup>lt;sup>4</sup> "Initial Estimations," Art of War.

<sup>&</sup>lt;sup>5</sup> This thrust is well reflected in the *Twenty-five Dynastic Histories*; Sima Guang's great historical compilation, the *Zizhi Tongjian* 資治通鑑; all the military compendia, including the *Wujing Zongyao* 武經總 (*Comprehensive Essentials of the Military Classics*); the great value placed upon esoteric works of wisdom such as the *Guiguzi* 鬼谷子 (*Master of Demon Valley*); and the unremitting quest for lost books of wisdom as portrayed in novels, tales, and even contemporary media.

馬發, Wuzi 吳子, Liutao 六韜, Sanlüe 三略, and Wei Liaozi 尉繚子– are included in the imperially sponsored Song dynasty compilation intended to ensure candidates for military office had a thorough grounding in fundamentals date to the Warring States period. (The seventh is purportedly a dialogue between emperor Tang Taizong and the highly esteemed military commander Li Weigong aptly known as the *Questions and Replies*. Complete translations and analyses of them all may be found in Sawyer, *Seven Military Classics of Ancient China*.)

<sup>&</sup>lt;sup>7</sup> *Huangshi Gong Sanlüe (The Three Strategies of the Duke of Yellow Rock), "Superior Strategy." (The Three Strategies is a late Warring States or early Han text.)* 

More importantly, Sunzi emphasized human effort and eschewed esoteric sources: "Advance knowledge cannot be gained from ghosts and spirits, inferred from phenomena, or projected from the measures of Heaven, but must be gained from men, for then it will be knowledge of the enemy's true situation."<sup>8</sup> For unknown reasons the radical nature of this rejection of otherworldly sources has frequently been underestimated for by 500 BC, a moment when both Sunzi and Confucius were active, divination and prognostication had been employed for a thousand years to determine the appropriateness (rather than feasibility) of undertaking major affairs, including warfare.

The Shang had resorted to oracle bones, which provided simplistic and, therefore, highly nebulous indications that simply confirmed or rejected a particular course of action. The Zhou replaced them with a form of cleromancy, the ritualized casting of milfoil stalks to obtain one of sixty-four possible hexagrams whose pronouncements were recorded in the still-evolving text now known as the *Yi Jing* (易 經). Highly complex theoretical explanations preserved in the *Zuozhuan* (左傳) indicate it was widely used in the Spring and Autumn period (722–481 BC) when deciding whether or not to fight.

However, neither Sunzi's assertion nor a similar admonition in a late Warring States compilation known as the *Wei Liaozi* completely deterred commanders from using divination or observing cloud and vapor formations to determine the likelihood of success, reacting to ill omens such as birds flying backward, or being troubled by the moon's phase or the direction of a comet's tail.<sup>9</sup> Moreover, the Han dynasty continued to employ official diviners and astrologers, though the latter were mainly entrusted

<sup>&</sup>lt;sup>8</sup> "Initial Estimations," *Art of War*. Even though Sunzi and Wei Liaozi sought to negate the influence of prognostication and omens, the practice of observing vapors and cloud formations for indications of victory or defeat, as well as for the probable success of strategies, persisted. (For a discussion of the ongoing clash between believers and critics, see Sawyer, "Paradoxical Coexistence of Prognostication and Warfare," *Sino-Platonic Papers*, Number 157 (2005)).

<sup>&</sup>lt;sup>9</sup> For examples, see Sawyer, "Military Prognostication," in *Military Culture in Imperial China*, or Michael Loewe, "The Oracles of the Clouds and Winds," in his *Divination*, *Mythology and Monarchy in Han China*.

with calendrical matters and predicting eclipses to preclude them being interpreted as expressions of Heaven's displeasure with the rulership.<sup>10</sup>

## The Nature of Information

The *Art of War* essentially determined the thrust of intelligence gathering efforts by enumerating seven categories deemed critical for comparative assessment:<sup>11</sup>

Which ruler has the Tao?Which general has greater ability?Who has gained [the advantages of] Heaven and Earth?Whose laws and orders are more thoroughly implemented?Whose forces are stronger?Whose officers and troops are better trained?Whose rewards and punishments are clearer?

Although diplomats, spies, and others often proved highly capable, simply acquiring the knowledge needed to conduct net assessments and anticipate plans was felt to be insufficient without well-tested criteria by which to evaluate it. During the Warring States (453–221 BC), military and political thinkers turned their attention to what constitutes effective government, the nature of strategic power, and the character of the people in their quest to fathom enemy capability and intent and understand the dynamics that predispose states to extinction or preeminence.

The classic military writings include chapters replete with signs that indicate vulnerability, as well as signify strength and formidability. Two that circulated during the Han – the *Three Strategies of Huangshi Gong* and the Tai Gong's *Six Secret Teachings* 

<sup>10</sup> The *Shiji* (史記), China's first synthetic history, contains two chapters ("Rizhe" and "Guici") that discuss the practices and successes of some early diviners and the *Han Shu* (漢書), the history of the Later Han, several on the five phases, as well as one on astronomy.

<sup>&</sup>lt;sup>11</sup> "Initial Estimations."

(*Liutao*) – also ponder the nature and effects of weakness.<sup>12</sup> The former contains a detailed list of ten exploitable deficiencies, most of them stemming from administrative failures that range from royal perversity through the predominance of conniving subordinates who manipulate and obfuscate the ruler, keeping him ignorant of real events, as commonly occurred in Chinese history. The presence of cliques and powerful groups is considered particularly debilitating.<sup>13</sup>

In detailing six so-called "thieves" and seven "harms" along similar lines, the *Six Secret Teachings* emphasizes how the self-interested who espouse alternative values, pursue extravagant lifestyles, or disdain authority undermine the state.<sup>14</sup> Among the former, "the officials form cliques and parties, obfuscate the worthy and wise, and obstruct the ruler's clarity." In contrast, self-seeking, loquacious individuals who are skilled in conning and deceiving others and "seek office and rank through slander, obsequiousness, and pandering" are particularly singled out among the "seven harms." Some of them even "create magical formulas and weird techniques, practice sorcery and witchcraft, advance unorthodox ways, and circulate inauspicious sayings, confusing and befuddling the good people."

Within the political writings, "doomed states" – those whose pervasive corruption, weakness, and disorder make them easy prey and obviate any hope of revival – comprise a special category. As would be expected, philosophical orientation determines the emphasis. Confucian imbued writers invariably stressed virtues such as righteousness, benevolence, and credibility, and extolled a vision of social order that emphasized deference, ritual, adherence to detailed behavioral practices and constraints known as the *li* (禮),<sup>15</sup> and the participation of "wise men" and "moral exemplars" in

<sup>&</sup>lt;sup>12</sup> The *Six Secret Teachings* also includes two chapters, "Civil Offensive" and "Three Doubts," on how to subvert enemies by exploiting inherent vulnerabilities and fissures.

<sup>&</sup>lt;sup>13</sup> "Superior Strategy." The complete list may be found in my translation of the *Three Strategies* in the *Seven Military Classics of Ancient China* (pp. 298-299), and in *The Tao of Spycraft*, pp. 399-401.

<sup>&</sup>lt;sup>14</sup> "Honoring the Worthy." They may be found in my translation of the *Six Secret Teachings*, one of the *Seven Military Classics of Ancient China* (pp. 48–50), and *The Tao of Spycraft*, pp. 401-2.

<sup>&</sup>lt;sup>15</sup> The *li* were essentially prescriptive forms of behavior that governed every aspect of political and personal life, ranging from daily rituals through state relations. Their extensiveness, not to mention intrusiveness, may be seen in two of the thick ritual works that have survived from the Warring States period, the *Yili* 儀禮 and *Liji* 禮記. As seen in reports of diplomatic missions, any failure to adhere to the details indicated ignorance or a character deficiency. (The *Yili* was translated a century ago by John Steele

government. Their absence was deemed symptomatic of a weak state, one susceptible to attack and conquest.

In decided contrast, so-called "realists," often known as Legalists (法家 *fajia*), decried the presence of "perfected men" (*junzi* 君子) because they undermine well-governed states. They instead emphasized strict organization, the imposition of law and order, a draconian legal edifice, and measures that stimulate economic prosperity and strengthen the state and army. Flaws in the ruler's character, ineffective government, licentiousness and debauchery, alternative values, popular disaffection, disorder, and deprivation all mark weak enemies.

Nevertheless, despite often vehement disagreement, in aggregate the indications that emerged from their disagreements came to provide a basis for defining the Han's intelligence objectives and orienting its assessment procedures. Since intelligence insights stem from details rather than grandiose schemes and sweeping evaluations, a few well-known examples merit contemplation. When queried how states lose the allegiance of their people and perish, the prominent Spring and Autumn stateman Yanzi described the inimical behavior he felt marked a "doomed state:"<sup>16</sup>

The state is impoverished but the ruler likes to boast; his wisdom is meager, but he likes to rely upon himself; he is estranged from the noble and lowly; the great ministers neglect the rites; he inclines to flatterers and sycophants while slighting worthy men; takes pleasure in being rude and

<sup>16</sup> Yanzi Chunqiu 晏子春秋, "Neipianwen, Shang." Yan Ying was a prominent Qi official and adviser who probably died about 500 BC. Considerable disagreement exists about the date of the book's composition and whether any of the materials reflect his thought. (This chapter also contains a comparative analysis of the likelihood that Chü or Lu would perish first. Along the same lines, one of the fragmented texts recovered in 1971 from a Former Han dynasty tomb – fully translated in my *Art of War* volume, pp. 246-248, is a purported dialogue between the king of Wu and Sunzi on the factors that will influence Jin's dissolution and who might emerge unscathed. Based on the comparative arrogance of the ruler, prosperity of the common peoples, and level of taxation, Sunzi correctly predicted the Fan and Zhonghang clans would succumb first, then the Zhi, followed by the states of Han and Wei, with Zhao eventually surviving them all. Although the accuracy of his prediction indicates a post event composition date, the assessment process merits noting.

as *The I–Li or Book of Etiquette and Ceremonial,* and the *Liji* even earlier by the masterful James Legge as *The Li Ki.*)

uncouth and in manipulating the common people; the state lacks constant laws; the people lack pattern and order; he takes those skilled in sophistry as wise, those harsh to the people as loyal; he is constantly inebriated and forgets the state; he loves the army and forgets the populace; is strict about punishment and execution, but slow in bestowing rewards; takes pleasure in other people's grief and finds profit in their hardship; his virtue is insufficient to embrace the people and his government inadequate to nourish them; his rewards insufficient to stimulate goodness and punishments inadequate to prevent evil.

Another historical work, the *Yi Zhoushu* (*Lost Book of the Zhou* 逸周書), a Warring States compilation that reputedly preserves early Zhou material and reflects a Confucian perspective, asserts "promiscuities" – government measures that fail to accord with the seasons, licentious practices that destroy the virtues and values necessary to effectively govern, and pervasive artifice – are the chief culprits. They are all, therefore, symptomatic of a state in terminal decline.<sup>17</sup>

Many other Warring States political and philosophical writings, such as the *Guanzi* 管子, *Xunzi* 荀子, and *Huainanzi* 淮南子 preserve similar iterations of judgmental criteria. Despite the fervency of his belief in the efficacy of Virtue, the so-called "realistic" Confucian Xunzi recognized the importance of other criteria and was confident that accurate evaluations were possible, for he said, "To determine whether a state is well governed or in turmoil, virtuous or not, merely observing the border will immediately provide evidence." He added, "Evidence exists for observing whether a state is strong or weak, rich or poor."<sup>18</sup>

At the end of the Warring States period, Xunzi's disciple Han Feizi 韓非子-a well-known Legalist – believed the state should be governed by a strong ruler who oversees an efficient, responsive administration and law-abiding populace. Moreover, it should be free of distracting beliefs and inimical values, including the Confucian virtues, and be intolerant of asocial behavior. Scholars and worthies, the epitome of Confucian

<sup>&</sup>lt;sup>17</sup> Yi Zhoushu, "Da Wukai." An interesting list of ten practices, aptly entitled "Ten Defeats" is found in "Fengbao Jie," while another section notes that when the ruler loves wealth, it facilitates the acquisition of power by the perverse. A ruler who immerses himself in pleasure is seen as likely to lose his power to his ministers. ("Shiji Jie.")

<sup>&</sup>lt;sup>18</sup> "Fu Guo." (Xunzi is best, but simplistically, known for his belief in the inherent perversity of human nature.)

administrative excellence, with their self-confidence and divisive beliefs, therefore have no place. His signs of incipient disorder, which he terms "parasites," and other iterations that reflect the erosion of the ruler's sole authority and make states vulnerable to attack and collapse thoroughly reflect these beliefs.<sup>19</sup>

Not unexpectedly, the *Han Feizi* contains the most extensive compilation of behavior and practices indicative of collapse and, therefore, of successfully attacking an enemy state.<sup>20</sup> However, Han Feizi notes that the forty-seven are merely predispositions, not factors certain to lead to ruin. External stimuli, analogous to heavy rain beating on a weakened wall, are needed to precipitate an actual collapse. (In other words, military strikes or covert actions that subvert a state, such as the highly successful systematic program developed by Qin, are necessary.)<sup>21</sup> Most of them are symptomatic of a poorly administered state, the result of licentiousness and debauchery, the emergence of contending power centers, and the presence of distracting influences rather than failures in the Confucian ideals of benevolence, righteousness, and the people's welfare. Although the complete list is well worth studying, a few selections must suffice:

The chief ministers are highly honored and their cliques so extensive and powerful they can obstruct the ruler's decision-making and impede the exercise of government authority.

Although events can be foreseen, the ruler's mind is too weak and pliant. He knows what ought to be done, but even after deciding, still doesn't act.

The ruler is impetuous, acts carelessly, and never ponders the consequences when he becomes angry.

If a state lacks bastions of terrain, the exterior and interior walls are in ruins, accumulated stores non-existent, resources are few, and equipment

<sup>&</sup>lt;sup>19</sup> As found in "Wu Ku" and "Pa Shuo." (Han Feizi employs historical episodes and anecdotes to illustrate and prove his contentions. Similar iterations can also be found in the *Lüshi Chunqiu's*"Li-su-lan" and in the *Bao Puzi*, particularly the chapter entitled "Chün Tao.")

<sup>&</sup>lt;sup>20</sup> "Precursors to Extinction." (A complete translation may be found in Sawyer, *Tao of Spycraft*, pp. 415-420, and a translation of selected *Han Fezi* chapters in Burton Watson, *Basic Writings of Mo-tzu*, *Hsün-tzu*, *and Han Fei-tzu*.)

<sup>&</sup>lt;sup>21</sup> For a discussion of Qin's subversive program, see *Tao of Spycraft*, pp. 98-109, or Sawyer, "Estrangement" and "Subversive Programs" in the *Youtube* series "Intelligence theory and Practice in China."

for mounting a defense lacking, yet the ruler carelessly launches attacks against other states, the state can be destroyed.

Of particular importance is any failure to detect spies and negate agents of influence. Han Feizi warned a state is doomed "if foreign visitors and itinerant persuaders who have ample external funds can clandestinely observe the state's plans and estimations and become involved in the people's affairs."

#### Military Assessment

Two distinct forms of military assessment that developed over the early centuries continued to be fundamental in the Han: general characterizations of state capability and martial intentions, and more focused, essentially contemporary evaluations of army strength, position, and movement, based upon information gathered by external observers and spies. Although they reflect the prejudices that evolved during an era of fragmentation, the characterizations preserved in Warring States military and philosophical writings well illustrate the thrust of enemy assessment. Moreover, they change little in the Han whose rulership over the entire realm not only compelled them to direct their attention outward, toward the contiguous peoples beyond their proclaimed borders but also inward to quell rebellious leaders and local factions with proclaimed regional identities.<sup>22</sup> Nevertheless, much in accord with Guanzi's belief that "knowing capability isn't as good as knowing intentions," any assessment undertaken for military purposes still had to consider the broader issues of character, military capability, and intentions.

The *Wuzi*, a middle Warring States military text attributed to the surpassing commander Wu Qi, preserves a set of six evaluations that typify how enemy profiles were synthesized. His assessment of Qin, the western state that eventually subjugated the realm and restored imperial unity in 221 BC, is informative. After stating that "Qin's battle array is dispersed, with the soldiers preferring to fight individually," Wu Qi continues:

<sup>&</sup>lt;sup>22</sup> Despite impressions, China was never an ethnically or culturally homogenous state. The ancient fault lines that defined the Spring and Autumn states ensured local distinctiveness (and consciousness of particularized identity) resurged in periods of unrest and fragmentation.

Qin's character is strong, the land treacherous, and the government severe. Their rewards and punishments are trusted, the people never yield but instead are all fiery and contentious. Thus, they scatter and individually engage in combat.

The Dao for attacking them is to first entice them with profits because their soldiers are greedy and will abandon their generals to pursue them. Capitalizing on their misjudgment, you can hunt down their scattered ranks, establish ambushes, take advantage of the moment, and capture their generals.

Xunzi's observations and conclusions differed significantly following a personal visit to Qin:<sup>23</sup>

Qin's barriers and passes are solidly defended and the topography facilitates defense. The mountain forests and river valleys are spectacular and they derive extensive profits from natural resources. This is terrain conducive to victory.

Entering their borders and observing their style of life and customs, I found the hundred surnames were straightforward. Their music was neither licentious nor muddy. Their clothes weren't provocative and they deeply feared and obeyed the officials. They are like an ancient people.

The hundred capital officials were all serious and reserved, reverent and respectful, loyal, trustworthy, and honest. They are the officials of antiquity.

In conclusion, he states, "That they have been victorious for four generations is no accident, but a question of their measures."

The *Huainanzi*, a Former Han dynasty eclectic work, shows how these characterizations became an integral part of Han knowledge. Not unexpectedly, considerable attention is allotted to Qin:<sup>24</sup>

<sup>&</sup>lt;sup>23</sup> "Qiang Guo."

Qin may be characterized as having the avariciousness of a wolf. Their strength is great, they have little regard for righteousness, and they pursue profit. They can be awed with punishments but cannot be transformed through goodness. They can be motivated with rewards but cannot be threatened with names.

The state backs difficult terrain and is belted by the Yellow River. Their four passes constitute a bulwark, the land is advantageous, and the configuration of terrain is conducive to defense. They have abundant harvests and stores.

Situated in the isolated Wei River valley area, a naturally mountainous bastion on the periphery of the older, "more civilized" states, Qin's geostrategic advantages were undeniable. Moreover, just as the Zhou before them, the state enjoyed the twin stimuli provided by the sophisticated cultures in the east and the martial values of the nearby nomadic peoples in the west.<sup>25</sup>

Because of their particularistic nature, Wu Qi's assessment of their respective "strategic configurations of power" (勢 *shi*) is revealing.<sup>26</sup> For example, he characterized the powerful eastern state of Qi as follows:

Qi's battle array is dense but not solid. Qi's character is hard; the country prosperous; and the ruler and ministers arrogant and extravagant, insulting to the common people. The government is expansive but salaries are inequitable.

Their formations are of two minds, with the front being heavy and the rear light. Thus, while they are dense, they aren't stable. The Dao for

<sup>&</sup>lt;sup>24</sup> A complete translation of the *Huainanzi*, which has a heavily Daoist orientation, has been made by John Major and collaborators.

<sup>&</sup>lt;sup>25</sup> Although a number of Warring States writers and persuaders had already noted Qin's geostrategic advantages, a definitive summary by the Han statesman Jia Yi subsequently known as the "Jia Yi Guo Qin Lun" became famous for its sophistication and literary qualities.

<sup>&</sup>lt;sup>26</sup> The critical Chinese military concept of *shi*, which might be best translated as the "strategic configuration of power," is first discussed in several *Art of War* chapters. (A full translation of the *Wuzi* may be found in my *Seven Military Classics of Ancient China* and General Griffith's translation of Sunzi's *Art of War*.)

attacking them is to divide them into three, harry the left and right, and coerce and pursue them. Then their formations can be destroyed.<sup>27</sup>

Broad characterizations such as these can be employed to formulate foreign policy and strategic measures, but military assessments based on current strengths and weaknesses are critical in imminent confrontations. The *Art of War* early on provided the essential parameters by identifying roughly forty paired, mutually defined categories that can be employed to fathom the enemy and analyze battlefield situations. For example, when approaching the battlefield, the comparative state of readiness can be determined by assessing hunger/satiety, exhaustion/rest, order/disorder, fear/confidence, cold/warmth, wetness/dryness, and laxity/alertness. However, the crucial indicators remain the government's quality and effectiveness; the army's organization, discipline, and strength; and the character of the ruler and his commanders.

Fatal deficiencies and inimical situations were increasingly recognized as command experience accumulated and was pondered. Detecting them, therefore, became an intelligence objective for every field commander. Although the *Art of War* and Sun Bin's *Military Methods* (孫臏兵法) identify a number in which disorganization and debilitation are especially prominent, the *Sima Fa* 司馬法 provides the earliest summary:<sup>28</sup>

When the front and rear are ordered and the chariots and infantry move in concord in attacking, waging battle, defending, advancing, retreating, and stopping, it's termed a well-planned campaign.

When the troops do not follow orders; do not trust their officers; are not harmonious; are lax, doubtful, weary, afraid; avoid responsibility; cower;

<sup>&</sup>lt;sup>27</sup> "Evaluating the Enemy." The comparable *Huainanzi* evaluation, while almost uselessly brief, is rather more positive: "Qi's territory backs the ocean to the east and they adopt the Yellow River as their northern defensive barrier. The land is constricted and its agricultural fields few, but the people are very wise and clever." The *Wuzi* also preserves evaluations of Chu, Yan, and the three Jin successor states of Han, Wei, and Zhao.

<sup>&</sup>lt;sup>28</sup> "Determining Rank."

or are troubled, unrestrained, deflated, or dilatory, it's termed a "disastrous campaign."

When they suffer from extreme arrogance, abject terror, moaning and grumbling, constant fear, or frequent regrets over actions being taken, they are termed "destroyed and broken."

With an eye to identifying developments and factors that will make the enemy susceptible to defeat, a second thread accordingly focused on characterizing the army's condition and describing the situation immediately prior to battle. On this basis certain operative principles immediately follow:<sup>29</sup>

Attack the weak and quiet, avoid the strong and quiet. Attack the tired, avoid the well trained and alert. Attack the truly afraid, avoid those that display only minor fears. From antiquity these have been the rules for governing the army.

The *Wuzi*, which was probably composed after the *Sima Fa*, offers a number of tactically correlated evaluations:<sup>30</sup>

If the upper ranks are wealthy and arrogant while the lower ranks are poor and resentful, they can be separated and divided.

If their advancing and withdrawing are often marked by doubt and the troops have no one to rely on, they can be shocked into running off.

If the officers despise the commanding general and are intent on returning home, they can be attacked and captured by blocking off the easy roads and leaving the treacherous ones open.

If the terrain over which they advance is easy but the road for withdrawing difficult, they can be forced to come forward.

If the way to advance is difficult but the road for retreating easy, they can be pressed and attacked.

<sup>29 &</sup>quot;Strict Positions."

<sup>&</sup>lt;sup>30</sup> "Evaluating the Enemy," Wuzi.

If they encamp on low wetlands where there is no way for the water to drain off and heavy rain frequently falls, they can be flooded and drowned.

If they make camp in a wild marsh or fields dense with a heavy tangle of grass and stalks, if violent winds frequently arise, you can burn the fields and destroy them.

If they remain encamped for a long time, resulting in the generals and officers growing lax and lazy and the army unprepared, you can sneak up and spring a surprise attack.

Another significant *Wuzi* passage identifies eight situations of such great vulnerability that an attack can, and should be undertaken *without performing divination*, thus coincidentally showing the latter's persistence in the Warring States period:<sup>31</sup>

First, they arise early and in violent winds and extreme cold are marching while [barely] awake, breaking ice to cross streams, unafraid of hardship.

Second, they arise late and in the burning heat of mid-summer immediately hasten forward through hunger and thirst, concentrating on far off objectives.

Third, the army has been out in the field for an extended period; their food supplies are exhausted; the hundred surnames are resentful and angry; and numerous baleful portents have arisen and the superior officers have been unable to quash their effects.

Fourth, the army's resources have already been exhausted; firewood and hay are scarce; the weather has frequently been cloudy and rainy; and even if they want to plunder for supplies, there is nowhere to go.

Fifth, the number mobilized is not large; the terrain and water not advantageous; the men and horses are sick and worn out; and no assistance is coming from their allies.

Sixth, the road is far and the sun setting; the officers and men have labored long and are fearful. They're tired, haven't eaten, and have cast aside their armor to rest.

<sup>&</sup>lt;sup>31</sup> "Evaluating the Enemy."

Seventh, the generals are weak; the officials irresponsible; the officers and troops aren't solid; the Three Armies are frequently frightened; and the forces lack any assistance.

Eighth, their formations are unsettled and their encampment unfinished, or they are traversing dangerous territory and narrow defiles, where they are half concealed and half exposed.

In these eight conditions attack them without any doubt.

The *Wuzi* separately describes a number of other situations in which disorganization and lack of preparation make the enemy vulnerable to attack. For example, "If the enemy unthinkingly approaches in reckless disarray; their flags and banners are confused and in disorder; and the men and horses frequently look about, one of our contingents can attack ten of theirs."<sup>32</sup>

Conversely, this virtual reference library contains descriptions of situations that preclude attack. According to the text, there are six circumstances in which, *without performing divination*, conflict should be avoided. Wu Qi said, "In general, in these situations you are not a match for the enemy. Without doubt, avoid them. This is what is meant by "seeing possibility and advancing, knowing difficulty and withdrawing."

First, the land is broad and vast, the people wealthy and numerous.

Second, the government loves the people, the ruler's beneficence extends to them all.

Third, their rewards are trusted and their punishments based upon investigation, with both invariably being implemented in timely fashion.

Fourth, people are ranked according to their martial accomplishments, they official positions are awarded to the Worthy, and the able employed.

Fifth, their forces are massive and their weapons and armor all first rate.

Sixth, they have the assistance of all their neighbors and the support of a powerful state.

The *Six Secret Teachings* similarly preserves a well-known series of exploitable situations "when the enemy can be attacked":<sup>33</sup>

<sup>&</sup>lt;sup>32</sup> "Evaluating the Enemy."

<sup>&</sup>lt;sup>33</sup> "Military Vanguard"

When the enemy has begun to assemble.

When the men and horses haven't been fed.

When the seasonal or weather conditions aren't advantageous.

When they haven't secured good terrain.

When they are fleeing.

When they aren't vigilant.

When they are tired and exhausted.

When the general is absent from the officers and troops.

When they are traversing long roads.

When they are fording rivers.

When the troops haven't had any leisure time.

When they encounter the difficulty of precipitous ravines or are on narrow roads.

When their battle array is in disorder.

When they are afraid.

A second series describing moments of vulnerability, found in an historically important discussion of battle chariots and their limitations, similarly merits reproducing:<sup>34</sup>

When the enemy's ranks – front and rear –- are not yet settled.

When their flags and pennants are in chaos, their men and horses frequently shifting about.

When their battle array is not yet solid and the officers and troops are looking around at each other.

<sup>34 &</sup>quot;Battle Chariots."

When, in advancing, they appear full of doubt, and in withdrawing they are fearful.

When the enemy's Three Armies are suddenly frightened and all rise up in great confusion.

When fighting on easy terrain and twilight has come without being able to disengage from the battle.

When, after traveling far, they are encamping at dusk and the Three Armies are terrified.

Circumstantial factors that physically debilitate bodies and depress their spirit can also predispose armies to defeat. For example, Sun Bin said:<sup>35</sup>

If the army has been frightened several times, the general can be defeated.

If their *qi* (spirit) has been injured from being long exposed on campaign, the general can be defeated.

Considerable commonality marks all these approaches, but there are also important differences and subtle nuances obviously based upon extensive battlefield experience. The result is a veritable compendium of identifiable situations with strategic implications. They thus not only defined a range of targets for intelligence acquisition efforts but were also of great utility to field commanders trying to formulate tactics prior to battle.

#### Commanders

Being accorded increasingly immense power, commanders came to determine the army's fate and often the state's destiny by the Warring States period. Sunzi

<sup>&</sup>lt;sup>35</sup> "The General's Losses," *Sun Bin Military Methods*. Sun Bin wasn't just an outstanding Warring States commander, but also the era's leading strategist. (The *Sun Bin Bingfa* has been translated by Ralph D. Sawyer as *Sun Pin Military Methods* and by Roger Ames and D.C. Lau as *Sun Bin Art of War*.) His writings on *qi*, especially the chapter titled "Expanding Qi," constitute a veritable psychology of combat spirit. (An extensive discussion of his insights may be found in Sawyer, "Martial *Qi* in China: Courage and Spirit in Thought and Military Practice," *Journal of Military and Strategic Studies*, Winter 2008/2009.)

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initiated overt recognition of the general's crucial role by asserting, "The general is the state's supporting pillar. If his talents are all-encompassing, the state will invariably be strong. But if the pillar is marked by fissures, the state will inevitably grow weak."<sup>36</sup> The other classic military writers not only stress the commander's importance, they also emphasize the need to determine "which general has greater ability." Thus, Wu Qi said, "Before battle, it's essential to attempt to fathom the enemy's general and evaluate his talent. If you then exploit the strategic imbalance of power, you won't labor but still achieve results." <sup>37</sup> Great effort was, therefore, expended to discern personality and weakness, but especially the latter, and Han intelligence efforts continued to make the acquisition of such information a conscious objective.

In briefly discussing the skills and traits they felt characterize competent commanders, most of the early strategists tended to define deficiencies and defects in contrast with them. Although the criteria vary by writer and prevailing concepts, as evidenced by its placement in Sunzi's iteration of the five crucial aspects of wisdom, credibility, benevolence, courage, and strictness, in historic China wisdom was usually accorded priority.<sup>38</sup>

Thereafter, Wu Qi defined the nature of this knowledge and its limitations in a well-known passage:<sup>39</sup>

Warfare has four vital points: *qi*, terrain, affairs, and strength. One who knows these four is qualified to be a general. However, his awesomeness, Virtue, benevolence, and courage must be sufficient to lead his subordinates and settle the masses. Furthermore, he must frighten the enemy and resolve doubts. When he issues orders, no one will dare disobey them. Wherever he may be, rebels will not dare oppose him.

"Focused caution" turns out to be one of five important affairs in his conception: 40

<sup>&</sup>lt;sup>36</sup> "Planning Offensives," Art of War.

<sup>&</sup>lt;sup>37</sup> Wuzi, "The Tao of the General."

 <sup>&</sup>lt;sup>38</sup> "Initial Estimations." In "The Tao of the General" Wu Qi subsequently noted, "Courage is but one of the general's [requisite] characteristics, for the courageous will rashly join battle with the enemy."
<sup>39</sup> Wuzi, "The Tao of the General."

<sup>&</sup>lt;sup>40</sup> Wuzi, "The Tao of the General."

Now the affairs to which the general must pay careful attention are five: first, regulation; second, preparation; third, commitment; fourth, caution; and fifth, simplification. Regulation is governing the masses just as one controls the few. Preparation is going out the city gate as if seeing the enemy. Commitment means entering combat without any concern for life. Caution means that even after conquering, one maintains the same control and attitude as if entering a battle. Simplification means the laws and orders are kept to a minimum and are not abrasive.

Wei Liaozi, who offers a number of important observations of the nature of qi  $\equiv$  (combat spirit) notes the commanding general "should be composed so that he cannot be stimulated to anger. He should be pure so that he cannot be enticed by wealth."<sup>41</sup> And the *Three Strategies*, citing the *Military Pronouncements*, proclaims: "The general should be able to be pure, quiet, tranquil, and controlled, as well as able to accept criticism, judge disputes, attract and employ men, select and accept advice, know the customs of states, map mountains and rivers, discern defiles and difficulty, and control military authority."<sup>42</sup>

In "A Discussion of Generals," an aptly titled *Six Secret Teachings* chapter, the Tai Gong correlates five essential virtues with their effects.

What we refer to as the five critical talents are courage, wisdom, benevolence, trustworthiness (credibility), and loyalty. The courageous cannot be overwhelmed. The wise cannot be forced into turmoil. The benevolent love their men. The trustworthy will not be deceitful. The loyal will not be of two minds.

Although the list would vary over the centuries, the most extensive Warring States examination of command qualifications and disqualifying flaws appears in Sun Bin's *Military Methods*. <sup>43</sup> The chapter, known as "The General's Righteousness," specifies five positive characteristics every commander must possess: benevolence, virtuousness, credibility, and strategic wisdom. In an exemplification of the chain

<sup>&</sup>lt;sup>41</sup> Wei Liaozi, "Military Discussions."

<sup>&</sup>lt;sup>42</sup> "Superior Strategy."

<sup>&</sup>lt;sup>43</sup> Altogether, four chapters: "The General's Righteousness," "The General's Virtue," The General's Defeats," and "The General's Losses."

thinking that characterizes much early Chinese thought, the entry for righteousness states:

The general must be righteous. If he isn't righteous, he won't be severe. If he isn't severe, he won't be awesome. If he isn't awesome, the troops won't die for him. Thus, righteousness is the head of the army.

More broadly, the commanding general should be qualified for his position by his nature, intelligence, and knowledge. He should be a man of Virtue in every sense – benevolent, courageous, righteous, incorruptible, and caring. He must ensure the army is united, disciplined, submissive, and spirited. He should be awesome but not brutal; treat the men well without weakening their martial spirit; elicit a sustained effort without exhausting the army; be confident, so his orders are trusted; be impartial in imposing rewards and punishments; and decisive.

The absence of any of these qualities or the presence of other significant flaws virtually assures defeat. The classic military writers therefore generally stress the importance of detecting character flaws in rulers and commanders and ruthlessly exploiting them on the battlefield. Sunzi initiated the tradition with his recognition and explication of "five dangerous" ones: <sup>44</sup>

A general committed to dying can be slain.

A general committed to living can be captured.

A general [easily] angered and hasty [to act] can be insulted.

A general obsessed with being scrupulous and untainted can be shamed.

A general who loves the people can be troubled.

Of particular interest is the realization that certain virtues, especially if extreme, such as the last two just above, may equally prove inimical. Wu Qi subsequently noted:<sup>45</sup>

A commanding general who is stupid and trusting can be deceived and entrapped.

<sup>44 &</sup>quot;Nine Changes."

<sup>&</sup>lt;sup>45</sup> "The Tao of the General."

One who is greedy and unconcerned about reputation can be given gifts and bribed.

One who easily changes his mind and lacks real plans can be labored and distressed.

In its contemplation of command flaws, the *Six Secret Teachings* identifies certain complex defects that combine what are normally considered strengths with lethal weaknesses, the strength being the factor that allows an undesirable tendency to materialize. It also discusses how they may be open to exploitation, and thus constitute characteristics that spies and observers should strive to discern.<sup>46</sup>

The courageous who treat death lightly can be destroyed by violence.

The hasty and impatient can be destroyed by persistence.

The greedy who love profit can be bribed.

The benevolent who are unable to inflict suffering can be worn down.

The wise but fearful can be distressed.

The trustworthy who like to trust others can be deceived.

The scrupulous but incorruptible who do not love men can be insulted.

The wise but indecisive can be suddenly attacked.

The resolute and self-reliant can be confounded by events.

The fearful who like to entrust responsibility to others can be tricked.

Even the late Warring States *Three Strategies* reprises some flaws and their effects:<sup>47</sup>

If the general stifles advice, the valiant will depart. If plans aren't followed, strategists will rebel.

<sup>&</sup>lt;sup>46</sup> "A Discussion of Generals."

<sup>47 &</sup>quot;Superior Strategy."

If the general treats the good and evil alike, meritorious officers will grow weary.

If the general relies solely on himself, his subordinates will shirk all responsibility.

If he brags, his assistants will have few attainments.

If he believes slander, he will lose the trust of the people.

If he is greedy, treachery will be unchecked.

If he is preoccupied with women, the officers and troops will become licentious.

Sun Bin's chapter, "The General's Defects," summarily identifies twenty character defects: greedy for position or wealth, rash, obtuse, lacks courage, is courageous but weak, has little credibility, is rarely decisive, slow, indolent, oppressive, brutal, selfish, and confusing before concluding, "numerous defects will result in numerous losses." <sup>48</sup> Moreover, because outright incompetence can be similarly exploited, it must be recognized. Premised on the belief that, "in combat, the two commanding generals won't both live, the two armies won't both survive," Sun Bin, therefore, included a number of command deficiencies in his characterization of thirty-two inimical situations that need to be recognized in."<sup>49</sup> In every case, the entry concludes "he can be defeated."

First, he has lost the means for going and coming.

Second, he gathers together turbulent people and immediately employs them; he stops retreating troops and immediately engages in battle with them; or lacks resources but acts as if he has resources.

Third, he constantly wrangles over right and wrong, and in planning affairs is argumentative and disputatious.

Fourth, his commands are not implemented and the troops aren't unified.

<sup>&</sup>lt;sup>48</sup> Twenty defects were originally listed, but nearly half of them have been lost.

<sup>&</sup>lt;sup>49</sup> The General's Losses." The chapter originally contained thirty-two entries but more than two thousand years underground severely damaged some of the bamboo strips.

Fifth, his subordinates aren't submissive and the troops unemployable.

Sixth, the people regard the army with bitterness.

Seventh, the army is "old."<sup>50</sup>

Eighth, the army is thinking about home.

Ninth, the soldiers are deserting.

Eleventh, the army has been frightened several times.

Twelfth, the soldiers' route requires difficult marching and the troops are suffering.

Thirteenth, the army is focusing upon ravines and strongpoints and the troops are fatigued.

Fourteenth, he is unprepared.

Fifteenth, the sun is setting, the road far, and the troops dispirited.

Seventeenth, the troops are afraid.

Eighteenth, he frequently changes his commands and the troops are furtive.

Nineteenth, the army is disintegrating and the troops do not regard their generals and officials as capable.

Twentieth, they have been lucky [in battle] several times and the troops are indolent.

Twenty-first, he has numerous doubts and the troops are doubtful.

Twenty-second, he hates to hear about his excesses.

Twenty-third, he appoints the incapable.

<sup>&</sup>lt;sup>50</sup> As characterized in military writings such as the *Three Strategies* ("Superior Strategy"), "old" armies aren't simply forces that are exhausted from being long in the field, but those with ineffective commanders who have lost control of dispirited troops.

Twenty-fourth, their *qi* (combat spirit) has been injured from being long exposed on campaign.

Twenty-fifth, their minds are divided at the appointed time for battle.

Twenty-sixth, he relies upon the enemy becoming dispirited.

Twenty-seventh, he focuses upon harming others and relies upon ambushes and deceit.

Twenty-ninth, he deprecates the troops and the minds of the masses are hateful.

Thirtieth, he is unable to successfully deploy his forces while the route out is constricted.

Thirty-first, there are soldiers from the rear in the army's forward ranks and the troops in the front aren't coordinated and unified

Thirty-second, in engaging in battle, he is concerned about the front and the rear is (therefore) empty; or, concerned about the rear, the front is empty; or concerned about the left, the right is empty; or concerned about the right, the left is empty, and he engages in battle filled with worry.

# **Configurations of Terrain**

Throughout history, frequently to their sorrow commanders have acted as if the terrain's characteristics are irrelevant. Conversely, even the most dimwitted recognized the importance of geography and weren't unaware of its multifaceted impact on military operations. Administratively and politically, states sought to define their borders, quantify their populace, and map their land. Internationally, they needed to know diverse aspects of the enemy's territory ranging from the location of cities, mountains, and rivers to the earth's fertility and local agricultural products, metals, and medicinal plants, all of which were vital to assessing capability, maneuvering the army, and sustaining campaigns.

Beginning with the legendary Sage emperor Yu, traditionally credited with being the first to "tame the waters" annually inundating the land, China has been geographically apportioned according to grandiose schemes. Some of them were purely conceptual, such as the concentric rings of submission and tribute visible in the *Shang Shu* (*Book of the Shang* 尚書), <sup>51</sup> others comparatively functional hierarchies of administrative districts. As they were generally defined by natural demarcation lines such as mountain ranges and rivers, they tended to enclose ethnically and culturally distinct areas. Not unexpectedly, these fault lines then tended to reopen whenever China's often fictitious unity was fractured, such as in the Six Dynasties period (222-589 AD), and they became important when Chinese authorities attempted to repulse Khitan, Jurchen, and Mongol invaders moving through them.<sup>52</sup>

However, it wasn't until the Warring States period that the importance of geographical knowledge was truly realized due to the internecine warfare decimating the country, raising concerns about the threats posed by contiguous peoples, ongoing border incursions, and the *Art of War's* emphasis upon the martial implications of *dixing* (地形), "configurations of terrain." Thereafter, geographical and topographical concerns continued to be a focal concern of Han dynasty intelligence efforts.

As information continued to be acquired, it was stored in government archives before being synthesized into regional reports, a few of which have been preserved in the *Shiji* 史記, China's first synthetic history, and the *Hanshu* 漢書, the first of the dynastic histories.<sup>53</sup> This material, together with ongoing accretions, formed the basis of intensive, often acrimonious court discussions on foreign policy measures and military missions, especially those intended to entangle, weaken, or suppress exterior nomadic groups such as the Xiongnu.<sup>54</sup>

<sup>&</sup>lt;sup>51</sup> Supposedly an ancient text that was probably composed in the Warring States period, it's also known as the *Shu Jing* or *Book of Documents*. As with all the classics, it has been fully translated by the great Sinologue James Legge.

<sup>&</sup>lt;sup>52</sup> It's often forgotten that many states in the Spring and Autumn and Warring States period differed as markedly as European countries a millennium ago, and that China's unity was often as fictitious as real, tenuously held together by an administrative structure that employed a written language whose characters were pronounced differently, even unintelligibly, across the country.

<sup>&</sup>lt;sup>53</sup> Although the *Hanshu* still lacks an English language translation, much of the *Shiji* is available in Burton Watson's several volumes, including his *Records of the Grand Historian of China*, and in the ongoing series under the general editorship of William Nienhauser titled *The Grand Scribe's Records*.

<sup>&</sup>lt;sup>54</sup> Vestiges of policy discussions appear in the court records for each of the dynasty's emperors, various biographies of important officials, and the two reportedly verbatim records of extensive court debates,

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The *Art of War* advanced the crucial idea that commonly encountered configurations constrain the tactics that can be advantageously employed or must be avoided. "Configurations of Terrain" explicitly describes the critical role that terrain, and knowledge of it, plays: "Configuration of terrain is an aid to the army. Analyzing the enemy, taking control of victory, estimating ravines and defiles, the distant and near is the Dao of the superior general. One who knows these and employs them in combat will certainly be victorious. One who doesn't know these nor employ them in combat will certainly be defeated." Sunzi also said, "The nine transformations of terrain, the advantages deriving from contraction and expansion, and the patterns of human emotion must all be investigated."<sup>55</sup>

Another focal chapter, "Nine Terrains," points out the price of ignorance: "Anyone who doesn't know the topography of mountains and forests, ravines and defiles, wetlands and marshes cannot maneuver the army. Anyone who fails to employ local guides will not secure advantages of terrain." Furthermore, the nature of the terrain fundamentally affects the strength of the forces that should be assigned to the effort: "Terrain gives birth to measurement, measurement to estimating the forces. Estimating the forces gives rise to calculating the number of men. Calculating the number of men leads to weighing strength. Weighing strength gives birth to victory."<sup>56</sup>

Certain terrain-based axioms were thought to apply to maneuvering the army in general. For example: "Now the army likes heights and abhors low areas, esteems the sunny (*yang*) and disdains the shady (*yin*). It nourishes life and occupies the substantial. An army that avoids the hundred illnesses is said to be certain of victory."<sup>57</sup> Since illness debilitates an army's strength and generally claimed more lives than combat in eras of poor sanitary practices and lethal diseases, occupying "lifegiving" terrain was essential.

the Discourses on Salt and Iron (Yantie Lun 鹽鐵輪) and Discussions in White Tiger Hall (Baihu Tang 白虎堂), the former dating to 81 BC during the Western or Former Han, the latter to 79 AD in the Eastern or Later Han. (For translations, see E. M. Gale, Discourses on Salt and Iron and Tian Tjoe Som, Po Hu T'ung: The Comprehensive Discussions in the White Tiger Hall. Two examples may be found in Sawyer, Tao of Spycraft: Intelligence Theory and Practice in Traditional China, pp. 420-423.)

<sup>55 &</sup>quot;Nine Terrains."

<sup>&</sup>lt;sup>56</sup> "Military Disposition."

<sup>&</sup>lt;sup>57</sup> "Maneuvering the Army."

In addition, logistical difficulties dictated plundering and foraging. Sunzi said, "If one forages in the fertile countryside, then the Three Armies will have enough to eat."<sup>58</sup>

Although nine terrains are normally associated with the *Art of War*, the text contains two distinct enumerations. The first of six includes accessible, suspended, stalemated, constricted, precipitous, and expansive, while the second of nine describes dispersive, light, contentious, traversable, focal, heavy, entrapping, encircled, and fatal terrain. Furthermore, the text actually describes more than twenty distinct configurations, several deadly land formations, and a number of natural obstacles, including mountains and rivers, whose necessary discovery must be the objective of scouting and reconnaissance efforts.<sup>59</sup>

For example, difficult terrain encompasses mountains, ravines, wetlands, and dense forests. Similarly, "entrapping terrain," while fairly unique, easily includes the entire range of dangerous and fatal configurations, such as deep gorges and pit-like areas. In both cases, they should be avoided, but if it isn't possible, moved through quickly. However, in contrast with later texts, commanders are rarely advised to try to compel the enemy onto difficult terrain or otherwise exploit it, such as by turning constricted valleys into killing grounds, just as Sunzi's famous descendant Sun Bin did at Maling in 341 BC where Qi's forces slew 100,000 troops from Wei with concentrated crossbow fire.<sup>60</sup> Conversely, Sun-tzu does advise that "there is terrain for which one does not contend."

Sunzi's correlation of terrain types and optimal operational tactics are too numerous to list exhaustively, but two samples might suffice:<sup>61</sup>

Land surrounded on three sides by the feudal lords where the four sides are open and whoever arrives first will gain the masses of All under

<sup>&</sup>lt;sup>58</sup> "Nine Terrains." (Sunzi's famous analysis of the logistical difficulties posed by prolonged campaigns appears in "Waging War.")

<sup>&</sup>lt;sup>59</sup> While the descriptions are marked by some repetition and variation, there aren't any real contradictions. In addition, some of the broader categories, such as easy and difficult, can subsume the more detailed ones.

<sup>&</sup>lt;sup>60</sup> For a recounting of this famous battle, the first clash known to employ crossbows, see the historical introduction to my Sun Bin *Military Methods*.

<sup>&</sup>lt;sup>61</sup> The entire array of terrains, including characterizations of the soldiers' combat spirit as they penetrate ever deeper into enemy terrain, may be found in any *Art of War* translation.

Heaven is focal terrain. Form and solidify alliances and unite with your allies.

If, when we occupy it, it will be advantageous to us, while if they occupy it, it will be advantageous to them, it's contentious terrain. Rapidly bring your rear elements forward but do not attack.

The earliest summation of geographical knowledge is generally thought to be the "Tribute of Yu" preserved in the *Shang Shu* or *Book of Documents*, one of China's earliest canonical works.<sup>62</sup> Clearly a work of the Warring States period rather than antiquity, it chronicles Yü's efforts to control the annual flooding that inflicted immense damage and reputedly brought about humanity's near extinction. Yu reportedly proceeded by banking, diking, changing, and deepening the course of rivers and streams, as well as draining and creating marshes.<sup>63</sup>

The text describes territorial boundaries that allow rough maps to be created; the course of important rivers and the presence of other bodies of water; the main plants; the quality of the soil (for agricultural and taxation purposes); and the specialized local items that were forwarded to the central government as "tribute" but were really a form of taxes. For example, the entry for the province of Yangzhou states:<sup>64</sup>

The Huai and the sea formed *the boundaries* of *Yangzhou*. *The lake of* Pangli was confined to its proper limits; and the sun birds had places to settle on. The three Jiang (rivers) were led to enter the sea. The bamboos, large and small, then spread about; the grass grew long and thin, and the trees rose

<sup>&</sup>lt;sup>62</sup> Although Yu's activities and reign date to the beginning of the Xia (2205-1766 BC), the chapter was probably composed in the Warring States period (453–221 BC) from unknown sources. (The *Shang Shu* is plagued by controversy as to what parts, if any, are genuine, and what parts forgeries. For an overview, see Edward L. Shaughnessy, "*Shang shu* 尚書," in *Early Chinese Texts: A Bibliographic Guide*, pp. 376-389.) <sup>63</sup> For a discussion of Yu's supposed efforts and the significant accomplishments of early flood control efforts in China, see Joseph Needham's monumental *Science and Civilisation in China: Civil Engineering and Nautics*. (Cambridge: Cambridge University Press, 1871), pp. 211-378. Presumably a collective memory embodied by one man, it marks the initiation of China's unremitting efforts to mitigate the disastrous impact of seasonal flooding.

<sup>&</sup>lt;sup>64</sup> As found in James Legge's classic translation (but with contemporary romanization): James Legge, *The Chinese Classics*, Vol. III: *The Shoo King*. London: Oxford University Press, 1865, pp. 108-112. (For a more recent translation, see Bernhard Karlgren, *The Book of Documents*, Gotenborg: Elanders, 1950.)

high; the soil was all miry. The fields of this province were the lowest of the lowest class; its contribution of revenue was the highest of the lowest class, with a portion of the class above. Its articles of tribute were gold, silver, and copper; *yao* and *kun* stones; bamboos small and large; elephants' teeth, hides, feathers, hair, and timber. The wild people of the islands brought garments of grass. The baskets were filled with woven ornamented silks. The bundles contained small oranges and pummelos, rendered when specially required. They followed the course of the Jiang and the sea, and so reached the Huai and Si.

Another early work, the *Mu Tianzi Zhuan* 穆天子傳, describes the peregrinations of an actual Zhou dynasty king, King Mu, who reigned from 956–918 BC and travelled far out west in search of the legendary Queen Mother.<sup>65</sup> It initially speaks of a punitive expedition (*zheng*) being mounted against the Quan Rong (犬戎 Dog Barbarians) and makes several references to the great charioteer Cao Fu who accompanied him, as well as the six armies (presumably of 2500 or 3000 men each) that supported the effort.<sup>66</sup> However, no real military clashes are recorded, the only semi-military event being several extensive hunts. Various peoples are recorded as voluntarily presenting thousands of horses and sheep. Although they should have easily supplied the army's protein requirements, their highly sporadic nature would have been problematic, as evidenced by the king compelling a local group to provision the army on at least one occasion.

Whatever its origins, the *Mu Tianzi Zhuan* contributed in a fundamental way to recognizing the exterior regions. The text identifies many distant places (including, perhaps, the Altai mountains), indicates the distance between mountains, rivers, and other important points for the first time, and also briefly describes certain salient

<sup>&</sup>lt;sup>65</sup> The *Mu Tianzi Zhuan* has obviously undergone extensive revision and suffered major losses. Whether it was originally based upon a transmitted kernel of events – some claim it's an actual record of the king's quest to dominate external regions and meet the Queen Mother of the West – or simply represents an attempt, however fictionalized, to integrate a vast amount of observational, perhaps reconnaissance based information, is an open question.) (For analyses, see Yang Kuan, *Xi Zhou Shi*, pp. 577-589, who suggests it is an account produced by the guide, or "Discussion of the *Mu T'ien-tzu Chuan*" in Shaughnessy, *Rewriting Early Chinese Texts*, pp. 172-177.)

<sup>&</sup>lt;sup>66</sup> The Quan Rong eventually played a pivotal role in the destruction of the Western Zhou.

regional characteristics and the inhabitants.<sup>67</sup> Two brief examples can provide a sense of the entries:

On *gengchen* (the 17<sup>th</sup>), the emperor<sup>68</sup> continued his expedition eastward, arriving at Mount Wu where the Zhi dwell. He then ventured northward to the marsh at Yizi. The Zhi clansmen offered a hundred jars of wine to the emperor.

Continuing his campaign southward, he then turned east and went as far as Changtan which is the western border of the Chongyong [?]. On *dinghai* (the 24<sup>th</sup>), after ascending the mountain, the expedition continued eastward. On *gengyin* (the 27<sup>th</sup>), he reached the settlement of the Chongyong on the bank of the Hei (Black) River. They had wild wheat and beans which the Western region calls *muho* (woody grain). They are what the Chongyong eat.

The quest for geographic knowledge, which naturally emphasized the readily identifiable features of mountains and rivers, prompted the creation of two other early, purely geographical works, the *Mountain Classic (Shanjing*山經) and the *Water Classic (Shuijing*水經). Although neither survived independently, the *Mountain Classic* came to furnish the first five books of the heavily mythological work known as the *Classic of Mountains and Seas (Shanhai Jing*山海經). The *Water Classic* is also partly incorporated into the *Shanhai Jing*.<sup>69</sup> Although the knowledge was obviously accumulated over the centuries, the core of the *Shui Jing* probably dates to the Warring States period. The extant text still describes the origin, flow, and tributaries of China's rivers, both major and minor.

The *Shanhai Jing* itself, whose earliest parts – including the *Mountain Classic* – similarly evolved during the Warring States period, if not earlier, describes China's

<sup>&</sup>lt;sup>67</sup> For an extensive analysis of the probable locations and a full translation, see Yu Taishun, "The

Communication Lines between East and West as Seen in the *Mu Tianzi Zhuan," Sino-Platonic Papers*, No. 197, 2010.

<sup>&</sup>lt;sup>68</sup> *Tianzi*, literally the "Son of Heaven" but also a term for emperor.

<sup>&</sup>lt;sup>69</sup> The *Shuijing* now forms the basis of a dense, annotated meditation by Li Daoyuan known as the *Shuijing Zhu (Annotated Shuijing)*, which is really a totally new work prompted by Li's dissatisfaction with the brevity of the accounts found in the geographic sections of the dynastic histories.

topography in considerable detail.<sup>70</sup> The later chapters integrate increasingly extensive shamanistic and mythological material, but the entire work evinces a fascination with geography and reflects the impulse to seek out and record information about the world around the center. The text includes the names of mountains and rivers; their relative distance from each other; numerous important minerals, animals, and plants, together with their medicinal effects; comments on the inhabitants and their lifestyle; descriptions of mythical creatures that now populate anime stories and movies; and various offerings to local deities. An example of a conservative entry from the early *Mountain Classic* portion describes Bamboo Mountain and its environs in Shaanxi:

Fifty-two *li* further west is Bamboo Mountain. Atop it are numerous majestic trees.

On the *yin* (shady or northern) side iron is abundant. There's a sort of grass called *huang guan* (yellow heron 黃 雚) whose appearance is like *shu* (*ailanthus* 樗). The leaves resemble hemp, the flowers are white, and the red fruit has a purplish tint. Washing with it cures itchiness and can also reduce swelling.<sup>71</sup> The *Ju* (Bamboo) River, which has its origin here, flows northward toward the Wei River.

On the *yang* (sunny or southern) side, bamboo [that can used for] arrows is numerous and green jade is abundant.<sup>72</sup> The *Dan* (Cinnabar) River, which originates there, flows southeast toward the Luo River. Crystalline like jade is abundant in its course and there are numerous humanlike fish. One of the mountain's animals resembles a pig but has black tipped white

<sup>&</sup>lt;sup>70</sup> Composed over centuries, the text has clearly discernible layers whose antiquity is argued. The first part, which is probably the oldest, is organized around the four quarters and the center and the work systematically integrates the five elements or phases of wood, fire, metal, earth, water. (The most accessible translation is Anne Birrell, *The Classic of Mountains and Seas.*)

<sup>&</sup>lt;sup>71</sup> An unexpected use since the plant's oils are generally considered an irritant. (An alternate identification is the "varnish tree.")

<sup>&</sup>lt;sup>72</sup> *Pseudossa japonica* (commonly known as arrow bamboo) isn't indigenous to this area so it's probably some sort of thin culm bamboo that can be cut to a sharp point and used for arrows after drying.

hair as long as a woman's hairpin that it uses to shoot other animals. It's called a *hao zhi* (brown swine).<sup>73</sup>

The final formulation in the early thrust to compile vital topographical knowledge is the lengthy "*Dili Zhi*" (地理志 "Treatise on Geography")<sup>74</sup> included in the first of the dedicated dynastic histories, the *Hanshu* (漢書) completed before the end of the first century AD. It begins by incorporating the "Tribute of Yü," then expands the early account with contemporary detail that includes population data and other important aspects.

Even though the Shang had a sense of its boundaries, the Zhou states obviously knew them much more precisely, especially when they were defined by rivers or mountain passes, and the various Spring and Autumn states zealously guarded their proclaimed domains and had clearly defined concepts of place and area, actual maps apparently didn't appear until about the fourth century BC.<sup>75</sup> Records of incursions, territory ceded, and cities lost indicate Warring States rulers zealously guarded their proclaimed domains and had clearly defined concepts of place and area.

At the time, virtually the sole medium for writing consisted of narrow bamboo strips that could be laboriously strung together to create a book or a continuous, but still somewhat irregular, surface. Map makers therefore resorted to cloth and solid planks of wood, both highly perishable. Nevertheless, from star maps on the ceilings of tombs, a couple of maps drawn on wooden planks, and a reference to a silk map that was employed to gain an audience for an assassin with the king of Qin at the end of the Warring states period, it's clear they were already being produced and seriously regarded.<sup>76</sup>

<sup>&</sup>lt;sup>73</sup> Haozhi continues to be the modern term for porcupine.

<sup>74</sup> Literally, "patterns of earth" (地理) but colloquially "geography."

<sup>&</sup>lt;sup>75</sup> Not until late do the military compendia include maps and extensive information on terrain. (For the most recent study of Chinese maps, see Wang Qianjian, "Surveying and Drawing of Maps," in *The Study of Heaven and Earth in Ancient China*, (Springer Nature Singapore Pte. Ltd., 2021), pp. 377–406.)

<sup>&</sup>lt;sup>76</sup> In order for his assassin to gain access to the king of Qin, the prince of Yan offered to become a vassal. In proof of his sincerity, he dispatched two emissaries with a map of Yan's territory and the head of one of the king's longtime enemies. Although he failed, Jing Ke was virtually lionized because of the realm's hatred for Qin. (The incident is reprised in the *Shiji*'s infamous chapter on assassins, "*Ci Ke*," discussed in

## Diplomats, Informants, and Spies

Prompted by the *Art of War's* "Employing Spies," by the Later Han China's strategic thinkers had been pondering intelligence objectives and the natures of agents for more than five hundred years. In addition, vital practices and experientially based contemplations are found in the extended *Shiji* and *Hanshu* biographies of important commanders. In aggregate they depict a highly conscious effort to achieve Sun-tzu's ideal of knowing the enemy and oneself.

Despite being largely confined to line-of-sight observation, deliberate efforts to gather information about enemies in China undoubtedly commenced with the earliest Neolithic conflicts. However, historians believe King Shao Kang of the Xia initiated the use of spies when he dispatched an agent to clandestinely observe his father's murderer around 1875 BC while he secretly accumulated the resources necessary to restore Xia rule. More importantly, Sunzi essentially canonized two men – Yi Yin and Lü Shang, otherwise known as the Tai Gong – as China's first spies as part of his focal examination of intelligence issues and spycraft.

Yi Yin was a true internal spy, someone dispatched to serve in the Xia palace and gain vital information, even possibly subvert it. Moreover, he was given a plausible pretext – a visible arrow wound – for seeking refuge with the Xia's perverse King, Jie, thereby establishing the importance of creating viable legends. In contrast, the Tai Gong was a defector, someone with supposedly detailed knowledge of Shang government and policies. Whether he brought any records, as other prominent officials did in the early period when they defected, or just the knowledge in his head is unknown.<sup>77</sup>

Institutionally, the Zhou dynasty *Xingren* 行人 appear to have been the first government officials tasked with intelligence activities because they were responsible

Sawyer, *Tao of Spycraft*, pp. 116-120, and fully retold in *Lust and Assassins in Early China*. (A translation of the *Shiji* chapter by Ts'ao Mo may be found in William Nienhauser, Jr., ed, *The Grand Scribe's Records, Vol VII: The Memoirs of Pre-Han China* under the title of "The Assassin-Retainers," and another by Burton Watson in his *Records of the Historian: Chapters of the Shih Chi of Ssu-ma Chien*.)

<sup>77</sup> For an extensive discussion of these two figures and their probable roles, see Sawyer, *Tao of Spycraft*, pp. 7-20.

for "conducting missions of inquiry in order to fathom intentions."<sup>78</sup> The post and its duties varied from state to state, for they served in a variety of roles ranging from untitled messengers through diplomatic couriers, protocol directors, secretaries of state, and even foreign ministers. In their role as emissaries and messengers, the *xingren* not only returned with replies but also reported their observations and conclusions. Furthermore, they were expected to note the enemy's strength, readiness, spirit, and other crucial factors in a battlefield context, including the names of the various commanders and the nature of the component forces. Accordingly, experienced military officers rather than civil officials were often dispatched.

A second official in the Zhou structure, the Xiao or Minor Xingren 小行人 seem to have shouldered the burden for more detailed, external work. They were responsible for seeing that all the information about deaths, famine, military clashes, auspicious affairs, and disasters were properly recorded, coincidentally showing the emphasis upon maintaining files for future use. Although the states that adopted Zhou style bureaucratic organization employed *Xiao Xingren* right up to the Han, officials with other titles assumed their duties thereafter, especially when they were dispatched on ostensibly diplomatic missions to the contiguous peoples beyond China's claimed borders.

Reflecting the penchant of the peripheral sedentary Chinese states and contiguous nomadic peoples to spy upon each other from at least Sunzi's era onward, another official called a Mu (牧 "shepherd") charged with intelligence gathering responsibilities was apparently established for the tribute and steppe regions.<sup>79</sup> It's worth noting their focus was "secretly observing the distant regions" and reporting negative developments, thus prefiguring the Han's focus on the steppe and border region peoples.

Although comparatively sedentary China had been suffering raids and incursions even before the Zhou's establishment, concern with the ever-evolving steppe

<sup>&</sup>lt;sup>78</sup> The official and his responsibilities are defined in the *Rites of Zhou* (周禮 *Zhou Li*), a highly idealized Warring states depiction of Zhou governmental and ritual practices. (For a discussion of the *xingren* and his activities, see Sawyer, *Tao of Spycraft*, pp. 41-47.)

<sup>&</sup>lt;sup>79</sup> Hanshi Waizhuan (韓詩外傳), p. 6, and also found in the Shuoyuan's (説苑) opening paragraphs. The Shepherd's existence is historically unattested. Nevertheless, the conception simulated discussion in later eras, garnering it a sort of secondary historicity.

peoples and the lethality of their threats increased throughout the Spring and Autumn and Warring States periods. Chapters in the *Shiji*, the great synthetic history compiled about 100 BC from various historical materials and court records, on the Xiongnu, Da Yuan, Nan Yüeh (Southern Yüeh), Dong Yüeh (Eastern Yüeh), Chaoxian, and other peripheral groups show a resolute quest to acquire detailed knowledge about them and their states, as well as the extensiveness of Chinese knowledge of the steppe.

A famous eighteen year Han diplomatic mission out into the steppe undertaken by Zhang Qian in 138 BC to establish relations with a distant group known as the Yuezhi in the hope that they might be persuaded to attack the intervening Xiongnu initiated efforts to deliberately exploit this information and expand the Han's knowledge of distant but important peoples.<sup>80</sup> The information he acquired, carefully recorded and stored on bamboo rolls, proved invaluable as the Former Han strove to master the threat posed by the nomadic peoples, especially the Xiongnu, whom they eventually managed to split into rival camps and tranquilize with external marriage relations, temporarily lessening the danger. Thereafter, missions that required years to complete were undertaken almost annually for purportedly diplomatic reasons, but always with the collateral purpose of gaining information. Officials and commanders throughout the imperial period, following the practice of earlier times, also employed traders and merchants to actively spy on nearby groups, bandit gangs (which were always numerous), and peasant movements, queried emigrants and interrogated defectors.

The resulting product assumed final form with the studies of foreign peoples that were produced in the Han and appear in the era's historical writings, the *Shiji* and *Hanshu*. The lengthy *Shiji* chapter on Xiongnu not only describes the several groups and their interaction with each other and with Chinese emissaries and forces but also characterizes the people and their customs.<sup>81</sup> According to the introduction:

<sup>&</sup>lt;sup>80</sup> Zhang Qian's biography originally appeared as part of the *Shiji* chapter on the Southwestern Barbarians, but as the importance of his accomplishments became recognized, he was accorded his own chapter in the *Hanshu*. (For a brief discussion of the mission and its importance, see *The Cambridge History of China*, Vol. 1: *The Ch'in and Han Empires*, 221 B.C. – A.D. 220, pp. 407-409.)

<sup>&</sup>lt;sup>81</sup> There are two readily available translations of the entire Xiongnu (Hsiung-nu) account: Burton Watson, *Records of the Grand Historian of China,* Vol. II: *The Age of Emperor Wu, 140 to circa 100 B.C.,* pp. 155-192, and Enno Giele, in *The Grand Scribe's Records, The Memoirs of Han China, Part II,* edited by William H. Nienhauser, Jr., Vol. IX, pp. 237–310. Giele provides a densely annotated, highly academic translation, Watson emphasizes readability.

The Xiongnu founder, Chun Wei, was a descendant of the Xia royal family. Even before [the legendary sage rulers] Yao and Shun, they were known as the Shan Rong, Xianyun, and Hunyu, peoples who inhabited the northern wilds and shifted their location with their herds. Their horses, oxen, and sheep are numerous, but they occasionally raise camels, donkeys, mules, and other interbred types. In pursuit of water and grass they move [their camps], so they don't have fortified locations where they permanently remain, nor do they pursue agriculture. Even so, they all have their allotted terrain.

They don't have writing so their agreements are purely verbal. Young male children are able to ride sheep and sufficiently pull a bow to shoot birds and rats. When they have somewhat grown up, the young men shoot foxes and rabbits for meat. All their warriors can fully draw their bows and serve as mailed cavalry. In good times, it's their custom to pursue herding and hunt birds and animals, but in straightened circumstances to practice strikes in order to make incursions and mount attacks. This is their nature.

More importantly, their fighting methods are also described, in itself crucial knowledge for inexperienced commanders:

They employ bows and arrows at a distance and sabers and short spears in close combat. If it's advantageous, they advance, but if not advantageous, they retreat since they don't consider it shameful to flee in avoidance. As long as there is a prospect for profit, they don't recognize righteousness or the *li*. They esteem vitality and strength and despise age and weakness.<sup>82</sup>

Rather than being an anomaly, the resulting imperial records continued a dedicated practice that began in the Spring and Autumn period as the remaining states began to aggressively encroach upon each other despite maintaining a veneer of diplomatic civility under the fictive dominion of the Zhou king whose authority was daily dwindling. In the face of armed conflict, political and military information became

<sup>82</sup> Selectively abridged.

highly valued. The major states apparently kept dossiers on each other, as well as summaries of developments that were compiled from external reports officially forwarded by other states and provided their own diplomatic personnel, all of which were integrated with ongoing internal events.

Only two survive, the *Spring and Autumn Annals* (*Chunqu* 春秋) maintained in the state of Lu and the *Bamboo Annals* (*Jushu Jinian* 竹書紀年) in Wei. Both are studies in brevity, though because the *Spring and Autumn Annals* was supposedly edited by Confucius, the wording is believed to obliquely express his judgment on events.<sup>83</sup> While somewhat handicapped by being partial and reflecting an individual state's perspective, they depict a world plagued by strife and provide important knowledge about interstate relations and significant internal political developments. They are therefore evidence of the felt need for information about potential enemies, as well as friends and allies.

Secrecy was paramount. It wasn't just the writings stored deep in the government's archives that were considered repositories of sensitive information, but also the already classic works of history, the *Zuozhuan (Zuo's Transmission 左傳), Zhanguo Ce (Intrigues of the Warring States* 戰國策), and *Guoyu (Discourses of the States* 國語).<sup>84</sup> In accord with China's reverence for antiquity, the Han dynasty considered them compendiums of both exemplary behavior and glaring perversity, political lessons to be

<sup>&</sup>lt;sup>83</sup> In the *Analects* 論語, the compendium of his sayings, Confucius states, "I transmit without creating, trusting and esteeming antiquity." Confucius' reputation as a transmitter rather than innovator was well established by the late Warring States and the view that antiquity furnished models for study and emulation had come to dominate. For example, in his *Chunqiu Fanlu* 春秋繁露 ("Ren Yi Fa) Dong Zhongshu writes: "The ancients had a saying, 'If you do not know what is coming, look at what has passed.' The *Chunqiu* provides a basis for study by taking the past as its Dao and making the future clear. Moreover, its language embodies the signs of Heaven and it teaches what is difficult to know. For someone incapable of investigating it, it is silent, as if without substance. But for someone able to investigate it, it is all comprehensive. To observe the movement of things, become aware of their sprouts, and preclude chaos, blockage, and harm before they take form, is the *Chunqiu*'s intent."

<sup>&</sup>lt;sup>84</sup> James Legge's volume 5, *The Chinese Classics* V: *The Ch'un Ts'ew and the Tso Chuen*, contains a complete text and translation of the *Zuozhuan* (*Tso-chuan*) as well. A number of important battles and many interesting episodes have also been translated by Burton Watson as *The Tso Chuan: Selections from China's Oldest Narrative History*. Stephen Durrant *et al* recently added another translation, *Zuo Tradition*. The *Zhanguo Ce* (*Chan-kuo Ts'e*) has been translated by J.I. Crump under the title *Chan-kuo ts'e*.

studied and tactical principles to be extracted. Just as with the secret of the crossbow mechanism and certain metallurgical advances, efforts were therefore made to prevent the steppe peoples from accessing them out of fear they would fathom the central states and master the techniques of deception.

When it came to employing human agents to gather information, all the spies described in Sunzi's infamous "Employing Spies" were active in the Han: local, internal, turned [or double agent], dead [or expendable], and living.<sup>85</sup> They are described as follows:

For local spies, employ people from the local area.

For internal spies, employ people who hold positions in their government.

Turned agents employ the enemy's spies.

Expendable spies are employed to spread disinformation outside the state. Provide our [expendable] spies [with false information] and have them leak it to the enemy's agents.

Living spies return with their reports.

It should be noted that while "local spies" and "local guides" are both individuals who operate in a particular area, they differ because "local spies" are tasked with actively seeking out information rather than simply retelling what the inhabitants presumably already know. However, the importance of local guides should not be underestimated, for Sunzi states, "Anyone who fails to employ local guides will not secure advantages of terrain" <sup>86</sup> and "one who does not know the topography of mountains and forests, ravines and defiles, wetlands and marshes cannot maneuver the army." <sup>87</sup> Conversely, local informants and defectors can be blinded by the limited nature of their perceptions, not to mention rumors, despite their acknowledged familiarity with an area. Agents tasked with ferreting out information and ascertaining

<sup>&</sup>lt;sup>85</sup> Although too extensive to discuss in detail, further information on Sunzi's categories and conceptions may be found in Sawyer, *Tao of Spycraft*, and the series of *YouTube* Sawyer talks presented under the title "Chinese Intelligence Theory and Practice."

<sup>86 &</sup>quot;Nine Terrains."

<sup>87 &</sup>quot;Nine Terrains."

the actual situation must therefore still play a role, and it was thought multiple categories of agents should be simultaneously dispatched.

Internal spies are distinguished by their participation in the government, which allows them access to the powerful and plans. In contrast, living spies undertake clandestine activities in foreign countries with or without cover stories or diplomatic credentials, ferret out crucial information through various means, and return to make actionable reports. Their targets are not the disgruntled or disparaged, but men with authority.

While Sunzi's five categories essentially categorize the important players in Han dynasty Chinese intelligence operations, operatives tasked with various activities ranging from passive collection to active efforts that include disinformation and assassination, both of which appear in the *Art of War*, identified in the other Warring States military writers were also employed. They not only continued the activist impulse found in "Employing Spies," but also expanded the range to encompass subversive measures such as estrangement.

"The King's Wings," a chapter found in the *Liutao* (六韜 *Six Secret Teachings*), outlines the staff structure that includes two specialized officials with intelligence gathering responsibilities.<sup>88</sup> Seven primarily internally oriented "Ears and Eyes" "are responsible for going about everywhere, listening to what the people are saying, discerning changes, and observing the officers in all four directions and the army's true situation." In contrast, eight "Roving Officers" are expected to act outside the state because they are "responsible for spying on the enemy's licentiousness, observing their changes, manipulating their emotions, and observing the enemy's thoughts in order to act as spies."

Early on, intelligence missions had been undertaken almost exclusively by government officials or members of the intelligentsia, such as Zi Gong (Tzu Gong), who was dispatched by Confucius himself to sow dissension and thereby prevent the state of

<sup>&</sup>lt;sup>88</sup> Although attributed to the great Zhou strategist known as the Tai Gong, the text was probably composed in the fourth or third century. (A complete translation with historical introduction may be found in Sawyer, *Seven Military Classics of Ancient China*.)

Lu's obliteration. <sup>89</sup> Only accomplished worthies like the statesman Yanzi were considered sufficiently versed in the proper forms of behavior to evaluate character and detect duplicity during diplomatic discussions with powerful officials and rulers.<sup>90</sup> Thereafter, the Warring States peripatetic persuaders were mainly sophisticated speakers like Su Qin who ostensibly proffered strategic advice, but often harbored pernicious intent.

Even though the *Art of War* mentions the difficulties that may be encountered when managing agents, it actually says little about the qualifications required for spy work. Warring States and Han dynasty historical writings indicate a variety of people were actually employed, including merchants and traders, former prisoners, escaped slaves, scholars, men prompted by curiosity, and defectors, including from among the steppe peoples. Vestiges in the historical records even attest to famous border commanders such as Li Mu of Zhao employing spies against the Xiongnu, Zhao She, also of Zhao, tricking spies sent into his camp from Qin, and the Xiongnu deceiving ten different spy missions dispatched by the first Han Emperor, resulting in him being besieged and nearly perishing out on the wintry steppe. But their employment isn't reflected in theoretical discussions, which caught up slowly.

Nothing need be said about the well-known bureaucratic structures of the Warring States period and early imperial era, nor about the household registers (*hukou*) and other administrative measures that were imposed throughout the realm. <sup>91</sup> Although internal efforts weren't completely neglected in the Han since observers regularly spied for the emperor on the various nobles and high officials, the real focus fell upon the contiguous nomadic peoples.<sup>92</sup> Conversely, powerful officials and high-ranking nobles such as Liu An, who was eventually executed for planning to rebel, also

<sup>&</sup>lt;sup>89</sup> The no doubt heavily fabricated account is found in the section titled "Qujie Jie" ("Explanations of Compromise") in the *Kongzi Jiayu* 孔子家語 (*Confucius' Family Sayings*). A translation and analysis may be found in *Tao of Spycraft*, pp. 20-26, or my translation of *Book of Spies*, pp. 10-18.

<sup>&</sup>lt;sup>90</sup> Numerous incidents of this type are found in late Warring States and early Han writings, including the Han dynasty compilation identified with Yanzi, the *Yanzi Chunqiu* 晏子春秋. (For several Spring and Autumn examples see *Tao of Spycraft*, pp. 37-41.)

<sup>&</sup>lt;sup>91</sup> The administrative records preserved on thousands of bamboo strips discovered in recent decades well attests to highly detailed Han administrative measures.

<sup>&</sup>lt;sup>92</sup> It should also be remembered that while the realm was becoming increasingly homogenous, enclaves of ethnically distinct peoples were still found within its borders.

spied on each other and the emperor. Liu, who was king of Huainan, even employed his reportedly loquacious daughter as a spy in the Former Han capital because of her perspicaciousness, one of the few times a woman would be recorded in this capacity rather than fulfilling a deliberately licentious role.<sup>93</sup>

External groups had been targeting the Chinese heartland for over a thousand years by the Han, but the extensive adoption of horses for riding during the Warring States period intensified the threat because their newly mobile, often massive cavalry components could plunder contiguous areas with impunity. Fortunately, while their leadership inevitably changed over time and the identity and relationship of the groups gradually evolved, the terrain and climatic conditions were immutable, and the herds, population, and warrior count relatively constant.

In view of the inescapable conflicts that mark twenty-first intelligence analysis, it's not surprising that Han dynasty records indicate acrimonious debate plagued the interpretation of the ever-accumulating wealth of information and evaluations of the strategic implications. For example, in 81 BC the Xiongnu were the focus of a heated disagreement between idealistic literati and avowedly more realistic officials during a court discussion of the appropriateness of the state's salt and iron monopolies:<sup>94</sup>

The High Officials said: "The Xiongnu lack the defenses provided by city walls and the stoutness of moats, the use of spear tipped halberds and strong crossbows, and accumulated stores in granaries and warehouses. The ruler lacks righteousness and laws, the people civility and order. Ruler and minister slight each other, upper and lower ranks have no

<sup>&</sup>lt;sup>93</sup> It wasn't until late in the imperial period that women were recognized for their intelligence gathering capabilities rather than just as femme fatale in the ploy (*ji* 計) of *meijen*, 美人"beautiful women." (For the tale of Liu An's plans to revolt, see his biography in the *Shiji*, "Huainan, Hengshan Wang Liezhuan," which is translated in Watson, *Records of the Grand Historian of China, II: The Age of Emperor Wu, 140 to circa 100 B.C.*)

<sup>&</sup>lt;sup>94</sup> Vestiges of policy discussions appear in the court records for each of the dynasty's emperors, various biographies of important officials, and the two reportedly verbatim records of extensive court debates, the *Discourses on Salt and Iron (Yantie Lun* 鹽鐵輪) cited here and *Discussions in White Tiger Hall (Baihu* 

Tang 白虎堂), the former dating to 81 BC during the Western or Former Han, the latter to 79 AD in the Eastern or Later Han. (For translations, see E. M. Gale, *Discourses on Salt and Iron* and Tian Tjoe Som, *Po Hu Tong: The Comprehensive Discussions in the White Tiger Hall*, respectively. Two examples may also be found in Sawyer, *Tao of Spycraft: Intelligence Theory and Practice in Traditional China*, 420-423.)

ceremony between them. They braid willow to make frames for their dwellings and use felt for the covering. They have plain crescent bows and use bone arrowheads. Their horses do not eat grain. Internally, their preparations are inadequate to be a cause for concern; externally, their rites are not worth noting.

"China is the heart of All under Heaven, the place where worthy officers gather, the rites and righteousness accumulate, and wealth and commerce are nurtured. Now if the wise plot against the stupid and the righteous attack the unrighteous, it will be like the leaves falling from the trees after an autumnal frost. The *Chunqu* states, "Duke Huan simply expelled the Jung and Di."<sup>95</sup> How much more so will one who possess all the strength under Heaven?"

The Literati replied: "The Xiongnu do not embellish their chariots or vessels with silver, gold, threads, or lacquer. They are plainly made and concentrate upon sturdiness. Their materials lack fancy colors, their clothes the distinctions of collars and sleeves. They simply concentrate upon completeness. The men do not pursue the artifice and skill of inlaying and engraving, nor labor at constructing palaces and city walls. The women make no contribution to embroidery or other dissipated skills or undertake the work of fine silk weaving. Their affairs are simple and utilitarian, easily finished, difficult to distress.

"Even though they don't have spear tipped halberds or strong crossbows, they have barbarian horses and good bows. Families have allotted preparations, men their employment. If there is a military crisis one morning, they stretch their bows and mount their horses. Although they do not seem to accumulate resources, their provisions are adequate to sustain them for several tens of days.

"They rely upon the mountains and valleys for their fortifications and the rivers and grasslands as their granaries and storehouses. Their laws are

<sup>&</sup>lt;sup>95</sup> Duke Huan of Qi's repulsion of northern barbarian attacks helped provided an essential part of the foundation for his claim to be the realm's first hegemon.

concise but easy to understand, what they seek easily satisfied. Therefore, their punishments are minimal and rarely violated. They signal with a pennant and follow orders.

"They slight the customary rites but are sincere in trust, they are uncultured but astute in affairs. Although they do not have books on the rites and righteousness, carved bones and rolled up wooden slips provide the hundred officials with a means to record their actions, and superiors and inferiors to employ each other.

"When our ministers make plans for the far-flung districts, they similarly speak about how easily affairs will be achieved, but in actuality they always turn out to be difficult. Thus, although Qin wanted to expel the Hsiung-nu, it was instead ruined itself. Accordingly, military weapons are inauspicious implements and cannot be lightly employed.<sup>96</sup> Will it be only one dynasty that assumed the strong were weak and the existent to have perished?"

While the accuracy of their perceptions remains to be ascertained, for the most part, they were observationally derived and no doubt reasonably reliable, especially as intelligence failures might be expected more in fathoming intent and behavior than in perceiving the easily visible material aspects of nomadic civilizations.

Finally, despite Sunzi's admonition to confine intelligence-gathering efforts to the human efforts, the heritage of Shang oracle bone divinatory practices and Zhou prognostications based upon the *Yi Jing* that evolved in the Western Zhou period persisted in the Han.<sup>97</sup> As several complex examples preserved in the *Zuo Zhuan* show, *Yi Jing* consultations required great expertise and highly esoteric knowledge to fully fathom, yet commanders still resorted to them, and to observing and interpreting vaporous phenomena.<sup>98</sup> *Qi* prognostication never had the impact seen in Roman

<sup>&</sup>lt;sup>96</sup> A *Dao De Jing* quote frequently found in military and political writings discussing, if not opposing, military action.

<sup>&</sup>lt;sup>97</sup> In "Employing Spies" Sunzi famously says, "Advance knowledge cannot be gained from ghosts and spirits, inferred from phenomena, or projected from the measures of Heaven, but must be gained from men, for then it will be knowledge of the enemy's true situation."

<sup>&</sup>lt;sup>98</sup> For a brief discussion, see Sawyer, "Ch'i Theory" in *Tao of Spycraft*. The *Six Secret Teachings* also preserves a short series of indications in "The Army's Indications."

practices, but the results sometimes affected Han military decisions, just as would be expected in a culture that reverenced tradition and esteemed historical wisdom.

In view of the above, it can reasonably be claimed that by the beginning of the first millennium AD, roughly coincident with the interregnum between the Former and Later Han dynasties, the objectives and methods of Han intelligence efforts were well defined; extensive compilations of commonly recognized criteria were being employed for undertaking analysis and making judgments; the agent categories had been finalized; and contiguous foreign states were being well studied. Geographical knowledge was expanding and the profiles of foreign peoples increasingly detailed. The incipient bureaucracy was burgeoning; the imperial library held an almost incalculable number of records, reports, and political writings; and both open court and secret discussions were being undertaken to plan policy and determine military missions based on evaluating every form of information and assessing the possibilities in the calculated fashion Sunzi had advocated in "Initial Estimations."<sup>99</sup>

<sup>&</sup>lt;sup>99</sup> All the available information about seven critical factors is comparatively assessed and a determination made, apparently by using some sort of tally or counting board for the first time in history. (The Han dynasty's ongoing use of tallies [*chou* 籌]is reflected in the subsequently well-known phrase, "formulating plans in a military tent" 運籌帷幄 (*yunchou weiwo*) which was supposedly uttered by the first Han emperor, Han Gaozu, when commenting that his skill in making military plans allowed him, rather than others, to subjugate the realm. [*Shiji*, "Gaozu Benji.] *Chou* [籌], the term for tally, also appears in a number of contemporary compounds for making plans and formulating strategy, such as *choumou* 籌謀, "plot," *chouce* 籌策, "plan" or "strategize.")