

ПУБЛИКАЦИИ

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MONGOL WARFARE IN THE PRE-DISSOLUTION PERIOD

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Although the Mongols used many of the tactics and strategies that steppe nomads had used for centuries, the Mongols refined steppe warfare so that this style of warfare reached its apogee during the Mongol Empire. Furthermore, the Mongols developed a style of warfare that made them possibly the greatest military force in history. This work examines several facets of the pre-dissolution period (1200–1260). With the dissolution of the Mongol Empire, Mongol warfare once again changed. In some areas it remained complex while in others it regressed to traditional forces of steppe warfare, still potent but not as effective as the pre-dissolution period.

Keywords: steppe warfare, archery, armor, siege warfare, weapons.

Throughout the history of Eurasia, numerous steppe nomad empires existed, but the largest and greatest was the Mongol Empire. Prior to 1200, the Mongols were one of several tribes that in the steppes of present day Mongolia. Mongolia had long served a training ground for the horse archers that comprised most of the nomadic armies that swept across Eurasia. Indeed, between 600 and 1206 C. E., Mongolia also formed the core of many of the steppe empires. The first was the Kōk Turk empire of the early 600's and then the Uighurs who dominated much of the region from 744–840 before being driven south by the Kirghiz of the Yenisei River. The next major empire came with the Khitans who formed Liao Dynasty of China. Although they dominated northern China, they maintained a considerable presence in Mongolia until their overthrow by the Jurchen of Manchuria in 1125.

Horse-mounted archers comprised the majority of the steppe armies. They relied on mobility and barrages of arrows to defeat their armies. Shock tactics, such as a cavalry charge by the European knights, played a lesser role and usually as the coup de grace. If charged, the horse-archers simply retreated and turned in their saddles to shoot their enemy using the so-called "Parthian shot", made famous at the battle of Carrhae in 53 CE

where the Parthians destroyed a Roman army led by Crassus¹. The most difficult battles for the steppe nomads tended to be when they fought other nomads using the same tactics and not the sedentary opposition of China, Central Asia, Europe, or the Middle East. While the sedentary armies might possess an advantage in numbers and quality of equipment, they usually lacked sufficient cavalry to counter the nomads' mobility.

Despite the long history of these steppe nomads, it was not until the establishment of the Liao Dynasty (907–1125) in Northern China and Mongolia that a true standardized military organization took a cohesive form. Prior to this, the armies were based on tribal groupings that gathered into a confederation. Typically a clan or tribal leader led his own men. To be sure, certain cohorts such as a *comitatus* unit that protected the leader might be more standardized, but the majority of the military was not. Strategic decisions were made by the confederation leader in consultation with other tribal leaders. There appears to have been little coordination of training or organization. The Khitans, however, altered this and after their fall, the nomads of Mongolia still maintained their military predominance. Yet, not until the rise of Chinggis Khan (1167–1227) did the Mongols become the premier military power of the medieval period.

Chinggis Khan drew upon the military formations of the Khitans and Jurchen (Jin Dynasty of Northern China 1115–1234), a Manchurian people who defeated the Khitans, as well as nomadic traditions and technology from the lands he conquered, to create an army that surpassed contemporary foes not only in fighting ability but also in strategy, tactics, and organization. The innovations he introduced continued throughout the Mongol Empire and formed the basis for later leaders such as Timur-i Leng or Tamerlane (1336–1405), who used them to forge an empire in Central Asia and the Middle East while also defeating the successors of the Mongol Empire. Although modifications of Mongol formations and equipment continued throughout the period following the Mongol Empire, it was not until the seventeenth century that sedentary armies could routinely defeat steppe-based armies.

Training. The standard observation regarding the training of the Mongols is as nomads they learned to ride and shoot arrows from an early age, thus giving them adequate ability as warriors. In addition to the advantage of becoming an expert rider as well as horse-archer, the constant exposure to shooting a composite bow from an early age enabled the Mongols, and indeed all steppe nomads, to acquire the requisite strength to pull and hold the Mongol bow at full-draw. This was a necessity since the Mongol bow possessed a pull of 45 to an extreme of 75 kilograms.

While exposure to archery and equestrian skills from an early age, only systematized training could provide consistent ability across the Mongol military, thus certain practices occurred. For archery, the Mongols practiced

¹ It should be noted that the Parthians did use heavy cavalry.

several exercises. Many appear to have been common throughout the steppe world and even adopted in areas that incorporated soldiers of steppe ancestry, such as the Mamluks of Egypt and Syria. One element of their training was the drill of the *qabaq*: a gourd affixed to a pole, which the Mamlûk would shoot at while riding, and shot at while riding [13, p. 258, 261]. Due to the height of the pole, the rider would shoot upwards and often from different angles, including by using Parthian shot, or turning in the saddle and shooting backwards. Various manifestations of the *drill* were used, and some still exist in modern Mongolia.

Another common observation about the Mongols is that their military maneuvers were based on the practice of the *nerge* or a mass hunt often referred to by the French term, *battue*. In the practice of the *nerge* the Mongols fanned out over several miles forming a circle. Gradually this circle closed and contracted until all of the animals were trapped within this ring of men and horses. After the Khan killed a few animals, others would begin their hunt. Some animals were allowed, intentionally, to escape. A hunt of this size naturally required excellent communication as well as discipline in order to maintain the circle in addition to preventing animals from escaping prior to their actual slaying of animals. If we study the Mongol military as a natural development from within nomadic society, we may be missing the point of their exercises. While the *nerge* certainly did have a function within nomadic culture, its refinement extends past the needs of hunting, requiring a higher level of organization and discipline.

The Mongols were not the only Inner Asian group that considered hunting a valuable technique in military training. The Khitan, even during the period of the Liao Dynasty (907–1125), used hunting not only for the practical purpose of feeding their troops, but also as training for military maneuvers. Indeed, one Liao emperor once said “Our hunting is not simply a pursuit of pleasure. It is a means of practicing warfare” [26, p. 565].

Certainly the *nerge* contributed to a well-disciplined force capable of complex maneuvers over a broad front. The fact that the Mongols also became competent horsemen and archers due to daily exposure almost from birth is also undeniable. In addition, the seasonal migrations of the nomads also enhanced their discipline as well as the practice of coordinated moves across great distances.

Another key element was instilling discipline in the otherwise individualistic nomad warriors. Anecdotes of the discipline of the Mongols are numerous and confirm the impression that the Mongols maintained a high level of military discipline [6, p. 33; 24, p. 261–263]. For the Mongols, discipline meant not only adhering to the orders of their commanders while maintaining unit and formation integrity, but also not straying from the parameters of an operation. While the Mongols certainly plundered and raided, they also completely bypassed areas that would have been rich targets. Furthermore, it instilled order among the armies so that generals,

princes, and the common soldiery understood their roles. Discipline allowed the Mongols to operate at great distances without their armies dissipating into marauders and bandits, bent more on their own interests rather than that of the khan.

Warfare in the steppes of Mongolia often degenerated into individual combats. Indeed, victory was often snatched away as victorious forces stopped to plunder. Thus, the instillation of discipline into the tribes of Mongolia may have been Chinggis Khan's greatest achievement. Even before his rise to absolute master of the Mongolian steppe, Chinggis Khan expected his orders to be obeyed, even by his relatives. While still a vassal of Toghril Ong-Qan, Khan of the Kereit, Chinggis Khan or Temüjin as he was known then, made a radical departure from the traditional method of waging war. This occurred in 1202 when the Mongols attacked the Tatars at Dalan Nemürges. Rather than plundering the enemy during the attack, he insisted that his men wait until after they defeated the enemy. Furthermore, he ordered his men to be prepared to regroup at a designated location rather than dispersing across the steppe if they suffered defeat; those who disobeyed would suffer the consequences [7, p. 76].

Not only did discipline allow the Mongols to maintain their unit integrity during battle, but it is what allowed them to use complex maneuvers such as the *shi'uchi* attack which resembled the 16th century *caracole* used in Central Europe [15, p. 519; 16, p. 182; 7, p. 118]. Furthermore, because of their discipline at an individual level, the ruler could rest assured that his commanders could carry out their operations without subordinates questioning their authority, or necessitating that the *Khan* be present on all campaigns.

Chinggis Khan expected absolute obedience to his commands. Much like other steppe leaders before him, he desired his followers to place him above all other ties, whether familial, clan, or tribal. In addition, the discipline instilled in the Mongol army permeated Mongolian society, which further benefited from a tendency to be more egalitarian than their sedentary counterparts. The Persian chronicler Jûzjâni recorded that one could leave a riding whip on the ground and only the owner of it would take possession even if a long duration passed before he claimed it [11, p. 181; 10, p. 1078–79].

Certainly with the great Khan present, few dared to risk offense, but as the Mongol armies ranged across a continent, there must have been temptation to plunder rather than to maintain discipline and destroy the paltry forces of a city-state in Rus' or a distant town in China. One of the most commonly held hypotheses is that draconian measures held the troops in check. A perfect example of the combination of the temptation of being distant from the Khan and also the threat of harsh punishment involves an expedition on which Chinggis Khan sent his general Sübedei against the Merkit and Naiman. He instructed Sübedei to spare his remounts so that they would not be overworked and become too lean. In

addition, he prohibited Sübedei from allowing his troops to hunt except in moderation and only as a means to maintain their food supply. Even orders on daily routines were to be carried out in strict obedience. He further instructed Sübedei: ...do not allow the soldiers to fix the crupper to the saddle and put on the bridle, but let the horses go with their mouths free. If this order is issued the soldiers will not be able to gallop on the way. Once you have so ordered, then whoever transgress this command shall be seized and beaten. Send to Us those who transgress Our command if it looks that they are personally known to Us; as for the many who are not known to Us, just cut them down on the spot [7, p. 126–27].

From this command we can deduce several points. The first is that clearly Chinggis Khan gave his general authority to deal with misconduct and that disobedience was a serious crime. Secondly, he also realized that princes and other relatives or others who might hold Chinggis Khan's favor could undermine the authority of the general in charge of the campaign by flaunting their own special rank. Thus, if they did disobey the general, then they were either to return to Chinggis Khan's camp on their own accord, or one can be sure that news of the violation would come to the Khan's attention. Even after the great Chinggis Khan died, princes were unable to usurp the authority of the generals.

Outsiders confirmed that the Mongols maintained discipline in the ranks and among officers with draconian measures. Carpini wrote: If anyone is found in the act of plundering or stealing in the territory under their power, he is put to death without any mercy. Again, if anyone reveals their plans, especially when they intend going to war, he is given a hundred stripes on his back, as heavy as a peasant can give with a big stick [6, p. 17; 4, p. 49].

In addition, Carpini noted that in battle, if a few men flee as part of an *arban* or unit of ten and the entire unit does not flee, then all are put to death. If an *arban* flees and the 100 do not flee, then also all are executed. Also if a few members are captured, the rest of the unit must rescue them [4, p. 77; 6, p. 33]. The key was that they must function as a unit.

Other factors could have been involved in maintaining discipline. One is simple loyalty. As Chinggis Khan elevated members from all levels of nomadic society to positions of importance, his followers may have remained devoted to him out of gratitude and loyalty. This is how Chinggis Khan rose to power, through the development of personal ties to his commanders. In return, they insured that their own units remained disciplined. Another factor may have been a sense of collective destiny since the Mongols thought they were destined to control the world, although it is doubtful if prior to the reign of Ögödei that any of them truly subscribed to this idea.

In the end, the training of the Mongol soldiers (whether ethnic Mongol or Turk) produced a soldier whose capacity for withstanding difficult conditions was unmatched. Marco Polo observed, "Of all troops in the

world those are they which endure the greatest hardship and fatigue, and which cost the least; and they are the best of all for making wide conquests of country" [24, p. 260–261].

Equipment. In the study of the military history of the Mongol Empire, the issue of equipment surprisingly has developed in to what may be classified as two schools of thought. The first is that the Mongol warrior was well armed, albeit primarily with a composite bow, but nevertheless, they were equipped much like the soldiers of the Liao dynasty in the tenth and eleventh century northern China and probably the warriors of the Kara Khitai Empire in Turkistan.

According to the *Liao Shi*, the history of the Liao dynasty, the soldiers were required to possess nine pieces of iron armor, saddle clothes, leather and iron barding and other accoutrements for their horses, four bows and four hundred arrows as well as a long and short spear, club, axe, and halberd. In addition, they were to be equipped with a small banner, hammer, awl, flint and knife, a bucket for their horse, rations of dried food, a grappling hook with two hundred feet of rope, and an umbrella [26, p. 559–560; 3, p. 64]. While it is an impressive list, much of it is in doubt as whether the official standards actually met reality. Furthermore, it is uncertain if the soldiers were furnished with all of these items or if they were required to acquire them through their own means.

John de Plano Carpini, who traveled through the Mongol Empire in the mid-1240's recorded that he saw similar equipment as standard among the Mongol soldiers: They all have to possess the following arms at least: two or three bows or at least one good one, three large quivers full of arrows, an axe and ropes for hauling engines of war. As for the wealthy, they have swords pointed at the end but sharp only on one side and somewhat curved and they have a horse with armor, their legs also are covered and they have helmets and cuirasses [4, p. 76–77; 6, p. 32–33].

It is quite notable that the observations of a Western European friar are similar to that of the Chinese account, even allowing for the fact that the *Liao Shi* was compiled during the Yuan Dynasty. One might wonder if the Liao armament may have been also influenced by what the compilers of the *Liao Shi* knew of the Mongols' own equipment.

The second school of thought concerning the armaments of the Mongols is that they were poorly and haphazardly armed. Indeed, most of their equipment beyond a composite bow was achieved by looting the battlefield and only in the later periods did the Mongols begin to establish a professional system of equipping their armies [25, p. 345].

While certain units of the Mongol army may have been fully equipped in a manner similar to the Liao army, it is doubtful that the Mongols would have maintained their army in this manner. Yet, there is simply too much data in the sources to support the arguments that the Mongols did not equip and arm their soldiers as befitting an empire but rather as simply bandits and roving plunderers. The greatest evidence against the argument that the

Mongols did not have professional armorers is the fact that the Mongols moved hundreds of craftsmen and artisans from Central Asia, Persia, and China to other locations [1, p. 266]. One such location was Chinqai Balasghun, near the Mongol capital of Karakorum.

These cities, while not thriving metropolises such as Zhongdu or Samarqand, were industrial and agricultural centers whose *raison d'être* was to supply the Mongol armies as well as the court. Perlee's archaeological and historical studies clearly reveal that a fledgling industry had existed in Mongolia prior to the rise of Chinggis Khan [21, passim; 22, passim; 23, passim]. The Khitans during their rule of part of Mongolia established at least ten garrison towns that included facilities for the maintenance of their garrisons, including smithies. The archaeological evidence demonstrates this continued after the Khitan, although on a more limited scale, until the rise of Chinggis Khan when other military-industrial colonies were established such as Chinqai Balasghun. The Mongols did not bring back these artisans simply to add splendor to the steppe in imitation of Zhongdu, Samarqand, and other cities they may have seen; rather the Mongols were simply pragmatic.

Scholars have noted that the Mongols were quick to adapt to siege warfare once they understood it. In the same manner, after seeing the benefits of regular taxation, the Mongols also adopted this. In a similar manner, the Mongols recognized the value of possessing a regular supply of arms and armor.

In addition to creating industrial centers for the manufacture of weaponry, armor, as well as luxury goods and other items for trade, the Mongol Khans also dealt with weapons merchants. Juvainî and Rashîd al-Dîn, who copies Juvainî's accounts almost verbatim, are replete with examples. On numerous occasions, Ögödei purchased bone arrowheads, bows, and even more mundane items such as leather thongs and bags for the military. While Juvainî notes that the merchants sold poorly manufactured equipment and that Ögödei overpaid for his purchases, it still should be recognized that he and other Khans regularly purchased equipment for the military [9, p. 169; 8, p. 212].

Weapons. The main weapon of the Mongols was the composite bow. Made from layers of horn, wood, sinew, and glue this weapon had a maximum range of three hundred meters on average, with an extreme range of five hundred meters [5, p. 61]. Of course, accuracy and penetrating power increased at closer ranges. Still, this was significantly better than the crossbow used in Western European armies and among the Franks in Palestine. The crossbow had an accurate range of approximately eighty yards, although it had considerable penetrating power. In order to aim it further, one had to elevate the crossbow in order to achieve a better arc. This in turned forced the archer to look upward and not at the target. The bow, however, was accurate at longer ranges as one would elevate the bow, but the archer looked under his hand to aim. Although a weapon primarily

used in the fourteenth century and later, the Welsh longbow possessed an accurate range of two hundred twenty meters.

Unlike the Welsh longbow, or any other Western bow for that matter, the Mongols, as well as other nomads and Middle Eastern archers, used a thumb ring to pull their bow-string. The use of the thumb ring prevented strain on the thumb. Ralph Payne-Gallwey noted that he could bend even a strong bow “much easier and draw it a great deal farther with the Turkish thumb-ring” than with the standard European finger grip [20, p. 12]. Furthermore, he noted that with the thumb ring, there was less drag on the release, thus resulting in a quicker release. Like Europeans, the Mongols held the bow in the left hand, but set the arrow on the right-hand side as the thumb ring affected how the arrow flew. If placed on the left-hand side of the bow, the shot tended to be less accurate. The composite bow started off in a larger form, through the course of time, the composite bow also became smaller, “making it more suitable for horse-archery, though at the same time the physical strength needed to pull such bows was correspondingly greater” [18, p. 2].

Much debate has arisen over the power of the Mongol bow. Payne-Gallwey noted that he shot an 18th century Turkish bow at ranges of up to three hundred sixty yards. In addition, he had seen Mongol bows of the nineteenth century shot to 220–240 meters, whereas the English longbows he shot possessed a range of 210 to 230 meters [20, p. 11]. One must keep in mind, however, that the accuracy of the archer at 275 meters diminished. In most forms of combat, shooting from such a range tended to consist of disrupting the enemy ranks. Actual combat, in which the archer intended to wound or kill opponents rather than disrupt formations, took place at a closer range, certainly under 150 meters.

While the bow provided the power to kill at a distance and even the power to penetrate armor, much of its lethality depended on the type of arrowhead used on the arrow. The Mongols utilized numerous styles of arrowheads made from iron, steel, horn, or bone. The arrows themselves tended to be a little more than two feet in length. The arrowhead possessed a tang which was stuck in the shaft of the arrow. In general, for armor penetration, a tapered spiked arrowhead or chiseled arrows that were tempered performed better than others as the force of the bow focused at one point. A broad head arrow dispersed the force along the edge of the arrowhead, thus it performed admirably on unarmored targets. The shafts of the arrow tended to be made from river reeds or willow wood. Mongol arrows tended to be larger than those used in Europe and Mongol troopers usually carried sixty. These were possibly divided into several quivers positioned on their remounts’ saddles to ensure a supply of arrows. The quivers themselves were constructed from birch bark and willow wood and fastened to the belt of the archer by a hook or loops. Although there has been some speculation concerning whether the Mongols

poisoned their arrows, it seems unlikely, as their weapons were sufficient in power and accuracy to kill without the aid of poison.

Although the composite bow was an excellent weapon, it did have some drawbacks, the primary one being that damp weather was extremely detrimental to it. Using the bow in the rain could ruin it. Thus when the nomads encountered a rainy battlefield, they could either close for melee combat or flee. Usually the nomads would flee as their hand-to-hand combat skills were often inferior to those of their sedentary opponents.

One may question if the lethality of the Mongol bow was an important factor in military history. It is indeed crucial to understanding why the Mongols remained a preeminent military power even after the Mongol Empire splintered into smaller states as it potentially answers the question of whether the Mongols possessed a technological edge in terms of weaponry. It is clear that the Mongols used a composite recurved bow much like those used by other steppe nomads. However, while it is true that all steppe nomads used recurved composite bows, it is also true that those used within Mongolia were somewhat different in terms of power and that the results of their use are considerably different from reports of the use of other bows.

Besides the bow, which influenced military tactics as well as styles of armor, the Mongols possessed weaponry for closer combat. One such weapon was a lance or spear that possessed a hook on one part of the shaft. This was used to pull opposing riders from their horses, thus leaving them defenseless. The sabre and other swords were also used, but the accounts are conflicting whether they were universally used [27, p. 78].

Armor. Although the Mongols were primarily light cavalry, this did not prevent them from donning armor, as Carpini [4, p. 77–78; 6, p. 33] indicated. When the Mongols did wear armor, they preferred lamellar armor as it provided better protection against arrows than chain mail. According to Nicolle [19, p. 136], “Tests have shown that mail can absorb arrows shot from a reasonable distance, but it could not prevent them causing minor wounds. Lamellar armour, however, was much more effective against arrows”. Carpini [4, p. 80; 6, p. 35] also noted that the night guards in the *keshik* carried larger cane or wicker shields. At the same time, the backs of the Mongols were generally unarmored and under the left armpit was exposed when the arm was raised to fire their bows. In addition to its protection from arrows, another reason existed for the Mongols preference for lamellar armor was its simplicity of manufacture. It is also quite possible that the Mongols did not have the means, or the desire, to create mail armor if lamellar armor was effective. In addition, as chain mail existed in the sedentary realms it remained expensive to buy or manufacture. The Mongols, however, could easily acquire it from the battlefield or during a raid.

The Mongols did not always wear armor. Many simply wore the traditional *deel*, or *degel*, a knee length coat that fastened on one side. In

addition, to the *degel*, the Mongols carried treated coats to protect them from the rain as well as felt coats to combat the cold. These were carried with them even during the summer.

In regards to helmets, the Mongols wore ones of simple construction. In shape they were similar to an upside-down acorn. On the sides, slots existed where flaps could be attached to better protect their ears and neck. The helmets, in general, were constructed of bronze or iron. At times these were often of an iron framework with a bronze skin.

It is notable that while John Plano de Carpini [6, p. 46] opined that the armies of Western Christendom should adopt Mongol military attributes, Eastern European armies, particularly those that primarily faced opponents from the steppe, gradually transformed their own armies along Mongol lines. As well as the more widespread use of the composite bow, Mongol style lamellar armor became more common in Eastern Europe after the Mongol Conquests.

Strategy and Tactics. The organization of the Mongol army was also based on an old tradition of the steppe: the decimal system. The Mongol army was built upon a squad of ten (*arban*). Ten of these would then compose a company of a hundred (*jaghun*). The next unit was a regiment of a thousand (*mingghan*). Most of the commanders listed in the contemporary sources were leaders of a *mingghan*. The equivalent of the modern division was a unit consisting of ten thousand (*tumen*).

The organization was simple, but sensible. This could also easily apply to new conscripts from vassals, or even forcibly conscripted troops from among the conquered. Yet, it is one thing to have organized units, but quite another to have them operate with any amount of efficiency. This is why the discipline of the Mongol army was such a key factor. The tactics that the Mongol army used, such a caracole technique in which the soldiers advanced, shot, then wheeled back in order for the next rank to fire, demanded unit integrity.

Before invading a territory, the Mongols made extensive preparations in a *quriltai* or meeting of the Mongol leadership. At this meeting it was decided not only how the upcoming war would be conducted, but also, which generals would participate in it. The Mongol meanwhile would have been accumulating intelligence on their opponent. Only after this was obtained, did they issue a declaration of hostilities. Then, during the *quriltai*, units would be called up.

Although the planning of the campaign was a major component, the Mongol generals still maintained a high degree of independence. Thus, they were able to complete their objectives on their terms, but they still had to abide by the timetable. This allowed the Mongols to coordinate their movements and concentrate their forces at prearranged sites.

The Mongols had a set method of invasion which varied only slightly from campaign to campaign. First the Mongol army invaded in several columns. Often it was three pronged attack, consisting of an army of the

center and then two flanking forces. Flanking forces in some cases went into neighboring territories before rendezvousing with the army of the center. All of these columns were covered by a screen of scouts who constantly relayed information back to their mother column. In addition, because of their pre-planned schedule as well as the scouts, the Mongols not only marched divided, but also were also able to fight united. Furthermore, because of their forces marched in smaller concentrations, the Mongols were not impeded with columns stretching for miles. They used their mobility to spread terror to the effect that rarely were their opponents ever really prepared to concentrate their forces when the enemy appeared everywhere.

The use of a many-pronged invasion also fit into their preferred method of engaging the enemy. The Mongols preferred to deal with all field armies before moving deep into enemy territory. This was very practical. Reaching this goal was rarely difficult as not only was the enemy usually seeking to meet the Mongols before they destroyed an entire province, except in the case of the Khwarazmians. Furthermore, the use of columns with its screen of scouts gathering intelligent would able the Mongols to locate the enemy armies much more rapidly than one army wandering around. In addition, since the Mongols, could usually unite their forces before the enemy was cognizant of all of the different invasion forces, the Mongols were better able to conceal their troop strengths. This also meant that an embattled force could receive reinforcements or, in the advent of defeat, they could be avenged.

By concentrating on the field armies, this meant that the strongholds had to wait. Of course, smaller fortresses or ones they could surprise easily were taken as they came along. This had two effects. First, it cut off the principle city from communicating with other cities, where they might expect aid. Secondly, refugees from these smaller cities would flee to the last stronghold. The reports from these cities and the streaming hordes of refugees not only reduced the moral of the inhabitants and garrison of the principle city, but it also strained the resources. Food and water reserves were taxed by the sudden influx of refugees. Soon, what was once a formidable undertaking became easy.

The Mongols were then free to lay siege without interference of the field army as it had been destroyed. Smaller forts and cities could not harry the Mongols who either foraged or were out on other various missions during the siege. Most importantly, the many columns and raiding forces, prevented the main cities from being effective in assisting its smaller neighbors before hand as to do so in any strength, would leave it open to attack. Finally, the capture of the outer strongholds and towns, provided the Mongols more siege experience as well as raw materials in the form of labor to either man the siege machines, or to act as a human shield for the Mongols.

It was also not uncommon for defeated troops to be recruited into the Mongol army. The most common method of preventing mutiny at a critical moment was to simply divide the new recruits into the already existing units. This prevented them from being a cohesive force, and it helped maintain unit integrity in the already existing formations.

Then came the task of destroying any hopes for an opponent to rally. This was carried out by harrying the enemy leader until they dropped. Chinggis Khan first carried this out in the wars of unification in Mongolia. In his first few encounters, he did not do this and it returned to haunt him. After that, it becomes a familiar tale. In Khwarazm, it was the flight of Muhammad to the Caspian Sea with Jebe and Subedei in pursuit. In the south of that empire, Chinggis Khan himself pursued Jelal al-Din to the Indus and later sent more troops after him. Then in Europe, King Bela IV received no breathing room after the disaster at Mohi.

By being constantly on the move, the enemy leader was unable to serve as a rallying point for his armies. They too would have to keep moving to find him. In many reports, the enemy leaders were only a few steps ahead of the Mongols. This also offered an opportunity for the Mongols to acquire new intelligence on other lands, as it was only sensible for the fleeing king to run in the opposite direction of the Mongols. The pursuing forces then could wreak havoc in new territories. Their presence made it advisable for local powers to keep their forces at home rather than going to help their overlord. In many instances, the Mongol, when they encountered a local army, would defeat it while avoiding the strongholds. Again, the method of destroying a field army before laying siege. The most important aspect of these flying columns that went in pursuit, is that their destruction they made as well as the fear they spread, created a buffer between the territory in which they were in and the one in which the main army was subduing.

The tactics used, whether in the field or during a siege, focused on two aspects: firepower and mobility. Military historians often speak of the great success of the English with their longbows at Agincourt or Crecy, but almost a century before Crecy, the Mongols had demonstrated on several occasions the advantages of concentrated firepower over any opponent. Not only did a withering hail of arrows break a charge of armored knights, but it also could pin units to a particular location. During siege operations, the Mongols still relied on concentrated firepower. At the siege of Aleppo, Hulegu used twenty catapults against the Bab al-Iraq alone (Gate of Iraq). There are several episodes in which the Mongols constructed hundreds of siege machines in order to surpass the number, which a defending city possessed [8, p. 88–92; 176; 9, p. 138–39; 10, p. 1036–37, 1132] . While the sources may exaggerate, the improbably high numbers which are used for both the Mongols and the defenders does give one a sense of the large numbers of machines used at a single siege.

Mobility was vital for the Mongols to carry out the caracole technique. By advancing, firing, wheeling, and retreating, the Mongol warriors left themselves open to a possible counterattack. Only due to the unit integrity and mobility (i.e. number of horses involved) permitted the Mongols to do this technique. Other tactics, such as encircling the enemy as the Mongols did during the battue hunt, could only be achieved with a high degree of mobility. Perhaps of most importance, it allowed the Mongols to withdraw and then reappear unexpectedly. This made it almost impossible for their opponents to accurately report on the movements of the Mongol armies.

What separated the Mongol armies from their contemporaries was based on discipline. Without discipline, the Mongols could not have perfected the system of steppe/horse archer warfare, which had existed for centuries. Nomads since the Scythians and Xiongnu based their armies and method of war on mobility and the bow. The Mongols, however, perfected it, allowing them to conquer the entire steppe land of Eurasia. While some may dismiss this accomplishment as simply being a victory over other tribes, one must remember, these are the tribes from which the Khitan, the Jurchen, and the mighty Seljuk armies came. Horse archers from the steppes were a desired element in every sedentary army stretching from China to Egypt. The Mongols perfected the system by adding the strict discipline that allowed them to overcome other nomads who also relied on the key factors of mobility and the bow. After overcoming the nomads of the Eurasian steppes, the victories over sedentary armies seem less astonishing.

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**ВОЕННОЕ ДЕЛО МОНГОЛОВ
НАКАНУНЕ РАСПАДА ИМПЕРИИ**

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В военном арсенале монголов находилось достаточно большое количество тактических и стратегических приемов, применявшихся на протяжении веков степными народами. В период существования монгольской империи эти приемы достигли максимального уровня развития. Исходя из этого можно говорить, что эти знания позволили татаро-монголам создать сильнейшую военную машину за всю предыдущую историю человечества. В настоящей статье рассматривается развитие военного искусства монголов в период между 1200–1260 гг. Автор отмечает, что после распада единой империи военное искусство у монголов подверглось серьезным изменениям. При этом учитывался региональный фактор в ходе развития монгольского военного дела. После распада империи монголы в большинстве своем вернулись к традиционным приемам впрочем, менее эффективным, сравнению с применявшимися в период единства империи.

Ключевые слова: степное военное дело, стрельба из лука, защитное вооружение, осадное военное дело, наступательное оружие.

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