ИСТОРИЯ ЕВРОПЫ

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**SUCCESS OF PIKE OVER THE BOW – BATTLE OF GUINEGATE – INFANTRY
OF THE SWISS TYPE IN A CLASH WITH LOUIS THE XI ARMIES.
TWILIGHT OF ENGLISH MILITARY SYSTEM**

Иногда, казалось бы, незначительные события оказывают очень большое влияние на исторические процессы или развитие различных отраслей человеческой деятельности. Одним из таких событий была битва при Гвинейте в 1479 г., во время которой французская армия столкнулась с армией, которой командовал молодой эрцгерцог Максимилиан Габсбург. Хотя это не имело большого значения в контексте всей войны за наследство на трон Бургундии, которая закончилась путем бескровной дипломатии, само по себе сражение крайне интересно. Полученный в ходе битвы опыт внес важный вклад в военную трансформацию как Франции, так и Священной Римской империи, что, в свою очередь, оказало серьезное влияние на вооруженные силы других стран Западной Европы. Во время этого столкновения швейцарцы и фламандцы под командованием Максимилиана одержали неожиданную победу над вооруженной в основном луками армией Кревекуэра. Таким образом, армия, построенная на опыте Столетней войны, проиграла довольно экспериментальной армии Максимилиана, где лучников было немного, но зато конница и пехота действовали очень слаженно. Это поражение отвлекло Францию от привлечения в войска множества лучников и убедило их перевооружить пехоту. Успех войск Максимилиана, с другой стороны, послужил также основой для создания швейцарской пехотной формации Ландскнехт, которая была так популярна в войнах XVI в.

Ключевые слова: фламандское ополчение, швейцарские пикинеры, эрцгерцог Максимилиан, Людовик XI, щука, лучники, искусство войны.

Sometimes seemingly minor events have a very large impact on historical processes or the development of various branches of human activity. One such event was the Battle of Guinegate in 1479, during which the French army, clashed with the one commanded by the young Archduke Maximilian Habsburg. It was of little importance in the context of the war of succession to the throne of Burgundy which ended in a path of bloodless diplomacy. It made an important contribution to the military transformation of both France and the Holy Roman Empire, which in turn had a major impact on the military of other Western European countries. During this clash, trained in pike fighting like the Swiss, the Flemish, under Maximilian's command, defeated the mostly bow-armed Crevecouer's army. A modern army, built on the experience of the Hundred Years War, lost to the archduke's a quite experimental army. This defeat turned France out of the way of enlisting the great archers' troops and convinced them to re-armed the infantry with polearms. The success of Maximilian's troops, on the other hand, was the basis for the establishment of the swiss- style Landsknecht formation, which was so popular in the 16th century wars, as a imperial soldiers, and infamous mercenaries.

Keywords: Flamands militia, Swiss pikemen, Archduke Maximilian, Louis XI, Pike, Archers, Art of war.

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Success of pike over the bow, which has made far-reaching changes in french art of war and the creation of landsknechts infantry, one of the most famous infantry, in a fact, led to the collapse of english military system on continental Europe. The battle that finally brought this changes, was a clash near village named Guinegate (Enguinegate today) in 1479.

The economy growth related to strong monetary position of the western Europe that begun in the end of 13th century, has led to significant enrichment of cities and their inhabitants. The town militias had better nad better equipped recruits, which they could afford expensive arms and armor. European leaders, thanks to power of multiplier money, begun to invest in professional military forces like mercenaries in even larger quantities [9, p. 10]. We could say that payment became much better method of formation of an army, than traditional duty. The power of forces, in real became based on training level and discipline. Masses of the knighthood elite with their traditions, were stepping on ever thinner ice. In the time of well armed, trained and tactically use infantry, place for romantic courage was starting to shrink dramatically. If an english knights, has experienced relatively gently the power of the dense, bristling with spears troops of scottish highlanders, that were resisting heroically attacks of heavy cavalry for example during battle of Falkirk (1298). While french chivalry, has suffered the most severe consequences their reckless and chaotic decisions. Very quickly it turned out that unconsidered use of heavy cavalry masses, that because of their elitism defeat even the hardest obstacles to get the enemy is an opinion doomed failure. Even the best warhorses and armament, couldn't ensure for knighthood the victory over appropriately equipped, well formed and ruled, plebeians.

The main purpose of this article is presentation of sinthetic sketch of the battle of Guinegate, and also to proof the big value of this battle in further process of western european art of war, underestimated in a current publications. By the author's opinion, fields of Guinegate verified medieval, western european art of war and became a basis for a next changes. It was also decisive clash in history of warfare between two conceptions of infantry armament, during which the swiss pike became more effective weapon than the english long bow.

Swiss infantry fighting as a in fact light armed, holding powerful polearms, appeared in 14th century as a force, that it was unstoppable. They were usually poor peasants, working in forests, and on a field. Their lives were usually very difficult. War for them was very risky, but lucrative way to improve their life conditions. Then they took the halberd, and join the mercenary groups, or cantonal armies, attacking neighbours, or defending their lands against the enemies. Swiss proved themselves as a very good, pugnacious soldiers. If good coordinated, but wild attack near woods of Morgarten (1315), we can recognize as a success caused by shock effect and inability to use their strenghts by enemy forces, the swiss victories in next clashes fully proved their unusual value on battlefields. In the battle of Laupen (1339), cantonal infantry showed by creating „*igel*”- (hedgehog) formation that they were able to repel impacts of enemy cavalry. While their great victory near Sempach (1386), demonstrated that no matter how opponents try to attack, on foot, or mounted, they will fiercely resist, and even when enemies come to close- into range of halberd, they will be masacrated [7, p. 7-8]. Offensive tactic of swiss armies, based on a strikes of stiff, and dense formations of halberdiers, showed how dangerous are polearms, bearing by courageous and disciplined infantry. Knights attacking by this kind of troops, couldn't defend demselves effectively. They couldn't use their lances, or even reach the opponent by swords. Some novelty, we can recognize in battle of Sempach, when swiss infantry used formation simillar to wedge shape, whose one arm was longer than another, what able to attack from the flank. Swiss infantry were using echelon formation, wedge and many different combinations in the next centuries, fighting against Burgundians, Swabians, and during Italian Wars (1494-1559). Analysing swiss art of war during 14th century issue, we can't not mention a weak elements of their armies. Basing on three battles presented before, we can this weakness restrict to armament issue, beeing advantage and disadvantage in the same time. Halberd inspite of many values, was insufficient weapon in fight with enemy bearing longer spear, or pike. Proved that charges of chivalry during Laupen and

struggle with their dismounted troops near Sempach. Having a greater range of weapon opponent could keep the advantage over armed with shorter halberds Swiss and inflicting heavy losses on them. In the battle of Sempach, highlanders were embroiled in a heavy fight against the dismounted knights and saved them fresh forces moved to flanking attack on the Leopold's vanguard [7, p. 10]. Swiss halberdiers created dense round formation during battle of Laupen and were resisting cavalry charges, but any further strike claimed more and more casualties. Trapped on either side, in fact they were at the mercy of heavy cavalry, that attacking over and over again, weakened swiss formation. Even in this case, the rescue of other troops was necessary [7, p.7-8]. Basing in so much degree on troops in one type (halberdiers), was very risky too. Sensitivity to enemy fire, lack of strong support from archers, or crossbowmen, was playing on lucky, that enemy will disregard the utility of this kind of forces. About how heavy consequences may be attached to a lack of flexible way of fighting, Swiss felt on their own skin in 16th century, when their infantry squares were being massacred by black powder guns during Marignano (1515) and La Bicocca (1522) [15, p. 240-267].

It's necessary to tell, that polearms played a major role in battles of 14th century, that have pushed medieval warfare into way of further developments. From battle of Stirling bridge (1297), through Fields of Courtrai (1302), clashes between swiss cantons and their enemies, to successful fighting english armies with French, at all times polearms were coming up as a important, or fundamental element. It's hard to imagine triumphs of swiss infantry without halberds, that they were using very efficiently, or resisting charges of french knighthood by flemish militias without spears and characteristic *goedendag* clubs. Except good preparation, command, favorable field conditions, weather conditions, weapons that were used proved to be crucial. The blows that the feudal knighthood has taken away, hit either all the traditional habits of medieval art of war. Relying on heavy cavalry, which was to be a universal remedy on every opponent that appears on the field, has been mercilessly pointed out. For many commanders, it was hard to understand and acquire, because of that the same mistakes were repeating for decades. In fact mercenaries market was offering a lot of professional infantry troops, that were willing engage in armed conflicts, but still they were treated like a relatively little worthwhile force, incomparable with power of feudal heavy cavalry. Through the further decades of the next century, but also that idea has been rapidly revised and belief in primacy of the knight cavalry has weakened significantly.

The changes that the medieval military has experienced, especially in 14th century, in the next century reached their apogee. The fifteenth century was not like any of the previous centuries of middle ages in many ways, also on planes not related to military history. But these has left much stronger mark on character of culture and people's understanding in the end of medieval times. Cruel and often chronic wars, suffering Western Europe, related with growing interest in science, creating new works and acquaintance with existing for centuries, has resulted in an unprecedented development of military literature. This area of knowledge has even dominated all the others in terms of the number written down works [1, p. 129-133]. It can be concluded from this that literature on the art of war and the mere exploration of this subject became a matter of great importance at that time. Kings, princes, or paid commanders of almost every rank, saw the need to acquire a thorough knowledge of the art of war [3, p. 27]. At this time many old books were rediscovered, most of them were written in ancient times, like a *De re militari (Concerning military matters)*, by Vegetius, which without much understanding was copied in centuries before. Also started writing down new works, like for example: *De bello, de represaliis et de duello*, by Giovanni de Legnano created while still on 14th century, *Bellifortis*, Konrad's Kyeser, or treaty written down by Jean V de Bueil - *Jouvencel*, that was created between 1460 and 1470 [1, p. 130]. A specific military enlightenment whose roots can be found in the second half of the 14th century, in 15th, at different tempo, although it has effectively spread throughout Western Europe, transforming the sphere of military theory and practice. In addition to knowledge and understanding, the development has also affected the sphere of organisation and technology. On the battlefields, more and more trained and equipped armies began to appear, largely of a professional character. These

changes were the last nail in the coffin of the already overripe system of feudal armies, which, while still defending itself for a long time, finally gave way to more modern and effective solutions. The topic of these solutions and the military development of Western Europe in general definitely needs further elaboration, starting from the organizational sphere and character of the army in the late Middle Ages, as a fundamental issues.

The wars mentioned earlier led to the full bloom of a kind of market for mercenary formation in the 15th century and than to put the sense of using their services under a big question mark. Conflicts like a Hundred Years War, has created many groups of soldiers with no one as a official leader, wandering as dangerous gangs all over Europe, looking for a job as well as mercenaries [5, p. 180]. The rulers often needed soldiers immediately, even in local conflicts, willingly used their services. The feudal system was characterized by inefficiencies and often long delays in formation of army. For this reason, the nobles of the various ranks preferred to efficiently take on the necessary number of soldiers of appropriate qualities rather than waiting for a feudal army of dubious quality to gather. The mercenaries of various origins tried to use both the fame of their nation and their own training. Fields of Crecy (1346), Poitiers (1356), or Laupen and Sempach, were created the figures of deadly English archers and brave infantry of the Swiss confederation [1, p. 146-147; 6, p. 10]. It is worth quoting here Florence, which in 1424, as the first in history, officially turned to Swiss cantons with an offer of employment for 10 thousand soldiers. English archers have often served in the armies of the Duchy of Burgundy, which has maintained a friendly relationship with England. Able to cover the enemy with thousands of arrows, they were the model for the creation of the Burgundian infantry, which consisted mainly of archers and crossbowmen, protected from the front by a small number of pikemen. The monarchs, noticing their black legend, wanted to have such famous formations on their side and turn them against their opponent. As mercenaries, companies of soldiers fought, but also professional commanders, with their professionalism overshadowing the nobles, who were the leaders of the army mainly due to their high birth. Like the companies, they entered into a contract with their employer, under which the size of the army, types of troops, training, length of service, salary, etc. were determined. The contracted commanders were responsible for fulfilling its conditions and gathering the army according to all guidelines [8, p. 10]. Italian metropolises, with their wealth and population, were a model example of the use of mercenary forces, and are among the most powerful European cities. Gradually departing from services of militia, in XIV and XV century they started to use in large quantities services of mercenaries, i.e. the so-called *condottiere*, from the contract that was concluded with them, i.e. *condotta*. As in other parts of Europe, they were to create and command troops paid for according to the *condotta* - document [8, p. 10]. The Italian mercenaries quickly became famous and Italy became an attractive place for their service. Many of the mercenary commanders have even been piled up at the levels of their political career, as exemplified by Muzio Attendolo Sforza (1369-1424), founder of the powerful Sforza family.

The French learned from their defeats in a clash with English troops, appreciated during the 15th century the value of formations armed with ranged weapons, especially the long bow. Charles the VII, when forming his first professional army, i.e. the Ordonnance companies, paid special attention to the need for appropriate facilities of shooting formations. Two years after the establishment of permanent armies, the king decided to appoint the so-called companions of free archers. It was an absolutely unique idea in the French lands, especially because of the French people's attachment to the tradition of heavy cavalry. According to its guidelines, each parish in the areas under this provision was obliged to maintain, train and ensure the training of one archer. In this way, it was possible to form an 8 thousandth reserve of shooters, armed not only with bows, but also crossbows and firearms, which was obliged to serve as a feudal mobilization if necessary [1, p. 144]. The successor of Charles the VII, Louis the XI, developed and reformed the work of his predecessor. During his reign, he first widened the range of parishes committed to providing free archers, increasing their number to 14 thousand. The return from the way of enlarging the reserves of shooting formations, was only achieved by a defeat by the Swiss troops faced by his family

member, the Duke of Burgundy, Charles the Bold, during the three-year war which broke out in 1474, and the defeat of the royal troops at Guinegate in 1479. The conclusions learned from them led Ludwik to replace the company of free archers, with Swiss and French infantry, armed and trained like canton infantry. Unlike the archers, the permanent foot forces were numbered 4,000 French halberdiers and 6-8,000 Swiss mercenaries on permanent service. It is estimated that as a result of these operations, in the last 25 years of the fifteenth century, the permanent royal army reached from 20-25 thousand soldiers [1, p. 145].

In parallel to professionalisation and the effects of the technological advance, far-reaching changes in the philosophy of fighting on the battlefield can also be observed, and therefore in the choice of troops and tactics. As mentioned above, the great victories, especially of the English and the Swiss, have brought with them certain trends. In the name of effectiveness, traditional habits began to be abandoned and opened up to experiments and changes. Noticing the effectiveness of English archers and Swiss infantry, there were attempts to either use these formations as mercenaries, or to "imitate" them, or replace them in tactical sense. This resulted in significant changes in the use and proportion of forces on the battlefield. On one hand, armies formed according to the "English model" can be mentioned, on the other hand the „Swiss model". The choice between these two options was the intention of the commanders and could occur regardless of the geographical region. Of course, different armies, different rulers could and did appear in different proportions, even after the traditional domination of horse knighthood. However, the models of composing the army in English and Swiss style were the most characteristic and regularly used. Which model was used was not influenced by political circumstances, culture or region. An example is the French, who first leaned towards the use of masses of shooting formations and then switched to using troops modelled on the Swiss infantry. The first one was characterized by the use of the predominant, often very significantly, number of formations fighting with ranged weapons, over other weapons. In this shape, the masses of crossbows and archers, in particular, formed the main part of the forces, and the cavalry and infantry fighting in close combat, performed only an auxiliary function [1, p. 145]. According to the Swiss model, there was an inverse proportion in the infantry ranks. Short range infantry, armed with polearms weapons, dominated in numbers over the rest of the formations, pushed into support actions. Within both models, there was a different degree of saturation with firearms and the amount of artillery collected, but It isn't related to the accepted doctrine, but to financial conditions and the trust in the new weapons. It is impossible to decide which model was better. Depending on the field conditions, the opponent and the tactical skills of the commander, they presented different characteristics, and the victory of one over another in the fight was rather due to favorable conditions and appropriate conduct, than the superiority of one of them. Other characteristic aspect of the medieval military of the 15th century was the use of horses. Although after the 14th century one could have an apparent impression that the use of a horse would start to decrease, the fate turned out to be completely the opposite. The next century can be called a kind of "hippisation" of the medieval army. This concerned mainly armies composed according to the English model, where the bulk of soldiers, armed with ranged weapons, was moving on the back of the mount [1, p. 136-143]. Due to the size of the polearms, this process has not taken place at all, or to a very limited extent in the Swiss model. The massaged use of horses favoured the mobility of the army and had a positive effect on road fatigue, which was undoubtedly evident in infantry. On the other hand, the role of the horse as a "weapon" began to decline. Just as for any kind of "shooters", the horse is no longer an obvious source of strength during combat, but mainly a form of transport that can be used in the traditional way for heavy cavalry if it would be necessary or ordered to. The defeats at the hands of the English and the Swiss made dismounting before the fight became completely normal [6, p. 4].

A specific example of changes that took place in armies of medieval Europe is the little-known battle of Guinegate, which illustrates in a illustrative manner the twilight of the English system and the Swiss triumph in other European armies. In order to understand the changes taking place, it is necessary to explain how this small but significant battle for military history has taken

place. However, first a brief historical introduction should be made and the issue itself has to be extended.

The heroic death of the duke Charles the Bold at the Battle of Nancy led to the creation of a vacancy on the ducal throne of Burgundy. The duchy, although independent and rich for many years, was formally a French fief, for this reason Louis XI, King of France, fully felt himself to be the rightful ruler of all the lands of the fief, after the died duke. But he wasn't the only candidate to take over the legacy of the Duke of Burgundy. The husband of the rightful heiress of Charles the Bold, his daughter Mary of Burgundy, has filed claims for these lands. It was the Austrian Archduke Maximilian Habsburg, only twenty years old and inexperienced, but extremely talented and knowing how to surround himself with the right people. Such a man was undoubtedly the Count de Romont, a nobleman from the Neuenburg area, who fought against the Swiss in the past and knew their art of war very well [2, p. 4]. His knowledge was extremely valuable, especially because the king had an unquestionable military advantage over the archduke. The knowledge of the Swiss military proved particularly useful in forming the Archduke's troops to be used against the well-trained and modern army of the French king.

The subject of the Battle of Guinegate, deserves attention because of its crucial importance for the French military, which under its influence has been thoroughly revised. It was also important for Maximilian Habsburg, who, using his knowledge, later created one of the most famous military formations in history. Unfortunately, this clash remains in the shadow of the second Battle of Guinegate of 1513, during which the forces of Henry VIII and Emperor Maximilian defeated French troops, whose excellent description was left by the British historian Charles Oman, for example [10, p. 215]. This is due to a weak source base and therefore serious information gaps. The most important source is the memories of a witness to those events, Philippe de Commines. He was a writer, politician and diplomat serving with King Louis XI among others. This source in the Polish scientific literature on military history is not known and needed to be translated by the author himself. Historiography left mostly only encyclopedic descriptions of this battle. One of the exceptions is the analysis undertaken by H. Delbruck in one of the volumes of his monumental series of art of war history [2]. The Battle of Guinegate, in the context of the War of the Burgundian Succession, has not played a major political role, which also makes the need for its analysis unnecessary for scholars. In the author's opinion, a broader and fresher view of this event is needed, especially due to the aforementioned further consequences in the changes of the war craft. The result of the Battle of Guinegate has caused extensive changes in the armament and character of the foot soldiers in both France and the Holy Roman Empire. This in turn has affected the military forces of countries of almost the entire Western Europe, whose armies soon began to clash during the Italian wars (1494-1559). Analizy i próby odtworzenia przebiegu bitwy funkcjonują w wielu różnych wariantach [13; 14; 2; 11]. One of the most interesting is the one published in *The Oxford Encyclopedia of medieval warfare and military technology*, it mentions, among other things, the use of war wagons in Hussite manner, but, according to the author, this is hardly true [14, p. 226]. However, on the basis of their comparison, it was possible to create the next most probable version according to the author.

The first point to start with is the concept around which the Archduke's army was formed. It assumed the recruitment of large Flemish infantry forces and training it according to the Swiss design. We can't be sure who was behind this idea. It is very possible that such a proposal was made by de Romont, since Maximilian was still a young and inexperienced commander. The Flemish were the perfect material to create an imitation of the Swiss infantry. The cities of Flanders were rich, and their militia could afford high quality weapons, sometimes equal to those used by knights [16, p. 209]. But the greatest value was the soldier himself. For centuries, the Flemish people have been considered warlike and steadfast. The most famous of the battles in which they won took place near the city of Courtrai (1302). At that time the Flemish militia commanded by Guy de Namur, humiliated the flower of the French knighthood, which disregarded a club and spear armed infantry. The first of these weapons was particularly infamous. *Goedendag*, because

that was its name, it was a wooden baton, ended with an iron spike. After the knight's fall to the ground, the goedendag was ideal for stabbing the most sensitive armor points. At the beginning of the 14th century, the primary form of protection was mail coat, often in the form of a long tunic. The spike that ended the goedendag could easily pierce that armor. The Flemish militia have not only proved their strength, but also the power of a deep, armed with polearms infantry formation that they have begun to use universally. Unfortunately, relatively easy victories also have negative consequences. The Battle of Courtrai, which opened up a trail of further successes, has lost the Flemish. They felt too confident and disregarded the threat from the enemy, who for a long time could not react properly to their tactics. The French in fact took the revenge for this defeat 80 years later, at Roosebeke. This was a clear success due to the weak Flemish command and not to the ineffectiveness of their formation [2, p. 191]. H. Delbruck in his book tries to show that the guilt was the terrain, because it was the plain and not the mountains, giving the Swiss in some way an advantage against this type of attack. This is not true, because at the Battle of Laupen, for example, part of the Swiss infantry formed in a circle was attacking by an opponent's cavalry, which could not break it down, and it is worth recalling that the Swiss did not yet had pikes but much shorter halberds. Philip van Artevelde, the leader of the militia forces, allowed his own troops, which, attacked by the heavy cavalry from the flanks, threw themselves to escape, to be surprised. But it wasn't a bad prognosis before the Battle of Guinegate. Roosebeke's victory could have had a negative effect on the French, just as it did on the success of the Flemish at Courtrai. The bold French were more likely to make serious mistakes. This risk has increased thanks to the preparations initiated by archduke Maximilian and de Romont. For two years, the Flemish were training to fight with Swiss pikes in the same way as the cantonal infantry did [4, p. 22; 13, p. 161]. It was a very important step, especially since the Flemish were not very familiar with these weapons. Until that time, they probably have been using mostly long, cavalier spears reaching 4.5 m. It is known that in 1477, the city of Bruges equipped its troops with 4-6 m. pikes. However, this is an isolated case, so although the people of Flanders knew what this weapon was, they had no practical experience with it. The 5.5 m long Swiss pika, which took a bloody harvest during the war with the Duchy of Burgundy, was now to become famous in the hands of Flemish militiamen.

The French army that arrived at Guinegate, did not resemble the one that was defeated in 1302. The Hundred Years War has left its mark on the military forces of the kingdom, which under its influence began to recruit large numbers of archers. A series of ordinances released since 1446, became the basis for the formation of professional troops, consisting of heavy cavalry and horseback riding archers. An important part of the French war system was the so-called *franc archers*, or "free archers". It was a reserve composed initially of 8, and in the times of Louis XI 14 thousand missile units, mostly armed with long bows. The army's main force of impact was heavy-armed cavalry, consisting of both feudatories and professional soldiers. The French knights, who were wearing plate armour, had an unquestionable reputation throughout the medieval Europe. Learned that the masses of crowded knights, covered with hail of arrows fall into complete chaos, which leads to complete defeat, set off to fight en haye, that is in narrow lines [12, p. 78]. On the occasion of the royal army, it is also important to mention briefly the artillery, which at that time was in almost every western european army. The popularization of cannons, mortars, etc. has primarily influenced the art of siege. However, this type of artillery began to appear also in the field. However, the practices of that time were still lacking in experience, and artillery technology itself had great limitations. Successfully hitting the enemy's dense troops formation caused severe casualties, and weakened morale. However, the slow loading and poor accuracy caused the artillery to play no significant role at the time.

An open conflict with the king was initiated by the Archduke who began the siege of Therouanne fortress in late summer 1479. Louis XI was right to take direct control of the lands of the Duchy of Burgundy by force, i.e. by sending troops and occupying the lands belonging to the Duchy. This allowed the king to react very quickly to an emerging threat from a rival. The rescue of the besieged Therouanne was carried out by the future Marshal of France, Philippe de Creve-

couere, with about 7200 cavalry, of which 3600 were heavy armed and 3600 mounted archers [14, p. 230]. In 1479 there was still a lance squad approved in 1445, i.e. 1 knight, 1 coutilier, 2 mounted archers. Each lance was served by 3 more servants with horses, but they were not soldiers. It is worth to note that the horse archers fought on foot. The French infantry was 8,000 *franc archers*. The Marshal also had artillery at his disposal, but there is no information on the specific quantities of this kind of equipment. Maximilian Habsburg arrived from 11,000 Flemish infantry, 3,300 Burgundy infantry armed with pikes and halberds, 4,125 archers and gunners with firearms, unknown number of artillery, and with 1650 cavalry, of which only 825 were knights. These calculations are correct assuming that Maximilian brought in 825 full Burgundy lances [11, p. 40]. Assuming that 825 full Burgundian lances were assembled, the Archduke had the Burgundian infantry collected as required by the infantry squad, and 11,000 Flemings not covered by this military administration system should be added separately. Philippe de Commynes estimates Maximilian's strength at over 20,000. Philippe de Commynes also mentions English and German mercenaries. However, there is no information about their number. Estimating the most reliable quantities, these were forces of over 20,000, therefore larger than the French. But they had an advantage in the number of heavy armored cavalry. The young commander immediately demonstrated his determination and, hearing about the approaching Frenchmen, set out to meet them.

The troops of both archduke Maximilian and Philippe de Crevecouere met at Guinegate on August 7th. We have no detailed information on the battlefield conditions. However, looking at the terrain of this part of Europe, the armies most probably were struggling on a flat, grassy plain. Maximilian divided his infantry into two massive quadrangles with pikes and halberds, and then placed it in the center of formation. Its flanks were cavalry, of which the right flank was weaker than the left, which was probably due to the separation of about 200 knights and putting them in the front line of infantry [2, p. 5]. The front of the army were troops fighting with ranged weapons, and artillery [13, p. 159; 14, p. 226]. Interestingly, the Archduke himself stood in the front line of the quadrilateral formation with the knights, thus adding moral support for the infantry [2, p. 226]. The French divided their army into three large groups. The center was made up of archers and other missile formations behind whom there was a heavy cavalry reserve. The flanks, being occupied by the rest of the knights and light cavalry [14, p. 226]. As with the Archduke's troops, the artillery has most likely been set up frontally. It is not likely that the artillery would be on the flanks as the Burgundians had set it up during many battles, because in this clash the French decidedly wanted to be an active side and the cannons located in this way would block the cavalry movements.

The French began the battle. A cavalry fell on the wings of the Archduke's troops, which chased away the less numerous rides standing on the left wing and stood in a fierce fight against the one on the right. There, French horses failed to succeed and were stopped by a knighthood supported by placed near infantry. On the left wing, the French cavalry stopped in front of the flank of the pikeman formation and started preparing to strike at them. However, french cavalry was not in enough strength, which quickly turned out to be a significant disadvantage. The horse archers sent with the knights, instead of taking a position on the enemy's flank, chased the defeated enemy to plunder his camp. In the meantime, Crevecouere's military centre has moved into the attack. The ranks of 8,000 French archers easily gained an advantage over nearly half the Burgundians, who tried to keep the enemy out of their artillery. A hail of arrows, followed most likely by the charge of the chivalry's reserve, led to the breakdown of Burgundian troops and the capture of valuable equipment. The artillery captured by the French was quickly turned against the quads of the infantry. For the time being, Crevecouere's troops have managed to gain an advantage over Archduke Maximilian's army, whose troops have been seized from almost all sides and exposed to a decisive blow from the enemy. The decisive phase of the clash came soon. From the front, the archduke's dense quadrangles from the artillery he had captured a moment earlier began to be fired, mixed with thousands of arrows launched by archers. Then the Archduke's flanking troops began to attack, and with them the cavalry reserves, which now were controlling the artillery with

the archers. Despite the fierce battle, the knights' attack was fatal for him. Full of polearms square finally discarded the French and forced them to flee. It also did not do any good to fire on the Flemish infantry. Projectiles released from bows and crossbows, were colliding with the pikes set forward and upwards. In turn, those that broke through the forest of shafts were unable to penetrate the solid armour that the Flemish were wearing. During second half of 15th century, most popular armor of infantry was padded jacket, because of it's low cost. Best equipped soldiers had standing in first ranks of the formation and in late Middle Ages they could wear plate cuirasses, or „plates” - armor consisted of metal plater riveted to leather. Remembering that many Flemish militiamen could afford expensive armor, quadrangles were quite resistant to projectiles shot by archers and crossbowmen. Only the artillery could cause them any damage, but there is no information about the effect of its firing, so either it wasn't fired at all or the balls fired from it caused very little casualties. The fight on the second flank of the Archduke's troops, and their frontline, where a cavalry probably also tried to break through the wall of halberd and pikes, also failed. The knights' lance was too short to reach an enemy equipped that way. The balance of victory began to lean dramatically towards the Archduke's troops. After throwing away the surrounding French cavalry, Maximilian went on a counter-attack and dispersed the archers, who, seeing the cavalry escape, most likely did not resist at all. The same fate was shared by those who, ignoring the orders, rushed to plunder the camp instead of participating in the battle. Maximilian Habsburg's victory was full, 1300 Frenchmen died in the battle and many were taken to slavery. Losses among the Archduke's troops are estimated at 5,000 dead, which seems exaggerated, but it shows that he lost more men. This was probably due to the defeat of the Burgundian archers, and the knights who could not stand the blow of a French cavalry [14, p. 226; 13, p. 161; 2, p. 4-7; 11, p. 40].

The Battle of Guinegate, although insignificant in the context of the rest of the conflict, which ultimately ended in a bloodless diplomatic victory for Louis XI, left some significance in the military context. Maximilian Habsburg and the Earl of Romont took an important step in making the de facto Swiss infantry out of the Flemish and winning over the professional, modern army of Louis XI based on heavy cavalry and masses of archers. The experiment was a success and proved that you can arm your own infantry on swiss manner and defeat your opponent's troops with the same striking effect as the Swiss did. This request was taken up by both Archduke Maximilian, who later invested in the formation of the Landsknechts' troops, and Louis XI, who abandoned Franc Archers and introduced Swiss and French Pikemen in their place. It has been another defeat in military history of the archers in a confrontation with the pikemen. Charles the Bold also tried to stop the Swiss infantry with archers unsuccessfully. Analysing the battle and the concept that the French have adopted, it seems that Crevecouere wanted to win this battle on the basis of Roosebek's success. This time, however, the opponent had a guarding flank cavalry that had not successfully driven away from the battlefield. The French also failed to provoke the quadrangles standing in the centre to throw themselves to defend the artillery or to chase away the archers. The Flemish infantry trained to fight in the Swiss style was very well commanded and its discipline was excellent. Armed with pikes, it showed how deadly this weapon is and how effective it is in stopping cavalry attacks regardless of the direction they take. The success of pike over the bow, which has influenced far-reaching changes in the French military and the foundation of the Landsknechts, has led to a de facto collapse in the popularity of the English art of war on the continent. The battle that finally led to this was the Battle of Guinegate in 1479.

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