

## Accidental Pioneer

# Charles VIII and the Dawn of Military Revolution in the Gunpowder Age

Francesco Guicciardini, an Italian diplomat and historian, captured the essence of the French invasion's impact on Italy when he remarked, "Charles entered Italy on the ninth day of September in the year 1494, bringing with him the seeds of innumerable calamities and most horrible events, which resulted in significant changes across the entire state of affairs. His passage into Italy not only gave rise to changes in dominions, the subversion of kingdoms, the desolation of countries, the destruction of cities, and the cruelest massacres, but also introduced new fashions, customs, and bloody ways of waging warfare, as well as diseases previously unknown in the region."<sup>1</sup> This statement resonates deeply with the tumultuous era of the Italian Wars, which heralded the onset of the Gunpowder Revolution, a transformative period in warfare that reshaped military tactics and strategies over centuries.

The Gunpowder Revolution, spanning 500 years, constitutes a series of military upheavals that continue to intrigue scholars and historians. While interpretations vary, the focus here revolves around its inception and culmination, particularly its manifestation in the European theater during the Renaissance.

In 1955, during a lecture at Queen's University of Belfast, Michael Roberts introduced the notion of a military revolution. His seminal article titled "The Military Revolution, 1560–1660" ignited scholarly discourse and has remained pivotal in shaping historical narratives for decades.

Differing viewpoints exist regarding the timing and pivotal periods of the military revolution in early modern Europe. Michael Roberts, credited with coining the term "military revolution," proposed a timeframe from 1550 to 1660.<sup>2</sup> Conversely, Geoffrey Parker suggests that the sixteenth century holds "central importance" in this context.<sup>3</sup>

Roberts' perspective spans over a century, indicating significant changes in military strategies, technologies, and organization across Europe during this extended period.

In contrast, Parker emphasizes the profound significance of the sixteenth century within the broader context of the military revolution. He likely highlights key innovations and transformations during this century, arguing that they laid the groundwork for subsequent military developments in Europe.

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<sup>1</sup> Phillips, Mark. Francesco Guicciardini: The Historian's Craft. University of Toronto Press, 1977, p. 121.

<sup>2</sup> Michel, Rogers. "The Military Revolution, 1560–1660." In The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe, edited by Clifford J. Rogers, Routledge.

<sup>3</sup> Parker, Geoffrey. "In Defense of the Military Revolution." In The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe, edited by Clifford J. Rogers, 341Routledge, 1951.

While consensus eludes scholars regarding the revolution's origins, its impact on historical narratives remains undeniable. The seminal Italian War of 1494, marked by King Charles VIII's invasion of Italy, symbolizes a watershed moment in military history. This conflict ushered in an era of technological and tactical advancements, signaling the demise of medieval warfare and the dawn of modern military practices.

The Gunpowder Revolution, however, unfolded gradually over centuries, punctuated by successive revolutionary epochs:

Gunpowder Revolution: 1494-1700

First Industrial Revolution: 1750-1900 (including the democratization of warfare)

Second Industrial Revolution: 1900-1945 (marked by the development of the atomic bomb)

Information Revolution: From 1970 onwards, characterized by the evolving role of information in warfare.

The evolution of warfare exemplifies a continuous process, shaped by innovations, geopolitical shifts, and societal changes. While the Gunpowder Revolution stands as a pivotal moment, subsequent revolutions have further reshaped the contours of military conflict, underscoring the dynamic nature of warfare across history.

The classification presented above pertains to the technological aspect, but neither of them, including the Gunpowder Revolution, should only be considered for their significant changes. During these epochs, military innovations, warfare transformations, and technological advancements emerged, all of which influenced strategic decisions parallel to the political, social, and economic factors. It could be argued that the emergence of state monopoly on warfare during periods of military conflict contributed to the concept of statehood, where both parties exerted significant influence on each other's integration, enhancing progress. Such mutual interaction arguably renders the evaluation by Charles Tilly, who asserted that "war made the state, and the state made war," as one of the most accurate assessments on the interdependent relationship, which had the most profound impact on history.

It can be argued that revolutions in the forms of warfare are not only dependent solely on technological aspects, but the second revolution may be carried out in such a way that it does not rely on military technologies or weapons, and it may be based entirely on other non-technical factors. For example, the emergence of revolutionary France's wars may be cited. These wars were not motivated by a desire to expand the territory of the entire world, but rather by the compassion of an ideological founder, which led to the rise of the French society at that time. The main event was the mobilization of the population - this manifested the superiority of the French over the Prussians, Russians, and others, not weapon. Therefore, factors such as nationalism, absolutism, or democracy such factors as nationalism, sometimes exert even greater influence than technological advancements like tanks or weapons on the battlefield and the evolution of warfare simply having advanced technology is not enough; one must also understand how to strategically utilize and integrate it into military operations effectively. This involves considerations such as tactics, logistics, political factors, and overall strategic objectives. By prioritizing strategic thinking alongside technological development, one can better harness the full potential of new weaponry and ensure its superiority in the complex landscape of warfare. Simply embracing the recognition of a newly acquired weapon or a broader technological change does not necessarily fuel revolution in the conduct

of warfare. Human multidimensional behavior plays a significant role here - their ability to harness the best utilization of technology and adapt it effectively in military strategies

Beyond weaponry and military tactics, revolutionary change necessitates adequate tactics, strategy, organizational administration, leadership, and the involvement of other human factors. Moreover, it could be argued with caution that the adoption of technological innovations, including the understanding of weaponry, does not necessarily signify that the revolutionary change in the conduct of warfare solely depends on them. Such interpretations only reflect the perspectives of the best users of technology. Both Inventors of technology and the best users of technology may independently influence the outcomes, rather than being identical subjects, but significantly divergent, as in time, so in space. Such a notion can be likened to Bacon's triad applied to each representative - in gunpowder , marine navigation(magnet), and printing. All of them were invented in Asia at one time or another but recognizable revolutionary definitions could be found in other times and places, like in Europe. Hence, military revolutions are highly nuanced in time and space, which should include the gunpowder revolution among them. Its main technological exponent, gunpowder, was invented in China, presumably in the 9th century

One period completely misunderstood that Chinese intellectuals did not use gunpowder as a military designation, but it was revealed through subsequent investigations that the Chinese had indeed relied heavily on gunpowder in comparison with Europeans in sincerity for military purposes. However, the fact remains that the gunpowder revolution did not begin in China, but in Europe, not in the 9th century, but during the Renaissance. The proliferation during the time of the same revolution is also very significant, extending over 200 years, with its technological progress being quite embryonic, started with very primitive arquebuses,, and concluded with fairly sophisticated flintlock rifles As for the assertion of Artillery, gunpowder's revolution began with such a premise that it was virtually unchanged over the next 350 years.

Perhaps the best universal example of the difference between the inventors and the best users of weapons is the culmination of the German art of maneuver, the Blitzkrieg. Many people quite rightly associate this phenomenon with the British invention - the tank, but those who look for the reasons for the German astonishing success in the number or quality of tanks are sorely mistaken. The real reason for success was hidden in completely different - human factors. As Max Booth points out: "Generally accepted opinion, Germany possessed a great technical and numerical advantage over its rivals. However, if we look at the forces with which Germany invaded other countries , we will find that this opinion is very far from the truth. Germany used far fewer tanks and aircraft than Britain and France"<sup>4</sup>

During the critical period of conflict, the French army boasted 3,063 tanks, while the combined strength of the other Allied forces yielded a total of 3,384 tanks. In contrast, Germany fielded 2,445 tanks.<sup>5</sup> This meant that numerically, the Allies held an advantage in tank numbers during the Battle of France in 1940.

However, the quality of weaponry alone did not determine the outcome of the conflict. The success of the German forces stemmed from their superior coordination of forces, adept command structure, and

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Booth, Max. *War Made New: Technology, Warfare, and the Course of History: 1500 to Today*. New York: Gotham Books, 2006.

<sup>5</sup> <https://weaponsandwarfare.com/2015/10/01/battle-of-france-1940/>

rigorous training, along with a resolute fighting spirit. Unlike their counterparts, the Germans adeptly leveraged new technologies and tactics to their advantage, contributing significantly to their triumph during this pivotal period of warfare.

Of special note is the ability to maintain revolutionary achievements, which seems to be the most difficult task, since no technological or tactical achievement can guarantee eternal superiority. A rival will always copy any useful innovation and may today or tomorrow use it better than the original innovator. So the preservation of revolutionary achievements can only be hidden in the constant search for innovations, and sometimes completely utopian innovations, which in turn is a very expensive and difficult task for any state. It can be said for sure that any state that cannot master innovations in the military sphere is doomed to epochal backwardness. The state or military machine is also doomed to collapse, which, fascinated by its own tactical success and revolutionary progress, does not notice the line between the possible and the impossible, between tactical success and strategic possibilities.

As a result, history is full of examples of such states or nations, which suffered from epochal backwardness in relation to modern developed forms of warfare. However, more importantly, the current world configuration repeats the same picture, the majority of states are still epochally behind the 21st century technological capabilities of warfare.

As for those who were able to develop a stunning revolutionary success on the tactical field of battle, but failed to maintain this success and transform it into a victory at the strategic level, the already mentioned German military machine and Charles VIII are enough, whose war we must return to in a few words below.

However, before proceeding directly to the review of Charles VIII's war, one important circumstance should be emphasized once again. Even when we talk about gunpowder or any weapon, its importance and revolution, we must remember that we cannot give too much role to technological factors, we must never place more hopes on them than they can handle. In essence, attributing the entirety of military prowess solely to technological superiority is not entirely accurate, as succinctly articulated by Fuller: "Strategy, management, command, courage, discipline, supplies, organization, and all other moral or physical attributes are nothing compared to weapons of great superiority; What they can create is only one percent of the overall capabilities of the army."

However, rejecting this extreme doesn't mean embracing its complete opposite, as echoed by Napoleon: "Three-quarters of the victory in war is determined by the moral spirit, and only one-fourth by the actual balance of forces."

Accepting either extreme would lead to flawed beliefs – either in the success of an untrained, unmotivated army solely due to weaponry or in defeating a powerful enemy with sheer spirit alone. Success on the battlefield cannot be derived through fixed percentages or fractions, nor can human and technological factors be interchanged. Depending on the circumstances, dominance may shift between technological and human factors. Ultimately, victory requires a balance between both – effective military strategy and technological armament, complemented by human resolve and spirit.

### ***Charles VIII and the Year 1494***

In Michael Howard's portrayal of the events unfolding in 1494, he vividly captures a seismic "shift in speed" from the stagnant medieval warfare to the dynamic, aggressive modern warfare, epitomized by King Charles VIII of France's bold invasion of Italy. Despite being seen as a pioneer of the gunpowder era, Charles's role as a military leader remains relatively overlooked in historical accounts. This oversight is understandable, considering Charles's limited prowess as a commander and his minimal contribution to military innovations during his time. Charles himself likely had no inkling that his actions in 1494 would herald a revolutionary epoch in warfare.

Contemporary depictions offer glimpses into Charles's character, painting him as lacking in both physical stature and intellectual acumen. With a disproportionately large head and a modest frame, Charles's education was notably lacking, to the point where he struggled to write his own name. According to David Abulafia: Though mocked by his foes in his own lifetime for his dwarfish stature and his large head with its massive nose atop a skinny body, Charles was not, in fact, the idiot king who is often portrayed<sup>6</sup>. Despite his illiteracy, Charles held a deep fascination with mythical legends, particularly those of Camelot immortalized in Thomas Malory's "Le Morte d'Arthur," a work published since 1485. Alongside his love for legends, Charles harbored a fervent desire to emulate the heroes of the Crusades, driven by a passionate ambition to reclaim the Holy Land from perceived injustices.

In essence, Charles VIII's bold venture into Italy in 1494 marks a pivotal juncture in the evolution of warfare, ushering in an era defined by rapid technological and strategic shifts. Despite his personal limitations, Charles's actions set in motion a cascade of events that would reshape the course of history, laying the groundwork for the modern military landscape.

While Charles may not have possessed the leadership qualities requisite for a grand endeavor like reclaiming the Holy Land, it's worth noting his technical capacity as the leader of France, objectively the strongest state in Europe at the time. France had recently concluded the Hundred Years' War with England, successfully reclaiming Normandy and Guyenne from British control. Moreover, under Charles's reign, France expanded its territory, incorporating Armagnac, Anjou, Brittany, Burgundy, and Provence into the royal domain, essentially solidifying the modern borders of France.

During the same era, the French achieved remarkable technological advancements, notably enhancing artillery which had long existed in Europe but remained largely ineffective. The older siege artillery was cumbersome and immobile, typically stationed at siege sites due to its impracticality in transportation. Moreover, the labor involved in its operation was arduous, allowing for only a few shots per day. Projectiles were ineffective stone balls that disintegrated upon impact, causing minimal damage. Accurate aiming was nearly impossible, with the assembly of the artillery unit occurring at a distance of 80-90 meters from the target due to limited firing range. This proximity to fortresses made artillery installations vulnerable to enemy capture or destruction.

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<sup>6</sup> Abulafia, David. *The French Descent into Renaissance Italy 1494-95*. London: Jonathan Cape, 1983.

In the Middle Ages, artillerymen were typically craftsmen rather than soldiers, responsible for all aspects of artillery operation from assembly to firing. This arrangement led to instances like the 1453 siege of Constantinople, where Mehmed II's army utilized Hungarian artillery led by master Urban.<sup>7</sup>

During the 15th century, French advancements revolutionized artillery and gunpowder production. They refined the explosive composition, resulting in a more potent granulated explosive that increased projectile velocity and flight distance. Iron shells replaced stone ones, while improvements in steel casting enabled the creation of lightweight bronze barrels modeled after church bells. These lightweight barrels facilitated the development of portable mounts, allowing for rapid target changes and aiming adjustments. Light artillery could now be transported on horses, providing greater mobility compared to the heavy barrels tied to oxen used by the Italians.

The French artillery suddenly gained numerous advantages, including increased destructive power, extended firing range, faster firing speed, and unprecedented mobility. While the modernized French artillery proved to be a formidable weapon of victory, mastering the tactics of portable firearms posed a challenge. This shortfall in adapting to new battle tactics would later contribute to the French defeats following Charles's lightning victories.

Moreover, the spread and refinement of firearms in medieval Europe faced not only technological barriers but also moral opposition. Firearms encountered significant resistance within medieval society, akin to the resistance encountered by later innovations like the typewriter. Knights, who were at the forefront of warfare, particularly resisted the acceptance of firearms. Traditional knights viewed firearm users as dishonorable, cowardly individuals who avoided direct combat. They perceived firearms as instruments of deceitful killing, lacking the valor associated with face-to-face combat. This sentiment was echoed by the 14th-century Italian poet Petrarch, who denounced firearms as tools of "hellish" cunning killing.

In 1494, King Charles VIII of France, equipped with the technological and material resources previously outlined, seized the opportunity to invade Italy. Following the death of the King of Naples, Alfonso II, his successor laid claim to the Duchy of Milan. Meanwhile, the Duke of Milan, Ludovico Sforza, urged Charles to seize the Neapolitan throne, driven by Angevin ties to the Kingdom of Naples. Charles embarked on the military campaign into Italy, viewing it not merely as a conquest but as the rightful occupation of his throne. However, Charles saw the throne of Naples as a means to launch a crusade against perceived injustices and ultimately reclaim the holy land of Christianity.

Charles's motivations highlight the intricate blend of personal ambition, political maneuvering, and religious zeal that characterized the events of 1494. His expedition into Italy, fueled by dynastic aspirations and religious fervor, inadvertently set the stage for profound transformations in warfare, ushering in an era marked by technological innovation and strategic evolution.

The year 1494 emerged as an extraordinary period within an already exceptional era. Gutenberg's Bible had been circulating for nearly five decades, while the reverberations of the fall of Constantinople still resonated throughout Europe. Across the Atlantic, Spain's throne buzzed with discussions of newly discovered lands, a topic that had propelled the Italian explorer Columbus on his second expedition just a year prior. Amidst these seismic shifts, luminaries such as Botticelli, Leonardo da Vinci, Michelangelo, Raphael, Titian, and Machiavelli graced the earth, ushering in a new epoch for art, science, and politics.

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<sup>7</sup> Cotterell, Arthur. *Asia: A Concise History*. John Wiley & Sons, 2011, p. 174.

Europe and humanity, collectively, stood on the brink of change, bidding farewell to the past and embracing a future teeming with possibilities.

In the midst of this transformative milieu, a watershed moment unfolded in the realm of warfare. Charles VIII's army, comprising 27,000 men, descended upon Italy through the formidable Alps, heralding the dawn of a new era in military organization and strategy. With a structure reminiscent of the Roman legions, Charles's army epitomized a unified force centrally financed by the state. It boasted a tactical amalgamation of infantry, cavalry, and artillery—a composition that Michael Howard aptly likened to the armies commanded by Napoleon three centuries later.

Charles's expedition into Italy represented more than mere military conquest; it symbolized the dawn of a new age of warfare characterized by centralized command, strategic coordination, and technological innovation. The convergence of historical forces in 1494 catalyzed a paradigm shift in the conduct of war, foreshadowing the profound transformations that would reshape the contours of European history in the centuries to come.

The core of Charles's army was infantry, supported by Swiss lancers, along with French lancers and crossbowmen. Swiss spearmen were already considered a particularly dangerous force. It had been a long time since they had restored Alexander the Great's hedgehog phalanx. Using this tactic, the infantry more and more often mercilessly defeated the cavalry that had dominated the battlefields of Europe for almost a thousand years. Charles's army certainly included cavalry units of mounted knights, but his most brutal and strange tactical grouping was a unit of three dozen artillery pieces.

As soon as the French appeared in Italy, the natives immediately switched to their usual battle tactics, they began to fortify their fortresses. Such passive forms of fighting were then considered the norm. Fortifications in fortresses unequivocally proved the obvious superiority of defense over attack. Then no one in the whole of Italy or in the whole of Europe would share the opinion that Machiavelli would voice in just a few years regarding the cult of castles, according to which in practice "there is no wall so thick that artillery cannot destroy it in a few days". However, Machiavelli, who saw the invasion of the French as the setting of the Italian sun, did not so strongly criticize the defensive strategy with fortresses as he did the essence of the Italian army - mercenary soldiers. Later he will write: " the ruin of Italy has been caused by nothing else than by resting all her hopes for many years on mercenaries... King of France, was allowed to seize Italy with chalk in hand."<sup>8</sup>

Indeed, the mercenaries, or condottieri as they were called in Italy, had nothing to do with the fighting spirit of the national army, although the whole of Italy depended on them. The condottieri understood perfectly well that today's enemy could become tomorrow's employer, only those motivated by money had no reason to sacrifice themselves. It is one thing that mercenaries did not sacrifice their own lives, but it is another that they were wary of the lives of their adversaries, preferring to hold the enemy hostage for ransom rather than physically annihilate them on the battlefield to achieve decisive victory. Of course, this does not mean that there were no cases of self-sacrifice on their part or the destruction of the enemy, but for the most part the fighting style of the Condottieri tended to be absurd, more like a messy hand-to-hand fight than a life-and-death encounter. Machiavelli also describes several such pointless battles.

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<sup>8</sup> Machiavelli, Niccolò. *The Prince*, chap. XII.

As he recounts, in one case only one fighter was killed "only because he was thrown from his horse and drowned in the mud with two of his comrades", and in another case "the battle lasted from 20 to 24 hours, in which only one person was killed, although he was not killed either." , they didn't even cut him and didn't even throw him off his horse with any violent action, he just fell off and was crushed to death as a result."

With such a weak, unmotivated army, the Italians faced a much stronger and cruel French army. To reach Naples, Charles had to pass through the Duchy of Milan, the Republic of Genoa, the Republic of Florence, and the Papal States. The Neapolitans decided, while the French were still far from Naples at the beginning of the Italian lands, to make a pre-emptive strike and meet them at Milan. According to the existing tactics, the Italians decided to block the way for the enemy by strengthening in the fortress and fortified themselves in the Morando fortress. Naturally, by this maneuver the Italians hoped to hold off the French for a long time, they were sure that, as before, as now, the fortress of Morando would resist without difficulty for months, to say nothing of a resistance of a few weeks or a few days. However, Charles' artillery performed a real miracle - it did not take months and weeks, but even days to break the walls of the castle, Morando fell in three hours. Not only the power of the French artillery, but also the brutality of the French soldiers towards their opponents turned out to be shocking for the Italians. Morando followed with lightning speed the quick and unproblematic capture of several garrison castles in Tuscany. Along with the loss of several fortresses, the Italians practically lost their courage. As a result, the governor of Florence, Piero Medici, frightened and surprised by the speed of the French army, surrendered Florence without any resistance.

The Italians had never seen such a fast war, such fast artillery. Francesco Guichardini writes: "They approached the walls of the fortresses with such speed that the distance between them soon disappeared; They fired from the cannons at such a speed that they spent as many hours as it would take the Italians to storm the cities." What is surprising is that in a few days such an army occupied Rome very quickly and without problems. Naples was the next step, and while moving from Rome to Naples, the Italians still tried to resist, this desperate move on the part of the latter was the biggest and last attempt at resistance. At first glance, the Italians seemed to have something to hope for, since this time they used the fortress of Monte San Giovanni for resistance, which was known for its stability and which in the not-so-distant past had survived a 7-year siege. The problem, however, was that the Italians still didn't seem to understand that the past was over. Now was the time not for the castle, but for Charles's artillery. The French made it known to the Italians in just 8 hours, Monte San Giovanni, which had resisted the enemy for 7 years, was occupied by the French in 8 hours. First, the artillery destroyed the walls of the castle, and then the brutal French soldiers who broke into the castle did not even allow the Italians to escape. The results of the battle were shocking, the French lost 10 soldiers and the Italians more than 700. The shock of Monte San Giovanni proved too much for King Alfonso II of Naples, he gave up the fight and abdicated to Charles, who took only 6 months to fully conquer Italy. He practically razed Italy's strongest fortresses to the ground, along with a fortress-oriented defensive strategy, for a while, but he *changed the concept of superiority of defense over attack*.

The shock experienced by the Italians was similar to that of Sudanese soldiers later in 1898 fighting British machine guns with swords, or to the shock experienced by French soldiers in 1940 when the Maginot Line hopefuls failed to understand how German tanks had reared their heads, or even to the general shock that in 1945, Japan suffered from the atomic bomb.



We should revisit the account of contemporaries regarding the invasion of Italy by the French. In 1520, a narrative captures their impressions:

“Now wars were sudden and violent: entire kingdoms were conquered and captured in less time than it used to take to conquer a village. Sieges were successfully carried out not in months, but in days or hours. Battles were fierce and bloody”<sup>9</sup>

The shock caused by Charles's campaign directed the attention of all the great thinkers of Italy to the elimination of the problems experienced by the defeat. Among them was Da Vinci, who did not at all show interest in military issues and referred to war as "the most beastly madness", he was so involved in the invention of military technologies that he even created a number of such sketches, which, due to technical and technological limitations, humanity could not see until the 20th century. Among his many "outlandish" ideas at the time were sketches for models of submarines, missiles, armored vehicles, mortars, fireballs, poison darts, variations of portable firearms, machine guns, and chemical weapons. In addition, Leonardo was at the head of the process of creating new defensive fortresses for Cesare Borgia, and Michelangelo, engaged in the same work, but this time in a discussion with the Sangalo family, said: "I do not know much about painting and sculpture, but I have accumulated great experience in fortifications and I have already proved that I know much more about this matter than the whole family of Sangalos." As for Machiavelli, it can be freely said that thinking about military problems led him to political ideas, and he became interested in military problems under the conditions of defeated, "in ruins" Italy.

Within a few months of entering Naples, Charles was defeated by the Italian coalition forces, essentially because he could not resist the new Spanish tactics used by the Italians, and had to return to France. However, his invasion laid the foundation for the greatest historical processes. It was then that the foundation of the 60-year conflict between France, Spain and the Holy Roman Empire was laid for domination over Italy. It is due to the lightning storm of Charles and the Italian wars that the Italians, descendants of the Roman Empire and the Roman legions, finally lost their reputation as brave warriors. Although Charles of 1494-95 was finally personally defeated by the Italians, the defeat experienced by the Italians proved to be much more lasting. Despite the revival of the Renaissance, this nation was unable to form a state for nearly the next 500 years until the 20th century. This was the immediate reason why the military backwardness revealed at the dawn of the gunpowder era could not be overcome either in the immediate or subsequent eras. The Italians attempted an immediate response to the French artillery, and this response was the work of Italian engineers, new forts called the Trace Italienne. These thick-walled forts had bastions around them, on which artillery was permanently stationed. The bastions worked together to bring the battlefield into full view, and in some cases they could even control several battlefields. The fortresses were surrounded by earthworks that made it very difficult for the enemy's artillery to directly damage the walls. However, the creation of such a permanent bastion system proved to be too late, even though Italian castles gained great popularity in other parts of Europe. This invention brought Italy only the status of a kind of laboratory, where French artillery, and then a new system of fortification of fortresses were tested.

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<sup>9</sup> Phillips, Mark. Francesco Guicciaradini: The Historian's Craft. Page 30

Charles's Blitzkrieg was just the beginning of the gunpowder revolution. More surprising changes were waiting for the Europe of the gunpowder era, in the following years, first the Dutchman Moritz Nassauel, and later the Swedish Gustav Adolf, the army of the French Charles VIII would seem like an untrained and undisciplined army, and they would not be wrong. After all, these two stars of the era ensured the real progress of the gunpowder revolution thanks to constant tactical training and the discipline it required, and not directly at the expense of improving gunpowder or even artillery. As Max Weber says, "Yet, just as in the middle ages gun powder can scarcely be said to have brought the transition from undisciplined to disciplined fighting"<sup>10</sup> It was discipline, not gunpowder, that initiated the transformation. Gunpowder itself and any other war method related to it became the bearer of meaning only with the presence of discipline.

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<sup>10</sup> Max Weber. From Max Weber: Essays in Sociology, edited by H.H. Gerth and C. Wright Mills (Routledge, 2009), 255.