CAPSTONE PAPER

ATTACK AND DEFENSE AT THE 1704 SIEGE OF LANDAU: AN ANALYSIS

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Preface

I wish to acknowledge the assistance of my wife Manuela Clare both in translating German sources, and for her support throughout the process of my efforts towards obtaining the degree of Master of Arts in Military History. Carmen Martin, Wanda Bruvold, and Sandra Chulka of the College of New Caledonia library each assisted me in obtaining research material. In particular, CNC Librarian Jennifer Sauvé went above and beyond the call of duty in locating some rather obscure sources for me. In addition, I would thank Terence Freese for his helpful peer review of my initial draft, and the College of New Caledonia's faculty professional development committee for supporting some of my expenses towards the degree. Finally, I would also acknowledge the welcome distractions of my daughters Elise and Danielle in their efforts at preventing me from taking myself too seriously.

I. Introduction

At 77 days from its investment on September 9 to its capitulation on November 25, the 1704 Siege of Landau was one of the longest in the War of the Spanish Succession. A careful assessment of the considerations affecting the siege of Landau in 1704 reveals both the reasons for Landau's defensive strength, and even more significantly the contribution of that long siege upon the attacking side's impetus and initiative in the subsequent campaign season of the War of the Spanish Succession. A combination of natural considerations and human influences that generally favoured the defender over the attacker lengthened the siege.[1] First, the commander of

[1] All four Landau sieges were longer than most other sieges during the War of the Spanish succession. From investment to capitulation, sieges longer than Landau's of 1704 included Landau in 1702 at 84 days; Gibraltar in 1704 at 249 days; Verrua in 1704 at 152 days; Turin in 1706 at 96 days; Lille in 1708 at 117 days; and Alicante in 1708 at 139 days. The shortest Landau siege was that of 1703 at 35 days. There are a variety of factors that would have contributed to each siege, but the 1704 one in particular benefitted from being in good repair and well-stocked as well as having a strong and well-motivated garrison. In that respect, it was similar to the situation of the French Garrison in 1702 under the Comte de Mélac, though Laubanie had improved the outworks by the fall of 1704. A

the fortress, Lieutenant General Yrieix Masgonthier de Laubanie, was well-acquainted with siege-craft. He knew well the terrain in which his opponent would operate as well as the strong defensive features of his fortress. Second, Laubanie's siege journal describes an active and vigorous defense which made the best use of the tactical situation, terrain, manpower, and that took advantage of poor weather, inundated ground, aggressive sorties, and mining.[2] Third, the wet weather in the fall of 1704 contributed to the inundated ground which made trench construction and assaults difficult, miserable affairs. The wet weather also reduced the effectiveness of black powder flintlock firearms and would have contributed to casualties from disease. A fourth important reason was that the Imperial commander of the siege, Prince Louis, the Margrave of Baden did not begin the siege with a full siege train, and his efforts in conducting the siege were less than vigorous. There were neither secret weapons, nor war winning tactics that were either dramatic or decisive. Instead, the siege was a drawn-out affair with each side playing out their tactical options to deal with the problems posed by their respective opponents.

A significant strategic result of General Laubanie's vigorous defense of Landau was that it limited the ability of Marlborough to exploit the victory at Blenheim, which in turn allowed the French to recover from their loss in that battle. Even though Marlborough still achieved all of his objectives of the campaign, including taking the fortresses of the Moselle valley to use for winter

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most helpful table of siege information can be found in Appendix C to Jamel Ostwald, *Vauban under Siege; Engineering Efficiency and Martial Vigor in the War of the Spanish Succession. History of Warfare*, Volume 41, Kelly DeVries, General Editor, (Leiden and Boston: Brill, 2007), 340-347.

[2] Lt. Col. Antoine Marie Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau, Luxembourg, et Divers Sujets. Extraits des papiers de ingenieurs Hue de Caligny et Precedes d'une notice Historiques sur les Enginieurs, s de Louis XIV et de Louis XV*, (Paris: J. Correard, Editeur d'Ouverages Militaires, 1841), 81-187. Augoyat's work includes an overview of the strategic importance of Landau, Vauban's plan and reasons for improving the fortification, the operational circumstances, and the battle diary of the besieged garrison of Landau with specific comments as to the progress of the siege and defensive actions, as well as comments regarding casualties and the weather.

quarters, he was unable to exploit those gains as he had intended in the 1705 campaign. He did not receive the necessary co-operation from his Imperial ally Prince Louis, and thus the Allied focus shifted to other theatres of the war. The vigorous defensive action at Landau provides a clear example of the persistence and importance of operational defense in early eighteenth-century warfare, a situation which in the context of the Blenheim defeat directly contributed to the French assessment of the value of its highly evolved positional defensive operations as compared to costly, and apparently risky, field actions.

The 1704 Siege of Landau took place in the context of a remarkable campaign by the combined English, Dutch, and Imperial Armies with four objectives. First, they wanted to remove Bavaria as an ally of France. Second, they hoped to prevent the Bavarian and French armies from invading Austria along the Danube. Third, they wanted to secure the river routes along the Moselle and Rhine to serve as jumping off points for a possible invasion of France. Fourth, the allies intended to deny access of the French army to those same routes.[3] The progress of Marlborough's army on campaign had initially persuaded the French that the Allied goals were merely to seek modest gains on the Moselle, when in fact the objectives were considerably more ambitious. The united forces of the English Duke of Marlborough and Prince Eugen of Savoy were decisive in defeating the combined armies of Maréchal Tallard and the Elector of Bavaria Maximillian Emmanuel at the Battle of Blenheim August 13, 1704.[4] During the Battle of Blenheim, the Margrave Prince Louis of Baden and his army had stood guard on the Rhine so

[3] Thomas Lediard, *The Life of John, Duke of Marlborough, Prince of the Roman Empire*, Vol. 1, (London: J. Wilcox, 1736), 296-298, writes of Marlborough's designs on the Moselle, and of the removal of Bavaria as an enemy combatant. Winston Churchill, *Marlborough: His Life and Times*, Book One, (Chicago: University of Chicago Press, 2002), 888, refers to Marlborough's goals of removing the risk to Austria by securing the Danube, pacifying Bavaria, and of obtaining winter quarters on the Moselle River to be used for an advance on Paris in the spring. John Lynn, *The Wars of Louis XIV 1667-1714*, (Harlow, Essex: Pearson Education Ltd., 1999), 286-287, also outlines these objectives.

[4] The Europeans refer to the Battle of Blenheim as the Battle of Höchstädt.

as to secure the Allies' base in case of a French victory. In this role, the Margrave's forces besieged Ingolstadt as a diversion from the intentions of Marlborough and Eugen, although he actually believed that their actions were a diversion from his own siege efforts. After Blenheim, Prince Louis joined up with the combined Allied army to cross the Rhine and take charge of the siege of Landau. The siege gave the Margrave a crucial role in capturing this important objective of the campaign. Landau had been a dangerous threat, it was a fortress that he wanted to capture, and having command of the siege was a good opportunity to demonstrate a vigorous approach in support of his allies.

Some 14,000 Bavarian and French prisoners, including Tallard himself, were captured following Blenheim. Tallard's Army of Alsace was 60,000 strong at Blenheim and had taken some 20,000 casualties in the battle and lost several thousand to desertion. Maréchal Marsin commanded the remnants of approximately 16,000 as they fled south via Ulm through Villingen and then to Strasbourg to seek refuge from the Allied forces.[5] Maréchal Villeroy, who commanded the Army of Flanders and had shadowed Marlborough to Blenheim, led his army to Landau where he chose not to seek battle on the Queich River, but rather to reinforce the fortress and stock it well with food and munitions so as to cover the retreat of those remnants of the French Army of Alsace under Marsin. Villeroy then pulled south to the Moder River and dug in. The Governor of Landau, Lieutenant General Laubanie and his reinforced garrison of around 7,000 troops would be the only French force between over ten times their number of Allied forces and their objectives on the Upper Rhine.[6] The long delay at Landau was significant for

[5] John A. Lynn, *The Wars of Louis XIV 1667-1714*, 290-293.

[6] According to General Saint Hilaire in Armand de Mormes, Sieur de Saint-Hilaire, *Mémoires de Saint-Hilaire*, Volume 4, (Paris: Renouard, H. Laurens successeur, 1766), 99-100, also cited in Michel Gondinet, *Un Héros Oublié; Le Lieutenant-général Yrieix Masgontier de Laubanie 1641-1706 et le Grand Siège de Landau 1704*, (Paris-Limoges-Nancy: Charles-Lavauzelle & Cie, 1928), 46, there were six battalions of infantry plus engineering and artillery officers as well as others who might be of use who were left to augment Landau's defenses: "Sur les

several reasons. First, it protected the retreating French army from an aggressive pursuit. Second, the siege and covering operation tied up large numbers of Allied troops, which in turn slowed down Marlborough's designs on the Moselle. Third, the need to protect the siege kept Prince Eugen from returning to Austria to fight Hungarian rebels. Fourth, the spirited defense demonstrated that French spirit remained strong after Blenheim. Fifth, it demonstrated that the French fortress system was a highly effective form of defense and served as an early signal that campaigning against the French fortresses would take time and consume a lot of resources. After the French defeats in the major battles of Blenheim and Ramilles, it became attractive and safer for armies to make use of the defensive power of the fortresses so as to avoid the risk of engaging major field forces in battle.[7]

II. The Fortress

Landau is located on the Queich River in the Rhine valley, west of the Allied fortress and depot at Philippsburg, and north of Hagenau. It is east of the large Palatinate forest and the Hunsruck Mountains and thus the fortress was well-placed strategically to block access either north towards Mainz, or south into Alsace and Lorraine. Landau was also useful to interdict

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avis qu'on eut les Impériaux passaient le Rhin avec des armées victorieues et des forces supérieures, on tint en conseil de guerre ou Laubanie, gouverneur de Landau, fut mandé. On y conclut qu'il valait beaucoup mieux abandonner Landau à sa propre defense que de risquer l'armee du roi avec tant d'evidence d'inegalité. On envoya donc, sur ce résultat, six bataillons d' augmentation dans cette place, des officiers d'artillerie, des cannoniers, des ingénieurs et les autres secours dont on pouvait avoir besoin..." John Lynn, *Giant of the Grand Siècle: The French Army, 1610-1715*, (Cambridge, UK: Cambridge University Press, 1997), 467, cites battalion strength in the War of the Spanish Succession as being approximately as many as 585 or as few as 421 men, not including officers. Six full strength battalions would mean an additional 2,526 to 3,600 men; however, it is likely that these units were not at full strength which would lend credence to the variance in Landau's strength of from 5,000 to 7,000 troops. The extra 2,000 or so troops may not have been counted by some as part of the 5,000 man garrison, but rather as supplemental forces. See also the information at notes 71 and 72 on casualties and strength. Destroying the Army of Alsace does not seem to have figured as prominently in the Allied objectives after Blenheim as much as the strategic and operational goals.

[7] George Rothrock makes this astute observation in the preface to his translation of Sebastien LePrestre de Vauban, *A Manual of Siegecraft and Fortification*, George A. Rothrock, Trans., (Ann Arbor: University of Michigan Press, 1968; original published Leiden, 1740), viii-x.

communications and travel on the Rhine River to the east and north, and could be used for offensive operations as a supply depot and secure base.[8] The area around Landau in 1704 was a rolling, inundated plain with low hills and occasional small farming villages in an area known for its abundant agriculture and quality wine.[9]

Landau's design, history, and strategic location shaped the outcome of the siege of 1704. Landau was a well-positioned chokepoint at the junction of what resembled a long wishbone in which Alsace and Lorraine form the two branches, each representing a natural route through the valleys on either side of the Vosges Mountains. Following the broad valley by land from Landau southwest to Metz requires a secure flank on the Moselle River into the drainage of the Saar and Moselle Rivers. The eastern flank through Alsace's narrow low ground is both protected and threatened by the Rhine. Anyone who held Landau would control the upper Rhine and thus access into and out of Germany.[10] The Allies had to take Landau in order to push the French back into France and thus gain control of the upper Rhine valley.

In the centuries before the War of the Spanish Succession, the gradual introduction of gunpowder had forced changes in fortress design away from high slab-walled castles into the sloped glacis and bastioned form of the trace italienne.[11] As the quality of cannon and propellant

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[8] Christopher Duffy, *The Fortress in the Age of Vauban and Frederick the Great 1660 - 1789, Siege Warfare Volume II*, (London, Boston, Melbourne & Henley: Routledge & Kegan Paul, 1985), 87.

[9] Augoyat, *Mémoires Inédits du Maréchal De Vauban,* 59. Vauban provides a list of the many fruits, vegetables and grains grown around Landau, and an equally impressive description of the waterways and the fortress as well as the surrounding terrain. Landau was obviously centered in a highly productive agricultural area, an important consideration in the ability of the region to both supply the fortress and support a besieging army.

[10] Ibid., 62-65. Vauban describes Landau's strategic importance as first, a key side of the box that comprises Alsace, second, as located in the best land for producing the food and ammunition needed to support military forces, and third, as being upon the best route to move an army.

[11] Christopher Duffy, *Siege Warfare*: *The Fortress in the Early Modern World*, (London and New York: Routledge and Kegan Paul, 1979), 1-7, 20-21.

powder improved, so did the effect of these weapons on slab-sided walls. The geometrically designed star-shaped fortress as built at Landau was crafted to remove the penetrating advantage of the attacker's guns by lowering the wall. This change sheltered the ramparts behind a low bank, itself separated from the embankment by a broad, deep ditch. The eventual response of besiegers when faced by this new development was to engage in vigorous sapping and mining methods which could be stymied by the ditch, especially if it could be flooded. French besiegers, and sometimes others, also employed ricochet techniques with direct-fire cannon, and plunging fire from howitzers and mortars which effectively removed the advantage of the walls.[12]

The example of this type of fortress at Landau dated from the late seventeenth century. Sebastien LePrestre de Vauban presented his design for the fortress of Landau to King Louis XIV on October 9, 1687. The design included the new towered bastions, detached bastions, ravelins, lunettes, and significant strengthening of the southern defenses since the south was the expected direction of attack as it was drier than any other approach. The other aspects of the trace could be easily inundated through the carefully engineered locks that controlled the flow of the River Queich through the fortress. Even on the south side the ditch between the walls could be flooded with several feet of water if needed to repel an assault. Landau was built with two entrances, the German gate in the north and the French gate in the south, obviously named to represent the likely destination of anyone departing by those passageways. The gates were designed to portray the power and glory of France with ornate stone works that represented the Sun King. Smaller reinforced doors provided restricted access for the defenders to move

[12] John A. Lynn, "The Trace Italienne and the Growth of Armies: The French Case." *The Journal of Military History*, Vol. 55, No. 3 (Jul., 1991): 304. Lynn's article is reproduced in Rogers, Clifford J., ed. *The Military Revolution Debate. Readings on the Military Transformation of Early Modern Europe.* (Boulder, Colorado: Westview Press, 1995), 169-199.

between the curtain and the towered bastions. By 1702, the fortress was also equipped with a crown work on the high ground to the northwest, which was intended to deny use of that ground to enemy cannon. Crown and other detached works were important for increasing the distance

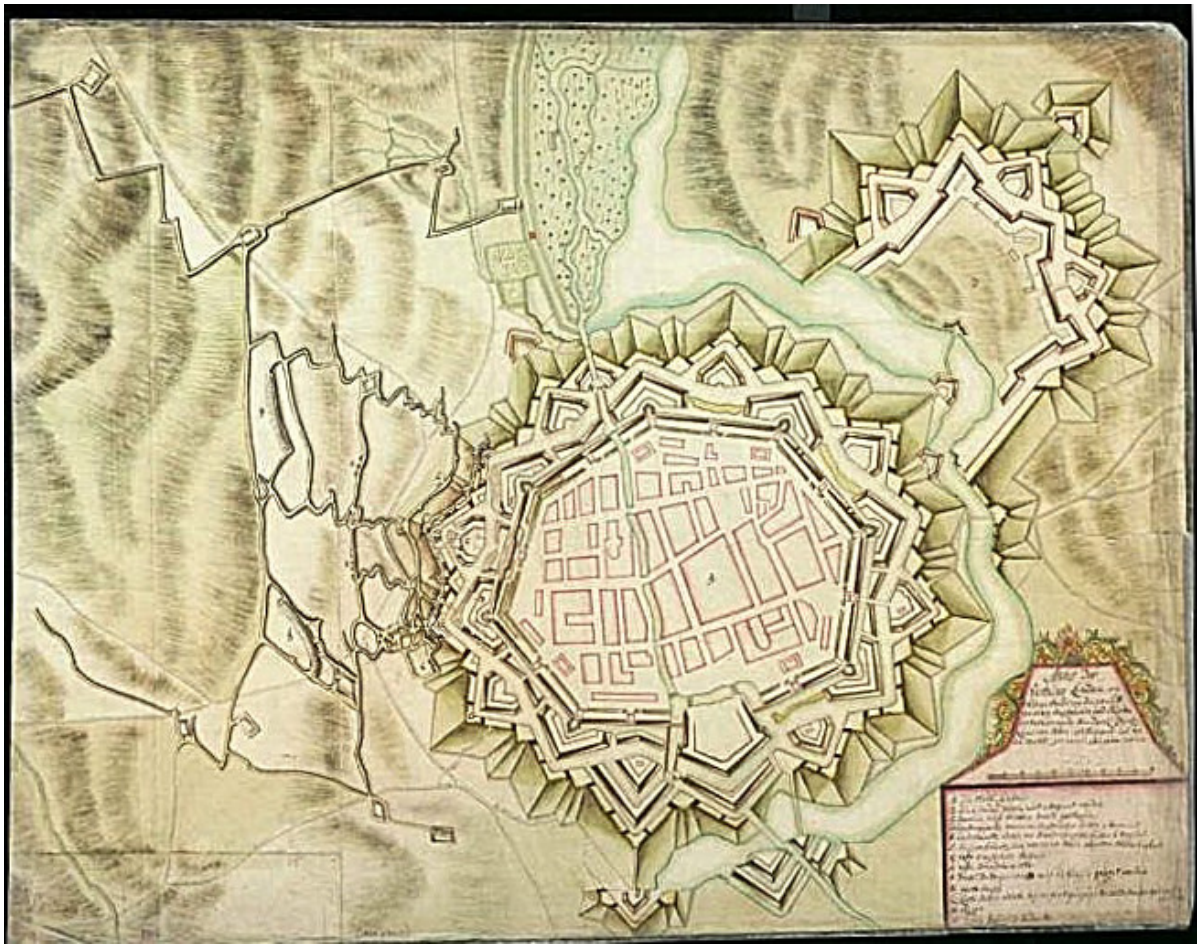

Figure 1. *Landau Fortress Under Siege in 1704*. Scale is approximately 1:15,000. The top of the map is oriented to the west. The trenchworks shown are from the south of the fortress on the driest approach.[13]

between a besieger's gun batteries and the main fortress with the aim of making the siege longer and more difficult. The new crown work was named after the then-governor Mélac, and its loss

[13] *Abris der Vestung Landau wie selbige anno 1704 den 24 sept. von denen kaijserlicken und allijrten unter commando Ikro durchl. printz Louis von Baden ist belagert und den 26 november per accord übergeben worden*. http://digmap1.ist.utl.pt:8080/records/Kbr/html/kbr_1_1060401.html. [1704?] Access obtained 7 March 2010. See Appendices A-G for enlarged images of enhanced clarity and the index. Additional high resolution images may be viewed online at the cited digmap website.

in the 1703 siege, which had included pressure on both the north and the south, was a major factor in the subsequent capitulation of the fortress.

The poorly drained land around the fortress made infantry assaults and the digging of trenches difficult. The inundated ground, the River Queich, and the carefully designed overlapping arcs of fire all contributed to make Landau a difficult fortress to take by storm. Figure 1 shows the formidable design of the fortress, the position of the besieger's saps and trenches, and the nature of the ground. One can see the rolling hills and marshy ground as well as the trace, its ramparts and the Mélac crown work to the northwest. The tactical terrain problem for the defender included the low hills which presented a useful opportunity for a savvy attacker to put cannon within 600 yards range of the fortress as was done in the battery positions in the trench works to the south. High ground was important for improved range and better line of sight to the targets such as bastions, and the defending infantry and artillery. Effective fire would keep the defenders from engaging the troops in the trenches or from being tempted to sortie. Once the covered way was taken a breach could be made by making a mine or by bringing up cannon to hammer away at the critical point on the scarp.[14]

Landau represented the state-of the art of the evolution of the trace italienne. Vauban had designed it to make maximum effective use of its terrain and incorporated the improved towered bastion, first built by him at Besançon.[15] Landau was the second of the three fortresses to benefit

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[14] Vauban, *A Manual of Siegecraft and Fortification*, 59-61, 66, 70,71, notes that the longest effective cannon range is less than 600 yards and that they were normally placed at closer than 400 yards. Mortars are sited at under 280 yards "even up to the glacis of the fortress, since stones do not carry far." He also advocates placing batteries as close as 200 yards to batter and enfilade the counterscarp. Lynn, *The Wars of Louis XIV*, 75-77, cites Vauban who suggests placing cannon back as far as 600 yards at the first parallel, and that fortress cannon may have been effective as far out as 1.5 miles.

[15] See Lynn, *Giant of the Grand Siècle*, 561-563, for a helpful discussion of the features of Vauban's fortress designs.

from this innovation. The major fortification change brought about by the effective employment of improved artillery was the development of the bastion.[16] The tower bastion was a further improvement because it not only provided cannon fire to cover the ditch, but also elevated cannon to permit engaging the enemy at a longer ranges. A key feature of a well-designed artillery or star fort was that it covered all the ground around the fort by firing on the attackers usually from bastions in defilade into the enfiladed flank of the attackers. [17] Landau, as a trace italienne, was intended to have all areas around the fortress swept by effective small arms and cannon fire, which was itself protected by low walls, parapets, embrasures and bastions. The increased surface area of the bastioned fortress also provides for more firing positions and thus allows more defenders to engage attackers. Lynn argues that these developments, especially the bastions, were largely intended only to affect close-range assault by eliminating protected spaces, which was not the main threat to such a fort. [18] He correctly points out that the main threat to the fortress was the enemy artillery, but less convincingly that countering it could have been just as effectively accomplished from the curtain walls of a less-expensive square-shaped fort without

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[16] The evolution and origins of the bastion are well presented in Christopher Duffy, *Siege Warfare: The Fortress in the Early Modern World,* 25-40. Duffy indicates that bastions have their origins in Italian designs from the fifteenth century, if not before.

[17] Clifford J. Rogers, ed. *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe,* (Boulder, Colorado: Westview Press, 1995), 172.

[18] Lynn, "The French Case," 302-304, and Rogers, *The Military Revolution Debate*, 172-173. One can argue that Lynn underestimates the role of the irregular shape in providing protection from flanking fire for adjacent bastions and ravelins. In this regard it is worth consulting Janis Langins, *Conserving the Enlightenment, French Military Engineering from Vauban to the Revolution*, (Cambridge, MA: The MIT Press, 2004), 29, 245-246 and 256-257. Langins emphasizes the importance of the trace in providing protection from defilading fire. See also John A. Lynn, *Giant of the Grand Siècle, the French Army 1610-1715*, (Cambridge, UK: Cambridge University Press, 1997), 554-556. Lynn does not acknowledge the value of this feature of the bastioned star fort for protection from shots fired at distance, and in fact minimizes the shape as irrelevant, except for close-in fighting to protect the ditch. See also Duffy, *The Fortress in the Age of Vauban*, 30, regarding the use of enfilade and cross fire techniques in the Siege of Ath. Consider the comments and diagram of David Chandler, *The Art of Warfare in the Age of Marlborough*, (New York: Sarpedon Publishers, 1995), 240, 275, 277. Chandler points out the role and significance of the tower bastion design. This innovation was obviously designed to defend both the ditch from its lower guns and the glacis from the elevated gun platform.

bastions.[19] For that reason, Lynn argues that the expensive geometric shape of the fort was wasted because artillery targets would be at a distance rather than in the dead zones created by the walls of a square fort.[20] However, Lynn may not have considered that the shape of the fort could also contribute to providing protection for the guns. The irregular front makes individual bastions much more difficult oblique targets when compared to those on a straight-on wall even if both shapes are protected by the earthen embankments. In addition, the irregular bastioned shape would permit firing in enfilade against infantry advancing in the open, even at distance. Enfilade shots would inflict more casualties than straight on shots. The enfilade fire could send a cannon ball down many ranks from the flank whereas a straight on shot could only affect a file. This feature of the shape is likely one reason that Vauban developed ricochet techniques for direct fire cannon using lighter than usual charges of powder so as to clear defenders from the walls, rather than the heavy loads used to make a breach. A straight wall would be a dangerous place to be when receiving enfilade fire. It is precisely to avoid the problem of fire down a long line, either straight on or in enfilade that the trenches used to assault such a fortress were built in a zigzag fashion to prevent effective fire along the length of a trench. The bastion provides a similar purpose for a fortress. The tower design allowed defenders both to fire close in on the ditch and to fire enfilade on attackers, all the while preventing enemy enfilade fire along a straight wall. Since a determined siege was usually victorious, Lynn makes the compelling point that the real advantage of artillery forts was that an attacker needed vast resources to besiege

[19] Lynn, "The French Case," 304. See also Rogers, *The Military Revolution Debate*, 172, and Lynn, *Giant of the Grand Siècle*, 556.

[20] Ibid.

one.[21] The Allies certainly mustered great resources and spent much time to invest and capture Landau, with both sides regarding time as being the critical factor.

By the War of the Spanish Succession, the efficient siege techniques of Sebastien LePrestre de Vauban were well known to engineers of all sides in the conflict. The Age of Enlightenment was a time during which many thinkers believed reason provided answers for all problems, including military ones. Many of the practitioners of siege warfare held generally to the principle that a well-supplied besieging army that followed the correct procedure without interference from a relief force should eventually succeed.[22] However, despite the belief in a scientific approach to siege warfare, there were many variables that could interfere with prescribed siege timetables. For example, poor logistical preparations on the part of either the besieger or defender could force an early end to the siege. Shortages of food, fodder, munitions,

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[21] Lynn, "The French Case," 304. See also Rogers, *The Military Revolution Debate*, 172, and Lynn, *Giant of the Grand Siècle*, 573-574.

[22] Sebastien LePrestre de Vauban, *The New Method of Fortification, as Practiced by M. de Vauban, Engineer General of France with an Explication of all Terms appertaining to that Art,* Second Edition, (London: Printed for Abel Swall, 1693). See also Sebastien LePrestre de Vauban, *A Manual of Siegecraft and Fortification*, 65, 175. Vauban argues there that "I guarantee an infallible success without a day's extra delay if you will defer to my opinion and follow faithfully the rules I lay down." He further states that his aim is "to make siegecraft more certain and less bloody."Also of interest is Baron Menno Van Coehoorn, *The New Method of Fortification. Translated from the original Dutch, of the late famous engineer, Minno Baron of Koehoorn, general of the Artillery and lieutenant general of the Infantry of the states of Holland; governour of Flanders and of the Fortresses on the Scheld, & c. by Tho. Savery, gent.* (London: Printed for Daniel Midwinter at the Rose and Crown in St. Paul's-Church-Yard, 1705). A significant work on the topic of bringing order and reason to the chaos of war can be found in Henry Guerlac, "Vauban: The Impact of Science on War," in *Makers of Modern Strategy, Military Thought from Machiavelli to Hitler*, Edited by Edward Earle Meade, (New York: Atheneum, 1967), 26-48. Designing a contemporary fortress took much skill in mathematics, engineering, and architecture. The contemporary approach to taking a trace italienne required an understanding of fortress design, as well as a strong grounding in artillery and ballistics, and an efficient, methodical approach that makes use of applied science and applied mathematics. Guerlac's argument that Vauban sought efficiency in siege warfare to avoid bloodshed is a major theme in Jamel Ostwald, "Chapter Three Efficiency and the Perfect Siege," *Vauban under Siege,* 46-90. Also consider the comments in Janis Langins, *Conserving the Enlightenment; French Military Engineering from Vauban to the Revolution*, (Cambridge, MA: The MIT Press, 2004), 338-340, regarding the use of Vauban's procedures without fully understanding his theory, and the inherent contradiction of military science in being restricted to specialized practitioners and not generally available for public scrutiny and discourse. As argued by Christopher Duffy, *Fire & Stone: The Science of Fortress Warfare 1660 – 1860,* (London: Castle Books, 2006, originally published 1975), 103-104, Vauban's estimates of times for sieges were primarily theoretical for the purposes of planning logistical requirements. See also the comments of Michel Gondinet, *Un Héros Oublié*, 92.

supplies such as picks and shovels, and even wood to make fascines and cooking fires could make the difference between victory and defeat. Changes in weather or season could also force a siege to be lifted, as could the arrival of a relief force, or other threat to the attackers that forced them to redeploy their forces and lift the siege. Fortresses could also be made to capitulate sooner than expected through use of surprise, by trickery, including false messages, or through treachery. A change in the political or strategic situation could also make a resolute siege or defense impossible. Even the threat of bombardment could affect the morale of the defenders of a fortress.[23] Fortresses were strongest when their lines of communication were kept open, and when they were supported by mobile forces such as a field army.

In the fall of 1704, Landau held a well-led, strong garrison that was well supplied and sheltered in one of Vauban's most effectively designed fortresses. Despite its isolation and lack of support, Landau was in a strong position to withstand yet another lengthy siege. This time, however, the fate of a defeated French army depended upon denying the Allies the initiative and freedom of movement that they had enjoyed thus far in the campaign to the Danube. Although Marlborough maintained designs on the Moselle River and at Saarlouis, the Allies could not merely ignore and bypass Landau as it would be poised to shelter troops that could sever the army's internal lines of communication. It could likewise provide a firm base for renewed French activity in the area. Landau had to be taken yet again, but it would not fall easily. After Maréchal Villeroy left his rallying point on the Queich to cover Marsin's surviving soldiers from Tallard's defeated army, Landau soon became isolated from any source of immediate assistance.

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[23] Lediard, *Life of John, Duke of Marlborough*, Vol. 1, (1736), 295. He mentions that the French were "too much dispirited with their losses." See also Chamillart's letter to Marsin, and Marlborough's comments to Godolphin as cited in Churchill, *Marlborough*, Book One, 894. As well, consider the effective so-called Quaker gun mentioned in Jac Weller, "Irregular But Effective: Partizan Weapons Tactics in the American Revolution, Southern Theatre," *Military Affairs*, Vol. 21, No 3. (Autumn, 1957), 128, made from a log used by Colonel William Washington to bluff British troops in surrendering a strong position during the War for American Independence as a later example of trickery combined with threat of bombardment.

The investment efforts of the Allies to cover Landau ensured that no relief army could approach without risking a pitched battle with the armies of Marlborough and Eugen - something that after Blenheim, the French were both unwilling and unable to do in Central Europe during the fall of 1704.

The Allies tended to favour the methods of the famed Dutch military engineer Menno Van Coehoorn, who had the misfortune to die of a stroke in March of 1704 while en route to confer with Marlborough regarding the upcoming campaign to the Danube. One wonders if Coehoorn would have supported Marlborough's decision to leave the siege train back in Holland, a choice made to give his army the mobility that helped it to prevent the French and Bavarians from attacking Austria along the Danube. The Allies would feel the absence of that siege train in the early days of the Landau siege and it was fortunate for the Allies that General Thüngen captured so many useful cannon and munitions during the brief siege of Ulm, which fell on September 10, 1704.[24] Coehoorn's method has been loosely described as supporting massive firepower and the aggressive storming of the covered way. He also encouraged a timely and vigorous approach and emphasized the importance of providing covering fire for the besiegers.[25]

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[24] Winston Churchill, *Marlborough: His Life and Times*, Book One, 826-827, 878. Marshall Tallard indicates his dismay at finding Ulm poorly stocked with only 6,000 sacks of flour on July 9, an amount far less than needed to feed a besieged garrison, let alone the large numbers of wounded left there, as mentioned above. The lack of provisions at Ulm contributed to its rapid capitulation to Allied General Thüngen.

[25] A helpful comparison of the methods of Coehoorn and Vauban can be found in Jamel Ostwald, *Vauban under Siege,* 279-290. A better understanding of the many similarities and differences between Coehoorn and Vauban may be gleaned through considering their respective works on fortifications. For Coehoorn's method see Baron Menno Van Coehoorn, *The New Method of Fortification. Translated from the original Dutch, of the late famous engineer, Minno Baron of Koehoorn, general of the Artillery and lieutenant general of the Infantry of the states of Holland; Governour of Flanders and of the Fortresses on the Scheld, & c. by Tho. Savery, gent.* (London : Printed for Daniel Midwinter at the Rose and Crown in St. Paul's-Church-Yard, 1705). For Vauban, there are several descriptive works, two of which include Sebastien Le Prestre de Vauban, *A Manual of Siegecraft and Fortification*. George A. Rothrock, Trans. (Ann Arbor: University of Michigan Press, 1968; original published Leiden, 1740) , and Sebastien LePrestre de Vauban, *The New Method of Fortification, as Practiced by M. de Vauban, Engineer General of France with an Explication of all Terms appertaining to that Art*, Second Edition, (London: Printed for Abel Swall, 1693). Coehoorn's work is quite specific and sometimes acknowledges use of specific French techniques, but he is also at pains to differentiate his methods from those of the French. Vauban's later writings appear to be

Coehoorn valued reducing the towered bastions which he regarded as difficult if not impossible to take by storm alone.[26] The towered bastions were an important design feature of Landau that Vauban had first used at Besançon.[27] This feature is often called Vauban's second system and as such represents a natural evolution of the trace italienne.

Vauban preferred to make use of ricochet firing techniques along the flank aspect of the walls to clear the covered way of defenders. Vauban's method included careful preparation and extensive use of trench works to protect the infantry in the advance towards the covered way. The Vauban attack was designed to protect the besiegers from casualties, rather than to end the siege quickly. His main contribution to the already well-established use of zigzag trenches was to include three rows of parallel trenches which could be used to cover masses of troops close to the fortress so that they could move into the zigzag saps quickly upon an assault. Vauban was concerned with protecting the attackers from unnecessary casualties even if it cost a little more time. One should note, however, that the shortest Landau siege was the 1703 one by the French, so Vauban's efficient methods did not necessarily mean a long siege. Conversely, Coehoorn's method fit well with the Allied desires for a vigorous prosecution of sieges, though a careful reading of Coehoorn indicates his awareness of the strength of flanking fire when used by defenders.[28] A disadvantage of the Coehoorn method is that it requires a substantial siege train

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increasingly proscriptive and even rigid, much more than his more creative and flexible effort as presented in Rothrock's translation of his earlier writing. Duffy, *The Fortress in the Age of Vauban*, 63-97, also provides a useful comparison of the two engineers and their methods.

[26] Coehoorn, *The New Method of Fortification*, 43-48.

[27] Lynn, *Giant of the Grand Siècle,* 562. Vauban first used the new tower bastions in fortresses at Besançon, Landau, and Belfort in what is commonly referred to as his second system of fortification design. Towered bastions were thus an uncommon evolution of the star fortress. They could also be found in his third system design such as that of Neuf-Breisach.

[28] Coehoorn, *The New Method of Fortification*, 29-35, 42-43. His method of enfilade seems mainly directed toward supporting the assault, rather than to the use of cannon fire by the besieger to provide cover. For Coehoorn, cannon are used in mass for making the breaches in the wall through which to send the massed infantry and for destroying

with supporting elements in order to achieve rapid breaches of the wall through carefully directed massed firepower. The other risk is that an attack following a breach could still lead to heavy casualties amongst the besiegers if the defender has not been sufficiently reduced or suppressed. On the other hand, a vigorous assault may well carry the day, so both methods could work as part of a well-executed plan of suppression and attack.

Lacking in the sources of the 1704 siege of Landau is any mention of Vauban's technique of ricochet fire using reduced powder so as to inflict maximum damage on the garrison. The description of massive bombardments such as the one which injured Laubanie seems to be more in line with a Coehoorn style of siege, though the besieger's use of parallel trenches was certainly a technique that Vauban promoted. One might question, though, if the Landau parallels and trench works were as efficient as they could have been.[29] The conduct of the siege at Landau thus displays a mix of tactics of the two engineers with Coehoorn's techniques as the dominant influence on the Allied siege methods. It is unclear if the apparent mixing of methods was intentional, but it is more likely that the Margrave lacked a strong engineer to provide technical support which led to trying a variety of techniques. In short, the Allied siege appeared to rely on the Margrave's past experience with Landau in 1702, rather than on coherent advice from a competent engineering corps. The Allies were short of both engineers and artillery so good technical support and advice was likely unavailable. As well the Margrave's earlier

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targets. Vauban is not mentioned in Coehoorn's book - he prefers to refer to the "French style." According to Ostwald, *Vauban Under Siege*, 254-259, both sides used Vauban's three parallels method, but the most significant factor in successful siegecraft was that there was plenty of artillery, a factor even more important than how it was used. Figure 1 on page 9 shows crude parallels with several non-continuous ones, probably used to emplace batteries. Ostwald cites Lt. Col du Génie A. Allent, *Histoire du Corps Impérial du Génie. Premiere Partie, Depuis l'origins de la fortification modern jusqu'a la fin du regne de Louis XIV*, Paris: Chez Magimel, Libraire pour l'Art militaire, 1805, 407, 416, and 589, in pointing out that less talent was needed to conduct a Coehoorn-style of attack as compared to the "skillful " Vauban methods.

[29] Of special interest is Laubanie's criticism of the poorly placed first parallel recorded in Augoyat, *Mémoires Inédits du Maréchal De Vauban*, 88-89.

experience of Landau had involved a long siege which was not in sync with the more aggressive ambitions of his Allied commanders. As Marlborough found in his dealings with the Dutch, attacking was not a popular choice unless victory could be practically guaranteed, certainly before he had proven himself as a great commander, but also even after the Blenheim campaign.[30] In all respects in the war with France it should be remembered that the English were only at risk of losing an army and their financial commitment, whereas the Dutch were at risk of losing their independence, a situation which may explain some aversion to pitched battles. This caution was one reason for the secretive nature of his campaign to move his combined forces to

[30] Winston Churchill, *Marlborough: His Life and Times*, Book One, 577-580, 589-591. The reluctance of the Dutch to engage in pitched battles at the start of the war is well known, as Marlborough went to great pains to ensure that history was aware of his desire to engage his opponents when he was forbidden by his risk-averse Dutch allies. His main effort was his well-known apology to the French generals for not attacking them. Comments about the realities of the war and not the Dutch being the blame can be found in John Lynn, *The Wars of Louis XIV 1667-1714*, 273. Perhaps Churchill was a little hard on the Dutch in not giving fair consideration to their complex political and weak strategic situation and in not acknowledging the poor discipline of the English troops. Churchill's account and those of other English historians should be viewed with caution – consider the comments of Ciro Paoletti, "Prince Eugene of Savoy, the Toulon Expedition of 1707, and the English Historians: A Dissenting View," *The Journal of Military History*, Vol. 70, No. 4. (Oct., 2006), 941 & 943. For additional information on difficulty with the Dutch also consult William Coxe, *Memoirs of John*, *with his Original Correspondence: Collected from the Family Records at Blenheim and other Authentic Sources,* Second Edition, Volume II, (London: Longman, Hurst, Rees, Orme, & Brown, 1820), 171, 177-182, 254-255, 259, 266, 283-284. Lediard, *The Life of John, Duke of Marlborough,* Vol. 1, (London: J. Wilcox, 1736), 171, mentions some of the political reasons for the Dutch desire for caution. Dutch caution was also tempered by the fact that Marlborough was initially an unknown quantity who still needed to prove his worth. Also consider C.T. Atkinson, *Marlborough and the Rise of the British Army*, (London: G.P. Putnam and Sons, 1921), 268, 271-274, regarding the Dutch generals overruling of Marlborough's desire to attack in 1705. As well, read David G. Chandler, *Marlborough as Military Commander*, (Toronto, Ontario: Penguin Books, 2000 first published by B.T. Batsford, 1973), 98, but see also the widely cited self-deprecating comments of the Dutch officer Godart de Ginkel, Earl of Athlone on the 1702 campaign as found in Chandler on page 122, and in William Coxe, *Memoirs of John, Duke of Marlborough, with his Original Correspondence: Collected from the Family Records at Blenheim and other Authentic Sources,* Second Edition, Vol. 1, (London: Longman, Hurst, Rees, Orme, & Brown, 1820), 196. See again Lediard, *The Life of John,*Vol. 1, (1736), 181, 210-215, 240, 248, for mention of the brave conduct of Dutch soldiers and firmness of their generals, and discussion of the demand by parliament for the Dutch and others to cease trading with the French and their allies. Lediard points out that the parliament had good reason to seek suspension of trade with the enemy. The Dutch did cause Marlborough some grief, as noted by Lediard, *Life of John*, *Duke of Marlborough,* Vol. 1 (1736), 511-516, in his account of the Dutch Field deputies rebelling against Marlborough due to their reluctance to act upon an opportunity to engage the French in battle. However, also see Francis Hare, *An Exact Journal of the Campaign in Germany for the Year 1704*. [London: 1704?], 13 on the Dutch conduct at Blenheim where he records "These preparations being over, the English and Dutch began the Attack with the most unparallel'd Intrepidity, and greatest Fury imaginable." As noted in Nicholas Henderson, *Prince Eugen of Savoy*, (New York: Praeger, 1964), 112, more Dutch troops fought at Blenheim than English [Henderson calls them British] a point which highlights the significant contribution made by the Dutch forces in the march to the Danube.

prevent the Elector of Bavaria from opening the way to the French invasion of Austria along the Danube without giving much information to his English and Dutch principals. This bold operation culminated in the Battle of Blenheim, itself ultimately decisive in removing Bavaria from the War and in establishing Britain as a land as well as a maritime power.[31] In that case, aggressive action carried the day against poor tactical choices. But Blenheim was a major pitched battle on one day, it was not a siege.

It has long been argued that the use of the so-called revolutionary Vauban, or French-style tactics for siege meant that the trace italienne fortress's time as a successful defensive development was on the wane. Many viewed the eighteenth century attack on a trace italienne to be a scientific affair that would likely result in the fall of the fortress, usually in a predictable amount of time.[32] In 1702, French-held Landau was besieged by the Imperials in a summertime siege lasting 84 days, but was returned to the French in a mere 35 days in the fall of 1703. Given their recent success at Blenheim, the Allies could have reasonably expected that French morale would be poor and thus contribute to a siege of short duration in 1704.[33] Despite, however, the Marlborough's demand for urgency in prosecuting the siege, Landau held out more than twice as

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[31] Major General J.F.C. Fuller, *The Decisive Battles of the Western World, and their influence upon history*, Volume 2, (London: Eyre & Spottiswoode, 1963), 154-155.

[32] For more on the conduct of sieges, and the apparently predictable nature of them, see David G. Chandler, *The Art of Warfare in the Age of Marlborough*, (New York: Sarpedon Publishers, 1994) 234-235, and all of the rest of Chapter 15. See also Duffy, *Fortress in the Age of Vauban*, 6, regarding Louis XIV's affection for the predictable nature of grand sieges.

[33] Lediard, *The Life of John, Duke of Marlborough,* Vol. 1 (1743), 295. Allied morale was boosted by defeating an army regarded as unbeatable, and even the French troops of Landau were affected by both the loss at Blenheim and their own daunting circumstances. See also Robert Parker, *Memoirs of the most remarkable military transactions from the year 1683 to 1718. Containing a very particular account of the several battles, sieges, &c. in Ireland and Flanders, During the Reigns of K. William and Q. Anne. By Captain Robert Parker, Late of the Royal Regiment of Foot in Ireland, who was an Eye-Witness to most of them. Published by his son,* (Dublin: printed, and sold by Geo. and Alex. Ewing, Booksellers in Dame-Street, MDCCXLVI, [1746]), 94. The words of Captain Robert Parker are illustrative regarding the English assessment of French morale after Blenheim: "The true account of this battle was concealed from old Lewis for some time, but when he came to know the truth of it, he was much cast down; it being the first blow of any consequence, his Arms had received, during his long reign. And he said in a passion, he had heard of *Armies been beaten*, but never of one *taken* before." [emphasis in original]

long as it had in 1703, nearly as long as it had in 1702, and slightly longer than it did in 1713.[34] Although the fortress fell each time, it was always at a great cost in both time and manpower. While the siege's length indicates that Landau's fortress was effectively designed, other considerations also affected Landau's ability to hold out for as long as it did.

The Siege of Landau started with the movement of the combined armies of Marlborough, Eugen and Prince Louis of Baden across the Rhine near Phillipsburg and then south to the River Queich.[35] Marlborough and then Eugen followed Villeroy south and occupied covering positions on the River Lauter, another tributary of the Rhine. The Margrave began the investment of the fortress on September 9, 1704 and began to dig trenches.[36] His troops opened

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[34] Ostwald, *Vauban under Siege,* 325-364. Ostwald deserves much credit for his work on providing clear data as to the dates and conduct of sieges during the war of the Spanish Succession. Some sources written around or after that time adjusted their dates to the new calendar, which may account for the many variations in dates found in both contemporary and modern published sources. From 1582, Italy, Spain, Poland, France and Portugal were on the Gregorian calendar while Britain did not change until Parliament enacted the *New Style Calendar Act (1750),* which took effect in 1752. Austria converted in 1583-4 and the various parts of what is now Germany converted over a period from 1583 to 1700, with Catholic areas converting first. In the contemporary English histories the practice appears to have been to use the dates in effect where the event took place, but it is worth examining the dates recorded to determine the calendar in use. Where particular correspondence was written is often the key to understanding the date of the letter. The 11 day difference between the calendars can make the distribution of some news appear to be more rapid than it otherwise was. Ostwald acknowledges that this situation may well account for some of the difficulties in assigning accurate dates to events around sieges. An interesting, though informal discussion of the calendar change is that of Toke Nørby, *The Perpetual Calendar, a Helpful Tool for Postal Historians*, (Denmark: Toke Nørby, February 29, 2000), available online http://www.norbyhus.dk/calendar.html. Internet access obtained 27 January 2010.

[35] A good source for the conduct of the siege is Lt. Col. Antoine Marie Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau, Luxembourg, et Divers Sujets. Extraits des papiers de ingenieurs Hue de Caligny et Precedes d'une notice Historiques sur les Enginieurs, s de Louis XIV et de Louis XV*, (Paris: J. Correard, Editeur d'Ouverages Militaires, 1841), which includes the daily siege journal of the fortress. French language works such as Michel Gondinet, *Un Héros Oublié; Le Lieutenant-général Yrieix Masgontier de Laubanie 1641-1706 et le Grand Siège de Landau 1704*, (Paris-Limoges-Nancy: Charles-Lavauzelle & Cie, 1928), and Philippe Tenant de la Tour, *Yrieix Masgonthier De Laubanie; Lieutenant Général de Louis XIV*. (LePuy Fraud, St. Paul, France: Lucien Souny, 2005), include good accounts of the siege. The extensive work of Emile Heuser, *Die Belagerung von Landau 1702, 1703, 1704, 1713*, (Landau, Pfalz: Phillip Stoeppel, 1913), is often cited, especially by French writers.

[36] See the progress of the imperial trenches recorded upon Schenk, Pieter. *Belegering der Stadt Landau, met aenwysinge , hoe verre dagelyks gevordert is, onder? t beleit des Roomschen Konings en Pr. L. van Baden, overgegeven 'd 26 Nov. 1704*. Amsterdam: [s. n., 17..]. Available online at http://teca.bncf.firenze.sbn.it/TecaViewer /index.jsp? RisIdr=BNCF0003496469, access obtained April 15, 2010. This interesting map shows the progress of the Imperial trenches by date. For ease of reading, it is located at Appendices F and G.

the trenches on September 13 and continued to dig. Since Prince Louis did not yet have a siege train he could not engage in bombardment but instead concentrated on building the trenches. Prior to September 28 and probably as early as September 20, General Thüngen returned from Ulm with captured weapons that included two hundred and fifty cannon and twelve hundred barrels of powder that Baden promptly put into service at the siege.[37] With the arrival of the siege train and stores captured at Ulm, Prince Louis' men put into use the positions they had made for artillery batteries. Digging progressed through September, with most work stopped during rainy periods.

The King of the Romans, Joseph I, the eldest son of Emperor Leopold I inspected the troops on September 28. He was nominally in charge upon his arrival, although the Margrave continued to actually conduct the siege. During October, the Imperials increased their use of artillery. General Laubanie's defenders engaged in sorties designed to disrupt digging and to make the best use of the inundated ground provided by the River Queich that flowed through the fortress. Laubanie also relied on carefully directed infantry and cannon fire upon trench works in order to disrupt the progress of the sappers.[38] Laubanie intended to use a series of locks to control flooding of the ditch behind the covered way in order to disrupt an assault. Bombardments throughout October killed and injured several key leaders and other member of the garrison. Laubanie himself was blinded in a bombardment on October 10, but he remained actively in command of the defense. The efforts of the besiegers were concentrated upon the relatively dry southern approach to the fortress at the Gate of France and its defences including the demi-lune of France. As the siege continued, Marlborough became frustrated that the

[37] The siege journal notes an increase in the use of artillery from about September 20, see Augoyat, *Mémoires Inédits du Maréchal De Vauban, 158-161*.

[38] Augoyat, *Mémoires Inédits du Maréchal De Vauban*, 89.

campaign time and weather needed to take the fortresses on the Moselle and Saarlouis was fading, so he concurrently began operations against the Moselle fortresses as the Siege of Landau continued while Eugen remained in place to cover the siege. As November dragged on the prospect of relief became increasingly improbable, and the increased artillery fire damaged the locks on the river such that flooding could no longer be controlled by the garrison. When the covered way was taken, and an assault became likely, a wounded Laubanie held a council of war on November 23, whereupon he and his officers decided to beat the chamade to parley for terms of surrender. The fortress capitulated on November 25 and was occupied by the Imperials on November 28.

III. Why did the Siege of Landau take so long? Leaders and other Considerations

The 1704 siege of Landau provides a good example of the importance of siege craft in the War of the Spanish Succession. When one considers the context of 1704 and the tumultuous time after the defeat of the French and Bavarian armies at Blenheim, the English and Dutch-driven negotiations with Austria and her Hungarian rebels, English victories at sea and at Gibraltar, and French successes in Italy and Spain, Landau demonstrated to both sides something that they already knew - that siege operations were an effective means of delaying an attacker without the risk of a major battle. That Landau took so long to capitulate demonstrated that operational fortress defense was a strong and effective form of positional warfare in the early eighteenth century.[39]

[39] The issue of whether or not attack as a form of warfare was actually in the ascendancy mainly concerns the military revolution versus evolution debate which is discussed later in this paper.

This third siege of Landau in 1704 is of particular interest as the commander of the besieging forces was Prince Louis, the Margrave of Baden, and it was his forces which had taken Landau in the long siege of 1702. The Margrave was thus both experienced with the conduct of sieges and familiar with Landau, at least as it had been during that earlier siege. Landau had been improved and upgraded since 1702, so although it was the same basic trace, the repairs and enhanced outworks prevented easy use of the high ground by an attacker. The Margrave's opponent was Landau's governor, Lieutenant General Yrieux Masgonthier de Laubanie, an experienced officer who was highly regarded both as a leader of men and also as a well-trained and competent engineer. Laubanie was both technically adept at siege warfare and also capable of motivating his troops in difficult circumstances.[40] He well understood both Landau's tactical situation and the important strategic need to protect the army falling back after Blenheim. His predecessor, the aging Ezéchiel du Mas, Comte de Mélac, had been pensioned off after losing Landau to the Allies despite a vigorous defense in 1702. Though well thought of by the French, Melac's lingering reputation for harsh tactics in the Palatinate during his tenure at Landau caused much resentment among the German people of that region and was likely a contributing reason for the Margrave's strong motivation to retake Landau.[41] Another possible choice for Governor

[40] For typically flattering treatment of Laubanie and his efforts, see the monographs of Michel Gondinet, *Un Héros Oublié,* and Philippe Tenant de la Tour, *Yrieix Masgonthier De Laubanie; Lieutenant Général de Louis XIV*. The English historians are no less laudatory of Laubanie, consider his treatment in Winston Churchill, *Marlborough: His Life and Times*, Book One, 905. As well review the description in George Sale, et al. *An universal history, from the earliest accounts to the present time: The Modern Part of Universal History*. Volume 27. (London: C. Bathurst & Co. 1782), 272. See also Abel Boyer, *The History of the Reign of Queen Anne, Digested into Annals. Year the Third. Containing, The most memorable Transactions both at Home and Abroad: In which are Inserted several Valuable Pieces, never before Printed*, (London: A. Roper, The Black Boy, Fleet Street, 1705), 129, 170. Boyer calls him "…one of the best officers France had." Laubanie is more critical of himself for raiding the village to obtain stores to use in the defense, see Augoyat, Antoine Marie, Lt. Col. *Mémoires Inédits du Maréchal De Vauban*, 109-110, for his self-deprecating comments from the siege journal.

[41] Gondinet, *Un Héroes Oublié*, 37, refers to Mélac as "Mélac, gouverneur de Landau, ancien lieutenant-général, espérait commander la province en l'absence du marquis d'Uxelles. Le comte de Mélac, remarquable officier, n'allait pas tarder a donner des preuves de sa vaillance, en defendant Landau en 1702." Dumont, *Memoirs of Eugene and Marlborough*, 63, mentions Mélac's preparations in 1702. *Histoire des Camisards*, 73-73, also mentions Mélac's

of Landau might have been the talented engineer Louis Laparra des Fieux who like Laubanie was a well thought of contemporary of Vauban.[42] However, if good engineers were in short supply, exceptional ones were even less common and Laparra was needed in Spain where he was eventually killed during the siege of Barcelona in 1706. Despite Laubanie's senior age of 63, he was a vigorous commander of the Armies in Alsace. He had a long record of service as a skilled administrator and governor of such diverse posts as Calais, Mons, and Neuf-Brisach with a distinguished record as an infantry officer. While Maréchal Tallard commanded the siege, General Laubanie had commanded the successful assault on the French Gate of Landau in 1703. After the siege as Landau's new governor he had then repaired and reinforced the fortress.[43] Laubanie was the logical choice to be its governor - he knew well Landau's strengths and weaknesses, and he well understood the danger of allowing the Allies to advance unchecked into Alsace.

General Laubanie deserves much credit for commanding a determined defense; however, it is not the case that the siege was long only because of the efforts of its strong and resolute

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strong defense. A helpful summary intended for a popular audience of Mélac's life can be found in Michael Martin, "Porträt Mélac!" *Die Zeit Online*, (May 6, 2004), Available online http://www.zeit.de/2004/20/ZL-Melac, internet access obtained 16 March, 2010. See also David Jones, *A compleat history of Europe*, ([London]:1703), 188, in which he specifically mentions "long practiced French barbarity" against villages in the Palatinate, and includes Prince Louis of Baden's threat to Mélac that he would exact revenge for such conduct upon the French prisoners. Mélac was likely taking steps to deny the attackers sources of food and shelter. Despite Mélac's spirited defense in 1702, at 72 years of age he was essentially forced to retire. It is likely that many French soldiers retreating from Blenheim met their ends at the hands of the resentful civilian population. See also Philippe Tenant de la Tour, *Yrieix Masgonthier De Laubanie, Lieutenant Général de Louis XIV*, (LePuy Fraud, St. Paul, France: Lucien Souny, 2005), 104, regarding the taking of supplies for the fortress by local people.

[42] Ostwald, *Vauban Under Siege*, 175. See also Harald Skala, *Die Belangerungen von Landau 1702 und 1703*, (Germany, 2005), www.kuk-wehrmacht.de/gefechte/17021703Landau.html, access obtained 15 March 2010, in which he cites Emile Heuser and materials in the Landau city archives to claim that Colonel Laparra had commanded the siege works at Landau in 1703. In contrast, Christopher Duffy, *The Fortress in the Age of Vauban,* 45, writes that another Vauban-trained engineer, Pierre Filley was in charge of the siege of Landau in 1703.

[43] According to Harald Skala, *Die Belangerungen von Landau,* as cited above, Lt. Gen. Laubanie personally commanded three companies of grenadiers in three consecutive night attacks on the ravelin protecting the critical French Gate; his subsequent fourth attack with fresh troops was successful in taking that objective. Laubanie's valor was recognized by Maréchal Tallard by selecting him to be the new governor.

defender. There are many other reasons for Landau's ability to hold out as it did in 1704. With the benefit of hindsight one might look back at the 1704 siege of Landau and argue that its progress was slowed by a poorly supported plan of attack, especially since Prince Louis begin the siege without a full siege train. It could be argued that the Margrave was less than vigorous in his execution of the siege; after all the troops were in the main his countrymen, while those of Marlborough and Eugen were covering him on the Lauter. It may have been the case that he was concerned with limiting casualties so close to the end of the campaign season. Perhaps he was intentionally delaying the siege so as to limit the ability of the Allies to engage in actions against the French that might risk a major defeat, or otherwise take away from the value of the victory at Blenheim – even though Bavaria was no longer a threat. Prince Louis was also suffering from a foot injury received at Schellenburg which apparently affected his aggressiveness. He may well also have felt slighted for playing a secondary role to Marlborough and Eugen, who though very accomplished commanders were in his view junior in rank and status to himself.[44] Regardless, it is apparent that Marlborough and Eugen had serious reservations about trusting the Margrave. After all, Prince Louis had been seeking a deal with the Elector of Bavaria, and his perceived habit of resistance to decisive action was causing concern among his allies. His role in besieging Ingolstadt was part of a conscious effort on the part of Marlborough and Eugen to keep the Margrave away from the decisive action, while at the same time giving him something useful to do that would not require much risk. Baden's resentment at being marginalized by his co-commanders likely made him less willing to take risks in support of his allies. It would have

[44] Thomas Lediard, *The Life of John, Duke of Marlborough*, Vol. 1, (1743), 317. See also Churchill, *Marlborough: His Life and Times.* Book One, 771, 778-780, 895. Baden was a Prince and had been a mentor to the much younger Prince Eugen and Marlborough was a mere commoner of humble beginnings. See also Coxe, *Memoirs of John Churchill*, Volume 1, 338, 362-363, for discussion of Prince Louis' attitude to his allies regarding seniority and command, and regarding Marlborough's dislike for the Margrave. It should be mentioned that the Dutch also had their concerns with Prince Louis. In that light consider Churchill, *Marlborough*, 712-713, General Van Goor was highly critical of the Margrave's fruitless marches and his perceived lack of skill.

been obvious to the Margrave as it was to the French that his allies did not trust him.[45] Prince Louis seemed to be adverse to risk, and thus he was much more interested in achieving limited objectives than engaging in the large and risky pitched battles that Eugen and Marlborough sought. He certainly wanted to capture Landau, but it is also clear from his lack of enthusiasm for a renewed campaign in 1705 that he was not interested in further support to his allies for additional campaigns into France.[46] His commitments to provide troops for the 1705 campaigns proved to be hollow. Baden's age and his slow-to-heal foot injury likely influenced his unwillingness to support the 1705 campaign. The arrival of Joseph I, the King of the Romans at Landau further reduced the status of the Margrave. Credit for the victory would thus elude Louis of Baden, and yet since the Margrave did continue to direct the siege, he would be criticized for the length of the operation. The King of the Romans was likely too busy with the negotiations with the Electress of Bavaria to take much of an active role in the siege, but he was still senior to Baden and thus nominally in command.

Inside Landau there was no command confusion. Despite some injuries to key personnel, including Laubanie himself, the general plan seems to have been communicated to the garrison and well-executed by those defenders of Landau. There were some desertions, once notably during a sortie on the night of October 6 &7 by some grenadiers, but Laubanie quickly took steps

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[45] David Chandler, Editor. *Military Memoirs: Robert Parker and Comte de Merode-Westerloo, The Marlborough Wars*. Series Editor Brigadier Peter Young. (London: Longmans, Green and Co., Ltd., 1968), 47-48, 164. English officer Captain Robert Parker writes of the Margrave never forgiving Marlborough and Eugen for depriving him of a share in the victory. A general officer in French service commanding Walloon troops, the Comte de Merode-Westerloo writes that Marlborough and Eugen had plotted to keep the Margrave busy in the siege of Ingolstadt while letting him think that they were merely covering his siege efforts, while in fact they were actually seeking decisive battle with the French field army. The Comte had good reason to dislike Eugen and Marlborough for the role that they played in his defeat with the rest of the French at Blenheim. See also Frank Taylor, and G. Winifred Taylor, Editor, *The Wars of Marlborough, 1702-1709*, (Oxford: Basil Blackwell, 1921), 243-244, regarding Baden's jealousy at not being trusted to take part in the Blenheim victory.

[46] Taylor, *The Wars of Marlborough,* 244. Taylor highlights the importance of taking Landau as a means of keeping the German allies happy by getting rid of this major economic and military threat to the region.

to prevent further losses of that nature.[47] Subsequent sorties showed that his leadership methods and resulting decisions had been successful in encouraging much better spirit among the grenadiers, even though the casualties that the garrison had suffered were affecting morale.[48] After Laubanie was blinded as a result of wounds received during a bombardment on October 10, he continued to direct a vigorous defense for well over another month.[49] Laubanie's serious injury added to the friction of war that cannot have been helpful to the defender. The loss of Landau's chief engineer Villemont to a musket ball on October 23 was a further blow both to morale and a loss to the fortress's technical leadership.[50] Laubanie's vigorous leadership by personal example contributed to the duration of the 1704 siege, just as Mélac's style had helped hold Landau for a week longer in 1702. It is not without significance that the defender of 1704 had been the besieger in 1703, and in both instances General Laubanie had shown himself to be a skilled practitioner of siege warfare.

The accounts in much of the English historiography of the Landau siege seem remarkably consistent in their criticism of the Margrave. It was a tough siege for which the Margrave was poorly prepared; the French did a commendable job in difficult circumstances; and the siege took far too long preventing even greater efforts on the part of Marlborough and Eugen.[51] It may be

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[47] Augoyat, *Mémoires Inédits du Maréchal De Vauban*, 107-108.

[48] Ibid., 108-113. Laubanie was an officer who led by personal example in exposing himself to the same dangers as his men.

[49] Augoyat, *Mémoires Inédits du Maréchal De Vauban*, 113. See also Gondinet, *Un Heros Oublie*, 57-58, in which he likewise describes the events on the night of October 9 & 10 that led to Laubanie being injured.

[50] Augoyat, *Mémoires Inédits du Maréchal De Vauban*, 128.

[51] English accounts are typically centered upon the achievements of Marlborough and his great relationship with Eugene and contemporary accounts repeat the same material. Further research in languages other than English would add much understanding of this period. See Lediard, *The Life of John, Duke of Marlborough,* Vol. 1, (1743), 295-297. See also Churchill, *Marlborough: His Life and Times*, Book One, 894-895, 902, 905. In addition, consider the comments of Colonel John Blackader, cited in C.T. Atkinson, *Marlborough and the Rise of the British Army*, 252: "You know Prince Louis is not thought rash of attacking." Atkinson, 249, also cites Major Cranstoun

that the Allies had expected to fight Villeroy at Landau, but their own rapid crossing of the Rhine forced the French commander to head even further south.[52] Before retreating south, Villeroy had added troops to the garrison and dropped off plenty of stores to support the defenders. Thus the garrison of Landau was strong, recently reinforced, and well stocked with munitions and supplies prior to the arrival of the Allies.

When evaluating Baden's performance one must understand that Allies were unable to provide sufficient siege resources at the critical opening phase of the siege. Prince Louis had little in the way of siege equipment and engineers, and no money with which to obtain them. Marlborough's plan to link up with Eugen and have Baden prevent the French and Bavarian forces from invading Austria along the Danube, included leaving behind his siege train as it would have impeded rapid movement. In order to fight the decisive battle that he was seeking, Marlborough had decided that the ability to manoeuvre his forces was more important than the ability to conduct sieges. Marlborough had lost Baron Menno Van Coehoorn earlier in the year to a stroke, and thus he was lacking the counsel of one of the great military engineers of the age. In other words, a side effect of the great victory of Blenheim was that the delay that occurred at Landau contributed to Marlborough not having the army's heavy siege train and engineers

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about Marlborough's aims after 1704 to have "opened the campaign with either the siege of Saarlouis or Thionville and after that to have besieged or taken Metz, which if we had done no more secured us of winter quarters in Lorraine and cut entirely the French off from Strasborg and Breisach." Atkinson, 242-243, even suggests that the Margrave conducted the siege "indifferently"so as to ruin Marlborough's cavalry in revenge for not being present at Blenheim. Atkinson, 275-276, argues that Marlborough saw Baden as politically important but militarily uncooperative and slow to act.

[52] Braubach, *Prinz Eugen*, vol. 2, 79-80. Eugen had urged the Margrave to cross quickly in case the French were able to react and prevent the crossing. Fortunately for the allies the French were not capable of gathering forces to resist the victors of Blenheim in their vigorous pursuit. Braubach indicates that there were many suspicions about the Margrave's loyalties as he was often obstructionist, resentful, and lacking any vigour in his conduct. Lediard, *The Life Of John*, *Duke of Marlborough,* Vol. 1, (1743), 317, also mentions that Prince Louis was believed to be "corrupted by the French," though others more charitably accounted his actions or lack thereof to "haughtiness" and "envy" of Marlborough.

present to support the Margrave's meagre resources. The limited siege equipment and few engineers available were needed by General Thüngen at the Siege of Ulm. Fortunately, the garrison at Ulm did not hold out for long and thus a major siege was unnecessary.[53] In that regard it is worth considering that the defenders of Ulm had managed to achieve honourable terms of capitulation after only a few days of resistance - Ulm's brief fight had hardly distinguished its garrison or leadership and in fact that garrison's token effort and surrender of munitions and cannon contributed directly to the siege at Landau. Ulm was certainly in an untenable position given its situation as a hospital for Blenheim casualties, low provisions and lack of support, but a slightly longer delay would have prevented General Thüngen from supporting the Landau siege with those captured cannon.[54] Though capturing Ulm provided some resources needed at Landau, it had taken away some of the scarce engineers and artillery of the tiny Imperial siege train which in turn had prevented a timely start to the Landau siege. An additional point to consider is that captured cannon and powder do not include the trained artillery crews needed to make effective use of the newly-gained weapons, which in any case only arrived at Landau just prior to September 28.[55]

Allied attention to the siege was divided by the need to obtain suitable winter quarters on the Moselle. Marlborough regarded the ability to control the Moselle to be just as important as the need to control the Rhine, the Danube, and the Meuse. All four rivers provided the lines of

[53] Churchill, *Marlborough: His Life and Times.* Book One, 878. The main reason for the ease of Ulm's capture was that Maréchal Marsin had left in Ulm several thousand officers and men wounded at Bleheim who were not able to travel due to their injuries. A quick but honourable surrender would assist these men in obtaining medical aid. The fortress was thus left weakly defended with the intent that it would surrender if attacked.

[54] Lediard, *The Life of John, Duke of Marlborough*, Vol. 1, (1743), 294. Lediard lists the weaponry captured from Ulm as including "…222 pieces of brass cannon, 12 iron guns, 25 brass mortars , 1200 barrels of powder with other stores and provisions in great abundance; a [R]easonable Supply for carrying on the Siege of Landau."

[55] Ibid., 296. It took General Thüngen a little over two weeks to move from Ulm to Landau whereupon he and his men were inspected by the King of the Romans on September 28.

communication and supply necessary to both move and support a large army, particularly its heavy equipment such as cannon. Landau, along with the other fortresses along the Rhine such as Philippsburg would protect that waterway from any French designs in Holland and succour Allied designs in Strasbourg and Metz. Capturing the Mosel fortresses such as Tréves, Trarbach and nearby Saarlouis were important objectives. Tréves fell easily, Trarbach put up a better fight, but the time and resources needed to take Saarlouis faded with the end of the campaign season.[56] Marlborough ended the 1704 campaign season in control of the major rivers that would allow him to invade France, and probably more importantly, to hinder river-based attacks upon his allies.

Marlborough became increasingly impatient with the slow pace of the Landau siege and its effect upon the operational and strategic initiative. In order to regain that initiative, Marlborough chose to engage in concurrent activity - Eugen would continue to cover the siege by holding on the Lauter, and Marlborough moved to attack the Moselle fortresses. In that regard, Marlborough found it necessary to divide his forces from Landau. There were likely four good reasons for that decision. First, the Margrave had sufficient manpower resources to invest and besiege the fortress, even if he was lacking in some siege resources, he certainly had sufficient infantry. Second, concern over any possibility of Villeroy rallying a relief force made it important to cover the siege by placing blocking forces along the Lauter.[57] Third, large armies consume huge quantities of forage, food, firewood, and water, and thus it would hinder the siege to have all of the army present. The need for adequate food and shelter would thus have made it

[56] Coxe, *Memoirs of John, Duke of Marlborough*, Volume 2, 36. Coxe mentions the desire of Marlborough to take Saarlouis as an important step in invading France next season and how the long siege of Landau prevented the siege and capture of Saarlouis. It may be the case that Marlborough placed more strategic importance upon the Moselle and Saarlouis than on Landau, yet saw Landau as an important part of keeping the Margrave of Baden satisfied.

[57] Braubach, *Prinz Eugen*, vol. II, 79-80

necessary to disperse the attacking force to avoid consuming all of the local resources and limiting the deposits of the large quantities of waste that such consumption would produce. Fourth, the huge numbers of men sleeping in tents and in billets in the damp conditions and fighting in the wet weather at Landau would have been at risk of illness. With the benefit of hindsight, one can see that the dispersion of the Allied force made good operational sense.

IV. The Division in the Allied Approach

Despite the obvious desire to finish off Landau and move on to the next objective it is likely that the personal agendas of key Allied commanders were distracted from concluding the siege quickly. The historiography demonstrates significant disagreements between Louis of Baden on the one hand, and both Marlborough and Eugen on the other hand about the conduct of the entire campaign, and especially about who should be in command.[58] Prince Louis used his foot injury as a reason for his lack of vigour, but he was more likely envious of his allied co-commanders.[59] Given Marlborough's prolific writings, it seems apparent that he was well aware of the need to at least influence if not manage the message about the war for his audience. Most of the histories cite Marlborough's correspondence, which in the tradition of *Caesar's Commentaries* makes the enemy appear great and thus enhances the glory of the victory. From his writings it is clear that Marlborough did not enjoy the same rapport with Prince Louis of Baden that he enjoyed with Eugen of Savoy. There were several reasons for the poor relationship, some of which have already been discussed, but there always seemed to be a

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[58] Braubach, *Prinz Eugen*, vol. II, 50-51. See also Coxe, *Memoirs of John*, 361-362.

[59] William Coxe, *Memoirs of John, Duke of Marlborough, with his Original Correspondence: Collected from the Family Records at Blenheim and other Authentic Sources,* Second Edition, Volume 1, (London: Longman, Hurst, Rees, Orme, & Brown, 1820), 358. The Margrave of Baden had suffered a contusion to his foot at the battle of Schellenberg at Donauworth.

concern that the Margrave was less aggressive than his allies Marlborough and Eugen needed him to be. In particular his overtures to the Elector of Bavaria prior to the Danube Campaign made his conduct appear suspicious to both Marlborough and Count Johann Wenzel Wratislaw, a diplomat of the Austrian emperor.[60] The Margrave favoured going on the defensive to make a diversion and merely observe on the Danube, rather than actively supporting Austria should the Elector not be amenable to changing sides.[61] To be fair, the Margrave's cautious sentiments were more in line with those of London and the Hague, both of which wanted to see success on the Moselle before an aggressive campaign against Bavaria.[62] The Dutch and English were being risk adverse without recognizing that a campaign against Bavaria was a necessary part of a vigorous defense of the Alliance. A passive defensive strategy of sitting in Dutch fortresses would have provided the French and Bavarians with full initiative to attack Vienna. In order to defend the Austrians, the Allies needed to adopt an aggressive and therefore potentially risky strategy that changed the dynamics of the war. If the Danube campaign transferred the initiative to the Allies, then Landau blunted that initiative. One might well wonder if the cost in time and manpower of taking Landau repaid its value to the besiegers, especially since the invasion of France from Central Europe planned for 1705 never happened.

The Margrave sought limited objectives along the Rhine that included taking Landau while avoiding risks against the Elector of Bavaria. Eugen and Marlborough took a much more strategically aggressive approach with the clear aim of removing Bavaria from the war so as to

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[60] Churchill, *Marlborough*, 785-786. Marlborough and Count Wratislaw were concerned enough by Baden's delays that they considered having him arrested. Wratislaw served as the Emperor's special envoy to London and the Hague and was an influential foreign relations advisor.

[61] Braubach, 48.

[62] Ibid.

protect Austria from invasion. The battle of Blenheim had accomplished that objective and the siege of Landau was the next important strategic objective. Landau was also politically important as taking it was a major objective of Prince Louis, who had pressed for it early on.[63] The problem for the Allies was that the Margrave remained tied to a limited campaign. His concept for such a campaign did not fit with Marlborough's goal of controlling the rivers that would allow the army to threaten France in the next campaign season. He was also not pleased about playing a subordinate role to his former student Eugen and the upstart English Duke, both of whom he regarded as inferior in rank and status, and he was resentful about their complicity in making him miss out on the glory of the victory at Blenheim. [64]

Marlborough, making use of improved weather began moving forces, including cannon to the Moselle so as to prevent reinforcement of Tréves prior to taking both it and Trarbach. The letter to his wife in that regard contains some interesting points:

> I am got thus far in my way to the Moselle, after having marched through very terrible mountains. Had we any rain it would have been impossible to have got forward the cannon; and it is certain if the enemy are able to hinder us from taking winter quarters in this country, we must throw our cannon into some river, for to carry them back is impossible… If I can succeed in the taking of Tréves, I shall not stay above ten days in this country; for when I have given the necessary orders for the siege of Trarbach, I shall leave the execution of it to the Prince of Hesse, having promised the King of the Romans to be with him before the siege of Landau is ended.[65]

Marlborough had expected a fight at Tréves, but not a major one as he knew it had a small garrison and as he expected, Trarbach would resist. It is fortunate for Marlborough that the

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[63] Ibid., 50-51.

[64] For mention of the sensitive nature of Prince Louis of Baden, see Churchill, *Marlborough:His Life and Times*, Book One, 895, 902. Braubach, *Prinz Eugen von Savoyen,* 51, also discusses the matter and indicates that Prince Eugen had advised Marlborough to treat the Margrave carefully so as to not offend the man's sensitivities. It seems that Eugen, like many great commanders, was a skilled reader of people.

[65] Coxe, *Memoirs of John, Duke of Marlborough,* 33. See also the same citation and discussion in Churchill, *Marlborough*, Book 1, 904-905.

garrison at Tréves fled without a fight, as this allowed him to establish a solid Allied base on the Moselle and delegate the taking of Trarbach. Thus Landau had not prevented Marlborough's designs on the Moselle - it had merely delayed their progress. When he was no longer concerned about Villeroy mounting a relief force, Landau was no longer able to delay him from taking the field again. The fortress that Landau's long siege probably saved was Saarlouis as the Allies lacked the resources to engage in another major siege over that well-sighted and prepared fortress while the Margrave was still using the siege train at Landau.[66] Besides, winter quarters were the most important Allied object as the campaign season neared an end. The need to besiege Landau had certainly allowed the French army to escape to the south, though it is unlikely that Marlborough would have followed it far anyway as the French would then have stronger internal lines and much better ability to support a fight on their own ground.

As well, Marlborough was in need of attending to political problems between the Tories who supported a blue-water strategy and land-oriented Whigs. He was also distracted by relationship problems with his wife. Their only son had died earlier in the year and her letters to him showed the strain of their separation - the Duke had been away during his wife's time of sorrow and the strain was wearing on them both. The maritime powers of England and Holland were involved in negotiations with the Hungarian rebels who were creating a major problem for Austria. The Danube campaign had prevented the French and the Bavarians from taking advantage of Austria's exposed position resulting from the revolt in Hungary and the threats posed by the French army in Italy. Prince Eugen had an eye on the Hungarian revolt against

[66] Bancks, John. *The History of John, Duke of Marlborough,* (London: James Hodges, 1742), 101. Bancks records that the English decamped in mid-November after there was no longer any danger of a French relief force. There was half-hearted discussion of a relief force to aid Landau towards the end of November, but given the timing and operational situation, relieving Landau at that point was unrealistic and in any event too late. Marlborough hoped to capture Saarlouis in 1704, the Siege of Landau forced back that goal to the next season as something to be achieved with the assistance of Prince Louis; however, despite some limited successes the Margrave either could not or would not move his forces to that end in 1705.

Austria, and the English and Dutch attempts to accommodate the rebels in negotiations, yet throughout his relationship with Marlborough remained solid.

V. Why did Landau capitulate?

The role of the Landau garrison was to delay whatever designs Marlborough might have had on the retreating forces of Villeroy and the Elector of Bavaria, and to make the Allies pay dearly for their victory; by November of 1704 those objectives had been met. The large size of besieging forces meant that the Allies had plenty of manpower to invest the fortress, even if they lacked all of the equipment needed to fight a siege. The Allied ability to provide a covering force for the Margrave, and the blow suffered by the French at Blenheim ensured that there was no credible threat of relief from a French field army. However, even the employment of Vauban-style siege tactics, including full investment and advancement of the trenches combined with well-protected besiegers in parallel trenches did not reliably guarantee success in the face of a resolute defense.

The trace italienne was designed to absorb punishment that slab walled castles of earlier centuries could not bear. Structural damage from heavy artillery bombardment to the fortress in the form of a breach was the key that the fortress's defensive integrity was at risk. Once a practicable breach was made in the wall, the fortresses defenses were compromised. At that point, further resistance would likely lead to severe punishment being inflicted on the defenders should they make a storm necessary. Once the breach was made, a wise fortress commander would beat drums for a parley and seek terms for capitulation.

These were the considerations faced by Laubanie at the end of November in 1704. The garrison at Landau had suffered several significant casualties which may well have affected its

ability to continue a resolute defense; Laubanie himself was wounded in the bombardment on 11 October, and several key officers and engineers had also been killed or wounded.[67] By November the siege was taking its toll on the defenders as the trenches reached the fortress and more officers critical to the defense were killed or injured. There were few breaks from the constant pounding of artillery and these were usually due to the effect of rain on the powder. The siege journal entries for November 13-14 are illustrative:

Du 13.

> L'artillerie des ennemis fit moins de feu qu'à l'ordinaire, apparemment à cause de la pluie qui dura presque tout le jour, et dont ils avaient eu le bonheur de n'être point incommodés depuis quarante-cinq jours qu'ils canonnaient la place.

Du l3 - au 14.

> Les ennemis, à la faveur d'un grand feu de leur artillerie qui dura toute la nuit, comblèrent de sacs à terre et de fascines le fossé gauche de la demi-lune pour s'y faire un passage. On les incommoda autant qu'on put parle feu continuel que l'on fit sur eux.[68]

The siege diary records the loss of several key leaders in a short period of time:

> L'on travailla sans relâche dans la place à nettoyer le pied de la brèche de la courtine. Le sieur de Remberger, ingénieur, dont la valeur et l'expérience étaient recommandables, fut tué d'une pierre en venant de reconnaître à la demilune les travaux des ennemis. M. Richard, capitaine d'une compagnie franche, fut blessé dangereusement à la tête, étant à la batterie de la demi-lune, dont M. de Laubanie l'avait chargé dès le commencement du siége, connaissant son expérience dans l'artillerie où il a servi autrefois. M. de Chanteloup , capitaine des galiotes, a aussi été blessé pour la seconde fois; il en est mort peu de jours après.[69]

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[67] Dumont, *Memoirs of Eugene and Marlborough*, 159.

[68] Augoyat, *Mémoires Inédits du Maréchal De Vauban*, 149-150. The entries can be translated as: "November 13. Enemy artillery fired less than usual, apparently due to the rain which lasted all day which was a pleasure after having been under cannon fire for forty five days. November 13-14. Under the cover of heavy artillery fire which lasted all night, the enemy filled the left ditch of the demi-lune with bags of earth and fascines so as to make a passageway. We were much hampered with the steady fire upon us."

[69] Augoyat, *Mémoires Inédits du Maréchal De Vauban,* 149. The artillery was moved closer to the wall and increased in intensity. The entry can be translated as: "Everyone worked tirelessly to clean the debris from the breach of the curtain. The Sieur of Remberger, a valuable and experienced engineer was killed by a stone while

Casualties mounted, and when the Allies managed to lodge themselves upon the counterscarp the fall of Landau through assault was imminent. Landau's commander knew the end was near, and he and his officers held a council of war to consider their options whereupon they decided to surrender. On beating the parley, a blinded Laubanie was given the right to prepare the terms of an honourable capitulation, and he and his remaining men left Landau with all the honours of war after having served their duty. A question to consider is at what point were the objectives and the honour of the defenders satisfied and the goals of the attacker thwarted? In short, Landau was important in delaying Marlborough's efforts on the Moselle only as long as his and Eugen's forces were needed to cover the siege. Landau had probably served its main purpose of delay by mid-October when the French army had successfully reached the safety of its southern defenses.

VI. Was the trace italienne an effective defense?

The example of Landau can provide insight into a broader historical question. Do the Vauban techniques for taking a fortress eliminate the effectiveness of the formidable defenses of the trace italienne? The Vauban style of attack on the trace italienne was intended to be an efficient means of taking a fortress without causing great loss of life; however, this method was less aggressive and slower than a direct mass assault as often favoured by the siege commanders

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reconnoitring the enemy's work on the demi-lune. Mr. Richard, the captain of a Frankish company, was seriously wounded in the head while commanding a battery on the demi-lune which Mr. de Laubanie had assigned him at the start of the siege, knowing of his gunnery experience from other actions. Mr. de Chanteloup, captain of the Galiotes, was wounded a second time and he died of his wounds a few days later."

Note that a galiote is a term indicating a small galley or barge. M. de Chanteloup was probably an officer in command of river transport barges.

in the fashion of Coehoorn. One might consider that the French defenders of Landau were highly effective at delaying and inflicting casualties upon the enemy. Christopher Duffy claims by the time that Landau surrendered on November 25, 1704, it had inflicted 9,322 casualties and even though this figure probably indicates both killed and wounded, it represents heavy damage to the attackers in excess of 10 percent casualties.[70] The defenders are variously listed as having taken casualties of 2,600 to 5,000 killed, wounded, and sick from a garrison counted as from 5,000 to 7,000 troops. [71] It is not clear in most sources how these numbers are broken down, or what happened to those who were too sick or injured to travel. Many contemporary accounts emphasize the numbers killed and the length of the siege. [72] Regardless of the precise casualty

[70] John Lynn, "The French Case," in *The Military Revolution Debate,* 193. Lynn's dates for the 1704 siege do not stand up to scrutiny as the contemporary accounts put the end of the siege at November 25 instead of November 11 - this could be a typographical error of writing the 11 twice. John Le Neve, *The Lives and Characters of the most Illustrious Persons who died in the year 1712*, (London: S. Holt for Andrew Bell, in Cornhill, E. Curll and G. Pemberton in Fleet Street, 1714), 188, puts the surrender of Landau at September 24, 1704 - he is out by two whole months. The evidence is clear that the garrison capitulated on November 25 and left on November 26, but it seems to be a matter of what one means by taken and surrendered - Winston Churchill, *Marlborough: His Life and Times*, Book 1, 903, 905, puts the fortress on his map as taken, probably meaning occupied, on November 28.

[71] Christopher Duffy, *The Fortress in the Age of Vauban*, 47. Unfortunately Duffy does not directly cite a source for that number, but he does include Emile Heuser's work in his bibliography which appears to be the source of the figure that arises from the *Verdun Gazette*. See also Michel Gondinet, *Un Héros Oublié,* 86-87, who rounds the number of allied casualties at about 10,000 citing the German historian Emile Heuser, *Die Belagerung von Landau 1702, 1703, 1704, 1713*, (Landau, Pfalz: Phillip Stoeppel,1913). Gondinet also cites the precise 9,322 number quoting Prince Louis of Baden in the *Verdun Gazette*. Duffy's number also appears to originate from Heuser citing the *Verdun Gazette*, as he does not indicate use either of the monograph by Michel Gondinet, or of the *Verdun Gazette*. Michel Gondinet at page 111, points out that the high casualties made "La prise de Landau, conclut-il, fut pour les Allies une victoire à la Pyrrhus." Gondinet also laments that the figure does not break down into killed and wounded as casualties includes both. Lediard, *The Life of John, Duke of Marlborough,* Vol. 1, (1736), 462, claims a garrison of 7,000 and 3,400 survivors, and the besiegers with 2,000 killed and about double that figure wounded. See also Lynn, "The French Case," 193, 195-196, citing Gaston Bodart, provides round numbers for casualties at Landau, claiming 5,000 attackers and 3,000 defenders. It is not clear if the casualty numbers represent killed and wounded or merely those killed. The French and German accounts tend to indicate Heuser's higher numbers which, like Gondinet's, appear to originate from the *Gazette de Verdun*.

[72] The defender's casualties are listed in round numbers by Lynn, "The trace italienne," 193, at 3,000 and by Godinet citing Heuser in *Un Héros Oublié* at 5,000 including both killed and wounded. Braubach, *Prinz Eugen von Savoyen*, 81, 475-476, cites correspondence between the Comte de Philipp Ludwig Wenzel Von Sinzendorf and Eugen indicating that Laubanie's garrison had 5,000 soldiers which would make the defense even more remarkable with only 1,600 casualties during the siege. Figures found in Dumont, Jean, Baron de Carlscroon, *The Life and Military History of His Grace the Duke of Marlborough, Prince of the Roman Empire and Generalissimo of the British Forces in the Late Reign of Her Majesty Queen Anne.* (London: Printed for M. Cooper, Pate-Noster-Row; W. Reeve, Fleet Street; and C. Sympson at the Bible-warehouse, Chancery Lane, 1754), 159, indicate that the

figures, it was obvious that the French had performed much better at defending Landau than they had at fighting the pitched battle at Blenheim. All sides recognized the fortress's strategic importance owing to its location on a transportation route between the Rhine and Moselle rivers. On the tactical level, the towered bastion was intended to put heavy fire along the ditch between the scarp and the counterscarp, while still sweeping the glacis. The tower bastion's lower guns were well-protected from enemy fire and would represent a nasty surprise to anyone who appeared in the arc of fire of the cannon that this emplacement sheltered.

By the end of November, the siege cannon were doing significant damage to the fortress and its defenders. The trenches were close and a practicable breach would soon be made. Landau and its garrison had fought a good fight, but no one could have been asked to suffer more for a fortress that was clearly lost - the Allies were too strong and well-positioned, and so there would be no relief for Landau in November of 1704.[73] As well, heavy casualties, damaged cannon, lowered stocks of munitions, and deteriorating morale made the decision to surrender the fortress and save the remaining garrison clear.[74] Can the example of the 1704 Siege of Landau help explain whether during the eighteenth century the attack was stronger than the

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Landau garrison started with approximately 7,000 troops and marched out with 3,400 after having inflicted 2,000 killed and 4,000 wounded on the besiegers. See also Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau, 187-188,* which claims in the siege journal that the defenders' casualties were "Au 5 novembre, 53m jour de siége, la force des bataillons était réduite à 180 hommes présens sous les armes. Il sortit de la place environ 2,400 hommes, et il y resta 600 blessés ou malades." It puts the garrison strength at 5,000. It should be recognized that casualty figures for ordinary soldiers are often incomplete and few differentiate between killed, wounded, and sick. Lediard, *Life of John*, Vol. 1, (1736), 310-311, mentions sickness among the French troops after Blenheim, with 150 being buried in one week at Ulm. One also wonders about the rates of desertion which is occasionally mentioned. Consider the comments of Churchill, *Marlborough*, 895, 902, regarding sickness and desertion of the French troops in the retreat to the Rhine, and on illness to both allied soldiers and horses during the siege.

[73] Gondinet, *Un Héros Oublié,* 65. Gondinet cites Heuser in arguing that Laubanie always hoped that Villeroy would return to save Landau. The morale in the fortress fell when it became obvious by the middle of November that relief was not coming.

[74] Augoyat, *Mémoires Inédits du Maréchal De Vauban,* 163-164.

defense? As Vauban would argue, the attack was certainly a necessary part of war, although it is possible that a determined defense may well discourage an attack, or at least prevent a rapid resolution to the siege.

VII. Nature and Friction at Landau

Friction of war plays a part that deserves some consideration; sometimes events provide unintended consequences that can have a major effect upon what occurs, regardless of technological or tactical innovation.[75] For example, the chance but significant blinding of Governor Laubanie during a bombardment probably affected the duration of the Landau siege; his example may also have inspired his soldiers and it is indicative that the siege journal relates several acts of heroism by his men, even though it was becoming plain that the end was near.[76] Without doubt, Landau's circumstance as a well-sited fortress on low, wet ground in a plain drenched by the river Queich provided great advantage to the fortress's defender and a major challenge to its attacker. That situation, however, is not the only reason for Landau's ability to hold out for as long as it did. The rainy weather certainly helped to support the defenders by adding to the already sodden ground and making trench building difficult. Damage to the locks prevented Laubanie from flooding the last ditch at the optimum time of the assault rather than in advance of it - an act which would surely have delayed the siege for an even longer time. Vauban discusses the problems of assaulting a fortress surrounded by marshy ground:

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[75] Peter Paret, *Clausewitz and the State*, (New York: Oxford University Press, 1976), 197-199. Paret discusses Clausewitz's eight major sources of friction in order to highlight the great difference between plans and outcomes. Clausewitz's sources of friction in war can be applied to several aspects of the Siege of Landau, including espionage.

[76] Augoyat, *Mémoires Inédits du Maréchal De Vauban,* 144. The account in the siege journal of a Swiss sergeant who stood firm and rallied his men in the face of an allied attack is but one example. Laubanie certainly wanted his men to be recognized for their heroism.

> It is the same in marshy ground, where you cannot hope to gain much depth. All this is just a question of degree, but attacks surrounded by water, or by marshes soaked to the surface which you can neither drain nor cross except by narrow paths, are undeniably the most difficult.[77]

Coehoorn also recognized the problem of working in water-soaked ground as a benefit to the defense.[78] This is not to mention the unhealthy conditions for engineers and soldiers working for days on end in mud and water. After all, tunnelling to build saps and place mines, or to advance under cover was next to impossible in soaked land. For that reason, the area selected to begin trenches was relatively dry as compared to most other points around the fortress, but even so the frequent cold rain of that fall, and the river's dampening of the ground were serious impediments to any siege.

The poor weather at Landau during the early fall of 1704 also affected the ability of the infantry soldiers to use flintlock weapons.[79] Moisture is the great enemy of black powder and Landau in the fall of 1704 was a very wet place. Laubanie's siege journal, Marlborough's letters and most of the various histories refer to the difficulties created by poor weather. Marlborough wrote of his own poor health in a letter to his wife Sarah.[80] The danger of being shot, and the heavy work of digging trench works in muddy ground, as well as the misery of the rain would have had a detrimental effect upon both the health and morale of the besiegers and their officers. Of all of the natural factors affecting the siege, the frequent heavy rains probably were the most significant in causing work delays and preventing any vigorous assaults. The siege journal

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[77] Vauban, *A Manual of Siegecraft and Fortification*, 93.

[78] Coehoorn, *The New Method of Fortification*, 5. Coehoorn writes that he regards wet ground as superior for defense.

[79] Vauban, *A Manual of Siegecraft,* 125-126.

[80] Winston Churchill, *Marlborough: His Life and Times*, Book One, 896-898. See also the mention of the effect of rainy weather on bombardments as recorded in Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau,* 149.

records that the breaks in the rain were usually quickly exploited while little was done by the besieger during rainy weather, which is mainly recorded as occurring in September.[81]

A critical problem for any attacker of Landau was to secure the sources for food and shelter for the large army. For the most part, small local villages and farms would have been the sources for both of those operational needs.[82] Such a situation underlines the need to maintain a good relationship with the local people. If there are no farmers, then there are no crops and even worse, a hostile civilian population can wreck havoc on an unwelcome military force. Landau receives a lot of rain in the autumn and enjoys warm, sunny weather in the summer months. The weather and terrain conditions are excellent for growing the grapes which were and remain an important crop in this agricultural area. At one point during the Landau siege Marlborough sent Laubanie a basket of local grapes to which Laubanie responded in kind with a basket of oranges and lemons.[83] The presentation of such gifts was clearly intended in the first instance to show the benefits of surrender and in the second instance that the defenders were well-stocked and thus not tempted by offers of fresh local produce. Along with cutting off the fortress from supplies it was just as important to maintain secure lines of supply and communication to Allied depots such as the stores held at Fortress Philippsburg on the Rhine, especially as the harvest season passed. Stockpiling food and fodder for later use reduced any

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[81] Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau,* 92-96. As the siege journal progresses there are fewer mentions of the weather and enemy activity becomes increasingly vigorous. See also Churchill, 896, citing Marlborough's letter of October 6 to his wife Sarah, regarding his travel delay due to poor weather October 5-6. The siege journal makes no mention of the weather at that time.

[82] Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau,* 57-60, Vauban's description of Landau and its surrounding area includes a description of the local produce available from the local farms and villages.

[83] Vosgien. *An historical and biographical dictionary,* Catharine Collignon, trans. Volume 3. (Cambridge: John Burges Printer to Cambridge University, 1801). The exchange of fruit is in the entry for Laubanie. Marlborough sent Laubanie a basket of grapes and received in return two dozen each of oranges and lemons. Vosgien's date indicating an end to the Landau siege in 1705 is obviously incorrect.

potential friction introduced by considerations of poor weather and the resulting risk of crop failure.

In examining the role of friction in the siege of Landau it is important to consider both the techniques of the attack as well as those of the defense. Vauban's earlier works seem much less proscriptive that his later edition, much of which is reproduced by John Muller.[84] Muller includes several references to Landau, and includes some useful diagrams which aid in making sense of trace italienne terminology. Muller argues somewhat fancifully that one must anticipate every circumstance affecting the siege as well as have very good intelligence about one's opponent. True to his era, Muller presents siege combat as relatively scientific and outlines specific methods of attacking and defending a trace italienne fortress in a variety of circumstances, including one involving wet ground. Muller notes Landau as being a naturally wet site with the ability to flood its ditches on command. In an obvious reference to the 1704 siege, Muller argues that Laubanie's failure to take the advice of Mr. De Valliere about delaying the opening of the sluices until the assault meant that the siege ended sooner than it otherwise would have.[85] However, other sources indicate that this is precisely what Laubanie intended to do; it was the failure of the locks that prevented him from waiting.[86] Godinet indicates in his monograph, *Un Héros Oublié*, that the delay is what caused the problem because the locks

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[84] See the point on Muller as a plagiarist raised by Janis Langins, *Conserving the Enlightenment; French Military Engineering from Vauban to the Revolution*, (Cambridge, MA: The MIT Press, 2004), 48-49. To be fair to Muller, many of the histories of the day contain long passages from previously published work. See also John Muller, *The Attac and Defense of Fortified Places*, Notes by David Manthey, Reprint of Second Edition 1757, (Woodbridge, Virginia: Flower-de-Luce Books, 2004, original published London, England: 1757), 7-8, 26-27, 143-147. Muller makes several references to Vauban in his text, apparently as a means of citing him as a source. Muller's comments on intelligence are worth considering as an element of friction and compared to those of Vauban, *A Manual of Siegecraft*, 21-23. Vauban refers to "Dame Fortune," which may well be considered part of what Clausewitz later termed friction.

[85]Muller, *The Attac and Defense of Fortified Places*, 170.

[86] Augoyat, Antoine Marie, Lt. Col. *Mémoires Inédits du Maréchal De Vauban*, 147-148.

controlling the water had been damaged by cannon fire and thus would not work to flood the second ditch when the assault started.[87] These examples of friction in war point to the effect that minor problems can have on the result - that is sometimes a specific task may seem simple in theory, but difficult in execution. Regardless, it is likely that even working locks would have only delayed the capitulation, not prevented it.

VIII. Why was Landau's long siege a significant event in the War of the Spanish Succession?

The siege tied up large numbers of Allied troops and thus prevented active pursuit of Tallard's defeated army and allocation of resources to deal with the Hungarian rebellion. Marlborough was concerned about obtaining suitable winter quarters on the Moselle, a situation that he viewed as just as important as taking Landau. Holding the Moselle would give his armies yet another direct route into France with his forces well-positioned at the beginning of the next campaign season to maintain the initiative. Obtaining secure river-supported positions early on would allow him to stock up for the coming operations into France and allow a rapid retreat should the situation not go as intended. His ability to make use of the Rhine River for a rapid return to Holland was a concern to his French opponents. Unfortunately for Marlborough, the lengthy siege took up remaining time of the campaign season and prevented an early dispersion to winter quarters.

While the Margrave is often criticised for his lack of vigour and is sometimes perceived as even being disloyal, it may well be that he merely represented a more cautious approach that

[87] Michel Gondinet, *Un Heros Oublie Le Lieutenant General Yrieix MasGontier de Laubanie (1641-1706) et Le Grand Siege de Landau (1704),* (Paris, Limoges, Nancy: Charles-Lavauzelle & Cie, Editeurs Militaires, 1928), 80. The title of the section discussing the problem is telling entitled "Echec de la Manoeuvre des Eaux." See also the siege journal in Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau,*150-151, 161-162, for a description of the problem of the damaged locks affecting control of the water.

simply did not mesh well with the more aggressive styles of Marlborough and Eugen. Regardless, his cautious conduct in 1704 and 1705 lends credence to the idea that his objectives, such as Landau, were regional in nature and that the Alliance was useful for him to achieve regional security from threats to Imperial interests. Unfortunately for the Margrave, he had undertaken a mission without adequate siege artillery and few engineers against a resourceful opponent, a situation similar to that of the 1702 siege. With hindsight, one can see that such a situation had to contribute to the length of the siege. Engineers were necessary to organize the trench works and give advice on proper use of artillery, which was a critical force in suppressing the defenders and breaching the walls. As well, Prince Louis' efforts were overshadowed by the arrival on site of the King of the Romans, who by virtue of his seniority who would be credited for the eventual success. Landau's significance lessened as its capitulation became obvious and the unfinished business on the Moselle drew away the attention of Marlborough. The Allies had set out ambitious objectives for the Danube and quite remarkably had achieved every one of them. By the end of the campaign Bavaria was no longer a threat, Vienna had been spared from attack and likely defeat, and the Allies now controlled the river routes along the Meuse, Moselle and Rhine rivers, all factors which put them into an excellent position for continued operations against the French next year. Although Landau's heroic defense had not prevented any of that from occurring, it had allowed Marsin to escape with the survivors from Blenheim and it had also helped worsen the relationship between Prince Louis and Marlborough. The Siege of Landau had contributed to the difficulties of coalition warfare that prevented exploiting these gains in 1705.[88]

[88] Parker, *Memoirs*, 98. Parker relates the plan formed during the siege and agreed to by the King of the Romans, Eugen, and Prince Louis to attack France from the Moselle with 40,000 Germans and 40,000 other troops in the spring of 1705. The Margrave was either unable or unwilling to live up to his commitment.

Therefore, Landau's defense did have an important effect upon the war. The steadiness of the French garrison at Landau demonstrated that the French army was capable of absorbing the loss at Blenheim, the loss of Bavaria as a major ally, and the loss of key fortresses without a military collapse. For the French, the War of the Spanish Succession became a war of caution after 1704 with a general aversion to taking risks thereafter both at sea and on land, and later battles such as that of Ramillies and Malplaquet only served to confirm the strategy. Laubanie was rightly celebrated as a hero for his gallant defense that France saw as its means of safety. Landau was confirmation of the grand strategy that Vauban had long prepared; the Allies could not afford the time and men to keep fighting well-stocked French fortresses, especially ones that unlike Landau had a real possibility of being relieved.

Although the court of Louis XIV seemed to pay little attention to the loss of Landau, except to compliment its steadfast commander, it had also seemed unconcerned with the loss of Blenheim. Though French morale in the theatre of operations was affected, France's resolve was unbroken after Blenheim. There were other major forces available as well as a large population to provide and support replacements for battle losses; after all, the soldiers were replaced next season.[89] The probable reason for that lack of apparent concern was that France saw the loss of Tallard and the removal of Bavaria from the war as an opportunity lost rather than as a major defeat. Certainly panic and recrimination over that setback would have served the Allies more than the ambitions of King Louis XIV; the cumulative strategic effect of Allies' successful campaign was to curtail dramatically French ambitions for decisive battle in the future. If

[89]For a blunt assessment of the condition of Villeroy's forces at Landau from Laubanie's siege journal, see Augoyat, *Mémoires Inédits du Maréchal De Vauban sur Landau*, 81-82. Consider also Churchill, *Marlborough*, 698. France had eight armies deployed in 1704: Villeroy had started in Flanders, Tallard on the Rhine, Marsin with the Elector on the Danube, Vendome in Piedmont, his brother, the Grand Prior, in Lombardy, La Feuillade in Savoy, Villars in the Cevennes, and the Duke of Berwick in Spain. See also Lynn, *Giant of the Grand Siècle*, 57-58. The resilience of France in replacing Tallard's army was a remarkable military achievement.

Tallard and the Elector of Bavaria had been able to attack Vienna, the War of the Spanish Succession may well have ended early on with a major Bourbon Empire in place encompassing most of Europe. Even if France did end the war with its chosen heir on the Spanish throne, under the terms of the Treaty of Ultrecht that heir had to renounce claims to the French throne just as the French heirs had to renounce claims to the Spanish throne; if at the end Austria was not the victor in the war, at least it did not lose as it could have in 1704.[90] The removal of Bavaria from the conflict and the rescue of Austria were the major political and military results of Blenheim. The negotiations with the Electress of Bavaria to surrender Bavaria's remaining fortresses were concluded during the siege of Landau, even if the garrisons themselves were reluctant to depart without being paid.[91]

The difficulties at Landau created doubt in the mind of Marlborough and in the governments of Holland and England regarding the strength and positioning of the French fortresses, and even more significantly, of the army's ability to fight a costly war against garrisons more strongly supported with shorter lines and more secure lines of communication than Laubanie had enjoyed at Landau. Despite Blenheim, France had not come even close to being defeated and Landau had made its contribution to showing what cost there would be to besieging the fortresses of France. As in all wars, the question had to be asked if the gains would be worth the cost in time, resources and lives. The Allies had control of the sea and freedom of movement on land, but their ability to exploit that freedom and to have their way on the issue of

[90] An important reason for the war was the Allies' fear that France's power in Europe would be greatly increased through dynastic union of the successions. Lynn, *Wars of Louis XIV*, 266-271, indicates that the French war aims were primarily defensive in regaining lost territories, asserting French military power, and in placing his grandson on the Spanish throne.

[91] Braubach, *Prince Eugen*, 82. See also Coxe, William. *Memoirs of John, Duke of Marlborough,* 335, for Marlborough's approach of insisting that his troops be "regularly paid."

who would sit on the Spanish throne was severely limited by the French strategy of fortress defense.

IX. The Siege of Landau - Revolution or Evolution?

Landau can serve as a useful case study as to the merits of the "Revolution vs. Evolution" debate and its implications for early modern fortress warfare. While the military revolution debate focuses on arguably major changes such as the use of effective gunpowder cannon, and consequential changes to fortress design, it also encourages one to consider if special features such as the bastioned towers represented some sort of radical design innovation that helped Landau to hold out, or if instead they represented a logical evolutionary change in Landau's defenses. Some changes, such as the introduction of bayonets and flintlock actions also represent change; the debate is partially over whether or not such modifications represent a dramatic revolution in military affairs, or instead a gradual evolution in military technology.[92] Christopher Duffy argues that the French received much prestige from their tremendous engineering capabilities, not just in the attack, but also in the defense of fortresses. Duffy indicates that after Blenheim there was reluctance, especially on the part of the French, to engage in pitched field battles and so the war then became one of position, based upon key fortresses which included Landau.[93] The reluctance to engage in a decisive battle, plus France's ability to raise large numbers of troops meant that the war would not be over quickly. It was not revolutionary technological change that had affected the strategic situation; instead it was

[92] One of the key points of the debate is whether or not a change taking place over a long time truly represents a revolution.

[93] Duffy, *The Fortress in the Age of Vauban*, 46-47.

concern over the risk of loosing a decisive battle, a situation with which Marlborough had to endure both from Prince Louis, and also from some of his Dutch allies early in the war.[94]

Like John Lynn, Duffy argues that the changes in fortresses are evolutionary ones. When examining the role of the trace italienne and gunpowder weapons in the War of the Spanish Succession, an aspect that bears consideration is whether or not these developments represent a revolution in military affairs, or rather an evolutionary process. A key aspect of the question is why the Landau siege took so long in a time when the conduct of successful sieges had developed into a relatively predictable pattern.[95] Vauban's rare and relatively new towered bastions were a feature which certainly contributed to the success of the defense of Landau Fortress of 1704. However, it must be stressed that design innovation did not play the only significant role in the drawn-out siege; tactical choices on the part of the commanders were also important.

The revolution in military affairs point of view that relates to Landau, as a fortress of the latest style of the trace italienne, is mainly articulated in the writings of Geoffrey Parker. Parker defends the opinion that revolutions in military affairs have provided the innovative changes that have led in turn to a dominant Western way of fighting wars. Parker argues that technological changes contributed to dramatic growth in size of armies, changes in tactics and strategy, and an increased effect of warfare upon society.[96] Parker responds to several of the criticisms of his thesis, including first, the concern over whether a development that occurs over centuries can be

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[94] William Coxe, *Memoirs of John*, 171, 177-182, 254-255, 259, 266, 283-284. Churchill, *Marlborough*, 577-587. His Tory enemies in the English parliament would have probably welcomed the loss of status that a defeat in battle could have presented Marlborough.

[95] Chandler, *The Art of Warfare*, 246. Chandler cites Vauban's timetable for capturing a well-defended six bastion fortress. Landau had seven tower bastions.

[96] Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500-1800*, (Cambridge, Ma: Cambridge University Press, 1996), 3.

properly termed as a revolution; second, the order in which various changes occurred; third, whether or not the effect of the technology is as dramatic as postulated; and fourth, the manner and means in which military change becomes geographically dispersed.[97]

In considering Parker's position about revolutions in military affairs and relating it to the Landau siege, one of the issues is whether or not the attack was the dominant form of war which led to a predetermined victory over a defensive style of warfare. Or did the defense do what its proponents needed and were expected to do in delaying the Allied army, and inflicting significant casualties upon that force. The revolution-evolution debate is at much risk of being centered too much on the technology and less upon other factors such as geography of the site, leadership, morale and other less tangible factors that are no less important than the capability of a particular innovation in military affairs. At Landau in 1704 there was no outcome, technological change, or tactical advancement indicating a revolution in military affairs that predetermined the victory of one party over the other. The outcome of the siege rested on the attacker's and defender's abilities to both inflict and to absorb punishment. Leadership and morale in the garrison played significant roles in favour of the defender and were likely an impediment to the besiegers, although at the end of the siege the tactical situation had eroded morale to the point that resistance no longer made sense. Despite Landau's strong fortification and vigorous defense, the Allies eventually forced a capitulation over that isolated fortress; leadership, location, time, and resources hardly represent a revolution in military affairs.

John A. Lynn is a proponent of the evolutionary side of the debate as presented in "The Trace Italienne and the Growth of Armies: The French Case." as published both in *The Journal of Military History* and in *The Military Revolution Debate*. Lynn critiques Geoffrey Parker's

[97] Parker, "In Defense of the Military Revolution," *The Military Revolution Debate,* (Boulder, Colorado: Westview Press, 1995), 337-365.

thesis that the trace italienne was the main technological innovation that led to an increase in army size. He uses the French example to make his case and in so doing discusses seven variables in the formula of siege warfare, to which one might add uncontrolled variables such as weather that could affect the outcome of a siege. He dissects Parker's argument using seven variables and argues that population size, wealth, and expansionist ambitions also played a significant role in the size of the French military forces.[98]

John A. Lynn helpfully notes many of the reforms and technological improvements that the French army received during the reign of Louis XIV. However, his main focus is upon the difficulties of feeding, clothing, equipping and paying that army which were challenges not limited to the French.[99] One recognizes that supply of and support for the fortresses were critical features in maintaining their longevity in the face of sieges. Landau had been well-stocked and vigorously defended, but it was isolated from any further aid or relief. Its only hope was to hold out longer than its besiegers who would have also been in need of supplies and shelter in the course of the operation. Given the wet conditions at Landau it is possible that some casualties on both sides were due to disease.[100] Although Landau of 1704 represented the state of the art in terms of fortress design and preparedness, it was poised against the modern siege techniques and an untenable situation which ultimately resulted in its capitulation. Further, it is worth

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[98] John A. Lynn, "The French Case," 297-330. See also the same essay in Clifford J. Rogers, ed. *The Military Revolution Debate, 169-189.*

[99] Lynn, *The Wars of Louis XIV 1667-1714*, 271, 288, and Lynn, *Giant of the Grand Siècle*, 148-158. The importance of proper and regular pay is critical to maintaining an effective military. Marlborough's technique of bring along large sums of cash was a remarkable and effective development. See also Braubach, *Prince Eugen*, 82. Consider the previously mentioned problem of the Bavarian garrisons of Ingelstadt, Kufsein, and Neuberg am Inn, who refused to abandon their fortresses unless paid.

[100] For discussion on casualties due to disease during the War of The Spanish Succession, see Lynn, *Giant of the Grande Siécle*, 426. Lynn cites Jacques Dupaquier who indicates that for ten soldiers killed in the war, "…one fell in action, three died of wounds, and six died from disease." The disease glanders killed many horses at Blenheim. Since we now know that the disease can be passed from horses to humans it is possible that some soldiers contracted the disease from their mounts.

considering whether or not evolutionary improvements such as tower bastions were significant on their own, or merely one of several features that contributed to a convergence of natural and human factors that protected this fortress for longer than expected, and perhaps for longer than necessary.

IX. Conclusion

The war of position and fortification was a key element of the War of the Spanish Succession and thus the situation in Northern Europe in the summer and fall of 1704 provides a good example of the importance of the fortress in that war.[101] Landau in the fall of 1704 held a well-motivated French garrison led by Lieutenant General Laubanie. At the time of the 1704 siege Landau was a well-designed and carefully-sited trace italienne fortress which was state-of-the-art for its day. As a skilled and experienced commander, Laubanie was well acquainted with the strategic situation and the importance of buying time to permit the Army of Alsace to escape. He started with a well-garrisoned and fully equipped fortress, and a solid understanding of the finer points of siege warfare. For example, Laubanie made use of the covering fire on the ditches provided by the second system design and he was also very clever about moving around his cannon and firing positions in anticipation of attacks. His use of mines at likely points of attack and ordering of aggressive sorties disrupted the trench works of the besiegers. These tactical choices were all techniques taken directly from his mentor Vauban's writings on defense. Laubanie defended his fortress in an aggressive fashion, and made use of sorties and the wet terrain to make the attacker's progress both slow and dangerous; only the failure of the damaged locks that took away Laubanie's control over flooding the ditches allowed the Imperials to take

[101] See Lynn, *Giant of the Grand Siècle,* 549-533, for a discussion of the role of the fortress in positional warfare.

the covered way and thus prepare a breach in the ramparts. With functioning locks, the siege may well have lasted into December; the Margrave certainly was concerned about the possibility of Laubanie flooding the ditches during an assault.[102] The commander and defenders of Landau deserve much credit for their resolve and élan in the face of overwhelming odds. They made the siege costly for their attackers, and the historiography from all sides is clear in crediting the garrison for a job well done. They were well-prepared to fight and resolved to do their duty. If nothing else the fact that the victors permitted Laubanie to prepare the terms of the capitulation showed high regard and respect for a commander and garrison who fully deserved the honours of war and who bore no shame with their objective of engaging the Allies in a long and costly siege fully achieved.

Conversely, the siege was also as long as it was because the Allies were slow to marshal the siege equipment and engineering expertise needed to be effective in their bombardments and trench-works. Even so, Landau represents an early if crude example of the Allies combining Vauban-style parallel trenches with massive Coehoorn-style bombardments, techniques which were to be used frequently in the later part of the war.[103] The besiegers were likewise hampered by poor weather, inundated ground, and a perceived or real lack of motivation on the part of the Margrave Prince Louis of Baden. Despite his high rank and senior position, the Margrave saw himself increasingly in the shadow of the Duke of Marlborough and Prince Eugen of Savoy. While Prince Louis favoured taking Landau, he was not in favour of continuing the campaign beyond retiring into winter quarters. The Margrave was possibly hampered in temper and

[102] Augoyat, *Mémoires Inédits du Maréchal De Vauban*, 145-146. Even at this late point in the siege, Laubanie benefitted from a supportive spy. Gondinet, *Un Héros Oublié*, 72-74, citing Heuser, discusses the role of a German spy in informing Laubanie as to allied reinforcements and assault preparations as a consideration in the decision to capitulate. This information provides yet another example of friction affecting the outcome.

[103] Ostwald, *Vauban Under Siege*, 254-295. Ostwald demonstrates convincingly that contemporary accounts valued the artillery over the trench works as the most important factor in sieges.

ambition by his injured foot, and by his recognition that his army needed to rest and recuperate after a hard fought and lengthy campaign season. Despite gaining captured cannon from Ulm, he had would have had to equip those guns with green crews, which would have further reduced the siege's efficiency. As well, Prince Louis would have opened the 1704 siege with the memory of the 1702 siege that he had directed which took 84 days.[104] Though isolated, Landau was not an easy place to take and thus the Margrave may well have resigned himself to a long siege, a circumstance which did not sit well with the strategic need to free up the army. In this regard, his outlook on the strategic situation was much more provincial than that of Prince Eugen, who was highly concerned about the threat to Austria from the French in Italy and from the Hungarian rebellion. As well, Eugen always had to keep an eye on the politics of the Austrian court in providing the necessary pay and equipment to maintain his army. The role of the English and Dutch in trying to mediate with the Hungarian rebels and Austria, while allied with the Austrians, was complex and likely represented the blue-water Tory and pro-army Whig division over the conduct of the war. As maritime powers with an interest in trade, neither England nor Holland ever seemed completely comfortable with land warfare conducted deep into continental Europe.

Marlborough, though well-motivated to follow up on the victory of Blenheim by engaging the French so as to limit their ability to defend against his plans for the subsequent campaign season, needed to ensure that the politics at home continued to support his prosecution

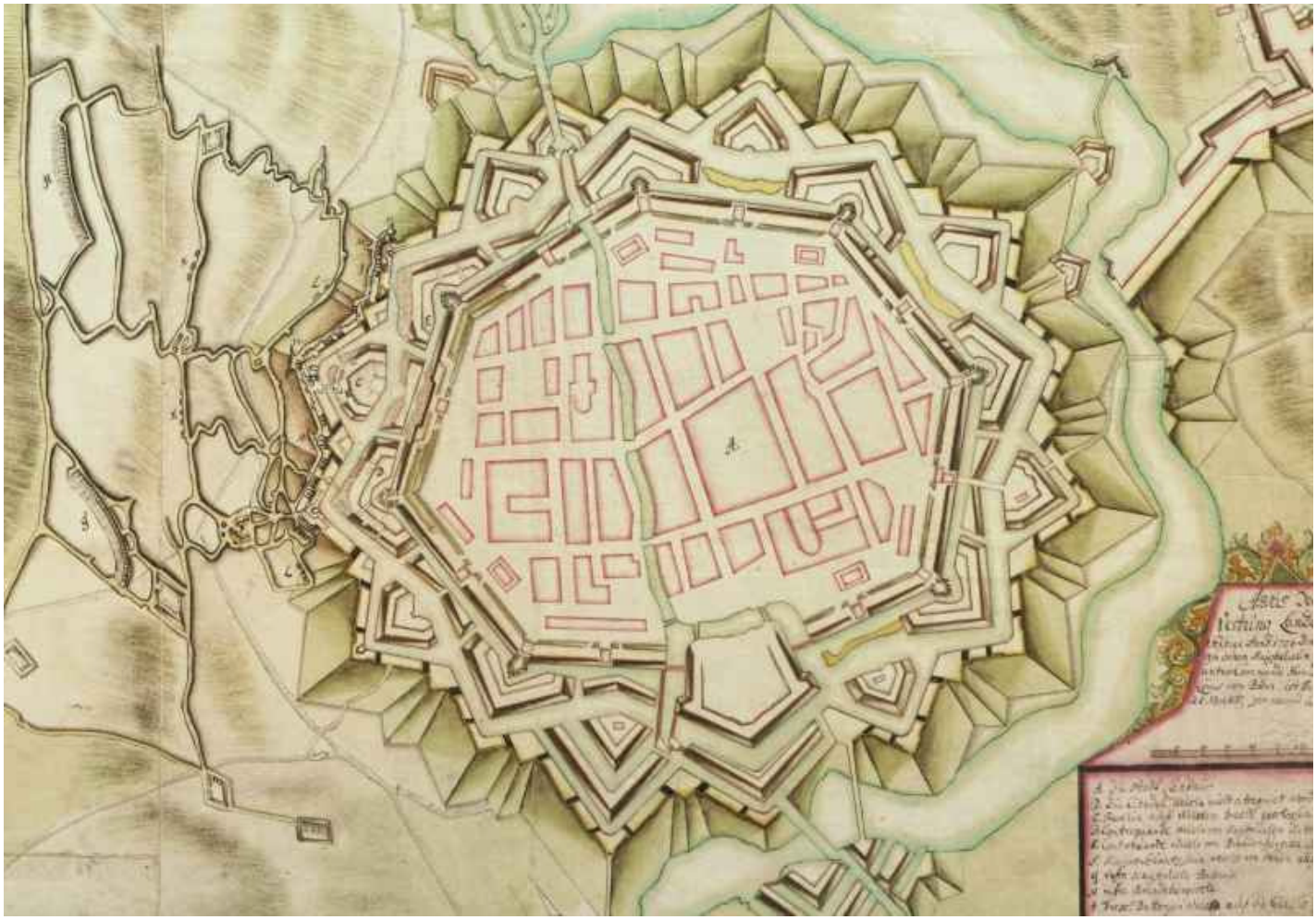
[104] See the account of Harald Skala, *Die Belangerungen von Landau 1702 und 1703*. (Germany, 2005). www.kuk-wehrmacht.de/gefechte/17021703Landau.html, access obtained 15 March 2010.According to Skala, the Margrave's forces attacked in 1702 from the south using similar techniques as in 1704, though the siege started in June and ended in September. As in 1704, the Margrave had little in the way of siege equipment at the start, so his first efforts were to prepare positions and begin building the parallels. Unlike 1704, his attack was at three points and included heavy bombardment of the town, rather than the ramparts. Some of the common elements favoured the defender – a well-stocked and provisioned fortress with experienced gunners and infantry. As in 1704, there was no relief expected. Appendix E is a map of 1702 Siege of Landau with the main efforts directed at the French gate and the crown work. Compare that to the 1704 Siege Map shown in Figure 1 and those in the other appendices.

of the war. Another consideration affecting the progress of the operation was Marlborough's need to secure his internal lines by withdrawing forces from the siege to prepare for taking control of suitable winter quarters along the river Moselle. As the siege dragged on it became obvious that any additional campaigning would be only to secure winter quarters, and so Marlborough's attention shifted from protection of the siege to preparation for the next campaign season. A rejuvenated campaign meant building political and economic support for the war in London and the Hague, and ensuring that the winter quarters were well located in places suitable both for ease of supply and for tactical flexibility of movement when the season commenced again. Though England's numbers of troops were small relative to the continental powers, its major contribution was the money that parliament provided to pay a large share of the expenses of the war. Successes such as Blenheim encouraged support back home, but long sieges were costly and lacked the rapid glory of cavalry charges and security of decisive combat. In that respect, Landau became one of many sieges that contributed to the weariness of what became a long war that would ultimately result in Britain seeking a separate peace with France and abandoning its allies, yet ultimately denying France the growth that it desired and costing it a tremendous amount of human and financial resources. The siege of Landau should also alert historians that a broad view is needed when examining issues of inter-allied co-operation. While much of the historiography emphasizes problems between Marlborough and his Dutch allies, Allied coalition difficulties were not limited to those disagreements. The interests of all component members of the Allies need to be considered to build a better understanding of the conduct of the war. In that regard, Prince Louis of Baden seemed to have much more limited war aims than his partners and was thus less inclined to take aggressive action against the French forces after his goals were achieved.

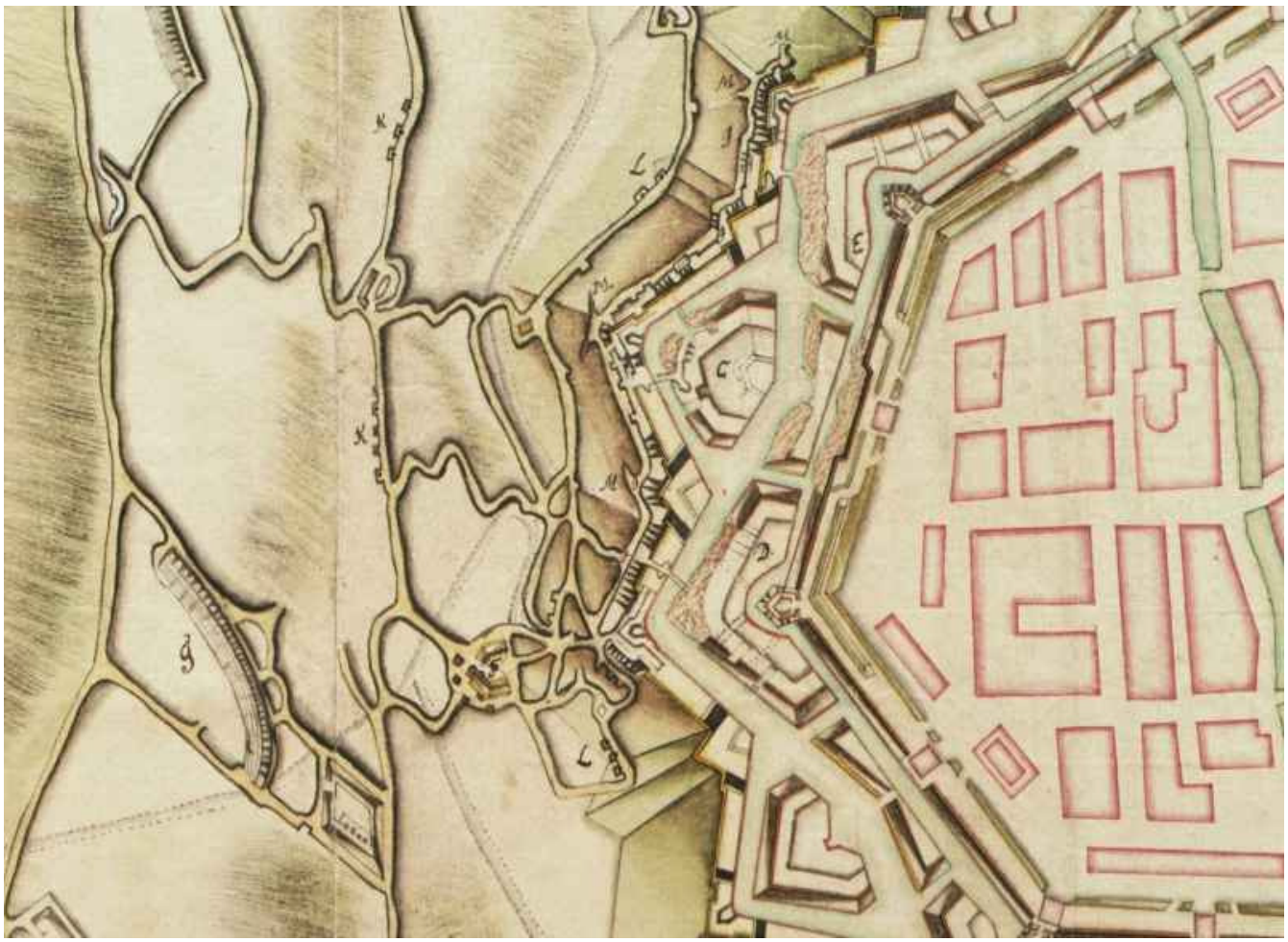
The strong defense of Landau made an important contribution to preventing any vigorous pursuit of the defeated French army, even if one had been desired. It also delayed reaction to Allied difficulties in Hungary and Italy, and provided a slow and agonizing end to the central European campaign season of 1704. The siege also suggested that there could be strategic implications for future campaigns in the war since this operational level siege had proven so costly in terms of time, manpower and resources against that well-defended trace italienne. In general terms active defense of fortresses worked for the French while pitched battles against the like of Marlborough and Eugen had not. The 1704 Siege of Landau demonstrated that an active defense could prolong a siege to the point where the delay could affect operational goals and even have strategic effects. Landau had capitulated, not to revolutionary tactics or wonder weapons, but rather because it had fulfilled its mission for that campaign and there remained neither need nor ability to carry on the fight. Even more significantly, Landau signalled the beginning of a change in strategy for King Louis XIV that would increasingly value the defense over the attack as a way of avoiding the risk of major battles that could lose the war.

Appendix A –Enlarged map scale bar and index of Landau under siege in 1704

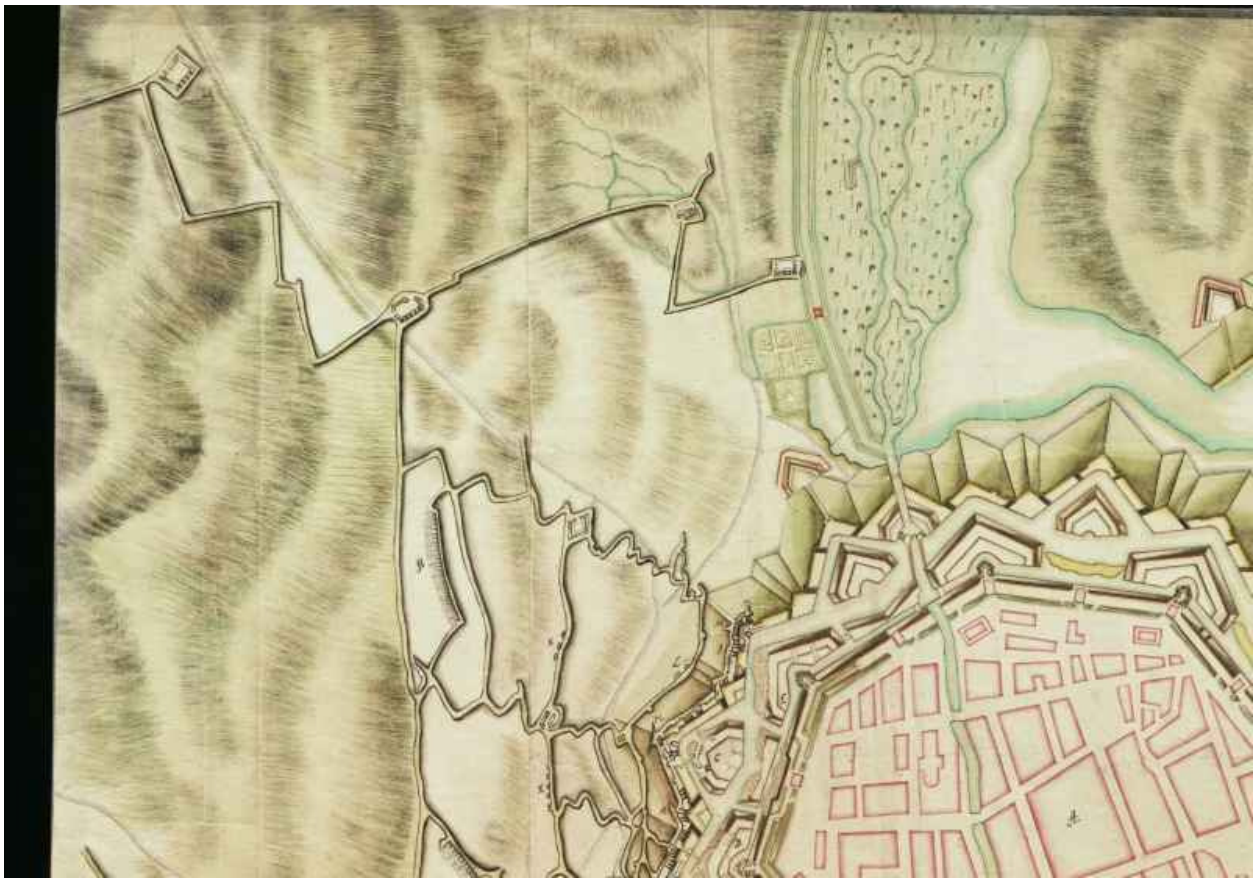
Appendix B - Southern trench works, showing several parallels, saps, and emplaced batteries.



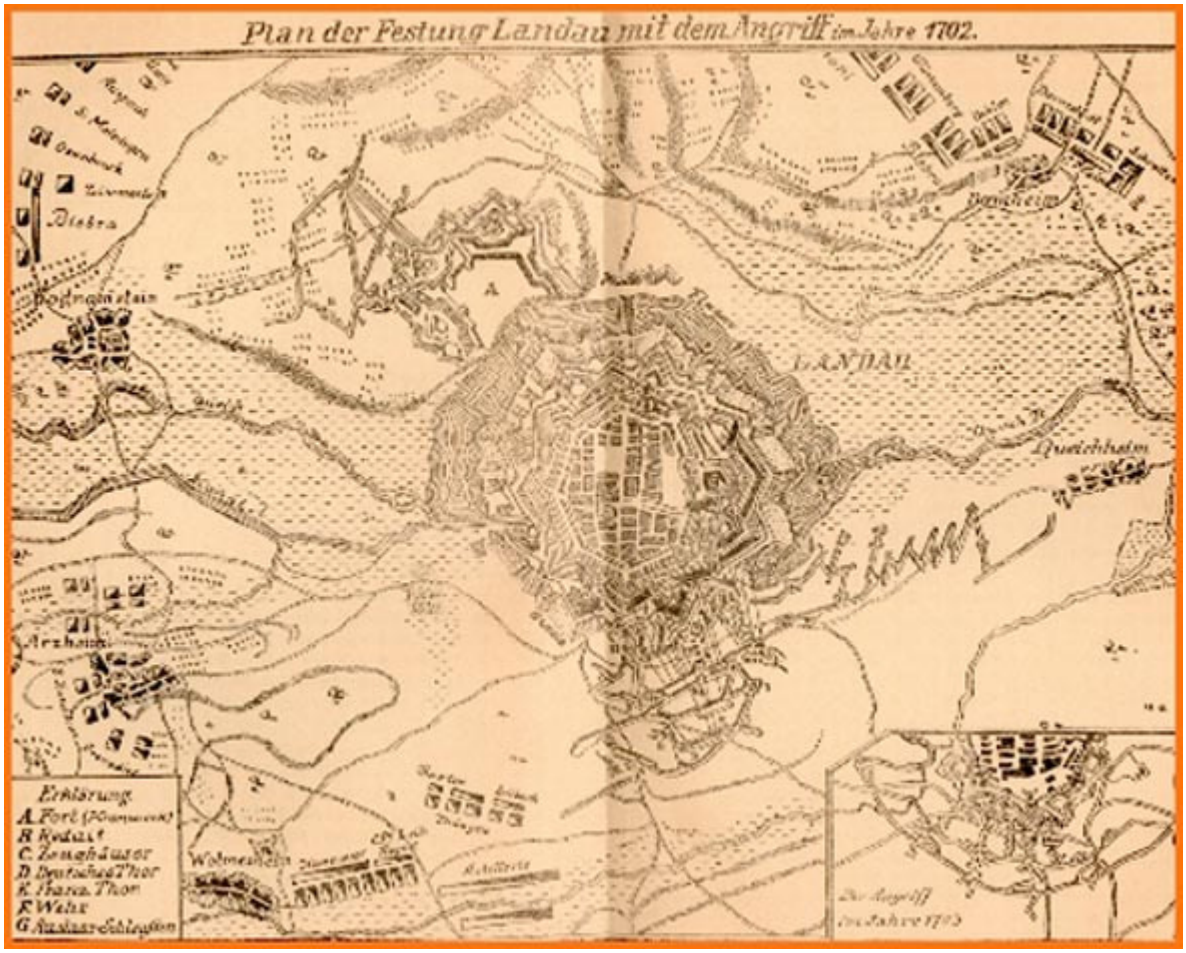
Appendix C – Enlarged detail of trench works at the French Gate. Note the heavy damage to the bastions, ravelins, and scarp from artillery fire and mines.



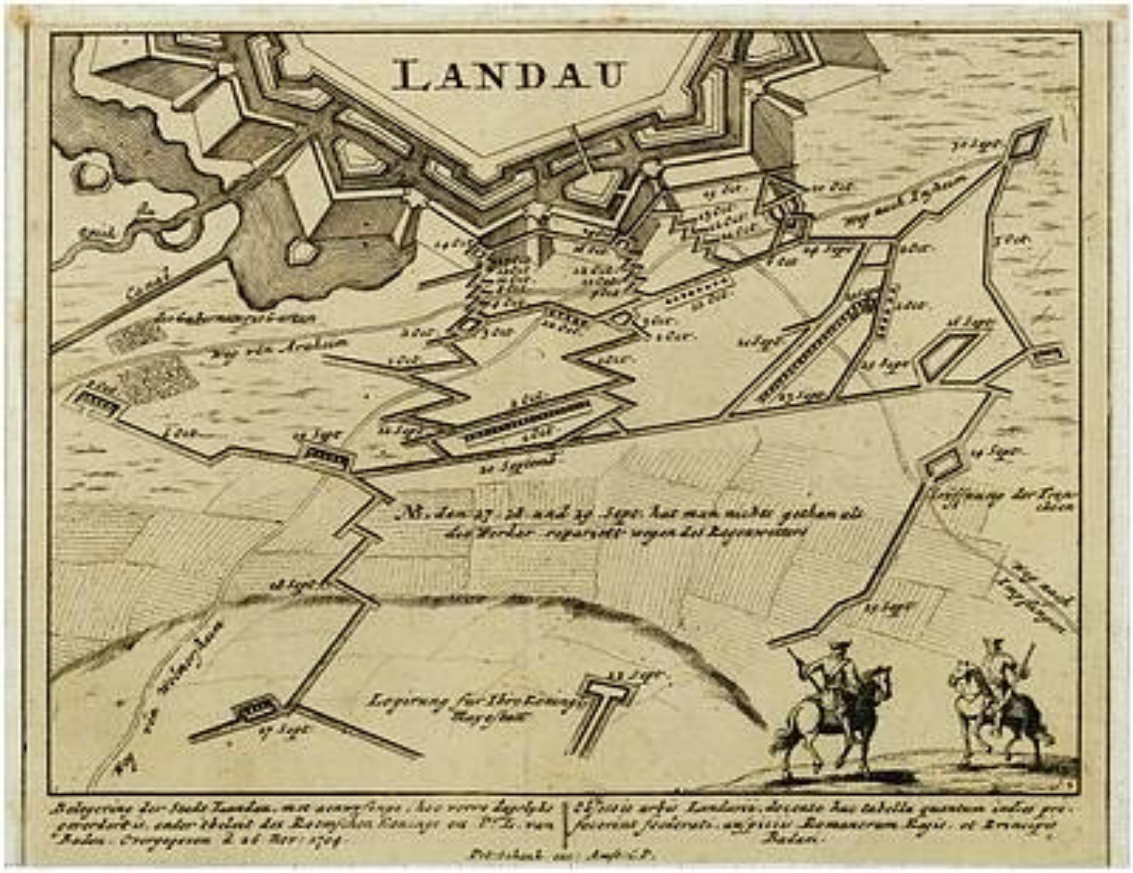
Appendix D - Enlarged south-western trench works and battery locations.



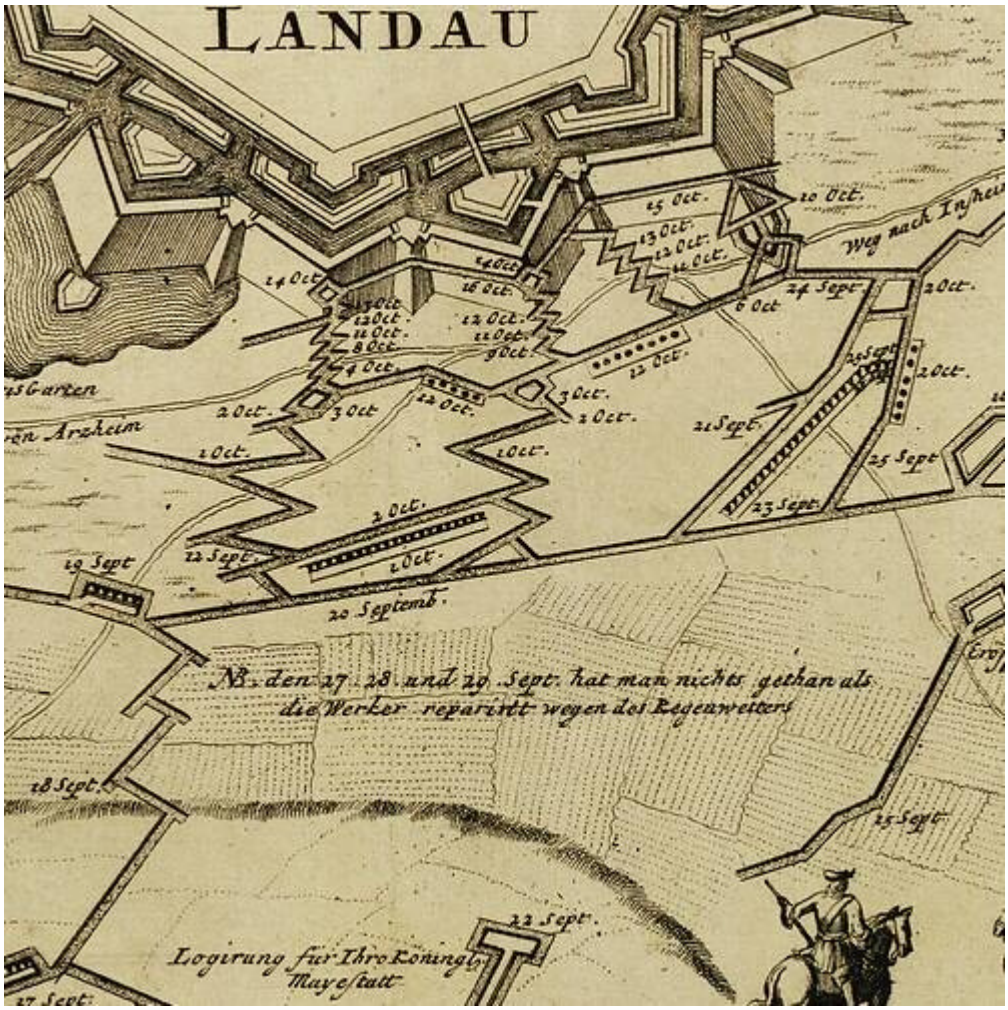
Appendix E – Map of 1702 Siege of Landau from Harald Skala, *Die Belangerungen von Landau 1702 und 1703*. Germany, 2005. www.kuk-wehrmacht.de/gefechte/17021703Landau.html, access obtained 15 March 2010. This image, though only indirectly cited by Skala, is probably from Emile Heuser, *Die Belagerung von Landau 1702, 1703, 1704, 1713*. (Landau, Pfalz: Phillip Stoeppel, 1913). Scale is approximately 1:33,333. A better quality image may be available in German archives, or in the collection at the University of Heidelberg.



Appendix F - Pieter Schenk, *Belegering der Stadt Landau, met aenwysinge , hoe verre dagelyks gevordert is, onder? t beleit des Roomschen Konings en Pr. L. van Baden, overgegeven 'd 26 Nov. 1704*, Amsterdam: [1706?], http://portal.digmap.eu/, directed to http://teca.bncf.firenze.sbn.it/TecaViewer/index.jsp?RisIdr=BNCF0003496469, access obtained 14 April, 2010. This work was probably part of Schenk's 1706 collection of military town maps called *Theatre de Mars.* This map shows the progress of the Imperial trenches with dates. Note that much of the digging takes place in October. A better view may be seen in the blown-up version at Appendix G. The scale is approximately 1:7,500.



Appendix G – Enlarged map from Appendix F showing Imperial trench progress with dates. Note how the progress slowed in October as the trenches came closer to the fortress's French Gate, which is indicated by the path from the covered way to the ravelin through the tenaille to the rampart.



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Abris der Vestung Landau wie selbige anno 1704 den 24 sept. von denen kaijserlicken und allijrten unter commando Ikro durchl. printz Louis von Baden ist belagert und den 26 november per accord übergeben worden. [1704?] http://digmap1.ist.utl.pt:8080/records/Kbr/html/kbr_1_1060401.html, directed to http://mara.kbr.be/kbrImage/CM/1060401.imgf, access obtained 7 March 2010.

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