

FEEDING VICTORY: THE LOGISTICS OF THE FIRST CRUSADE 1095-1099

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ABSTRACT

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This thesis addresses the First Crusade with a focus on the crusaders' logistics during the course of the campaign. It addresses the campaign in three phases, each the focus of its own chapter. The first chapter covers the preparatory phase of the crusade which began with the Council of Clermont in 1095 and lasted through the siege of Nicaea in 1097. Crusader logistics in the preparatory phase, though negatively affected by five years of ecological crisis, operated under familiar regimes, and benefitted from the support of their Byzantine allies. In the second phase of the Crusade, from 1097 through 1098, the crusaders departed Nicaea and their Byzantine allies crossing into Asia Minor and Syria. This transition carried the crusaders beyond the reach of Byzantine infrastructure, and into an unfamiliar and often hostile landscape. At Antioch, the crusaders suffered the greatest number of losses of any siege in the Crusade, with the winter months posing the greatest challenge to their logistical systems. The final phase the Crusade was drastically different than the previous phases. In this phase, the armies of the First Crusade separated into two factions, and took disparate paths south before reuniting at Arqah. Isolated from the Mediterranean Sea and the crusaders' familiar logistical system, Raymond IV of St. Gilles was forced to adapt his logistical approach to guarantee his faction's survival in enemy territory. In approaching the First Crusade from a primarily logistical perspective, this thesis

shifts the focus from the battles and tactics, to address the support systems which enabled the crusaders to seize ultimate victory at Jerusalem.

INTRODUCTION

“You may rest assured that we are now besieging Antioch with all diligence and hope to soon capture it. The city is supplied to an incredible extent with grain, wine, oil and all kinds of food.”¹ So wrote Anselm of Ribemont in a letter to the Archbishop of Reims in February of 1098 as the Christian army of the First Crusade sat encamped on the outskirts of the Syrian city. Yet, despite the hope conveyed in these words, the reality faced by the crusaders was bleak. The siege of Antioch would last from October 1097 until June 1098, the longest and most taxing military engagement of the First Crusade. Throughout the siege, the crusaders were plagued by starvation, exhausting their stores of provisions, scavenging what scarce foodstuffs could be found in the surrounding areas, and unable to resupply while the city stood. However, at the end of the siege, the city’s stores were revealed to have been likewise devastated and devoid of food, crushing the crusaders’ hopes of resupplying upon its capture. Unable to resupply, the exhausted armies of the First Crusade would soon find themselves likewise besieged within Antioch by the Seljuk forces under Kerbogha, their hopes and expectations of respite crushed beneath the campaign’s bleak reality. Had God abandoned them?

Their predicament had been at least two years in the making. In 1095, Pope Urban II preached the sermon that sparked this first of the Crusades.² Traditionally, the Crusades have been conceived as two centuries of relatively consistent warfare between European Christians and Islamic powers in the Middle East which concluded with the crusaders’ defeat at Acre and

¹ Munro, Dana Carleton. *Letters of the crusaders* (Philadelphia: University of Pennsylvania Press, 1902) 4.

² “Crusade” as a term did not exist in any meaningful way during the First Crusade. Christopher Tyerman claims that the term, as it is now understood, was likely coined in the early 1700s. The First crusaders understood their campaign more in terms of a journey or a pilgrimage. The earliest usage of a term even resembling “Crusade” did not come about until the fourteenth century with the French *croisade*- “path of the Cross,” which referred to the processes involved in raising funds for one such journey. Tyerman addresses this in greater detail in both his 2011 book *The Debate on Crusades* and his 2019 *The World of the Crusades*.

expulsion from the Middle East in 1291. Following Acre, the Crusades and ideas of Crusading persisted as a cultural force in Europe throughout the High Middle Ages and the Renaissance.³ The predominant European military powers involved included Frankish, Germanic, and English forces on the side of the Christians, and the Islamic powers of the Seljuk Turks, and the Fatimid and Abbasid Caliphates. These wars have been analyzed from a variety of historical perspectives including religious, political, gender, economic and military studies. Logistical issues concerning supplies of food for the armies, while a vital factor in the crusaders' varying degrees of success in the repeated conflicts, have received far less focus than the individual battles, tactics, and commanders. Even less of the scholarship regarding crusader logistics fully account for environmental factors, such as seasonal drought, seasonal weather, and topography, affecting the availability of and the crusaders' capacity to transport food, fodder, weapons, armor, building supplies, and money. Given the considerable importance of logistics in influencing the outcome of any given military engagement, it merits greater consideration than it has received.

This thesis argues that the crusaders' successes, trials, tribulations and the ultimate victory during the First Crusade resulted from their ability to extract and transport food, drink, and equipment to their armies both while on the march and during prolonged military engagements. This argument stands in nuanced contrast to that posited by John France in *Victory in the East* attributing the Crusade leaders' experience and skill as military commanders, bolstered by the crusaders' faith in God, their faith in themselves and in their leaders, as the

³ Jonathan Riley-Smith argues in *The Crusades: A History* that the Crusades existed as part of an overarching movement in Europe which persisted until 1798 with the Hospitallers of St. John's final surrender to Napoleon. The reason for identifying the Fall of Acre in 1291 as the end of the Crusades is because it was that specific defeat which ended the crusaders permanent occupation of Middle Eastern territory. The idea of Crusading lived on, and continued to influence developments in Western European countries, but their presence in a Middle Eastern arena was over.

primary cause for their victory.⁴ For France, logistics play a tertiary role behind considerations such as battle tactics and military prowess. In this study, it is logistical proficiency that determines available tactical options and influenced the leaders' approach to the Crusade.

Regarding logistics, John Lynn writes that "Mars must be fed... The soldiers who practice his craft need food, clothing, and equipment. All these must be produced, transported and distributed to contending forces if they are to begin or continue the contest."⁵ Logistics then refers to the systems and processes for moving the necessary equipment, supplies, provisions, specifically defined as supplies of food and drink needed for a long journey, and people for military operations. For the purposes of this thesis, food and drink will be the foremost focus, as they are the factors the crusaders most frequently struggled with in the First Crusade. In terms of historiography, studies of logistics deal with questions regarding how war was prepared and supplied as opposed to questions over motives, individual battles, and tactics.⁶ As such, logistics addresses questions regarding military provisioning, the process of supplying an army's food, drink, and equipment, especially those necessary for a journey or campaign. Generally speaking, logistics have been applied as a focus of study in post-18th century wars, though this is in part due to the lack of consideration medieval and premedieval historians and chroniclers paid to such details.⁷ However, medieval armies and military leaders had to account for such considerations if they sought victory on the field of battle. One persistent logistical issue the crusaders faced in their campaign through the Middle East was that of provisioning food and water for their masses of armed knights, the unarmed

⁴ John France, *Victory in the East: A military history of the First Crusade*. (Cambridge: Cambridge University Press, 1994). 25, 373. While logistical proficiency can be considered an aspect of military skill, France is more focused on battles and tactics rather than the logistical systems the crusade leaders implemented to support their activities.

⁵ John A. Lynn. *Feeding Mars*. (Boulder;San Francisco;Oxford: Westview Press, 1993) vii.

⁶ *Ibid.*, 5.

⁷ *Ibid.*, 6.

peasants accompanying the armies, and their animals which included livestock, beasts of burden, and warhorses. In addition to the human lives lost due to starvation from lack of provisions, these issues negatively affected the crusaders' fighting ability as they lost valuable warhorses the knights needed to engage the enemy. During their campaign, the First crusaders sought to move armies en masse from Europe through the Middle East to realize the goal of liberating Jerusalem from Muslim hands. Their stated objective required the invasion, and eventually included the occupation, of Middle Eastern lands, a task which the nobility amongst the crusade leaders addressed with care. Therefore, the question remains, why were logistics such a persistent problem for the crusaders, and how did they succeed despite this challenge?

To answer this question, this thesis addresses the First Crusade from 1095 through 1099 divided into three stages, each the focus of its own chapter, beginning with the preparatory phase of the First Crusade from the Council of Clermont in 1095 to the crusaders' departure from Byzantine lands after the battle of Nicaea in 1097, the march from Nicaea to conclusion of the siege of Antioch in 1098, and finally, the march from Antioch to the crusaders' ultimate victory at the siege of Jerusalem in 1099. In the First Crusade, the crusaders did not enjoy the benefit of landholdings from the outset of the campaign. This meant that more so than in the later Crusades, the crusaders would be reliant on Europe and the Byzantine Empire for transporting the bulk of their food to the armies. Despite this additional strain, the crusaders managed to be victorious in their stated mission of liberating Jerusalem. During the later Crusades by contrast, the crusaders occupied territory within the Middle East, marking a change in their status from an invading force to a residential occupying force, as well as a change in their potential sources of provisions.

Yet despite these advantages, the crusaders ultimately failed in each of their later Middle Eastern campaigns' stated missions.

In each chapter, this thesis analyzes how the crusaders sought to acquire and transport enough food to satisfy the needs of their armies, who at the height of their strength numbered around 60,000 combatants and noncombatants, around 20,000 horses, as well as the thousands of pack animals they used to move their supplies. Included within this analysis will be observations availability of provisions on the environmental factors which dictated availability of provisions, namely agricultural productivity and aridity.⁸ In addition, it is necessary to address medieval religious belief, particularly those which concern sin, penance, and the relation between religion the physical world, as this relationship helped provide a motivation for the First Crusade.

As with any historical research, writing the story of the First Crusade requires evidence from those who lived through it. For written primary sources, the accounts of Albert of Aachen from around 1102, Fulcher of Chartres' account completed in 1127, Robert the Monk's *Historia* from as early as 1106-1107, Raymond D'Aguilers and Baldric of Bourgueil whose respective works were finished prior to 1105, as well as the works of Peter Tudebode from 1111 and Guibert of Nogent completed as early as 1106 all provide European perspectives on the First Crusade. Many of these works build upon the anonymously produced eye-witness account

⁸ Such considerations will be framed within the context of the Medieval Climate Optimum, a climatic phase first identified by H. H. Lamb in 1965, which exhibited generally higher temperatures and increased rainfall throughout Europe as compared to the Little Ice Ages which preceded and followed the period. The Climate Optimum lasted from around the ninth through thirteenth centuries during which time agricultural production experienced drastic growth, due to a multiplicity of factors ranging from climatic conditions to technological and agricultural advancements. During this period, farming expanding to altitudes and latitudes previously uncultivable since the time of the Roman Empire. This warming trend was not universal in its manifestations, with different regional trends appearing across the globe during the period, however, the European experience of the Optimum was generally beneficial for agriculture. The Middle East on the contrary experienced prolonged periods of drought. Such considerations have been addressed in the following works, John Aberth. *An Environmental History of the Middle Ages: The Crucible of Nature*. (London: Routledge Ltd, 2013.) xiv-xv. Richard C. Hoffmann. *An Environmental History of Medieval Europe* (Cambridge: Cambridge University Press, 2014) 322. Yochanan Kushnir, and Moerdechai Stein. "Medieval Climate in the Eastern Mediterranean: Instability and Evidence of Solar Forcing" *Atmosphere* 10, (2019) 1-24

entitled *Gesta Francorum* which is believed to have been first compiled as early as 1101.⁹ Of these authors, only the *Gesta* author, Fulcher of Chartres, Peter Tudebode, and Raymond D'Aguilers personally participated in the First Crusade, with Guibert, Baldric, Albert and Robert all writing their works in the aftermath. In addition to the works of European chroniclers, crusader letters written while on campaign provide further eyewitness accounts of the Crusade. Furthermore, Anna Comnena's *The Alexiad*, which was published in 1148, and the Islamic chronicler Ibn Al-Qalanisi's *Damascus Chronicle of the Crusade* published some time before his death in 1159, provide additional details and interpretations the Crusade from Byzantine and Islamic perspectives. However, as this thesis relies on the Christian chroniclers for the majority of its primary source data, it is necessary to analyze their works more closely, beginning with Robert the Monk.

Robert the Monk, who finished his *Historia* around 1107, was cloistered at the monastery of St-Rémi in the bishopric of Reims, writing after the events of the First Crusade after its completion under the orders of his abbot. He claims to have witnessed Urban II's speech at Clermont in 1095 in person.¹⁰ As he was not among the Crusade's participants, his account of the conflict was compiled after the Crusade's completion utilizing the written and oral sources made available by former crusaders, of which *Gesta Francorum* served as a main primary source.¹¹ Robert's *Historia* seems to have been commissioned by his abbot for its value as propaganda, calling on the First crusaders' success to garner support for a Second Crusade into the Holy Land to reclaim territories lost in the interim.¹² Robert's writing style leans heavily on scripture and

⁹ Rosalind M. T. Hill. ed. *Gesta Francorum: The Deeds of the Franks and the other pilgrims to Jerusalem* (New York: Oxford University Press: 1962) ix-x.

¹⁰ Carol Sweetenham. *Robert the Monk's History of the First Crusade: Historia Iherosolimitana* (Aldershot, Burlington: Ashgate, 2005), 4.

¹¹ *Ibid.*, 4-5.

¹² *Ibid.*, 6-7.

hyperbole. He presents the Crusade leaders as heroes of the faith and the very agents of God's will on earth. In addition to their piety, Robert praises their martial skill. One example of this is seen in his description of Godfrey of Bouillon before the Crusade's start. Robert writes,

Godfrey was handsome, of lordly bearing, eloquent, of distinguished character, and so lenient with his soldiers as to give the impression of being a monk rather than a soldier. However, when he realized that the enemy was at hand and battle imminent, his courage became abundantly evident and like a roaring lion he feared the attack of no man. What breastplate or shield could withstand the thrust of his sword?¹³

Robert is exaggerating, describing the prince as superhuman to behold. Godfrey was to be seen as a prince pious and merciful to his subjects, and invincible to his enemies. Here is what his audience, the would-be participants in the Second Crusade should aspire to, the legacy they could share in. Against such pious and gallant princes, he places the villainy of the Muslims. The atrocities he attributes to them are of biblical proportions.¹⁴ Chief of their depravities is the occupation and defilement of the Holy Sepulchre in Jerusalem. As God's agents in the Muslims' removal from the Holy Land, the crusaders' actions and victories were explained and justified by the simple, three-word phrase, "Deus lo vult." God wills it. As such, every action, event and happenstance that the crusaders experienced was due to God's activity among their ranks.

In similar manner to Robert's work, Albert of Aachen's *Historia*, completed around 1102, utilized survivor accounts of the Crusade selected by Albert himself to present an account he was not present to witness.¹⁵ Among the chroniclers, Albert appears to be a generally empathetic figure towards each group involved in the Crusade. He does not denigrate non-Latin Christians either in the Middle East or in the Byzantine Empire. In further contrast to his fellow chronicler, he recognizes the distinction between Turk and Saracen amongst the crusaders'

¹³ Ibid., 84.

¹⁴ Ibid., 80.

¹⁵ Susan B. Edgington. *Albert of Aachen's history of the Journey to Jerusalem: Volume 1: Books 1-6. The First Crusade, 1095-1099.* (Surrey: Ashgate, 2013) 3.

enemies and does not indulge in denouncing them as an abominable race or any similar insult, even praising them where their actions were admirable.¹⁶ He is also critical of the crusaders in several cases indicating where their actions were in the wrong, such as with the case with the People's Crusade's plundering of Byzantine lands and the crusaders' massacre of the Jews in Cologne.¹⁷

If Albert was empathetic, and Robert prone to exaggeration, Guibert of Nogent was a Frankish elitist. Completing his work as early as 1106, Guibert believed the First Crusade represented an important chapter in Frankish history. As such, his *Gesta Dei per Francos*, translated to *The Deeds of God through the Franks*, seeks to present the campaign as a largely Frankish affair. His elitism is made apparent in the disparaging tone he adopts towards the People's Crusade and the less wealthy participants of the main wave of crusaders. He goes into detail about the ecological crisis present in France from 1090-1095, addressing the rampant poverty and famine it caused. Despite this, he denounces as absurd the desperation and haste that the people took in their preparations to depart. He writes, "hard times reduced everyone's wealth, nevertheless, when the hard times provoked everyone to spontaneous exile, the wealth of many men came out into the open, and what had seemed expensive when no one was moved, was sold at a cheap price... seven sheep brought an unheard-of price of five cents..."¹⁸ In his assessment of the People's Crusade, he treats the group as an unruly mob, and Peter as an incapable leader who only held his position through his popularity as a preacher. By contrast, he lauds the princes' careful administration and diligence in raising the necessary funds for the journey.¹⁹ He

¹⁶ Ibid., 8-9.

¹⁷ Ibid., 29, 38-9.

¹⁸ Robert Levine, *The Deeds of God through the Franks by Guibert of Nogent*, (Middlesex: The Echo Library, 2008), 41-2.

¹⁹ Ibid., 42.

does not indulge in the level of praise exhibited by Robert the Monk, but he clearly views the noble leaders with a degree of respect and deference that he denies Peter and the People.

Baldric of Bourgueil and Ralph of Caen are the last of the chroniclers who did not participate in the Crusade. Completing his *Historia* in 1105, Baldric is similar to Guibert and Robert in their usage of *Gesta Francorum* as their main primary source, but in terms of temperament he more closely resembles Albert. Baldric recognizes the Byzantines' support for as an absolute necessity in the crusaders' activities in the East. As such, where Guibert, Robert, and several of the eyewitnesses accuse Alexius I of being cowardly or conniving, Baldric recognizes justifiable caution. For Baldric the crusaders were not superhuman religious heroes, they were human, fallible, prone to avarice, but not incapable of goodness either.²⁰ Ralph of Caen, by contrast, favors Robert in style if not topic. His *Gesta Tancredi*, completed around 1118, highlights the Norman contributions to the Crusade, though it is primarily those of Bohemond and Tancred, and not of Robert of Normandy.²¹ He reasons for doing so seem to have been in offering a corrective to other accounts of the Crusade which present, an overly Franco-centric narrative. The result of his endeavors is an account of Tancred and Bohemond's exploits in the Crusade which rivals Robert's predilection of hero-worship. Where the account diverts its gaze from the Norman princes, it provides more details about the crusaders' battle tactics which are useful to determining what would have been needed for the campaign. On the topic of hyperbole, neither Robert nor Ralph cannot afford to present unbelievable accounts in either of their stated missions. The basic events of the Crusade accounts line up with those of the

²⁰ Susan B. Edgington, *Baldric of Bourgueil "History of the Jerusalemmites": A Translation of the Historia Ierosolmitana*. (New York: The Boydell Press, 2020), 76-7. Baldric calls Baldwin and Tancred equal in terms of integrity, yet also recognizes their greed as the primary motivation for their expedition to Edessa.

²¹ Bernard S. Bachrach and David S. Bachrach. *The Gesta Tancredi of Ralph of Caen: A history of the Normans on the First Crusade*. (Abingdon: Taylor & Francis Group, 2016) 7.

eyewitnesses even if the motivations and explanations read as embellishment. It is in those basic facts where different details are made evident that these accounts can be relied upon.

For eyewitness accounts, this thesis draws from the anonymous author of *Gesta Francorum*, Peter Tudebode, Raymond D'Aguilers and Fulcher of Chartres. The four authors began the Crusade in three camps. The *Gesta* author set out with Bohemond's army, but later joined with Raymond IV's forces. Peter Tudebode and Raymond D'Aguilers accompanied Raymond IV of St. Gilles in his army of Provençals from the beginning of the Crusade, while Fulcher of Chartres followed Robert of Normandy until joining with Baldwin of Boulogne as he departed to take Edessa before returning to the rest of the crusader armies, then stationed outside Antioch.

The most important of these authors, at least in terms of influence, is ironically the one about whom the least is known. The author of *Gesta Francorum*, which seems to have been completed in 1101, never provides his name, or station, yet his writing style and focus suggests that he was a knight or soldier rather than a priest, like Raymond and Fulcher.²² He identifies the waves of Christians departing France and Germany as armies from the beginning of his narrative, and suggests that the people in various towns they travelled through harbored no delusions about whether the crusaders were pilgrims or invaders.²³ At Castoria, he freely admits that the crusaders plundered the town when they were refused use of the market, setting it ablaze before leaving, yet he does not seem to render any moral judgement on this action. This stands in sharp contrast to his assessment of the People's Crusade as he blames the Christian's abominable behavior which included pillaging, arson, and theft, against the Byzantines for their banishment from Constantinople. This is the only time in his narrative that the *Gesta* author suggests

²² Hill. *Gesta Francorum*, ix.

²³ *Ibid.* 2, 8.

Alexius' actions against the crusaders to be justified. The *Gesta* author is content in his account to present the campaign as primarily military affair with a religious motivation. God is not absent from the narrative, but it was through martial prowess and valor that he suggests the crusaders were victorious.

Completing his own *Historia* in 1105, Raymond D'Aguilers offers his perspective on the Crusade as a chaplain for Raymond IV. Raymond D'Aguilers can be seen as a crusader apologist, as he freely admits to being at the start of his narrative. His perspective is that of a man who believes that the crusaders' journey was one of holy inspiration and design, and as such he has little tolerance for the Byzantines, whom he repeatedly reviles as traitors to their alliance with the crusaders.²⁴ As a man of the cloth rather than one of steel, Raymond attributes the crusaders' victories to God's intervention and their sufferings and failings to their own sins. Where Raymond shines is in his descriptions of the cities and his perceptions of the events. In addressing both the crusaders times of plenty and of famine, he writes of the former, "Even those who stayed in camp enjoyed the high life so that they ate only the best cuts, rump and shoulders, scorned brisket and thought nothing of grain and wine."²⁵ Then during the famine, "Our victorious army consequently came back to camp without provisions and the ensuing famine drove prices so high that two solidi scarcely had the purchasing power to one day's bread rations for one man."²⁶ Raymond's account is useful because of these details and descriptions more so than its handling of the larger-scale events of the Crusade.

Peter Tudebode is the next eyewitness, and his account, completed in 1111 has been seen as controversial by some Crusade historians. John Hugh Hill and Laurita L. Hill, who provide the

²⁴ John H. Hill, and Laurita L. Hill. *Raymond D'Aguilers Historia Francorum Ceperunt Iherusalem*. (Philadelphia: The American Philosophical Society, 1968) 18, 27.

²⁵ *Ibid.*, 31.

²⁶ *Ibid.*, 35. Both accounts come from different points during the siege of Antioch

translations of both Raymond D'Aguilers' and Peter Tudebode's works highlight the fact that Tudebode has not infrequently been viewed as a plagiarist, taking the *Gesta Francorum* and adding elements of Raymond D'Aguilers' work.²⁷ However, while it is true that the three authors do seem similar in the content of their works, Tudebode is more than willing to contradict the others, especially where Bohemond, Raymond IV, and their respective merits are concerned. He makes little issue of how the crusaders razed Castoria, but rather than claiming it was for their refusing the crusaders use of the market, Tudebode claims the crusaders burned the city to kill the community of heretics within.²⁸ Tudebode continues the trend of supporting the idea that the Crusade was a divine mission, but is not blind to the crusaders' faults even if he offers justifications for some of them.

The final remaining eyewitness this thesis utilizes is Fulcher of Chartres. Completing his work in 1127, Fulcher is the religious fanatic of the group, who interprets nearly every event he records as the proof of God's intervention in the Crusade. One example of this is seen in his account of the crusaders' naval passage from Brisindi. He writes of a shipwreck as follows,

For among all these ships we saw one near the shore which suddenly cracked through the middle for no apparent reason. Consequently, four hundred of both sexes perished by drowning but concerning them joyous praise at once went up to God. For when those standing round about had collected as many bodies of the dead as possible, they found crosses actually imprinted in the flesh of some of them, between the shoulders.²⁹

He shares a similar penchant for description to Raymond D'Aguilers, at times providing specifics on the weapons and machines used by the crusaders, though as to their numerical strength, he greatly exaggerates.³⁰ He seems to have taken at least a passing interest in the

²⁷ John H. Hill and Laurita L. Hill. *Peter Tudebode: Historia de Hierosolymitano Itinere*. (Philadelphia, The American Philosophical Society, 1974) 4.

²⁸ *Ibid.*, 25.

²⁹ Harold S. Fink. *A History of the Expedition to Jerusalem, 1095-1127 Fulcher of Chartres* (New York: W.W. Norton and Company. 1969) 76.

³⁰ *Ibid.*, 81-2. He estimates the crusaders to have an army 600,000 strong, with 100,000 armed in mail and helmets.

crusaders' tactics and logistics, especially at Nicaea where he describes their usage of oxen to transport warships from the coast, over the mountains, to be deployed in the lake bordering the city.

Crusader letters provide another source of eyewitness information as they were written by individuals present during the campaigns in the midst of the trials they faced. The letters served as a primary means by which the crusaders could communicate their experiences with correspondents, often family members or clergy, back home in Europe.³¹ Nine letters dating from June 1097- September of 1099 survive to relay information from the front lines of the conflict, each of which were drafted by Crusade leaders and priests.³² While they rarely speak of logistical considerations in direct terms, the letters do provide insight into some of the authors' hopes, expectations, and sufferings during the campaign, all of which serve to show moments where they were or were not in possession of sufficient provisions.

It is not enough, however, to rely solely on the Christian chroniclers and the crusaders' letters. The story of the Crusades is not the sole concern of European historians. The Byzantine princess Anna Comnena, and Islamic chroniclers such as Ibn Al-Qalanisi recorded the Crusades as they interpreted the events from Byzantine and Islamic perspectives respectively. *The Alexiad*, completed by Anna Comnena in 1148, reveals many obstacles the crusaders faced in obtaining provisions as they travelled through Byzantine lands. One such obstacle was that of perception and reputation, as the Byzantines clearly recognized the armies as potential invaders in the best cases and as unruly belligerent mobs in the worst.³³ From a Byzantine perspective, the crusaders

³¹ Munro, *Letters of the crusaders*, 2. Munro maintains that all but two of the existing letters were drafted by the higher-rank crusaders, and all of them provide information inaccessible through other sources.

³² Malcolm Barber and Keith Bate. *Letters from the East: crusaders, Pilgrims and Settlers in the 12th-13th Centuries* (Abingdon: Taylor & Francis Group, 2010)1-11.

³³ Elizabeth A. S. Dawes. *The Alexiad of the Princess Anna Comnena: Being the History of the Reign of Her Father, Alexius I, Emperor of the Romans, 1081-1118 A.D.* (New York: Barnes & Noble, 1967) 258-9.

simultaneously represented a threat Emperor Alexius I would have to mitigate, and a logistical problem he would have to navigate, on account of the size of their forces, as he had to ferry them through Constantinople without them irreparably damaging his cities or countryside. While Alexius had requested military aid from western Europe to help reclaim territory lost to Muslim forces, the crusaders were not what he seems to have been expecting. Their sheer numbers coupled with the past conflicts between some Byzantine and Frankish nobles, meant that the crusaders had the potential to devastate the Byzantine countryside if left unchecked.³⁴ The primary means by which Alexius could control the crusaders while they marched through his lands and camped outside Constantinople was through controlling their access to Byzantine provisions. This being the case, reputation and power politics became important factors influencing the crusaders' logistical capabilities.

Ibn Al-Qalanisi's *The Damascus Chronicle of the Crusade* provides an alternate account of the Crusade as it reached the Middle East. It is an excerpt from a larger chronicle covering the period of time from 1056 to al-Qalanisi's death in 1160, in which he addresses the crusaders' arrival in the Middle East. At that time, he speaks of the political and military conflict between multiple Islamic factions vying for power in the region as a detriment to their defense of the region.³⁵ In his writings on the crusaders, Ibn Al-Qalanisi is direct and concise, addressing their actions on the battlefield and during sieges, including commentary of the machinery employed, and the Muslim responses in kind. The crusaders and Muslims were held no delusions of being friendly, much less allied forces to one another, as the Franks had hoped the Byzantines would have been. As such, logistics became a battlefield unto themselves, with Ibn Al-Qalanisi citing

³⁴ Ibid., 258-60.

³⁵ Gibb, H. A. R. *The Damascus Chronicle of the Crusades: Extracted and translated from the chronicle of Ibn Al-Qalanisi*. (New York: Dover Publications, Inc., 1932) 14.

multiple occasions in which the Muslim armies sought to exploit the crusaders' logistical inadequacies to their own advantage.³⁶ The Christian chronicles, crusader letters, *The Alexiad*, and the *Damascus Chronicle* all reveal critical moments where the crusaders' actions, trials, successes, and failures all rotated about an axis of logistical proficiency. The term axis is appropriate here because it refers to a central unifying structure about which dynamic elements move. As military action, success, and defeat are all dynamic states rather than static ones, and logistical proficiency, the degree of skill and ability one shows in procuring sufficient resources, influences each of them, it becomes the axis unifying each of them.

In terms of historiographical analysis and influence, this thesis employs interdisciplinary works that span logistics, military planning, the Crusades, as well as some elements of environmental studies as they pertain to the crusaders' food supply, specifically focused on drought, famine, aridity, and seasonal weather extremes. From a military perspective, the Crusades have received far more focus on the battles and leaders involved, as well as their religious and ideological belief, with logistics playing, at best, a supporting role to these overarching narratives. For example, in the words of John France, "It was indeed a hard training which produced coherent armies and ferocious fighters. It was this, their belief in God and themselves and their able commanders which gave them victory in the East."³⁷ These two sentences serve to summarize France's underlying argument in *Victory in the East*, yet logistics or any reference to them fail to appear. However, logistics are indispensable when waging any extended campaign, especially one on foreign soil. Logistical concerns limited what the crusaders could realistically accomplish during their campaigns. They were limited by their capacity to transport supplies, burdened by the daily dietary needs of their people and animals,

³⁶ Ibid., 46-8.

³⁷ France. *Victory in the East*. 373.

vexed by political and economic factors influencing their access to local markets, and vulnerable to attack while marching through hostile lands.³⁸ The environment in terms of weather, agricultural productivity, topography, and even the scars inflicted on the landscape by years of previous wars, influenced in some degree, each of the aforementioned logistical concerns, placing further limits on the crusaders' potential logistical systems outside their ability to control.

As the focus of this thesis is logistics, it is necessary to first address the limited attention logistics have received regarding the Crusades. This deficiency has been identified by both John A. Lynn and John H. Pryor, with the latter claiming that while "A considerable amount of attention has been devoted to military logistics in the classical and Early-Modern periods, but virtually none to military and naval logistics in the Middle Ages."³⁹ Of the two, Lynn's survey addresses trends in the development of logistics from the Middle Ages through the Vietnam War, while Pryor's addresses the Crusades specifically. The Middle Ages represent the point in time when military leaders began to attack their enemies' provisions, seeking to weaken their forces before annihilating them on the field of battle.⁴⁰ This is not to suggest that such tactics were newly developed in the Middle Ages, rather that they became an increasingly common practice, and a preferred method of victory. Pryor's work consists of multiple papers presented at a 2002 workshop addressing the logistical concerns of the Crusades ranging from food and equipment supplies, to harbors and naval resources, to roads, communications, maps, and money. In doing so his work helps fill in the historiographical gap surrounding the logistics of the Crusades. The contributing authors, amongst whom were included Pryor, John France, Bernard S. Bachrach, John Haldon, and Thomas F. Madden, share the primary concern of showing how logistical

³⁸ These are calculated in Chapter 1 with accompanying graphs from the sources used to find the necessary values.

³⁹ John H. Pryor. *Logistics of Warfare in the Age of Crusades*. (Aldershot: Ashgate Publishing, 2006) xi-xii.

⁴⁰ John A. Lynn. *Feeding Mars* (Boulder;San Francisco;Oxford: Westview Press, 1993) 34-35.

studies of the Crusades can be undertaken, and how they are essential to understanding the Crusades' courses and outcomes.⁴¹ However, Pryor does admit the inherent difficulty in applying modern understandings of logistics to the Crusades, echoing one of France's arguments regarding the problem of determining accurate numbers of crusaders from the primary sources, a problem common to all studies of medieval warfare.⁴² Furthermore, none of the studies represent a comprehensive look at the First Crusade overall, nor do they suggest logistics as a primary cause of victory. Rather, they identify, through smaller case studies, the minutia of different aspects of the crusaders' logistical practices, including the use of roads, wagon trains, coinage, and the necessity of Byzantine shipping. As such they are invaluable resource to this study. Still, the story of the First Crusade requires a deeper logistical focus to be complete, one which addresses how multiple systems were utilized to feed and arm the crusader armies, and in doing so fuel their victory.

As would be expected, given the nature of the crusaders' expedition, the crusading armies would not be able to always rely on their productive systems in their various home regions. On the path to ultimate victory, the armies of the First Crusade experienced moments of both prosperity and suffering. The story is riddled throughout with periods of starvation and destitution resulting from the crusaders' attempts to draw sustenance from marginal, heavily exploited, and even damaged environments that could not bear the load of thousands of additional people and animals traversing through them. It is a story that begins in drought, which was afflicting the soon-to-be crusaders, across class lines, as Urban issued his call to liberate Jerusalem.⁴³ In his 2013 book *An Environmental History of the Middle Ages: The Crucible of*

⁴¹ Pryor, *Logistics of Warfare in the Age of Crusades*. 292.

⁴² *Ibid.*, 2.

⁴³ Levine. *The Deeds of God*. 41-2.

Nature, John Aberth addresses medieval thought regarding the environment, stating his belief that “the thousand years of medieval history from 500 to 1500 were among the most crucial for determining man’s future relationship with nature.”⁴⁴ In doing so, he argues that dynamic periods of change in human attitudes towards the world around them were often the result of “ecological catastrophes” such as the Little Ice Age, the Black Death.⁴⁵ His argument has a particular resonance in the history of the Crusades when one factor in the events in Europe immediately preceding the crusaders’ departure. In the five years preceding Clermont, the Franks, who would comprise a substantial portion of the crusaders’ overall forces, had experienced severe drought, and crop failures leading to uncertainty regarding their futures in their native lands. Aberth argues against full commitment to the notion that ecological stimuli are sufficient to explain dynamic human interactions, noting that economic, political, and cultural factors encouraged change in conjunction with environmental ones.⁴⁶ Each of these factors must likewise be taken into consideration when addressing the reasons for the driving the crusaders to undertake their initial invasion. However, that the ecological crisis of 1090-1095 was the exception rather than the general state in Europe, and that Aberth’s claims over the importance of catastrophes in driving change have been challenged.⁴⁷

The story of the First Crusade is one of war, in which 60,000-80,000 combatants and non-combatants combined moved across European, Byzantine, and Middle Eastern lands. Their journey through these lands brought the crusaders into contact with various landscapes, each

⁴⁴ John Aberth. *An Environmental History of the Middle Ages: The Crucible of Nature*. (London: Routledge Ltd, 2013.) xiv.

⁴⁵ *Ibid.*, xiv-xv.

⁴⁶ *Ibid.*, 26-27.

⁴⁷ Most notably by Richard C. Hoffmann who argues that ecological changes prompted a multiplicity of response from Medieval people, not all of which resulted in invasions of foreign lands. Rather he argues, that ecological troubles were understood by farmers in medieval times and that they adapted their farming practices to compensate. *An Environmental History of Medieval Europe*. 125-6.

presenting different obstacles inhibiting their abilities to acquire provisions. In addition to the strain that the crusaders placed on the lands they travelled through, the environment, in terms of its climate, weather, and terrain, likewise placed a strain on the crusaders. As stated in Brian Allen Drake's 2015 work on the American Civil War, "war may be waged in the name of politics and ideology, but it is fought by bodies moving through space."⁴⁸ This suggests that in the study of warfare, the conditions of the bodies, including hydration, nourishment, mass, and numbers, and the factors presented the space through which they move and fight, such as terrain, weather, and temperature, are important considerations. Drake's work suggests that balance of power between these two forces is shown to favor the space rather than the bodies.⁴⁹ The environment's influence over the course of battle extends well beyond the battlefield, including the days, weeks, and even months preceding an engagement as the people are subject to the conditions through which they march and set up camp. While issues of drought, aridity, and topography presented environmental challenges to the crusaders' logistical systems, these systems could likewise be bolstered by bounteous harvests. However, the crusaders also had to contend with the fact that the landscape, in terms of its carrying capacity and terrain, had been acted upon by the various Islamic factions in response to the crusaders' arrival for the purpose of inhibiting their ability to invade the region. Unable to transport sufficient food and fodder to satisfy the full caloric requirements of their armies, the crusaders were forced to take from the land, which could not produce during droughts, making it difficult to maintain a robust fighting force for an extended period.

Studies of medieval logistics are complicated by the fact that it is very difficult to determine from the primary sources how many people actually went on these armed pilgrimages.

⁴⁸ Brian Allen Drake. *The Blue, the Gray, and the Green*. (Athens: University of Georgia Press, 2015) 48.

⁴⁹ *Ibid.*, 226-7.

However, historians have tried to compensate for this problem by employing multidisciplinary approaches. The 2011-2012 article by John Haldon et al. entitled “Marching across Anatolia: Medieval Logistics and Modeling the Mantzikert Campaign,” represents one such study, though it refers to a campaign which shortly precedes the First Crusade. Combining the efforts of historians, archaeologists, and computer scientists, the study set out to establish the range of possibilities for the size of the armies at Mantzikert in 1071. The research teams addressed roads, carrying capacity of pack animals, caloric requirements of humans and animals alike, available machinery for transportation, and the 24-day maximum time period within which transported supplies could be used in addition to estimates of maximum crop yields, range over which foraging parties can stray from the main army, and even population data concerning the areas which the campaigning armies passed through, all to establish models for estimating the greatest possible numbers of combatants the armies could muster.⁵⁰ The results suggest that even conservative estimates on the size of the armies carried a heavy burden on the land, and further emphasize the environment’s influence on logistics by addressing the effect terrain has on mobility and transportive capability.⁵¹ Using such data, this thesis will seek to more accurately determine how many people could have been provisioned on the journey and in doing so, better understand why provisioning remained a relatively consistent problem for the crusaders.

This opens up questions regarding the beleaguered fighting force, namely who, or more specifically, what, was a crusader? A crusader, as they would have understood themselves from Urban’s preaching, was an armed pilgrim, preferably a wealthy, heavily-armed-and-armored, mounted knight from amongst the nobility, on a divine mission to liberate the Holy Land from

⁵⁰ John Haldon et al. “Marching across Anatolia: Medieval Logistics and Modeling the Mantzikert Campaign.” *Dumbarton Oaks Papers* 65-6, (2011-2) 217.

⁵¹ *Ibid.*, 225.

the enemies of God. The crusaders believed themselves to be embarking on a form of pilgrimage, one which included military and settlement components.⁵² These factors created a cultural movement that promoted both warfare and settlement, such as the colonization of the Holy Land, but placed requirements on the religious community, the local lords, and the families of the crusaders to support these pilgrimages. Of these factors, Riley-Smith suggests, that lordship and kinship pressures were most influential in motivating potential crusaders to action because they carried not only the cultural pressures of living up to one's familial heritage, but also because they offered a degree of aid in the practical aspects of preparation for the journey, namely potentially vast sources of wealth and manpower.⁵³

As a concept, a crusader was oxymoronic, especially in the eyes of Byzantine observers, who saw armies of belligerents rather than groups of penitents.⁵⁴ The crusaders were expected and instructed to perform their military function in the service of God against His enemies, an obligation which necessitated they be armed.⁵⁵ Pilgrims, by contrast, were expected to be unarmed, wearing simple clothes and travelling with nothing but bare essentials and some money for the road.⁵⁶ These seemingly mutually exclusive roles resulted in conflict as the crusaders sought to use their roles as pilgrims to rely on Christian charity, while external observers, recognizing armies on sight, felt no obligation to offer knights, soldiers, and especially not perceived rioters, those courtesies entitled to pilgrims.

⁵² Jonathan Riley-Smith. *The First Crusaders, 1095-1131*. (Cambridge, U.K.: Cambridge University Press, 1997), 189.

⁵³ *Ibid.*, 130.

⁵⁴ Dawes, *The Alexiad*, 252-3.

⁵⁵ Sweetenham, *Robert the Monk*. 80-1.

⁵⁶ William Melzer. *The Pilgrim's Guide to Santiago De Compostela*. (New York: Italica Press, 1993) 132-3. Pilgrims were entitled to ask for charity in the form of food and lodging while on the road. Upon receiving such requests, medieval Christians denied such requests at great personal risk, opening themselves to divine retribution for their refusal to care for the penitents.

The first chapter of this thesis concerns the preparatory phase of the First Crusade, from Clermont in 1095 to Nicaea in early 1097. This chapter will address the identities of the crusaders as well as the regions of Europe they departed from, the people and animals involved in the journey, the sources for provisions available for collection and transportation, and the challenges posed to provisioning by issues surrounding water and weather. During this preparatory phase, the ill-fated “People’s Crusade” was undertaken by Peter the Hermit. This was the first of two waves to be addressed, and its ultimate failure can be seen as one born from overzealous and rushed preparations by a religious leader inexperienced in the ways of war. By framing the preparatory phase between the Council of Clermont and the departure from Nicaea in 1097, the events within occur completely in European and Byzantine contexts, establishing the crusaders’ abilities to provision their armies when they possessed familiar and orderly logistical systems to support their armies. From a logistical perspective, the siege of Nicaea represents the crusaders’ greatest triumph with the armies accomplishing a feat that would not be replicated in the remainder of the campaign, namely the transport of ships over mountains to blockade the city.

The second chapter concerns the march from Nicaea in 1097 through the Middle East to the hard-fought crusader victory in the siege of Antioch in 1098. This period was a transitional phase for the crusaders as they moved away from both their native region and source of military resources, and the economic and military infrastructure of the Byzantine Empire. This chapter will address the Middle Eastern landscape as well as its history preceding the crusaders’ arrival in the region, namely the wars and turmoil caused by the shifting power struggles amongst Islamic powers. It was during this transitional phase that the authors of the First Crusade narratives mark the crusaders’ greatest struggles with food supply, and provisioning, both

occurring at the siege of Antioch. At Antioch, the crusaders suffered from starvation brought about from the Syrian winter, which isolated them from previously captured cities, effectively restricting their supply lines. This was a logistical failing, though it was due to factors largely beyond their control. However, despite the starvation and suffering which made the siege such a harrowing experience for the crusaders, their victories over both the besieged forces at Antioch, and the later forces brought by Kerbogha were the result of a superior understanding of both their logistical capabilities and the threat presented by Kerbogha's use of siege tactics against them.

The final chapter addresses the final stages of the First Crusade during which the crusaders claim ultimate victory, capturing Jerusalem in a siege that took six weeks, rather than a number of months, in 1099. Between the siege of Antioch and the siege of Jerusalem, the crusaders faced tremendous starvation at Ma'arrat, and the crusader army separated into two factions, which reunited at the siege of Arqah in March of 1099. The first faction was led by Raymond IV, the second by Godfrey of Bouillon and Robert of Flanders. Of the two sets of leaders, Raymond IV exhibited a dynamic shift in his approach to logistics in their march south, relying more on his skills as a diplomat than as a military commander. In the wake of the siege of Ma'arrat, Raymond IV had to rebuild his weakened army in potentially hostile territory, without the support of familiar logistical systems. Once the factions reunited at Arqah, they continued south along the coast, enjoying the benefits of maritime trade in the Mediterranean. From Arqah, their march south to Jerusalem was peaceful in comparison to the previous sieges and skirmishes. In their final victory at Jerusalem, the crusaders' received aid from Genoa in the form of six ships which carried food, lumber and skilled labor sufficient to simplify the final siege of the Crusade.

CHAPTER 1: PREPARATION: From Clermont 1095 to Nicaea 1097

When Urban preached the First Crusade at Clermont in 1095 and subsequently at other cities throughout western and southern France, his sermon was spread across France and Germany to all classes, from the nobility to the peasantry, calling for Jerusalem's liberation. As Baldric of Bourgueil records,

The council was dissolved, and every one of us hurried to return homewards. The bishops were preaching, and the laymen were now proclaiming the same message loudly and outspokenly. The word of God was spread...⁵⁷

When the bishops and laypeople carried the Pope's call across Christendom, the result was a four-year campaign in which European Christians travelled from western France, Germany, and Italy, through the Byzantine capital of Constantinople and into the Middle East, ultimately capturing the city of Jerusalem in 1099.

The origins of their success lay in the preparations the crusaders' leaders made well before arriving at their destination. Before they could invade the Middle East, with the goal of liberating Jerusalem, the crusaders had to successfully transport thousands of knights, soldiers, non-combatants, animals, provisions, weaponry, and armor to Constantinople. Their activities in this endeavor help to identify the first, and longest, of three phases of the First Crusade from a logistical perspective. This phase encompasses the years between the 1095 Council of Clermont and the conclusion of the siege of Nicaea in 1097. During the first phase of the Crusade, the crusaders would have the logistical boons of a familiar landscape and systems to rely on for supplies, as well as the Byzantine Empire's infrastructure, serving at the pleasure of Emperor Alexius I, with its roads, markets and shipping. More importantly, the crusaders were in

⁵⁷ Susan B. Edgington, *Baldric of Bourgueil "History of the Jerusalemites": A Translation of the Historia Ierosolmitana*. (New York: The Boydell Press, 2020), 50-1.

primarily friendly, or at the very least allied lands, without the constant threat of hostile interference against their supply trains and foraging parties.⁵⁸ As will be made evident, these boons did not guarantee success on their own, but they could be useful tools aiding the crusaders in the early stage when used as such. For the two waves of crusaders departing Europe in 1096, this initial stage of preparation was critical in determining their success, or lack thereof, in invading the Middle East. These waves of crusaders met drastically different fates after departing Constantinople, each occurring as the result of their planning and preparations before departure.

In any age, logistics and military planning encompass a broad range of considerations.⁵⁹ Among them, environmental context plays a significant role in influencing how logistical planning can progress. In order for armies to be rallied and remain strong, they have to be fed. To understand how the crusaders handled logistics, it is necessary to consider the medieval agricultural systems which produced the food supply available to them. By the Middle Ages, Richard C. Hoffmann argues that medieval people understood their local environmental conditions, including soil type and seasonal wetness and aridity, to such a degree that between 800 and 1300 CE they began adapting their agricultural practices to seasonal climatic trends in order to maximize their productive capacity, while increasing concentration in cereal grains including wheat, rye, barley, and oats.⁶⁰ During this period he argues that people in southern and Mediterranean Europe developed a system of two-course crop rotation, which, while allowing fields to lie fallow during dry summer months, resulting in higher annual crop yields per hectare

⁵⁸ For the most part, so long as the crusaders stayed peaceful in the European lands through which they marched, they did not have to worry about having their supply lines raided. However, where they acted in hostility to their hosts, be it through actual attack or unwelcome forage, leaders such as Coloman of Hungary and Alexius I would respond in kind.

⁵⁹ As stated in the introduction, for the purposes of this thesis “logistics” refers to the systems and processes for moving the necessary equipment, supplies, provisions, and people for military operations. Napoleon Bonaparte’s 1812 invasion of Russia, covered next chapter, serves as a further elaboration on the importance of logistics outside the Middle Ages.

⁶⁰ Hoffmann. *An Environmental History of Medieval Europe*. 133.

cultivated than previous practices.⁶¹ This he contrasts with northern and western practices, which benefited from heavier soils capable of retaining moisture year-round. In these regions, three-course crop rotation allowed for plots of land to be cultivated two years out of three rather than every other year.⁶² The rise of cereal regimes was, in part, due to cultural significance and pressure from the nobility, who favored wheat for personal consumption, but also in response to the increased use of draft animals, primarily oxen and horses the latter of which required grains, like oats, for fodder.⁶³ Under this pressure, cereal grains were the primary source of calories, especially among the impoverished who relied on barley, rye, and oats. In the first phase of the Crusade, both regimes would be important as even though the crusaders originated from primarily France and Germany, their routes to Constantinople carried them either through Hungary in the case of Godfrey and the People's Crusade, or through Mediterranean lands.⁶⁴ Operating under stable conditions, these regimes helped to fuel economic and population growth throughout the High Middle Ages.

With the systems of production established, it is time to address systems of transportation, and with them, numbers. In order to properly address the crusaders' logistical proficiency, it is first necessary to estimate, the size of the force their logistical systems had to support. Fortunately, the maximum size of the crusader armies is a topic that has been addressed by historians, with numbers having been estimated from as low as 30,000 in total to 100,000 on the upper end.⁶⁵ In *Victory in the East*, John France argues that the maximum reasonable size for the crusader forces would be in the range of 50,000-60,000, including combatants and

⁶¹ Ibid., 125-126.

⁶² Ibid.

⁶³ Ibid., 124.

⁶⁴ Bohemond is the exception to the general trend, as he was in Italy when he learned of the Crusade.

⁶⁵ Pryor. *Logistics of Warfare*, 49.

noncombatants alike.⁶⁶ Of the total forces, he estimates no more than 7,000 to have been knights in full, but that this group would have started with an initial 20,000 horses, divided between warhorses, palfreys, and pack-horses, for which they would have brought a “substantial army” of grooms and retainers to see to their care.⁶⁷ To this he adds 20,000 participants in People’s Crusade making the total number of people travelling to Asia Minor in the order of 70,000-80,000, though the fact that the People’s Crusade was destroyed before the second wave even arrived in Constantinople, means that their contribution to the maximum size of the army is negligible. He places crusader losses at Nicaea at approximately 10,000, and of the remainder, only 30,000 arrived at the walls of Antioch in 1097 as estimated by Jonathan Riley-Smith.⁶⁸ 30,000 is the only number Riley-Smith gives as to the total strength of the crusaders’ forces, seemingly leading Bachrach to suggest that this was Riley-Smith’s estimation for their maximum strength overall.⁶⁹ However, he just states that 30,000 was the approximate size of the force that reached Antioch. As it unreasonable to believe that the crusaders would have been able to weather the siege of Nicaea, Kilij Arslan’s attack at Dorylaeum, and the march to Antioch without sustaining at least some casualties, it is equally unreasonable to suggest that 30,000 represented the First crusaders’ maximum strength. For these reasons, France’s estimates of 60,000 crusaders combatants and non-combatants alike, 10,000 of whom would not survive Nicaea, and 7,000 of whom were knights will be used as the crusaders’ maximum strength for the purposes of this thesis.

⁶⁶ France. *Victory in the East*. 142. France’s numbers are based on a count of the crusaders, numbering 20,000 taken as they left from Laodicea at the Crusade’s conclusion, numbers which he concedes “may have represented a pardonable exaggeration,” and applying a 3:1 ratio of loss, born of the trials and attritions they faced in the course of the journey. Historians such as Bernard S. Bachrach have suggested that France’s numbers are on the conservative side, yet Bachrach has used France’s numbers on more than one occasion, indicating that even as a conservative estimate, it is still a considerable force and is not unreasonable.

⁶⁷ *Ibid.*, 126.

⁶⁸ *Ibid.* Riley-Smith. *The Crusades*. 37.

⁶⁹ Pryor. *Logistics of Warfare*, 49.

The crusader leaders had three main methods they could utilize to meet the task of feeding 60,000 people and the animals they brought with them. The favored method would be foraging or pillaging for their needs from enemy lands, as it allowed the armies to simultaneously sustain themselves while harming their enemies.⁷⁰ However, to avoid antagonizing their allies or bring damaging their own landholdings, this method would have to wait until the crusaders reached Muslim-held lands.

A second method the crusaders sought to employ was to purchase additional provisions as they passed through different regions on their campaign.⁷¹ Money was one of the more important resources medieval commanders had to allocate, and purchasing food was one of the primary reasons why. However, purchase required two external conditions to be met. First, it required the consent of city leaders, who had to be pacified by the armies' leaders. Second the cities had to have food available for purchase. As the People's Crusade found in their march to Constantinople, failure to recognize or satisfy these conditions could lead to unnecessary and devastating hostilities.

The final method of feeding their armies involved the transportation of food with the army as it moved. Food and supplies could be transported by three basic mechanics: wheels, hooves, and feet. In a logistical study on the campaign preceding the Battle of Manzikert in 1071, Haldon et al. calculated the dietary needs and carrying capacity of eleventh-century horses and pack animals. Their data is shown below in Figure 1. Pasturage would obviously not have to be transported, however, the dietary needs of a single horse added 9.2 kilograms of food and 30

⁷⁰ John Clarke, *De Re Militari: The Classic Treatise on Warfare at the Pinnacle of the Roman Empire's Power by Flavius Vegetius Renatus*. (US: Leonaur Ltd, 2012), 69.

⁷¹ Sweetenham. *Robert the Monk's History*. 84. Harold Fink. *A History of the Expedition to Jerusalem, 1095-1127*. (New York: W.W. Norton and Company, 1969) 78. Hill. *Gesta Francorum*, 6, Edgington. *Albert of Aachen's history*, 18.

liters of water per day, to that which had to be satisfied for the army to remain at fighting strength.⁷²

| FEED | Hard fodder (kg) | Dry/green fodder (kg) | Pasturage (kg) | Water (L) |
|---------------|------------------|-----------------------|----------------|-----------|
| Donkey | 1.5 | 5.0 | 10.0 | 20 |
| Mule | 2.0 | 6.0 | 12.0 | 20 |
| “Pack animal” | 2.0 | 5.5 | 11.0 | 20 |
| Horse | 2.2 | 7.0 | 14.0 | 30 |
| Ox | 7.0 | 14.0 | 22.0 | 30 |

| LOADS ^a | Man + military equipment/clothing (kg) | Saddle (kg) | Pack saddle (kg) | Load (kg) | Total (kg) |
|------------------------------|--|-------------|------------------|-----------|------------|
| Horse ^b | 70 + 30 | 12 | -- | -- | 112 |
| Pack horse | -- | -- | 16–19 | 96 | 112–115 |
| Mule | -- | -- | 16–19 | 96 | 112–115 |
| Donkey ^c | -- | -- | 16–19 | 64 | 80–83 |
| Wagon (4-wheel), 2/4 oxen | -- | -- | -- | 650/1000 | 650/1000 |
| Cart (2-wheel), 2 mules | -- | -- | -- | 500 | 500 |

- a. The figures for animal loads must be taken as approximations to within 1 or 2 kg.
 b. Cavalry mounts could carry additional loads without suffering harm, but only very small amounts—ca. 4 kg, sufficient for three or four days’ supplies for the trooper, or about one day’s worth for both himself and his mount (the late sixth-century *Strategikon* and the tenth-century treatise *Skirmishing* recommend that cavalry soldiers carry three to four days’ supply with them in their saddlebags): see Maurice, *Strat.* 1.2.4; *Skirmishing* §16. For wagon and cart loads, see Bachrach, “Animals and Warfare in Early Medieval Europe” (n. 18 above), and Roth, *The Logistics of the Roman Army* (n. 4 above), 208–12.
 c. Ancient figures suggest a load two-thirds that of a mule.

Figure 1 Chart of Dietary Requirements and Carrying Capacity. Image from Haldon et. al. “Marching Across Anatolia.” 216.

Furthermore, while it need not be transported, the necessary pasturage presented its own challenges in terms of both logistics and tactics. From a logistical perspective it required the knights to find locations capable of providing the needed grasses to make camp, an issue which influenced the tactical problem. Keeping the cavalry grouped too close to their main forces threatened medieval armies with starvation. By contrast, dispersing the cavalry to graze as necessary weakened the overall strength of the army, leaving them vulnerable to an easy defeat

⁷² For each knight, this comes to an additional 27.6 kilograms of food and 90 liters of water necessary for their animals alone, given that they started their campaign a minimum of three horses each.

by the enemy.⁷³ This would become more of an issue as the crusaders moved into the Middle East.

Multiplying the daily food requirement of a single horse by the established minimum of 20,000 horses used by the knights, this comes to 552,000 kilograms, or 552 metric tons of food, and 475,510 gallons of water on a daily basis.⁷⁴ As for human requirements, Bachrach and Pryor both suggest that a daily ration of 1 kilogram of food, usually bread of some form as it was easy to transport, would have been standard in most armies, adding 60 metric tons to the daily food requirement for the armies.⁷⁵ The resulting 612 metric tons of food daily can then be multiplied by between 14 and 17 days, the range of maximum time food could safely be stored for consumption during travel to arrive at between 8,568 and 10,404 metric tons of food necessary for just the people and horses before having to resupply. Supposing they could utilize exclusively the 4-wheeled carts to transport just their food and none of their money, armor, weapons or lumber, the wagon trains would include between 8,568 and 10,404 wagons, and twice that range of oxen to pull it. As it stands, this does not account for the requirements of the pack animals, and the crusaders could not use only ox-carts to transport their necessities, but it does show the enormity of the crusaders' task.

Producing the colossal amounts of food which the crusaders needed would have been a Herculean task in optimal agricultural conditions. However, the environmental conditions in France which influenced agricultural yields during the five years preceding the Council of Clermont were neither optimal, nor even stable. Only two of the chroniclers, Guibert of Nogent,

⁷³ John France. *Western Warfare in the Age of the Crusades* (New York: Cornell University Press, 1999) 10.

⁷⁴ Haldon et. al. "Marching Across Anatolia." 216-9.

⁷⁵ Bernard S. Bachrach. "Some Observations on the Role of the Byzantine Navy in the Success of the First Crusade." *Journal of Medieval Military History: Volume I* (New York: Boydell and Brewer, 2002) 89. Pryor. *Logistics of Warfare*, 19.

and Robert the Monk, deemed it relevant to address, even in passing, the ecological crisis which that plagued France from 1090 through 1095. Of the two, Robert only mentions the crisis tangentially, claiming that Urban II's sermon at Clermont exhorted the Franks to:

not be held back by any possession or concern for your family. For the land you inhabit... cannot support your sheer numbers: it is not overflowing with abundant riches and indeed provides scarcely enough food even for those who grow it.⁷⁶

The Franks suffered five years of summertime droughts, torrential winter rains, and uncharacteristically high mortality, culminating with a particularly devastating drought in 1095.⁷⁷

Guibert of Nogent provides more detail regarding the effects of this drought, writing:

At this time there was a general famine, with great poverty among even the very wealthy, since when even though there were enough things, here and there, for sale for some people they had nothing or scarcely anything with which those things could be bought. Masses of poor people learned to feed often on the roots of wild plants since they were compelled by the scarcity of bread to search everywhere for some possible substitute.⁷⁸

The drought brought scarcity and economic ruin along all social classes. As could be expected, the poor were the most affected by the food shortages, being forced to scavenge “the roots of wild plants” since the grain crops had failed.⁷⁹ To medieval European Christians, such a devastating drought was understood to have but one cause, divine punishment levied against a sinful world. As sin was a religious problem, it required a religious solution to bring about an end to the suffering. At Clermont, Urban presented a solution.

Urban's call to Crusade was delivered to a suffering European flock. As the droughts were viewed as a divine punishment, medieval Christians would have held that one recourse

⁷⁶ Sweetenham. *Robert the Monk's History*. 80.

⁷⁷ Philip Slavin. “crusaders in Crisis: Towards the Re-Assessment of the Origins and Nature of the “People's Crusade” of 1095-1096” *Imago temporis: medium Aevum* 4 (2010): 176-87 Jonathan Riley-Smith. *The First crusaders 1095-1131* (Cambridge: Cambridge University Press; 1997) 16. Slavin argues that this crisis was a product of climate change during a transitional period between the Late Antique Little Ice Age and the Medieval Climate Optimum.

⁷⁸ Levine, *The Deeds of God*, 41.

⁷⁹ *Ibid.*

existed for salvation, penance.⁸⁰ A chance for penance is what Urban was offering, remission for sins of those who left Europe to liberate Jerusalem. With the promise of spiritual salvation, he included an idea of physical salvation by associating Jerusalem with the “land flowing with milk and honey.”⁸¹ Urban delivered a starving and desperate population with a means to escape their suffering, and guarantee their eternal salvation all in one fell swoop.⁸² Under such conditions, it is unsurprising that one response to the call was a religious fervor that overlooked the careful military planning necessary to be successful in a prolonged campaign. As will be made evident later, this is but a contributing factor, in the abject failure of the People’s Crusade.

The departure date was set for August 15, 1096 and members of the nobility, clergy, and peasantry in regions such as Normandy, Provence, and Flanders began to prepare in varying extents for a Holy War. For the crusaders who intended to fight in the Holy Land, the first objective they had to accomplish was the successful arrival at the Byzantine capital of Constantinople, armies intact. This meant that not only would they have to rally and provision armies for the cause, but that Emperor Alexius I would have to be ready for their arrival.

The nobility and military elite understood that the campaign they were about to undertake would require considerable wealth and preparation to end in success.⁸³ In his typical elitist fashion, Guibert lauds the nobility in taking their time to secure sufficient funding, scorning the People’s haste by contrast. Meanwhile, Robert suggests that Raymond IV of St Gilles, whom he

⁸⁰ Slavin, “crusaders in Crisis:” 192. This belief derives from an extension of the medieval idea of the Great Chain of Being in combination with medieval theological teachings on penance being necessary to atone for sins. In short, since God created everything and made his will manifest through the natural world, his judgement for sins could, and would be shown through natural phenomena, meaning that said phenomena could be influenced through penitent acts.

⁸¹ Sweetenham. *Robert the Monk’s History*. 81.

⁸² Ibid. Levine, *The Deeds of God*, 41-2., Edgington, *Albert of Aachen’s history*, 16. Taken together these works, in order, identify the drought as a problem, show the desperation felt by wealthy and poor alike, and suggest repentance specifically as a motivation for joining with Peter the Hermit and the People’s Crusade.

⁸³ Levine, *The Deeds of God*, 42. Sweetenham, *Robert the Monk*, 90.

identifies as the wealthiest amongst the crusaders' leaders, "sold all he owned" in preparation of the coming campaign. While Robert's choice of wording regarding Raymond's actions is an obvious hyperbole, the fact that the wealthiest of the leaders, which Raymond is attested to have been in primary as well as secondary works, would have had to go to such lengths to finance his operation suggests that the financial cost of Crusading was immense.⁸⁴

In preparation for the Crusade, the participants had to deal with the anticipated cost of undertaking a pilgrimage, increased by the cost incurred by the need for arms, armor, and horses.⁸⁵ As seen previously, one massive problem the crusaders faced was the fact that the caloric needs of their armies were increased by the presence of their elite forces, heavily armored knights on horseback. It was not unusual for medieval armies to incur such burdens, however, the additional necessary food brought additional financial cost. In his estimations on the crusader armies' full size, France argues that even the poorest among the knights rallied would have set out on the journey with a minimum of three horses as part of their entourage, including a destrier for combat, a palfrey for non-combat transportation, and a pack horse to transport their belongings.⁸⁶ In addition they would have brought along the grooms, servants, squires and retainers necessary to see to the upkeep of their animals and belongings, who could, if necessary, bear arms and fight.⁸⁷

In order ensure their armies' robust arrival on Alexius' doorstep, the Crusade leaders would have to store up food, raise funds, and decide on their routes to Constantinople. They were met with varying degrees of success in this regard. The leaders of the "Princes' Crusade,"

⁸⁴ Robert is intentionally referencing Acts 4:32-5 where the early Christians were recorded to have sold their lands and houses and presented the proceeds to the Apostles, to further highlight the crusaders' piety

⁸⁵ France, *Victory in the East*, 87-100. France argues that while the costs of pilgrimages were reasonably well known, costing at least a year's income, the cost of crusading was more difficult to estimate, owing to the additional money princes needed to support armies and preserve their social status during the journey.

⁸⁶ *Ibid.*, 126.

⁸⁷ *Ibid.*

considered the bulk of the crusading armies, were comprised of seasoned veterans from the nobility including Hugh of Vermandois, Bohemond of Taranto, Godfrey the Duke of Lorraine, Raymond of Toulouse, Adhemar the Bishop of Le Puy, Robert of Normandy, Stephen the Count of Blois, and Robert the Count of the Flemings.⁸⁸ In addition to this main force of crusaders, was the 20,000-strong People's Crusade led by Peter the Hermit, a preacher who had been stopped in his previous attempted pilgrimage to Jerusalem by Islamic forces, and was one of the First Crusade's most fervent supporters.⁸⁹ From the time these leaders spent in preparation, two facts become obvious. The leaders of the main force, having previous experience in military affairs, understood the magnitude of the journey ahead of them and the necessary preparations they would have to make prior to departure, whilst Peter did not.⁹⁰ Furthermore, they were able to maintain discipline over their forces when travelling in foreign lands, whereas Peter lacked the leadership necessary to control the mass of peasants following him.

The first group to take up the cross was the People's Crusade which started in April of 1096. This group of crusaders was doomed to fail from the beginning. Peter the Hermit was a popular preacher amongst the laity in Northern France and Germany, able to capitalize on and feed the religious zeal of the people rallying a great horde of believers to the cause.⁹¹ He was not a seasoned veteran with years of military experience. He led a mob, not an army. Furthermore, zealotry does nothing to satiate physical hunger pangs. His lack of experience in military affairs is shown by the lack of care he took in preparing, as well as the speed with which he departed. At the very least, he seems to have been able to raise some amount of money with which he planned

⁸⁸ Fink. *A History of the Expedition to Jerusalem*. 72-3. Like many of his fellow chroniclers, Fulcher often uses "princes" as a generic term in reference to the nobility on the Crusade. Godfrey is also called Godfrey of Bouillon

⁸⁹ Dawes. *The Alexiad*. 248.

⁹⁰ Levine. *The Deeds of God*. 42-48.

⁹¹ *Ibid.*, 42-3. Sweetenham. *Robert the Monk's History*. 83. Dawes, *The Alexiad*, 248-50.

to purchase food, but money alone was not sufficient for the task he was about to undertake.⁹² As a minister, he was unlikely to have learned military training or education that would address these nuances of warfare. Departing in April 1096 left the People's Crusade with only seven months to complete their preparations. Of that time, Peter the Hermit spent the early stages acquiring permission to lead the Crusade, rallying the masses behind him, and making his way to Cologne, leaving himself only eight days for him to make his final purchases, during which time European withered under a drought.⁹³

Peter the Hermit was a student of the Bible, not *De Re Militari*. It is, perhaps, unfair to judge him by the standards of the other Crusade leaders as he lacked their experience in military affairs. Peter the Hermit could not have been expected to succeed. His Crusade was conceived in panic caused by an ecological crisis, and fueled by religious zeal. He was a preacher, attempting to lead a military campaign without any of the experience or logistical acumen to see it completed, making him incapable of controlling his forces. When the people lost control and attacked the Hungarians, Peter found himself involved in battles over provisions which cost him forces he could not afford to lose, and ultimately the provisions and money he had gained. Depleted by repeated conflicts, his army arrived in the Byzantine capital weak. When the People's Crusade continued in their belligerent actions, Alexius banished them. Because Peter was unable to plan their campaign appropriately, the People's Crusade never made it past Asia Minor.

⁹² Edgington. *Albert of Aachen's history*. 18-21. This information comes by way of inference, as it is recorded that he possessed a cache of gold and silver prior to his arrival in Hungary, later to be lost in battle with the Hungarians, with which he planned to purchase food from local markets with the blessings of the Hungarian king, Coloman.

⁹³ *Ibid.*, 16-21. Pryor. *Logistics of Warfare*. 121-2. Riley-Smith. *The Crusades*, 26-8.

The nobles who led the second wave of crusaders out of Europe, however did possess the knowledge and experience sufficient to succeed. Most were seasoned veterans, well aware that the liberation of the Jerusalem, like any extended campaign, would require money, supplies, soldiers, knights, and time in order to succeed. In addition to the material components, the princes also had to determine means and routes of travel. Figure 2, shown below, depicts the four primary routes taken by the Franks to arrive in Constantinople. Of note, Godfrey of Bouillon's route was the same utilized by the People's Crusade earlier in 1096, sending him straight through Hungary mere months after the belligerent mob.

1096 turned out to be a pivotal year for the Franks in their preparations. The droughts came to an end, resulting in incredible agricultural yields from the summer harvests throughout France and Germany.⁹⁴ The end of the drought was more significant to the leaders than simply providing the necessary food supply to support their armies. It brought with it the money necessary to fund the endeavor. Food and weaponry were not the only items for which the Crusade leaders needed money. In *Victory in the East*, John France suggests that while on campaign, the princes had to maintain their status as "masters of men" through displays of personal wealth.⁹⁵ This included not only allocating funds to provide for the inevitable noncombatants that would follow the army simply to make the pilgrimage, but also reimbursing the knights who lost their horses in the course of the campaign.⁹⁶ This benefitted the princes as it allowed them to store and transport a greater percentage of their food, relying less on the

⁹⁴ Fink. *A History of the Expedition to Jerusalem*. 72. Riley-Smith. *The Crusades*. 28.

⁹⁵ France suggests that the crusade leaders were aware of the inevitability of their marches attracting attention. He claims the leaders knew they would be surrounded not only by their own respective entourages, but also by any poorer pilgrims who might attach themselves to the group or that the leaders would choose to support in their journey. The crusade leaders' wealth would be the factor which allowed them to support these additional people and maintain their social status over them through a physical medium.

⁹⁶ France. *Victory in the East*. 254-5.

markets. This is not to suggest they did not seek to purchase food as necessary, though when they did, they met with little resistance.⁹⁷

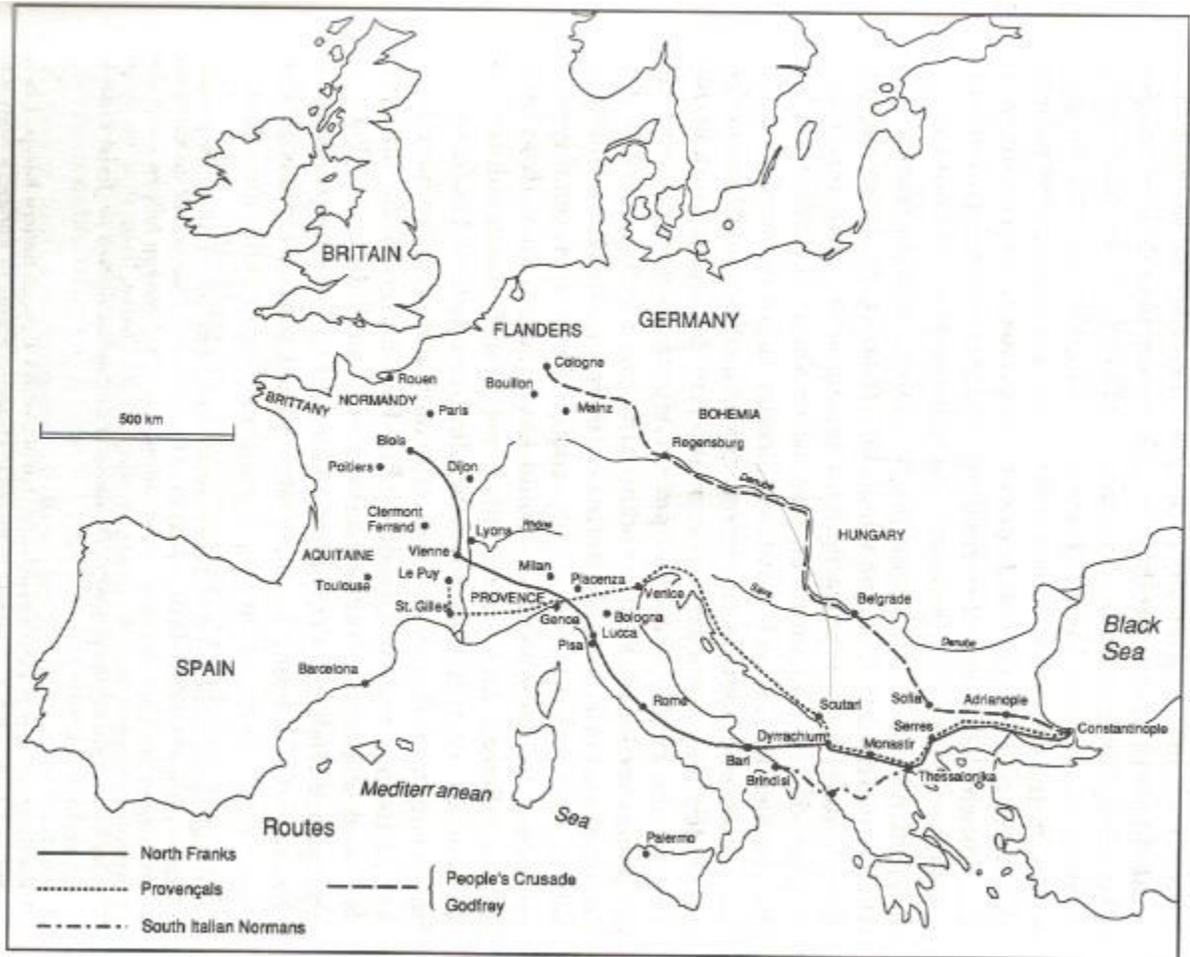


Figure 2: The Routes to Constantinople. Image from *Victory in the East* by John France, page 89.

The care with which the nobles undertook their preparations is indicative of their understanding of contemporary military tactics and strategy. The *De Re Militari*, a fourth century Roman text, serves as the only authority on formal understandings of strategy in the medieval west.⁹⁸ Walter Goffart suggests that before 1284, the treatise had been translated five separate

⁹⁷ Edgington. *Albert of Aachen's history*. 47.

⁹⁸ C. W. C. Oman, *The Art of War in the Middle Ages*. (New York: Cornell University Press, 1953) 33. Walter Goffart. "The Date and Purpose of Vegetius' 'De Re Militari'." *Traditio* 33 (1977): 65-6. This occurrence within the West is contrasted by the comparative multitude of Byzantine works regarding warfare and strategy, and contributes to the reputation of the Middle Ages existing as a "dark" age in the West.

times into the French alone, in addition to German, English, and Italian.⁹⁹ As such it outlines everything Western European nobles and military commanders, like those who led the crusaders, would have known about preparing for war. However, none of the chroniclers even suggest that the crusade leaders had knowledge of this treatise, as none of the leaders' military training or even possible education is even mentioned. While it is unclear whether or not the crusader leaders had formal education in *De Re Militari*, the fact remains that with few exceptions, the crusade leaders' methods, strategy, and tactics in their approach to the First Crusade, match those outlined by Vegetius.¹⁰⁰

Vegetius maintains that victory through famine was the easiest and most preferred means of destroying one's enemies.¹⁰¹ The siege is the practical incarnation of this tactic applied against a fortified position, and siege warfare seems to have been both the crusaders' preferred tactic, and the one they were most proficient in utilizing. Why should they risk their armies or the people who travelled with them when they could win inevitable wars of attrition by starving besieged enemies? In siege warfare, victory through famine comes by means of blockading the defenders within their city and waiting until they run out of provisions. However, the inherent risk of a siege is that the besieging army can also fall victim to the threat of famine.¹⁰² This threat is made worse if the defending armies utilize scorched earth tactics in preparation for a siege, seeking to deprive the besieging army of necessary resources.¹⁰³ Taken together these points indicate that siege warfare is heavily influenced not only by logistics but also by environmental

⁹⁹ Goffart. "The Date and Purpose." 65.

¹⁰⁰ The similarities in the crusade leaders' tactics and methods, and Vegetius' writing could be the result of practical experience and common military practice over formal training. However, regardless of the origins of these similarities, they do exist, and as such *De Re Militari* remains an important source for understanding the leaders' actions and the possible motivations behind them

¹⁰¹ Clarke, *De Re Militari*. 65-9.

¹⁰² *Ibid.*, 69.

¹⁰³ The crusaders would face the threat of famine at the siege of Antioch in 1097-8, scorched earth tactics in the form of defiled wells at Jerusalem in 1099.

factors such as topography, and availability of food and water. Vegetius further advised marching in the fall and spring months, though suggested that if armies must march through the summer or winter the commanders had to make certain considerations regarding equipment and timing as to avoid taxing their armies through exposure to elemental extremes.¹⁰⁴ Ensuring the strength and wellbeing of their armies was of utmost importance for being victorious in a lengthy campaign. However, the crusaders were not able to follow every tenet of the *De Re Militari*. Vegetius cautions against the rallying of massive armies, as they are both difficult to supply and made vulnerable by the bulk and sluggishness of their supply lines.¹⁰⁵

In sharp contrast to the People's Crusade, the nobles all successfully arrived at Constantinople with the bulk of their forces intact, since they did not have to attack or pillage their hosts along the way to prevent starvation. They did not all leave Europe, nor arrive at the Byzantine Empire simultaneously, a byproduct of their preparations and the events of their journeys, but they did so successfully because they were careful and prepared. For the most part, it was only with their arrival in the Byzantine Empire that the nobles faced any trouble on the road. Their troubles at this stage were due to how their forces were perceived by the Byzantine Emperor.

It was the oldest and wealthiest of the Frankish nobles, Raymond IV of St. Gilles, then around 55 years old, who showed the greatest care in his preparations.¹⁰⁶ Departing from Le Puy in October 1096, Raymond led the largest body of crusaders along the longest route arriving in Constantinople on April 21, 1097.¹⁰⁷ The route he chose was entirely landlocked, sending his

¹⁰⁴ Clarke. *De Re Militari*, 67-8.

¹⁰⁵ *Ibid.*, 65.

¹⁰⁶ His preparations would pay off in the later stages of the Crusade, addressed in Chapter 3, where he becomes a primary focus.

¹⁰⁷ Riley-Smith, *The Crusades*. 32.

army marching through the mountains of northern Italy and Bulgaria to cover almost 3100 kilometers in a seven-month journey. His journey was only slightly longer in terms of distance than Robert of Normandy's when accounting for the latter's crossing the Adriatic Sea.¹⁰⁸ One explanation for the fact that Raymond opted to take a landed route over chartering ships, is that he understood that the increased cost of passage for his forces would have greatly exceeded the cost of packing extra food for a longer, more arduous path.¹⁰⁹ His preparations paid off as the army of Provençals passed through the Bulgarian highlands, during the winter, unscathed. During this leg of the trip, Raymond D'Aguilers, a fiery author and chaplain in Raymond's army who refused to waste any opportunity to praise his leader, suggests that foraging was not an option for a period of three weeks as there was no game to be found.¹¹⁰ He writes of the conditions, "Truly, Sclavonia is a forsaken land, both inaccessible and mountainous, where for three weeks we saw neither wild beasts nor birds... We passed through Sclavonia without losses largely through God's mercy, the hard work of the Count, and the counsel of Adhemar."¹¹¹ The only issues that the Provençals encountered on their journey occurred after Raymond had fallen ill and had to be escorted to Constantinople. In Raymond's absence, the Provençals attempted to forage in Byzantine lands, only to be stopped after a skirmish with the forces Alexius had dispatched to escort them to the capital.¹¹²

¹⁰⁸ See Figure 1.

¹⁰⁹ Another explanation could be that taking the landed route, along a traditional pilgrim's route would have been understood as a more pious action. However, none of the primary source authors provide any insight on the Count's motivations for choosing his route.

¹¹⁰ John H. Hill, and Laurita L. Hill. *Raymond D'Aguilers Historia Francorum Ceperunt Iherusalem*. (Philadelphia: The American Philosophical Society, 1968) 16-7.

¹¹¹ *Ibid.*

¹¹² *Ibid.*, 24.

These armies were not what Alexius had expected Urban to send when he had appealed for aid in 1095.¹¹³ The armies approaching Constantinople were not mercenaries sent to aid in the retaking of land Byzantine land, nor were they a traditional band of pilgrims headed for the Holy Land to perform acts of penance. From a Byzantine perspective, the crusaders were, at best, invading armies, marching through his empire, armed and approaching his capital expecting to rest and resupply. At worst, they were potentially a barbarous horde intent on ransacking his Empire to satisfy their sense of pride and greed.¹¹⁴ Having accepted, then subsequently banished, the People's Crusade from the capital, Alexius faced the unenviable task of managing four incoming armies, whose combined might was near 60,000 people strong, some of which were led by past enemies. The general approach he took was to allow the crusaders use of the markets, but to have his military monitor their progress, intervening when they sought to forage or worse pillage in the Byzantine countryside. When it came to defending his interests from foreign invaders, Alexius showed both political cleverness and strength. While he knew the forces marshalling outside his capital were a potential threat, he was more than willing to restrict their access to Byzantine markets necessary for the crusaders' resupplying in an attempt to control their behavior and elicit oaths of fealty from the leaders.

Departing Constantinople, one major obstacle remained for the crusaders before they could enter Asia Minor and continue their march to Antioch, the city of Nicaea, a map of which is shown in Figure 3. Much like their arrival in Constantinople, the crusaders' arrival at Nicaea was staggered with the earliest forces, a portion of whom had been sent ahead to clear a path through the mountains for the armies to follow, arriving around May 6, 1097 and the latest forces

¹¹³ Anna Comnena seems to have been unaware of Alexius' request for Frankish aid in his conflicts against the Turks in Anatolia, rather suggesting that the Crusade started as a Frankish plot.

¹¹⁴ Dawes, *The Alexiad*. 249-51.

arriving in the first week of June.¹¹⁵ The siege began on May 14, 1097 and by June 20 Nicaea had fallen, surrendering to Byzantine forces.¹¹⁶

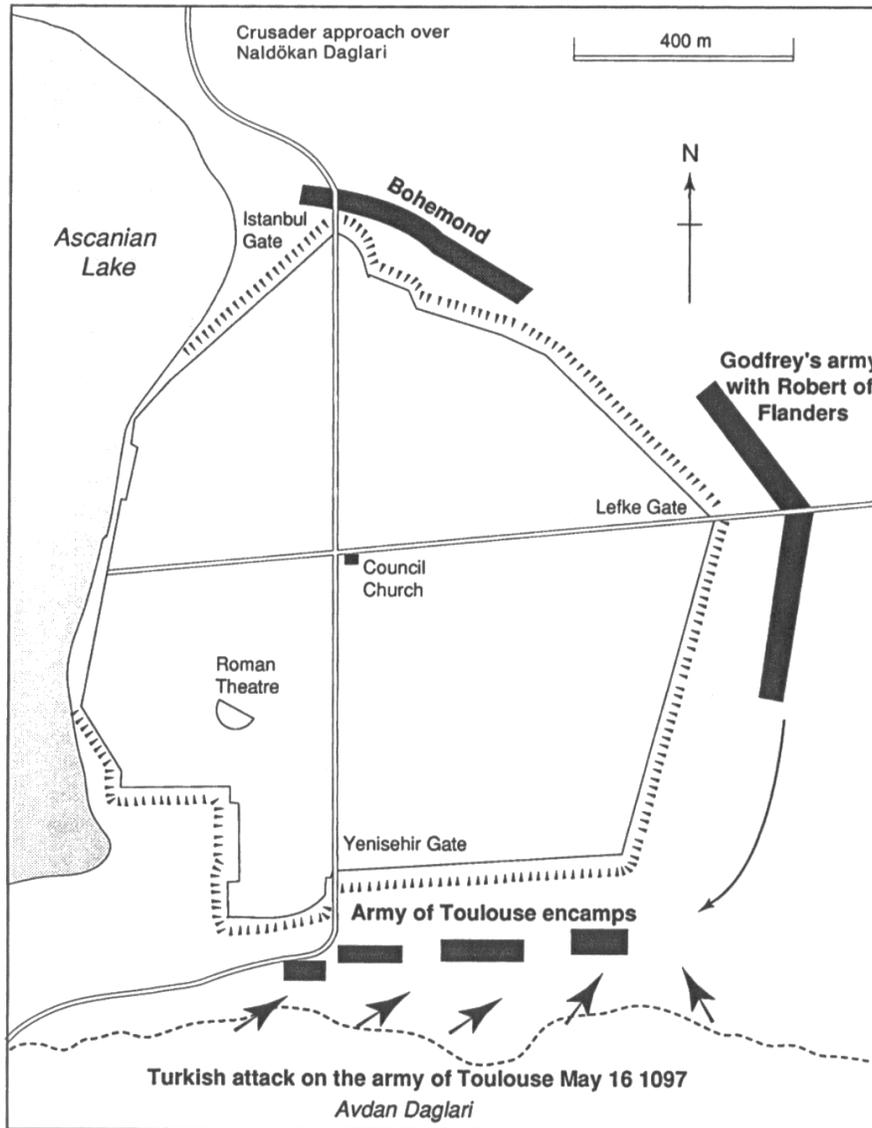


Figure 3 Map of the siege of Nicaea. Image from *Victory in the East* by John France page 123.

¹¹⁵ Hill. *Gesta Francorum*. 14., Fink. *A History of the Expedition to Jerusalem*. 81. The anonymous author of the *Gesta* claims to have been amongst the first army to depart Constantinople following Godfrey, whereas Fulcher of Chartres admits to having been amongst the last to arrive, commenting on how the city had already been set to siege with the defending force having suffered many casualties.

¹¹⁶Hill. *Gesta Francorum*. 14-7., Sweetenham. *Robert the Monk*. 104-6. Fink. *A History of the Expedition to Jerusalem*. 81-3., Edgington. *Albert of Aachen*, 58-73.

The speed with which the crusaders arrived at, besieged, and captured the city of Nicaea, is due in large part to the logistical boon offered by the Byzantine's infrastructure. Despite initial shortages that were relieved with Bohemond's arrival at the city the crusader armies thrived during the siege.¹¹⁷ As Fulcher of Chartres writes, "for as long as we besieged the city of Nicaea food was brought in by ocean ships with the consent of the emperor. Then our leaders ordered machines of war to be made, battering-rams, *scrofae*, wooden towers, and *petrariae*."¹¹⁸ What Fulcher describes are crusader forces operating at peak efficiency, unhindered by hunger or thirst, with materials sufficient to construct proper siege engines for attacking a fortified city. The Byzantine war machine was behind them and in that moment their victory was all but inevitable. At Nicaea, the crusader forces exhibited such a mastery of logistical planning and execution that they were able to receive Byzantine warships at the port of Civitot, where they were brought ashore then transported through the mountains by teams of oxen, so they could be launched into the city's neighboring lake, securing a blockade around the city and forcing a surrender.¹¹⁹

The fact that the Byzantines, and not the crusaders, were the ones to accept the surrender seems to have been the last straw in driving the crusaders to hurry towards the Middle East, their true objective. This decision, however, would take the crusaders away from the infrastructure that had served them so well at Nicaea. As they departed Byzantine lands at Dorylaeum, the crusaders exited the first logistical stage of their campaign. Going forward, logistics were going to become a more complicated issue, as the crusaders entered a hostile landscape, with challenges they were ill prepared to face.

¹¹⁷ Hill. *Gesta Francorum*. 14.

¹¹⁸ Fink. *A History of the Expedition to Jerusalem*. 82. *Scrofae* are indicated to have been portable defensive shelters, and *petrariae* were a form of catapult more properly called a mangonel.

¹¹⁹ Hill. *Gesta Francorum*. 16., Levine. *The Deeds of God*. 58.

CHAPTER 2: TRIBULATIONS: From Nicaea 1097 through Antioch 1098

Though it was off to a favorable start, the First Crusade was far from over, and the crusaders were still ignorant of the true scope of the hazards they would face in the Middle East from 1097 through the campaign's conclusion in 1099. The march to and subsequent sieges of Antioch presented challenges to the crusaders which would affect their logistical practices and provisioning, ranging in intensity from troubling to devastating. As seen with the ill-fated People's Crusade, and cautioned against centuries earlier by Vegetius, a summertime march with a large force, such as that of the crusader armies, could be hazardous. Scholars of later European wars will recognize similarities in the challenges faced by the crusaders to the challenges Napoleon and his Grande Armee in the French Emperor's unsuccessful invasion of Russia. For both invading armies, the problems of provisioning massive armies were exacerbated by the weather extremes of the respective regions.

The second stage of the First Crusade spans from the march south through the Amanus Mountains to Antioch where they arrived in October of 1097 up through the conclusion of the second siege of Antioch in June 1098. Between these events the crusaders experienced skirmishes with Islamic forces on the road to Antioch, Baldwin and Tancred's diversion to and conquest of Edessa, and the two sieges of Antioch. During this stage, the crusaders departed from the Byzantine Empire's landholdings and infrastructure, which limited future access to markets, as the towns they encountered were under no imperial compulsion to provide for the crusaders.¹²⁰ Furthermore, the crusaders were not entering a pristine landscape.

¹²⁰ While the towns could not be forced to trade with the crusaders, some opted to do so, with harmful effects on the crusaders' alliance with the Byzantines

In the latter parts of the eleventh century and early decades of the twelfth, Syria was plagued by wars between up to six separate Islamic factions: the Fatimid Empire; local Arab tribes and princes; the Seljuk Turks; the Turkish military officers; non-Seljuk Turkish tribes, and even the general populace.¹²¹ The natural result of so many groups vying for supremacy was political and military chaos resembling complete anarchy. For some of these groups, mainly the non-Fatimid and non-Seljuk factions, the crusaders represented an army with whom they shared a common enemy. As a result, some of the local towns and nobility were welcoming and willing to provide use of their markets. Those who took exception to the crusaders' invasion presented a resistance, as could be expected, but their resistance was weakened by the comparative disunity amongst the Islamic nobility. However, the decades of warfare in Syria and Asia Minor created a different logistical problem for the crusaders. The repeated conflicts had taxed the region's capacity to produce food, leaving little available for forage, be it through the collection or destruction of crops, or inability to work the fields. Food aside, the passage through the Amanus Mountains was not an easy one, and would prove to weaken the crusaders before arriving at the walls of Antioch.

Departing from Nicaea in June of 1097 meant that the crusaders would be marching to Antioch during the hottest part of the summer, an unenviable task for any force, especially one as large as the combined army of the crusaders, which numbered around 50,000 after Nicaea. At this time, each of the leaders who had departed Europe still remained with the army, and Bishop Adhemar of Le Puy was still the recognized leader. Their chosen route carried them by way of Dorylaeum, a formerly Roman way-station and nexus to the road systems spreading throughout Anatolia, from which they could resupply and chose a route to Antioch. They had the options of

¹²¹ Gibb. *The Damascus Chronicle*, 14.

travelling along a “Pilgrim’s Road” going by way of the Cilician Gates, a 350-kilometer route, or traversing the Amanus Mountains by way of Caesarea, a 630-kilometer route.¹²² As the Crusade leaders were aware, marching in a single, consolidated force would have been ill-advised, as it would slow their progress and leave them vulnerable to attack. In fact, they were attacked as they departed from Dorylaeum. On July 1, the Seljuk Sultan of Nicaea, Kilij Arslan, understandably irked by the crusaders’ capture of his capital, led a violent but ultimately unsuccessful attack against their forces, which served to remind the Crusade leaders of the inherent dangers of rallying and moving massive armies.¹²³

Knowing of the danger and difficulty of provisioning their consolidated forces, the Crusade leaders split the army in two parts. The armies led by Tancred and Baldwin formed one faction which took the shorter route, while Raymond and Bohemund led the main bulk of their forces through the mountains, accompanied by the rest of the leaders. In terms of total numbers, Ralph of Caen suggests that Tancred commanded around 300 men, divided into 100 Knights and around 200 archers, while upon arrival at Tarsus, Baldwin commanded 500 knights and 2,000 infantry.¹²⁴ This leaves nearly 47,000 people in the main group, hardly a reduction in size or strength. However, aside from Baldwin and Tancred’s diversion it is nigh impossible to determine further subdivision of the crusader army in the march to Antioch, as the remaining leaders all followed the same route through Asia Minor. Of the two groups, the main body will be addressed first, as theirs was the route that led directly to Antioch and the effects of their march were most heavily felt during the siege.

¹²² France. *Victory in the East*. 185-9.

¹²³ Bernard S. Bachrach, David S. Bachrach. *The Gesta Tancredi of Ralph of Caen: A History of the Normans on the First Crusade* (Burlington, Ashgate Publishing Company, 2010), 44-5. Fink. *A History of the Expedition to Jerusalem*. 86-9. Sweetenham, *Robert the Monk*, 107.

¹²⁴ Bachrach. *The Gesta Tancredi*, 57. Though these numbers are not corroborated by any other chronicler, they are well within the bounds set by the accepted estimate of 50,000 crusaders in total.

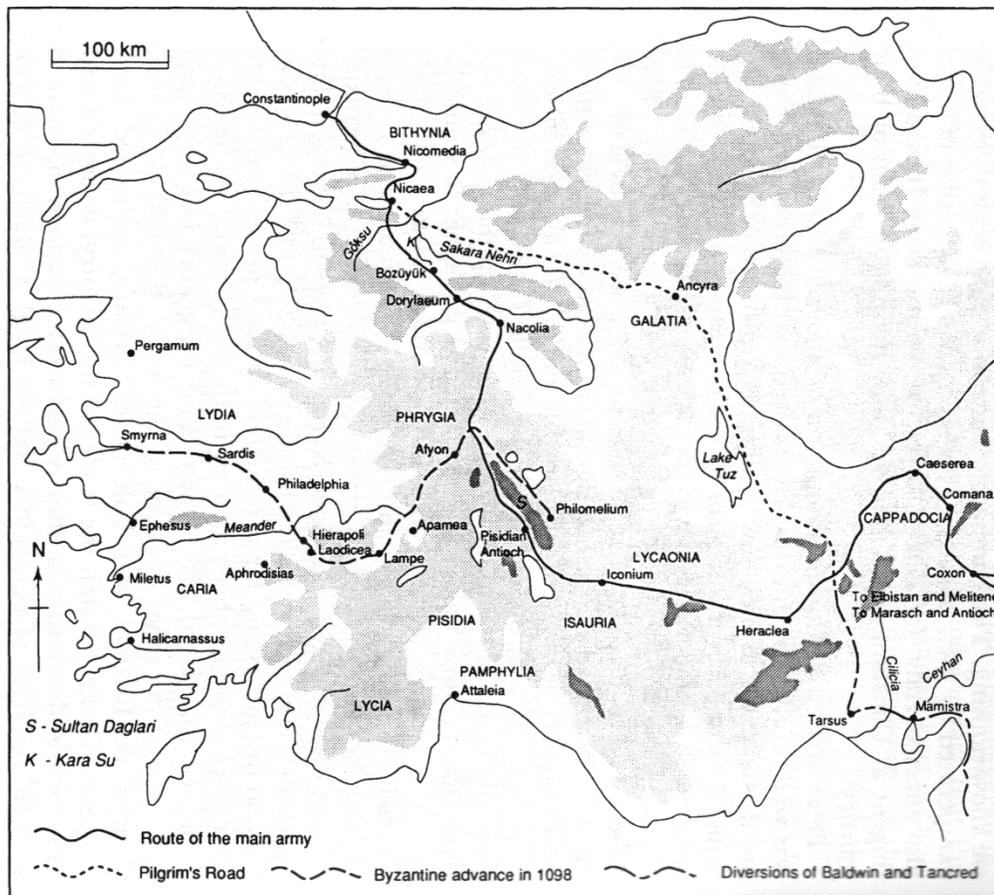


Figure 4 Map of the Crusaders' routes through Asia Minor. Image from *Victory in the East* by John France, page. 94.

The decision to lead the larger of the two forces across the longer, mountainous route may seem ill-advised, as taking such a path was a more daunting task than taking a lowland one. However, such a task was not without precedent. In his march to Constantinople Raymond IV had successfully leading the largest contingent of crusaders across an even greater distance, likewise through the mountains. Another similar passage may not have seemed such a daunting task in the wake of his past success. However, Raymond was facing very different circumstances in Anatolia. Rather than marching through the cooler fall and winter months, he would be leading his forces through the heat of the summer along roads which were in far worse condition. Unlike the pilgrimage roads they had previously traversed, the roads in Asia Minor would have

suffered from the chaos and warfare endemic in the Muslim conquests in the area.¹²⁵ However, even without the additional damage and wear incurred by decades of war, the formerly Byzantine roads would not have been suitable for the crusaders' carts and wagons. In his contribution to Pryor's *Logistics of Warfare in the Age of Crusades*, John Haldon addresses Byzantine roads and communication, he indicates that from the sixth century through the ninth, maintenance on Byzantine roads had declined and become a local concern rather than an Imperial one.¹²⁶ One of the most important results of this decline was a shift in transportive regime from wheeled carts and wagons to pack beasts which lead to a narrowing of many roads further away from key cities like Constantinople.¹²⁷

Damaged or poorly maintained roads would not only slow the crusaders' wagons and carts, they also represented a further danger for their animals, which were already at risk due to the aridity and heat. The loss of a single horse in a knight's retinue could present a variety of problems depending on the particular role the horse filled. Loss of a warhorse affected the knight's ability to fight whereas the loss of a pack beast meant that either the supplies it carried were likewise lost, or that whatever could be salvaged had to then be carried by the people.¹²⁸ The near unanimously agreed upon chronicler accounts recount how oxen were utilized as mounts by desperate knights and how the people sought to use donkeys, cattle, goats, rams and even dogs to help transport their supplies and weaponry as they lost their horses and carts to the treacherous mountain paths and crippling aridity. Peter Tudebode's eyewitness account provides the following description of events:

¹²⁵ France. *Victory in the East*, 187-8.

¹²⁶ Pryor. *Logistics of Warfare*. 136-8.

¹²⁷ *Ibid.*, 137-40.

¹²⁸ John H. Hill and Laurita L. Hill. *Peter Tudebode: Historia de Hierosolymitano Itinere*. (Philadelphia, The American Philosophical Society, 1974) 42. Levine. *The Deeds of God*, 62. Edgington. *Baldric of Bourgueil*. 75. Sweetenham. *Robert the Monk*. 119. Hill. *Gesta Francorum*. 23, 27. Fink. *A History of the Expedition to Jerusalem*, 88.

Horses plunged over cliffs and pack animals tumbled over one another as tearful knights stood everywhere wringing their hands, overcome by grief and shock. Doubtful of the fate of themselves and their arms, they sold their shields, expensive breastplates and helmets for three or five denarii or more, if possible. Those who could not sell their worthless arms threw them down and marched on.¹²⁹

The grim reality facing Raymond's group was that the mountain roads they sought to utilize were too narrow and in far too poor condition to allow the use of their horses, carts or wagons. Aside from the conditions of the roads, aridity was another problem vexing the crusaders and their animals alike. Each horse in the crusader army needed a minimum of 30 liters of water on a daily basis, not accounting for strenuous labor or marching, and the crusaders were marching through dry summer heat of Anatolia.¹³⁰ The very landscape through which the crusaders moved had become an enemy to their campaign's progress. As scholars of later European military affairs can confirm, the First Crusade was neither the first nor the last time the environment presented a crippling obstacle to an invading force.

These events strike a resonant chord with those surrounding Napoleon Bonaparte's ill-fated Russian Campaign in 1812. For a myriad of reasons, mostly political, the French Emperor sought to invade Russia, rallying an army over 600,000 strong to undertake his invasion.¹³¹ As can be expected, provisioning an army of such unprecedented size presented a proportionally incredible challenge. Furthermore, Napoleon was aware that Russia would, most likely, present the greatest challenge he had yet faced in terms of military resistance, environmental conditions and even infrastructural issues regarding poor roads.¹³² The land he intended to invade was vast, more so than any he had previously sought to dominate, yet with its size came the potential for

¹²⁹ Hill. *Peter Tudebode*. 42.

¹³⁰ France. *Victory in the East*, 186. France suggests that summertime highs on the Anatolian plateau reach upwards of 30° Celsius, or 86° Fahrenheit. For equine daily dietary requirements refer to Figure 1.

¹³¹ David G. Chandler. *The Campaigns of Napoleon* (New York: Scribner, 1966) 853-7.

¹³² *Ibid.*, 853.

bounteous forage to be extracted to feed his army. His over 600,000 soldiers were accompanied and supported by some 200,000 animals split amongst his cavalry, artillery and supply trains. While his men could be fed on the supplies transported by 600 light carts, 600 heavy wagons, 252 four-animal wagons, and whatever draft oxen they could afford to slaughter as the campaign dragged on, the fodder requirements of his animals still had to be met. Fearing that the Russians may attempt a scorched earth policy to deny his army the necessary provisions he might seek to forage, Napoleon sought to mitigate this need by making his army as self-reliant as possible, though it was unreasonable to believe that he could eliminate the army's reliance on forage. Knowing this, Napoleon had scheduled his invasion to coincide with the peak of the Russian growing season, when the plains would be lush with grass as to increase the likelihood that they could at least draw some amount of fodder from them.¹³³ He was aware that poor roads would slow his army's progress, though the exact degree to which they eventually did, seems to have been unknown or expected.

For all his planning, however, Napoleon ultimately failed in his invasion of Russia, turning back as his army reached a burned Moscow. Rather than face Napoleon's superior might, the Russians, led by Prince Mikhail Illarionovich Golenishchev-Kutuzov, engaged in the very tactics Napoleon had feared, burning their own towns, accumulated food stores, and surrounding countryside, as to deny the French any possible provisions. Continuing in this manner, the Russians led Napoleon's army through the Russian countryside, burning everything in their wake, drawing out the confrontation and waiting for the effects of an extended campaign to devastate the increasingly overextended French army. As the campaign extended into the late summer months, the French began to suffer from depletion of their resources, loss of their

¹³³ Ibid., 859.

soldiers, and the combined effects of extreme heat and disease.¹³⁴ By the time he captured Moscow, only 100,000 soldiers, less than a sixth of his starting forces, remained in Napoleon's army. Having failed to break the Russian resistance, Napoleon began his retreat, and the Russians began their counter attack.¹³⁵ The invasion of Russia, despite careful planning, had failed.

While this example is separated from the First Crusade by 716 years of technological, cultural and tactical advancement, the core elements of each remain comparable. Each army was at their respective times, enormous in size, utilizing their local logistical and tactical systems to invade foreign land, and ultimately crippled as they became overextended in a hostile environment. Furthermore, their available logistical systems were comprised of the same three main mechanics of transportation, wheels, hooves, and feet. Where they differed is in how the environment was utilized and in the ultimate results of each campaign. Knowing it would be their best weapon and defense against Napoleon, the Russians burned their own land destroying the food sources he sought to obtain through forage. In the case of the First Crusade, the crusaders likewise experienced problems of overextension and less than adequate available forage, but this had come as secondary result of the conflicts between the six warring Islamic factions. Furthermore, whereas Napoleon's invasion failed, the crusaders succeeded in theirs. The most important factor in deciding these different outcomes, however, is how the crusaders were able to eventually adjust their logistics and recover from their privation, while Napoleon's army was unable to do so before losing the bulk of their forces and all of their morale. The crusaders, in so far as they have been addressed to this point, have yet to encounter their greatest hardships.

¹³⁴ Ibid., 909.

¹³⁵ Ibid., 916-8.

In their passage through the Amanus Mountains, the crusaders came face to face with the fact that even the landscape itself was their enemy. The heat, aridity, and even the battle scars it bore from decades of warfare worked in concert to deprive the crusaders of desperately needed food, animals, and weaponry including materials needed for siege weapons. Amidst their internal conflicts, the six warring Islamic factions had turned the very ground beneath the crusaders feet into a weapon to be levied against the invaders. The weapon proved effective, as when the crusader forces arrived at Antioch in mid-October of 1097, the robust armies that had set siege to Nicaea and rebuffed Kilij Arslan now were haggard, exhausted, hungry enough to strip the Orontes River valley of its bounty.

Before continuing to the events of the first siege of Antioch, it is necessary to address the campaign undertaken by Baldwin and Tancred, which culminated in Baldwin's capture of the city of Edessa. Among the chroniclers who speak on their motivations, only Fulcher of Chartres suggests that anything other than greed drove Baldwin and Tancred eastward, away from the bulk of the Army.¹³⁶ Fulcher suggests the following,

When we reached the city of Heraclea, we beheld a certain sign in the sky which appeared in brilliant whiteness in the shape of a sword with the point toward the East. What it portended for the future we did not know, but we left the present and the future to God... And so trusting in the Lord and in his own strength, Baldwin collected a few knights and set out toward the Euphrates.¹³⁷

Fulcher's claim of a divine inspiration for Baldwin's departure to Edessa is contrasted with claims by Guibert de Nogent, Baldric of Bourgueil, Peter Tudebode and Albert of Aachen each stating that Baldwin and Tancred each sought to take for themselves landholdings and riches in

¹³⁶ Fink. *History of the Expedition to Jerusalem*. 88-9. Levine. *The Deeds of God*, 62. Edgington. *Baldric of Bourgueil*. 77. Edgington. *Albert of Aachen*. 82-3. Hill. *Peter Tudebode*. 40.

¹³⁷ Fink. *History of the Expedition to Jerusalem*. 88-9.

the East.¹³⁸ It makes sense that Fulcher is alone in his claims, however, given that he himself accompanied Baldwin to Edessa, only to rejoin the main bulk of the crusaders later on. They came into contact at Tarsus, which Tancred had set to siege, seeking to claim dominion of the city. With the arrival of Baldwin and his army, widely attested to be the larger force between the two men, the city fell within short order.¹³⁹ Conflict broke out between the two, with Tancred conceding Tarsus to Baldwin, due to the superior strength of the latter's army. Their rivalry would come to a head at Mamistra where the two came to blows over issues surrounding trade and provisioning between their two armies and the landholdings they had obtained.¹⁴⁰ Though they eventually buried the hatchet, with Tancred even coming to rescue a surrounded Baldwin outside Edessa, their rivalry created enough friction between them to cause Tancred to abandon their campaign and return to the main body of the crusaders. For his part, Baldwin succeeded in claiming dominance of Edessa by March of 1098, after unseating the then-current governor by aiding the rioting people of the city.¹⁴¹

From a logistical standpoint the importance of their campaign is seen in the cities they took, namely Edessa and Mamistra. Located in what is now southeastern Turkey, Edessa was watered by the Euphrates, along with at least three other smaller rivers, making it incredibly fertile. As the Crusade persisted into 1098, Edessa would serve as a source of both horses and money for the crusader forces as they continued their march to Jerusalem.¹⁴² While this did little to provide for the needs of the beleaguered crusaders besieging Antioch, it did offer them aid of a

¹³⁸ Levine. *The Deeds of God*, 62. Edgington. *Baldric of Bourgueil*. 77. Edgington. *Albert of Aachen*. 82-3. Hill. *Peter Tudebode*. 40.

¹³⁹ France. *Victory in the East*. 194. John France suggests that Bohemund had bolstered Tancred's forces with 500 of his own men prior to Tancred's initial siege against the city

¹⁴⁰ Bachrach. *The Gesta Tancredi*. 68-9.

¹⁴¹ *Ibid.*, 72-3. Fink. *History of the Expedition to Jerusalem*. 91-2. Riley-Smith, *The Crusades*. 36. France. *Victory in the East*. 194-5.

¹⁴² Riley-Smith, *The Crusades*. 36-8. France. *Victory in the East*. 196.

sort. The Atabeg of Mosul, Kerbogha, a Seljuk Turkish prince with ties to the Abbasid Caliphate, wasted three weeks in May of 1098 in a vain attempt to unseat Baldwin from his newly-acquired County.¹⁴³ None of the cities or castles that Baldwin and Tancred captured whilst campaigning in the East were included in the initial goal of liberating Jerusalem. It was not necessary that the castles be captured from a strategic perspective, given how far out of the way they were. However, the two young knights' actions opened up new invaluable sources of supplies and horses for the crusader armies to utilize in the later parts of the campaign.

Returning to Antioch, the crusaders arrived at its gates in October of 1097, greeted with conditions widely recognized as beneficial to besieging the city. Food was plentiful in the Orontes river valley, and the crusaders had managed to intercept, capture, and plunder a Turkish supply caravan intended to relieve the garrison at Antioch.¹⁴⁴

Of the near 60,000 crusaders who had left Constantinople, only around 30,000-35,000 had reached Antioch. The crusaders had incurred these losses through casualties in battle, desertion, deaths during the march, and by the troops which had accompanied Baldwin and Tancred in their Cilician adventure.¹⁴⁵ As seen in Figure 5 below, the city of Antioch was positioned between the two mountain ranges forming the Orontes River valley, seated on a crossroads south of the Orontes River with Mount Silpius directly to its southernmost border.¹⁴⁶ Its innermost citadel was positioned high upon the side of the mountain, rendering it impossible to completely encircle, as the crusaders had eventually done at Nicaea.¹⁴⁷ According to Raymond

¹⁴³ Ibid. Ibid.

¹⁴⁴ Hill, *Gesta Francorum*. 28. Levine. *The Deeds of God*. 67. Sweetenham. *Robert the Monk*. 119-20.

¹⁴⁵ Riley-Smith. *The Crusades*. 37. France. *Victory in the East*. 142. Bachrach. "The Siege of Antioch" 135.

¹⁴⁶ France. *Victory in the East*. 207.

¹⁴⁷ Riley-Smith. *The Crusades*. 37-8. France. *Victory in the East*. 207.

D'Aguiers, the banks of the Orontes rendered the surrounding landscape marshy, further complicating the prospect of besieging the city.¹⁴⁸

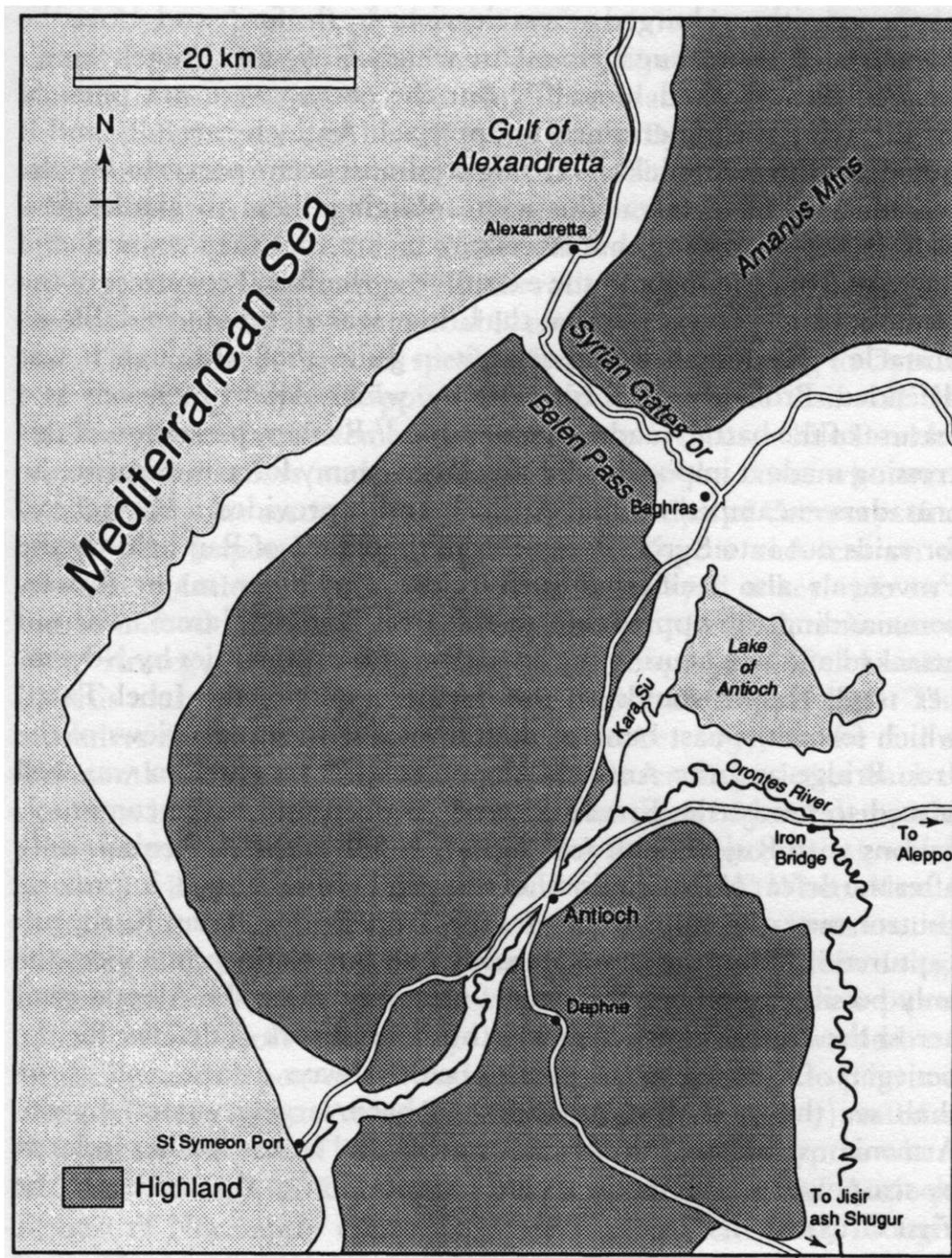


Figure 5 Map of the area surrounding Antioch. Image from *Victory in the East* by John France, page 207.

¹⁴⁸ Hill, *Raymond D'Aguiers*. 30-1.

Both the road and the leg of the Orontes River leading southeast of the city led to St. Symeon Port connecting the city to the Mediterranean Sea from which food, supplies, and people could be transported from Europe to Syria. Though the port was not integrated in the city itself, the defenders could easily ambush and intercept incoming supplies to the crusaders' encampments, making it difficult for the bulk of crusader forces to actually receive supplies from the port.¹⁴⁹ So long as Antioch was in enemy hands, the crusaders would be unable to make full use of either the port of St. Symeon or the Orontes River. However, the area was lacking in one particularly important aspect for the crusaders planned endeavors, timber. Without available timber, the crusaders were hard-pressed to construct siege engines, though they were able to construct fortifications from stone providing a measure of defense.¹⁵⁰ Robert the Monk is completely ignorant of the lack of wood in the area claiming that the crusaders had set about building siege craft, such as catapults, which would have been impossible for the army.¹⁵¹ Their siege was necessary because Antioch had to fall for the First Crusade to realize its ultimate objective. It was too important as a commercial hub and source of food to allow it to stay under Islamic control. In terms of supplies and supply lines, the crusaders had access to the markets of some cities such as Tripoli, which they obtained from the city's rulers, as well as the available food in the Orontes River valley, and port cities such as Mamistra, Alexandretta, Tarsus, Laodicea, and St. Symeon.¹⁵² Of these sources, the most convenient was the river valley, as foraging parties could be mobilized in the area so long as the valley remained productive.

¹⁴⁹ Bachrach. *The Gesta Tancredi*. 75.

¹⁵⁰ France. *Victory in the East*. 212. Hill. *Gesta Francorum*. 30. Edgington. *Albert of Aachen*. 110.

¹⁵¹ However, as Robert was not an eyewitness of the Crusade, his ignorance of the lack of wood is somewhat understandable.

¹⁵² Hill. *Peter Tudebode*. 43. Edgington. *Albert of Aachen*. 108. Edgington. *Baldric of Borgueil*. 79-80. Sweetenham. *Robert the Monk*. 121. France. *Victory in the East*. 213.

From the other sources, incoming shipments of supplies would have to be offloaded from ships then sent by caravan to the crusaders, again making use of pack beasts, wagons, and carts, in so far as they could be utilized, in hopes they would arrive in safety. For those supplies, the crusaders still yet relied on their Byzantine allies despite having parted ways with their armies.¹⁵³

In the beginning of the first siege, food was plentiful and the general outlook amongst the crusaders was optimistic.¹⁵⁴ Raymond D'Aguilers claims that such was the prosperity at the outset of the first siege of Antioch that even in the camps, the crusader forces dined on the "best cuts, rump and shoulders, scorned brisket, and thought nothing of grain and wine," and the temperament was such as to allow the crusaders to forget their enemies in Antioch, save for the sentries atop their walls.¹⁵⁵ As shown by Figure 6, below, the crusaders had blockaded three of the five gates of Antioch, and engaged in skirmishes with the defenders near the fourth. However, the prosperity was short-lived, as Antioch's defenders, understandably, took exception to the army attempting to surround their city on three of four sides.

Unwilling to sit idly by and allow the besieging army to starve them out without resistance, the defenders sent out raiding parties from Antioch's unblockaded Bridge Gate, meant to harass the crusaders, kill the foraging parties they sent out from their camps, and intercept caravans from the Port of St. Symeon.¹⁵⁶ Rather than ride out to meet the crusaders' armies, exchanging the safety of their garrison for the folly of a pitched battle, the besieged force under Emir Yaghi Siyan, a Seljuk Turk, sought to turn the crusaders' tactics against them. Wars of

¹⁵³ France. *Victory in the East*. 210.

¹⁵⁴ Hill. *Peter Tudebode*. 43. Hill. *Raymond D'Aguliers*. 31. Hill. *Gesta Francorum*. 28. Levine. *The Deeds of God*. 67. Sweetenham. *Robert the Monk*. 121. Edgington. *Albert of Aachen*. 108. Edgington. *Baldric of Bourgueil*. 79.

¹⁵⁵ Hill. *Raymond D'Aguliers*, 31.

¹⁵⁶ Edgington. *Albert of Aachen*. 112. Hill. *Raymond D'Aguliers*. 32. Hill. *Gesta Francorum*. 29.

attrition cuts both ways, and Yaghi Siyan was gambling on the chance that the besieged might starve the besiegers before their own supplies ran out.

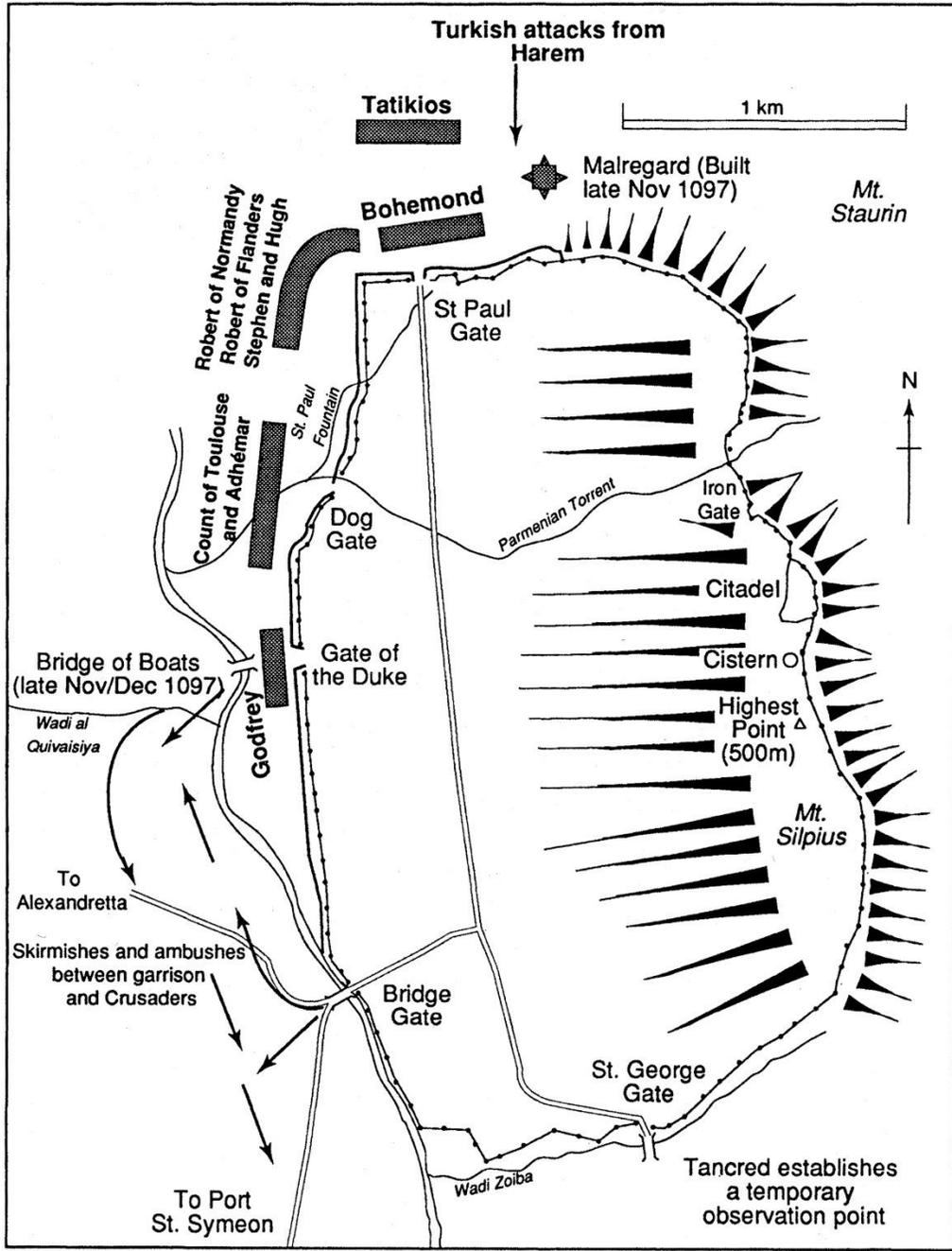


Figure 6 Map of the siege of Antioch Oct. 1097- Feb 1098. Image from *Victory in the East* by John France, page 221.

The tactic was brilliant and effective, crippling the crusaders through famine where force of arms would not suffice. As the months progressed into the winter, the 30,000 strong besieging force found themselves low on provisions by Christmas of 1097. The winter months between 1097 and 1098 were among the most harrowing for the armies of the First Crusade. Food was scarce and trade had all but dried up, as the snow and ice in the mountain passes had isolated the army, leaving them cold, starving, and miserable before Antioch's nigh-impregnable walls.¹⁵⁷

Here, Vegetius' writings proved prophetic:

Famine makes greater havoc in an army than the enemy and is more terrible than the sword. Time and opportunity may help to retrieve other misfortunes, but where forage and provisions have not been carefully provided, the evil is without remedy. The main and principal point is to secure plenty of provisions and destroy the enemy by famine.¹⁵⁸

The bitter irony of their own tactics and philosophy on war being applied against them by the besieged Muslim forces cannot have been lost on the crusade leaders. Among the chroniclers, the more vivid descriptions of the crusaders' suffering outside Antioch are not found in the eyewitness accounts, but rather those written by clerics in the aftermath such as Robert the Monk, Albert of Aachen and Guibert of Nogent. The *Gesta* author, Raymond D'Aguilers and Peter Tudebode all mention that by Christmas, food was scarce and foraging near impossible. However they give no specific details of their suffering, but rather immediately progress to speaking on what the crusade leaders determined to do to rectify the situation.¹⁵⁹ Among the eyewitnesses, Fulcher of Chartres stands as an exception to this trend, going into detail about the variety of dietary options the crusaders explored for want of bread and the "Miserable Poverty" they experienced. Fulcher claims that for their winter at Antioch, the crusaders dined on, "the

¹⁵⁷ Sweetenham. *Robert the Monk*. 123-4. Hill. *Peter Tudebode*. 45. Hill. *Gesta Francorum*. 30. Hill. *Raymond D'Aguilers*. 33. Edgington. *Albert of Aachen*. 116-7. Fink. *History of the Expedition to Jerusalem* 94-5. Edgington. *Baldric of Borgueil*. 81. Bachrach. *The Gesta Tancredi*. 79-81.

¹⁵⁸ Clarke. *De Re Militari*. 68-9.

¹⁵⁹ Hill. *Peter Tudebode*. 45. Hill. *Gesta Francorum*. 30. Hill. *Raymond D'Aguilers*. 33.

stalks of beans still growing in the fields, many kinds of herbs unseasoned with salt, and even thistles which because of the lack of firewood were not well cooked and therefore irritated the tongues of those eating them. They also ate horses, asses, camels, dogs, and even rats. The poorer people ate even the hides of animals and the seeds of grain found in manure.”¹⁶⁰

This discrepancy should not suggest that the eyewitnesses either lacked conviction or did not endure great hardship. Rather it seems they deemed it more important to address the actions taken to end their suffering rather than the details of their misery. However, religious fervor should not be discarded as a precondition of the crusaders’ ultimate victory. The eyewitnesses never denounced their faith, even if they chose not to address its importance in their ordeal at Antioch. Were it not for their religious zeal, they would not have referred to themselves as pilgrims, nor is it likely that so many noncombatants would have accompanied the armies on the campaign. Freezing and starving before a city that denied their attempts to capture it for over near nine months, the crusaders, in majority, remained firm in their convictions that they were on a divinely sanctioned mission, to such a degree that they refused to break, and outlasted the winter despite their suffering.¹⁶¹

The winter spent at Antioch was a logistical nightmare, and were it not for the crusaders’ faith that it was God’s will that they liberate Jerusalem, the Crusade could have easily died there in Syria simply through desertion. Victory, defeat, prosperity and privation, all were directly tied to how the crusaders handled logistics in the First Crusade’s various stages. Where their logistical systems were insufficient to supply the full measure of their needs, as was the case at

¹⁶⁰ Fink. *A History of the Expedition to Jerusalem*. 95-6.

¹⁶¹ Hill. *Gesta Francorum*, 33. Hill. *Peter Tudebode*, 47-50. Fink. *A History of the Expedition to Jerusalem*, 97. Desertion was problem, albeit a small one, mitigated by the threat of punishment at the hands to princes who caught deserters, like William the Carpenter and Peter the Hermit. The most notable deserter was Stephen of Blois who left the day before the city fell, ostensibly out of fear of Kerbogha’s incoming army.

Antioch, the crusaders suffered. Though it was their greatest challenge, the crusaders survived, and while many land routes had been cut off from them, they still held the port of St. Symeon, and they still had their alliance with Byzantines. Despite the fact they had left his armies at Nicaea, Alexius seems to have been determined to uphold his responsibilities toward their alliance. The crusaders' survival at Antioch relied on Byzantine shipping through the port of St. Symeon, as well as Italian shipping.¹⁶²

As winter gave way to Spring, the arrival of more supply fleets brought relief to the crusaders, and Baldwin began to send aid from his seat in Edessa. Albert of Aachen indicates that Baldwin sent money, horses, weapons in addition to "corn, barley, wine and oil."¹⁶³ Knowing that Yaghi Siyan would not allow them to resupply unchallenged, the crusaders set about building a new fort, The Mahomeries Tower, outside of Antioch's Bridge Gate, which faced the port of St. Symeon, shown in Figure 7, below.

As expected, the army of Antioch set an ambush for the incoming caravan, but it was defeated by a counter attack led by Godfrey, allowing the crusaders to resupply.¹⁶⁴ The crusaders' completion of the Mahomeries Tower in March of 1098, followed by the construction of Tancred's Tower in April marked the beginning of the end of this first siege of Antioch. With these towers in place, the crusaders could both check the defenders' activities and raiding, in doing so they could protect any further incoming shipments and begin to recover, and finally cut off the city of Antioch, completing their blockade.¹⁶⁵

¹⁶² Bernard S. Bachrach, et. al. "Some Observations on the Role of the Byzantine Navy in the Success of the First Crusade" *Journal of Medieval Military History: Volume 1* (Woodbridge, The Boydell Press, 2002) 89-90. France. *Victory in the East*. 209-211, Bachrach. *The Gesta Tancredi*. 84.

¹⁶³ Edgington. *Albert of Aachen*, 139-40.

¹⁶⁴ France. *Victory in the East*. 254.

¹⁶⁵ Hill. *Peter Tudebode*. 60. Levine. *The Deeds of God*. 78. Hill. *Gesta Francorum*. 43. Hill. *Raymond D'Aguliers*. 45-6.

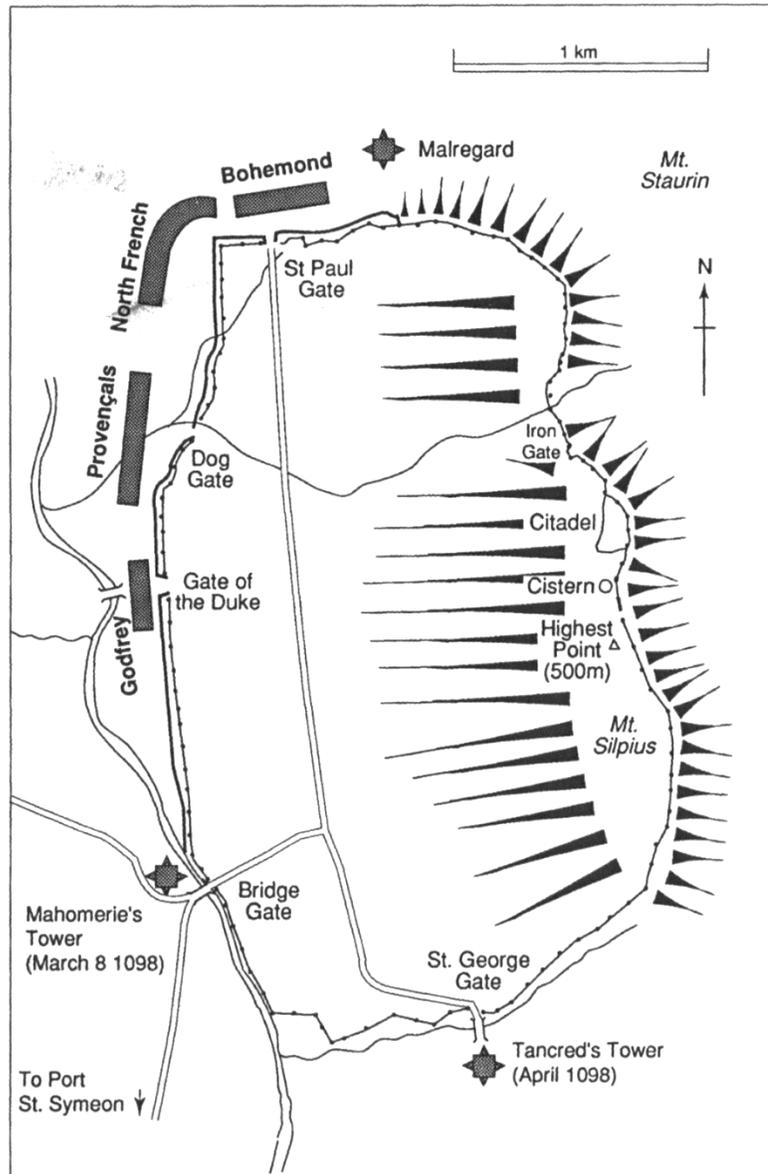


Figure 7 Map of the siege of Antioch March-May 1098. Image from *Victory in the East* by John France, page 252.

Any hope for Emir Yaghi Siyan of Antioch now rested with the possibility of external aid, which he had sent for in December of 1097, and the chance whatever relief arrived might be strong enough to destroy the crusaders. The aid he hoped for was en route, as the crusaders soon found out, much to their dismay.¹⁶⁶

¹⁶⁶ Hill. *Gesta Francorum*. 45. Hill. *Raymond D'Aguliers*. 46. Edgington. *Albert of Aachen*. 142-3.

The crusaders had just recently been able to re-establish their supply lines through the port of St. Symeon and were in no fit state to withstand an attack, dedicated as they were to the siege. However, the nine-month siege had devastated Antioch, depleting the city's food supply leaving them starved, weakened, and desperate for an end of the siege. However, a guard by the name of Firuz, through a series of dialogues with Bohemund, had agreed to allow Bohemund's forces scale the walls and capture the city in exchange for a bribe.¹⁶⁷ Firuz's motivations are not really discernable from the multiple disparate claims regarding his person and the nature of his interactions with Bohemund. What is clear however is that by June, conditions within Antioch had deteriorated to such a degree that the promise of personal wealth as well as a cessation of the blockade was sufficient to convince the man to betray Antioch to Bohemund's control.

Bohemund's actions in this regard have often been portrayed in much the same light as Baldwin and Tancred's motivations for their campaign to Edessa, that is to say the actions of a man concerned primarily with his own self-interest. Arguments of this kind have a good deal of support from the chroniclers as they record him only enacting his plan after receiving confirmation from the other Crusade leaders that he would be given dominion over the city provided he succeed in capturing it.¹⁶⁸ However, the crusaders were well aware that they were weakened from their winter time ordeal, and that Seljuk Turkish reinforcements were soon to arrive. Bohemund himself was instrumental in many of the raids and foraging parties sent out to alleviate the crusaders' suffering. The crusaders had spent enough time outside Antioch to know two essential points. First of all, the city was a defensible position, an obvious enough statement,

¹⁶⁷ Hill. *Peter Tudebode*. 61. Edgington. *Albert of Aachen*. 141-9. Hill. *Gesta Francorum*. 45-7. Sweetenham. *Robert the Monk*. 146-50. Dawes. *The Alexiad*. 278. Fink. *A History of the Expedition to Jerusalem*. 98-9. Levine. *The Deeds of God*. 81-4. Edgington. *Baldric of Bourgueil*. 93-9.

¹⁶⁸ Hill *Gesta Francorum*, 45. Levine. *The Deeds of God*. 82. Hill. *Peter Tudebode*. 62. Edgington. *Albert of Aachen*, 144.

but an important one given that the crusaders believed that they would be outnumbered when Kerbogha arrived.¹⁶⁹ Second, and more importantly, Antioch's size made it difficult to fully blockade. The Bridge Gate, which provided easy access to the port, was the third of four gates from where Kerbogha's army approached. So long as they could prevent their access to the port of St. Symeon from being cut off, there was a chance, slight though it was, they could outlast the Turkish prince. On June 2, 1098, Bohemund and a contingent of knights and soldiers loyal to him scaled the walls and by the time the sun rose on June 3, 1098, Bohemond's banner flew over the city and the first siege of Antioch had ended.¹⁷⁰

The situation inside the city walls was dire. The nine-month siege had devastated Antioch, and the crusaders were greeted with yet more privation and death within the walls.¹⁷¹ The sources differ on the amount of wealth within Antioch, Raymond D'Aguilers boasts of plenty while Albert laments the scarcity. In this case, it seems prudent to favor Albert, as Raymond is both prone to exaggeration when speaking of the crusaders' exploits and gains and could be speaking in terms of riches and plunder rather than food. Furthermore, it is unlikely that a city coming out of a nine-month long siege would have any appreciable stocks of food remaining in it, especially when one considers the chronicler accounts of starvation in the second siege. Any hopes that the crusaders might be able to keep their access to the port of St. Symeon were dashed with Kerbogha's arrival four days after they entered the city. The second siege of Antioch, shown in Figure 8, began on June 7, and the crusaders within Antioch were in worse shape than Yaghi Siyan had been when they arrived. Unable to resist Kerbogha in the way they

¹⁶⁹ Hill. *Gesta Francorum*, 45. Levine. *The Deeds of God*. 82.

¹⁷⁰ Hill. *Peter Tudebode*. 61-5. Edgington. *Albert of Aachen*. 141-9. Hill. *Gesta Francorum*. 45-7. Sweetenham. *Robert the Monk*. 147-9. Dawes. *The Alexiad*. 279. Fink. *A History of the Expedition to Jerusalem*. 98-9. Levine. *The Deeds of God*. 83-5. Edgington. *Baldric of Bourgueil*. 93-9. France. *Victory in the East*. 258-9.

¹⁷¹ Edgington. *Albert of Aachen*. 151. France. *Victory in the East*. 267.

had been resisted, the crusaders found themselves blockaded with in the city in a matter of three weeks, facing the very tactics they had utilized in the first siege.

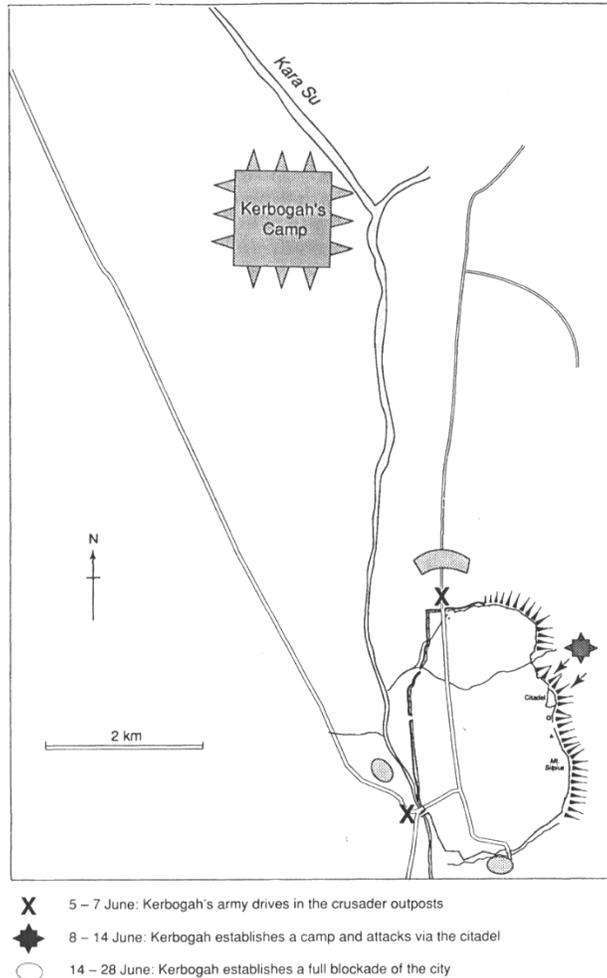


Figure 8 Kerbogha's siege of Antioch June 4-28, 1098. Image from *Victory in the East* by John France, page 272.

The point of siege warfare is to deny the enemy forces food, blockading and starving them until their will to resist is broken. The crusaders knew this tactic all too well. Furthermore, as they grew weaker, Kerbogha's forces would grow stronger, as they could draw resources from their allies without fear of crusader interference. There was only one solution to the logistical problem they now faced, and it was risky. They had to attack Kerbogha's forces before the siege devastated their forces. The chroniclers, without exception, attribute the crusaders' victory to

divine intervention spurred by the discovery of the Holy Lance of St. Andrew.¹⁷² On June 28, they attacked. Marching out from the Bridge Gate, the crusaders rallied in force to attack Kerbogha's forces. As to why Kerbogha allowed them to gather in force, Peter Tudebode and the *Gesta* author both suggest it was so that he could maximize his chances of capturing the bulk of the army and bring a decisive end to their campaign.¹⁷³ In doing so, he gave the crusaders the opening they needed to rally their army in force and launch a desperate attack which broke his army's ranks and ended the Second siege of Antioch.

The end of the second siege of Antioch heralded the end of the second phase of the First Crusade. Now the crusaders held both Edessa and Antioch, cities that not only would become the capitals of two of the crusader states, eventually, but also held incredible logistical value. From Baldwin's seat in Edessa horses and coin flowed to the crusader army, while Antioch offered control of the fertile Orontes River valley and the port of St. Symeon. The crusaders had earned their respite, and would delay the continuation of their march until November. The end was in sight. In the final phase of the First Crusade, the crusaders, specifically those led by Raymond IV of St. Gilles faced very different conditions than they had in the first two phases. For Raymond IV, diplomacy would become a valuable tool in his logistical toolbelt.

¹⁷² Hill. *Raymond D'Aguliers*. 59-60. Edgington. *Baldric of Bourgueil*. 118. Hill. *Peter Tudebode*. 83-4. Fink. *A History of the Expedition to Jerusalem*. 99-101. Edgington. *Albert of Aachen*. 165-6. Hill. *Gesta Francorum*. 65. Sweetenham. *Robert the Monk*. 163.

¹⁷³ Hill. *Peter Tudebode*. 86. Hill. *Gesta Francorum*. 68.

CHAPTER 3: VICTORY: From Antioch 1098 through Jerusalem 1099

The final phase of the First Crusade was strikingly different from the previous phases, with the crusaders' approach to logistics being no exception. This phase saw the crusader army split into two factions, one led by Raymond IV of St. Gilles, and the other led initially by Bohemond, but later by Godfrey and Robert of Flanders when Bohemond abandoned the campaign, to secure his hold over Antioch. The death of Bishop Adhemar of Le Puy at Antioch left the princes without their counselor and arbitrator.¹⁷⁴ With their forces parting ways at Ma'arrat, the armies of Raymond IV and Godfrey took two drastically different routes south from Ma'arrat in January 1099 and Laodicea in February 1099 respectively, reuniting at Arqah in March as shown in Figure 9 below. Raymond's march presented him with critical logistical concerns, as he had to rebuild his army without having access to the Mediterranean Sea. His march is covered in greater detail than Godfrey's by the eyewitness authors, the *Gesta* author, Raymond D'Aguilers, and Peter Tudebode, who accompanied him. To compensate for losing access to the Mediterranean, Raymond IV had to adapt, and alter his approach to logistics to a degree which Godfrey and Robert of Flanders did not. Diplomacy became Raymond's greatest logistical tool preceding Arqah, and his exploits in the march from Ma'arrat demand a greater deal of analysis than that of his fellow Crusade leaders.

Following their hellish nine-month ordeal, Antioch had been captured, and with it, the Orontes River and the Mediterranean Sea were open to the crusaders. However, the army was exhausted, hungry, and weakened due to the loss of their horses during the course of the sieges. The crusaders' fighting strength was somewhere between 14,000 and 20,000 total combatants,

¹⁷⁴ Edgington. *Baldric of Bourgueil*, 126-7.

given that 30,000 had begun the first siege of Antioch and their losses were severe.¹⁷⁵ The immediate concern for the crusaders' leaders was for their armies to resupply and rest before continuing their campaign.

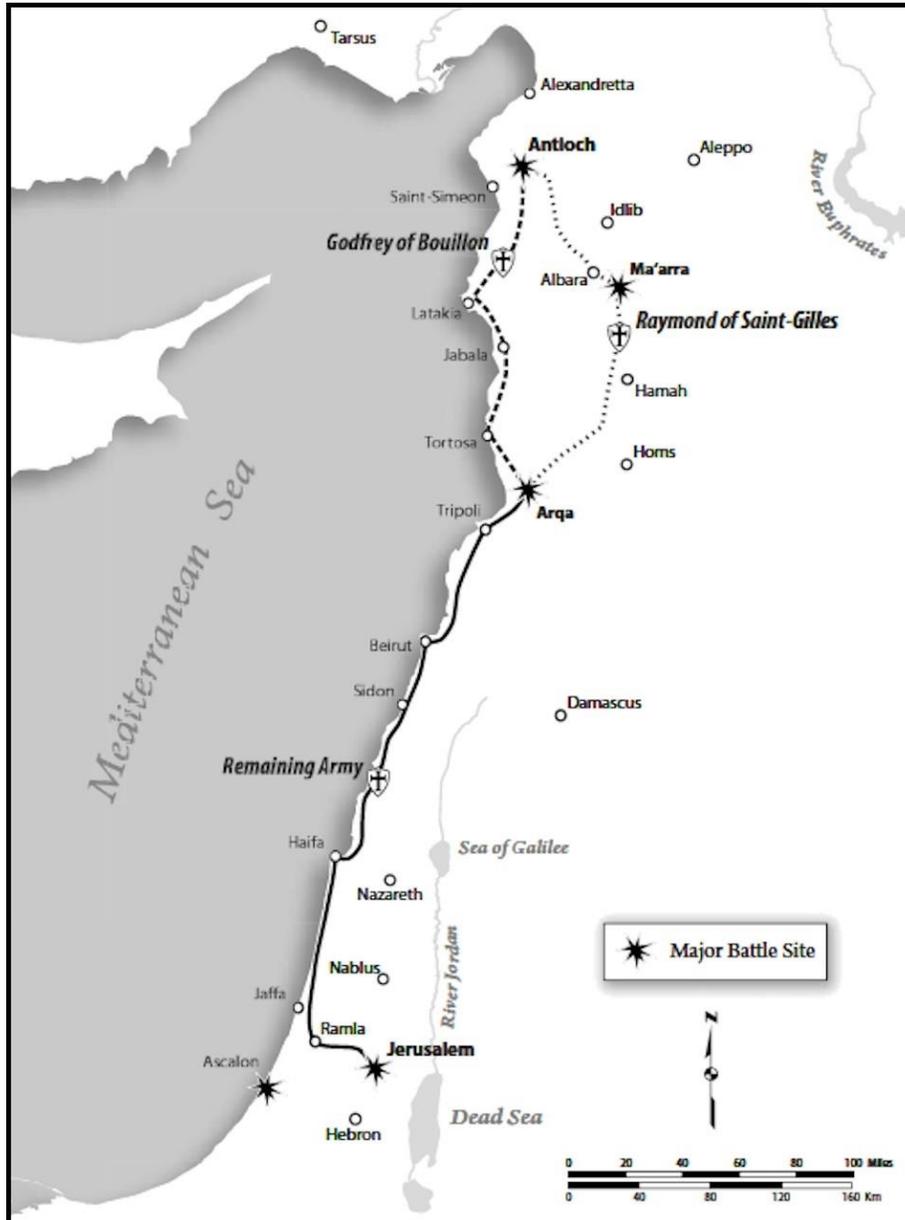


Figure 9 The crusader's roads from Antioch to Jerusalem. Image from *Armies of Heaven: The First Crusade and the Quest for Apocalypse* by Jay Rubenstein, page 237.

¹⁷⁵ France. *Victory in the East*. 131, 269. France suggests that the 14,000 was the total force available to march in January of 1099. He presents no exact numerical value for their forces after Antioch, only suggesting that they could not have been as many as 30,000 including non-combatants.

Their victory over Kerbogha's numerically superior force had brought with it some the spoils of their camp, and re-opened the road to the Port of St. Symeon as potential means to alleviate their needs.¹⁷⁶ Among the eyewitness accounts, the *Gesta* author, Raymond D'Aguilers, and Peter Tudebode all speak of the plunder, including horses, cattle, camels, grain, wine, and inedible items available in Kerbogha's camp. The *Gesta* author suggests that Kerbogha's army attempted to set fire to the camp as they fled.¹⁷⁷ While the spoils taken from Kerbogha's camp would provide a short-term relief for the beleaguered army, they would need a more sustainable solution if they intended to continue to Jerusalem. Recognizing the severity of their present circumstances, the Crusade leaders, who now consisted of Raymond IV, Godfrey of Bouillon, Bohemond and his nephew Tancred, Robert of Flanders, Hugh of Vermandois, and Robert of Normandy, realized they would need to send for help from Alexius. Designating Hugh of Vermandois as their emissary, the Crusade leaders sent envoys to Constantinople in search of aid.¹⁷⁸ In the meantime, they rested in Antioch for four months from June through November 1097 seemingly awaiting Byzantine supplies. Precious little is recorded in the chronicles and letters regarding any shipments or the general state of the crusaders' provisions between their victory over Kerbogha in June of 1098 and the continuation of their campaign the following November.

The interim months at Antioch were not by any means devoid of activity, with Bohemond and Raymond of St. Gilles engaging in political disputes over the city's ownership in the wake of Bishop Adhemar of Le Puy's death. France suggests that these disputes were the

¹⁷⁶ Hill. *Raymond D'Aguilers*, 64. Hill. *Peter Tudebode*, 88-9. Hill. *Gesta Francorum*, 69-71.

¹⁷⁷ Hill. *Gesta Francorum*, 69-71.

¹⁷⁸ Hill. *Gesta Francorum*, 72. Edgington. *Albert of Aachen*, 178-9. Sweetenham. *Robert the Monk*, 175-6. Levine. *The Deeds of God*, 102. Edgington. *Baldric of Bourgueil*, 124. While some of the chroniclers address this event, the surviving crusader letters are conspicuously silent. The crusader leaders aside from Bohemond seem to have intended to turn Antioch over to Byzantine rule, in accordance with their oaths.

culmination of the two men's personal rivalry, which ultimately resulted in Bohemond's eventual abandonment of the Crusade. Insofar as logistics are concerned, France posits it was during July of 1098 when Bohemond negotiated for Genoese aid and support of his claim on Antioch.¹⁷⁹ The fleets sent as a part of these negotiations would be instrumental in provisioning the crusaders in their southward march down the Syrian coast and their eventual siege of Jerusalem.

The crusaders could not stay in place indefinitely. With Antioch under their control, and the summer months having passed, the crusaders resumed their march. In mid-November, the armies led by Raymond IV, Robert of Flanders, and Bohemond set siege to Ma'arrat which fell to them in less than a month's time. The size of their armies at the start of the siege is hard to determine. Raymond D'Aguilers suggests that Raymond IV had "less than 300 knights and only a small number of footmen" in the wake of Ma'arrat, but gives no tallies for before the siege.¹⁸⁰ Bohemond's forces are completely uncounted. The reason this siege is noteworthy is because Ma'arrat served as a catalyst in forcing Raymond to advance further south ahead of his fellow crusade leaders. At Ma'arrat, the crusaders experienced such extreme suffering and privation that the poorest among them supposedly dined on human flesh.¹⁸¹

These cannibalistic acts reportedly were committed sometime between the city's capture and the continuation of the march Raymond's faction in January 1099. All of the major Crusade chroniclers report on these events.¹⁸² Every one of the chroniclers, attest to the crusaders'

¹⁷⁹ France. *Victory in the East*, 297-8.

¹⁸⁰ Hill. *Raymond D'Aguilers*, 82.

¹⁸¹ Edgington. *Baldric of Bourgueil*, 131. Levine. *The Deeds of God*, 107. Hill. *Peter Tudebode*, 102. Hill. *Gesta Francorum*, 80. Hill. *Raymond D'Aguilers*, 81. Fink. *A History of the Expedition to Jerusalem*, 112. Sweetenham. *Robert the Monk*, 186. Edgington. *Albert of Aachen*, 194. Bachrach. *The Gesta Tancredi*, 116. Gibb. *The Damascus Chronicle*, 46.

¹⁸² Of the events at Ma'arrat Anna Comnena is silent, though this is unsurprising as her coverage of the Crusade represents the movement as a secondary activity occurring simultaneous to more important Byzantine

cannibalism as an act of desperation. Historian Jay Rubenstein has argued against such claims, suggesting rather that the acts of cannibalism were performative rather than desperate. He presents his arguments in the article “Cannibals and crusaders” by suggesting that the Franks’ brutality and acts of cannibalism were but one necessary component in fashioning the crusaders as the agents of God’s will, his wrath incarnate.¹⁸³ His overarching arguments address primarily how the chroniclers recorded these acts, and the psychological effects they would have had more so than the conditions surrounding the events. He suggests that the most probable explanation for ways the chroniclers addressed cannibalism is that it was a means of communicating the horror of the famine the crusaders experienced at Ma’arrat.¹⁸⁴ This sentiment is continued in one of the crusader letters as well, from Daibert, Archbishop of Pisa, to the Pope and all of the Christian faithful.¹⁸⁵ His letter reads of the events as follows.

Our army defeated the enemy, but was continuing to suffer from hunger and fatigue as well as from quarrels among our leaders, so it set out for Syria where it captured the Saracen cities of Barra and Marra as well as the fortresses in the region. While we were resting there our Christian soldiers were so hungry that they ate the decomposing corpses of the Saracens.¹⁸⁶

Daibert indicates that while the army had been ready to commit such acts at Antioch, they did not succumb to their desperation until Ma’arrat.

events. However, she does suggest briefly in her coverage of the People’s Crusade that at Nicaea the Normans dismembered children and roasted the parts on spits, but she never suggests that they consumed the meat.

¹⁸³ Jay Rubenstein. “Cannibals and crusaders” *French Historical Studies* 31 (2008): 542, 548-9. In Rubenstein’s book *Armies of Heaven: The First Crusade and the Quest for Apocalypse* addresses the trend of accusing the “Tafurs” as the culprits committing acts of cannibalism. He suggests that this trend started with Guibert of Nogent. However, the translation of Guibert’s account used in this thesis does not identify any particular culprit, simply referring to the group as “Others.” In terms of historiography, he admits that modern writers tend to approach crusader cannibalism by either “following Guibert’s lead” and accusing the Tafurs, or preferring Raymond D’Aguilers’ account that places cannibalism in the aftermath of the siege and suggests it was the result of “sharp, unexpected hunger.” However, he concedes that Raymond’s is an eyewitness account, “and modern historians, like medieval ones tend to put greater weight on eyewitness testimony.”

¹⁸⁴ *Ibid.*, 550.

¹⁸⁵ Barber. *Letters from the East*. 34.

¹⁸⁶ *Ibid.* Barra and Marra refer to Albara and Ma’arrat

Ma'arrat stands roughly 60 miles south-east of Antioch, less than 10 miles from Albarra, which Raymond IV had previously seized as a base of operations in the wake of Antioch, and 20 miles from the Orontes river at its minimum distance, as indicated below in Figure 10. The city sat in a flat, open plain, possessing few natural defenses or advantages, with its only constructed defenses being the walls which covered about two square miles in area, and a ditch along the southern wall which Raymond IV had his forces fill in.¹⁸⁷ The crusaders' siege of Ma'arrat occurred exactly one year after the harsh Syrian winter crusaders had to endure at Antioch. The siege itself was handled with ease compared to the troubles they had faced at Antioch, as not only did Ma'arrat lack the protection of a mountain range on one side, but the crusaders had the ability and material to construct a siege tower and ladders allowing Raymond IV's forces to breach the wall.¹⁸⁸ As the *Gesta* author writes, "Raymond of St. Gilles caused a wooden siege-tower to be built and it was strong and loft, so engineered and constructed that it ran upon four wheels... and it was higher than all the walls of the city."¹⁸⁹

It would have been impractical for the crusaders to have imported the timber necessary for this tower's construction by way of Antioch given Ma'arrat's distance from the Orontes. While the eyewitnesses of the siege are silent on how the lumber was acquired, Albert of Aachen elucidates the matter in suggesting that Raymond obtained it, along with some much-needed provisions, in a successful raid in the mountainous region of Talamria.¹⁹⁰ Albert of Aachen is further unique among the chroniclers in suggesting that the crusaders committed acts of cannibalism during the course of the siege, rather than in the aftermath of the city's capture as

¹⁸⁷ France. *Victory in the East*, 311-12.

¹⁸⁸ Hill. *Gesta Francorum*, 78. Hill. *Raymond D'Aguilers*, 78. Hill. *Peter Tudebode*, 99. Levine. *The Deeds of God*, 106. Edgington. *Baldric of Bourgueil*, 129. France. *Victory in the East*, 314.

¹⁸⁹ Hill. *Gesta Francorum*, 78.

¹⁹⁰ Edgington. *Albert of Aachen*, 192-3.

the other chroniclers indicate, and that Raymond's actions in undertaking the aforementioned raid was direct reaction to the crusaders' suffering and hardship.¹⁹¹

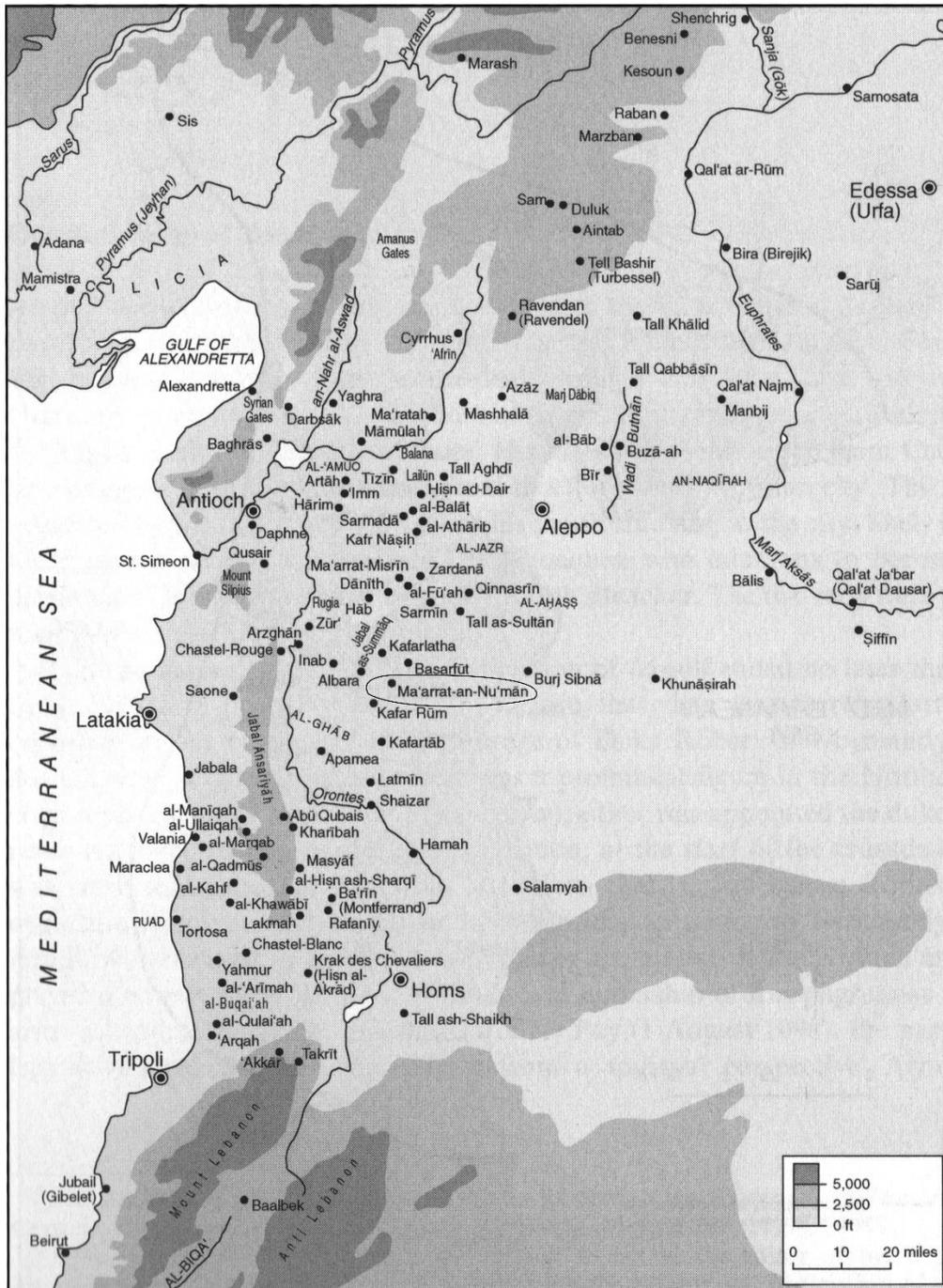


Figure 10 Map of Northern Syria. Image from *The Gesta Tancredi* by Bernard S. Bachrach, page xi.

¹⁹¹ Ibid.

Seeing as Albert's account of the Crusade was written after the events had long since concluded, and even some of the eyewitness accounts, namely Raymond D'Aguilers, are known to have gotten some of the events out of order chronologically speaking, it is a forgivable error.

Furthermore, it provides much-needed logistical information excluded from the other accounts.

In terms of logistics, the crusaders present at Ma'arrat were forced to rely on what provisions Raymond IV had obtained in his raid in Talamria, as they were caught in a second winter time famine. While the siege of Ma'arrat lasted only five weeks, it was five weeks in a similar Syrian winter to the one which had plagued the crusaders only a year before at Antioch. One possible explanation for the famine is provided by Albert of Aachen. He suggests that the people of Ma'arrat had felt the parasitic effect of the crusaders' long investment at Antioch which stripped the surrounding areas clean of resources and food, and fled into the mountains with their "possessions and herds."¹⁹² Any food that remained after their departure would have been taken into the city in advance of the crusaders' arrival, leaving the crusaders with little to find in the area.¹⁹³ Unlike Antioch, where the Port of St. Symeon had provided the crusaders with some measure of relief from the Mediterranean, Ma'arrat was completely landlocked and sat 20 miles from the Orontes River, well beyond the reach of maritime trade and support.

While Raymond IV's raiding forays during the earlier part of the siege helped alleviate the problem of food supply during the siege, they also contributed to the harsher conditions the crusaders faced in the aftermath. The region around Ma'arrat had been depleted, and the crusaders were unable to forage far from the city, fearing the threat of attack from Islamic forces. In the face of such scant provisions, the poorest among the crusaders turned to what sources of

¹⁹² Edgington. *Albert of Aachen*, 192.

¹⁹³ Bachrach. *The Gesta Tancredi*, 115.

nourishment they could find, most infamously, human corpses.¹⁹⁴ The association with crusader cannibalism and poverty is only suggested by Guibert of Nogent, an identified elitist. However, he is vague in his writing on the subject, suggesting that the crusaders were “entirely without resources, finding nothing in nearby areas to supply their needs.”¹⁹⁵

The crusaders’ reported acts of cannibalism coincided with another problem for the armies. Bohemond and Raymond IV’s rivalry split the crusader army into factions in the wake of the siege of Ma’arrat. Raymond D’Aguilers’ account of the siege and subsequent cannibalism place the latter events after Bohemond’s departure from the Crusade.¹⁹⁶ This is particularly interesting because Peter Tudebode and the *Gesta* author, as well as many of the other chroniclers writing after the Crusade, place Bohemond’s departure after their accounts of cannibalism.¹⁹⁷ However, none of the authors suggest how much time separated the acts of cannibalism and Bohemond’s departure. This raises the question: what relation, if any, existed between the practice of cannibalism and the departure of one of the two most powerful and respected Crusade leaders from the campaign? Clearly, the crusaders were having an issue with their supplies in the wake of the siege, and Bohemond’s departure would do nothing to alleviate their problems. Earlier in the campaign, it was Bohemond who had negotiated for supplies to be sent to the crusaders from Genoa. Having withdrawn support from Raymond of St. Gilles, Bohemond returned to Antioch, whereupon Fulcher of Chartres suggests, he banished any and all of Raymond IV’s remaining supporters and allies from the city.¹⁹⁸ This left Raymond IV effectively cut off from the Mediterranean. In addition to Ma’arrat’s distance from the Orontes

¹⁹⁴ Levine. *The Deeds of God*, 107.

¹⁹⁵ Ibid.

¹⁹⁶ Hill. *Raymond D’Aguilers*, 80-1.

¹⁹⁷ Hill. *Gesta Francorum*, 80-1. Hill. *Peter Tudebode*, 102.

¹⁹⁸ Fink. *A History of the Expedition to Jerusalem*, 113.

River, Raymond IV now had to contend with the fact that his primary rival amongst the Crusade leaders held sole ownership of the city which oversaw trade routes travelling from the Mediterranean along the Orontes.

The crusader army was now truly dissected. Raymond IV led a faction from Ma'arrat comprised of himself, Tancred, Bohemond's nephew whose continuing military service Raymond had purchased until the army had taken Jerusalem, and Robert of Normandy, whom would join them at Kafartab. The second faction's ranks included the armies led by Godfrey de Bouillon, Robert of Flanders, and Bohemond, who would abandon the Crusade entirely by March 1099.¹⁹⁹ These factions took very different routes forward, though they reconvened at the siege of Arqah in March of 1099, as indicated previously in Figure 9.²⁰⁰ Of the two, Raymond IV's route is the more interesting from a logistical perspective, as he spent the entirety of his march to Arqah isolated from the Mediterranean Sea, and the boon of maritime shipping. As they enjoyed this boon, Godfrey and Robert of Flanders did not have to adapt their approach to the Crusade and its logistical planning nearly to the degree that Raymond IV did.

The desperate acts of cannibalism had shown the Count that the situation at Ma'arrat was untenable and his army would have to move on.²⁰¹ However, the upcoming stage of the Crusade, insofar as Raymond's forces were concerned, was very different in appearance and activity than its earlier stages. The situation was dire, and navigating it would require a degree of finesse on the part of Raymond IV. The march from Ma'arrat to Jerusalem was a comparatively less violent affair than the crusaders' previous experiences in Asia Minor and Syria. It is during this phase where of the Crusade where the eyewitness accounts by the *Gesta* author, Peter Tudebode, and

¹⁹⁹ Fink. *A History of the Expedition to Jerusalem*, 113. Hill. *Gesta Francorum*, 80-1. Hill. *Raymond D'Aguilers*, 80-3. Hill. *Peter Tudebode*, 104.

²⁰⁰ Arqah is sometimes spelled as "Arqa" as is the case in both Figure 8 and Albert of Aachen's account

²⁰¹ Hill. *Raymond D'Aguilers*, 81-2. Edgington. *Baldric of Bourgueil*, 133.

Raymond D'Aguilers first portray Raymond of St. Gilles as a traditional pilgrim in appearance or actions.²⁰² To quote Raymond D'Aguilers, "On the appointed day, the Count, his clerks, and the Bishop of Albara departed and trudged along barefooted, calling out for God's mercy and the saints' protection as flames set by the departing Christians mounted the ruins of Ma'arrat-an-Nu'man"²⁰³ The image of Raymond IV in this passage is not that of the valiant military commander whom Raymond D'Aguilers profiled at the start of his account, where he claims that, "In the midst of these dangers the Count always protected his people by fighting in the rearguard and by being the last one to reach his quarters," but rather that of a humbled pilgrim.²⁰⁴ This change in presentation is accompanied with a change in behavior, regarding how Raymond IV sought to obtain provisions. In this final stretch the crusaders, first in Raymond's faction but eventually with the reunited armies after Arqah, exhibit a willingness to negotiate with Islamic rulers which had not existed amongst them previously. In his march to Arqah, Raymond IV made deals with the rulers at Shaizar, Raphania, and Homs to purchase food and horses.²⁰⁵

John France has suggested that the Raymond IV's initial march from Ma'arrat was "never intended as anything more than an extended raid whose continuation was provisional on better conditions and one which might be made to serve self-interest if all else fails," and that "the count never intended to march to Jerusalem with his relatively small force."²⁰⁶ Such arguments have their merits, given that Raymond was keenly aware that he was no longer leading a large or well-provisioned force. His faction possessed a combined military strength of between 450 and 500 knights, and an undocumented number of infantry.²⁰⁷ Raymond IV had

²⁰² Hill. *Peter Tudebode*, 104. Hill. *Raymond D'Aguilers*, 83. Hill. *Gesta Francorum*, 81.

²⁰³ Hill. *Raymond D'Aguilers*, 83.

²⁰⁴ *Ibid.*, 17. This passage is taken in reference to the march through Romania, referring to Raymond's efforts in defending his army from marauders.

²⁰⁵ Hill. *Peter Tudebode*, 104-106. Edgington. *Baldric of Bourgueil*, 134-5. Hill. *Gesta Francorum*, 81-3.

²⁰⁶ France. *Victory in the East*, 316.

²⁰⁷ *Ibid.*, 129-30.

acquired this army by paying 15,000 *solidi* Tancred and Robert of Normandy in exchange for their military service. However, Raymond D'Aguilers suggests he was prepared to spend an additional 16,000 to purchase similar service from Godfrey and Robert of Flanders.²⁰⁸

Geographically Raymond IV's coalition was isolated from the Mediterranean by the Jabal Ansariayah, or Syrian Coastal Mountain Range, depicted in Figure 9 above, meaning that naval support and trade were inaccessible, leaving his army effectively stranded in hostile territory. It would not be until the siege of Arqah in March of 1099, that Godfrey of Bouillon and Robert of Flanders would rejoin their forces with Raymond's. Until then, the Raymond IV's military strength would be diminished, leaving him too weak to risk open conflict where it was unnecessary.

However, it seems incorrect to suggest that Raymond did not intend to lead his coalition to Jerusalem from the time he departed Ma'arrat, as John France maintains. The eyewitness accounts by the *Gesta* author, Raymond D'Aguilers and Peter Tudebode make it clear that this was not the case, and that Raymond's march from Ma'arrat was made with the full intention of continuing south until they reached and took Jerusalem.²⁰⁹ They stress the piety of Raymond's actions, reinforcing his image as that of a pilgrim. The *Gesta* author writes that, "When Raymond saw that he was the cause why none of the other leaders would set out on the way to the Holy Sepulchre he went out barefoot from Marra on the thirteenth of January."²¹⁰ It bears repeating that the *Gesta* author is widely considered to have been a militarily-inclined individual

²⁰⁸ Hill. *Raymond D'Aguilers*, 80. Peter Spufford. *Money and its use in Medieval Europe*, (Italy: Cambridge University Press: 1989) 397. According to Peter Spufford in his 1993 book *Money and its use in Medieval Europe*, a *solidus*, the singular of *solidi*, was a coin worth 12 silver *denier*, which weighed 24 grains, or 1.272 grams. This means that Raymond IV was prepared to dispense with around 100 pounds of silver in exchange for military service.

²⁰⁹ Hill. *Raymond D'Aguilers*, 82-3. Hill. *Gesta Francorum*, 81. Hill. *Peter Tudebode*, 104-5.

²¹⁰ Hill. *Gesta Francorum*, 81.

rather than a religiously-inclined one, and he is indicating that it was Raymond's piety rather than his military concerns which pushed him towards Jerusalem.²¹¹

However, his behaviors in January and February of 1099 read as those of a practical military commander, one both in need of provisions and looking to strengthen his forces. His army was hungry and weakened. Raymond did not intend to attempt to take Jerusalem with his 500 knights in their state. The fact that Raymond sought diplomatic solutions to his logistical problems indicates that he recognized that his forces were not strong enough in the wake of the siege at Ma'arrat to survive angering the local rulers. Therefore, he would have to replenish his forces while on the march. Jerusalem was the goal. He could not afford to waste time, resources, or lives in pointless or avoidable conflicts. Diplomacy and trade were simply the most practical way for Raymond to both obtain the food necessary to ensure his force would arrive at Jerusalem in the best possible condition to liberate the city from its Fatimid rulers, and further bolster his strength through the purchase of warhorses from the local rulers.²¹² Fortunately, the rulers of several Arabic principalities, the main resistance to Fatimid power in Syria, were sympathetic to Raymond IV given their shared Fatimid enemy.²¹³ Ultimately, this diplomatic approach paid off, as his forces were able to purchase enough horses to more than double his cavalry's numerical strength, resulting in a force of around 1,000 knights as they approached Arqah.²¹⁴

However, Raymond IV did not ignore other options or opportunities when they presented themselves. His march south was not entirely peaceful. The crusaders were attacked at their rear, where the stragglers in the army had fallen behind prompting Raymond IV to reposition his

²¹¹ Connor Kostic, *The Social Structure of the First Crusade* (Boston: Brill; 2008) 12.

²¹² France. *Victory in the East*, 333. The Fatimids had taken possession of Jerusalem in August 1098, shortly after the fall of Antioch. It was previously held by the Artukid Turks, who France suggests had been weakened by committing forces to Antioch's relief.

²¹³ Gibb. *The Damascus Chronicle*, 17-8.

²¹⁴ Hill. *Raymond D'Aguilers*, 84. France. *Victory in the East*, 119-20.

knights to form a defensive rearguard, weakening the fore of his army.²¹⁵ Furthermore, when they arrived at Caphalia, shortly after their peaceful negotiations with the King of Shaizar, in either late January or early February 1099, Raymond's faction of crusaders found the city abandoned and plundered it for all its food, wine, oil and fodder.²¹⁶ Additionally they acquired around 5,000 herd animals, such as cattle, donkeys and camels which would serve as food or pack animals.²¹⁷ Raymond could not afford to leave the abandoned stores of food and animals, as both were needed to bolster his own forces. As for the size of his force approaching Arqah in early February 1099, Raymond now commanded 1,000 knights, newly mounted on as many horses, roughly 5,000 infantry, and 5,000 animals.²¹⁸ In a month since his departure from Ma'arrat, Raymond had not only doubled the size of his cavalry force, but had taken his army from the brink of starvation and brought them back into fighting strength, travelling at least 110 miles in his journey. While stationed outside Arqah some of Raymond IV's men would seize the port cities of Tortosa and Maraclea by February 17, 1099, renewing his access to the Mediterranean.²¹⁹ These cities were roughly 25 and 35 miles north east of Arqah respectively, and directly south of Jabala. They were taken without a single casualty, days after Raymond IV took up his position outside Arqah.²²⁰

As for Godfrey and Robert of Flanders' faction, which rejoined Raymond IV's army at Arqah in March of 1099, their march from Antioch had been delayed until late February, after the start of Raymond IV's siege of Arqah. Their route began in Laodicea, shown in Figure 11,

²¹⁵ Hill. *Raymond D'Aguilers*, 84-5. France. *Victory in the East*, 316.

²¹⁶ Hill. *Gesta Francorum*, 82. Sweetenham. *Robert the Monk*, 188. Hill. *Peter Tudebode*, 105. Edgington. *Baldric of Bourgueil*, 134-5.

²¹⁷ Hill. *Gesta Francorum*, 81-2. Hill. *Raymond D'Aguilers*, 86. Hill. *Peter Tudebode*, 104-5. Edgington. *Baldric of Bourgueil*, 134. Robert the Monk gives a number of 15,000 animals, but Robert the Monk is prone to hyperbole.

²¹⁸ Hill. *Raymond D'Aguilers*, 84. France. *Victory in the East*, 130.

²¹⁹ Hill. *Peter Tudebode*, 107. Edgington. *Baldric of Bourgueil*, 136. France. *Victory in the East*. 320.

²²⁰ Hill. *Peter Tudebode*, 107.

from which they followed the coastline south.²²¹ Given that their faction enjoyed the logistical benefits of keeping close proximity to the coast and Mediterranean naval commerce, theirs was a more belligerent march. They went the offensive, rallying their forces at Laodicea, and subsequently setting the city of Jabala to siege in early March.²²²

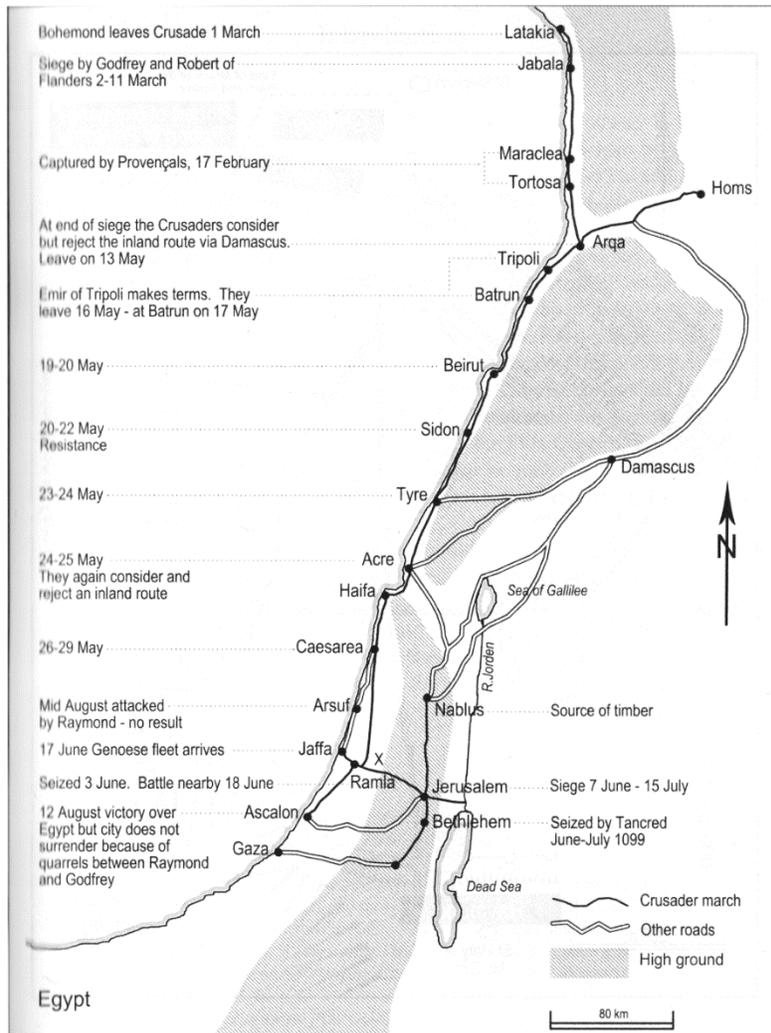


Figure 11 The March South, March-July 1099. Image from Baldric of Bourgueil *History of the Jerusalemites*, by Susan B. Edgington, page xiii.

In sharp contrast to Raymond, Godfrey and Robert spurned peace in favor of conflict. Albert of Aachen writes:

²²¹ Laodicea is marked as Latakia in Figure 10.

²²² Edgington. *Baldric of Bourgueil*, 136. Hill. *Gesta Francorum*, 84.

Soon afterwards, when they had heard of the destruction of Albara and Ma'arra and the killing of their Turkish inhabitants, and now of the long siege of Arqa and the assault on it, the Saracen soldiers took counsel with the citizens and offered an enormous sum of money to Duke Godfrey and Robert of Flanders, in return for which the city of Jabala would remain untouched by them, with its citizens, its vines and all fruits, and their army would move on elsewhere. This was flatly refused by the Christian princes, unless the town was surrendered to their power with its keys. Therefore, the townspeople and the magistracy realized that the aforesaid princes could not be bribed to move away their camp by offers of money or by other precious gifts...²²³

Albert continues this narrative by suggesting that Raymond IV colluded with the rulers of Jabala to convince the other Crusade leaders to abandon the siege in exchange for a substantial monetary reward.²²⁴ Regardless of any accusations of collusion, Jabala was not as logistically important as Arqah, as it could be bypassed by incoming trade fleets in favor of Maraclea or Tortosa, with Laodicea serving as a potential port of call for these ships if they needed to resupply before continuing south. Arqah sat on the lower slopes of Mount Lebanon 147 meters above sea-level, overlooking three roads to crusader-held or crusader-sympathetic cities, such as Tortosa and Homs, and could help defend caravans travelling along those roads, if the crusaders could take it.²²⁵

Having been convinced by Raymond IV to break their siege, Godfrey's forces were presented with gifts from the emir of Jabala, namely gold and mules.²²⁶ Raymond stood to gain tremendously by having the other leaders rejoin him, as they commanded a combined force of an estimated 200 knights and between 4,000 and 5,000 infantry.²²⁷ These numbers come by way of John France, as Raymond D'Aguilers is uncharacteristically silent on the number of crusader forces at Arqah, and suggest that neither Godfrey nor Robert of Flanders had been able to

²²³ Edgington. *Albert of Aachen*, 197.

²²⁴ *Ibid.*, 197-8.

²²⁵ France. *Victory in the East*, 319. The roads and cities in question are also shown in Figure 10. Tortosa, Maraclea, and Homs were all held by either crusaders, or crusader-sympathetic Arabic princes.

²²⁶ Edgington. *Baldric of Bourgueil*, 137.

²²⁷ France. *Victory in the East*, 129-30.

augment their cavalry with fresh knights since parting ways with Raymond IV at Ma'arrat. The additional infantry would have doubled Raymond's forces, yielding an army of 10,000 infantry, and a not insubstantial cavalry force of 1,200 knights, a considerable force to meet any assumed threat or to aid in a siege. Meanwhile the mules Godfrey had been gifted would augment the reunited crusader army's growing herd of beasts of burden. The gold would both help recoup Raymond's expenses, and aid in future purchases on the road to Jerusalem. Regardless of his true motivations, whether fear or avarice, Raymond IV needed the force of arms and wealth brought by Godfrey and Robert if he was to continue to Jerusalem.

While Arqah's location was strategically and logistically advantageous, the siege was ultimately abandoned and the crusader army moved towards Tripoli.²²⁸ The *Gesta* author indicates that the decision to move forward was largely influenced by the hope that the crusaders could reach Jerusalem before the end of the spring harvest, which their leaders hoped to take to feed their armies.²²⁹ At Tripoli, the crusaders resupplied. While Raymond D'Aguilers writes of a glorious crusader victory at Tripoli, which he places before the crusaders abandoning of Arqah, his is the only account to tell of such a conflict. By contrast, Peter Tudebode writes,

They took leave of Arqah and arrived before Tripoli on the sixth day of the week on the thirteenth day of the incoming May, where they remained for three days. The King of Tripoli made an agreement with Raymond of Saint-Gilles and the other lords by which he immediately released more than three hundred prisoners whom he had captured in prior battles. He also gave to Count Raymond fifteen thousand bezants, fifteen high-priced horses, and assured an abundant sale of horses, asses, bread and all necessary goods, thus insuring the entire Christian army of plenty.²³⁰

²²⁸ France. *Victory in the East*. 323-4. France repeatedly refers to this event as the siege of Akkar, rather than Arqah, the former a city and the latter a castle. In her review of France's book, Dr. Hadia Dajani-Shakeel suggests that France has a tendency to misspell Arabic names and titles. His map places Akkar in the same location that Figure 10 places Arqah, and the sources he cites as evidence for his analysis of the siege all name the site Arqah. John France argues that the end of this siege marks the end of truly united leadership in the Crusades, largely due to Raymond's insistence on finishing the siege. He suggests further that the disunity amongst the crusade leaders exhibited at Arqah was the result tensions building since the crusaders' defeat of Kerbogha.

²²⁹ Hill. *Gesta Francorum*, 85.

²³⁰ Hill. *Peter Tudebode*, 109-10.

This account is nearly identical to the one presented in *Gesta Francorum*, with the sole exception being that the *Gesta* author provides no information on the amount of gold or horses changing hands. The crusader army did appear to grow in size as a result of the negotiations in Tripoli with their combined fighting force looking to be somewhere in the order of 14,000.

Taking the coastal route to Jerusalem meant that the crusaders' hastened march south would no longer suffer for lack of access to trade. However, as their departure from Tripoli came before the arrival of Byzantine emissaries, their Byzantine alliance was effectively over. Naval support would now come exclusively from Genoa. Their march was uneventful apart from the crusaders' thirst prior to reaching Beirut. Hunger would not become an issue until June. By June 3, 1099, the crusaders reached Ramla, where they commissioned one of their bishops to restore a church, leaving "one-tenth of the gold, silver, animals and horses, so that the bishop could live most honorably with those who remained with him."²³¹ While a ten percent tithe to the church was indeed pious, it was logistically problematic as four days later the army arrived in Jerusalem, where they spent the following ten days without food. Of this, the *Gesta* author writes,

During this siege we could not buy bread for nearly ten days, until a messenger arrived from our ships, and we suffered so badly from thirst that we had to take our horses and other beasts six miles to water, enduring great terror and apprehension on the way. The pool of Siloam, at the foot of Mount Sion, kept us going, but the water was sold very dearly in the army.²³²

The crusaders' food troubles would be alleviated by the arrival of the Genoese fleet at Jaffa. However, water was scarce at Jerusalem. The only reliable source of water sat six miles away at the Pool of Siloam. As the eyewitness accounts indicate that the water was transported by hoof and foot, it seems that the crusaders no longer possessed wagons or carts for transportation.²³³

²³¹ Ibid., 111.

²³² Hill. *Gesta Francorum*, 88.

²³³ Hill. *Gesta Francorum*, 88. Hill. *Raymond D'Aguilers*, 118-9. Hill. *Peter Tudebode*, 114. Fink. *A History of the Expedition to Jerusalem*, 119-20.

The crusaders' answer to the problem of transporting the water they needed was crude and consequential. To quote Peter Tudebode:

In the course of the siege scarcity of water plagued the crusaders so much that they stitched the skins of oxen, buffalo, and goats into leather bottles and lugged water in them for six miles. Such foul and stinking water was drunk from these canteens that daily we were in great misery and torment because of the fetid water and barley bread.²³⁴

Utilizing these makeshift canteens allowed them to move the water. However, as the hides were untanned, unwashed, and likely taken from animals dying of thirst or heat, they spread disease throughout the crusader camp.²³⁵

The site of Jerusalem made it difficult to blockade, and its proximity to other cities such as Bethlehem, and Nablus meant that the crusaders would have to divert portions of their now over 13,000-strong army to subdue their surroundings.²³⁶ The three valleys of Hinnon, Qidron Jehosaphat descend from Jerusalem's western, southeastern, and eastern walls respectively, as can be seen in both Figures 12 and 13 below, with the slope of Mount Zion rising in the southwest. Close to 28 miles of stone walls surrounded the city, though no record of their height seems to remain. The surrounding region was devoid of trees and the grass was poor fodder for the animals, contributing to the aforementioned issues with food supply.²³⁷ As advantageous as their position was, the Fatimid defenders were able to easily rebuff the crusaders' initial rushed attack on the city.²³⁸ So the siege began, with the crusaders deciding that proper siege engines would need to be constructed, which meant acquiring lumber. Compared to the siege of Antioch, the crusaders faced a more dire set of initial conditions for the siege of Jerusalem.

²³⁴ Hill. *Peter Tudebode*, 114.

²³⁵ Ibid.

²³⁶ France, *Victory in the East*, 331. 12,000 Infantry, 1,200-1,300 Knights

²³⁷ Edgington. *Baldric of Bourgueil*, 142.

²³⁸ Hill. *Raymond D'Aguilers*, 117. Raymond admits the crusaders recognized the need for siege weaponry, but also recounts how they listened to a hermit, claiming God's omnipotence, and improvised ladders in the night. The attack failed and was abandoned, but Raymond blames the crusaders' own fear and indolence for its failure, not the scarcity of ladders nor their lack of means of breaching Jerusalem's inner defenses.

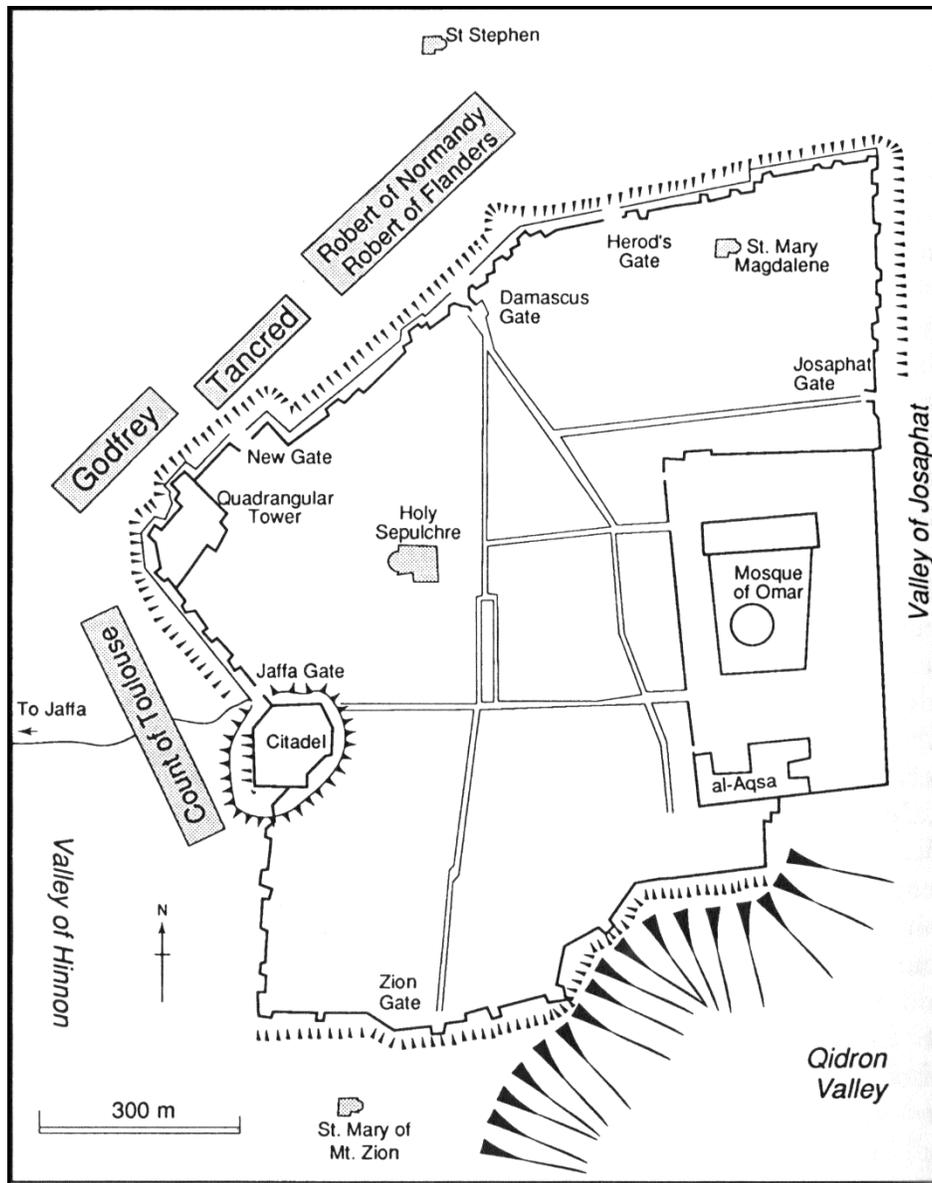


Figure 12 Crusaders' First Arrival at Jerusalem June 7-12, 1099. Image from *Victory in the East* by John France, page 338.

Despite these challenges, the siege of Jerusalem was concluded just over one month, from June 7 through July 15, 1099. Its comparative ease had but one primary cause, the arrival of six Genoese ships at Jaffa on June 17, 1099.²³⁹

²³⁹ Hill. *Raymond D'Aguilers*, 119. France. *Victory in the East*, 336.

Sitting just over 43 miles from the city of Jerusalem, Jaffa was easily a full day's journey away by Raymond D'Aguilers' observations.²⁴⁰ The city had been previously abandoned and mostly razed in an attempt by its previous Fatimid owners to deprive the crusaders of a valuable port city by means of destroying its fortifications. Nonetheless, the harbor was in good enough condition for the ships to make port and unload the crusaders' much-needed supplies, specifically lumber and food. Each of these ships would have had a maximum cargo capacity ranging between 95 and 450 metric tons yielding a potential total load of supplies and provisions between 570 and 2,700 metric tons for the over 13,000 crusaders at Jerusalem.²⁴¹ To survive their ordeal, which lasted for four weeks after the ships' arrival, and making the assumption that each knight possessed only a single horse at Jerusalem, the crusaders would have required a minimum of 1,291.36 metric tons of food imported on these ships, not counting the needs of their pack animals.²⁴²

The minimum requirements suggest that for the crusaders' needs to have been satisfied by just six ships, the ships would have to be substantially larger than those suggested by Bachrach in his discussion of naval support at Antioch. He claims that the ships supplying Antioch were medium-sized with a capacity around 100 tons, and they could support the 30,000 crusaders' needs. Raymond IV of St. Gilles seems to have taken the initiative on ensuring the supplies transportation from Jaffa, mobilizing his forces upon hearing word the supplies had arrived.²⁴³ Transporting the food and supplies back to Jerusalem cost the crusaders all but one of the ships which had brought them, as they were attacked by Egyptian ships the day after

²⁴⁰ Hill. *Raymond D'Aguilers*, 119.

²⁴¹ Richard W. Unger. *The Ship in the Medieval Economy, 600-1600*. (Montreal; McGill-Queen's University Press, 1980) 123-6. Bachrach. "Some Observations of the Role of the Byzantine Navy" 92.

²⁴² See Chapter 1 for dietary minimums.

²⁴³ Hill. *Gesta Francorum*, 88-9. Hill. *Raymond D'Aguilers*, 119-20.

unloading, though their sacrifice bought enough time for the supply train to escape far enough to make it to Jerusalem intact.²⁴⁴

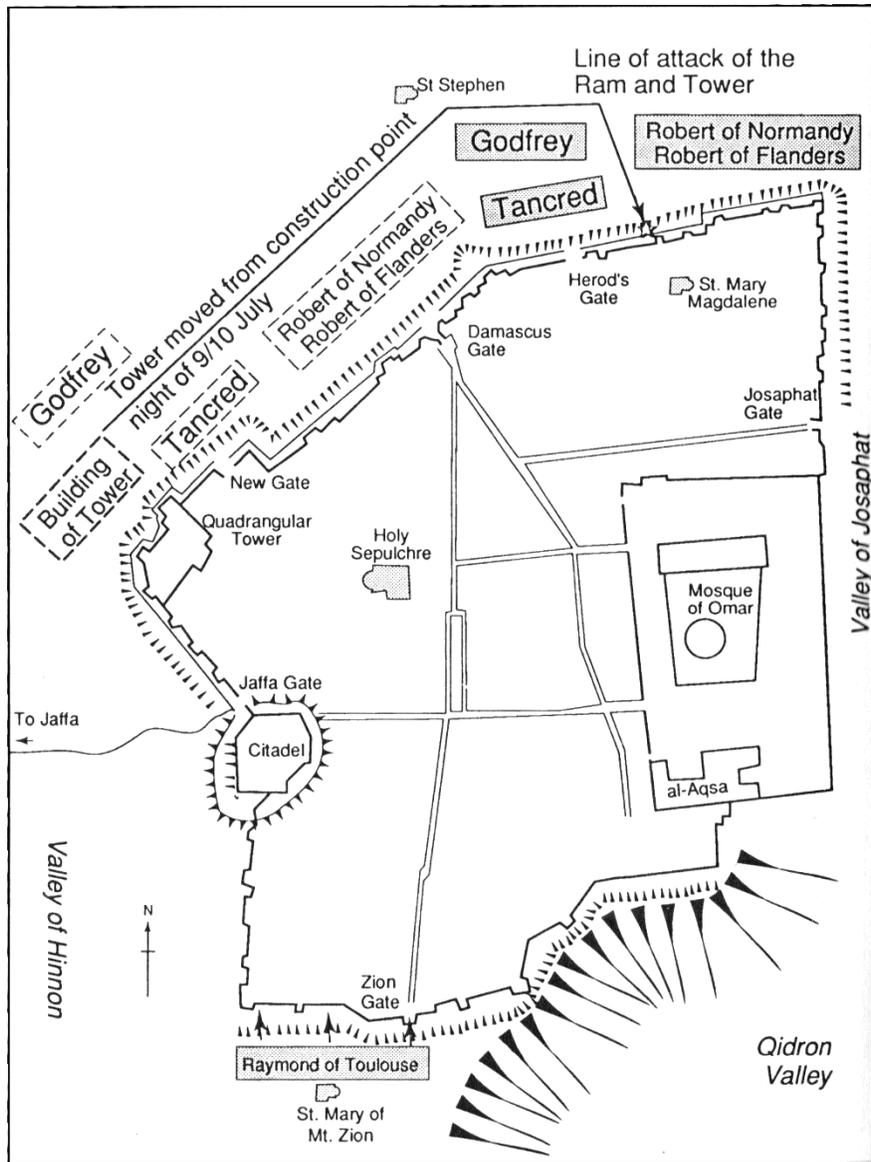


Figure 13 Final Attack on Jerusalem July 13-15, 1099. Image from *Victory in the East* by John France, page 340.

The Genoese ships brought not only food, but lumber and skilled labor, though the quantities of which are hard to determine. This was utilized to supplement lumber found by Robert of Flanders at Nablus, 47 miles north of Jerusalem, which Albert of Aachen suggests was

²⁴⁴ Hill. *Raymond D'Aguilers*, 120. France. *Victory in the East*, 337.

transported by camel back to Jerusalem in safety.²⁴⁵ However, none of the eyewitnesses nor any of the other chroniclers corroborate this account. They simply suggest that the crusaders began the construction of siege weapons with imported wood. It is hard to determine which source was yielded more wood, though the Genoese fleet was burdened with the crusaders' food supplies. The importation of the lumber was the key logistical element in simplifying the siege of Jerusalem. The wood brought by Robert of Flanders from Nabulus seems to have been cut smaller than that brought by the fleet, understandable considering it was suggested to be transported by camel rather than merchant ship. Fulcher of Chartres suggests that the northern tower was built in piecemeal fashion from smaller pieces of lumber, to be assembled as a full tower in the night preceding their final assault.²⁴⁶ However, in Raymond IV's camp, the beams their craftsmen were working with were of immense size, with Raymond D'Aguilers suggesting that, "You could see fifty or sixty of them carrying on their shoulders a building beam too heavy for four pairs of oxen to drag." The magnitude of size suggested for these beams may be an exaggeration, however, the southernmost tower appears to have been completed as a single unit, as opposed to the northern tower's assembly in parts, suggesting larger building materials for its construction. In addition to the two towers, the crusaders spent the next four weeks of the siege building more elaborate siege weapons, including a battering ram, *scrofae*, and several mangonels with which they intended to assault the city.²⁴⁷ Compared to the single siege tower constructed at Ma'arrat, the siege weapons at Jerusalem included far more complex and intricate machinery, which would have required a degree of engineering that further suggests the presence of skilled laborers. The siege of Jerusalem was undertaken with a degree of logistical proficiency

²⁴⁵ Edgington. *Albert of Aachen*, 211.

²⁴⁶ Fink. *A History of the Expedition to Jerusalem*, 120.

²⁴⁷ Hill. *Peter Tudebode*, 116. Hill. *Gesta Francorum*, 90. Edgington. *Albert of Aachen*, 212. Fink. *A History of the Expedition to Jerusalem*, 120.

that the crusaders had not exhibited in the campaign since the siege of Nicaea. The final battle of Jerusalem was decided over the course of about two days from when the first waves of crusaders entered the city.²⁴⁸ Victory had come on the back of camels, in the hulls of ships, and in the form of lumber.

Jerusalem fell to the crusaders on July 15, 1099 nearly four years after the Crusade had been called. Though Bohemond did not participate in the battle, his aid was a necessary component for the crusaders' victory. He had established contact and trade relations with Genoa, and their promises of aid outlasted his own commitment to the Crusade. This enabled the crusaders take Jerusalem, a city no less impressive than Antioch, in a fraction of the time. The siege of Jerusalem was won by the crusader armies led by Godfrey of Bouillon, Raymond IV of St. Gilles, and Robert of Flanders, but their victory was made possible through trade and planning organized by Bohemond. Though the crusaders would fight one more battle at Ascalon before returning home, they had achieved their objective. Jerusalem had been "liberated" from the Fatimids.

²⁴⁸ Hill. *Gesta Francorum*, 91. Hill. *Peter Tudebode*, 117-8.

CONCLUSION

“With the fall of the city it was rewarding to see the worship of the pilgrims at the Holy Sepulchre, the clapping of hands, the rejoicing and sing of a new song to the Lord. Their souls offered to the victorious and triumphant God prayers of praise which they could not explain in words.”²⁴⁹ This is the scene that Raymond D’Aguilers presents in the aftermath of the crusaders victory at Jerusalem, the scene for which the crusaders had sacrificed so much. However, as with Ma’arrat, the crusaders’ victory was accompanied by atrocity, as the *Gesta* author, Ralph of Caen, and Guibert de Nogent suggest that the crusaders massacred the defenders, driving them back to the Temple of Solomon and set about ransacking the city.²⁵⁰ The crusaders made no distinction between combatant and civilian, with the *Gesta* author suggesting that the crusaders’ brutality intimidated the defenders enough to drive them to commit suicide, as “they threw themselves down headlong from the Temple.”²⁵¹ Such were the results of the crusaders’ campaign.

Four years, upwards of 80,000 people in total, thousands of metric tons of food, fodder, lumber, and weaponry, thousands of wagons, carts, pack beasts, and warhorses, all had been committed to bring about this final victory. The Crusades have served as a point of interest for a variety of historical disciplines, but first and foremost, the Crusades were wars, with armies, commanders, battles, tactics, atrocities, and above all logistics. Logistics shape the course of warfare to a far greater degree than individual battles or commanders, simply by influencing the starting conditions of any given battle. The First Crusade stands as the single instance in which

²⁴⁹ Hill. *Raymond D’Aguilers*, 128.

²⁵⁰ Hill. *Gesta Francorum*, 91-2. Levine. *The Deeds of God*, 119-20. Bachrach. *The Gesta Tancredi*, 142-6.

²⁵¹ Hill. *Gesta Francorum*, 92.

one such war was called for in Medieval Europe and executed in the Middle East, where the crusaders stood victorious at the end. Victory at Jerusalem in July of 1099 was the result of logistical planning, execution, and adaptation across a four-year long campaign, without which the crusaders would have been incapable of succeeding.

Of the upwards of 80,000 people who departed Northern and Western Europe to undertake the First Crusade, only around 20,000 boarded ships at Laodicea to return home in the wake of the battle of Ascalon.²⁵² Transporting the food, weapons, animals, money, and other supplies necessary to support an army of this size was a considerable task, the responsibility for which rested largely on the shoulders of the Crusade leaders. The Crusade leaders' understanding of logistics was the most direct cause for their overarching success in their campaign, however, they had learned much in their march to Jerusalem. European noblemen and knights had to adapt familiar Western logistical systems to a Middle Eastern theater which would resist them with both its human and natural landscape. Their task was made possible by the thousands of ships, carts, wagons, and pack beasts, along with the strength of their own backs, which transported their supplies. These logistical systems were more important than the knights and soldiers who fought the crusaders' battles, for the simple reason that they would have been unable to fight without their food or armaments.

Logistics stood as the primary military concern for the crusaders' approach to their campaign, and governed their success. Their approach to battle and preference for siege warfare was meant to deprive their enemies of resources and mitigate losses and risk on their own side. The crusade leaders' approach to their campaign greatly resembles the tactics and thought that Vegetius outlined in *De Re Militari*. This fact is made evident in the care they took in preparing

²⁵² France. *Victory in the East*, 141.

their invasion, their preferences for siege warfare, and their aggressive foraging and raiding while in enemy territory. For the crusade leaders, logistics were not just important to military endeavors, they were central to the very practice of warfare. Each of the crusaders' victories, including both sieges of Antioch, derive from their understanding of their logistical situation, which informed their tactics during battle and decision-making on the march. Acquiring the resources needed to feed and fuel their campaign required the crusaders not only to forage and pillage supplies from their enemies, but also to negotiate for market access with foreign leaders open to diplomacy. Such skills were indispensable for the Crusade leaders, particularly Raymond IV of St. Gilles, who commanded the largest individual force among the nobles, and showed just how useful such skills were in January and February of 1099. In this, the crusaders were indebted the previous decades of political instability and warfare in the Middle East which made the possibility of diplomatic negotiations a welcome change. Furthermore, negotiations between the Crusade leaders and Byzantine Emperor Alexius, and later on between Bohemond and the Genoese, gained the crusaders naval support which was absolutely necessary for their survival. Byzantine-led shipping sustained the crusaders where other methods of acquiring provisions failed. Yet, despite this fact, the Byzantine's efforts remained undervalued by the Crusade chroniclers, who saw the Byzantines traitors to their alliance, and attributed their successes to the manifest will of God.

However, while the crusaders' triumphs were the result of logistical successes, their trials were also directly related to logistical failings, largely the result of the crusaders having to come to terms with the unfamiliar environmental conditions of the Middle East including aridity, seasonal weather patterns, and topography. Summers and winters were both devastating to the crusader armies. Summer heat and aridity robbed them of many of their animals both in the

march to Antioch and at the siege of Jerusalem. Meanwhile the two most dire instances of crusader starvation occurred at the siege of Antioch and occupation of Ma'arrat where during the winter the crusaders found their potential trade routes and supply lines cut off by ice in the Amanus Mountains and the sheer distance separating Ma'arrat from the Orontes River. Of these instances, though the siege of Antioch persisted for a far longer period of time, and suffered greater losses, the crusaders' occupation of Ma'arrat was the more dire, and had the greater effect on the Crusade as a whole despite afflicting far fewer people. During their winter at Antioch, the crusaders lost access to their previously conquered cities in the Amanus Mountains due to ice blockading the paths, but they maintained access to the Port of St. Symeon. At Ma'arrat, Raymond IV's faction of crusaders, still the largest single force amongst the armies, had nothing and their situation prompted him to both advance their march and fundamentally change his approach to the campaign until he could replenish his forces. In both cases, famine, topography, and distance prevented the crusaders from leveraging their logistical systems of forage and trade to their advantage, resulting in their suffering and starvation.

By focusing on the logistics of the First Crusade as the primary concern in the campaign several elements of the Crusade are cast in a new light. Jerusalem was the crusaders' end goal, and the process of arriving there was a chief concern, with the Crusade leaders having to consider many options to maximize their chances of success. Decisions typically viewed or portrayed as the roguish acts motivated by individual self-interest, such as Baldwin's diversion to Edessa, can be recognized as acts informed by an understanding of their logistical situation. Baldwin opened up new sources of provisions, wealth, and horses for the crusaders going forward which allowed him to contribute to their overall victory from a distance. Furthermore, when addressed as a logistical endeavor the Crusade becomes an extended campaign of resource

acquisition and management, an all-important factor which can easily become eclipsed in the pursuit of religious, cultural, and other military foci.

This thesis set out to address the logistics of the First Crusade as a whole, attempting to achieve a comprehensive understanding of how the crusaders managed to lead their only successful foray into the Middle East, despite possessing none of the landholdings, and inherent advantages of said landholdings, present in the later crusades. The results of this analysis indicate that the crusade leaders approached the crusade as an extended campaign, with their strategy and tactics being heavily informed by their recognition of the supreme role of logistics in determining military success. The nobles took their time in preparations, gathering money, people, animals, resources and provisions well in advance of their arrival in the Middle East. As a result, not only were they able to arrive in Asia Minor and the Middle East with their armies intact, but they also possessed the money and knowledge necessary to compensate for their losses incurred by environmental and geopolitical factors beyond their power to control. Furthermore, the crusade leaders showed an incredible ability to adapt, at times utilizing diplomacy to bolster their existing logistical systems, or acquire entirely new sources of provisions. Bohemond established trade relations with the Genoese that would ultimately save the Crusade he abandoned as they sat outside Jerusalem. Meanwhile Raymond IV fundamentally changed his approach to the Crusade, enabling him to turn a starving force protected by less than 500 knights into a provisioned robust army 1,000 knights and 1,500 infantry strong in the course of a single month after Ma'arrat. Their central focus on logistics allowed the crusaders to overcome tremendous obstacles in their invasion. Their victory was the result their ability, and the abilities of their allies, to successfully acquire and move people, provisions, and supplies

from Europe to the Middle East, and ultimately to Jerusalem, thus turning potentially hazardous battles into comparatively easy wars of attrition.

The First Crusade started a movement that would long outlast any of its participants. To this day, the Crusades capture the minds of historians, inviting new ideas and analysis. However, above all else, the First Crusade was a war. It was a war initiated by European combatants who recognized the supremacy of logistics in military affairs. Beyond their faith, tactics, or martial prowess, it was the crusaders' mastery and adaptation in the area of logistics which fed their ultimate victory at Jerusalem.

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