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ROME, ROBES, AND RIVERS: LAND WATER AND POWER IN THE ANIENE  
VALLEY

by

Jonah R. Bibo

A thesis submitted in partial fulfillment  
of the requirements for the degree

of

MASTER OF ARTS

in

History

Approved:

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UTAH STATE UNIVERSITY  
Logan, Utah

2020

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## ABSTRACT

Rome, Robes, and Rivers: Land, Water, and Power in the Aniene Valley

by

Jonah R. Bibo, Master of Arts

Utah State University 2020

Major Professor: Dr. Christopher Conte  
Department: History

In the Aniene river valley, power was acquired and exercised through the control of land and water resources. The Aniene river runs for 92 kilometers east of the Rome, and from the Middle Republic period was deeply tied to the city. Within it, the town Subiaco, became its own economic and religious center under Benedictine rule during the medieval era. Using Classical literature and archaeological studies, chapter 1 traces how the Romans used the Aniene valley's water to foster the growth of the city itself through extensive aqueducts, and exercised control over the region through war and colonization. Chapter 2 shows how Benedict of Nursia's presence and philosophy in the valley began to change how its resources were exploited in a post-Roman world, as his followers began to gain control both the land and the water and develop their own society based at an Abbey near Subiaco. Chapter 3 focuses on the Subiaco Abbey at its height by drawing upon court records, land receipts, and land registers. From the 14<sup>th</sup>-16<sup>th</sup> centuries, Subiaco Abbey maintained control through specific land divisions and intensified taxes from peasant laborers. In all, *Rome, Robes, and Rivers* is a multi-century study that shows how

the occupants of the Aniene valley used it in different ways and, in doing so, left their mark on the modern landscape.

(127 pages)

## PUBLIC ABSTRACT

Rome, Robes, and Rivers:

Land, Water, and Power in the Aniene Valley

Jonah R Bibo

*Rome, Robes, and Rivers* is a multi-century environmental history that shows how different occupants in the Italian Aniene river valley help power through the exploitation and control of its land and water resources. It ranges from the classical to late medieval eras, focusing on the Roman empire alongside later Benedictine monastic societies, who each used different tactics to maintain control over the land. Roman aqueducts brought water to the city, while Benedictine monks taxed peasant laborers to maintain control of the land. Each occupant shaped the land their own needs and left their mark on the landscape in ways that are still visible today.

## ACKNOWLEDGMENTS

First and foremost, I would like to thank Dr. Norm Jones and Cecile Gilmer for the generous Graduate Student Fellowship. Their fellowship was paramount in allowing me to complete this research. I give special thanks to my committee, Chris Conte, Nancy Huntly, and Frances Titchener, whose support and guidance continuously helped me throughout this process. To Mark Damen and my close friends in the USU Classics Lab, who assisted me with Latin translation and moral support for the last two years, thank you all so much. Finally, I would also like to thank the countless professors who have guided me along the way in more informal roles, namely Susan Cogan and, again, Norm Jones. Both of your insights so helpful in times when I found myself stuck or overwhelmed.

I would also like to extend thanks to my family, friends, and colleagues. Thank you all for the support. Thank you Kaity for all the love you gave me during this process. Without your support, none of this would have been possible. Thank you so much.

Jonah Bibo

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## INTRODUCTION

From the bus stop in the southwest corner of Subiaco, Italy, a short walk west leads to the Ponte di San Francesco, an imposing medieval bridge. Cross it, cut back east, and a walking path will lead alongside the Aniene river, today a quiet waterway flanked by chestnut and oak trees. The path continues, back across the river and through the town, guided by signs marking the way to the *Monasteri Benedettini* farther east. Gradually, the town recedes along the highway as the path follows the road up the mountain. A rocky stairstep leaves the road, cutting into another deciduous woodland. A stone “pax” halfway along the trail marks the Monastery of Santa Scholastica, the second of Subiaco’s neighboring monasteries, whose fields grow olives and grapes, and whose library holds the abbey’s archive. The path continues through the complex and back up the mountain, where it becomes a steep trail frequented by hikers, pilgrims, and even a local troop of the *Federazione Italiana della Scautismo*, boy scouts. Finally meeting back with a road, the journey ends at the Monastery of the Sacro Speco, built into the cliffside, and a statue of St. Benedict of Nursia looks over a panorama of the historic Aniene river valley.



Figure 1: The Aniene River at Subiaco



Figure 2: Part of the path to Subiaco's two monasteries.





Figure 3: A message of peace welcoming the path into the Monastery of Santa Scholastica.



Figure 4: Statue of Benedict overlooking the Aniene valley.

This thesis documents how a Benedictine Abbey headquartered at Subiaco came to control an Italian watershed in the late middle ages and exercise significant influence in the region. It is an environmental history, because the valley's natural resources were the main objective of not just this monastic control, but also their Roman predecessors. The Aniene's water had spurred architectural and agricultural developments within and

outside the valley for 2000 years by the time Subiaco Abbey was at its height in the fourteenth century. Therefore, this is more than just a story of a rising feudal system. It is one of successive centuries of landscape modification and domination under successive parties which transformed the Aniene valley from a landscape of pastoral grazing and temporary silviculture to one dominated by intense monastic land and water resource management in the fourteenth century.

### **Aniene Valley Geography and Ecology:**

Today, the Aniene valley is a verdant place, dotted with small family farms alongside larger fields which use modern equipment and agricultural practices. Except for the modern highway, the journey from Subiaco to Rome might have looked and felt much the same in the Middle Ages as it does today.<sup>1</sup> When gazing at the Rocca Abbaziale that dominates Subiaco's skyline, or taking the pilgrim's path up to the Sacro Speco, it is possible to imagine the expansive medieval valley with its fiefs, villages, castles, and monasteries.<sup>2</sup> From the mountainside overlooking the Aniene river, the Benedictine Monastery of Saint Scholastica and the Sacro Speco at Subiaco gained authority from Pope and Emperor to spread its cultivator culture throughout a valley with a long history of environmental modification. This Apennine landscape is characterized by steep, rocky cliffs with terraced agriculture along the upper portions of the Aniene river and rolling foothills with large fields as the mountains retreat and the city comes into view.

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<sup>1</sup> See figures 1 and 2.

<sup>2</sup> See figure 3.





Figure 5: The Monastery of St. Scholastica (foreground, left) and its olive grove (foreground, right) overlook the Aniene valley (background).



Figure 6: Subiaco and the Aniene valley



Figure 7: Rocca Abbaziale, the fortified seat of the Abbey built in the late 11th century.

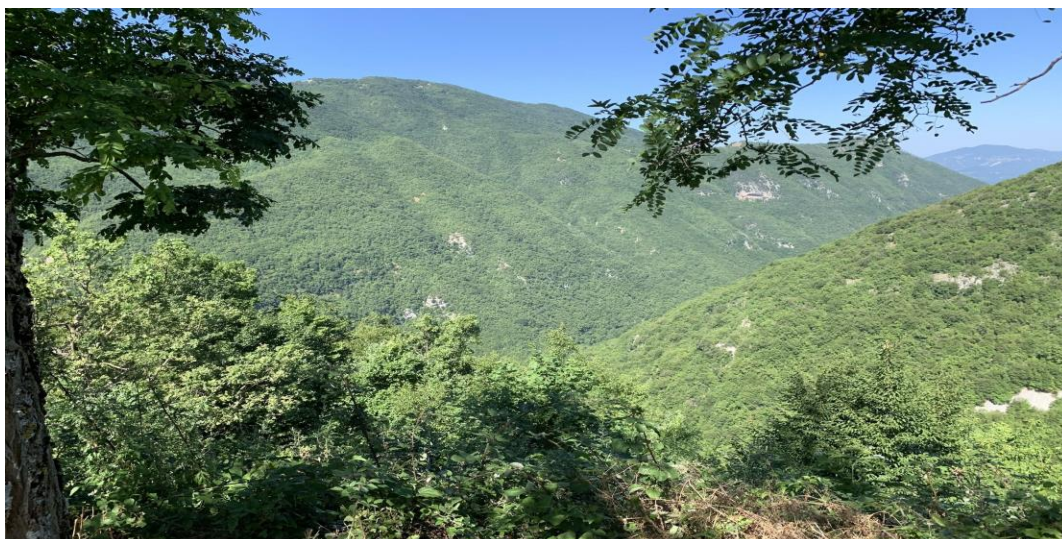


Figure 8: Deciduous woodland in the Aniene valley near Jenne, around 800 meters, July 2019.





Figure 9: Modern map of the Aniene river from its source to its confluence with the Tiber, by OpenStreetMap project, Creative Commons <https://creativecommons.org/licenses/by-sa/2.0/deed.en>.

The Aniene valley lies within the Apennine range which traverses the inland portion of the Italian peninsula. East of Rome, the river flows through the central range, through a narrow valley beyond Subiaco to modern Tivoli, before meandering through the plains of Roman Campagna and joining the Tiber in the northern part of the modern city. For the purposes of this thesis, the “upper valley” will refer to the section of the river above Tivoli, which is characterized by steep canyons and higher altitudes. This is where the bulk of the study included in this thesis takes place. The “lower valley” will refer to the flatter section of Roman Campagna, where Rome conquered and settled the Aniene as is outlined in chapter one.

As part of the Central Apennine range, the upper valley is characterized by montane forests. Today, deciduous trees such as oak and chestnut dominate these

woodlands due largely to the 40-80 inches of rain the region receives each year.<sup>3</sup> As part of a general Mediterranean climate, the Aniene experiences dry, hot summers with colder, but still mild, wet winters. Annual rainfall totals can vary greatly, as is typical in this climate, and Mediterranean rainfall is also determined by location, with northern and western regions receiving more rain than their counterparts.<sup>4</sup> Indeed, the western slopes of the Apennine range from which the Aniene flows receive higher levels of precipitation than the Adriatic side.<sup>5</sup> Terraces line the slopes of the range, where today olives are grown in vast quantities.<sup>6</sup> This combination, deciduous forested land broken by intermittent towns with terraced olive groves, characterizes the landscape in the upper Aniene valley.

Historically, the same has been true to varying degrees. Under Roman control, the Apennines, when settled, were heavily terraced to combat erosion, a function that they still fulfill today.<sup>7</sup> The Mediterranean climate was similar in the classical era, with temperatures decreasing with elevation. The highest points of the Apennine range were glaciated, and Romans may have used Apennine ice as a luxury.<sup>8</sup> In the post-Roman period, the climate was much more variable.

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<sup>3</sup> Thomas M. Poulsen and Bruno Accordi, "Apennine Range," Encyclopaedia Britannica (Encyclopaedia Britannica, inc., September 10, 2009), <https://www.britannica.com/place/Apennine-Range/Climate>.

<sup>4</sup> J. R. McNeill, *The Mountains of the Mediterranean World: an Environmental History* (New York: Cambridge University Press, 2002), 14-5.

<sup>5</sup> Poulsen and Accordi, "Apennine Range."

<sup>6</sup> See chapter 2, figure 14.

<sup>7</sup> Donald J. Hughes, *Environmental Problems of the Greeks and Romans: Ecology in the Ancient Mediterranean* (Baltimore, MD: Johns Hopkins University Press, 2014), 122.

<sup>8</sup> Ibid, 10.

In the Rieti basin, 70 kilometers north of Subiaco, pollen data shows a similar but variable historical climate.<sup>9</sup> In summary, the Rieti underwent a dramatic shift and reversal throughout the medieval age. From 600-870 CE, the landscape was dominated by a deciduous woodland like today. Data show that this was a wet and cool period in much of Italy. In the late ninth century the Rieti basin began to shift into a grassland, as a dry and cool climate set in and human modification repurposed the once forested landscape for increasingly intensive cereal agriculture.<sup>10</sup> Benedictine monks maintained this cultivated agricultural landscape for centuries.<sup>11</sup> Beginning in the 15th century, reforestation gradually reshaped the landscape once again, as oaks, beech, and alder woodlands replaced swaths of fields used for cereal production. Massive depopulation (around 50%) as a result of the Black Plague in 1348, as well as a wetter and cooler climate during the Little Ice Age, led to the abandonment of many higher elevation settlements, where in turn cleared fields became woodlands again.<sup>12</sup> Peaking between 1500-1650 CE, this process began the formation of deciduous woodland seen today. Olive and walnut groves

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<sup>9</sup> Scott Mensing et al., “Human and Climatically Induced Environmental Change in the Mediterranean during the Medieval Climate Anomaly and Little Ice Age: A Case from Central Italy,” *Anthropocene* 15 (2016): 49-59, Most climatic, or even central Italian environmental studies center in some way around Rieti, because the monastery at Farfa kept thorough records. It underwent similar historical processes as the Aniene, namely: an early group practicing smaller scale agriculture before being conquered by Rome; a later conquering by successions Germanic invaders; and monastic control beginning under an expansion of Benedictines in the sixth century.

<sup>10</sup> Mensing et al, “Human and Climatically Induced Environmental Change,” 54.

<sup>11</sup> Although, it should be noted that Mensing et al identify these monastic changes in the 9th century, whereas in Subiaco they would have occurred earlier, around the 6th century.

<sup>12</sup> Mensing et al, “Human and Climatically Induced Environmental Change,” 55.

also became prominent at this time where they had not previously been a major source of agriculture.<sup>13</sup> The oak, olive, and walnut characterize the modern landscape.<sup>14</sup>

While the Aniene valley lacks the scientific studies that the Rieti has received, the modern landscape aligns with its neighboring valley. Along a pilgrims' path that cuts through the town of Subiaco and the mountains to the monastery, those deciduous trees provide shade from the harsh summer heat.<sup>15</sup> Its fields were great in number by the 12th century, split up into multiple different groups with different uses, providing the backbone of the economy.<sup>16</sup> This would have required a great deal of land clearing, just as the Rieti did. The current state of the modern landscape points to a similar centuries-long process of deforestation followed by reforestation.

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<sup>13</sup> In the Aniene valley, olives and walnuts, alongside chestnuts, appear in records slightly earlier, at least by 1428. However, they are missing in the monastery's earliest catalogues from the 6th century, suggesting a similar timeline for relevance.

<sup>14</sup> Mensing et al, "Human and Climatically Induced Environmental Change," 53, McNeill, *Mountains of the Mediterranean*, 31-32.

<sup>15</sup> See Images 8 and 9.

<sup>16</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39., and *Registro Di Marano 1428.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 36.



Figure 10: Part of the (now in places deteriorated) path through the mountains to the monastery, bordered by shrubs and deciduous trees.

### **Filling the Historiographical Gap:**

A major impetus for this project was a gap in the environmental and social history of medieval Italy and Europe as a whole. Despite Aniene valley's abundance of resources which have been exploited for millennia, as well as its significance in Roman technological and medieval intellectual and social histories, it has not received a great deal of environmental study in its own right. The goal of this thesis is to begin filling this space. That is not to say that the Aniene valley is invisible throughout the existing historiography. On the contrary, it is often a proxy in larger works with other foci. But therein lies the debate about Subiaco and the Aniene valley. Is it a place to be studied in its own right? Or, is it instead simply part of a larger Roman, Italian, Mediterranean, or European world? As many before, Subiaco and its surrounding villages and countryside raise more questions: How did the Aniene valley shape not only the Benedict and his monks, but also the Roman conquerors that came before? How did their actions, both in isolation and

in their larger classical and medieval, shape the landscape in turn? How did the valley's natural resources, chief among them water, inform the lived experience of the monks and laymen in the valley? What was life like in the Aniene valley during these periods?

Medieval monastic societies have been the focus of a plethora of works, and there has been some work on the ties between monks and their environments elsewhere in Europe. Studies have shown, for instance, that in the Ardennes Benedictines formed their identity around control of the landscape and its population.<sup>17</sup> Written by Ellen F. Arnold, *Negotiating the Landscape* uses monastic records to detail the significance of a “wilderness” landscape. Much like in the order's earliest days in the Aniene, the Benedictines at Stavelot and Malmedy held isolation as an ideal that they would strive for in the construction and maintenance of their monasteries. The fact that the Ardennes was long occupied meant little. It was removed enough from the excesses of the city that it could serve as a “desert” where monks could practice.<sup>18</sup> While isolation was the ideal, it was not long before the realities of life in a populated landscape superseded it. Over time, the monks at Stavelot-Malmedy would come to control the forest alongside its people and produce, which they used to build the monastery's wealth.<sup>19</sup> Arnold's work begins with the premise that monastic identity was shaped by the Ardennes. If this is true for her subjects at Stavelot-Malmedy, or indeed, as she points out, for populations in William

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<sup>17</sup> Ellen F. Arnold, *Negotiating the Landscape: Environment and Monastic Identity in the Medieval Ardennes* (Philadelphia: University of Pennsylvania Press, 2013).

<sup>18</sup> Arnold, *Negotiating the Landscape*, 32-7.

<sup>19</sup> Arnold, *Negotiating the Landscape*, 62-70.

Cronon's Chicago or along Richard White's Columbia River, so too must this be true for Subiaco and the Aniene.<sup>20</sup>

On the other hand, the Aniene valley and Subiaco abbey have not yet received this treatment. Environmental historians have given due attention to the classical world. Like their monastic counterparts, Rome expressed its dominance through agricultural settlement and taxation.<sup>21</sup> Still, this work is broad. J. Donald Hughes's *Environmental Problems of the Greeks and Romans*, and other works like it, centers around a broader Mediterranean world. Meanwhile, expansive tomes like K.D. White's *Roman Farming* go in depth into general Roman agricultural practices. White creates a picture of a stereotypical Roman farm, with its grains, livestock, and peasant or slave laborers.<sup>22</sup> However, neither work gives voice to the Aniene specifically. Instead, it is usually considered a part of the larger, Roman, world.

Even when the Aniene valley does appear in classical secondary source work, it has been relegated to a background for Rome's feats of engineering. Works like Thomas Ashby's seminal *Aqueducts of Ancient Rome* or Harry Evans's *Water Distribution in Ancient Rome* feature the Aniene valley only as a source for Rome's aqueducts.<sup>23</sup> Ashby's work is fundamental to the field, and Evans's features heavily in the first chapter

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<sup>20</sup> Arnold, *Negotiating the Landscape*, 10.

<sup>21</sup> Donald J. Hughes, *Environmental Problems of the Greeks and Romans: Ecology in the Ancient Mediterranean* (Baltimore, MD: Johns Hopkins University Press, 2014), 124. Also see J. Donald Hughes, *The Mediterranean: an Environmental History* (Santa Barbara, CA: ABC-CLIO, 2005).

<sup>22</sup> K.D. White, *Roman Farming* (London: Thames and Hudson, 1970).

<sup>23</sup> Thomas Ashby, *The Aqueducts of Ancient Rome*, ed. I.A Richmond (Washington: McGrath Publishing Company, 1973), and Harry B. Evans, *Water Distribution in Ancient Rome: The Evidence of Frontinus* (Ann Arbor: University of Michigan Press, 2000).



of this thesis. However, the Aniene valley simply remains a place in a greater history of technology and engineering.

In the Medieval era, environmental historians identify the valley as a larger part of the Italian world. Subiaco's monastic fishing rights are used as evidence for growing monastic resource control throughout Italy, while its water resource management has been contrasted with that of Farfa, another monastery in the Rieti basin 70 kilometers north.<sup>24</sup> The author of this work, Paolo Squatriti, blends the themes of Hughes and Evans. It is at its heart an environmental history, but one whose focus on water requires it to draw from history of technology. This is not out of the ordinary, since environmental history is at its heart an interdisciplinary genre. Indeed, similar works on monastic society in medieval Italy rely heavily on palynology and archaeobotany, while turning their focus away from the Aniene to the Rieti basin.<sup>25</sup> Such studies have shown the tremendous effect that human interaction and modification had on the environment even through a changing climate. Some works have taken a "Braudelien" approach to the landscape. Emilio Sereni's *History of the Italian Agricultural Landscape* traces agriculture in Italy from its earliest roots through the modern era.<sup>26</sup> Still, after the development of Benedictine monasticism in the west, Subiaco and the Aniene valley largely disappear

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<sup>24</sup> Paolo Squatriti, *Water and Society in Early Medieval Italy: AD 400-1000* (Cambridge: Cambridge University Press, 1998), 19, 108.

<sup>25</sup> Mensing et al., "Human and Climatically Induced Environmental Change in the Mediterranean during the Medieval Climate Anomaly and Little Ice Age: A Case from Central Italy," 49-59, also see Edward M. Schoolman, Scott Mensing, and Gianluca Piovesan, "Land Use and the Human Impact on the Environment in Medieval Italy," *The Journal of Interdisciplinary History* 49, no. 3 (2018): 419-444.

<sup>26</sup> Emilio Sereni, *History of the Italian Agricultural Landscape*, trans. R. Burr Litchfield (Princeton, NJ: Princeton University Press, 1997).



from the literature. In Chris Wickham's *Medieval Rome*, the valley is once again combined with the Roman countryside as an extension of the city.<sup>27</sup>

As for the development of monastic society, the historiography unsurprisingly focuses more on philosophy than location. Works like Marilyn Dunn's track the creation and dispersion of Benedictine philosophy from its origins at Subiaco and Monte Cassino. Dunn connects these ideas with the lands where they were written, arguing that the *Rule of Benedict* was written with both gardening within the monastery and agriculture outside in mind in locations where laymen farmers would not be present.<sup>28</sup> Clearly, the landscape at Subiaco informed the philosophy to which monks at Farfa and even in the Ardennes adhered, but it is still a background in intellectual histories.

As this project developed, it became clear the Arnold's approach would be best for the Aniene valley. Therefore, I try to approach the Subiaco and the greater valley as its own landscape, with its own sense of place. That is not to say it is isolated. Indeed, it was not incorrect for Squatriti or Wickham to include it as part of a greater Roman or Italian world. But, as John McNeill writes, "every landscape tells a slightly different story."<sup>29</sup> So, while Subiaco is part of the larger Roman metropolis and Italian countryside, it has its own history that is worth studying.

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<sup>27</sup> Chris Wickham, *Medieval Rome: Stability and Crisis of a City, 900-1150* (New York, NY: Oxford University Press, 2015), 67.

<sup>28</sup> Marilyn Dunn, *The Emergence of Monasticism from the Desert Fathers to the Early Middle Ages* (Malden, MA: Blackwell, 2007), 111-38.

<sup>29</sup> McNeill, *The Mountains of the Mediterranean World: an Environmental History*, 67.

## The Sources:

Because of the valley's long history of human habitation, as well as the vast timeline of the thesis, almost 2000 years, sources can differ drastically by chapter. The process by which Subiaco Abbey came to control most of the upper valley transcends traditional periodization, so there is some overlap in sources at times as well.<sup>30</sup> In all, this thesis combines classical texts, catholic hagiographies and regulations, papal charters, and land registers creating a narrative of both how the valley fell to monastic control and what life looked like once it did.

Chapter one, covering the Roman era from apocryphal expansion of the Republic through the zenith of the Empire, largely relies on the classic authors Livy, a famed Roman historian who wrote during the Augustus' reign, and Frontinus, Rome's water commissioner under Emperor's Nerva and Trajan. Livy narrates the beginning of Rome's presence in the valley through his tales of early wars with its Italic neighbors, including those that lived in the Aniene valley. Naturally, his work comes with major limitations. For one, many of Livy's narratives were modified for their audience to represent Roman values and greatness, so the verifiable historicity of some events in his works is questionable.<sup>31</sup> To reconcile this, I have turned to archaeological evidence. Indeed, recent studies have confirmed that the area Rome conquered along the Aniene had belonged to their Latin neighbors and the Aequi, as Livy discusses.<sup>32</sup> But more important than the

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<sup>30</sup> Traditional being Pre-Classical, Classical, Late Antique, etc.

<sup>31</sup> Melissa M. Matthes, *The Rape of Lucretia and the Founding of Republics: Readings in Livy, Machiavelli, and Rousseau* (University Park, PA: The Pennsylvania State University Press, 2000), 54.

<sup>32</sup> Paolo Carafa, "I Latini: Prospettiva Archeologica," in *E Pluribus Unum?: L'Italie, De La Diversité Préromaine à L'unité Augustéenne* (Berne: Peter Lang SA, 2014), 34-5.

factual nature of Livy's writing is its subtextual reflection on Roman culture and the process by which Romans conquered land.

The other significant author to the chapter is Frontinus, whose *De Aquaeductu Urbis Romae* is invaluable in tracking the sources and uses of Rome's aqueducts. However, it is difficult to determine accuracy in Frontinus' work. Unlike Livy, the inaccuracy is not in regard to the truth of Frontinus' statements. Archaeological evidence and modern presence of the aqueducts show that he was at least accurate in their sources and locations.<sup>33</sup> Rather, the problem lies with Frontinus' measurements of water volume. He relies on a then standard form of measurement, the *quinaria*, or five-pipe, which is difficult to convert into modern mathematics. The measurement corresponds only to a pipe diameter, but does not tell the reader anything about capacity. Over the 20th century, there were attempts to calculate the five-pipe's capacity based on pressure, which came out to .48 liters per second.<sup>34</sup> However, the equation assumed a constant universal stream of pressure and water volume, one that was not necessarily present in each reservoir or aqueduct. Furthermore, the extant pipes that have been excavated do not support these calculations. Finally, a later study showed that, if this measurement of the capacity of the *quinaria* is used, the aqueducts themselves would not be capable of bearing it over large periods of time.<sup>35</sup> Frontinus' work leaves many questions as to exact measurements of Rome's water supply as provided by the Aniene valley. Still, it is invaluable for

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<sup>33</sup> Thomas Ashby, "The Four Great Aqueducts of Ancient Rome," *Classical Review* 14, 6 (July 1900): 325-327.

<sup>34</sup> Christer Bruun, "The Impossibility of Reaching an Exact Value for the Roman Quinaria Measure," in *Frontinus: De Aquaeductu Urbis Romae*, 343-4.

<sup>35</sup> Bruun, "The Impossibility of Reaching an Exact Value for the Roman Quinaria Measure," 345.

understanding the river's significance to the city, both during its development and its zenith.

The first chapter also draws upon Pliny the Elder, Pliny the Younger, Plutarch, Varro, and Horace. Each Pliny describes the agricultural villas that lined the Aniene river in their time, albeit from different perspectives. The Elder was concerned with the valley's natural history and the river's flow, while the Younger was concerned with farming, tenants, and flooding along his own villas. Plutarch's biographical narratives of the Gracchi provide insight into Rome's troubled agricultural economy in the Late Republic, while Varro describes the specific dimensions of Roman farms. Finally, Horace owned a villa in the greater Aniene valley, where he wrote his poetry and described his love for the countryside. Each of these sources has their limitations regarding accuracy, but the insight they provide into Roman customs and perspectives on the Aniene valley is invaluable.

The second chapter, which begins at the Empire's fall in 476CE through the Sixth Century, turns to hagiography, monastic rules, and early papal grants. As with chapter one, the import of these sources is largely in their perspectives and details on what the landscape contained. When Benedict travelled to Subiaco, he entered into a modified environment that would shape his philosophical writings and influence his followers, who in turn would take control of the same space. As a result, the first major source is Book 2 of Gregory the Great's *Dialogues*, which presents a largely hagiographic narrative of Benedict of Nursia's life. As a hagiography, naturally it cannot be relied on for historical accuracy. It is filled with stories of miracles and premonitions, being more concerned with the image of Benedict as an ideal pious monk than a man. However, these stories

still reflect the physical environment in which they take place. Nero's lakes, the river itself, and early agricultural settlements feature prominently within them providing an early glimpse at what the landscape and ecosystems of the Aniene valley may have looked like during Subiaco Abbey's earliest days, even if these descriptions have limitations. An ideal element of Benedictine philosophy is isolation in wilderness, so the landscape portrayed within the *Dialogues* may again only reflect an ideal, not a reality.

Secondarily, Benedict's own *Rule for Monasteries* also provides some insight into the ideals of isolation and independence that monastic lands should provide. However, it should be noted that its use is extremely limited. While the *Rule* does mention that the monastery should control its own mill, well, bakery, and garden all within its walls, it gives little recommendation on how they should be constructed, what they should contain, or from where the monks should gather the natural resources to supply them.<sup>36</sup> Furthermore, the *Rule's* emphasis on isolation and confinement to the monastery provides little direct perspective on the Abbey's dealings with the "outside" world. In practice, the Abbey was not truly isolated, since records show that already in the Sixth Century they controlled large amounts of land and mills outside the monastery, many of which were staffed by secular farmers.<sup>37</sup> Still, like the hagiographic perspective of the *Dialogues*, the *Rule* shows that Benedictine philosophy was formed around piety and labor, as shown through the sect's mantra *ora et labora*, work and pray. However, while this mantra was

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<sup>36</sup> Benedict, *Rule for Monasteries*, trans. Leonard Joseph Doyle (Collegeville, MN: St. Johns Abbey Press, 1948), 94.

<sup>37</sup> Guido Levi and Leone Allodi, *Il Regesto Sublacense Del Secolo XI* (Roma: Società romana di Storia patria, 1885) 252-3.

designed to be practiced in isolation, the sixth century would see its early adherents defy it and take control of the landscape.

In Chapters Two and 3, the sources begin to overlap. The second deals with the early formation of the monastic power structure in the valley, while the third covers its zenith. Instead of hagiographical texts and regulations, here the monastery's own chronicles and papal charter begin to shape the narrative. First, there are the two chronicles which contain Subiaco Abbey's history through 1369 and 1628, respectively. Both detail the Abbey's early years, focusing on a timeline of individual abbots and their acts. These narratives can be vague and unclear especially regarding the monastery's earliest years. In an attempt to remedy that the chapter relies upon papal charters from the same era that detail the abbot's earliest properties including land, water rights, fisheries, and mills.

In later centuries, the records are far more detailed. The 1628 chronicle recounts a 1305 flood that destroyed the dams Nero built over one thousand years before. While the narrative does have its issues, namely some impossible feats performed by brave monks, it still contains vivid descriptions of the cleared fields, villages, and livestock farms that were present among the abbey's possessions in the 14th century. Whereas chapter two is concerned with the formation of monastic identity and power structures, chapter three focuses on the actual function of those structures both on a regular basis and in times of crisis.

In all, chapter three contains the most direct and robust source base. Once Subiaco Abbey had secured its place in the hierarchy of the Aniene valley, its main focus became resource control and taxation, not work and prayer. For this reason, chapter three is

centered around two land registers, known as *catasto*, which detail different categories of farms, family names, the crops they grew, the livestock they kept, and the tax burden they owed to the Abbey and other local lords.<sup>38</sup> These are most directly related to land use of any source in the thesis, and they show that by the flood in 1305, after the destruction it wrought well into the 16th century, Subiaco abbey maintained an environmental hierarchy within the Aniene valley. Furthermore, the chapter draws on papal and royal grants to the monastery which not only increased its landholdings periodically, but also reinforced its authority. Finally, the thesis consults court records wherein the Abbey maintained its control during land disputes, as well as personal land grants and wills where laymen farmers and landowners in the valley donated their own property to Subiaco as a form of piety.

A glaring absence from sources in all three chapters is the lack of ecological information specific to the Aniene valley. Even Frontinus, Rome's water commissioner, does not describe rainfall patterns at the aqueduct's sources. As a result, it is necessary to look at the Apennine range as a whole for proxy evidence, and when possible turn to other monasteries for their perspectives. At other major abbeys, landscape and identity were intricately linked, as they were in Subiaco. In places like Farfa and the Ardennes, where Benedictines spread, they became major players in feudal society as laymen farmers flocked to them for protection from the dangers of invaders, famine, and drought.<sup>39</sup>

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<sup>38</sup> *Catasto*, cadastre, a register to track taxation.

<sup>39</sup> This is part of what is called *incastellamento*. More on that process in chapter 3. Also see Edward M. Schoolman, Scott Mensing, and Gianluca Piovesan, "Land Use and the Human Impact on the Environment in Medieval Italy," *The Journal of Interdisciplinary History* 49, no. 3 (2018): 419-44, Ellen F. Arnold,

The project originated from a curiosity about Rome's aqueducts. At first, its scope was limited to their use within the city. However, a question soon arose: where did the Romans gather this water? This soon pulled my research east into the Aniene where it became clear that the valley had served as the backdrop to not only Rome's engineering feats, but also to St. Benedict's spiritual movement that would shape Italy, alongside the rest of Europe. These developments were intimately tied to the environment and its resources.

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*Negotiating the Landscape: Environment and Monastic Identity in the Medieval Ardennes* (Philadelphia: University of Pennsylvania Press, 2013), or Chris Wickham, *Medieval Rome: Stability and Crisis of a City, 900-1150* (New York, NY: Oxford University Press, 2015).



## CHAPTER 1

### FIELDS AND RIVERS OF ROME

As he looked out upon his estate in the Sabine hills, down upon its fertile fields, verdant forests, and trickling streams, the famed poet Horace was inspired to write to a woman, Tyndaris, “Here the rich bounty of the graces of the field flows to you from its bounteous horn.”<sup>1</sup> Today identified archaeologically as the Villa di Orazio, Horace’s villa overlooked the Licenza river, a tributary to the Aniene. The picturesque Sabine valley that filled the poet with such a love for the countryside was, per his own description, dotted with woods, streams, and fields. It was also an extension of the Aniene river valley.

The Aniene was not consistently the idyllic paradise that Horace presents. A little over a century after his death, the Aniene river would flood, wreaking destruction along its path which by this time had become heavily populated by villas along its lower western banks, as well as along the ridges and hilltops that overlooked the valley in its upper eastern course.<sup>2</sup> Pliny the Younger quipped, “Is that your sky also so severe and stormy? Here [there are] incessant storms and constant floods,” as he reported a recent deluge in one of his *Epistles*.<sup>3</sup> His letter goes on to describe mass flooding along the

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<sup>1</sup> Horace, *Odes* 1.17.14-16.

<sup>2</sup> Pliny the Younger, *Epistles* 8.17. For a textual criticism and analysis of how this flood story fits in with the larger tradition of Roman flood literature, see Stefano Rocchi, “Plinius, Brief 8,17: eine Überschwemmung des Tiber und des Aniene : Text, Textkritik und Intertextualität.” *Gymnasium* 122, 4 (2015): 389-402.

<sup>3</sup> Pliny the Younger, *Epistles* 8.17.1-2. ‘Num istic quoque immite et turbidum caelum? Hic assiduae tempestates et crebra diluvia.’

Tiber that, like so many floods do, destroyed fields and ruined homes before moving on to what he calls the “most pleasant of rivers,” the Aniene.<sup>4</sup> This narrative presents an image of the Aniene river and valley’s agricultural settlements during Trajan’s reign.

Pliny writes that the Aniene had seemed restrained by the numerous villas that lined its banks, but now it threatened to destroy those same symbols of Roman dominance and agriculture.<sup>5</sup> “[The Aniene] undermined mountains, and closed in many places by boulders of debris, until seeking a lost passage, it overthrew [its] holdings and sent itself over the ruins it made.”<sup>6</sup> The flooding did not only affect those living in villas along the river’s banks. Pliny writes that the hills’ inhabitants watched the valley below in horror as “ploughs, oxen, their drivers, herds of cattle, tree trunks, and beams of neighboring villas,” were swept into the inundation and floated down the river. But they themselves did not escape damage, as the storm was so bad in the mountains that, even though the river’s flood could not reach them, it ruined fields and buildings in destruction that Pliny says was as bad as the flood’s.<sup>7</sup>

The Aniene river, which runs for 62 miles from the Tiber, did not initially fall within Roman territory. Instead, it took generations of military conflict and territorial expansion to develop a “Roman” Aniene. The havoc the Pliny described took with it centuries of development.

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<sup>4</sup> Pliny the Younger, *Epistles* 8.17.3-5. ‘*Anio, delicatissimus amnium...*’

<sup>5</sup> The Latin word for Aniene is ‘*Anio*,’ and it will appear in this form in aqueduct names and Latin transcriptions.

<sup>6</sup> Pliny the Younger, *Epistles* 8.17.5. ‘*...subruit montes, et decidentium mole pluribus locis clausus, dum amissum iter quaerit, impulit tecta ac se super ruinas eiecit atque extulit.*’

<sup>7</sup> Pliny the Younger, *Epistles* 8.17.

Throughout the Bronze age, agriculturalists mostly practiced short term, temporary clearing and burning. To the peninsula's earliest Greek and Etruscan settlers, the small amount of farming that the indigenous inhabitants practiced was not enough to clearly define a specific agricultural landscape.<sup>8</sup> As Greek colonists continued to settle along Italy's eastern coast and Sicily, they began to practice polycropping on terraced hillsides. These fields were often irregularly shaped as the farmers adapted to the hilly and mountainous landscapes that define the region. In order to make the best use of limited space, Etruscans would grow grapes on the trunks of olive trees.<sup>9</sup> Still, even these larger adaptive works were often temporary so that the soil could naturally return to fertility. Once the Romans came to dominate all of Italy in the latter half of the first millennium BCE, permanent land clearing and land holding became ubiquitous throughout its territories.

In practice, the system Rome implemented over its conquered territories was mathematical. The *limitatio* was central to this system, and was made up of the *decumanus* (east-west) and *cardo* (north-south), forming a grid over the landscape. Surveyors then split the land into fifty-hectare plots, known as *centuriae*, which were relegated either to farmland for the settlers or public pastures for grazing.<sup>10</sup> The grid physically changed the landscape, since it was made up of small roads and paths which

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<sup>8</sup> Emilio Sereni, *History of the Italian Agricultural Landscape*, trans. R. Burr Litchfield (Princeton, NJ: Princeton University Press, 1997), 18.

<sup>9</sup> Sereni, *History of the Italian Agricultural Landscape*, 23-5.

<sup>10</sup> Ibid, 27. and Daniel J. Gargola, *Lands, Laws, & Gods: Magistrates & Ceremony in the Regulation of Public Lands in Republican Rome* (Chapel Hill: University of North Carolina Press, 2009), 39. Today this practice is referred to as centuriation, because of the *centuriae*.

defined land boundaries and allowed for easier access to farms.<sup>11</sup> Because Roman land settlement was also steeped in tradition and religion, once a site had been selected the process used to establish the *centuriae* became ritualistic.<sup>12</sup>

These processes were not invariable. Even Vitruvius, who set the guidelines for Roman architecture during the Augustan Principate, allowed variations within his work as they were needed to suit the landscape.<sup>13</sup> In the same way the *decumanus* and *cardo* were often ordered within the context of their landscapes rather than in line with the sun as the tradition mandated.<sup>14</sup> In practice the goal became to adhere to ritual as much as the terrain allowed, while adjusting to maintain a suitable agricultural landscape. This likely occurred along the upper Aniene, where the hillsides are steep. Nevertheless, because the *centuriae* was regular yet flexible, it likely underwent the same basic system of agricultural development as other colonial lands.

Finally, the development of aqueducts along the Aniene and the development of an expansive system of villas, the same whose destruction Pliny describes and whose beauty Horace adored, formed a landscape of leisure in the Imperial era. It served to cultivate the city's growth through its aquatic and agricultural exports while Nero, along with countless other nobles, used it as a place of leisure and opulence.

### **Conquering the Land:**

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<sup>11</sup> Gargola, *Lands, Laws, and Gods*, 39.

<sup>12</sup> Gargola, *Lands, Laws, and Gods*, 46-7. Gargola argues that the process had become so formalized that it was even the subject of parody by the playwright Plautus in the second century BCE.

<sup>13</sup> The Principate is usual dated from 27 BCE-284 CE.

<sup>14</sup> Gargola, *Lands, Laws, and Gods*, 47. Vitruvius, *De Architectura* 4.5.

The Aniene was populated long before Horace's time. Its earliest inhabitants were pastoralists who made use of the valley's ample natural resources as they herded livestock and practiced small amounts of farming. Before the Romans came to dominate the valley, it was inhabited by two distinct groups, the Latins and the Aequi.<sup>15</sup> Both would fall to Rome as it gradually took over control of the Aniene valley, but they also had their own long histories of land and resource use. Archaeological studies have shown an increasing amount of small, single family farms throughout Latin territory from the 6th-2nd centuries BCE. This trend continued right up until Roman invasion, when they were replaced by colonies and villas.<sup>16</sup> The Sabines lived to the North, along the extensions of the valley's water systems.<sup>17</sup> In short, the Aniene valley was marked by the same settlement and conflict as the rest of Italy. Before it could be modified into the landscape of leisure and agriculture that Horace and Nero adored, it would be conquered militarily and politically.

The process by which Rome came to control the resources of the Aniene valley is in many cases apocryphal. Sources are largely limited to Roman writers who, although technically belonging to the same city and culture featured in their works, wrote centuries after the tales were set. While the details and drama found within Roman histories are more representative of the authors than their subjects, the events described, especially when paired with current archaeology, can still shed some light on how the Aniene valley

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<sup>15</sup> Zaccaria Mari, "La 'Valle Degli Imperatori': Insediamenti e Uso Del Territorio Nella Valle Dell'Aniene in Età Antica," in *Dall'Italia: Omaggio a Barbro Santillo Frizell* (Firenze: Polistampa, 2013), 152.

<sup>16</sup> Paolo Carafa, "I Latini: Prospettiva Archeologica," in *E Pluribus Unum?: L'Italie, De La Diversité Préromaine à L'unité Augustéenne* (Bern: Peter Lang SA, 2014), 38.

<sup>17</sup> Mari, "Valle Degli Imperatori," 153.

came under Roman control. Over time, the Latin tribes of the western Aniene, the Aequi of the east, and the Sabines in the north all fell and became Roman colonies. But the narratives as put forth by authors such as Livy serve more as justification for this process than a detailed account and shed a light on the environmental importance that the Aniene valley and its extensions held for early Rome.

The Sabine hills were named for their inhabitants. According to Livy, once Rome had established itself as a significant power its male inhabitants feared that the city would “see the end of her greatness” from a lack of women. To remedy this problem, Romulus sent envoys out to the surrounding peoples, including the Sabines, to arrange intermarriages between Rome and its neighbors. However, the envoys were all rejected, and no intermarriages could be secured.<sup>18</sup> While the narrative that Livy puts forward is framed in the necessity of reproduction, Rome’s goals were two-fold. There may have been a mythological need for women, but Livy’s story also represents an early attempt at diplomatic expansion, since with marriage would come influence, and maybe more importantly, land for agriculture.

The diplomatic attempt proved fruitless, so Romulus devised a new deceitful plan to capture women, and therefore power, by force. He and his men kidnapped many Sabine women during a festival that the Romans put on for their neighbors which led to many conflicts with the same people.<sup>19</sup> The Sabines joined with other nations to attack Rome, but were soundly defeated. Romulus then captured their city and brought its spoils

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<sup>18</sup> Livy, *Ab Urbe Condita* 1.9.1-6.

<sup>19</sup> Livy, *Ab Urbe Condita* 1.9-10.

back to Rome.<sup>20</sup> The conflict did not end there, and another group made inroads into Rome's territory before also being pushed back. The Romans would soon take and colonize two other neighboring territories, preferring to settle in those places with the richest soil.<sup>21</sup> In the aftermath, Rome gained territory increasing its environmental and agricultural resources, the main goal of its conquests. In this way, it is possible that the legend that Livy puts forward stands as justification for Rome's methods. The real objective was land and the power.

Although Livy's narrative ends in peace, historically this was not the case. The following wars with the Sabines increased Rome's combined terrestrial and cultural dominance further into the countryside. A century after the kidnapping, during the partly legendary second Sabine war, the Aniene itself became a battleground. Rome destroyed the river's ever strategic bridges and cut off their enemies, leaving many Sabines with nowhere to retreat and ultimately drowning in the river.<sup>22</sup> Here, Livy shows that Rome's control of the environment spread beyond agriculture. It played a significant role in their strategy; to dominate the river was to rout the enemy. This was a pattern in legendary Roman conquests. No longer were they bound by geographic landmarks and would pursue enemies across rivers and over mountains. It was here that they began to settle along the Aniene and came to draw on the river and its valley for resources and wealth.<sup>23</sup>

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<sup>20</sup> Livy, *Ab Urbe Condita* 1.10.5.

<sup>21</sup> Livy, *Ab Urbe Condita* 1.11.5.

<sup>22</sup> Livy, *Ab Urbe Condita* 1.37.1-2. The conflict with the Sabines does not end here. It goes on well into book 2 of Livy. But for the purpose of this thesis, I have deemed it more important to understand the basis of the conflict that would lead to Roman control over Sabine territory, rather than the exact details of the author.

<sup>23</sup> D. Konstan, "Narrative and Ideology in Livy: Book I," *Classical Antiquity* 5, 2 (January 1986): 200-2.

Furthermore, while the events described by Livy can be considered semi-legendary, archaeological records have confirmed a period of destruction, rebuilding, and “romanization” that coincides with the period.<sup>24</sup>

Similarly, it was conflict with the Aequi that lured Rome into the eastern reaches of the Aniene valley. Early in the fifth century BCE, Rome was at war with many of its neighboring tribes, including those in the Aniene valley. During this time, the Aequi made an incursion into Latin territory. Livy states that when the Latins were unable to defend themselves properly, they went to the Roman senate for help which then mustered an armed response against the invasion. From the start, even the conflict was defined by its environment and the Aequi made use of the Aniene valley’s mountainous terrain as a defense against the advancing enemy.<sup>25</sup> After deliberation, the Roman soldiers forced their own commander to order an attack into the mountain valley itself despite the unfavorable terrain. According to Livy, the Aequi were so shocked by the audacity of the Roman soldiers that they abandoned their camp in the mountains and retreated further up the valley leaving the camp’s spoils to the victors without bloodshed.<sup>26</sup> Rome would continue to engage in minor wars and skirmishes with the Aequi for over a century with each group encroaching upon the other’s territories sporadically. However, it would be some time before the Aequi, and by extension the upper Aniene valley, would fall under Roman control.<sup>27</sup>

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<sup>24</sup> Mari, “Valle Degli Imperatori,” 155.

<sup>25</sup> Livy, *Ab Urbe Condita* 2.30.9. ‘*Cessere Aequi campis, locoque magis quam armis freti summis se iugis montium tutabantur.*’

<sup>26</sup> Livy, *Ab Urbe Condita* 2.31.6-7.

<sup>27</sup> Examples of these conflicts can be found in Livy books 2 and 4.



Early in the 4th century BCE, Rome was routed at the Battle of Allia by Gauls who, after camping near the Aniene river, proceeded to sack the city, causing widespread panic and chaos. Although much of the city was destroyed, and most of its grain supply desolated, Rome was able to hold off the attack.<sup>28</sup> The newly appointed dictator, Camillus, led troops from the Capitoline hill while the Gauls besieged the city and due to the lack of grain the survivors of the sack suffered from famine and plague.<sup>29</sup> It is uncertain how this siege finally came to an end. There are multiple narratives of a ransom of 1,000 pounds of gold paid to the Gauls but no solid authority on the details since the authors that tell the story often conflict with each other.<sup>30</sup> Regardless, it is clear that the sack did occur historically and although it did instill a lasting fear of Gauls in Romans, it did not spell the end of the city's dominance in the region.

The 4th century BCE would see Rome rebound from the sack and go on to solidify control of its neighboring territories which included those of the Aniene valley. First to fall definitively were the Latins who were defeated in 338.<sup>31</sup> The Latins had been short on resources and decided to try to defend their cities as needed. At the same time, those from the city of Tibur, modern Tivoli allied with a few other tribes and decided on a more direct form of warfare. They were routed by Rome and one by one the army assaulted the region's towns until they "[lead] their army onto the complete subjugation

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<sup>28</sup> Livy, *Ab Urbe Condita* 5.39-43.

<sup>29</sup> Livy, *Ab Urbe Condita* 5.44.1-4.

<sup>30</sup> Jeremy Armstrong, *Early Roman Warfare: from the Regal Period to the First Punic War* (Barnsley, South Yorkshire: Pen & Sword Military, 2016), 86.

<sup>31</sup> Mary T. Boatwright, Daniel J. Gargola, and Richard J. A. Talbert, *The Romans from Village to Empire: a History of Ancient Rome from Earliest Times to Constantine* (New York, NY: Oxford University Press, 2004), 79-82.

of Latum.”<sup>32</sup> Most of the smaller Latin cities were absorbed into Rome itself; their lands were redistributed to Roman settlers and the citizens themselves were granted citizenship within the Republic. The larger cities, Tibur and Praeneste, retained a degree of legal autonomy, but they were entirely surrounded by Roman lands and its people lived on Roman resources, so in practice they too became extensions of the city.<sup>33</sup> Control of Tibur, which sits on the banks of the Aniene, gave Rome access to the resources of the western valley.

In the East, it would be another thirty years before the Republic secured absolute control. As Rome expanded and solidified its rule over Latium, so too did the Samnites, another group to their south. By the last quarter of the 4th century, they were neighbors and since both were expansionist powers they naturally came into conflict with one another.<sup>34</sup> In 326 BCE, the two collided in a war that would last until the “Battle” of the Claudine forks in 321, where the Samnite trapped the Romans and forced a surrender. War would break out again in 316. During this conflict Rome began to exercise dominance over its environment through exportation, drawing its resources from its newly conquered territories with the construction of its first aqueduct, the *Aqua Appia*, built in 312.<sup>35</sup> In 306, Rome brought war to the Aequi, and the conflict between the two saw high casualties on both sides, but would solidify Rome’s dominance in the region.<sup>36</sup>

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<sup>32</sup> Livy, *Ab Urbe Condita* 8.13.8.

<sup>33</sup> Boatwright, *The Romans*, 80.

<sup>34</sup> Boatwright, *The Romans*, 84.

<sup>35</sup> Frontinus, *De Aqueductu* 5.

<sup>36</sup> Boatwright, *The Romans*, 86.

Following the conclusion of the Second Samnite war and the subjugation of another Apennine group, the Hernici, Rome decided to fight the Aequi directly. Livy's narrative states that the Aequi refused Roman citizenship and, once the Hernici were subjugated, left no alternatives to war.<sup>37</sup> The Aequian strategy was to retreat within its cities' walls and fight as needed to defend its fields and resources but it proved useless as the Roman army discovered this plan and sacked 31 towns and cities in two weeks.<sup>38</sup> The Aequi were all but destroyed. As with most of the land acquired from its neighbors, Rome sent veterans out to establish colonies throughout Aequi territory, and although there would be uprisings over the next few years, the colonists proved resilient and Rome remained in power.

On its surface, Livy's history is a story of Rome's semi-mythical rise to prominence and eventual dominance throughout Italy and eventually much of Europe. Underneath, it is also a narrative of expansion and settlement into the city's hinterlands. With each acre of new land came further opportunity for agricultural growth and resource control, which according to Pliny, was abundant along the Aniene even up into the hills.<sup>39</sup> In practice, Rome's new territorial and colonial power accomplished more than *glorias* for its leaders fostering the continuous growth that allowed the city to achieve its famous status.

### **Possessing the Land:**

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<sup>37</sup> Livy, *Ab Urbe Condita* 9.45.5-14.

<sup>38</sup> Livy, *Ab Urbe Condita* 9.45.15-18.

<sup>39</sup> Pliny the Elder, *Historia Naturalis* 3.9.

Once conquered, the Aniene valley likely underwent the same system of centuriation that other colonized territories did under Rome.<sup>40</sup> The process would divide the land into serviceable plots with its standard form. Colonization itself was another process rife with ritual and tradition that dated to the same time as the development of centuriation.<sup>41</sup> Colonies were often placed in strategic locations, in areas vulnerable to attack, or within recently conquered territories. The Aniene valley was all three. Although recently conquered, by the 4th century CE the Aequi were already raiding Roman settlements in their former territory, including the Aniene Valley.<sup>42</sup>

Agriculture was the impetus behind Roman expansion, and thus fertile environments were key to new settlements. According to Strabo, the Aniene valley had rich soil and its mountainous slopes were well watered and ideal for rich agriculture.<sup>43</sup> Eventually, the banks of the river would be lined with ample villas and farms, even up into the hills past Tibur, modern Tivoli, as Romans expanded their settlements into the countryside.

After Rome conquered a new territory, new colonies required a formalized authorization from the senate. Once it reached a verdict they tasked the tribune to present the idea to the plebeians who would also take a vote. Both events took place in sacred spaces within the city itself.<sup>44</sup> When the governing bodies had reached a decision to

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<sup>40</sup> Sereni, *History of the Italian Agricultural Landscape*, 27.

<sup>41</sup> Gargola, *Lands, Laws, and Gods*, 51.

<sup>42</sup> Livy, *Ab Urbe Condita* 10.1.

<sup>43</sup> K. D. White, *Roman Farming* (Ithaca, NY: Cornell University Press, 1970), 72, 80.

<sup>44</sup> Gargola, *Lands, Laws, and Gods*, 54.

establish a new colony they set about defining its laws as well as the local government and councils that would oversee it. These seats were attained through standard elections which were often competitive.<sup>45</sup> These commissioners would be responsible for gathering settlers for the new colony.

Once selected, colonists would be ordered to gather nearby the site to prepare for the establishment of the colony. Next, the entire group would make the final approach toward the site like a legion through enemy territory which was often in foreign or newly acquired territory and at risk of attack.<sup>46</sup> With the support of the senate and the city, the lands would then be surveyed and divided, and the colony established.

While the colony would ostensibly be made up of farmers seeking to establish control over a new landscape, one of its goals would also be to establish itself as a legitimate *urbs*, city, in a way that reflected its fatherland. In its final form, the colony would become a type of “home away from home” with some of the luxuries and facilities of Rome like forums or baths. This would in turn further establish Rome’s dominance in the region.<sup>47</sup> Agriculture was still the backbone of any expansionist endeavor without which no quasi-Rome could exist and this was certainly true in the towns and farms of the Aniene.

Farms sizes differed by era. During the 3rd and 4th centuries BCE, small land holdings of 2.5-20 hectares dominated, on which farmers largely practiced subsistence

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<sup>45</sup> Gargola, *Lands, Laws, and Gods*, 60.

<sup>46</sup> Gargola, *Lands, Laws, and Gods*, 67.

<sup>47</sup> Gargola, *Lands, Laws, and Gods*, 71-102.

farming to support themselves and their families.<sup>48</sup> This type of farm would persist through the following centuries even as larger, profit-driven farms began to become more popular among the rich while the poor found themselves increasingly landless.<sup>49</sup> Small estates measuring from 20-125 hectares followed. It was on this type of farm that Horace, the famous poet who praised the Aniene's beauty, lived and worked. Finally, large estates were popular in the late Republic and imperial Rome. Known as *latifundia*, they held over 125 hectares, varied considerably in use and productivity, and were unified more by size than function.<sup>50</sup> It is these types of villas and farms whose destruction the younger Pliny described in such detail.<sup>51</sup> Farms could be further categorized by forms of management, whether through direct familial labor, use of slaves, or a combination of slave, tenant, and family labor. They could also be categorized by production, as in vineyards, olive plantations, ranches, or mixtures of all three.<sup>52</sup> All three types were concurrently present, however the *latifundia* would become the primary form of Roman agriculture toward the end of the Republic as Rome's wealthiest citizens consolidated the land.

Many of these farms grew a variety of crops with different needs and requirements for each. In *De Re Rustica*, Varro describes 200 *iugera* plots divided

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<sup>48</sup> Hectare measurements are calculated from the Roman *iugera*, roughly equal to .25 hectares.

<sup>49</sup> White, *Roman Farming*, 387.

<sup>50</sup> Ibid, 388.

<sup>51</sup> Pliny the Younger, *Epistles* 8.17.

<sup>52</sup> White, *Roman Farming*, 389.

between a vineyard and an olive plantation.<sup>53</sup> Furthermore, other famous agriculturalists such as Cato and Columella, as well as Varro himself, describe various types of figs, grapes, olives, and grains, all of which could be grown simultaneously if the land was varied enough and the manpower was available. Indeed, vineyards would often have to be grown in conjunction with grains in order to properly supply a farm's hands and slaves with food.<sup>54</sup> Furthermore, Columella's ideal farm was one of a varied landscape with both cleared and forested land, flat in some places while hilly in others, and near a river or stream by which the farm's produce might be transported to Rome.<sup>55</sup> If one were to follow Columella's advice, they would find that the lower Aniene valley encompassed many of these same features, making it ideal for agriculture. In the upper valley, steep cliffs and high rainfall might provide obstacles to agriculture. To combat these, much of the Apennine range was terraced to prevent erosion and make steeper hills farmable.<sup>56</sup> In the late Republic, *latifundia* likely grew a plethora of crops due to their massive sizes, which would often cover many different types of terrain. Furthermore, as independent landowners were increasingly forced into selling their land, they could pick up tenant contracts on these larger farms wherein they would grow crops in accordance with their leases.<sup>57</sup>

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<sup>53</sup> Varro, *De Re Rustica* 1.18.4.

<sup>54</sup> White, *Roman Farming*, 395-400.

<sup>55</sup> Columella, *De Re Rustica* 1.2.3.

<sup>56</sup> Donald J. Hughes, *Environmental Problems of the Greeks and Romans: Ecology in the Ancient Mediterranean* (Baltimore, MD: Johns Hopkins University Press, 2014), 122.

<sup>57</sup> *Ibid*, 407-8.

Tenants alongside slaves would make up the majority of laborers on many farms along the Aniene when its 108 CE deluge occurred. 250 years prior, the richest of Rome began to purchase or seize much of the public land that had been set aside for grazing in Roman territory as well as the smaller 2.5-20 hectare farms.<sup>58</sup> The *latifundia* left little land for the average or poor Roman citizens who then began to flock to the city in search of work or take up tenant contracts on the same lands to which they once held the rights. Despite the now famous efforts of the Gracchi brothers to redistribute land and grain back into the hands of the Roman populace, their efforts failed and both met their death at the hands of the senate.<sup>59</sup> So, alongside the collapse of the Republic and the rise of the empire came the continuous consolidation of land in the hands of Rome's wealthiest citizens who then leased their land.

Among these landlords was the author of the flood narrative, Pliny the Younger, who made much of his fortune from tenants who grew wine and olives on his properties.<sup>60</sup> Tenants also stood to benefit from the leases they signed. They could sell their surplus at market, something that their landlords occasionally tried to curb or at least control.<sup>61</sup> Farmers became increasingly dependent on selling surplus in the second century CE. Debt too became endemic as they became increasingly unable to afford their

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<sup>58</sup> Plutarch, *Life of Tiberius Gracchus* 8.1-3.

<sup>59</sup> Plutarch, *Life of Tiberius Gracchus* 19.5-6. and *Life of Gaius Gracchus* 17. For more on the grain redistribution, see Peter Garnsey and Dominic Rathbone, "The Background to the Grain Law of Gaius Gracchus," *Journal of Roman Studies* 75 (1985): 20-25.

<sup>60</sup> Dennis P. Kehoe, *Investment, Profit, and Tenancy: the Jurists and the Roman Agrarian Economy* (Ann Arbor, MI: University of Michigan Press, 1997), 197-8.

<sup>61</sup> Kehoe, *Investment, Profit, and Tenancy*, 407-8.



rents.<sup>62</sup> To remedy this, the Younger Pliny began signing tenants into sharecropping agreements wherein the landlord and the farmer would both benefit or suffer depending on their yields further incentivizing both parties to invest in the success of the farm.<sup>63</sup>

It was this system that Pliny would see washed away before his eyes during the flood of 108. All along the Aniene these types of large estates and villas were destroyed, and this would have affected agriculturalists of all social standings. Still, the tenant system would continue into late antiquity. By the 4th century CE, *latifundia* would continue to prosper in private and imperial hands as well as under the control of the early Catholic Church. However, many of these large farms along the Aniene, or at least along its upper portions, would fall abandoned during late antiquity due to a lack of foreign revenue combined with depopulation.<sup>64</sup> Regardless of its flooding or eventual abandonment, the Aniene valley would benefit Roman citizens and farmers for at least 600 years through its ritualized colonization and standardized variable farming systems. It was not only through agriculture that Romans benefited from the valley; its ample water systems would also foster Rome's continuous growth starting in the 3rd century BCE. Furthermore, through domination of the landscape, Nero would turn the upper Aniene into his own personal paradise.

### **Acquiring the Land's Resources:**

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<sup>62</sup> Paul Erdkamp, *The Grain Market in the Roman Empire: a Social, Political and Economic Study* (Cambridge, UK: Cambridge University Press, 2005), 30-1.

<sup>63</sup> White, *Roman Farming*, 408.

<sup>64</sup> Kevin Twine, "The City in Decline: Rome in Late Antiquity," *Middle State Geographer* 25 (1992): 135.

By the end of the First Century CE, when one watered their garden or partook in the classic Roman tradition of the bathhouse, they watered and bathed with waters originating in the Aniene valley. In 272 BCE, Rome began to import the Aniene valley's waters into the city via aqueducts. Until 312 BCE, the city had satisfied its need for fresh water with numerous city wells and water from the nearby Tiber river. During the Second Samnite War (326-304 BCE) the censor Appian oversaw an aqueduct's construction which brought water from what had formerly been Latin territory into Rome.<sup>65</sup> This was the first of the famous Roman aqueducts, as described by Frontinus, a Roman official and author who was appointed the city's water commissioner in 96 CE. In 272 BCE, the first aqueduct would be sourced from the Aniene valley, called the *Anio*, and later the *Anio Vetus*. At the empire's height, four major aqueducts would gather their water from the Aniene valley's springs and river.<sup>66</sup> With these aqueducts, Rome would supplement its internal water supply with the Aniene's, while the valley would become a refuge for Rome's elite.

Aqueducts were built by private contractors as needed, usually only once a century. Some, like the Aqua Marcia, were overseen by public official and funded by foreign conquests, while later projects were spearheaded by Emperors as public works. Once built, the constant flow of water meant that they required regular maintenance, which was carried out by two distinct groups of slaves.<sup>67</sup> One group, numbering 240,

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<sup>65</sup> Frontinus, *De Aqueductu* 5.

<sup>66</sup> Thomas Ashby, "The Four Great Aqueducts of Ancient Rome," *The Classical Review* 14, 6 (July 1900): 325-327. These were the *Anio Vetus*, *Anio Novus*, *Claudia*, and *Marcia*.

<sup>67</sup> Frontinus, *De Aqueductu* 7.1, 13-15, 98.

belonged to the public, while another, numbering 460, belonged to the Imperial family.<sup>68</sup> Within the groups, men were divided into jobs like overseers, plasterers, inspectors, and pavers, who paid special attention to the above-ground portions of the aqueducts, which Frontinus said were the most prone to damage. The slaves also worked to clear debris buildup and ensure that the aqueducts maintained a consistent flow. In all, estimates show that, at their average yields, all four combined would have a discharge of 600,000 m<sup>3</sup>/day.<sup>69</sup>

The Anio Vetus, built from the spoils of the Pyrrhic war, was designed to serve the ever expanding and growing populations of Rome. It was designed with the ambition of bringing a much higher volume of water into the city than its predecessor, the Aqua Appia.<sup>70</sup> Beginning high in the hills above Tivoli in the upper Aniene valley, it had a long, gradual course to its terminus at the Servian wall.<sup>71</sup> Its length was mostly underground, which Frontinus posits was either because its builders did not know how to properly level aqueducts above ground, or because they intentionally built underground to protect it from being cut off by enemies along its length.<sup>72</sup> Indeed, during the 3rd century BCE Rome had come to dominate much of the Aniene valley, however, the territory was not free from conflict. In 212 BCE, 60 years after the aqueduct's

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<sup>68</sup> Frontinus, *De Aqueductu* 116. Frontinus says that the second, larger, group was created specifically for the construction and maintenance of the Claudia and Anio Novus.

<sup>69</sup> Deane R. Blackman, "The Volume of Water Delivered by the Four Great Aqueducts of Rome," *Papers of the British School at Rome* 46 (1978): 52, Frontinus, *De Aqueductu* 119-121.

<sup>70</sup> Harry B. Evans, *Water Distribution in Ancient Rome: the Evidence of Frontinus* (Ann Arbor: University of Michigan Press, 2000), 76.

<sup>71</sup> Frontinus, *De Aqueductu* 6.

<sup>72</sup> Frontinus, *De Aqueductu* 18.

construction, the Second Punic War would come to the Aniene valley, and Hannibal Barca would cross the river and deal Rome a minor defeat while plundering their lands.<sup>73</sup>

From its terminus, the Anio Vetus' yield, at most 1.2m<sup>3</sup>/s, would then be distributed throughout the city in auxiliary channels and lead pipes that have long since been scavenged.<sup>74</sup> By the time of Frontinus' writing, it contained 35 individual reservoirs and supplied water to ten different Roman districts, including the Forum.<sup>75</sup> Half of its yield went to public works and the other to private households. Owing to its antiquated design, the Anio Vetus was easily polluted or clogged by mud, so most of its water was used for gardening, baths, and other industrial uses within the city.<sup>76</sup>

The Anio Vetus did not only serve the parts of the city that were constructed before it. On the contrary, it also fostered the growth of the city's eastern portions. The Servian wall at which Frontinus stated the aqueduct ended was well within the boundaries of the city by the time of his writing, and the Anio Vetus supplied water to places beyond it. However, during the aqueduct's construction that same area may have been sparsely populated since at the time it lay beyond the city's wall.<sup>77</sup> Therefore, the regions that the aqueduct supplied beyond its original terminus were likely later additions, built so that the waters of the Aniene cultivated urban growth alongside botanical. Despite its significant contributions to the city's growth and water supply, the

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<sup>73</sup> Appian, *Hannibalic War*, 6.40.

<sup>74</sup> Blackman, "Volume of Water Delivered by the Four Great Aqueducts of Rome," 68.

<sup>75</sup> Evans, *Water Distribution*, 76-7.

<sup>76</sup> Evans, *Water Distribution*, 81. Peter J. Aicher, *Guide to the Aqueducts of Ancient Rome* (Wauconda, Ill: Bolchazy-Carducci Publishers, 1995), 36. Frontinus, *De Aqueductu* 92.

<sup>77</sup> Evans, *Water Distribution*, 77.

Anio Vetus was just the first major aqueduct to import the Aniene valley's resources. By Frontinus' time it would fall out of favor for other more robust aqueducts, especially for the purposes of providing potable water to the city's inhabitants.

Both the Anio Vetus and Appia become leaky and rundown with age 127 years after their construction, so the consuls ordered a *praetor urbanus*, Quintus Marcius Rex, to restore them. An additional element of his assignment was to bring further, potable waters into the city to serve its continuously growing state. As a result, he planned what would become the Aqua Marcia, a longer, cleaner aqueduct sourced from the Aniene valley.<sup>78</sup> Due to the project's size and scope, Marcius's *praetorship* was extended for another year. However, the completion of the Aqua Marcia was not without controversy.

Much like the establishment of colonies, or any other number of Roman undertakings, the transportation of natural resources such as water could be steeped in religion, tradition, or simple greed. In 179, the senate tried to commission another aqueduct with the same intention as the Marcia, but the project was cancelled when one aristocrat refused to allow it to pass over his lands.<sup>79</sup> The Marcia itself was delayed when the *decemvirs*, a legal counsel of ten men, found a reference in Rome's Sibylline Books that warned against transporting the Aniene valley's waters into the city. The debate was brought to the senate twice over three years, but Frontinus states that Marcius succeeded and with funds from Rome's sack of Corinth finished building his aqueduct.<sup>80</sup>

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<sup>78</sup> Frontinus, *De Aqueductu* 7.1.

<sup>79</sup> Evans, *Water Distribution*, 84.

<sup>80</sup> Frontinus, *De Aqueductu* 7.

The Aqua Marcia ran from its source in the hills of the northeastern Aniene valley and followed the river west toward Rome. Unlike its predecessors, a significant portion of its course was above ground where it passed the Aniene valley's rolling hills and valleys, as well as its final stretch toward the city on the dramatic arches that are famous in Roman architecture.<sup>81</sup> It reached its destination at a sufficient elevation to supply water to the entire city with branches carrying water to more places than the Anio Vetus.<sup>82</sup> It had 51 reservoirs and an average discharge of 1.1m<sup>3</sup>/s, at most 1.4m<sup>3</sup>/s.<sup>83</sup> Most of its waters, almost three-fourths, were reserved for drinking in private households and public basins. Its water was continuously praised for its quality.<sup>84</sup> Although the initial intent had been to supplement a growing population, Rome found that the Aniene valley's waters could provide both water to clean themselves and nurture their plants through the Anio Vetus, as well as support the life itself throughout the city with the Marcia.




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<sup>81</sup> Frontinus, *De Aqueductu* 7.7.

<sup>82</sup> Evans, *Water Distribution*, 90.

<sup>83</sup> Blackman, "Volume of Water Delivered by the Four Great Aqueducts of Rome," 69.

<sup>84</sup> *Ibid*, 92-3.

Figure 11: Remains of the Aqua Marcia at Tivoli. By Lalupa, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=502305>

165 years passed between the Marcia's completion and the building of the next Aniene aqueduct. Other aqueducts were sourced from elsewhere in Rome's territory during this time, and one, the Tepula, was commissioned to supplement the Marcia only 20 years after the latter's construction and supplied extra drinking water to a further expanding population.<sup>85</sup> However, the next century would be filled with chaos as the Roman Republic collapsed, after the civil wars of Marius and Sulla and the rise and fall of Julius Caesar, and was reformed into the Principate under Augustus. In 33 BCE, Augustus' lieutenant Agrippa would attain the aedileship, and commission three new aqueducts to supplement the city's water infrastructure, which had fallen into disrepair during the chaos.<sup>86</sup>

In 38 CE, Caligula would commission two new aqueducts within the Aniene valley, both longer and larger than their predecessors. By the time of his reign the seven extant aqueducts were no longer suitable to support the "public uses and private pleasures" of the city.<sup>87</sup> Caligula was killed by his own praetorian guards in 41, but his uncle and successor Claudius would complete the project, naming it the Aqua Claudia. Sourced in the Upper Aniene valley above the modern town of Agosta, it brought water of a similar quality to the Marcia. The second, the Anio Novus, was sourced from the

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<sup>85</sup> Aicher, *Aqueducts of Ancient Rome*, 38.

<sup>86</sup> Evans, *Water Distribution*, 99. These were the Julia, Virgo, and Alsietina.

<sup>87</sup> Frontinus, *De Aqueductu* 13.1. '...cum parum et publici usibus et privatis voluptatibus...'

river itself, near the town of Sublaquem, modern Subiaco, and like its namesake was prone to debris after storms and agricultural pollution along its course.<sup>88</sup>

Still, the Claudia and Anio Novus were designed with their environments in mind. Once the Anio Novus met the Claudia, the two travelled together, one on top of the other, through the valley toward Rome. While the Marcia and Vetus followed routes along the lower elevations of the valley, the Novus and Claudia had channels of higher elevations, which helped to avoid landslides that could be common in the Aniene's steeper sections.<sup>89</sup> This design change would ease maintenance in those areas where other aqueducts might be damaged by the landscape itself.

Frontinus notes that both were poorly or hastily constructed in places, and that the two waters were mixed before distribution for efficiency. If one failed its sibling could act as a backup.<sup>90</sup> Still, given its greater height the Claudia brought drinkable water to a wider array of individuals than the Marcia. Individually, both aqueducts produced high yields, the Claudia 2.21m<sup>3</sup>/s and the Novus 2.3m<sup>3</sup>/s at peak capacity.<sup>91</sup> Once they were mixed, the volume of water was enough to double the supply of water within the city. Although it would continue to grow, the water provided by the Aniene valley would be enough for another sixty years.<sup>92</sup>

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<sup>88</sup> Frontinus, *De Aqueductu* 13-15.

<sup>89</sup> D. Motta et al., "Hydraulic Evaluation of the Design and Operation of Ancient Rome's Anio Novus Aqueduct," *Archaeometry* 59, no. 6 (September 2017): 1166.

<sup>90</sup> Evans, *Water Distribution*, 116-7

<sup>91</sup> Blackman, "Volume of Water Delivered by the Four Great Aqueducts of Rome," 69-7.

<sup>92</sup> *Ibid*, 126-9.





Figure 12: Porta Maggiore in Rome. A section of the Aqua Claudia and Aqua Anio Novus are preserved at its peak. By Diana - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=178530>

While Frontinus describes the uses of each of the Aniene's aqueducts, he also laments their endemic misuse at the hands of private landowners along their routes and the lack of maintenance undertaken by his predecessors.<sup>93</sup> He noted that in many places yields were far below expectations, because private land owners as well as public officials were diverting the aqueducts' waters into private basins or gardens before distribution.<sup>94</sup> He goes on to further decry such "misdemeanors" writing, "we have found

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<sup>93</sup> Frontinus claims that the Anio Vetus carried 1,541 *quinaria*, the Marcia 2,162, the Claudia 2,855, and the Anio Novus 3,263. For the long standing issues about *quinaria*, see Christer Bruun, "The Impossibility of Reaching an Exact Value for the Roman Quinaria Measure," in *Frontinus: De Aquaeductu Urbis Romae*, 343-50.

<sup>94</sup> Frontinus, *De Aqueductu* 75, 96.

watered fields, taverns, attics even, and finally buildings all perverted with continuous fountains,” all of which drew water from Rome’s infrastructure.<sup>95</sup>

While the taverns, attics, and “perverted buildings” are all urban issues, the irrigated fields were likely a problem along the entire length of the aqueducts. Furthermore, villas in this age would have likely been large *latifundia*, with tenant and slave farmers who were required to make rent or fulfill crop quotas.<sup>96</sup> It is plausible that these farmers may have tapped into an aqueducts resources as needed to supplement the irrigation they could draw from the river or wells near their properties, causing the abuse that Frontinus found in his inspection.

Regardless of aqueducts’ legal violations, they nevertheless fostered Rome’s growth substantially. Indeed, both Anios, the Claudia, and the Marcia are known as the “great aqueducts of Rome.”<sup>97</sup> Whether for their scale or their significance in the city’s formation and growth, that greatness would not be possible without the exploitation and importation of the Aniene valley’s most plentiful natural resource, water. With the Aniene’s water, the city would grow, and in return, continue to settle and build deeper into the valley.

### **Conclusion:**

To Frontinus, the practice of mixing waters, particularly the pure, potable waters of the Marcia and the Claudia, with the unclean waters of the Anio Novus seemed

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<sup>95</sup> Frontinus, *De Aqueductu* 76. ‘...inriguos agros, tabernas, cenacula etiam, corruptelas denique omnes perpetuis salientibus instructas invenimus.’

<sup>96</sup> White, *Roman Farming*, 389.

<sup>97</sup> Blackman, “Volume of Water Delivered by the Four Great Aqueducts of Rome,” 52-72.

especially egregious. Indeed, he laments that the Marcia should be put to misuse in baths or gardens.<sup>98</sup> It would be to his excitement then when Trajan decided to move the Anio Novus's source from the river itself to the uppermost lakes that had been created a generation earlier for Nero's villa at the town Sublaquem, modern Subiaco. Frontinus says that this is where the Aniene's waters were purest, because the river ran through rocky forested hills before reaching the lake, and that in that steep portion of the valley there was little agriculture, even around Nero's villa and the surrounding village.<sup>99</sup>

Over the 600 years before Frontinus wrote, the Aniene river valley had been subject to conflict, cultivation, and domination by Rome and her predecessors. Rome seized the valley from the Latins, Sabines, and Aequi through warfare and colonized it. From there, the landscape was gradually transformed from one of temporary clearing and subsistence farming to permanently settled and cleared villas, and later, the massive farms known as *latifundia*. Through the new Roman form of farming the valley would produce surplus grain, wine, and oil, while each settlement spread Rome's influence even further. Concurrently, it imported the Aniene's water to the growing city.

And yet, for all of its development and exploitation, it remained a sanctuary for Rome's elite. Its rustic villas were getaways and muses for Horace and Pliny the Younger, both of whom felt at peace within the valley's landscape. Nero would take it a step further, and dam the river itself to create lakes on which he could enjoy the "natural" life from his villa at Subiaco.<sup>100</sup> Still, the area around the villa did not lend itself to

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<sup>98</sup> Frontinus, *De Aqueductu* 91.

<sup>99</sup> Frontinus, *De Aqueductu* 93.

<sup>100</sup> Norman A. F. Smith "The Roman Dams of Subiaco." *Technology and Culture* 11, 1 (1970): 58-68.

Roman agriculture. As Frontinus describes, the villa and town were largely bereft of agriculture to pollute the Anio Novus' new sources.<sup>101</sup> Even though the Aniene valley was dotted with fields below Subiaco and the river continued through the mountains to the city, Nero's villa was isolated enough to be considered wilderness.<sup>102</sup>

The notion of escape did not deteriorate with the collapse of the Empire. In the 5th century the long-abandoned Subiaco and the ruins of Nero's villa would become a refuge of a different sort for religious devotees. Furthermore, while that tract of the valley was not settled for agriculture in Frontinus' time, when Benedict of Nursia came to Subiaco from Rome in the late 5th century CE, his philosophies and monasteries would once again reshape the landscape.

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<sup>101</sup> Frontinus, *De Aqueductu* 93.

<sup>102</sup> Frontinus, *De Aqueductu* 15.

## CHAPTER 2

### MONASTIC IDENTITY, POWER, AND LANDSCAPES

Autumn of 589 CE was by all major accounts, wet. The Roman countryside, long prone to flooding due to centuries of agriculture that rendered the landscape vulnerable, was once again facing environmental disaster. Throughout the Sixth century, increased precipitation had contributed to the expansion of wetlands throughout Campagna, replacing once fertile farmland with marshes and swamps.<sup>1</sup> However, to those who documented it, the flooding in Fall 589 was remarkable. The waters of the Tiber swelled over the walls of Rome, trapping many faithful inside a church for its duration.<sup>2</sup> Gregory of Tours wrote that the flood washed the church's granaries away in its wake, and, fantastically, lasted until a great serpent led the peninsula's reptiles to their deaths in the sea. Another anonymous author simply noted that the floods were the worst in recent memory.<sup>3</sup> Later, Paul the Deacon wrote that the deluge encompassed all of Italy, and, destroyed fields, roads, and livestock in Lombardy and Veneto, not unlike Pliny the Younger's account four centuries before. It was a flood like no other "since Noah's time."<sup>4</sup>

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<sup>1</sup> Paolo Squatriti, "The Floods of 589 and Climate Change at the Beginning of the Middle Ages: An Italian Microhistory," *Speculum* 85, no. 4 (2010): 801.

<sup>2</sup> Gregory, *The Dialogues of Saint Gregory: Surnamed the Great; Pope of Rome & the First of That Name. Divided into Four Books, Wherein He Entreateth of the Lives and Miracles of the Saints in Italy and of the Eternity of Men's Souls.*, trans. Philip Woodward, Edmund G. Gardner, and George Francis Hill (London: P.L. Warner, 1911), 140. Naturally, a miracle occurred during this crisis, the impetus for Gregory's work.

<sup>3</sup> Squatriti, "Floods of 589," 804.

<sup>4</sup> Ibid, 805, Paul the Deacon, *History of the Lombards*, ed. Edward Dudley Peters, trans. William Foulke (Philadelphia: University of Pennsylvania Press, 2011), 126.

A plague that followed the flood killed the sitting Pope, Pelagius II, and in the aftermath one of the flood's chroniclers was elected. This was Gregory I, later Gregory the Great, who, alongside a plethora of other works including the above deluge narrative, wrote the hagiography of St. Benedict of Nursia. While much of the Italian countryside faced environmental and social decline during the sixth century, the Aniene valley east of Rome would see the development of a monastic hierarchy under Benedict and his followers. As their Aniene monastery began to flourish, the monks and peasants they ruled would reshape the landscape through careful land management and intense labor.



Figure 13: Remains of Nero's villa near Subiaco.

Emperor Nero made significant, though not permanent, modifications to the landscape of the upper Aniene valley. Sections of his villa are visible today along the

road leaving Subiaco eastward toward the town of Jenne.<sup>5</sup> In addition, his dams, the largest ever built by Romans, stood for over a thousand years until they were destroyed in 1305.<sup>6</sup> Despite these developments, as well as the Roman's settlement of the valley and their exploitation of its natural resources, the area around and beyond his villa remained sparsely populated into the second century CE. Subiaco was prolific enough to give its name to a road, the *via sublacensis*. The lands upriver, further into the mountains, were not settled while downriver agricultural settlements had been built by Frontinus' time.<sup>7</sup> Still, it remained a sanctuary where Nero could be relatively isolated with his excesses. Toward the end of the imperial era Subiaco would become a refuge of a different type.

The fall of the western Empire left a gap in Europe's power structures. Over the course of the next six centuries, through the periods generally considered late antique or early medieval, Benedictine abbeys would fill this vacuum in many places such as the Rieti basin, the Ardennes, and Subiaco, Italy.<sup>8</sup> Subiaco was the first among these, the center from which Saint Benedict of Nursia developed his monastic philosophy in the early sixth century. Its chief tenet, pray and work, *ora et labora*, as well as its emphasis on isolation fueled its followers' work ethic and informed their identities. While the work ethic did not dissipate, the concept of isolation was quickly adapted into landscape

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<sup>5</sup> See Image 1.

<sup>6</sup> Norman A. F. Smith, "The Roman Dams of Subiaco," *Technology and Culture* 11, no. 1 (1970): 60.

<sup>7</sup> Frontinus, *De Aqueductu* 93. Pliny the Elder, *Historia Naturalis* 3.12.17. Frontinus notes that, as of his writing, the landscape lacked any large-scale agriculture which could pollute the Anio Novus' water supply.

<sup>8</sup> See Ellen F. Arnold, *Negotiating the Landscape: Environment and Monastic Identity in the Medieval Ardennes* (Philadelphia: University of Pennsylvania Press, 2013), and Edward M. Schoolman, Scott Mensing, and Gianluca Piovesan, "Land Use and the Human Impact on the Environment in Medieval Italy," *The Journal of Interdisciplinary History* 49, no. 3 (2018): 419-44.

management.<sup>9</sup> While they carried an ideal of isolation, work, and prayer, in practice the Abbey was deeply involved in the transformation of the valley's agriculture, and their spiritual right to the land was bolstered by both secular and holy sources. From their foundations in the beginning of the century to the Lombardic invasions at its end, monastic management would change the valley's landscape and shape it throughout the medieval era.

According to Gregory I, Benedict of Nursia fled from Rome at the turn of the 6th century to seek refuge in the wilderness, free from the excess and impiety of the city. His travels carried him into the Aniene valley, where Gregory's narrative says he took refuge in a cave in the cliffs overlooking the lakes created 400 years before by Nero's dams. At this time, the landscape would have been a deciduous woodland dominated by oaks and chestnuts along the valley's walls.<sup>10</sup> From there, Benedict developed his philosophy around piety, structure, prayer, and work. He attracted followers and eventually developed a monastic order that spread throughout much of Europe.<sup>11</sup> Although late antiquity saw a decline in settlements in the west, monastic communities expanded.<sup>12</sup> Within the valley itself, the Benedictine devotion to *ora et labora* shaped monastic

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<sup>9</sup> Ellen F. Arnold, *Negotiating the Landscape: Environment and Monastic Identity in the Medieval Ardennes* (Philadelphia: University of Pennsylvania Press, 2013), 80.

<sup>10</sup> Scott Mensing et al., "Human and Climatically Induced Environmental Change in the Mediterranean during the Medieval Climate Anomaly and Little Ice Age: A Case from Central Italy," *Anthropocene* 15 (2016): 49-59.

<sup>11</sup> Gregory, *The Dialogues of Gregory the Great: Book Two, Saint Benedict*, trans. Myra L. Uhlfelder (New York: Bobbs-Merrill Company, 1967), 4-20.

<sup>12</sup> Kristina Sessa, *Daily Life in Late Antiquity* (Cambridge, United Kingdom: Cambridge University Press, 2018), 33.



perspectives of the landscape and the agricultural modification and organization that the monks developed there.

The exact year in which Benedict, or his followers, began to construct monasteries in the Aniene valley is historically subject to debate. Still, it is possible to differentiate between what Gregory identified as Benedict's early life with his adulthood. But once the author identifies Benedict as a man rather than a boy, he follows no strict timeline in regard the events in the narrative.<sup>13</sup> As a result, it is difficult to know exactly when the first monasteries were built, aside of Benedict's lifespan from 480-547. This ambiguity was preserved within the abbey's own histories as well. One chronicle, covering the years 593 through 1369, contains almost no details to the abbey's early centuries, only providing a list of abbots and basic acts for the first several hundred years in its narrative.<sup>14</sup> Another narrative from a later source simply recounts Gregory's hagiographical narrative of Benedict's life, but does not provide any substantial evidence to verify it.<sup>15</sup> However, it is clear the by the end of the sixth century the Benedictine monks had already taken substantial steps toward the development of agriculture in the valley.

Despite the lack of detail, these acts are almost entirely composed of building projects and land acquisitions, not unlike Livy's work which narrated Rome's acquisition of the surrounding countryside. The abbey's second leader, a monk named Honoratus

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<sup>13</sup> Gregory, *The Dialogues of Gregory the Great: Book Two, Saint Benedict*, trans. Myra L. Uhlfelder (New York: Bobbs-Merrill Company, 1967), xvi-xxi. 'vir' vs 'puer.'

<sup>14</sup> Raffaello Morghen, *Chronicon Sublacense (593-1369)* (Subiaco: Monastero S. Scolastica, 1981), 4-8.

<sup>15</sup> Cherubino Mirzio and Luchina Branciani, *Chronicon Sublacense: (1628-1630)* (Subiaco: Tipografia Editrice Santa Scholastica, 2014), 64-5.

who had, according to the monastery's chronicle, been a disciple of Benedict himself, undertook large building projects, including a church dedicated to Benedict and his twin sister Scholastica. Furthermore, it was under his leadership that the Subiaco abbey received the privilege from Pope Gregory I, the same pope that would go on to write about Benedict's life.<sup>16</sup> The later chronicle, written in the 17th century, estimates that the construction of the first monastery at the site of Benedict's hermitage began in 506, when Benedict himself would have been just 26 years old.<sup>17</sup> Regardless, by the end of the century these early developments would have already begun to reshape the landscape.

This metamorphosis was not unique to the Aniene valley. All throughout Italy, the collapse of the western Empire triggered a dramatic restructuring of the landscape around the *latifundia* that had come to dominate it at Rome's height. While they too suffered from depopulation and invasion, these agricultural centers soon became sources of labor and production for their old masters alongside new invaders. Castles, fortresses, and even monasteries like the Subiaco Abbey received new laborers who would assist with transforming the landscape.<sup>18</sup> So, while Benedict's earliest days in the valley may have been relatively isolated, its population would have grown in conjunction with his monasteries, as their need for labor outweighed what the monks themselves could maintain. By the end of the century, the Aniene river valley had already undergone a great deal of development.

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<sup>16</sup> Raffaello Morghen, *Chronicon Sublacense (593-1369)* (Subiaco: Monastero S. Scolastica, 1981), 5.

<sup>17</sup> Mirzio and Branciani, *Chronicon Sublacense: (1628-1630)*, 66.

<sup>18</sup> Emilio Sereni, *History of the Italian Agricultural Landscape*, trans. R. Burr Litchfield (Princeton, NJ: Princeton University Press, 1997), 55-8.

Gregory confirmed the monastery's rights to the Aniene valley's waters, fields, and deciduous forests of oak and chestnut, as well as legitimate usage of the land and buildings that the monastery had developed by the end of the sixth century. The Pope solidified their right to the entire lake that was formed by Nero's dam and all the fish within it, as well as rights to the water of Aniene river as it flowed away from it throughout the valley. The privilege explicitly mentions the fisheries and water mills that had been built upon it, and lists them within the rights of the monastery, as well as any tributaries or other artificial waterways within the valley.<sup>19</sup> In other words, the abbey had either developed or laid claim to significant portions of the Aniene's water resources following Benedict's earliest hermitage there a century before. Furthermore, Gregory would also legitimize the abbey's early control over land resources within the valley.

Although remote, Subiaco had existed in various forms since Nero's day, when it was the site of his villa but of little agricultural production. By the time of Benedict's hermitage, the area was sparsely populated, though not abandoned, as evidenced by the presence of other monks already living in the area before his arrival.<sup>20</sup> Still, it fulfilled Benedict's need for a "wilderness" or "desert" in which he could meditate and develop his ideology, which indicates that there were still no major agricultural or urban developments in the immediate area. By the end of the sixth century, this had changed. Not only did Gregory give Subiaco Abbey the right to the town itself, he also bestowed

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<sup>19</sup> Guido Levi and Leone Allodi, *Il Regesto Sublacense Del Secolo XI* (Roma: Società romana di Storia patria, 1885) 252-3.

<sup>20</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 4-6.

the right to pasture and garden in its forests and woodlands to the monks.<sup>21</sup> With this papal privilege, Subiaco Abbey would have the primary rights to all the lands and waters surrounding the twelve monasteries that Benedict and his followers had built.



Figure 14: Highly terraced olive grove at the Monastery of the Sacro Speco, Subiaco, Italy. Note the steep mountainside in the background.

By the end of the sixth century, Subiaco Abbey, the town, and its surrounding villages had become dependent on the river. The specific bestowment of legal rights to its water, fish, and mills shows the ways in which the Aniene fueled life in the valley. Fish and grain were staples of the monastic diet. Indeed, each meal as laid out in the *Rule of Benedict* consisted of rations of bread alongside a cooked meal, which contained fish when possible. Additionally, vegetables from the monastery's gardens would also be

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<sup>21</sup> Levi and Allodi, *Il Regesto Sublacense Del Secolo XI*, 253.

included in a separate dish when they were in season.<sup>22</sup> The water itself was also significant for horticultural and daily use. An early purported miracle attributed to Benedict was the divine creation of a spring along the mountaintop that would flow down to the monastery.<sup>23</sup> Despite the miraculous nature of that story, it may have been written as a response to two problems faced by the early monks of the valley. First, monks would have to traverse relatively steep and treacherous terrain down to the valley's floor, or at the least the lakeshore, to gather water for gardening or bathing in buckets before transporting them back uphill to the monastery. Second, Benedictine monks throughout the Aniene valley and beyond did make use of artificial waterways and wells to harness springwater for daily use.<sup>24</sup> So, whether it was by carrying it up the mountainside or not, the Aniene's water put those vegetables on the table alongside the grain from its mills and the fish from the river itself. The valley provided the backbone of monastic life.

Gregory legitimated Benedictine power over the Aniene valley and its resources. However, he also confirmed and mandated their adherence to the *Rule of Benedict*.<sup>25</sup> The *Rule* set the standard for monastic life, including monks' daily labors and their diets. Spiritually, the main tenets of monastic life were prayer and work. But physically, it was water, grain, and wine that fed and sustained monks in their isolation. Furthermore, the

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<sup>22</sup> Benedict, *Rule for Monasteries*, trans. Leonard Joseph Doyle (Collegeville, MN: St. Johns Abbey Press, 1948), 57-8.

<sup>23</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 12-13.

<sup>24</sup> Paolo Squatriti, *Water and Society in Early Medieval Italy: AD 400-1000* (Cambridge, UK: Cambridge University Press 1998), 19.

<sup>25</sup> Levi and Allodi, *Il Regesto Sublacense Del Secolo XI*, 253.

ideal monastery would have the resources to produce all three locally.<sup>26</sup> Monks worked to maintain their piety alongside their diets, and they utilized the Aniene valley and its resources to reshape both.

### **Power over Land and Water**

At Subiaco, control of fisheries, graneries, fields, and forests contributed to the tangible power that the monastery held. But there was also a philosophical aspect to power, one that helped the monks remember their founder's piety and help them maintain control of the legal power that the Pope had bestowed upon them. How monasteries exercised this became a key component of their identities, in the Aniene and elsewhere. By 1305, their power was feudal and absolute. But even in its early centuries Subiaco Abbey's dominance was tied to their beliefs and control of the land.

Power over the environment meant more than control of the land. It was a way of affirming the monastery's history and identity. Benedictines, who had learned to build and control artificial waterways near their residences, proudly displayed that control through fountains and waterways tapped from natural springs. At Cluny, an abbot was said to have miraculously created ponds for his monastery's needs. Miracles conferred a divine right to power over the landscape.<sup>27</sup> The same was true at Subiaco. In the *Life of Benedict*, Gregory wrote that Benedict himself drew a spring from a rock when his monastery was in need.<sup>28</sup> This narrative was not unknown to the monks, especially into

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<sup>26</sup> Benedict, *Rule for Monasteries*, 94.

<sup>27</sup> Richard C. Hoffmann, *An Environmental History of Medieval Europe* (Cambridge: Cambridge University Press, 2015), 146.

<sup>28</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 12-13.

their second century. Indeed, many parts of Gregory's work are incorporated into the monastery's chronicles.<sup>29</sup> Gregory's narrative is framed as a conversation between himself and his deacon, Peter. As Gregory narrates Benedict's life, Peter confirms that their subject was pious and correct. So, when the monks at Subiaco maintained control of and modified the valley's physical properties, they did so with the knowledge that their founder had been capable of a divine landscape modification through pious worship.

Alongside physical and practical modifications such as waterways or cleared fields, monks also dotted the landscape with religious iconography to cement their place in the valley. In the Ardennes, they placed shrines and crosses near streams, fields, and forests so that the workers and monks present would be reminded of the piety of their labor and the sacrality of the landscape.<sup>30</sup> Though these icons, monks claimed the landscape for God and themselves. Likewise, for an abbey to secure control over an area its residents had to be converted or at the very least convinced of the importance of the abbey's place in the Christian world both spiritually and physically on the land. As a result, early Monasticism encouraged religious conversion alongside landscape modification, and the two were bound together for monks.<sup>31</sup> In the Aniene, the Subiaco Abbey would have maintained similar reminders of their presence in the valley's power structure. While Gregory's narrative does say there was already a Christian presence in

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<sup>29</sup> Cherubino Mirzio and Luchina Branciani, *Chronicon Sublacense: (1628-1630)* (Subiaco: Tipografia Editrice Santa Scholastica, 2014), 64-5.

<sup>30</sup> Ellen F. Arnold, *Negotiating the Landscape: Environment and Monastic Identity in the Medieval Ardennes* (Philadelphia: University of Pennsylvania Press, 2013), 176.

<sup>31</sup> Arnold, *Negotiating the Landscape*, 173-8.

the Aniene when Benedict arrived there, it nevertheless emphasizes the followers that he attracted from the valley's laymen as well as from beyond its borders.<sup>32</sup>

Furthermore, as Subiaco Abbey expanded and interacted with the "outside" world, its leaders would have had great interest in maintaining the sense of isolation that was so significant to their worldview. For monks, isolation was key for quiet and piety, and as a barrier against the moral temptations that existed beyond the monastery.<sup>33</sup> One of the first stories in the *Life of Benedict* tells of Benedict resisting a temptation of the flesh, motivated by the presence of a woman from outside the monastery who tempted him to violate his chastity.<sup>34</sup> While the story has obvious sexual undertones, it also represents a very real danger to the monks' hegemony over the valley. The monks at Subiaco, and indeed at Benedictine monasteries throughout Europe, shaped their worldview around isolation from and control of the world around them.

Spiritual and physical control over the landscape came alongside the isolation that monks sought. This philosophy may seem paradoxical, but it did not prevent the abbey from function and indeed expanding rapidly in the sixth century. The monastic worldview made them natural leaders in an agricultural landscape, because of their devotion to labor and control. Subiaco Abbey quickly became the dominant power in the Aniene valley. Under the guise of *ora et labora*, the monks at Subiaco expanded their control of the Aniene valley, so that within the sixth century they held the rights to the valley's water and agricultural resources. Chief among these were the rights to the

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<sup>32</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 4-10, 12-14.

<sup>33</sup> Arnold, *Negotiating the Landscape*, 32.

<sup>34</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 6-7.



valley's primary resource, water. It was through control of water resources that the Subiaco Abbey survived, thrived, and changed the landscape.

### **Using the Water and Shaping the Land:**

Water made the Aniene valley, and its denizens, productive. As stated, Pope Gregory I confirmed the abbey's ownership and legal right to the Aniene's water, mills, and fisheries in 594, and various popes would reconfirm these rights throughout the remainder of the millennium.<sup>35</sup> It is featured in many of Benedict's purported miracles, and was recommended within his *Rule* for washing and gardening.<sup>36</sup> In order to not rely on outsiders, monks throughout the Aniene would have maintained a tight control over aquatic resources. Many of its uses were continuations of older Roman practices, adapted to fit within both the physical and religious confines of the monastery.

Bathing was controversial in monastic life, but it had its roots in Roman tradition. Baths became the cornerstone of Roman social life during the middle and late Republic, and Seneca writes that these smaller, darker baths were intended for use, not just leisure.<sup>37</sup> Later, Emperors would build massive luxurious baths decorated with imported marble and mosaics as a testament to their own wealth. The empire's records show almost 900 private and public baths in Rome alone.<sup>38</sup> At the same time, the act was not without controversy, and Tacitus counted it among one of Rome's moral failings.<sup>39</sup> After

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<sup>35</sup> Mirzio and Branciani, *Chronicon Sublacense: (1628-1630)*, 66.

<sup>36</sup> Benedict, *Rule for Monasteries*, 72, 94.

<sup>37</sup> Anne Hrychuk Kontokosta, "Building the Thermae Agrippae: Private Life, Public Space, and the Politics of Bathing in Early Imperial Rome," *American Journal of Archaeology* 123, no. 1 (2019): 49.

<sup>38</sup> Kontokosta, "Building the Thermae Agrippae," 44-46.

<sup>39</sup> Squatriti, *Water and Society*, 56.

the Gothic Wars of the sixth century, bathing within the city declined sharply, as the aquatic resources it required were redistributed to mills and churches.<sup>40</sup> While the social importance of public bathing disappeared, its perceived status as a moral failure would be carried into monastic life, even as it was reinterpreted and adapted.

On the one hand, monasteries in Subiaco and beyond understood that bathing was necessary for cleanliness. But the immodesty of the act, especially in groups, made it difficult. One step in combating the taboo and possible temptation was monastic baths, which, in adherence to the *Rule*, were insular within the monastic community. Outsiders were not allowed in, so that monks would only bathe with each other. These were not ubiquitous, indeed in some places monks and nuns still left their isolation to bathe in nearby towns, but as they were able many monastic communities began to use water for more secure bathhouses.<sup>41</sup>

At Subiaco bathing may not have been a priority. The Roman bathing tradition was vast, but monks at Subiaco refrained from the practice. Early church leaders refrained from bathing as a reaction to the excesses of Rome.<sup>42</sup> Benedict himself discouraged it for all but the sick and elderly.<sup>43</sup> Still, Benedictine monasteries would go on to build complex water systems for irrigation and bathing when they had the resources and wealth necessary. At Vivarium in the late 6th century, the water system was said to

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<sup>40</sup> Robert Coates-Stephens, "The Walls and Aqueducts of Rome in the Early Middle Ages, A.D. 500–1000," *Journal of Roman Studies* 88 (1998): 171.

<sup>41</sup> Squatriti, *Water and Society*, 59–61.

<sup>42</sup> Meredith Parsons Lillich, "Cleanliness with Godliness: A Discussion of Medieval Monastic Plumbing," *Melanges Anselme Dimier* 204, 3 (1982): 127.

<sup>43</sup> Squatriti, *Water and Society*, 60.

be capable of supplying a local mill, gardens, and baths for the sickly practically on demand. It is possible that such a system also existed at Benedict's later complex at Monte Cassino.<sup>44</sup> So even Benedict's earliest followers at Subiaco would have been capable of building complex systems. Yet none were built there, either because of a religious decision, or because they gathered ample resources from the lake, river, or the channel that was built flowing into the monastery. But bathing was not the only use that the monks of Subiaco would have had for their local water supply.

Water was also used for horticulture when the monastery grew its vegetables within its walls. While agriculture at this time relied largely on rainfall, smaller gardens within the monastery required a more intensive use of water that exceeded the quantities brought in naturally.<sup>45</sup> Like bathing, horticulture had long been a Roman tradition that was preserved after the fall of the western Empire in 476. Authors like Cato encouraged gardening as a virtuous and profitable use of one's private land.<sup>46</sup> The practice diminished following the Empire's dissolution. Other Christian thinkers viewed the practice as too excessive to fit within their teachings.<sup>47</sup> Benedict did not share this view, instead agreeing with Cato that gardening was a virtuous use of land, and he included it as one of the many labors through which one might worship and be pious in monastic life.<sup>48</sup>

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<sup>44</sup> Lillich, "Cleanliness with Godliness," 127.

<sup>45</sup> Squatriti, *Water and Society*, 80.

<sup>46</sup> Squatriti, *Water and Society*, 81.

<sup>47</sup> Bruno Sisic, "The Gardens of the Benedictine Abbey on the Island of Lokrum," *Dubrovnik Annals* 7 (2003), 101.

<sup>48</sup> Benedict, *Rule for Monasteries*, 66, 94.

These gardens, housed within the walls of the monastery as opposed to the larger fields for groves, grains, and grapes outside, grew herbs and vegetables. However, the specific species during this era can be difficult to determine, since the first reliable records on the contents of Mediterranean medieval gardens is from the tenth century. By that time, Mediterranean gardens grew fruits such as pears and plums, vegetables like leeks and garlic, or herbs, including sage and basil.<sup>49</sup> Regardless, it was the water resources of the Aniene valley, imported either through physical labor, wells, or the monastery's artificial waterways, that predicated any horticultural practice.

Beyond the monastery's walls, the Aniene river provided goods that were equally necessary for the monastery's survival. In Gregory's 594 confirmation of the Subiaco Abbey's legal rights, he specified that the monastery should control all the fisheries at the headwaters of the Aniene near Subiaco, in this case where the river exits the dam, as well as those along the Aniene's course.<sup>50</sup> Like bathing and horticulture, fishing was a continuation of common Roman practices that were readapted within the monastic framework. While Romans had preferred sea fish to freshwater, fish from rivers like the Aniene were still bred and consumed, and many villas like those along the river contained private fisheries. Additionally, water was held in common, and in many places all would have rights to the fish in rivers. It was these inland installations that survived well into late antiquity, as poor farmers who could not afford coastal fish as well as monastic communities increasingly included freshwater fish into their diets.<sup>51</sup> Throughout

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<sup>49</sup> Sisic, "The Gardens of the Benedictine Abbey on the Island of Lokrum," 102-5.

<sup>50</sup> Levi and Allodi, *Il Regesto Sublacense Del Secolo XI*, 253.

<sup>51</sup> Squatriti, *Water and Society*, 98-102.

the second half of the first millennium CE, increasing numbers of pious nobles would donate their fishing rights to monasteries, which in turn expanded monastic fishing rights throughout

Europe.<sup>52</sup> But even in the early part of that era, Subiaco Abbey's rights had already grown substantially, so that they controlled most of the fish in their vicinity. The water and the fish within it now belonged to the monastery.<sup>53</sup> The monks strictly enforced their rights and were meticulous in the measurement of their boundaries.<sup>54</sup> Furthermore, monastic communities could then lease fishing rights to other parties, such as laymen farmers or laborers nearby. When successful, the excess bounty from fishing could bring additional revenue into the monastery and surrounding communities.<sup>55</sup> Still, it was significant to the monks that they maintain control over the lands near them, in order to ensure a balanced harvest from their fisheries and maintain a controlled but functional ecosystem within the river.

Along the river's banks, the monks at Subiaco maintained fields that provided grain for the monastery. The Aniene valley was no stranger to large-scale agriculture. Indeed, Romans had covered its banks with villas and vineyards for the majority of the common era.<sup>56</sup> However, after the breakup of the western Empire and the invasion of so-called "barbarian" forces into central Italy, the infrastructure that allowed the Roman

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<sup>52</sup> Ibid, 107.

<sup>53</sup> Levi and Allodi, *Il Regesto Sublacense Del Secolo XI*, 253.

<sup>54</sup> Squatriti, *Water and Society*, 109.

<sup>55</sup> Squatriti, *Water and Society*, 109-115.

<sup>56</sup> Pliny the Younger, *Epistles* 8.17.

villas to thrive disintegrated. In the mid-sixth century, all aqueducts but the Virgo had fallen into disrepair, either from a lack of resources to maintain them properly, or ongoing conflict during which their above-ground channels had been severed. Although both the Claudia and Anio Novus would be repaired in various stages throughout the century, the supply was not enough to adequately maintain the same levels of use as in previous centuries.<sup>57</sup> These shortages, as well as continuous conflict with invaders such as the Lombards, led to depopulation throughout the peninsula. As Rome shrunk, so too did many of the agricultural centers that dotted the countryside.<sup>58</sup> Subiaco, which had not been agriculturally developed by the end of the first century CE, likely would have seen a similar abandonment in regards to any developments that had been made there in the interim centuries before Benedict's arrival. Besides the gardens or small scale agriculture necessary for the survival of its few inhabitants at the end of the fifth century, the territory would have been a largely uncultivated wilderness to Benedict.<sup>59</sup> Once he and his followers began to develop the land around Subiaco, they, alongside peasant laborers, would till lands along the river in places that their predecessors had not.

The peasants are difficult to pin down. They were largely illiterate, and as a result are often silent throughout the historical record, at least before the 19th century.<sup>60</sup>

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<sup>57</sup> Coates-Stephens, "The Walls and Aqueducts of Rome in the Early Middle Ages, A.D. 500–1000," 166, 171-3.

<sup>58</sup> Sereni, *History of the Italian Agricultural Landscape*, 55. For population decline, see Kevin Twine, "The City in Decline: Rome in Late Antiquity," *Middle State Geographer* 25 (1992): 134-138. During the second century, estimates put the city's population at just over one million. By the middle of the sixth century, during which the monastery at Subiaco began to thrive, Rome's population had fallen to about 30,000 persons.

<sup>59</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 4-6.

<sup>60</sup> Chris Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean: 400-800* (Oxford: Oxford University Press, 2007), 383.

Population decline following the turmoil of the sixth century left Italy open to resettlement, and in that time the Lombards invaded and resettled much of the peninsula.<sup>61</sup> However, as will be seen later in the chapter, Subiaco was one of the many victims of their destruction, so it is difficult to distinguish the peoples who populated the valley prior to Lombard settlement. What little mention there is of the Aniene's peasants at this time is largely found in Gregory's *Life of Benedict*. It is not uncommon for peasantry to appear in this type of hagiography, but naturally these portrayals are largely moral constructions.<sup>62</sup> The laity are presented as tempters, converts, or unaffiliated Christians, not as Italian, Ostrogoths, or Lombards.<sup>63</sup> It is possible that these were the remnants of the Roman settlements downriver from Subiaco, as described by Frontinus, but still there is no clear picture of the Aniene's peasantry at this time.

As with much of the chronology surrounding the earliest days of the monastery, it is unclear when monks would have begun to farm along the riverbanks and lakeshore. While Benedict was still living at Subiaco, Gregory writes that a man who had come to devote his life to the monastery was assigned to clear the land for a garden along the lakeshore.<sup>64</sup> But as with all of his narratives, Gregory does not give any indication as to when this may have taken place. Benedict's own *Rule* does account for fieldwork, setting special meal times for those monks to whom it was assigned.<sup>65</sup> Since the *Rule* is often

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<sup>61</sup> Sereni, *History of the Italian Agricultural Landscape*, 55.

<sup>62</sup> Wickham, *Framing the Early Middle Ages*, 384.

<sup>63</sup> Gregory, *Dialogues: Book II: Life of Benedict*, 2-4, 6-7.

<sup>64</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 13-14.

<sup>65</sup> Benedict, *Rule for Monasteries*, 59.

dated to 516, it is likely that gardens, fields, and mills were all in various forms of development in the Aniene by that time. And by the end of that same century, grain mills and fields were both included in the Monastery's confirmation from Gregory.<sup>66</sup>

As with fisheries, it was important that the monastery maintain control over the grain that was produced in the valley. This included not just the fields, which were largely irrigated naturally through rainfall, but also the mills that processed it, where once again the river itself became a crucial component of monastic agriculture. It was not a lack of water resources that made control important; the Aniene had plenty of power to put into mills. Instead, the goal was controlling the grain itself that was grown in the valley.<sup>67</sup> In other words, whether it was grown by the monks or by the laymen farmers that began to flock to the lands around monasteries or castles in late antiquity, the monks at Subiaco ensured that they would get their cut of the produce in the valley, since it was necessary for their survival, and later for maintaining power.

Whether requisitioned from local laymen farmers or harvested by the monks themselves, cereals required a multi-step process before they could be baked into bread in the monastic bakery. Lands were tilled and seeds planted in Autumn or early Winter with the goal of a wheat harvest in the Spring when it would be harvested and processed into grain that could be sent to mills.<sup>68</sup> Ideally, as stated in the *Rule*, these mills might be located within the monastery itself. However, in the Aniene at the end of the sixth

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<sup>66</sup> Levi and Allodi, *Il Regesto Sublacense Del Secolo XI*, 253.

<sup>67</sup> Squatriti, 142.

<sup>68</sup> Sessa, *Daily Life in Late Antiquity*, 35.



century, many mills outside of its walls were still under its control.<sup>69</sup> In later centuries, the abbey's hegemony would expand into large scale taxation, as will be seen in Chapter 3.

While bread formed the backbone of the monastic diet, it was not the only crop grown in the upper valley. The laymen farmers who grew some of the wheat milled in monastic graneries, or harvested it in the abbey's fields, did not consume it themselves. While the elite or landowning classes in Europe consumed grains in a solid form, the peasants themselves usually got their calories through porridge or ale. These were rarely made from the same bread grains that were paid as taxes or tribute. Instead, throughout much of Europe, and indeed in the Aniene valley near Subiaco as well, smaller fields of spelt, millet, or barley would have grown alongside the wheat fields on which the monastery relied.<sup>70</sup> Barley was particularly common throughout Europe, because of its it could grow in a variety of soils and was versatile as both a bread and ale grain. Like wheat, it was requisitioned by feudal lords for these same reasons.<sup>71</sup> The result was a landscape with multi-use cereals that could provide the monastery with its rations as mandated by the *Rule of Benedict*, as well as supply their peasant families with sustenance, even in its early days.

Where peasants drank ale, monks drank wine. The *Rule of Benedict* states that wine is to be consumed in moderation with meals, but it is nevertheless to be the main

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<sup>69</sup> Benedict, *Rule for Monasteries*, 94, and Levi and Allodi, *Il Regesto Sublacense Del Secolo XI*, 253.

<sup>70</sup> Hoffmann, *An Environmental History of Medieval Europe*, 116.

<sup>71</sup> Muiris O'Sullivan and Liam Downey, "Early Medieval Cereal Cultivation and Processing," *Archaeology Ireland* 33, 4 (2019): 49.

source of hydration for its adherents.<sup>72</sup> Indeed, many Benedictines avoided the consumption of drinking water as a philosophical guideline, believing it would stir up their baser emotions.<sup>73</sup> Undoubtedly, while the *Rule* does advise against excessive consumption, monks drank large quantities of wine. Yet nowhere in Gregory's 594 confirmation of the monastery's properties does he mention vineyards. The *Rule* was insistent that the monastery be as insular and local as possible. However, they did make use of outside labor in their fields and it is possible that the same applied to their vines. Viticulture was labor intensive and required considerable care and water resources. But in late antiquity, vines were often grown around trees in groves that already existed in order to make the best use of the available water.<sup>74</sup> It is possible that in the early centuries of the monastery's existence vines were grown around the oak and chestnut groves that are mentioned in its confirmation. The properties included the vines that grew among them even if they were not its main product. As a result, the abbey at Subiaco would gain control of the valley's wine as well, which then provided the rations needed.

In addition to vineyards, Gregory's confirmation makes no reference to olives or olive groves. Today, however, olive groves dot the Mediterranean landscape. Their historical absence may seem puzzling, but studies of another Apennine abbey at Farfa have shown that olive groves were not prevalent there until the 16th century.<sup>75</sup> Likewise,

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<sup>72</sup> Benedict, *Rule for Monasteries*, 58.

<sup>73</sup> Squatriti, 40.

<sup>74</sup> Sessa, *Daily Life in Late Antiquity*, 38-9.

<sup>75</sup> Scott Mensing et al., "Human and Climatically Induced Environmental Change in the Mediterranean during the Medieval Climate Anomaly and Little Ice Age: A Case from Central Italy," *Anthropocene* 15 (2016): 55.

in the Aniene valley they appear in records by the 15th century alongside chestnuts and walnuts.<sup>76</sup> So while olives are ubiquitous to the region today they are actually relative newcomers to Subiaco's landscape.

Dedication to work, prayer, and isolation formed the philosophical identity of the Benedictine monks at Subiaco. However, monks deviated from or adapted these principles growing from an isolated group of worshippers to medieval landowners over the first century of their practice in the Aniene. With papal authority they came to control the valley's water and agriculture, a trend that would continue throughout the era. Ultimately, peace was not guaranteed, and their power did not go unchallenged.

### **A Lasting Legacy?**

Although catastrophes such as the 589 flood contributed to the decline of many agricultural settlements throughout the countryside before and after the sixth century, Subiaco Abbey's first destruction was not environmental. The Italian peninsula was plagued by Lombard invasions throughout late antiquity, and by the late sixth century they had come to dominate its northern half, still known as Lombardy.<sup>77</sup> This was a great source of anxiety to Pope Gregory because in 593, just one year before he confirmed Subiaco Abbey, Lombards had besieged Rome itself. Through them Gregory saw the destruction of cities and the beginnings of plague and famine.<sup>78</sup> He imposed these fears onto Benedict as well through his narrative. In one section, Benedict is found weeping

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<sup>76</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 39.*, and *Registro Di Marano 1428.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 36.*

<sup>77</sup> Hoffmann, *An Environmental History of Medieval Europe*, 58.

<sup>78</sup> Gillian R. Evans, *The Thought of Gregory the Great* (Cambridge: Cambridge University Press, 1986), 19, 139.

over the destruction of his monastery claiming that it will be handed over to God for judgement.<sup>79</sup> Gregory's fears were not unfounded.

Under the rule of its third abbot Helias, the Aniene valley and the Abbey at Subiaco soon underwent a period of invasion and destruction. Despite the monastery's growth, confirmed by Gregory in 594, he wrote at the beginning of the seventh century that Benedict had been right to fear the Lombards because they had recently sacked Subiaco Abbey.<sup>80</sup> The chronicler at the monastery also noted the chaos in the region. Although Helias had increased the monastery's properties and was "in no way inferior to his predecessors," his acquisitions sometimes bore the mark of invasion.<sup>81</sup> He added a monastery some distance away from Subiaco, but unlike previous acquisitions, it had been left in ruins by invading raiders.<sup>82</sup> Furthermore, upon seeing the invasion Gregory mentioned, his administration fled to a monastery in Rome to wait it out.<sup>83</sup> Unfortunately, Subiaco would remain abandoned far longer than either Gregory or Helias expected. According to the chronicle, the monastery remained abandoned until the reign of John VII a century later.<sup>84</sup>

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<sup>79</sup> Gregory, *Dialogues: Book Two, Saint Benedict*, 27.

<sup>80</sup> Ibid.

<sup>81</sup> Mirzio and Branciani, *Chronicon Sublacense: (1628-1630)*, 135. '*...nequaquam a suo predecessore degeneravit.*'

<sup>82</sup> Ibid. In this case, the raiders were identified as Saracen.

<sup>83</sup> Mirzio and Branciani, *Chronicon Sublacense: (1628-1630)*, 138. In *Dialogues: Book Two, Saint Benedict*, 2, Gregory writes that it was by divine influence that all the monks survived the invasion. While this is dubious, it is possible that the monks' retreat was largely successful.

<sup>84</sup> Mirzio and Branciani, *Chronicon Sublacense: (1628-1630)*, 138.

In the eighth century, Subiaco would undergo a period of rebuilding under a new abbot, Stephanus. This time the monastery would continue to grow without an interruption as major as the Lombardic invasion. Previously, it had used the landscape and its people to maintain its ideals and changed both in turn. By 1305, it had grown into a system of many towns, villages, and castles, all of which paid tribute to Subiaco while continuing to provide the grain, wine, and other materials that allowed the Benedictine order to function even in times of great environmental strife.

### CHAPTER 3

#### THE TOWN AND THE FLOOD

On the 20th of February, 1305, “a storm, more tumultuous and savage than any man ever before had remembered or produced in the memory of writing, descended from the Simbruini Mountains and their vicinity.”<sup>1</sup> The wind blew horizontally, filled with snow and ice, and wrought havoc among the valley. It was as if “the snow-capped peaks skimmed the ground.”<sup>2</sup> As the streams swelled into rivers, and the fields into lakes, two monks tried to put up stone barriers to prevent the water from coming over the walls at Santa Scholastica. As the flood raged on the walls seemed to be unable to withstand the force of the torrent. The water flowed down the mountain and against the dam that held back the lake for which Subiaco was named. The same lake that Nero created over a millennium before for his personal pleasures.<sup>3</sup> “The villas, farms, forests, and dead livestock, for tracts of many *stade* of the Aniene Valley, were strewn about from such a horrendous flood.”<sup>4</sup> Subiaco’s namesakes were no more.

The tempest endured by the monks at Subiaco unmade centuries of landscape modification and management. In the medieval era, the landscape underwent a significant

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<sup>1</sup> ‘...cum turbidior et saevior tempestas quam unquam antea ullus hominum meminisset aut literarum memoria prodidisset, ex Symbruinis circumvicinisque montibus descendit...’ Cherubino Mirzio and Luchina Branciani, *Chronicon Sublacense: (1628-1630)* (Subiaco: Tipografia Editrice Santa Scholastica, 2014), 375-76. The wording here is dramatic in both my English and the original Latin, but this is actually part of the sixth century flood tradition as described by Squatriti, 71.

<sup>2</sup> ‘nivosa montium culmina verreretur.’ Ibid, 376.

<sup>3</sup> Ibid.

<sup>4</sup> ‘Quo horrendo profluvio, Anienae vallis, per plurimorum stadiorum tractus; villis, satis, arboribus, arementisque absumptis dissipavit.’ Ibid, 377.

shift as the monks acquired and divided land into a system that kept them well fed while creating lasting rural communities. By 1305 these systems dominated the valley, so its denizens, especially those directly downstream from the dams and their lakes, had a lot to lose in the wake of the coming deluge. And lose they did as the torrent carried bridges, buildings, and livestock away, alongside many of the survivors' friends and families.<sup>5</sup> Furthermore, the decades that followed would prove tumultuous as the valley's communities endured power struggles and apparent corruption alongside the famines and plagues that characterize the 14th century.

In 1306, just one year after the deluge, a new abbot named Franciscus came to power in the valley. Born a "wretched bastard of a noble family," his rule was contentious from its beginning.<sup>6</sup> In what was likely an effort to alleviate the hardship created in the wake of the flood, Franciscus distributed 500 florins from the papal court to the serfs of Subiaco. However, the funds had been meant for the abbey itself, not for the people, and his fellow monks were outraged.<sup>7</sup> According to the chronicle, the Abbot continued to pilfer the treasuries and vestries of the abbey, "pawned [them] for 500 florins."<sup>8</sup> However, his redistribution and supposed corruption would not last, and when the Pope became aware of Franciscus's actions, he moved to suppress and expel the

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<sup>5</sup> Ibid, 377.

<sup>6</sup> Raffaello Morghen, *Chronicon Sublacense (593-1369)* (Subiaco: Monastero S. Scolastica, 1981), 42.

<sup>7</sup> Ibid.

<sup>8</sup> "...impignoravit pro florenis quingentos." Raffaello Morghen, *Chronicon Sublacense (593-1369)* (Subiaco: Monastero S. Scolastica, 1981), 43.

Abbot.<sup>9</sup> Due to turmoil in Rome, the Pope's sentencing was never carried out officially. Franciscus, however, attempted to escape his fate by hiding in the Rocca Subiaco, but was betrayed and made prisoner there instead, wherein he was tortured and made to drink his own urine before finally succumbing to the torture and dying after several years.<sup>10</sup>

Following his death, one of the Colonna, the same family that had caused turmoil in Rome during Franciscus's sentencing, took over as a secular governor of the Aniene valley until 1322, during which time he seized the serf's goods and put them back into the monastery's coffers, an act for which he was praised by the abbey's chronicler. Still, over the next century the Aniene would continue to face challenges. While the abbey would be back in control in 1322 and free from what it would consider corruption, the Black Plague would torment the valley's citizens during the late 1340s. Still, by 1428, fiefs were still divided into categories, each with their own rights, duties, and tax burdens.

In Italy, new forms of land management in a post-Roman countryside redefined the relationships between environment and power. Alongside the institutions of an ever expanding Catholic church and the centuries-long spread of monasticism, castles and fiefdoms of various sizes appeared across the Italian countryside.<sup>11</sup> Much like the rest of Europe, Italian farmers, usually peasants or serfs, owed fealty to some local power, often the nearest fortress and the landowner living there. These were not always nobles, and with the rise of the Benedictines came monastic control over the valley. Here, the Abbey

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<sup>9</sup> Raffaello Morghen, *Chronicon Sublacense (593-1369)* (Subiaco: Monastero S. Scolastica, 1981), 43. The chronicle is unclear as to when exactly this took place, but the Pope's efforts against Franciscus were cut short by the Colonna feud that began the Avignon Papacy, so these events likely took place around 1309.

<sup>10</sup> Raffaello Morghen, *Chronicon Sublacense (593-1369)* (Subiaco: Monastero S. Scolastica, 1981), 43.

<sup>11</sup> Chris Wickham, *Medieval Rome: Stability and Crisis of a City, 900-1150* (New York, NY: Oxford University Press, 2015), 67.



set up a smaller hierarchy with roots in environmental and agricultural management that defined power in the valley.

Although the monastic fiefs fit within the larger established framework of feudalism, they also fit within their own smaller hierarchies. The following sections examine how these hierarchies were formed and maintained legally, economically, and physically. Although ostensibly the Abbey owed fealty to the Pope and the Holy Roman Emperor, the day-to-day micro-hierarchy found in the Aniene valley may have taken precedence over distant political allegiances.

Benedictines were no strangers to landscape modification. Throughout the Italian peninsula, monks, inspired by the religious philosophies established by their canonized founders, sponsored the clearing of forests and planting of grain.<sup>12</sup> The earliest hagiographic depictions of the Aniene involved environmental modification, when Benedict of Nursia purportedly prayed for a mountaintop water source to alleviate his followers' burden of descending to the valley floor each day for water.<sup>13</sup> Likewise, the Aniene valley was not a virgin landscape, despite its role as a wilderness for Benedict. Rather, it had a historical precedent of recreation, including massive amounts of modification under the Roman Emperor Nero who dammed the river for his own private use.<sup>14</sup> By the time the Subiaco Abbey was built, the valley had already been occupied for millennia.

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<sup>12</sup> Richard C. Hoffmann, *An Environmental History of Medieval Europe* (Cambridge: Cambridge University Press, 2015) 134.

<sup>13</sup> Gregory the Great, *Dialogues, Book II: the Life of St. Benedict, Chapter 5: Of a Fountain that Sprung Forth from the Top of a Mountain, by the Prayers of a Man of God*. From Order of St. Benedict, Web, [https://www.osb.org/gen/greg/dia-07.html#P61\\_21985](https://www.osb.org/gen/greg/dia-07.html#P61_21985) accessed: 10/10/2019.

<sup>14</sup> Norman A. F. Smith, "The Roman Dams of Subiaco," *Technology and Culture* 11, no. 1 (1970): 60.

These monastic communities did not settle upon the land extrajudicially. Rather, throughout the early centuries of the second millennium they were granted charters from the Holy Roman Emperor or acquired religious authority from the Catholic church. Once they were in control of the land, monasteries and nobles exploited and modified it to produce the resources necessary to maintain their dietary and religious standards.<sup>15</sup> As seen in Chapter 2, this process began in the sixth century and, after a Lombardic invasion that led to another century of displacement, monastic life in the valley resumed in the eighth century.

By the sixteenth century, the abbey of Subiaco ruled over seventeen towns and fortresses throughout the Aniene valley, each built on land that it had acquired over centuries, and divided into different categories with different mandated taxes. This system was within the norms of feudal European society. Through the *pheuda*, the Abbey developed sustainable control over, and income from, most of the landscape, solidifying tangible power throughout the valley.

The first section of this chapter investigates exactly how the Abbey of St. Scholastica acquired land power from the Pope or the Emperor, as well as the complicated and difficult process of maintaining that power at a local level. It was one thing to be granted control of land from some higher power, but entirely another to enforce that control in a meaningful way. This section will examine that process.

The division of land under the Abbey supported the monks economically. Here, leases were often emphyteutic, requiring that land be improved by its tenants. But the distinctions between different farms were vast, and the system that the monastery created

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<sup>15</sup> Hoffman, 113, 133-5.

helped to maintain terrestrial and economic power. The second section will analyze how these classes of farms, farmers, and laborers were distinct, alongside their economic contributions to their feudal lords and the Abbey itself.

The final section of this chapter will ask in what ways did the Abbey and its farmers modify and control the land around them. This was imperative not just in the land itself through processes such as terracing, but also in control of resources, the most important of which was water. Without water, no one could maintain any amount of power over the land, and so this section will look at what methods the monks used to develop, control, and maintain water resources.

All these questions address a system of management in the Aniene valley that supported Subiaco, and each system is a different manifestation of the Abbey's power. It was in land and resources control that St. Scholastica gained its power, whether in its legal rights, divisions, or modifications. The hierarchy the monastery established in the Aniene reflected that of Europe at large, but it was in the Abbey's efficiency that the monks and their tenants found success in the valley.

Benedictine monks' intimate ties to the land have made them historical agents of environmental control and change. As they spread throughout Europe, they established authority across a variety of landscapes far beyond their origins in the Aniene valley. Within Italy itself, monastic agricultural and management practices have been the subject of modern studies into sustainable agriculture in the face of climate change. Despite a tumultuous environment in the late middle ages, agriculture in Rieti under monks went on

as they were able to adapt to climatic shifts.<sup>16</sup> In the Aniene, the same must have been true since the Abbey survived the little ice age despite the flood at its beginning in 1305.

While monks may have claimed spiritual, or even secular, power through their words and writings it was real control of the landscape that gave the Abbey at Subiaco its power over people and resources. Through a complex process of legal acquisition and defense, the abbey gradually spread throughout the Aniene valley over centuries not unlike the rise of feudalism throughout Europe. The Abbey acquired tangible power that was rooted in the control of the environment.

### **Acquiring the Land:**

Feudalism fundamentally changed the relationship between landowners and tenants throughout Europe. Present in most of Europe during the high middle ages, systems of vassalage and tribute dominated the social and political hierarchies of the continent, while simultaneously spurring on environmental modification as new lands were cleared in the name of lords and kings. Land was passed from kings to princes, and from princes to lords, securing the social hierarchy that defines the era.<sup>17</sup> In Rome, new agricultural practices began in and out of the city, with wine production on feudal farms occurring within its walls first, only later spreading systematically into the hinterlands.<sup>18</sup> In the Aniene valley, the Abbey at Subiaco acquired vast swaths of land which eventually would come to produce grapes, grains, olives, chestnuts, and livestock. Acquisition came

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<sup>16</sup> Edward M Schoolman, Scott Mensing, and Gianluca Piovesan. "Land Use and the Human Impact on the Environment in Medieval Italy." *The Journal of Interdisciplinary History* 49, 3 (2018): 419–44.

<sup>17</sup> Marc Bloch, *Feudal Society*, trans. L.A. Manyon, vol. 1 (London: Routledge and Kegan Paul, 1971), 176-8.

<sup>18</sup> Wickham, *Medieval Rome*, 97-98.

in the form of both traditional grants from popes or kings and private sales or donations from the valley's residents, giving the Abbey power over the environment.

As seen in chapter 2, the first buildings and lands under the Abbey were its twelve monasteries. According to its chronicle, the first two were built in the early sixth century CE, and received their official dedications from Pope Gregory the Great in the same century.<sup>19</sup> From then on, the Abbey acquired property through both religious and secular means as it consolidated and spread its power throughout the Aniene valley. Donations from Holy Roman Emperors were not uncommon, occurring throughout the tenth through twelfth centuries.<sup>20</sup> Throughout Europe, Frankish and Germanic kings granted land to monks, so the situation in the Aniene was not unusual or even impractical, as monastic philosophical and recording traditions allowed for accurate land management.<sup>21</sup> The Abbey could reliably uphold their end of emphyteutic leases, where tenants were obligated to improve the land they occupied. In the Aniene, late medieval registers from a town called Marano show consistent growth in crop yields throughout its pertinent holdings.<sup>22</sup> The Subiaco Abbey fit reliably into the feudal, and regal, hierarchy of medieval Italy. However, land was not only acquired through monarchical means, but also often put under the monastery through Papal authority.

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<sup>19</sup> Cherubino Mirzio and Luchina Branciani, *Chronicon Sublacense: (1628-1630)* (Subiaco: Tipografia Editrice Santa Scholastica, 2014) 18-19.

<sup>20</sup> Guido Levi and Leone Allodi, *Il Regesto Sublacense Del Secolo XI* (Roma: Società romana di Storia patria, 1885) 3-4.

<sup>21</sup> Ellen F. Arnold, *Negotiating the Landscape: Environment and Monastic Identity in the Medieval Ardennes* (Philadelphia: University of Pennsylvania Press, 2013) 86-7.

<sup>22</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 39.*, and *Registro Di Marano 1428.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 36.*

When John X supported the authority of Subiaco Abbey in the early 10th century, he re-sanctioned the spread of the monastery's properties, and various popes over the next few centuries would continue to confer land in the same way. In 1030, the Abbey received the territories Canterano and Marano and their surrounding fiefs from John XIX.<sup>23</sup> These acquisitions were not always smooth or easy. Two centuries earlier, both of these territories were already counted among the Abbey's possessions in papal privileges, and the 1030 charter is identified as a concession from a rival bishop in nearby Tivoli enforced by papal authority.<sup>24</sup> Likewise, charters from the Holy Roman Emperor often came with guarantees against attempted property encroachment.

Despite both religious and secular enforcement, the abbey's power over the land was challengeable. A court case between the monastery and the local university over the rights to a local forest showed that monastic rights could be challenged. In 1308, a forest and its water rights were given to the monastery at Subiaco by the local magistrate in perpetuity.<sup>25</sup> Almost four decades later, the local university laid claim to a line of this forest, and a local magistrate had to reaffirm the monastery's right to the land.<sup>26</sup> Land disputes, on both large and small scales happened regularly throughout the valley.

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<sup>23</sup> Levi and Allodi, *Il Regesto*, 252.

<sup>24</sup> Levi and Allodi, *Il Regesto*, 51-2.

<sup>25</sup> 1308 maggio 4. Rocca di Subiaco <ubi ius redditur>. Giovanni Cascio, vicario del Sublacense, sentenza che la selva <Aqua de Comu> di Subiaco, appartiene al monastero di Santa Cleridonia. Biblioteca Santa Scholastica, Archivio Monastico Arca XXXV 61.

<sup>26</sup> 1347 febbraio 28. Rocca di Subiaco, al banco <iuris ad iura reddenda>. Ponziano di Benedetto giudice della Badia sentenza nella causa di una selva in Subiaco fra il monastero di Santa Cleridonia e l'universita di Subiaco. Biblioteca Santa Scolastica, Archivio Monastico Arca XXXV 77.

Furthermore, smaller plots of land contributed to the variability of monastic control, and private donations and sales were actually more common than papal or imperial donations.

Perhaps for the same visage of piety that motivated the Holy Roman Emperor, or maybe for more practical monetary purposes, landowners throughout the Aniene valley traded land and other goods with the Abbey, and often named it as a benefactor in their respective wills. There are countless examples throughout the monastery's history, and usually they were not very remarkable, adding only small bits and parcels of land to its overall territory.<sup>27</sup> Nevertheless, these incremental acquisitions increased the spread of monastic power throughout the valley. Much like granted land, sometimes these smaller properties were also subject to dispute. One man, Giovanni di Orlando di Simone, illegally claimed some of the property of a widow who had left her husband's belongings to the monastery. When a court of seven arbitrators ruled in the abbey's favor, Giovanni was ordered to pay annual fines for three years.<sup>28</sup> With legal backing, the Abbey of Subiaco was able to win this challenge to their authority and many others, and preserve control over the land and the people on it.

Disputes and lawsuits aside, Subiaco eventually controlled most of the Aniene valley. With authority from Rome and the Holy Roman Empire, the Benedictines spread their agricultural practices and created a long-lasting agricultural system that brought constant income in the form of food and taxes. This was not done in a single form,

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<sup>27</sup> 1305 marzo 14. *Territorio di Subiaco, nella via pubblica, vicino ai cancelli della croce. Tolomeo del fu Simone vende alle monache di Santa Cleridonia una terra in Subiaco.* Biblioteca Santa Scolastica, Archivio Monastico Arca XXXV 58.

<sup>28</sup> 1308 maggio 4. [Subiaco]. *Sette arbitri risolvono una lite fra lo Speco e Giovanni di Orland di Simone per i beni della fu Gemma del fu Oddone di Mastino.* Biblioteca Santa Scolastica, Archivio Monastico Arca VIII 34. Giovanni does indeed pay his fines annually until his debt is fulfilled.

however, because the Abbey meticulously divided its land into plots of various sizes to maintain a manageable landscape.

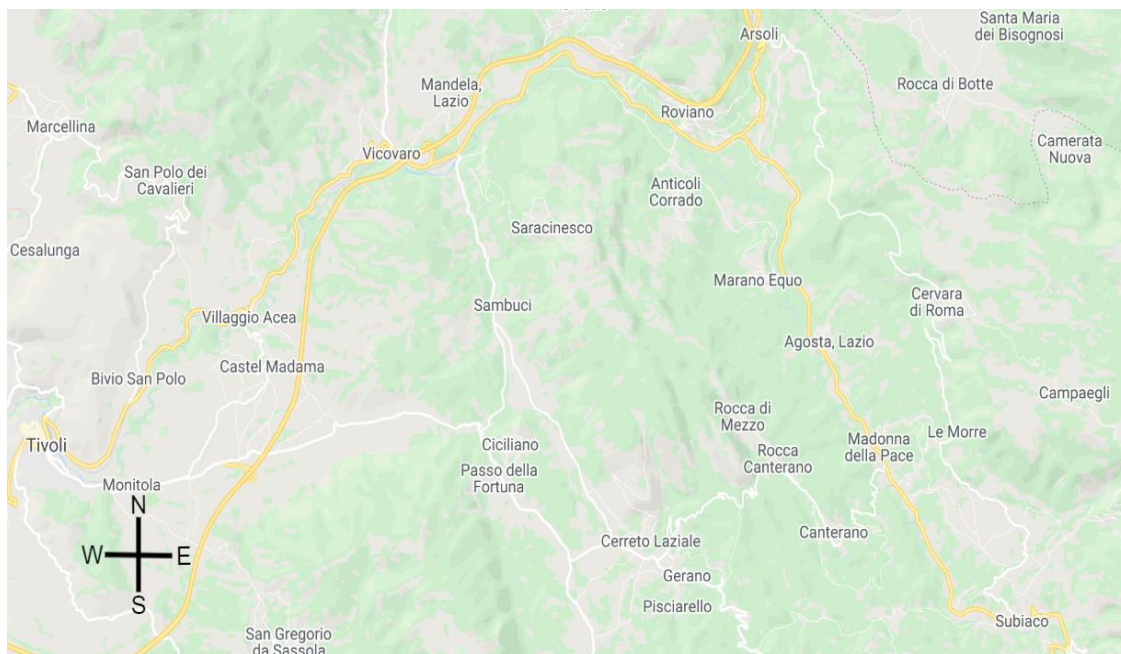


Figure 15: Map of the Aniene valley from Tivoli to Subiaco. Properties like Canterano, Agosta, and Marano all belonged to Subiaco Abbey in the medieval and early modern periods. Created with Scribble Maps. <https://www.scribblemaps.com/>

### Dividing the Land:

Once the Subiaco Abbey acquired a piece of land from the Holy Roman Emperor or through other exchanges, the Abbey divided it into dispensable parcels. Management was important, as mountain communities often fell victim to variable seasonal climate patterns, requiring longer term planning for land use.<sup>29</sup> Land existed in different classes, and registers identified different categories of farm differentiated by who owned, worked,

<sup>29</sup> J. R. McNeill, *The Mountains of the Mediterranean World: an Environmental History* (New York: Cambridge University Press, 2002) 104.



and collected income from them. While some of these fiefs were manned by free men, and slavery in the traditional sense had declined in the region centuries earlier, some laborers in the Aniene were decidedly unfree.<sup>30</sup> Of the nine categories identified in 1428, three are listed as *cum suis seruentiis*, or with their servants.<sup>31</sup> Of those owned and operated by free men, many leases seem to have been emphyteutic. This was not uncommon in Italy, and was often how the monastery further ensured that land was maintained. These leases also provided the Sacro Speco with some income, since most of these leases came with some initiation fee.<sup>32</sup> In any case, two registers from Marano, one of the Abbey's towns six miles northwest of Subiaco, dating from 1428 and 1571, respectively, identify these different categories as follows, including the expected annual payments from each category of fief.

The *Angararii* and *Seruiendum* provided the bulk of support for the monastery and functioned through forced labor. The *Angararii*'s goods all ended up in the possession of the monastery, and farms drew upon the manpower of the surrounding fiefs, with each category except the *Francorum* required to contribute some amount of personal service to the field for the benefit of the monastery.<sup>33</sup> Meanwhile, the primary

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<sup>30</sup> Chris Wickham, *Framing the Early Middle Ages: Europe and the Mediterranean, 400-800* (Oxford: Oxford University Press, 2005) 292. In his later *Medieval Rome*, Wickham argues strongly that technically, even the term *servus* had come to mean a free servant, in every sense. I disagree, since in the Marano register from 1428 identifies the servants as part of the *pseudum*. Still, there is an ongoing debate as to how free these people were.

<sup>31</sup> 'Pheudu[m] Anga[r]io[rum] cu[m] suis s[er]untiis... Se[r]uien[t]iu[m] cu[m] suis s[er]untiis... Placta[r]io[rum] cu[m] suis s[er]untiis." *Registro Di Marano 1428*. Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 36, folio 4.

<sup>32</sup> Wickham, *Medieval Rome*, 78-9.

<sup>33</sup> 'Serventia realia et personalia.' Translates to "services real and personal," *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583*. Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folios 7-10.

service that this class of farm provided was “servitude for the land of the count.”<sup>34</sup> Its members manned the castle grounds and gates for long periods of time. Compulsory service was not unheard of in medieval or early modern Europe. Feudal lords employed it as a means of taxing peasant farmers, and by extension, environmental use and modification throughout the continent.

**Table 1: Marano’s divisions per the 1428 and 1571 registers**

Name ( <i>Antiqua Nomina</i> )	Number of obligations	Servants
<i>Angararii</i>	22	Yes
<i>Seruiendum</i>	11	Yes
<i>Curiae et Nobilium</i>	8	None listed
<i>De Villa</i>	4	None listed
<i>Francorum</i>	0	None listed
<i>Platariorum</i>	5	Yes
<i>De Barrochis</i>	6	None listed
<i>Partitores Literarum</i>	Unknown	Unknown

This chart lists the categories of farms around Marano, a town in the Aniene valley. It features their names (*antiqua nomina*), the number of obligations in their tax burden, and whether or not they are listed with servants distinct from the serfs or peasants that lived there.

While the registers do not detail the enforcement of this mandatory labor, similar regulations in contemporary England allowed for the imprisonment, both in dungeons and in stocks, without trial or defense after only two notices. These practices ensured that

<sup>34</sup> ‘*In primis seruitium comitis compani[a]e.*’ ‘First, servitude for the land of the count.’ *Registro di Marano fatto L’Anno 1571. Id. di Agosta, fatto L’Anno 1579 Id. di Arsoli, fatto L’Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 8.

peasant laborers made good on their obligations to work royal, ducal, or monastic lands.<sup>35</sup> Regardless of potential punitive measures, the *Angararii* and *Seruientium* both seemed to be an effective form of land management, persevering from the 1428 register to the 1571, wherein they are identified as carrying *antiqua nomina* (ancient names) of the original families that managed them, and suggesting a tradition that extended further back in time than the registers note.<sup>36</sup>

These fiefs carried the heaviest burden of the entire system. In order to bear it they must have been large, likely further split into smaller farms worked by multiple families. While all but the *Francorum* owed some amount of product to the monastery and curia of Marano, the *Angararii* owed twice the total goods of the *Seruientium*. Not every farm produced the same products in the same quantities, so requirements were conditional and proportional. If a farm produced wine, the monastery would take a wineskin of each batch, and if they produced grains they would provide a portion for the monastery's bakery.<sup>37</sup> Fiefs in medieval Italy were rarely limited to one crop or product. Polycropping was practiced throughout the peninsula at places like Lucca, where olive

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<sup>35</sup> Judith M. Bennett, "Compulsory Service in Late Medieval England," *Past & Present* 209, 1, (January 2010): 15. It is not unfeasible that similar punishment might have befallen Italian farmers, but the source does not speak to it. For Medieval Italian law, see: Mario Ascheri, *The Laws of Late Medieval Italy (1000-1500) Foundations for a European Legal System* (Leiden: Brill, 2013).

<sup>36</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folios 6, 11-12. *Registro Di Marano 1428.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 36, folio 4. Many names repeat in both the 1428 and 1571 documents. While it is impossible that the same individuals could have lived on and worked these farms 150 years apart, it is feasible that these *antiqua nomina* come from an even older source, the original foffeee who worked the land.

<sup>37</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folios 7-9.

trees were planted among vineyards.<sup>38</sup> Farmers grew grains of different types depending on the demand of their lords. Throughout much of Europe, wheat and rye crops were grown exclusively for the benefit of feudal lords, while “lesser” grains such as barley, oats, and millet were relegated for personal uses in porridge or ale.<sup>39</sup> These same practices existed in the Aniene, and farms at Marano often contributed a variety of grains or wines to the monastery. This form of land production and taxation ensured that the monastery, the fortress, and the farmer remained fed when crop yields came in as expected on the *Angararii*, but also allowed for storage when shortages would occur. The agricultural support provided by the *Angararii* formed the economic backbone of the fief at Marano.

While the *Angararii* provided for the agricultural needs of the hierarchy in the Aniene, the *Seruentium* provided other types of manpower. These functioned similarly to, but separately from, the *Angararii*, operating through forced labor, and bearing a sizable responsibility to the monastery and the Marano castle.<sup>40</sup> However, the primary role of the *Seruentium* was to man the castle’s halls, and members guarded both the

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<sup>38</sup> Taylor Lynn Zaneri, "Rural Production, Peasant Participation, and State Power: The Reshaping of Medieval Italy." (Phd Diss., New York University, 2018), 92, accessed October 8, 2019, Proquest dissertations and theses.

<sup>39</sup> Hoffman, 113-19.

<sup>40</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 8. It is as of now unclear to me whether these *Seruentium* get their name from the type of labor used while being owned by a free farmer, or if these are farms specifically owned by a type of servant class. While the 1571 document mandates that the first thing owed by these farms is '*seruitium comitis campani[a]e*,' or 'servitude for the land of the count.' But these are not the same as the *Angararii*. Furthermore, the 1428 document lists both the *Angararii* and the *Seruentium* '*cum suis servuntis*,' 'with their servants' as if these workers are part of the land itself. This leads me to believe that the servants exist as a quasi-enslaved class. On the other hand, if the *Seruentium* themselves are tasked with guarding the castles gates, it would not make sense to achieve these tasks through unfree labor.

castle's gates by day and palisades by night.<sup>41</sup> Furthermore, the duration of this servitude differed substantially between these two classes. While the first category carried terms in the matter of days or weeks, those labeled *seruitium* carried terms as high as nine months in certain cases.<sup>42</sup> In this way, the monastery benefitted from not only the environment, but also the men who worked it. Laborers of the *Seruiendum* and *Angararii* were considered part of the land. The 1428 register identifies the servants as part of the property contained on the land of both the *Angararii* and *Seruiendum*.<sup>43</sup> To the monastery, the people who manned these lands were another natural resource that could be exploited.

Combined, both of these *genera* provided the required goods for the dietary customs of the Aniene, and it was through them that the Benedictine monks in the valley expressed the most direct control over their environment. However, these were not the only two types of fief that Subiaco oversaw at Marano, and although each of the next six categories' requirements consistently decrease, they appear in both registers and paid tribute to the monastery.

The third category of land was owned by nobility of Marano. These *Curiae et Nobilium* were affiliated with the Sublacensi Abbey and received payment and labor from the lesser farms. They also were responsible for distributing food and items among their feoffees or other tenants, distributing pork loin and bread as they were available at

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<sup>41</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 9.

<sup>42</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 10.

<sup>43</sup> *Registro Di Marano 1428.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 36, folio 4.

Christmas.<sup>44</sup> However, the *curiae* were not only responsible for benevolent holidays, but also for the practical storage and distribution of resources for servants, providing grain and spelt for those manning the towers during the day, and collecting wine, beans, grains, and barley from the subjected farms under their control.<sup>45</sup> The *curiae et nobilium* were middlemen between the monastery and the serfs who ensured the monks received their supplies and did not have to personally impose control over the peasants. But not all nobles were wealthy nor equal to each other.

In his seminal work, *Feudal Society*, Marc Bloch argues that while nobility was hereditary, wealth was not, and often families of antique riches did not retain them throughout the medieval period. As a result, multiple classes of nobility appeared around Europe, and hierarchies formed within upper class society as the Middle Ages wore on.<sup>46</sup> Bloch's study identifies distinct classes throughout Germany, France, and England, although he rarely touches on medieval Italy. This is perhaps due to the complexities of the region where, although a hierarchy existed, its nomenclature was often less formal and more complicated. Still, terms such as *dominus* or *milites* came to represent different distinctions between nobles in Tuscany.<sup>47</sup> Unfortunately, neither register contains titles even as vague as these. However, this does not preclude the possibility of differentiating

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<sup>44</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 39*, folio 9.

<sup>45</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 39*, folio 9.

<sup>46</sup> Marc Bloch, *Feudal Society*, trans. L.A. Manyon, vol. 2 (London: Routledge and Kegan Paul, 1971), 333-44.

<sup>47</sup> T. Casini, "The Minor Rural Aristocracy and Great Lords in Thirteenth-Century Tuscany: Three Cases from the Entourage of the Guidi Counts," *Journal of Medieval History* 37, 2 (2011): 180-7.

between types of nobles in Marano. In 1428, the primary *antiqua nomina* of the *Curiae et Nobilium* was Johannes Maranus, the town's namesake. His descendants continued to own and operate the castle and its grounds. As a result, that fief's yearly growth in 1428 outpaced most of its neighbors.<sup>48</sup> By 1571, this was no longer the case, but the town still bore its name and the legacy was cemented.<sup>49</sup> While the original Johannes may have been what Bloch identified as a type of *princeps*, the Maranus who ruled the land in 1571 may not have had the same level of power.<sup>50</sup> Regardless of secular power structures, each of the *curiae* was still subject to the same monastic auditing as their lesser brethren.<sup>51</sup>

The next four categories appear relatively minor within both registers, and the distinguishing characteristics of each are subtle. The *De Villa*, named after one of the original proprietors, were a group of four livestock farms. They contributed pork on saints' holidays and paid a tax to the *curiae* for all pork sold. The register emphasizes the meat that these fiefs produced, but also requires that the members of the *De Villa* contribute service to the upper classes.<sup>52</sup> The *Francorum* were unique among the feoffees at Marano. They were tax exempt, owing nothing to the nobles or the Monastery outside

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<sup>48</sup> *Registro Di Marano 1428*. Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 36, folio 4.

<sup>49</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583*. Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 15.

<sup>50</sup> Bloch uses *princeps* in a relatively standard sense, meaning a leader or founder.

<sup>51</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583*. Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 9.

<sup>52</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583*. Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 9.

of the service that they provided to the community at large.<sup>53</sup> Regardless, a distinct class of livestock farmers merited land for grazing and growth. In this and other parts of Italy, the tops of rolling hills were often left uncleared for just this purpose.<sup>54</sup> However, the steep mountainsides found in the upper Aniene valley would have made such a practice impossible for all but goats and sheep.<sup>55</sup> Instead, flatter fields alongside the river may have been used for grazing, or the flatter rolling hills along the lower rivers if needed. In the case of livestock, unmodified, or at least unploughed, land was just as exploitable and useful as its agricultural counterpart.

The *Plactariorum* and *De Barrochis* were flexible categories that did not carry a set list of services. The 1571 register stated that, “service and debts are not given here as in others, since each fief has different services and debts from the others,” but the details of the potential requisitions include both livestock and grain products, not unlike the *Seruiantum*.<sup>56</sup> Furthermore, the 1428 document identifies them, “*cum suis seruntiis*,” indicating a use of compelled labor not unlike the first two types of farms.<sup>57</sup> The *Plactariorum* were a catch-all, providing many of the same agricultural services as other farms. However, they also guarded the castle gates in year-long stints, as opposed to

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<sup>53</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 39*, folio 9. The register does not explain how or why the *Francorum* earned their tax exempt status.

<sup>54</sup> Hoffman, 113, 133-5.

<sup>55</sup> These animals are commonly herded in Subiaco today, but have no mention in the antique registers.

<sup>56</sup> “[*Plactariorum*] sunt numero quattuor, quor[um] servitia [et] debita hic non ponuntur, prout in aliis, quia unumquod[que] pheudum habet seruitia, [et] denota diuersa ab aliis...” *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583*, folio 9.

<sup>57</sup> *Registro Di Marano 1428.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII 36*, folio 4.



other guards who fulfilled quotas in the measure of nights or days.<sup>58</sup> Finally, the seventh category was the *De Barrochis*, which were technically under the control of a single landlord, but divided up into four different parts depending on the service provided. According to the 1571 manuscript, they provided the same varieties of grain as the *Angararii* alongside bread and cheese and the standard services provided by each category.<sup>59</sup> The final four well-defined fiefs operated more independently, since the *Angararii* and *Seruientium* provided most of the necessary goods to the Monastery.<sup>60</sup> The main goal of documenting their actions was to ensure the proper collection of taxes from each, and exhibit some level of control over the land, even if in an indirect form.

While the abbey's financial records give voice to the monastic perspective of landscape management, they do not provide a thorough view of the layman, serfs, and tenant farmers in the valley. Still, it is clear that these non-monastic residents were not always enthusiastic about their role in Aniene society, nor were the monks themselves in their role as providers in case of emergency. The land disputes from the early 14th century show that private landowners often infringed on the monastery's property boundaries.<sup>61</sup> Furthermore, the 1306 post-flood dispute between Franciscus and the rest of his cloister show that even in cases where an abbot tried to uphold his duty through

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<sup>58</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583, folio 10.*

<sup>59</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583, folio 10.*

<sup>60</sup> While the category '*portitores literarum*' is listed as a type of *pheudum*, its actual description does not fit with the others. They seem to represent the Abbey when payments are due, and their collections are listed later in both books.

<sup>61</sup> 1308 maggio 4. *Rocca di Subiaco <ubi ius redditur>. Giovanni Cascio, vicario del Sublacense, sentenza che la selva <Aqua de Comu> di Subiaco, appartiene al monastero di Santa Cleridonia. Biblioteca Santa Scholastica, Archivio Monastico Arca XXXV 61.*

alleviating the valley's citizen's hardships, he would be met with condemnation from the Pope himself. Despite these conflicts, the feudal system established by the Benedictines lasted through centuries.

By dividing up its land and delegating its authority, the Abbey made the Aniene valley manageable in two ways. The first was bureaucratic. It allowed the Abbey to control the land in smaller portions while simultaneously accounting for its food stores and ensuring that it maintained a sustainable flow of income. The second was practical. Serf and tenant farmers could better manage smaller plots of land, and although not specified in the registers themselves, it was not uncommon to have multiple small family farms on a fief throughout much of medieval Europe. Service on the *Angararii*, while compelled, operated in shifts. Agroecological management allowed these divided fiefs to function.

### **Conquering the Land:**

While it was divisions that eased ecological management in Marano, the descriptions of the divisions themselves only list what the monastery expected to collect in taxes. Their largely conditional requisitions do not paint a picture of what the land itself looked like. The forests clearly present in land disputes make no appearance, nor do the canals through which irrigated fields functioned. Fortunately, more detailed tax records in the 1571 document contain descriptions of some of the features found on various farms, and paint a picture, if very basic, of what these lands may have actually looked like.

One of the *Angararii*, the fief named for one Stephanus Gregorius, was heavily wooded. Located at the edge of a larger swampy woodland, the property contained groves of both chestnut and oak. It was bordered by neighboring properties, two at its head, and a road, the *via marci madalene* to one side, and had a canal at its foot.<sup>62</sup>

Another, named for Petrus Blasius, was a vineyard dotted with canals and located just off the *via publica*, or public road. Various *seruientia* looked largely the same, consisting of chestnut groves and vineyards alongside ploughed land, and were often located to the side of a major road and bordered by a canal and other properties.<sup>63</sup>

Unsurprisingly, the lands belonging to the *curiae et nobilium*, that is, the nobility of the Aniene valley, contained lands with more direct connections to the river. The fief named for the town's namesake, Johannus Maranus, held a collection of mixed trees, likely oaks and chestnuts, that overlooked a major canal in the valley and was located within plain view of the public road. Meanwhile, the fiefs of Berallus Sampanolus and Odus Blasiolus were both located at the source of the region's canals.<sup>64</sup> While the document is not clear whether this means a stream, spring, or the river itself, their position over the source of water undoubtedly gave them some amount of power in the valley.

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<sup>62</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583, folio 83.* I use the terms "head" and "foot" because this is how the document identifies land boundaries(i.e. "*a capite, a pede, a latere*").

<sup>63</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583, folio 84.*

<sup>64</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583, folio 84.*

All of these fiefs contain the ambiguous *terram*, which may have been lands plowed for crop agriculture. Clearing and plowing were of course essential for agriculture, and elsewhere in the document the monastery differentiated between groves, vineyards, and what are identified as *terram sativam*, or plowed lands. The *terram* listed in the properties of the *pheuda* represent the same concept. These could have been used for growing grains or grazing animals in order to fulfill the tax obligation to the monastery. However, the clearing and plowing of land was far from the only modification present in the valley, and larger scale projects likely took place on many of these fiefs which actually precluded their productivity.

Landscape modification was not new to the Aniene valley in the medieval era. As seen in Chapter 1, The Roman emperor Nero dammed the river, while agricultural settlements and villas dotted the landscape throughout the classical era.<sup>65</sup> Likewise, many of the techniques used throughout the Aniene were not revolutionary; terracing and hydraulic manipulation were used throughout and outside of the Roman world to the point that they have been overlooked by many as anything other than part of the “natural” landscape.<sup>66</sup> Deforestation was also prevalent, and throughout Italy the most accessible parts of mountain ranges had long lost much of their forest coverage by the time Benedict came to Subiaco in the fifth century.<sup>67</sup> The transitions that took place under the Abbey’s rule existed in the context of an already greatly modified environment.

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<sup>65</sup> Smith, "The Roman Dams of Subiaco," 60.

<sup>66</sup> Donald J. Hughes, *Environmental Problems of the Greeks and Romans: Ecology in the Ancient Mediterranean* (Baltimore: Johns Hopkins University Press, 2014) 131., Joachim Radkau, *Nature and Power: a Global History of the Environment* (Washington, D.C.: German Historical Institute, 2009), 97.

<sup>67</sup> J. R. McNeill, *The Mountains of the Mediterranean World: an Environmental History* (New York: Cambridge University Press, 2002) 71-2

Italian terraces are difficult to date since the archaeology can be inconsistent, and even in places where a terrace would be put to the best use, they were not always employed. Because of their “background” nature, and the fact that they did not usually fall under the jurisdiction of larger bodies, terraces do not often show up in records.<sup>68</sup> In other words, in many landscapes the terrace simply *is*. Unfortunately, the records from Subiaco are equally silent in this regard. While the registers identify crop yields and feudal possessions, the actual makeup of these lands is ambiguous. However, terraces are ubiquitous to modern Subiaco, and are built into the structure of both the monastery at the Sacro Speco and the monastery of Santa Scholastica. In antiquity terraces would have been necessary to support agriculture on the valley’s steep cliffs.<sup>69</sup>



Figure 16: A multi-use modern terrace at the Rocca Abbaziale, olive trees in background, chestnut trees right and in upper left corner.

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<sup>68</sup> Radkau, *Nature and Power*, 98-9.

<sup>69</sup> Radkau, *Nature and Power*, 98-9.

The same is true today. Olive trees are visible on almost every terrace throughout the town, and well into the mountain on the lands still owned and farmed by the monasteries.<sup>70</sup> Regardless of the lack of recorded history regarding terraces in the Aniene, the modern terraced landscape is the result of an older tradition.

Terraces were created with intimate knowledge of construction and landscape modification. In Liguria, terrace construction was a community function, not one sponsored by a larger body. Community members would gather together to transform an otherwise hostile landscape, such as a mountainside, into one that carries more utility, drawing upon tradition and instruction passed down through generations. Terracing was a process, and entire landscapes were not modified at once. Rather, hillsides were modified as needed, sometimes taking centuries to fully develop.<sup>71</sup> Because they are developed slowly and repeatedly over time, terraces are difficult to track historically with the exception of famous terraced gardens like those at the Villa d'Este in Subiaco's nearby counterpart, Tivoli.<sup>72</sup> Regardless, Tivoli was not under the jurisdiction of the monks of Subiaco, and so the Aniene valley's terraces remain simultaneously undocumented historically and presently obvious and ancient. The Abbey's terraces were likely constructed communally like Liguria's and would have allowed the monks and their feoffees to make use of otherwise hostile landscapes, thereby increasing the output of their agriculture. Still, land is worthless without water.

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<sup>70</sup> See images 5 and 6.

<sup>71</sup> Renata Allegri, "The Terraced Landscape in a Study of Historical Geography," *Annales: Series Historia Et Sociologia* 29, 1 (January 2019): 70-74.

<sup>72</sup> Philip Jacks, "Pirro Ligorio and the Design of the Fontana Del Diluvio at the Villa d'Este," *Studies in the History of Gardens & Designed Landscapes* 39, 4 (2018): 271-304.

If agriculture was the heart of communal life in the valley, then the Aniene was the vein that brought the blood necessary for survival. Historically, the river provided ample amounts of water for the entirety of Rome, but the monastery had to make use of water within the valley itself, not just export it as had been done in the Empire.<sup>73</sup> Subiaco, named for the now drained lake it bordered, and its monasteries held significant ties to the water and their environment. When the monastery acquired new land it usually included the rights to the water on it, and when that land was divided up, the water rights were split in turn.<sup>74</sup> This was not abnormal in the medieval world and in fact the Catholic Church and its subsidiaries had a long tradition of water management.

After the Late Empire slowly descended into impotence, it lost the ability to maintain its robust aqueduct system that had tied the Aniene to Rome in antiquity.<sup>75</sup> Instead, aqueduct's maintenance fell upon the Church. Above all else, water fed agriculture, bringing life to the plants and livestock on which the monastery relied. Managing the Aniene valley's water supply was vital, and by many accounts the monastery was successful to this effect. Yields increased regularly over time, outside of abnormalities like droughts or floods, and life in the Aniene went on smoothly.<sup>76</sup> While the original monastery at the Sacro Speco apparently acquired its water resources

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<sup>73</sup> The Aniene was the source of four major roman aqueducts, the *Aquae Virgo*, *Anio Novus*, *Claudia*, and *Marcia*. See Peter J. Aicher, *Guide to the Aqueducts of Ancient Rome* (Wauconda, IL: Bolchazy-Carducci Publishers, 1995).

<sup>74</sup> Levi and Leone, *Il Regesto* 3-4.

<sup>75</sup> For more on the difficulties of maintaining and building aqueducts, see Frontinus' *De Aquaductu*.

<sup>76</sup> *Registro di Marano fatto L'Anno 1571. Id. di Agosta, fatto L'Anno 1579 Id. di Arsoli, fatto L'Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folios 20-33.

miraculously, other, non-divine sources of water were required elsewhere, like at Farfa where monks built channels or assembled smaller aqueducts to supply themselves.<sup>77</sup> At Marano, land was given to the Abbey “*cum ... aquis aquarumque decursibus,*” and the monastery made thorough use of these water resources by 1571.<sup>78</sup> The water’s presence gave value to land as well. The Maranus grove “at the mouth of a canal” was among the farm’s primary possessions and represented a large portion of its wealth.<sup>79</sup>

The river itself could provide the monks and laymen in and around Subiaco ample resources with proper management. These uses permeate all the divisions seen at Marano regardless of class, because they are tied to the river itself instead of a piece of land. First were fisheries, which were located on smaller farms alongside regular crops. Fish must have been a common part of the Aniene diet, although they are not mentioned in any of the monastery’s requisitions. Mills were also located along the river, and the grain that they processed was often given to the monastery as payment.<sup>80</sup> These types of processing structures did not belong in any one class and were instead found among multiple categories. But despite the best efforts of the farmers and monks in the Aniene, there remains things that no human has the capability to control.

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<sup>77</sup> Squatriti, 19. For more on the “miraculous” nature of the Speco’s water source, see Gregory the Great, “Dialogues, Book II: the Life of St. Benedict, Chapter 5: Of a Fountain that Sprung Forth from the Top of a Mountain, by the Prayers of a Man of God.” From Order of St. Benedict, Web, [https://www.osb.org/gen/greg/dia-07.html#P61\\_21985](https://www.osb.org/gen/greg/dia-07.html#P61_21985) accessed: 10/10/2019. For more on Farfa, see Edward M Schoolman, Scott Mensing, and Gianluca Piovesan. “Land Use and the Human Impact on the Environment in Medieval Italy.” *The Journal of Interdisciplinary History* 49, 3 (2018): 419–44.

<sup>78</sup> Levi and Leone, *Il Regesto Sublacense* 252. “With and [full] of rushing water.”,

<sup>79</sup> *Registro di Marano fatto L’Anno 1571. Id. di Agosta, fatto L’Anno 1579 Id. di Arsoli, fatto L’Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 84.

<sup>80</sup> *Registro di Marano fatto L’Anno 1571. Id. di Agosta, fatto L’Anno 1579 Id. di Arsoli, fatto L’Anno 1579. Id. di Rocca di Mezzo fatto 1583.* Biblioteca Santa Scolastica, *Archivio Monastico Arca XXVII* 39, folio 90.



Water's variability is instrumental to its significance, often becoming a historical actor in and of itself. In the medieval era, many societies had to deal with water in either too small or too high quantities, and in the Aniene valley, flooding was especially problematic.<sup>81</sup> Even in classical Rome, flooding was a primary concern for those living along the Tiber, and in the Sixth century Italian flooding became especially prevalent in literature.<sup>82</sup> While the written tradition declined after the sixth century, flooding remained a chief concern for the monks and people of Subiaco. The 1305 flood is evidence for this, and its narrative is a tale of the destruction that the environment could bring. The lakes swelled and the dams broke, and as the water and debris, both natural and man made, cascaded down the valley almost all of the Abbeys work was undone in its wake. Bridges were destroyed, isolating the churches and communities from each other until they could be rebuilt. Both humans and livestock were swept away while working their fields, and when the water finally subsided the fields and streets of Subiaco were littered with bodies. "Canals became rushing rivers, and fields became lakes," and the manmade environment modification became a hazard to the farmers in the Aniene valley as they allowed larger volumes of water to flow into their lands.<sup>83</sup>

### **Water, Land, and Power:**

The diluvian tale is dramatic, evoking biblical imagery of death and destruction in a valley. The dams, the monumental testaments to human environmental modification,

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<sup>81</sup> Squatriti, 70-2.

<sup>82</sup> Ibid, 67-70.

<sup>83</sup> *Chronicon Sublacense: (1628-1630)* (Subiaco: Tipografia Editrice Santa Scholastica, 2014), 375-76.

were destroyed.<sup>84</sup> Homes could be rebuilt, farms re-furrowed, channels rebuilt, and terraces remade, but the rebuilding process was long and tumultuous. Early efforts under the abbot Franciscus were met with disdain by his own monks and the Pope, and when he tried to funnel resources to the serfs in the Aniene he was imprisoned, tortured, and killed. Likewise, a power struggle in Rome sent the Pope into exile during the Avignon Papacy, and a local, secular leader took over control of the valley for a decade.<sup>85</sup> The social and political turmoil caused in part by the 1305 flood was only the beginning. The Black Plague came in 1347 and ravaged the Aniene's settlements for fifteen years. Still, the chronicle does not end. The abbey at Subiaco, and indeed the valley's residents at large, endured the trauma and rebuilt and maintained their agricultural infrastructure. While Subiaco was no longer literally "under the lake," the feudal monastic system established there survived, and by 1428 the monasteries were again collecting taxes as they had been for centuries.

Flooding remained a concern well into the 20th century. In 1904, the Italian government took specific measures to study the most effective flood management techniques that modern technology would allow.<sup>86</sup> It is a universal problem in the Aniene valley that the Abbey could not adequately prepare for because it could not predict or control for the events. However, it was still within this context the Abbey spread and developed the valley. That is, flooding was a known risk. The flood in 1305 occurred at

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<sup>84</sup> Smith, "The Roman Dams of Subiaco," 60.

<sup>85</sup> Raffaello Morghen, *Chronicon Sublacense (593-1369)* (Subiaco: Monastero S. Scolastica, 1981), 43.

<sup>86</sup> *Opere Idrauliche Di 3 Categoria (Legge 25 Luglio 1904 n. 234 - Testo Unico)* (Roma: Corpo Reale Del Genio Civile, 1908).

the beginning of what is known as the Little Ice Age, and was part of a series of major storms that marked the beginning of a major ecological shift. In Northern Europe, storms caused destruction much like in the Aniene, with floods that swept over any protections that were developed there.<sup>87</sup> While the Abbey's eye for land management likely made it adaptable for long term change as it did for those in Farfa or the Ardennes, rapid change wrought destruction that could not be accounted.

Landscape modification throughout the Aniene was gradual but often intentional. Terracing enabled the use of otherwise rocky and steep slopes, including those that the Monastery of the Sacro Speco and the Monastery of St. Scholastica stood. Meanwhile, channels and canals that tapped the Aniene itself or the springs in the hills around it like the classical counterparts pumped water and nutrients into soil in fields along the river and in flatter parts of the valley. No one could account for massive rapid flooding as was seen in 1305, but intentional land management even after the deluge meant that the infrastructure could be rebuilt and the valley would not be abandoned.

The key to controlling the environment and maintaining power in the Aniene was resource management. While ostensibly the Abbey acquired its land and power through more traditional feudal means, from kings and the pope, real power came from functional control over the landscape. Under purely judicial means, these rights could be challenged, even against the command of the kings who administered the land. Therefore, it was important to maintain control over the land through organization, delegation, and taxation. By splitting the Aniene valley into manageable *pheuda*, many of which required initial leases payments alongside the rents or taxes paid annually, the monks and Subiaco

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<sup>87</sup> Brian M. Fagan, *The Little Ice Age: How Climate Made History 1300-1850* (New York: Basic Books, 2002) 65.

were better able to ensure that they remained in power. Furthermore, the relationship between the Abbey and the land, and its inhabitants, was not one-sided. The monasteries sponsored landscape development and modification throughout Europe, and this was likely the case in the Aniene as well. While the Abbey did fit into the traditions of feudal society, in the Aniene it also created a symbiotic hierarchy rooted in ecological management and modification.

## CONCLUSION

### REFLECTIONS FROM THE JOURNEY HOME

On a searing August afternoon, I descended from the Monastery of Santa Scholastica for the last time. As I came to the foot of the mountain stairs where they meet the winding highway, my glance was drawn toward the ruins of Nero's villa. Now, gated and closed off from the public, they sat along the highway. A few times every minute, a bus, a car, or a cyclist sped past, paying no mind to the two-thousand-year-old structure right off the road. Over time, the villa has become part of the landscape that it and its dams dominated two millennia ago.

I had only begun to conceptualize the scale of environmental modification that these ruins represented. In the modern Aniene, the highway runs with the ruins on the left-hand side, and a sheer drop into the canyon on the right. But in antiquity, the artificial lakes and massive dams that defined the landscape gave the town and region its name. Even though the lakes were destroyed seven hundred years ago, it seemed to me that their legacy remained, accentuated by their absence and the existence of these cliffside structures. Indeed, the journey from Subiaco to Rome is still marked by reminders of the Aniene valley's environmental past.

In some ways, these reminders are highlighted by local works. The town's economy is rooted in tourism, and every day visitors from Rome and elsewhere tour the city and its monasteries, either in groups or alone<sup>1</sup> The path that I walked is part of a

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<sup>1</sup> E-Borghi, "The Italian Village of Subiaco, Roma in Lazio, Italy 2020," accessed June 11, 2020, <https://www.e-borghi.com/en/village/Roma/369/subiaco>.

larger trail built for pilgrims seeking to follow St. Benedict's steps from his home at Nursia to his final residence at Monte Cassino.<sup>2</sup> Along these paths, the tourists see the physical reminders of the valley's history, like Nero's ruins, monasteries themselves, or the Rocca Abbaziale, the 10th century castle that dominates Subiaco's skyline and received tribute from the surrounding farmers in the following centuries.<sup>3</sup> Furthermore, dams again exist along the river, but now they provide hydroelectric power to the region rather than any emperor's personal pleasures, and downriver from Subiaco, local farms still make use of the valley's natural resources. Even today, those who control the valley use it for whatever purpose best suits their needs, whether that be power, tourism, or agriculture.

Still, many of the reminders of the town's history are shadows or replicas of their former selves. In the 20th century, war brought destruction to most of Subiaco's historic buildings and sites. Like many before them, Italian and German soldiers fortified and populated the town and region during the Second World War. In preparation for their ground invasion, the Allies planned Operation STRANGLE, a series of air raids designed to supply lines in the Apennines and compel a German withdrawal from the areas north of Rome.<sup>4</sup> Subiaco was a one of their strategic targets. On May 26th, Allied bombers targeted the road leading to Subiaco as well as the town itself, and dispersed the Italian

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<sup>2</sup> "Il Percorso Del Cammino," Cammino di San Benedetto, May 11, 2020, <https://www.camminodibenedetto.it/percorso/>.

<sup>3</sup> See Chapter 3.

<sup>4</sup> Frederick M. Sallagar, "Operation 'Strangle' (Italy, Spring 1944): a Case Study of Tactical Air Interdiction," Operation "Strangle" (Italy, spring 1944): a case study of tactical air interdiction § (1972), v-vi.

battalions that had been laboring there.<sup>5</sup> In separate attacks on the 27th and 30th of that month, heavy bombers targeting troop concentrations and communication stations within the city, while medium bombers from the 12th air force targeted roads, railways, and gunner positions in Subiaco and elsewhere.<sup>6</sup> The destruction was devastating to the local population. Today monuments to the lives lost dot the city as frequently as other historic structures. In addition, many of the towns historic buildings, including the two monasteries, were damaged in the bombings and had to be rebuilt following the war.<sup>7</sup> The modern structures were built to replicate the style of the original buildings, but what was lost can never fully be rebuilt. Nevertheless, like Nero's villa the modern structures serve as reminders for the valley's history.

The route from Subiaco to Rome is itself another reminder of the historical landscape. Much as it did in antiquity, the road winds along the river through the valley, passing through towns which, as I left my place of study, felt familiar. From Subiaco, *Strada Regionale 411 Sublacense* passes first through Agosta, and then through the modern Marano, where, in the 15th and 16th centuries, the lands were meticulously divided.<sup>8</sup> Southwest of Agosta is Canterano and its castello, and northeast of Marano there is a town called Arsoli. Both places were featured in one of the many registers used in this thesis. Furthermore, it was from the hills above these towns that mountain springs

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<sup>5</sup> Frederick M. Sallagar, "Operation 'Strangle' (Italy, Spring 1944): a Case Study of Tactical Air Interdiction," *Operation "Strangle" (Italy, spring 1944): a case study of tactical air interdiction* § (1972), 68.

<sup>6</sup> Jack McKillop, "USAAF Chronology: May 1944," *USAAF Chronology*, accessed June 12, 2020, <http://paul.rutgers.edu/~mcgrew/wwii/usaf/html/May.44.html>.

<sup>7</sup> E-Borghi, "The Italian Village of Subiaco, Roma in Lazio, Italy 2020," accessed June 11, 2020, <https://www.e-borghi.com/en/village/Roma/369/subiaco>.

<sup>8</sup> See Chapter 3.

became the source for Rome's Aqua Marcia.<sup>9</sup> While the region is no longer dominated by the Roman Empire or Benedictine Monks, their legacies remain in these places which are still visible today.

The landscape itself has also changed, especially along the lower Aniene. While the initial journey from Subiaco is dominated by small family farms and rural *comuni*, just south of Vicovaro the route leaves the Aniene river, and the rural highway, and follows European Route 80, E80, for the remainder of the bus ride. For the Aniene's part, it continues on beset by local farms, through Tivoli and past the Villa d'Este, and continues through hilly agricultural land. As in Pliny the Younger's day, the landscape here is still dotted by farms with olive groves and orchards.<sup>10</sup>

Slowly, the land and river are consumed by suburbs and, eventually, modern Rome itself. By the time the highway reconnects with the river, it is barely visible among the urban landscape. At the Ponte Mammolo metro station I left the Aniene, which continues through the city for another mile through an urban park before running into the Tiber at its terminus. In antiquity, this junction was north of the city's boundaries. It is lost in the expansion of a city whose growth it once cultivated two thousand years before.

The Aniene valley is the backdrop for thousands of years of history. Ancient emperors and poets, feudal monks, and even humble farmers have called the valley home, and each left their mark upon the valley's landscape. To harness its water and support a city 70 kilometers away, Romans left their mark on the history by building massive aqueducts. When Emperor Nero desired an escape, he chose the Aniene valley and in

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<sup>9</sup> See Chapter 1.

<sup>10</sup> See Chapter 1.



doing so created a new landscape that redefined the region. His environmental impact would develop in unforeseen ways, however, as Benedictine monks again reshaped the same landscape, first around his lakes, and then without them after 1305. From then on, small, rural villages of farmers lived off the Aniene river, first in villages under the command of the Subiaco Abbey, and even now as small *comuni* within the greater administrative body of Rome. The relationship between the two is deep. It was the river valley's water that fostered Rome's development, and its expansion in turn brought new waves of settlers who farmed the land. In this way, even today towns like Subiaco carry a type of double identity. It is Roman, but rural. Furthermore, it is definitively its own place with its own history.

Throughout that history, power was tied to control of the landscape and water. By dominating the valley's early inhabitants, Rome came to control the valley's ample resources. In the early centuries of the Benedictine abbey, great focus was placed upon gaining legal control over the valley's land and water resources. Finally, at the height of Subiaco Abbey's control, it exercised its power through intense landscape management and taxation. Each stage shaped the landscape even today, with the valley's historic villages attracting large numbers of tourists every year. Now, tourists can visit the remnants of the valley's agricultural history, raft down the Aniene, and dine on local cuisine. This industry further fuels local agriculture and landscape modification in the form of hydroelectric dams. In this way, the Aniene river and its surrounding landscape still provide for those who live there, as it did in antiquity. Indeed, economic power is still tied to control of that landscape and the water that runs through it.

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