SETTLEMENT PATTERNS AND CONNECTIVITY IN LATE ANTIQUE ROUGH CILICIA

by

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Settlement Patterns and Connectivity in Late Antique Rough Cilicia

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To my family,

ABSTRACT

Settlement Patterns and Connectivity in Late Antique Rough Cilicia

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Master of Arts in Archaeology and History of Art

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Late Antique Rough Cilicia was composed of well-connected rural sites of various types, such as villages, hamlets, and farms. Archaeological and textual evidence suggests that the main products of these sites were wine and olive oil. These products were brought to ports to be shipped overseas. This mechanism of production and export was enabled by the development and maintenance of a road network, which made the transfer of wine and olive oil from the producer to the consumer or seller possible. This thesis aims to understand the elements that contributed to the working of these relationships through the study of different aspects of settlements, such as typology and production facilities, and their positions in the network of people, roads, and ports. To do that, a study region in eastern Rough Cilicia, encompassing three centers of Korykos, Elaiussa Sebaste, and Olba-Diokaisareia with their hinterlands, was chosen and all the rural sites known to have been occupied during Late Antiquity were examined. During the analysis of these subregions, a methodology of categorizing site types and evaluation of these sites in terms of their topography, production facilities, and proximities to the crucial network elements, such as roads and harbors is employed.

Keywords: Settlement patterns, connectivity, Late Antiquity, Rough Cilicia, agricultural production.

ÖZETÇE

Geç Antik Dönem Dağlık Kilikyası'nda Yerleşim Düzenlemesi ve Bağlantısallık

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Geç Antik Dönem'de Dağlık Kilikya, köy, mezra ve çiftlik gibi birbiriyle bağlantılı kırsal yerleşimlerden meydana gelmektedir. Arkeolojik ve yazılı kaynaklar, bu yerleşimlerin temel geçim kaynaklarından birinin şarap ve zeytinyağı üretimi olduğuna işaret etmektedir. Bu ürünler, limanlara getirilip deniz aşırı bölgelere ihraç edilmek üzere gemilere yüklenmekteydi. Bahsedilen bu üretim ve ithalat mekanizması, şarap ve zeytinyağının üreticiden tüketici veya satıcıya ulaştırılmasını sağlayan yol ağının geliştirilmesi ve bakımının devam ettirilmesi ile mümkün olmuştur. Bu çalışma, yerleşimleri tipolojileri, sahip oldukları üretim olanakları ve insan, yol ve liman yerleşimlerinden oluşan bölgesel ağdaki konumu gibi farklı açılardan inceleyerek bahsedilen bu üretim-tüketim ilişkilerinin nasıl işlediğinin anlaşılmasına katkı sağlamayı amaçlamaktadır. Ayrıca, bu çalışmada kırsal yerleşimlerin nasıl ve ne ürettikleri ile bölgelerarası deniz ticaretine nasıl dahil oldukları gibi daha büyük soruların cevapları da aranmaktadır. Bu amaçla, çalışma alanı olarak Korykos, Elaiussa Sebaste ve Olba-Diokaisareia olmak üzere toplamda üç merkezin art-bölgesini kapsayan Doğu Dağlık Kilikya seçilmiş; bu kırsal bölgelerde şimdiye kadar tespit edilmiş tüm Geç Antik yerleşimleri incelenmiştir. Analizler sırasında izlenen yöntem, yerleşim tiplerinin gruplanması ile topoğrafik özellikleri, üretim imkanları, ve bağlantılılık açısından önem teşkil eden, yol ve liman gibi unsurlara yakınlıkları açısından değerlendirilmesi olmuştur.

Anahtar Kelimeler: Yerleşim düzenlemeleri, bağlantısallık, Geç Antik Dönem, Dağlık Kilikya, tarımsal üretim.

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ABBREVIATIONS

AA	Archäologischer Anzeiger
AAS	Les Annales Archeologiques Arabes Syriennes
ACARP	The Antiochia ad Cragum Archaeological Research Project
AKMED	Suna-İnan Kıraç Akdeniz Medeniyetleri Araştırma Enstitüsü
AmerAnt	American Antiquity
AnatSt	Anatolian Studies
ANMED	Anadolu Akdenizi Arkeoloji Haberleri
AST	Araştırma Sonuçları Toplantısı
BAP	Bilimsel Araştırma Projesi
BAR-IS	British Archaeological Reports, International Series
BASP	Bulletin of the American Society of Papyrologists
BCE	Before Common Era
CE	Common Era
DARMC	Digital Atlas of Roman and Medieval Civilizations
DOP	Dumbarton Oaks Papers
ÉtBalk	Études balkaniques
IJNA	International Journal of Nautical Archaeology
IstMitt	Istanbuler Mitteilungen
JFA	Journal of Field Archaeology
JHS	Journal of Hellenic Studies
JRA	Journal of Roman Archaeology
JRS	Journal of Roman Studies
JSAH	Journal of the Society of Architectural Historians
KAAM	Kilikia Arkeolojisini Araştırma Merkezi
KST	Kazı Sonuçları Toplantısı
LR	Late Roman
MonAnt	Monumenti Antichi
NEA	Near Eastern Archaeology
ODTÜ	Orta Doğu Teknik Üniversitesi
OJA	Oxford Journal of Archaeology
ÖJh	Jahreshefte des Österreichischen archäologischen Instituts in Wien

RCSP	Rough Cilicia Survey Project
SAT	Sualtı Araştırmaları Topluluğu
SIMA	Studies in Mediterranean Archaeology
TÜBİTAK	Türkiye Bilimsel ve Teknolojik Araştırma Kurumu

Chapter 1:
INTRODUCTION

Rough Cilicia is an archaeologically rich region for the study of the Late Antique Anatolian countryside. Located in a rough and mountainous area, the region had always a bad reputation since the Hellenistic Period due to its hard living conditions and prevalence of piracy and banditry. Yet, its annexation by the Roman Empire and consequent adaptation to a wider socio-economic sphere through production and exchange stimulated production in the settlements of the region. Both urban and rural Cilician sites seem to have flourished between the 1st c. and 7th c. CE, evidenced by an increase in the size of the coastal cities and the number of monumental structures, and the proliferation of rural settlements. The improvements in road infrastructure and harbor facilities helped both the coastal and interior parts of the region prosper, thus creating a dense network of well-connected settlements. This connectivity was provided by the maintained roads linking the harbors and inland areas, which stimulated a prosperous economy in the region, particularly the production and export of wine and olive oil. Thus, the settlement organization and road network existing in the region plays a crucial role in the understanding of the Late Antique economy of Rough Cilicia.

The focus of this thesis will be the examination of rural sites, including villages, hamlets, and farms, which were inhabited during Late Antiquity, as well as other sites such as ports, monastic sites, funerary sites, and sacred sites. Identifications of their types and study of their spatial relations to the cities and the roads give insights about how the rural economy functioned in Late Antique Rough Cilicia. Although the countryside of Rough Cilicia has been studied by various researchers since the 19th century, the position of the region needs to be dealt with on larger networks. Thus, the compilation of such data, which is a combination of sites and road network in relation to the maritime connections, can help understand the production relations of the region and its integration to the Roman maritime network. Besides, this thesis aims to present a more clarified terminology used for site types in the Late Antique countryside to integrate the archaeological data produced by various researchers and projects.

Due to the large territory of Rough Cilicia, the focus of this thesis will be limited to eastern Rough Cilicia, and the hinterlands of three urban centers, Korykos, Elaiussa Sebaste, and Olba-Diokaisareia, in particular. For the analysis of the sites, I defined the

terminology first based on the literary sources and archaeological evidence. The rural sites that have been detected in the study region so far are analyzed regarding their topography, types, and locations in the road and maritime network. Thus, a comparison of settlement patterns in the different parts of the study region will be made.

Chapter 2 introduces the geographical and historical background of Rough Cilicia for a better understanding of the factors that formed the Late Antique phase of the region. Chapter 3 presents the current situation of the archaeological research in the region and the data on which the interpretations in this thesis will be based. Besides, the methodological basis of the study will be explained. In Chapter 4, the production-based economy of the region will be reviewed in the light of textual and archaeological evidence from various parts of the Roman Empire. Thus, the production facilities that are very common in the archaeological record of the region will be better understood. Chapter 5 will be composed of different datasets, including sites, roads, and maritime networks of different geographical scales. In the last chapter, the interpretation of the data will be made through the discussion of certain aspects, such as the factors effective on the selection of site locations, the prevalent site types, the form and volume of agricultural productions, and the connectivity of the sites.

Chapter 2:
GEOGRAPHICAL AND HISTORICAL BACKGROUND

2.1 Geographical Background

2.1.1 Geographical Definition of Rough Cilicia

Various ancient authors mentioned the boundaries of *Cilicia* in different ways. Although *Cilicia* can be briefly described as the region on the southern coast of Asia Minor, encompassing the lands between the Cape of Rhosus (modern Hınzır Burnu) in the east and possibly the Melas River (modern Manavgat Çayı) in the west,[1] this description is ambiguous. One of the ambiguities about the geographic definition of *Cilicia* is its western border with *Pamphylia*. In the 1st c. CE. Pliny the Elder reported that the Melas River (known today as the Manavgat Çayı) was the boundary[2] while, in the 1st c. BCE, Strabo had already defined the city of *Korakesion* as the western border of Cilicia, which was thus located farther east of the Melas River.[3] Another problem with the boundaries of the region is the vague definition given by Strabo about the northern frontier of Cilicia. Based on Mitford's interpretation of Strabo's account, the region covered the Gulf of Issos, the northeastern lands up to the Cilician Gates (modern Gülek Boğazı), and the lands to the north of Seleukeia on the *Kalykadnos* up to the northern slopes of the Tauros Mountains. Determining the northern frontiers of the region is rather complicated since Strabo implied that *Cilicia* encompassed the Tauros Mountains; however, he did not specify how much it extended towards the Anatolian Plateau, where the provinces of *Pisidia* and *Lykaonia* are assumed to have been located (fig. 1).[4]

Divided by the Lamos River (Limonlu Deresi), *Cilicia* was (according to Strabo) composed of two regions: *Cilicia Pedias (Campestris)* and *Cilicia Tracheia (Aspera)*. *Cilicia Pedias* constituted the lands to the east of the river, whereas the name of *Cilicia Tracheia* referred to the western part of the region.[5] Modern scholars call the regions Smooth Cilicia and Rough Cilicia, respectively. Hereafter, in this thesis, they will be

[1] Mitford 1980, 1232-234.
[2] Plin. *HN*, 5.22.
[3] Str. *Geography* 14.4.2-3, 325; Magie 2017, 266. Magie accepts *Korakesion* as the western border of the region.
[4] For a detailed discussion on which cities were located to the north of the coastal strip, see Mitford 1980, 1232-234.
[5] Str. *Geography* 14.5.1-2, 327; 14.5.6-8, 339; Magie 2017, 2.

referred to by their modern names rather than by the Greek and Latin ones. The Late Antique Period brought several changes to the names and definitions of the two regions. The Diocletianic regulations in the late 3rd c. CE renamed Rough Cilicia *Isauria* and subdivided Smooth Cilicia into *Cilicia Prima* and *Cilicia Secunda* (see fig. 1).[6] Therefore, the names "Isauria" and "Rough Cilicia" will be used interchangeably throughout the Late Antique period of the region.

2.1.2 Topography, Environment, and Geographical Position

Cilicia was a topographically varied region, which embodied two very distinctive parts. The ancient terms used by the Greeks and Romans reflect the contrast between them, as *Tracheia* or *Aspera* means rugged and mountainous, whereas, *Pedias* or *Campestris* means smooth and flat. This geographic difference between the two areas was so noteworthy that Strabo described in detail how these two regions contrasted with each other.[7] Smooth Cilicia was agriculturally rich due to alluvial sediments and water sources. The remote positioning of the Tauros Mountains to the coast left a sizable area of plains for cultivation, and these arable lands were watered by three main rivers, namely Cydnos (Tarsus Stream), Saros (Seyhan), and Pyramos (Ceyhan).[8] Its location on the passages linking Northern Syria and Anatolia via the Cilician Gates was another asset of the region.

Rough Cilicia, on the other hand, had a limited area of lowlands that were readily arable because the Tauros range is situated at or very near the coast, leaving only a very narrow strip of arable land. Also, unlike Smooth Cilicia, it lacks water sources. Rough Cilicia includes two main rivers, the *Kalykadnos* (Göksu) and the Lamos (Limonlu). The deep canyons formed by the rivers reveal how the limestone stratigraphy was sharply cut, creating fertile lands around the riverbed.[9] Other streams such as the Yenibahçe, Paşa, and Şeytanderesi (alternatively named as Verev and Karyağdı) also flow through deep ravines, which constituted the main arteries of communication between the coastal strip and the hinterland.[10] The most prevalent soil type in the study region is *terra rosa,* which is a type of soil with high iron content and good drainage capacity.[11] Typically encountered in the Mediterranean region, *terra rosa* is favorable for maquis and

[6] Mitford 1980, 1250; Marek 2016, 393-94. See also, Varinlioğlu 2008, 19-20.
[7] Str. *Geography* 14.5.1-2, 327.
[8] Lenski 1999, 415.
[9] Magie 2017, 266. See also Jones 1998, 192; Aydınoğlu 2007, 105; Topuz 2014, 23.
[10] Aydınoğlu 1998, 141-42.
[11] Topuz 2014, 29.

vineyards.[12] Alluvial soils, on the other hand, cover a very limited area, particularly the river mouths of four rivers (Yenibahçe, Şeytanderesi, Paşa, and Limonlu) around the districts of Atakent, Kızkalesi, Ayaş, and Limonlu.[13]

Although Rough Cilicia suffered from its topographical features limiting easy access and cultivation, it had several natural assets. First of all, the region was known for its cedar forests, providing timber resources that were ideal for ship construction and buildings.[14] The forest cover of the region, which was the main source of fuel, was also utilized for other forest products, such as tar and pitch.[15] Secondly, the mountainous zones of the region were quite rich in limestone suitable for construction.[16] Thus, the abundant limestone resources in Rough Cilicia led to the emergence of a stone quarrying industry which greatly impacted the local architecture. As a consequence of this, the local people were renowned for their stone building skills and were even hired for interregional construction projects, especially in the 5th and 6th c. CE.[17] Besides, despite its constraints in agriculture, the archaeological finds of presses and related equipment suggest that Rough Cilicia could produce a considerable amount of wine and olive oil,[18] and its inhabitants even marketed and exported these products to other regions.[19] Furthermore, the landscape and climate of the highlands in the region were ideal for pastoral activities as the textual sources, archaeology, and the epigraphic evidence reveal. As a result of intense husbandry, Rough Cilicia, in particular its eastern part, traded animals such as oxen, mules, donkeys, and camels, and produced animal-related products such as clothes, sacks, and military equipment made by wool, goat hair, and leather.[20]

The topographical features of Rough Cilicia also played a critical role in the urbanization and connectivity of the region. Since most of the cities had limited

[12] Hugget 2005, 246.
[13] Topuz 2014, 30-31, 57.
[14] Str. *Geography* 14.5.2-3, 331.
[15] Karlıoğlu et al. 2016, 110. For an extensive information on the ancient forest cover of western Rough Cilicia and its deforestation process, see Akkemik et al. 2012.
[16] On the geomorphological analysis of the ancient city of Olba, see Erten and Özyıldırım 2007, 52-53. Studies have shown that the slopes of the valleys around the city was very rich in limestone with a thick layer, which created optimal conditions for the building of monolithic structures, such as rock-graves and massive *sarcophagi*. The upper parts of the slopes, on the other hand, had thin layered limestone which was prone to breaking so they suited better for manufacture of ashlars to be used in the buildings such as churches, houses, and towers.
[17] Varinlioğlu 2008, 83-84. For an extensive study on Isaurian masonry, see Varinlioğlu 2008, 82-125; on the reputation of Isaurian builders, see Zanini 2007, 394-401.
[18] For an overview of wine and olive oil production in the region, see Chapter 4.
[19] Varinlioğlu 2007, 304-8; Aydınoğlu 2010b, 253-59.
[20] For the literary sources mentioning the use of *cilicium*, a special product of goat hair that was produced in the region, see Columella 1.26 and Procopius 2.26. On the general discussion of the animal-related production in Rough Cilicia and the epigraphic evidence on this subject, see Varinlioğlu 2008, 130-32.

hinterlands to feed their population, the region did not develop urban centers to the same extent as Smooth Cilicia. The cities remained relatively small compared to the great centers of Smooth Cilicia, such as Tarsos and Anazarbos.[21] Surrounded by the Tauros Mountains in the north and the Mediterranean in the south, Rough Cilicia was rather isolated. The mountains that range parallel to the sea were passable only from the Sertavul Pass situated in the Central Tauros.[22] Although this isolation functioned as a natural defense, the geographical position of Rough Cilicia limited the terrestrial connectivity between the Mediterranean coast and the Anatolian Plateau to a certain extent. Thus, the connectivity provided by the maritime facilities was crucial to the integration of the region into interregional networks.

Except for its westernmost part, Rough Cilicia had an advantageous coastline that was suitable for sea trade. Based on his survey project in the 1990s, Vann divided the coast of Rough Cilicia into three zones: a western, central, and eastern one (fig. 2). According to his subdivision based on the position of the Tauros Mountains against the coastline, the western zone includes the lands between Korakesion-Anemorion, which have no deep bays that could provide shelter for ships. The second section contains the coastline between Anemorion and Seleukeia on the *Kalykadnos*, where many deep bays are located. The last zone, starting from Seleukeia and extending to Zephyrion (modern Mersin) in the east, is rich in natural harbors.[23] On the other hand, the location of Rough Cilicia in the Eastern Mediterranean brought its dynamics to the maritime network. Its proximity to Cyprus and the Levant was the main advantage that its geography offered.[24]

2.2 Historical Background

In the ancient texts, the Cilician cities are said to have been founded by Greek heroes after the fall of Troy, which implies that the people of the region were Greek in origin. However, these foundation myths have been interpreted as efforts of the urban elites to invent a Hellenistic ancestry. One of them concerns Olba, which was believed to have been founded by Ajax, son of the Greek hero Teukros.[25] Jones suggested that the Greek

[21] Varinlioğlu 2007, 290.
[22] Aydınoğlu 1998, 139.
[23] Vann 1997a, 307-8.
[24] Varinlioğlu 2007, 293.
[25] Mackay 1968, 71; Jones 1998, 192-93, 198; see also Magie 2017, 269. Magie states that the names of the priests who ruled over Olba before the late 3rd c. BCE were related to Tarku, who was an Anatolian deity to whom the temple was dedicated before Zeus, rather than the Greek heroes, Teukros or Ajax.

past of the cities in Cilicia was usually invented during the Hellenistic and Roman periods, probably with the Greek migration to the region that took place from the 8th c. BCE onwards. Even though the coastal settlements had been populated by the Greeks since then, the region maintained a strong indigenous culture as well.[26] A solid indication of the preservation of this culture is that the people of Rough Cilicia kept speaking their own language, Luwian, even in the 6th c. CE. The indigenous people inhabiting the highlands were living in tribes, such as the *Isauri*, the *Homonades*, the *Lalasses*, and the *Kennatae*, each of which occupied a specific geographical area in the mountains.[27]

Rough Cilicia appears in the ancient texts recording battles and conquests. Seleukeia on the *Kalykadnos* was captured in 715 BCE by the Neo-Assyrian king, Sargon II (721–705 BCE). The Babylonian king Nebuchadnezzar II (ca. 605–ca. 561 BCE) was also reported to have conquered Rough Cilicia in 592/591 BCE. The battle between Appuašu, the king of Rough Cilicia, which was known as Pirindu, and Neriglissar (559–556 BCE), the king of Babylonia in 557/556 BCE, was recorded as well. Having been semi-autonomously governed by the local kings under the Persians between 542 BCE-401 BCE, Rough Cilicia completely lost its autonomy and was ruled by the Persians between 401 BCE and 333 BCE.[28] The first systematic urban transformation in Cilicia started in the 3rd c. BCE when the region became a part of the Hellenistic world, especially with the foundation of the capital city Seleukeia on the *Kalykadnos* as a Greek *polis*. Yet it should be kept in mind that the interior areas of the region had to wait for the Roman Imperial Period to adapt their indigenous way of life.[29] While the inhabitants of the highlands maintained their native traits to a significant extent in epigraphy, art, and social organization until the end of antiquity, the coastal settlement became more adapted to the Roman lifestyle through urbanization.[30]

2.2.1 Hellenistic Period

Although Rough Cilicia must have become a part of Alexander the Great (336–323 BCE)'s empire during his expeditions in southern Asia Minor, the region is very seldomly

[26] Jones 1998, 192-98. For detailed information on the Greek tradition attested in the coastal cities of the region such as Kelenderis and Nagidos, see Magie 2017, 268.
[27] Lenski 1999, 415-16. On the Luwian inscriptions in the highlands during the Roman Period, see Elton 2000, 294.
[28] Mackay 1968, 72-74. For an overview of the pre-Hellenistic Period of the region, see Shaw 1990a, 203-217.
[29] Magie 2017, 269.
[30] Rauh et al. 2009, 39-40.

mentioned in the texts that were written about these campaigns. The ancient authors drew more attention to the events that took place in the reign of his Hellenistic successors.[31] One of the earliest references to Rough Cilicia, which was written in the 1st c. CE by Plutarch, described the 3rd c. BCE conflicts between Antigonos and his opponents. Plutarch reported that most of Asia Minor was under Antigonos' rule in the late 4th c. BCE, and that Cilicia was one of the territories over which he reigned. The region became a battleground between Antigonos and Alexander's other successors, especially the Ptolemies whom, upon their conquest of the coast of Cilicia in 315 BCE, Antigonos fought against in Aphrodisias and Mallos. For a brief time, Cilicia was annexed by Kassandros, but soon the Antigonid rule was restored in the region. After 296 BCE, the Seleucids took Cilicia and ruled it until the mid-2nd c. BCE.[32] The ongoing wars between the Seleucids and the Ptolemies in the Eastern Mediterranean affected Rough Cilicia as well as other regions.

During the 3rd c. BCE, Cilicia gained importance as both the Seleucids and the Ptolemies aimed to control the area. Control of this region became an issue between these two powers due to its strategic position. The geographical extent of the power struggles covered not only Smooth Cilicia but also Rough Cilicia because the Ptolemaic Empire planned to approach the former via the southern coast of Asia Minor. Another reason why Rough Cilicia was important to the Ptolemies was that it had timber resources that Egypt lacked. Besides, the region had a sizeable population of mercenaries that the Ptolemaic navy could recruit.[33] However, the Ptolemies managed to control only a limited part of the region, never taking hold of any places to the east of Anemorion.[34]

The desire of the Hellenistic kings to control the region resulted in the change of the urban landscape. Seleukos Nikator (305–281 BCE) was, if not the first, one of the earliest Hellenistic kings who exercised transformative power over the region, not only in Smooth Cilicia but also in Rough Cilicia, which was marked by the foundation of many cities in both regions.[35] The king even restructured the demographic framework of the region by settling the people of Holmoi (that is called Taşucu today) in Seleukeia on the *Kalykadnos,* which he founded possibly between 296–280 BCE.[36] As the archaeological

[31] For details of the struggle between the successors and the role of Rough Cilicia, see Mackay 1968, 76-78. On the situation of Asia Minor just after the Alexander's death, see Marek 2016, 180-99.
[32] Plut. *Dem*. 31-33, 48; See also Mackay 1968, 76-79 and Magie 2017, 273-74.
[33] Jones 1998, 198-99.
[34] Magie 2017, 278.
[35] Jones 1998, 199.
[36] Mackay 1968, 80; Magie 2017, 268.

evidence suggests, the use of stone in architecture was adopted in the region after the arrival of the Seleucids during the 2nd c. BCE.[37]

Compared to the external affairs of Rough Cilicia, its internal politics during the 3rd and the first half of the 2nd c. BCE are known less. However, the numismatic evidence sheds light on the autonomous status of the urban centers in the region. The coin finds of Rough Cilicia suggest that the power of the local autonomies diminished, as most of the cities in the region did not mint coins during the period mentioned above.[38] With Antiochos IV's (175-164 BCE) death, which led to civil wars in the kingdom, the power of the Seleucids drastically weakened, especially in the second half of the 2nd c. BCE.[39] The decline of the Seleucid sovereignty in the region enabled the local rulers to extend their span of autonomy, evidenced in the city coins showing that many cities minted their coinage.[40] In the meantime, the Tracheiotis,[41] the dynasty of high priests ruling from Olba, became more and more influential in the region until pirate groups took over the power in Rough Cilicia. In the early 1st c. BCE, the chiefs of these bandits, who wanted to rule over the Olban territory, suppressed the authority of the priests.[42]

Piracy in Rough Cilicia became prominent due to several reasons, among which the declining authority of the Seleucid Empire in the region was very important.[43] In 188 BCE, when the Treaty of Apamea was signed, the power of the Seleucids was limited in the region as their navy was not allowed to pass to the west beyond Seleukeia on the *Kalykadnos*.[44] Also, the diminishing Rhodian presence in the Mediterranean enabled the pirates to exercise their power in larger areas.[45] Rough Cilicia was especially convenient for piracy activities due to its rich timber resources and the rugged topography providing sheltered places for the pirates.[46] However, the eastern part of the region including

[37] Durugönül 1998a, 72; Erten et al. 2010, 274. Aydınoğlu argues that stone architecture in the region appears in the early 2nd c. BCE as known so far: see, Aydınoğlu and Mörel 2014, 526. In another publication, Aydınoğlu (2008, 424) states that the earliest stone structures were the towers which are assumed to have had both defence and agricultural uses. On these towers, see Durugönül 1995a.
[38] Jones 1998, 200.
[39] Mackay 1968, 87-88.
[40] Jones 1998, 201. During that time, Seleukeia on the *Kalykadnos*, Kelenderis, Korykos, Zephyrion, and Elaiussa Sebaste started to mint their own coinage.
[41] For a detailed discussion on the dynasty's origins, see Mackay 1968, 81-82.
[42] Jones 1998, 202; Magie 2017, 269.
[43] Magie 2017, 281. The factors playing a role in the increase of piracy in Rough Cilicia are the presence of projecting headlands on the coast with large visual range, closely located islands providing shelter for pirate ships to ambush the passing vessels, a hinterland that was rich in farms to "tax", and the cedar forests that were perfect for ship construction.
[44] Mackay 1968, 87.
[45] Mackay 1968, 94. She gives the date of 167 BCE as the time when the Rhodian control over the Mediterranean Sea started to shrink. See also Magie 2017, 282.
[46] Jones 1998, 202; on the piracy in Rough Cilicia, see Shaw 1990a; 1990b; De Souza 2002, 97-148; 2008.

Seleukeia on the *Kalykadnos* seems not to have been involved in the piracy activities as the coastline from Anemorion up to here had many indentations, the part to the east of it became flatter, which would have left the pirates defenseless.[47]

The acceleration of piratical activities[48] in the Eastern Mediterranean during the second half of the 2nd c. BCE prompted the Romans to intervene and to form a separate military unit for Cilicia. Yet, they took no action to seize the region until 67 BCE when Pompey waged a war against the pirates of Cilicia and defeated them.[49] After his victory, combined with Smooth Cilicia the region became a part of the newly formed province of Cilicia,[50] where Pompey repopulated several cities with the pirates who lost the war against him. Another deed of Pompey in Rough Cilicia was the restoration of Soloi, which he renamed Pompeiopolis after freeing it from the Armenian King Tigranes' hegemony in 65 BCE.[51] After Pompey's intervention, the region appears again in texts describing Mark Antony's rule in the East.[52] In line with Mark Antony's administrative rearrangements, local authorities were assigned to rule Rough Cilicia.[53] Just before the civil war between Mark Antony and Octavian, the western part of Rough Cilicia was

[47] Mackay 1968, 89. The author suggests that the Olban region was under the control of priests, not of pirates. In addition, Strabo implies that Seleukeia on the *Kalykadnos* was not a pirate stronghold, unlike Pamphylia and the rest of Cilicia, and states that Korakesion was the main base of the piracy. See Str. *Geography* 14.5.4. 670c.

[48] On the piracy and banditry issue in the region, see Shaw 1990a and Lenski 1999.

[49] Jones 1998, 202; De Souza 2008, 82-84. For an overview of the actions taken by the Romans on the Cilician coast before Pompey, see De Souza 2008, 78-79, 81; Magie 2017, 290-92. Magie notes that although Servilius waged a successful campaign on the southern coast of Asia Minor in 74 BCE, his operations were ineffective in suppressing the pirates of the region, leading to a need for more decisive military actions that would be undertaken by Pompey.

[50] Mackay 1968, 97. See also Magie 2017, 301, 375-76, 383. After Pompey's successful campaigns in the East, a new province composed of the already existing province of Pamphylia-Isauria and the newly annexed regions, Rough Cilicia and Smooth Cilicia, was formed. Magie suggests that possibly Lykaonia was also attached to this province.

[51] Str. *Geography* 14.5.6-8, 339; Jones 1998, 203; Magie 2017, 299-301. Magie notes that the refoundation of Soloi and its new population composed of the former pirates was a crucial step to secure the Roman authority in the region.

[52] Until the battle of Actium (31 BCE), the province underwent several changes and became the largest province in the East for a period. First, Cyprus was united with *Cilicia* in 59 BCE. Two years later when Lentulus became the provincial governor, Phrygia and Kibyratis were added to the Cilicia region. However, in 49 BCE the Phrygian districts, and later on, the Pisidian lands were detached from *Cilicia*. Cyprus returned to Egypt, which was under Kleopatra's rule, and Smooth Cilicia was united with Syria in 44 BCE. For further information on how the province was extended and rearranged, see Magie 2017, 383-84, 402, 418.

[53] Mackay 1968, 98; Marek 2016, 317; Magie 2017, 436. For a detailed discussion of the local noblemen with whom the Romans collaborated in the region, see Mitford 1980, 1241-43. He states that the Romans applied indirect rule in Rough Cilicia through the local authorities, which he describes as semi-independent. While Seleukeia on the *Kalykadnos* had a free status, the Olban region was ruled by a local dynast related to the Teukrid dynasty.

presumably given to Kleopatra as a gift by Mark Antony so that she could use the timber resources to build her fleet.[54]

After his absolute triumph over Antony and Kleopatra in the battle of Actium in 31 BCE, Octavian had to determine the status of Rough Cilicia. As the direct rule of the region was still beyond the scope of Roman power, Octavian gave the Teukrid dynasty of high priests the legitimacy to exercise its power in the territory of Olba.[55] The zone outside the Olban region was given to the Galatian King Amyntas (36–25 BCE). Following Amyntas' death, western Rough Cilicia became a part of the Galatian Kingdom, whereas, the east of it was granted to the Cappadocian King, Archelaos (36 BCE–17 CE).[56] In other words, the coastal cities situated to the east of Seleukeia on the *Kalykadnos* were included in Archelaos' kingdom, of which Elaiussa Sebaste had become the capital city.[57] In his account, Tacitus described how Archelaos overcame the revolts of the *Cietae*, the inhabitants of the highlands of the region, and reported that the king settled the rebels in Antiocheia on the *Kragos* and Iotape as a solution.[58] Eventually, in 38 CE eastern Rough Cilicia was given to Antiochos IV of Kommagene (38–72 CE) who reigned over the area until 72 CE. Ancient texts mention two kings who ruled the region after Antiochos IV: Alexander, Antiochos IV's son-in-law, and Polemo II who was the dethroned Pontic king.[59] However, their reigns seem to have lasted for a very short time since Vespasian (69–79 CE) intervened in the politics of Rough Cilicia very soon and changed the administrative arrangement of the region.[60]

2.2.2 Roman Imperial Period

Rough Cilicia was never under the direct rule of the Romans until 72 CE when the emperor Vespasian formed the province of *Cilicia*, which covered Rough Cilicia and Smooth Cilicia.[61] Although the autonomy of Rough Cilicia disappeared with the consolidation of Roman rule in the region during Vespasian's reign, the cities of Olba and Diokaisareia continued to mint their coins, on which certain symbols attributed to the

[54] Str. 14.5.2-3, 331; Mackay 1968, 99; M. Jones 1998, 209; Magie 2017, 434, 437. It must be noted that Seleukeia on the *Kalykadnos* was an exception among the cities of the region due to its free status. For a better understanding of Mark Antony's policy with the client kings in the East, see Marek 2016, 306-8.
[55] Jones 1998, 210.
[56] Magie 2017, 453; 475; Jones 1998, 210.
[57] Marek 2016, 327-28; Magie 2017, 475.
[58] Tacitus *Ann*. 6, 41; Mitford 1980, 1244.
[59] Jones 1998, 210; Magie 2017, 494, 548-49.
[60] Jones 1998, 210; Marek 2016, 339.
[61] Mackay 1968, 113-14; Magie 2017, 576.

Olban High Priests were depicted.[62] The borders of *Cilicia* changed once more during the reign of Antoninus Pius (138–161 CE) and extended to the north with the attachment of *Lykaonia* and *Isauria* that formerly belonged to the province of *Galatia*.[63]

During the Severan reign of the late 2nd c. CE, the relationship of Rough Cilicia with the Roman imperial authorities increased. Septimius Severus (193–211 CE) invested in the infrastructure of Rough Cilicia, while he and his dynasty were honored by its cities in turn.[64] Besides, the civil war among Severus, Niger, and Albinus left a mark on the urban landscape of Rough Cilicia, possibly changing the balance between the roles of Elaiussa Sebaste and Korykos in the region. Elaiussa Sebaste, a very attractive center since the 1st c. BC, fell from favor, whereas, other cities in the region, Korykos in particular, flourished at the end of the 2nd c. CE. Durukan suggested that the stagnation of Elaiussa Sebaste might have been since the city supported Niger in the civil war, for which it was punished by Septimius Severus upon his victory.[65] Furthermore, Severus visited the East in 197 CE after he triumphed over his rivals, to which the intensifying road constructions in the Olba region are assumed to have been related.[66]

In line with the general trend in Asia Minor during the late 3rd c. CE, Rough Cilicia saw a downturn in terms of prosperity as a consequence of the unsteadiness of imperial authority at the time.[67] One of the reasons why this region in particular underwent a decline is the Sassanian Persian attacks that began in 260 CE. The Persian troops, which advanced through the coast area and took the cities of Elaiussa Sebaste and Korykos, were eventually defeated by the Roman forces.[68] Furthermore, during the reign of Gallienus (253–268 CE), a Roman rebel named Trebellianus caused unrest in the region by declaring himself emperor of Rough Cilicia.[69] Lenski argues that the banditry in the region was suppressed by the Romans during the period between the mid-1st c. and the late 3rd c. CE. However, this relatively peaceful period ended due to the catastrophic

[62] Mackay 1968, 113-14. See also, Magie 2017, 576. During Vespasian's urbanization activities including constructing roads and enhancing the infrastructure of the cities in the provinces, Diokaisareia became a polis. For the identification of the coins, see Von Aulock SNG, no. 5546.
[63] Marek 2016, 347; Magie 2017, 660. The combination of three regions formed the three eparchies (*tres eparchiae*). For more details on the *tres eparchiae,* see Marek 2016, 417-18.
[64] Mitford 1980, 1249.
[65] Durukan et al. 2013, 347-70. For a detailed description of the battles between the three rivals, see Magie 2017, 667-74.
[66] Mackay 1968, 117.
[67] Mackay 1968, 120; Mitford 1980, 1250.
[68] Mackay 1968, 120-21. For a detailed information on how the Persian King Shapur (240-270 CE) proceeded into the Roman territories and was defeated at the end by Valerian's two officers, see Magie 2017, 708-9.
[69] Mitford 1980, 1250.

atmosphere resulted from the attacks of Persians and Goths, which led to the rise of the Isaurian warlords in the region.[70]

2.2.3 The Late Antique Period

During the late 3rd c. CE, Rough Cilicia officially started to be called Isauria with Diocletian's rearrangements of the eastern provinces.[71] The new province of Isauria, whose capital was Seleukeia on the *Kalykadnos*, fell in the Diocese of the Orient based on his new administrative system.[72] Brigandage remained an issue in the region during the Late Antique Period. The end of the 3rd c. CE saw several revolts in the region during the reign of emperors Gallienus (253–260 CE) and Probus (276–282 CE).[73] As a military measure taken against internal insecurity, three legions in total were stationed in Isauria, whereas, the provinces of Pamphylia, Pisidia, and Lykaonia had only one military unit.[74]

Isauria underwent another administrative change with Valens' command concerning the unification of the region with the province of Lykaonia in 370 CE.[75] Within the same century, Isaura became very prosperous, as evidenced by the newly built structures and the improvements made on the existing road infrastructure.[76] As wealth accumulated, the Isaurian rebellions got stronger and the local leaders organized larger raids on the coastal cities and neighboring regions.[77] The results of these raids are visible in the archaeological evidence, in the form of fortifications that were built around the settlements, such as Anemorion, St. Thekla, Eirenopolis, and Korasion.[78]

Nevertheless, Isauria continued to flourish during the 5th c. CE, as a consequence of the rather stable political and economic conditions of the Eastern Empire.[79] At the beginning of the century, extensive construction projects were undertaken in the region. In terms of scale, the largest one was the building and rebuilding of the aqueduct

[70] Lenski 1999, 455-56.
[71] Mitford 1980, 1250. Diocletian's reforms of the administrative units began in 293 CE, leading to a system of 12 dioceses under which the provinces took place. The province of *Isauria* encompassed the mountainous lands, reaching up to the northern slopes of the Tauros range. *Smooth Cilicia*, on the other hand, was divided into two: the eastern part became *Cilicia Prima*, while the western part was called *Cilicia Secunda.*
[72] Varinlioğlu 2008, 19.
[73] Mitford 1980, 1251.
[74] Mitford 1980, 1251.
[75] Varinlioğlu 2008, 19.
[76] Mackay 1968, 121.
[77] Lenski 1999, 454.
[78] Varinlioğlu 2008, 21.
[79] Wickham 2005, 30. The Western Empire, on the contrary, was unstable in the 5th c. due to barbarian attacks and several other factors such as internal instability.

connecting Korykos and Elaiussa Sebaste with the Lamos River.[80] On the other hand, the geographical extent of the Isaurian raids in the 5th c. CE was much larger than that of the 4th c. revolts, as the bandits could penetrate Cilicia, Syria, Pamphylia, Lykia, Kappadokia, Pontus, and even Cyprus.[81] Lenski emphasizes the differences in scale between the Isaurian violence before the mid-1st c. CE and the rebellions in the 4th and 5th c. CE. He argues that the later rebellions were much larger in scale and could only be controlled by imperial troops.[82]

The strong impact of the Isaurians during that time manifested itself in the late 5th c. when Zeno (474–491 CE), who was a native of Isauria, became the Byzantine emperor. The Isaurians' span of authority in both an imperial and regional context is assumed to have been greatly reduced after Zeno's death and the subsequent accession of Anastasius (491–518 CE).[83] Even though Anastasius' successful efforts to suppress the Isaurians in the army and court and to deport them to Thrace must have affected their power, both architectural and literary evidence suggests that the region continued to flourish and the Isaurians were involved in several construction projects in the late 5th and early 6th centuries.[84]

Justinian's reign (527–565 CE) brought economic growth to Isauria, which was the case for the Eastern Mediterranean in general.[85] Following the economic stability that Anastasius' financial reforms created, Justinian's empire grew in size, and it flourished in wealth.[86] However, a few decades later Isauria witnessed a series of enemy attacks as the Persians waged a war against the Byzantine Empire in 602 CE.[87] The war with Persia caused a huge cost to the Empire, especially the loss of a tremendous amount of territory including Syria, Palestine, and Egypt. The Persians even penetrated the Anatolian lands, reached the capital, and took part in the unsuccessful siege of Constantinople in 626 CE in alliance with the Avars. After the war ended in 628 CE, the Empire faced Arab invasions, this time losing its territories in the East and withdrawing to the north of the

[80] Mackay 1968, 121; Varinlioğlu 2008, 21. Varinlioğlu adds to the list the regions of Lykaonia, Armenia, Mesopotamia, and Palestine.
[81] Jones 1998, 214. For a detailed discussion of the Isaurian banditry in the Late Antique Period, see Lenski 1999, 439-46.
[82] Lenksi 1999, 440.
[83] Jones 1998, 214; Varinlioğlu 2008, 21. See also Shaw 1990b, 250-56.
[84] Varinlioğlu 2008, 22.
[85] Wickham 2005, 27. On Justinian's reign, see Haldon 1990, 16-31; Mitchell 2014, 408-34.
[86] Wickham 2005, 30.
[87] Haldon 1990, 35-40, 42-46; Wickham 2005, 27. During the war lasting almost 25 years, Syria and Egypt were lost to the Persians.

Tauros Mountains after its defeat at Yarmuk in 636 CE.[88] As a consequence, Isauria became a buffer or frontier zone, resisting the constant attacks of the Arabs towards the end of the 7th c. CE, until it was exposed to the new settlers from the Umayyad Khaliphate in the 8th c. CE.[89]

[88] Wickham 2005, 30. On the reign of Heraklios (610-641 CE), who was the emperor who fought against the Persians and then against the Arabs, see Haldon 1990, 41-53.
[89] Varinlioğlu 2008, 162-75; Ceylan 2009, 51. For a detailed discussion of the frontier between the Empire and the Islamic Khaliphate, see Eger 2015.

Chapter 3:
THE STATE OF RESEARCH ON ROMAN AND LATE ANTIQUE ROUGH CILICIA

Rough Cilicia remained archaeologically untouched until the early 19th century due to its specific local conditions including a harsh climate, a rugged topography, and a disadvantageous location remote from the main roads.[90] First, the region was described and documented by travelers who paid attention to the architectural remains, the ruins, and the inscriptions. During the 19th century, no systematic archaeological research was conducted. At the beginning of the 20th century, the first excavations were carried out at St. Thekla (Silifke) and Korykos by Herzfeld and Guyer.[91] Interest in Rough Cilicia continued to grow in the 1950s when surveys were undertaken to investigate ecclesiastical buildings in the region.[92] Until the 1990s, the most studied areas of archaeology in the region remained limited to church architecture and the coastal urban centers, while epigraphical studies were also carried out. Towards the end of the 1990s, the interior areas of Rough Cilicia started to draw the attention of archaeologists, which led to the investigation of rural settlements and defensive structures. The 2000s saw a growing interest in the rural archaeology of Rough Cilicia, and several different projects were undertaken in the hinterlands of the cities, which resulted in the discovery of many well-preserved settlements. Thus, the shift in the scholarly interest from the urban and documentary/epigraphical evidence to the rural context and material remains in archaeology can be easily observed in the history of research in Rough Cilicia.

For the last two decades at least, more systematic and material-based studies, in which more precise survey methods were employed, have been undertaken. It must be noted that, compared to other fields, maritime archaeology in Rough Cilicia has remained underdeveloped. The difficult underwater conditions off the coast and the harsh climate of the region are the main factors that make the region less attractive for the maritime archaeological projects. Besides, the region has drawn less attention in comparison to the Aegean coast of Turkey, resulting in a lack of high-budget archaeological projects along

[90] Borgia 2003, 41-44.
[91] Varinlioğlu 2008, 34. For the original publications of these expeditions, see Herzfeld and Guyer, 1928.
[92] For the surveys and excavations conducted at Alahan, see Gough 1955; 1962; 1972; Gough and Gough 1985; for the church plans, see Forsyth 1957 and 1961; for the ecclesiastical architecture, see Feld 1963/64; 1965.

the coast. Despite this, several underwater archaeology projects, such as Vann's coastal surveys, have been useful.

In the first section of this chapter, all the archaeological projects including surveys, excavations, and epigraphical studies that have been undertaken so far will be discussed along with their research interests. The surveys, which yielded the largest body of information on which this thesis is based, will be listed in chronological order without consideration of any thematic categorization. The excavations, on the other hand, will be categorized first into two groups: 1) excavations at coastal cities and 2) expeditions in the countryside. The projects in both categories will be chronologically presented. Finally, epigraphical studies will be mentioned in chronological order as well, regardless of their research subjects. The second section of this chapter discusses the methods employed in this thesis and the limitations that exist within the collection and interpretation of data.

3.1 Archaeological Research in Rough Cilicia

3.1.1 Surveys

Archaeological interest in Rough Cilicia began at the beginning of the 19th century with Cockerell[93] and Beaufort's[94] visits to the region. Their visits opened the area to more observant travelers, such as Irby and Mangles,[95] de Laborde,[96] Barker,[97] Langlois,[98] Von Tchihatcheff,[99] Davis,[100] and Bent,[101] who paid attention to ancient remains and cultural landscapes as well as to inscriptions. Although some of these travelers had other purposes than archaeological research during their visits, their early descriptions helped the later archaeologists reconstruct what has been destroyed since their travels as the ancient cities and monuments suffered great destruction due to increasing urbanization. Thus, their observations have constituted the basis of the research for the last century.[102]

During the first half of the 20th century, several scholars conducted several epigraphical studies, which will be later introduced. In the late 1960s, Theodora Stillwell

[93] Cockerell 1903, 171-99.
[94] Beaufort 1818.
[95] Irby and Mangles 1823.
[96] de Laborde 1838.
[97] Barker 1853.
[98] For his accounts on Soloi-Pompeiopolis, see Langlois 1853; on Seleukeia, see Langlois 1858.
[99] Tchihatcheff 1867.
[100] Davis 1879.
[101] For Eastern Cilicia, see Bent 1890a; for his accounts on Rough Cilicia, see Bent 1890b.
[102] Borgia 2003, 45-66. On a selection of personal notes belonging to the several earlier travelers, see Mackay 1968, 161-64.

Mackay[103] visited the Olba region, which was known as a "priest-kingdom" during the Hellenistic Period.[104] In 1968, she completed her Ph.D. dissertation titled "Olba in Rough Cilicia" which includes various aspects of the Olba region, such as the Olban symbols, the road network, and the buildings of forts and towers, covering a period from the Hellenistic Period to Late Antiquity. Moreover, her study brings together the descriptions and observations that earlier researchers made during their visits to the region as well as the epigraphic study of the Korykion Cave where a list of the priests who served in the Temple of Zeus at of Olba was inscribed.[105] Mackay and her husband Pierre A. Mackay prepared a publication in which they examined the inscriptions of eastern Rough Cilicia.[106]

During the late 1990s, Ahunbay and Saner conducted a survey project at St. Thekla, an important Late Antique pilgrimage site in Seleukeia, to understand the urban characteristics of the Late Antique and Early Medieval Periods of the region. The project included the documentation of the Northern Necropolis, the *temenos* walls of the Basilica of St. Thekla, and rock-cut tombs, which resulted in the formation of settlement plans of the site.[107]

Between 1996 and 2011, the *Rough Cilicia Survey Project* (RCSP), initiated by Blanton and Rauh, investigated western Rough Cilicia, focusing on both urban settlements and their hinterlands in a study area that is located between Iotape and Kharadros.[108] The surveys included various types, such as archaeological, architectural, and geographical surveys, and were conducted in a very systematic way, so that the data retrieved from the study region could be compared to those coming from other regions of the Mediterranean. In a very scientific manner, the project team produced a data set that attempted to answer several questions related to the arability of the land, the estimated population, and site categorization.[109] One of the main foci of the project was the ancient city of Lamos, which is situated midway between Selinos and Antiocheia on the *Kragos*,

[103] Mackay explored many places including Alahan, Mut, Silifke, Korykos, Elaiussa Sebaste, Kanytellis, Uzuncaburç, Olba, Mağara, Şahmurlu, Canbazlı, and Esenpınar. For the details of her visits during which she paid particular attention to the descriptions of landscapes, roads, tombs, watchtowers, and houses, see Mackay 1968, 229-42.
[104] Durugönül 1995b.
[105] Mackay 1968, 171-229; on the travelers' notes, see Mackay 1968, 161-64.
[106] Mackay and Mackay 1969.
[107] Ahunbay 1998; Ahunbay and Saner 1999; 2000.
[108] Townsend and Hoff 2009, 2. For other reports, see Hoff et al. 2006; Rauh 2000; 2005; 2012; Akkemik et al. 2008; Rauh and Wandsnider 2001; 2002; 2004. On the tomb architecture of the study region of the *RCSP*, see Townsend and Hoff 2004.
[109] Blanton 2000, 64.

nearly 9 km inland from the coast. From 1996 to 2004, Townsend and Hoff carried out an architectural survey in the city, which was composed of four main parts, including an agora, a colonnaded street, a cemetery, and an acropolis. While the majority of the structures date to the Early Roman Period, a small chapel and possible churches around the cemetery belong to Late Antiquity.[110] Besides, Townsend and Hoff, as well as the rest of the team, dealt with the study area within the framework of World-Systems theory and questioned the application of the conventional core-periphery model on western Rough Cilicia through the relationship between Roman traditions and the indigenous culture.[111] Since 2004, Michael Hoff and Rhys Townsend have been leading another archaeological project, *The Antiochia ad Cragum Archaeological Research Project* (ACARP), in western Rough Cilicia, together with Ece Erdoğmuş and Birol Can. Having undertaken both surveys and excavations, the *ACARP* aims to investigate the urban history of Antiocheia on the *Kragos* by restoring the buildings, the Northeast Temple in particular.[112]

The inland of Rough Cilicia also became the subject of archaeological expeditions in the early 2000s. *The Göksu Archaeological Project*, which was carried out by Hugh Elton between 2002 and 2006, surveyed the lands between Mut (Klaudiopolis) and Karaman (Laranda).[113] Being one of the earliest systematic research projects and the most extensive studies that have been conducted in this mountainous part of Rough Cilicia, it aimed to investigate the Göksu Valley holistically, dealing with various topics such as the diachronic change in settlement patterns, standardized analyses of surface finds, archaeological mapping of sites, road infrastructure, economic dynamics, and environmental studies.[114] Alahan, where a late 5th-early 6th c. CE church complex survives, was one of the foci of the expeditions.[115] During the surveys on the cemetery of the Alahan Church, almost 100 tombs were documented.[116]

[110] Townsend and Hoff 2009, 14.
[111] Rauh et al. 2009; Townsend and Hoff 2009, 3, 15-16. For a detailed study of the tombs at Lamos, see Townsend and Hoff 2004, 254-65.
[112] Hoff et. al. 2008; 2009; 2015a.
[113] For the survey reports, see Elton 2005a; 2007. For an overview of the project, see Varinlioğlu 2008, 34-35.
[114] On the geomorphology of the valley, see Doyle et al. 2010; on the communication routes of the valley, see Newhard et al. 2008. In addition to this multidisciplinary approach towards the study region, the project also employed a diachronic approach/perspective, including all the evidence related to its occupation history from the Early Bronze Age to the Ottoman Period.
[115] For an extensive debate on the construction of the Alahan Church, see Elton 2002. For the discussion of the urban characteristics of the Alahan region, see Elton et al. 2006.
[116] Elton 2005a, 332-35; Elton 2007, 240-42.

In the years 1995 and 1996, Serra Durugönül surveyed the Olba region, the project *İçel İli (Antik Dağlık Kilikya) Yüzey Araştırması*.[117] She also published several works on various aspects of the region, such as reliefs, Hellenistic architecture, Olban building techniques, and the acculturation process of the region within the framework of urbanism.[118] Ina Eichner wrote a study named *Dağlık Kilikia'daki Erken Bizans Konutları Yüzey Araştırması* on house architecture of the region in the years between 1998 and 2004.[119] Thus, the researchers focused mostly on the architecture of the region, leaving the *territorium* archaeologically understudied. However, in 2001, Emel Erten started an archaeological project in the ancient city of Olba (Uğuralanı), which continued until 2009. Erten and her team documented many structures including a *nymphaeum* and a 2nd c. CE aqueduct, a theater, many cisterns, *necropoleis*, and houses. The surface remains, such as roof tiles, window glass, and *opus sectile* pieces, suggested that the residents of the city had high living standards.[120]

The administrative and religious center of the Olba *territorium*, Diokaisareia (Uzuncaburç), which was connected to Olba (Uğuralanı) via a paved road, was researched by Detlev Wannagat in the years between 2001 and 2006.[121] The main focus of the project was to reconstruct the occupation history of the settlement, to document the buildings and to better understand their construction phases. Throughout almost all seasons, Wannagat and his team studied the Zeus Olbios Temple in great detail, revealing its different parts, such as the *temenos* and altar, construction techniques, and its transformation into an Early Byzantine basilica. In addition to the temple, the project focused on the topographical plan of the settlement, other buildings such as Tychaion and the Great Tower, the recording of the necropolis, the analysis of surface finds, and the production facilities in the adjacent fields of the settlement.[122]

Between 2002 and 2007, the hinterland of Seleukeia on the *Kalykadnos* was investigated by Günder Varinlioğlu, who undertook an extensive architectural survey

[117] Durugönül 1998c and 1996.
[118] On reliefs, see Durugönül 2005; Durugönül and Ozaner 1993; on the settlement patterns and the masonry techniques, see Durugönül 1998c; on the relationship between the towers and the settlements, see Durugönül 1998b; on the acculturation process of the region, see Durugönül 1998a; on the grave statues from the region, see Durugönül 2003. For an extensive discussion on the political nature of Olba, see Durugönül 1995b.
[119] Eichner 1999; 2000; 2001; 2004a; 2004b; 2005.
[120] Erten 2002; 2003; 2004a; 2004b; 2005; Erten and Özyıldırım 2006; 2007; 2008; Erten et al. 2009 and 2010. On the graves, see Akçay 2008b. For more information on the Olban masonry, see Akçay 2008a.
[121] Wannagat 2002; 2006; Wannagat et al. 2004; 2005; 2007.
[122] On the agricultural structures, see Wannagat et al. 2007, 78-80. For the documentation of the Tychaion, see Wannagat et al. 2005, 4-5. For details of 'Great tower' and the surface finds, see Wannagat et al. 2007.

project. The study area of her project covered the deep valleys between the *Kalykadnos* River in the west and the Yenibahçe River in the east.[123] Her team mapped and documented two large villages, Işıkkale and Karakabaklı. These villages differ from other settlements due to their high-quality masonry and monumental basilicas. Since the masonry techniques and settlement plans of Karakabaklı and Işıkkale suggest that two settlements had a common building program, Varinlioğlu argued that these two villages might have had administrative and social ties. As in the other settlements in the region, production equipment including presses and threshing floors were identified in Karakabaklı and Işıkkale.[124] Since these two villages are very well-preserved and show some urban characteristics that are different from other rural settlements in the region, Işıkkale and Karakabaklı appear to be crucially important for understanding the settlement patterns of the Late Antique Anatolian countryside.

Between 2004 and 2009, Serra Durugönül conducted a survey project called *Korykos (Kızkalesi) Yüzey Araştırması* to investigate the ancient city of Korykos, its surroundings, and its hinterland. The survey in the city yielded the detailed documentation of the Roman Temple which was converted into a Byzantine Church, and that of the Colonnaded Street as well as the mapping out of five churches.[125] Another focus of the project was the investigation of the shoreline, where rock-cut structures are located.[126] To the north of the city, the survey team documented a Byzantine fortification wall that runs towards the western Harbor.[127] The Korykos Necropolis, situated to the north of the city, was investigated, revealing monumental tombs, rock graves, *sarcophagi* and tombs of the *chamosorium* type (sunken tombs).[128] The team also studied the so-called "sacred road", along which four churches were located within the city. A *tetrapylon*, which was believed to have functioned as a monumental entrance to the pilgrimage area, was also documented.[129] Besides these investigations, during the 2010 campaign, the water supply system of the city was studied and the aqueducts carrying the water from the Lamos River to the city were investigated.[130] Also, the project yielded extensive results in the hinterland of Korykos by discovering and revisiting many rural settlements dating from

[123] Varinlioğlu 2008, 291-92. For the report, see Varinlioğlu 2010.
[124] Varinlioğlu 2010, 202-4, 206-7.
[125] Durugönül et al. 2005; Durugönül and Durukan 2006; Durugönül et al. 2007. On the Colonnaded Street, see Aşkın 2012.
[126] Durugönül et al. 2005; Durugönül and Durukan 2006; Durugönül et al. 2007.
[127] Durugönül et al. 2008, 85-86.
[128] Durugönül et al. 2010, 115-16.
[129] Durugönül et al. 2010, 116-17.
[130] Durugönül et al. 2010, 117-18; for a detailed study of the water supply system, see Özbay 2001.

the Hellenistic to the Medieval Periods in the neighborhoods of Kızkalesi, Hüseyinler Village, Akkum, Paşa Deresi Valley, Şeytanderesi Valley, Narlıkuyu, Hasanaliler Village, and Susanoğlu.[131] The most remarkable Late Antique settlements documented during the surveys were Tol,[132] Demirciören,[133] a settlement in the neighborhood of Çoku,[134] and Kızlarhamamı.[135]

Burcu Ceylan's BAP (Bilimsel Araştırma Projesi) *Mersin İli Silifke İlçesi Kanytellis Ören Yeri Yüzey Araştırması* was conducted in 2006 only for one season. The survey in the area with many well-preserved rural settlements located between *Kalykadnos* (Göksu) and Lamos (Limonçay) indicated that the region engaged in olive oil and wine production and trade as the distribution of Late Roman *amphora* remains have shown. As Ceylan claimed, these villages with their production installations, churches, and tombs are representative of the Late Antique settlement pattern of Rough Cilicia. As one of the largest settlements of the region, Kanytellis became the subject of archaeological investigations as well. Except for an Imperial Roman necropolis, Ceylan documented mostly Late Antique structures in the village, such as houses, churches, open public spaces, cisterns, and streets. The significant number of agricultural installations, such as presses, and their large dimensions point to a surplus economy based on olive oil or wine production rather than to a self-sufficient economy.[136]

Remains belonging to Late Antique farms in the region have been identified as well. Ümit Aydınoğlu has been investigating the rural economy of Rough Cilicia since 1997.[137] During his surveys on the urbanism and agricultural organization of the Olba region, which took place between 2004 and 2017, Ümit Aydınoğlu documented numerous farms and farmsteads in the districts of Erdemli and Silifke. With all the data retrieved from the surveys, he made a typology of farm structures and drew some characteristics peculiar to the region. Furthermore, the survey team encountered abundant evidence for olive oil and wine production equipment, such as levers, screw presses, and basins, suggesting an intense commercial production in this region.[138] One of the main foci of the project was

[131] Durugönül et al. 2005; Durugönül and Durukan 2006; Durugönül et al. 2007; Durugönül et al 2008; Durugönül et al 2009; Durugönül et al. 2010.
[132] Durugönül and Durukan 2006, 19-20.
[133] Durugönül et al 2007, 122.
[134] Durugönül et al 2008, 91; Durugönül et al 2009, 290.
[135] Durugönül et al 2009, 291.
[136] Ceylan 2009a, 49-51; Ceylan 2009b. For the survey report, see also Ceylan 2007.
[137] Aydınoğlu 1999.
[138] Aydınoğlu 2010b, 243. For the survey reports, see Aydınoğlu 2007; 2008; 2009b; 2010a; 2012a; 2013a; Aydınoğlu and Mörel 2014; 2015a; 2016; 2017; Aydınoğlu et al. 2018.

to shed light on the close relationship between the agricultural architecture including farms, *villae rusticae*, and workshops and the settlements, based on the assumption that the regional settlement pattern and architectural forms must have been affected by the agricultural economy.[139] After these surveys, Aydınoğlu also undertook projects at different rural settlements in the territory of Olba, including Karakabaklı, Işıkkale, Özköy, Çatıören, Öküzlü, Kanytellis, Tapureli, Paslı, and Akkale. Currently, he is leading a project in Diokaisareia, with the title "The Archaeometallurgy, Restoration, and Conservation Research of Uzuncaburç (Diokaisareia)."[140]

Hamdi Şahin has been directing a research project called *Dağlık Kilikia Yerleşim Tarihi ve Epigrafya Araştırmaları* since 2007.[141] The main goals of the project are to investigate the relationship between rural settlements of the farm-village type of to each other and to the ancient cities and to establish the settlement history of Rough Cilicia. As part of the further documentation of the region, the team has been recording the ancient road remains and milestones located between the settlements as well.[142] The team has examined eastern Rough Cilicia, documenting many rural settlements, such as Adamkayalar, Kanytellis, Korykion Antron, and Çatıören.[143] Surveys have been carried out in western Rough Cilicia as well, especially in the Anamur district. The ancient cities of Titiopolis and Arsinoe and the port city of Nagidos were documented during the 2016 and 2017 campaigns.[144] In the meantime, Aşkım Özdizbay has been undertaking his TÜBİTAK project *Roma İmparatorluk Dönemi'nde Dağlık Kilikia Demografisi* together with Şahin's research since 2015.[145]

The earliest study of the harbors along the coast of Cilicia belongs to Captain Beaufort, a British naval officer charged with mapping and surveying the southern coasts of Anatolia between 1811 and 1812, paying special attention to the harbors of Soli-Pompeiopolis and Korykos.[146] Since then, the harbor facilities of Cilicia remained

[139] Aydınoğlu 2007, 106.
[140] On the rural housing of Rough Cilicia, see Aydınoğlu 2017b; on Karakabaklı, see Aydınoğlu and Çakmak 2011; for Işıkkale, see Aydınoğlu 2017a; for the settlement of Paslı, see Aydınoğlu 2013b; for the graves of Kanytellis, see Aydınoğlu 2012b; for the olive oil production here, see Aydınoğlu et al. 2015. On the agricultural production in the region, see Aydınoğlu and Alkaç 2008; Aydınoğlu 2009a. For Özköy, see Mörel 2014; for Çatıören, see Mörel 2017a; for Öküzlü, see Mimaroğlu and Aydınoğlu, 2017; for Akkale, see Mörel 2017b.
[141] For the survey reports, see Şahin et al. 2010; 2011; 2018; Şahin and Özdizbay 2014; 2016; 2017; Şahin 2008; 2009; 2012; 2013.
[142] Şahin 2008, 437.
[143] Özdizbay and Dağlı-Dinçer 2016.
[144] Özdizbay and Dağlı-Dinçer 2016; 2018; Özdizbay 2017; Şahin and Özdizbay 2017.
[145] Özdizbay and Dağlı-Dinçer 2016, 196.
[146] Beaufort 1818. For an overview of his studies, see Borgia 2003, 43.

relatively unstudied. Between 1991 and 1995, Robert L. Vann conducted a survey project during which he revealed three geographical zones on the coastline that had an impact on the development of the urban areas and the formation of harbors in Rough Cilicia. Based on their locations, Vann also categorized the harbors into three types: natural harbors, harbors on rivers, and artificial harbors.[147] He examined several ports, including Selinos-Trajanopolis, Antiocheia on the *Kragos,* Aphrodisias, Korykos, Elaiussa Sebaste, Soloi-Pompeiopolis, Seleukeia on the *Kalykadnos*, Korakesion, and Iotape.[148] In the light of the drawings and plans that Beaufort made in the early 19th century,[149] the team documented what had survived of the artificial harbors of Soloi-Pompeiopolis and Korykos.[150]

In 1994, a team from ODTÜ Sualtı Araştırmaları Topluluğu (SAT) surveyed the coast located between Anamur and Gazipaşa under the project *Kilikya Kıyıları Sualtı Arkeolojik Yüzey Araştırmaları,* which has been undertaken since 1992. On the shore of Anemorion, architectural fragments possibly belonging to the ancient city, and stone and metal anchors were found. The team also surveyed the coast of Antiocheia on the *Kragos*, revealing anchor parts and *amphora* fragments at Çıpçıklıkaya, which suggests that this site might have been a mooring place for vessels.[151]

In western Rough Cilicia, another underwater survey team was established as part of the RCSP project by Cheryl Ward in 2003. During the 2004 season, the team surveyed the coast located between Iotape and Kalın Bay, documenting the remains of possible harbors and the anchorages located off Antiocheia on the *Kragos* and Iotape.[152]

The maritime studies in Rough Cilicia included the islands as well. While the SAT team from ODTÜ continued a series of surveys in Aydıncık between 1996 and 2001, the studies concentrated on the Yılanlı Island from 1998 onwards. Later in 2002, this project became a part of that Kelenderis archaeology project directed by Levent Zoroğlu.[153] In 2010 Günder Varinlioğlu started the Boğsak Archaeological Survey Project on Boğsak Island, a well-preserved settlement occupied during the period between the 4th and 9th centuries CE, nearby the Boğsak Bay located between two peninsulas, Ovacık and Taşucu, on the southern coast of Rough Cilicia.[154] The Boğsak region plays an important

[147] Vann 1997a, 307-8, 317-19.
[148] Vann 1993; for a detailed study of Korykos, see Vann 1997b.
[149] Beaufort 1818.
[150] Vann 1997b, 259-65.
[151] Türe et al. 1995.
[152] Rauh 2005, 226. See also Ward 2005.
[153] Evrin et al. 2002. On the harbor and mooring places of Kelenderis, see Zoroğlu 2015a.
[154] For the survey reports, see Varinlioğlu 2011a; 2013; 2014; 2016; 2017a and 2018; see also Varinlioğlu 2012.

role in the settlement history of Rough Cilicia due to its position between two harbors, Palaiai in the west and Holmoi in the east as well as its proximity to Seleukeia on the *Kalykadnos*. This was also the case with the Boğsak Island, which is situated only 300 m off the shore. The survey project aims to better understand the role of the settlement in a wider context, concerning both the mainland and the maritime network.[155] Thus, various aspects of the island need to be studied through the preparation of settlement maps, the documentation of building remains, surface finds, and maritime facilities. However, the study region is not limited to the island, but it encompasses the mainland as well as the other islands in this section of the region, namely Dana (Pityussa), Kösrelik, and Güvercin.[156] Since 2016, the team has been focusing particularly on Dana Island, which is located 2.5 km off the shore of the Taşucu Bay. Reaching its peak in the Late Antique Period, the island was initially an Early Roman settlement of a small size.[157] The University of Selçuk also undertook an archaeology project in 2015 and 2016, during which a large number of slipways were documented.[158] The investigations that have been carried out on these islands and in the Boğsak Bay have provided a more complete picture of Late Antique Rough Cilicia.

3.1.2 Excavations

Almost one century after the visits of the first travelers to the region, excavations in Rough Cilicia started in the early 20th century. Herzfeld and Guyer conducted the first archaeological excavations during the 1910s, undertaking expeditions at Saint Thekla and Korykos.[159] The earliest systematic excavation in the region, however, was directed by Elizabeth Alföldi-Rosenbaum in the coastal city of Anemorion, located at Cape Anamur, in 1966 and 1967.[160] Having taken over the archaeological project in the city in 1971, James Russell continued to excavate the site until 1987.[161] The Roman necropolis, dating to the period between the 1st and 4th c. CE was one of the foci of the expeditions

[155] Varinlioğlu 2011a, 172-73; 2017b; 2019.
[156] On the houses of Boğsak, see Varinlioğlu and Esmer 2017; on the investigations of the shore of the Boğsak Bay, see Harpster and Varinlioğlu 2015; on the coast of the Dana Island, see Jones (in press); on the archaeometric analyses of the stones and rocks that were used as building materials, see Eroğlu et al. 2017.
[157] Varinlioğlu et al. 2017; Varinlioğlu and Mine 2019.
[158] Öniz 2017; Denker and Öniz 2018.
[159] Herzfeld and Guyer 1928.
[160] For the excavation reports, see Smith 1969; Taylor and Alföldi 1969; Alföldi-Rosenbaum 1971; 1972; 1989.
[161] For the excavation reports, see Russell 1973; 1974a; 1975; 1980a; 1980b; 1983; 1988.

to/excavations on the site.[162] Beside simple tombs, other structures including chambers and courtyards were also discovered in the necropolis, which yielded architectural decorative elements, including mosaic pavements and painted wall plasters. Thus, most of the efforts during the campaigns were put on the preservation, restoration, and transportation of these elements, especially the mosaic floors.[163]

The second ancient city of Rough Cilicia to be excavated was Seleukeia on the *Kalykadnos*, which lies under the modern district of Silifke today. Between 1980 and 1984, Çelik Topçu undertook an excavation project in the center of the district, where the ancient remains were detected and mapped.[164] During the first season, the team undertook excavations at the Seleukeia Temple, which was originally a *pseudodipteros* temple of the 2nd c. CE but was later transformed into a church.[165] The second area that was excavated is a field located 500 m to the west of the temple. In a test sounding, a marble, *in situ* statue base with three inscribed faces was found.[166] In the southern part, the mosaic floor revealed a Greek poem praising the wife of Zenon, Patrikia Paulina and her renovations on the pavement and the building.[167]

Rescue excavations at Nagidos undertaken by the Anamur Museum in 1985 and 1986 revealed that the eastern and western slopes of the acropolis were *necropoleis*, evidenced by the discovery of funerary finds.[168] Between 1998 and 2002, Serra Durugönül directed archaeological excavations at Nagidos, starting from the acropolis, which was separated from the cemetery areas by a wall. One of the main targets of the excavation campaigns was to investigate the wall surrounding the city center. The wall was built in the 5th c. BCE and functioned until the end of the 3rd c. BCE when the settlement declined.[169] To the west of the hill where the acropolis is located, a possible harbor was detected. This inlet housing the Orman İşletmesi Tesisleri today is located immediately west of the modern harbor. Underwater archaeological expeditions were conducted in this inlet, and a column shaft, a lintel, and a wall were discovered. As the distance between this inlet and the acropolis is 4 km, the team suggested that this place would be a convenient

[162] Russell 1980b, 171.
[163] On the mosaic inscriptions, see Russell 1974b. On the general understanding of the city, see Russell 1980c and 2002.
[164] For the excavation reports, see Topçu 1981; 1982; 1984; and 1985.
[165] Topçu 1981, 49; 1982, 271-72; 1985, 509-10.
[166] Topçu 1982, 272-73.
[167] Topçu 1985, 510-11.
[168] Durugönül et al. 1999, 283.
[169] Durugönül et al. 1999, 284-88.

location for transferring exports/imports.[170] As Durugönül et al. 2001 reported, *amphorae*, dating to the Classical and Hellenistic Periods, revealed that Nagidos was an important port settlement on the routes between Egypt, Cyprus, and southern and western Asia Minor. The great number of stamped *amphorae* from Rhodes and Knidos suggested intense commercial activities with these places.[171] Similarly, coin assemblages showed the presence of strong relationships between Nagidos and other cities, including Miletos, Ephesos, Soloi, and Kelenderis.[172]

The excavations of Kelenderis, an ancient city located in Aydıncık of the Gülnar district of Mersin, has been directed by Levent Zoroğlu since 1987.[173] The eastern Necropolis, the western Necropolis, and the Harbor Bath were the foci of the expeditions at the beginning. While the *necropoleis* shed light on the funerary architecture,[174] population, and diet;[175] the Harbor Bath, which was dated to the 3rd c. CE, has given information about the land-based facilities of the Kelenderis Harbor.[176] The water resources of the city were investigated as well. In the town, a large cistern adapted from a grave was detected, probably in the 2nd c. CE when the city needed more water supply due to its growth. The main water source is situated to the east of the city, on the western slope of the Senir Mountain approximately 10 km away. The water channel running from this source to the Harbor Bath is believed to have been built in the 4th-5th c. CE specifically for this purpose.[177] Information on the harbor of the city has been gained through iconographic evidence as well. On a mosaic floor excavated in 1992, a scene depicting the harbor of Kelenderis and the adjacent buildings was found. Based on stylistic features, the mosaic was dated to the second half of the 5th c. and the first half of the 6th c. CE. As this includes a rare representation of Late Antique lateen-rigged ship from this period, the mosaic is a very important find.[178] As a port settlement that is situated in the central zone

[170] Durugönül et al. 2000, 273-74.
[171] Durugönül et al. 2001, 210. For more detailed information on the stamped *amphora* handles of the city, see Cankardeş-Şenol and Alkaç 2007. On the ceramic finds in general, see Durukan 2007.
[172] For the excavation reports, see Durugönül et al. 1999; 2000; 2001; Durugönül and Durukan 2002; 2003. On the interpretation of the excavation results, see also Durugönül 2007.
[173] On the excavations results, see Zoroğlu 1988; 1990; 1991; 1992; 1993; 1995; 1996; 1997; 1999a; 2011; 2015b, and 2016; Zoroğlu and Arslan 1998; Zoroğlu and Tekocak 2007; 2008; 2009; 2010; and 2012; Zoroğlu et al. 2000; 2003; 2004; 2005; 2017; 2018.
[174] For various tomb types found at Kelenderis, see Zoroğlu 2000.
[175] For element analysis on the diet at Kelenderis, see Çırak 2013.
[176] Zoroğlu 1988; 1990, and 1991.
[177] Tekocak 2008, 153.
[178] On the study of the mosaic, see Zoroğlu 1999b. For discussions on the mosaic depiction of the vessel, see also Pomey 2006; Friedman and Zoroğlu 2006.

of Rough Cilicia, Kelenderis had an important position between the coast and inland regions as well as in the Mediterranean maritime routes.[179]

Equini-Schneider, the first head of the Italian team from Sapienza University in Rome, started excavations in the ancient city of Elaiussa Sebaste in 1995.[180] The excavations, which have been continuously undertaken since then, have been led by Annalisa Polosa for the last five years.[181] The goals of the project have been to map the city with its various buildings, to excavate the main structures located in the public quarter and surroundings as well as on the island, to restore the exposed buildings,[182] to conduct paleo-anthropological studies on the human remains,[183] and to carry out geological and geophysical analyses[184] in different parts of the city including the northern and southern harbor basins.[185] The excavations concentrated on different sections of the city, on the mainland as well as on the island. The Roman agora where a three-aisled Byzantine church and a funerary complex were built later,[186] the theater area,[187] the aqueduct next to the theater,[188] the North-eastern Necropolis,[189] the temple area that is overlooking the Southern Port where a crypt and a Byzantine church (monastery complex?) were exposed in the west,[190] and the South-western Necropolis[191] covering the area between the temple area and the agora are the sections excavated on the mainland. The excavated parts of the island include the Christian basilica[192] located in the northern section, the front of the

[179] On the Roman *amphorae* found at Kelenderis, see Tekocak and Zoroğlu 2013.
[180] For the excavation reports, see Equini-Schneider 1996; 1997; 1998; 1999a; 2000; 2001; 2002, 2003b; 2004; 2005; 2006; 2007; 2008b; 2011; 2013; 2014, and 2015; Equini-Schneider and Borgia 2010; Polosa 2018. For detailed discussions of the research results, see Equini-Schneider 1999b; 2003a, and 2008a.
[181] Polosa 2018.
[182] For the restoration of the basilica on the island, see Equini-Schneider 1999; for that of the colonnaded portico along the ancient coastal road, see Equini-Schneider 2000; for that of the North-eastern Necropolis, see Equini-Schneider 2001; for that of the Byzantine aqueduct, see Equini-Schneider 2005.
[183] For detailed reports on the bones belonging to the tombs found in the agora, see Equini-Schneider, 2002; for the studies carried out on the bones from the tombs in the Basilica and in the North-eastern Necropolis, see Equini-Schneider 2003b.
[184] See Equini-Schneider 1997, for the gravity analysis which was conducted to locate the isthmus and the coastline of the mainland. On the geological surveys in the harbor basins, see Equini-Schneider 1998; 1999a; 2000; 2001; 2007; on the paleoenvironmental studies conducted in the Northern Harbor, see Melis et al. 2015. The results of the research on the coast between Korykos and Elaiussa Sebaste can be found in Equini-Schneider 2003b. For more detailed information on the seismological studies that were made in order to test the effects of earthquakes, see Equini-Schneider 2004 and 2006.
[185] For an overview of two shipwreck cargoes found in 2012, see Equini-Schneider 2013, 419; 2014, 566.
[186] For the agora area, see Equini-Schneider 1997; 1998a; 1999; 2000; 2001; 2003b; 2004; 2005, and 2006. See also Equini-Schneider 2010.
[187] Equini-Schneider 1996; 1997; 1998; 1999a; 2000; 2001.
[188] Equini-Schneider 2000 and 2005. On the aqueduct, see Murphy 2011.
[189] Equini-Schneider 2000; 2001; 2002, and 2003b.
[190] For the reports on the temple area, see Equini-Schneider 2004; 2005; 2006; 2011; Equini-Schneider and Borgia 2010.
[191] Equini-Schneider 2007.
[192] Equini-Schneider 1997; 1998, and 1999a.

Northern Port[193] where the baths are situated, a circular building in the southeastern sector,[194] the Domestic and Artisanal Quarter in the Southern Port area,[195] the 'Small Baths' complex in the northeast of the quarter,[196] and the Byzantine Palace.[197]

Soloi-Pompeiopolis was excavated by Remzi Yağcı, in the years between 1999 and 2008. Located in Viranşehir, the city is very near to the border between Rough Cilicia and Smooth Cilicia.[198] The site is very well known for its large harbor with structures built from hydraulic concrete, which was invented by the Romans as early as the late 3rd c. BCE.[199] During the excavations, a north-south oriented colonnaded street was revealed in the city. Known as the widest street of the region, the colonnaded street, which is 450 m long and 14.5 m wide, originally had 200 columns of the Corinthian order, forming porticoes that were constructed during Hadrian's reign; only 42 of them survive today. The shops were located on both sides of the street. The excavations have revealed that the shops, which date back to the 3rd c. BCE, were intensively used during the Roman Imperial Period between the 1st and 3rd c. CE.[200] Besides, the expeditions focused on the Soloi Höyük with a Roman bath that was built during the Early Severan Period,[201] and a Late Roman villa[202] in the close vicinity of the city center. The studies have shown that during Late Antiquity, the grandeur of the street diminished as the harbor started to lose its importance.[203]

Not only the coastal cities but also the inland settlements have been subject to archaeological excavations. Emmanuel Laroche started an excavation project in Meydancık Kalesi, which was a rural settlement located 9 km south of Gülnar. During the excavations on the site, which were carried out between 1977 and 1989,[204] a well-preserved building, which contained a hoard of coins, was exposed. The building seems

[193] Equini-Schneider 2001; 2002; 2003b; 2008b, and 2011; Equini-Schneider and Borgia 2010.
[194] Equini-Schneider 2001; 2002; 2003b; 2004, and 2005.
[195] Equini-Schneider 2008b; 2014, and 2015; Equini-Schneider and Borgia 2010. On the houses and *amphorae* in this quarter, see Iaocomi 2013. For a better understanding of the ceramic production in the city, see also Ferrazzoli and Ricci 2009.
[196] Equini-Schneider 2014 and 2015.
[197] Equini-Schneider 2006; 2007; 2008b, and 2011; Equini-Schneider and Borgia 2010.
[198] For the excavation reports, see Yağcı 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2015; 2016; Yağcı and Kaya 2008; 2009; 2011; 2012; 2013; Yağcı and Yiğitpaşa 2017; 2018. For a detailed interpretation of the excavation results, see Yıldırım 2017. For the statues exposed during the expeditions, see Tulunay 2005.
[199] Brandon et al. 2010b, 195. See also Stanislao et al. 2011.
[200] Yağcı 2011.
[201] Yağcı and Yiğitpaşa 2018, 267-69; see also Yağcı and Yiğitpaşa 2017.
[202] Yağcı 2016.
[203] Brandon et al. 2010a and 2010b. On the LR1 workshop at Soloi-Pompeiopolis, see Autret et al. 2010.
[204] For the excavation results, see Davesne 1981; 1987; 1988; 1989; 1990.

to have been built in the late 4th c. BCE and abandoned in the late 3rd c. BCE when the hoard was buried in the building. The hoard, which was composed of 17,000 drachms, the equivalent of 70 kg silver, dates to the period between Alexander the Great and Seleukos II, suggesting that it was buried during the time between 225 and 220 BCE. What was striking about this hoard was the abundance of Ptolemaic coins, which could indicate Ptolemaic sovereignty over Rough Cilicia at that time.[205]

Kilise Tepe, another rural settlement that was excavated in Rough Cilicia during the years between 1994-1997 and 2007-2012, is a mound that was first inhabited in the Early Bronze Age and abandoned in the 13th century BCE.[206] The site was first excavated by J. N. Postgate and then the research was continued by M. Jackson.[207] As the project has shown, the Late Antique phase of the mound is very well-preserved due to the absence of any occupation in later periods. Thus, the interpretation of these assemblages has provided more reliable results concerning the material culture and spatial use of the structures.[208] Jackson reported that the team found Late Roman I *amphorae* made of non-local clay in most of the structures and suggested that Kilise Tepe might have been on a transit route between the coast and the plateau.[209]

The ongoing excavations at Olba were initiated by Emel Erten in 2010 after her survey project here had come to an end in 2009.[210] The first structure that was excavated was the *skene* of the theater, which was built in local limestone ashlar. Many roof tiles, jar and *amphora* fragments, and bronze coins as well as glass finds, such as *chalice* and oil-lamp pieces, were recovered from the excavations.[211] Besides the theater, rock-cut cult spaces that were dispersed over the city were excavated as well. Both cult places, one at the Şeytanderesi Valley and the other on the southern slope of the acropolis, yielded obsidian tools, suggesting that they had been occupied since prehistory.[212] A monastery, which was used between the 5th and 7th c. CE, was excavated in 2014. On the floor of the basin and adjacent areas, a multi-colored mosaic pavement, which belonged to a 2nd-3rd

[205] Davesne 1981, 11-15.
[206] Jackson 2015, 355.
[207] For the excavation reports, see Postgate 1995; 1996; 1997; Jackson and Postgate 1998; 2008; 2010; 2012; Collon et al. 2009; Tevfikoğlu 2011; Jackson et al. 2013. For the results of the previous expeditions, see Postgate 1998; for the last two campaigns, see Tevfikoğlu et al. 2013.
[208] For the church at Kilisetepe, see Jackson 2007; for the study of the faunal remains, see Baker 2008; for the mosaics, see Neri et al. 2017.
[209] Jackson 2015, 355-56, 361, 363.
[210] For the excavation reports, see Erten et al. 2011; 2016; 2017; 2018.
[211] See Erten and Kaplan 2017.
[212] Erten et al. 2011, 549-50.

c. CE Roman villa, was discovered.[213] Another structure that was excavated was the Northern Church, one of several churches that are located within the monastery complex. Composed of one nave and two side aisles, the church has a basilical plan.[214] In the eastern valley of Olba, an area that was supposedly dedicated to the practice of religious rituals, such as sacrificial activities and libation, was detected. The niches in the rock-cut walls date to the 1st c. BCE-1st c. CE.[215] Lastly, the team worked on the summit of the acropolis where a cistern was exposed in one of the trenches.[216]

Excavations by Michael Hoff and his team within the framework of "The Antiochia Ad Cragum Archaeological Research Project (ACARP)" started in 2009 and is continuing.[217] So far, several parts of the city have been exposed, namely the Great Bath, the Colonnaded Street,[218] the Peristyle,[219] the *Bouleuterion*/*Odeion*,[220] the Northeast Temple,[221] the Small Bath,[222] and the Acropolis with an Early Byzantine church.[223] The works at the Great Bath, which is a well-preserved building, revealed a large, geometric mosaic floor in its *Palaestra*.[224] Another mosaic floor was found in 2017 in an area where a corridor linked the *Bouleuterion*/*Odeion* with the Great Bath.[225] The team also investigated the water infrastructure of the city and its harbor facilities.[226]

The olive oil workshops at Kanytellis (the modern town of Kanlıdivane), which was one of the largest rural settlements in the region, were excavated by Ümit Aydınoğlu. The excavations at the village, situated 10 km northeast of the ancient city of Elaiussa Sebaste, produced substantial results, leading to further analyses, such as the study of Late Roman I *amphorae* that were produced in the region.[227] The study of materials, especially ceramics, is very crucial for establishing a chronology for the local pottery and settlements. While the abundant number of these *amphorae* suggests a commercial

[213] Erten et al. 2016, 4-6. See also Erten 2016.
[214] Erten et al. 2018, 631. For a detailed study of the monastery complex and the church, see Özyıldırım 2016.
[215] Erten et al. 2016, 7-8.
[216] Erten et al. 2011 and 2016.
[217] For the excavation reports, see Hoff et al. 2010; 2013; 2014; 2015b; 2017; 2018; see also Hoff et al. 2015a.
[218] Hoff et al. 2013, 471-73.
[219] Hoff et al. 2105b, 582-83.
[220] Hoff et al. 2017; 2018.
[221] For a detailed study of this Imperial temple, see Geraldine 2014.
[222] Hoff et al. 2017, 179.
[223] Hoff et al. 2015a.
[224] Hoff et al. 2013, 469; see also Can 2017.
[225] Hoff et al. 2018, 669.
[226] For detailed information on the water system of the city, see Can et al. 2016; on the harbor, see Marten 2005.
[227] Aydınoğlu et al. 2015, 51.

expansion in the region during the Late Antique Period, their stratigraphic contexts indicate that this expansion lasted only until the 7th c. CE.[228]

3.1.3 Epigraphical Studies

The inscriptions in the region already took the attention of early travelers, such as Beaufort,[229] Langlois,[230] Bent,[231] Hicks,[232] Heberdey and Wilhelm,[233] Paribeni and Romanelli,[234] and Keil and Wilhelm.[235] The first systematic epigraphical study in Rough Cilicia was conducted by Bean and Mitford in the second half of the 1960s. During their journeys, many sites were identified, and numerous inscriptions were documented, which resulted in the publications of two volumes of the epigraphic corpus of Rough Cilicia.[236]

Between the 1980s until the late 1990s, the milestones of the region were extensively researched by David French, who compiled all his work in the series *Roman Roads and Milestones of Asia Minor,* of which the first fascicule was published in 1981.[237] In the third volume of this series that was published in 2014 as an electronic monograph, the milestones that were found in the provinces of Cilicia, Isauria, and Lykaonia are listed.[238] As these milestones revealed, most of the recorded road construction or maintenance activities were undertaken during the Imperial Period since only three of them were dated to the Late Roman Period.[239] Closely related to the study of milestones, French investigated the road network of Asia Minor as well, which formed another volume of the series *The Roads*.[240] In fascicule 4.1 of this volume, he specifically discusses three *itineraria*, namely the *Itinerarium Antonini*, the *Itinerarium Burdigalense* (the Pilgrim's Road), and the *Tabula Peutingeriana*.[241] Only the last itinerary includes the roads of

[228] Alkaç 2015, 151.
[229] Beaufort 1818; see also Borgia 2003, 65. Beaufort was interested in copying the funerary inscriptions that he found on the *necropoleis* of Seleukeia on the *Kalykadnos* and Korykos.
[230] Langlois and Delâtre 1854, 35-56. As an epigrapher, Langlois documented 182 inscriptions in the region; see Borgia 2003, 66.
[231] Bent 1890b.
[232] Hicks 1891.
[233] Heberdey and Wilhelm 1896.
[234] Paribeni and Romanelli 1914.
[235] Keil and Wilhelm 1931.
[236] Bean and Mitford 1965 and 1970; for an overview of earlier work, see also Varinlioğlu 2008, 33-34.
[237] French 1981. A few years later, an interim report on the milestones was published; see French 1988b. For the survey reports, see French 1984; 1985; 1986; 1987; 1988a; 1989; 1991; 1992; 1993; 1995; 1996; 1997.
[238] French 2014.
[239] French 2014, 14-15, 65-67.
[240] French 2016.
[241] For the *Itinerarium* of *Antonini* and the *Itinerarium Burdigalense*, see Cuntz 1929.

Rough Cilicia, as the other two bypass the region through the Cilician Gates on the way from Constantinople to Northern Syria. The *Tabula Peutingeriana* suggests four main roads that can be archaeologically observed: Ikonion–Anemorion, Ikonion–Pompeiopolis, Isaura–[Laranda?], and Perge–Tarsos. While the first three roads connected the ports to the Anatolian Plateau, the road starting from Perge and reaching Tarsos was a very long coastal road.[242]

M. Hamdi Sayar undertook an epigraphic research focusing on the inscriptions of Adana, Mersin, Osmaniye, Hatay, and Antalya between 1993 and 2010. His work included the discovery and examination of inscribed monuments that were located both in the field and in the archaeological museums of these cities. Having surveyed both western and eastern Rough Cilicia, Sayar visited many urban and rural settlements, such as Elaiussa-Sebaste, Korykos, Diokaisareia, Seleukeia, Çatıören, Cambazlı, Akkum, Narlıkuyu, Kızkalesi, and Keşliktürkmenli. Besides altars, funerary inscriptions, and reliefs; Sayar and his team also searched for road remains and related finds, especially milestones. Parts of routes, such as the Korykos-Lykaonia road, the Seleukeia-Klaudiopolis road, and the coastal road passing through Korykos were studied within this project.[243]

Within the framework of the project *Dağlık Kilikia Yerleşim Tarihi ve Epigrafya Araştırmaları*, Hamdi Şahin has been undertaking epigraphical studies along with archaeological surveys since 2007.[244] The epigraphical research that he directed in Rough Cilicia formed the project *Corpus Inscriptionum Latinarum XVII/5-2 Miliaria Provinciarum Lyciae-Pamphyliae et Ciliciae.* Within this project, the remains of several roads[245] and many inscriptions, such as milestones, altar stones, and funerary inscriptions,[246] were documented in the districts of Silifke and Erdemli. In the Erdemli district, Korykos is crucial for epigraphical studies since the city has many funerary inscriptions in its necropolis B. Şahin and his team worked also here to document the tombs and their inscriptions.[247] Besides the long continuing studies in Uzuncaburc since 2007, Şahin has been examining Kanytellis for a long time as well.[248]

[242] French 2016, 10-11, 15, 31-32, 36.
[243] Sayar 1994; 1995; 1996; 1998a; 1998b; 1999; 2000; 2001; 2002; 2003.
[244] Şahin 2008; 2009a; 2012; 2013; Şahin and Özdizbay 2014; 2016; 2017; Şahin et al. 2010; 2011; 2018.
[245] Seven roads in total were discovered in the 2013 season; see, Şahin and Özdizbay 2015.
[246] For a detailed study of a newly found milestone from Diocletian's period, see Şahin 2009b. For an altar inscription found at the site of Çele in the 2013 campaign, see Şahin 2016.
[247] Şahin and Özdizbay 2016.
[248] Şahin 2013; Şahin and Özdizbay 2016.

3.2 Methodology and Issues

This section covers several issues this study aims to resolve the limitations that are encountered in this type of research, and the principles to be followed to diminish the effects of those obstacles. The main obstacle for the study of settlement patterns in rural Rough Cilicia is the absence of criteria to interpret the survey data in terms of site typology and physical remains. After defining the principles that are followed for the categorization of the sites and the identification of the finds in the region, the most prevalent issues encountered during the study are explained so that both the extent and depth of the data are better understood.

3.2.1 Site Types

Categorization of the rural sites in Rough Cilicia constitutes one of the major problems of the countryside studies in the region because the terminology used for settlement types changes from one project to the other. Since the region has been researched by various teams that each use their terminology, the descriptions and interpretations presented in the archaeological reports are remarkably complicated. There are three approaches in the region to site typology. The first approach avoids employing any categorization of the sites and uses broad terms, such as 'settlement'. This way of defining a site can be accompanied by attributes, such as 'small', 'large', and 'complex'.[249] The second approach, on the other hand, employs specific definitions such as 'farm', 'farmstead', 'hamlet', and 'village', however, often without explaining the criteria used for the categorization of the sites. Especially this practice has created an ambiguity in the archaeological literature of the region as no common ground for debates among scholars can be achieved. A good example of the absence of a common ground can be seen in the different interpretations of the same phenomenon. While Varinlioğlu suggests that certain villages, Işıkkale and Karakabaklı in particular, transformed from hamlets into villages, Aydınoğlu argues that the transformation occurred from farmstead to village.[250] In this case, whether both mean the same kind of transformation or have different opinions about the issue can only be known by understanding their definitions of 'farmstead' and 'farm'.

[249] Mörel usually uses nonspecific terms such as "complex settlement" or "rural settlement" to define sites; see Mörel 2014, 147-57; 2017a.
[250] Varinlioğlu 2008, 45; Aydınoğlu 2010b.

The third approach chooses to categorize sites by following a certain number of clearly expressed criteria. *RCSP* detailedly discussed how to evaluate the type of settlement based on site size and character. Farms are quantitatively defined to be villas or family properties occupying 0.35 ha on average. Farmsteads, which are described as isolated residential sites, are categorized as settlements of max. 0.2 ha. Hamlets are excluded from the settlement categories. While the settlements whose size ranges between 0.2-3 ha are named villages, the ones occupying more than 3 ha are referred to as centers (city/town).[251] Similarly, Varinlioğlu is very clear in defining her criteria for settlement type terminology. These criteria, based on the site size measured according to the range of the architectural remains, are applied to three types of settlements: farmsteads, hamlets, and villages. Farmsteads and hamlets are defined as settlements whose size varies between 0.2 and 0.6 ha. Based on their size, the villages are divided into three categories: small, medium, and large. While the small villages occupy an area of 1-2 ha, the medium villages have an extent of 2-3 ha. Villages whose area ranges between 3 and 5 ha are categorized as large. In this categorization, the term 'farmstead' is preferred to 'farm'.[252]

To sum up, both comprehending the current data and making new interpretations based on the present literature is challenging, since there is no consensus about settlement terminology. Applying a set of criteria for the definition of each settlement type brings clarification and consistency to the archaeological literature of the region. These criteria could change from one project to another since each team could have its own paradigm to establish the settlement categories. Yet, whatever those criteria are, it is crucial to define them before using the terms in any research, so that information that is as correct and complete as possible could be conveyed to the reader. In this way, the region could be studied in a more integrative way. To do this, this thesis establishes a set of criteria according to which the sites recorded in the surveys are evaluated and defined.

The terms that will be helpful for the categorization of rural settlements in Rough Cilicia are *farmhouse*, *farmstead*, *farm*, *hamlet*, and *village*. With references to their lexical meanings provided by *Cambridge Dictionary*,[253] the definition of each term will be clarified for further use throughout the thesis even though those meanings reflect a modern situation. To do this, the main criteria for each category will be indicated based

[251] For the debate, see Blanton 2000, 64, 67.
[252] Varinlioğlu 2008, 39.
[253] To access the online dictionary, see https://dictionary.cambridge.org/us/

on the discussions in the literature of Late Antique settlement patterns in the East. The similarities and, more importantly, the differences between the terms will be highlighted so that it will be clear which principles are followed in Chapter 5 for the interpretation of settlement data from the study region.

The lexical meanings of the terms related to rural settlements can give insights to establish a consensus on the use of terminology. The Cambridge Dictionary describes a *farm* as "an area of land, especially together with a house and other buildings, used for growing crops and keeping animals." The house in this definition refers to a *farmhouse,* which is defined as "the main house on a farm where the farmer lives". Going back to the definition of a *farm,* other buildings that are located on a farm are nonresidential structures, used generally for production-related purposes. There is a specific term, *farmstead,* to define the farmhouse and the production installations on a farm altogether. Thus, *farmstead* refers to all the buildings on a farm, whereas, the term *farm* encompasses both the buildings and the land where they are located. As a result, the primary function of a farm is production as well as the accommodation of the farmer. A *village,* defined as "a group of houses and other buildings that is smaller than a town, usually in the countryside", differs from a *farm* in various aspects. A *village* is a rural settlement with residential character, meaning a place where a group of people can live and work. Despite its strong residential character, the term does not exclude production-related aspects. Therefore, cultivation and animal breeding are possible here as is the case on a farm. However, a village, in contrast to a farm, is expected to have multiple houses and, maybe, areas for communal use, such as public cisterns and churches. *Hamlet,* another settlement type with rural characteristics, is defined as "a small village, usually without a church." Based on this definition, a hamlet can be described as a residential site with production facilities. The difference between a hamlet and a village is not only limited to settlement size but also includes the presence of communal areas in its plan, a church in particular. As the definition suggests, the population in a hamlet is too low to create a community that has the need or financial facility for congregational spaces such as churches.

To judge the type of a settlement solely based on archaeological finds can be difficult since survey methods might be inadequate to clearly define such settlements. Besides, the differential preservation of archaeological evidence can mislead the researcher about the interpretation of finds. For instance, the number of buildings, which is a widely used criterion in the settlement hierarchy, is very difficult to detect in regions where the building material has not been preserved for various reasons. However, literary sources

can shed light on the different settlement types that existed during the Late Antique Period. The 4th c. historian Ammianus Marcellinus listed the settlements of the West as villages (*vici*), huge estates (*fundi*), and rural mansions (*castella*) in his book *Res Gestae*.[254] These terms could be securely applied to the settlements in the West, while the East required another set of terms due to its different settlement patterns.[255] Libanius, the 4th c. orator who lived in Antioch, spoke of the common presence of the compact village (*komè*) in the East of the Empire.[256] One ancient text explicitly gives an average value for the village population of Late Antique Asia Minor. Nicolas of Sion, the 6th c. saint from Lykia, wrote that the villages had 250-700 inhabitants on average and that this number could reach 1000 in large ones.[257] However, one should be cautious about these accounts as they might not reflect the truth. One of the texts which gives a suspicious number was written by Josephus. He wrote that the villages in Galilee were populated by more than 15000 people, which is an extremely high number for a village.[258]

More evidence on the settlement hierarchy of the countryside existing in Late Antique Asia Minor comes from the epigraphical sources. Several inscriptions that have been found in the hinterland of the Pisidian cities Kyaneai and Balboura mention terms used for rural settlements in the region. Those records, which are in Greek, testify the presence of villages (*komai*), hamlets, and isolated properties (*monagriai*) in the Pisidian countryside.[259]

The term *komè* (plural *komai*) plays a central role in the discussion on the settlement patterns of the study region since it became a very prevalent settlement type in the East during Late Antiquity.[260] The use of *komè* ('village') dates back to the Classical Period. The term was used as a concept that is the opposite of *polis* and expressed the duality between urban and rural. Thucydides, the historian who lived in the 5th c. BCE, defined the term as applying to the initial stage of a settlement before it became a *polis*. In the 2nd c. BCE, the Greek historian Polybius reported that Aristotle, the 3rd c. BCE philosopher,

[254] For the original account, see Ammianus *Res Gestae* 19.2, 30.1, 29.5, 31.6, referenced in Ceylan 2009, 48. The lexical meanings of these Latin terms are as following: *vicus* (sing. form of *vici*) is a row of houses, street, quarter, ward while *fundus* (sing. form of *fundi*) means the bottom, lowest part. *Castellum* (sing. form of *castella*) is defined as a castle, fort, citadel, fortress, stronghold.
[255] Banaji 2001, 6-15. The Empire showed a great diversity regarding settlement patterns; thus, each region should be evaluated in its own terms. For a detailed discussion on the settlements in the West, see Lewit 2004.
[256] Libanius *Or*. 47.4, 11; Ceylan 2009, 48.
[257] Trombley 1985, 331; Gregory 1997, 53-54. For the original work, see Ševčenko and Ševčenko 1984.
[258] Gregory 1997, 53.
[259] Coulton 2012a, 99-100, 169-75 as mentioned in Vandeput and Köse 2013, 239.
[260] For the village-dominated settlement pattern, see Vandeput and Köse 2013, 240.

defined *komè* as an enlargement of the household and *polis* as the assemblage of several *komai*. Thus, his explanations also underline the 'undeveloped' nature of *komè* compared to the city. Also, the residential character of the concept was emphasized by underscoring housing in a village as well.[261]

The meaning of the settlement terminology that was presented in the ancient texts changed in time. A good example of temporal variance in meaning is the term *kastron*, which took over the meaning of the term *polis* from the 6th c. CE onwards. Another example is the use of *polis* for bishopric centers starting from the 5th c. CE, even though they failed to meet the required conditions for gaining a *polis* status that was valid before in Classical antiquity.[262] The semantic shift occurring during the transition from the Late Roman to Byzantine Period appears in rural terminology as well. The meaning of the term *chorion* changed in the course of the 6th c. CE and took over the meaning of *komè* due to the introduction of new fiscal regulations applied in the Byzantine countryside.[263] However, before the 6th c. CE, the two terms referred to totally different concepts. Libanius described *komè* as a village inhabited by small landowners in the 4th c. CE; whereas, *chorion* was defined in the *Digest*, a 6th c. codification of laws, as an inhabited property ruled by a single fiscal unit.[264]

Finally examining how scholars working outside Rough Cilicia use those terms is another helpful way to clarify the differences between the settlement types encountered in the Late Antique countryside of Asia Minor. As part of the Pisidia Survey Project, Vandeput and Köse conducted architectural surveys both in the Pisidian cities and their hinterlands. They categorized the rural sites in two main groups: isolated structures and settlements. In their reports, isolated structures refer to farmsteads of various forms and sizes, including farmsteads with towers, large farmsteads looking like villas, and fortified farmsteads. From an architectural point of view, the use of 'farmstead' instead of 'farm' seems plausible since the focus of their research was on buildings. Yet, 'farm', which is an inclusive term that combines landscape and structures in one concept, will be preferred

[261] For a detailed discussion on the polarized perception of *polis* and *kome* in the Classical Greek and, later, Roman worlds, see Gregory 1997, 37-38. On the original accounts of Thucydides and Polybius referenced by Gregory 1997, respectively, see Thuc. 3.94.4 and *Pol.* 1252bl9- 1261a27-9; 1280b40-81al.
[262] Brandes 1999, 27; Haldon 1999, 10-12. Brandes claims that *kastron* was archaeologically indifferent from *polis* since the only difference between the two was the juridical rights possessed by the *polis*.
[263] For the historical explanation of this phenomenon, see Haldon 1990, 137-38.
[264] See Haldon 1990, 137. For the original account of Libanius, see Libanius, *Or.*15 (cap. 4) and 17 (cap. 11). For the original definition of *chorion*, see Digest 10. 1.4/5 in *Corpus Iuris Civilis II*.

to ‘farmstead’ in this study to address the site type because the latter excludes the farmland by referring only to the buildings.

The second category, ‘settlement’, was used by Vandeput and Köse as a term to address ‘some clusters’ and ‘villages’. Appearing as a small number of houses in the field, ‘some clusters’ should be understood as hamlets, while villages are explained by their large size in the reports.[265] In her Ph.D. dissertation, Commito gives a good summary of the definitions of rural settlements that are commonly used in Late Antique archaeology of the Eastern Mediterranean. She mentions two ways of estimating settlement size for the categorization: counting building numbers and identifying the extent of surface scatters. In her categorization, a single household refers to a farmstead while hamlets have multiple houses that are fewer than 15. As larger settlements, villages include a minimum of 15 houses. For the categorization based on the artifact density, she refers to Varinlioğlu’s criteria.[266]

In this thesis, the quantitative criteria expressed by Varinlioğlu will be taken into consideration when data concerning site size is available. Yet, such data is most of the time unmentioned in the survey reports. For the study region of the thesis, information on house numbers found at sites is more available. Thus, Commito’s categorization based on the house numbers will be more frequently used to define sites. Additionally, the qualitative aspects of sites that are discussed in the following section will be considered. In addition to the site types of ‘villages’, ‘hamlets’, ‘farms’, other site types are encountered in the study region as well. These types include ‘monastic sites’, ‘ports’, ‘funerary sites’, and ‘sacred sites’, which will also be discussed below. Furthermore, the characteristics of the Hellenistic ‘forts’ will be mentioned so that the occupation history of the study region is better understood.

Site Types and Their Common Features

Villages

Villages were the most populous rural settlements of the Late Antique East. Not every village had clearly defined public areas, but some of the larger ones did. The epigraphical evidence reveals that an *agora* existed in some of the large villages in

[265] Vandeput and Köse 2013, 237-39.
[266] Commito 2014, 12-13.

Anatolia. The most direct example for the study region is an agora mentioned to have existed in the Isaurian village of Olosada.[267] However, the function of these open spaces appearing in the inscriptions seems to have been more commerce-oriented. Gregory suggests that the small villages must have possessed an open space where the villagers could regularly gather to discuss the needs of their settlement.[268] The open-area at Işıkkale of Southeastern Isauria may be a good example of this type of communal space (fig. 3).[269] Furthermore, public buildings were sometimes part of the village plan. The most prominent type of these structures was the church.[270] Apart from churches, several villages possessed monumental buildings, such as the *tetrapylai* in Karakabaklı and Işıkkale settlements in eastern Rough Cilicia.[271] However, public buildings, such as *gymnasia*, theater, and baths, were either very rare and small in size or absent in the countryside.[272] Access to water, however, was occasionally provided in the form of aqueducts, fountains, or reservoirs as public services for communal resources in the villages. Cisterns were more prevalent in the regions with rough terrains, such as Lykia and Cilicia.[273] One of those which was interpreted to have had a public use was found in the open area at Işıkkale.[274]

A village was not limited to the inhabited space but also included the surroundings, as these were subject to the daily activities of the villagers. The arable lands located around the village were used by its inhabitants for growing crops and pastoral activities. When the needs for cultivation, such as daily transport on foot, and water sources, are considered, the distance of a villager to his/her farmland has been calculated as between 4-6 km.[275] This means that the remains of isolated production facilities located around a village could have been part of the village, rather than a settlement on its own. Therefore, the spatial relationships between rural sites matter for a better understanding of links between communities.

[267] For the inscription, see Bean and Mitford 1970.
[268] Gregory 1997, 56. For a more detailed discussion on the role of *agorae* as marketplaces in villages, see De Ligt 1993.
[269] Varinlioğlu 2010, 205.
[270] For the territory of Pednelissos in Pisidia, see Vandeput and Köse 2013, 239. The results of the Pisidia Archaeological Project suggest that the villages in the survey area lacked public buildings except for churches.
[271] Varinlioğlu 2010, 204.
[272] Gregory 1997, 58-59.
[273] Gregory 1997, 62.
[274] Varinlioğlu 2010, 205.
[275] Engels 1990, 24; Gregory 1997, 55.

Hamlets

Defined as small villages, hamlets constitute one of the grey areas in site typology. Due to methodological drawbacks in rural archaeology, this type of settlement is difficult to distinguish from a small village. All quantitative criteria fail to spot a hamlet due to several reasons. First of all, the values given as thresholds are arbitrary. The maximum. house number of 15 as a threshold for hamlets, for instance, is calculated on the average of what was experienced in the fieldwork; yet, it does not reflect any historically documented parallels. Secondly, even if it does, the survey data cannot be that precise, since it is unknown whether the current retraceable number includes all the houses that existed in the past. A site with ten identified houses could be a village of which several houses are not preserved today. Besides, some of the houses were likely to have been built using wood since the region had easy access to timber sources. Because of the same reason, the absence of a public area, usually a church, does not fully confirm that the site is a hamlet. Yet, its presence rules out a site was a hamlet. Another obstacle to achieving preciseness in survey data is the possibility of the misidentification of buildings. This can occur in case of the identification of houses, which would cause a miscalculation of their numbers. Thus, this study avoids making a rigid categorization in the case of sites that meet the criteria of hamlets. This type of site will be categorized as a hamlet/small village.

Farms

Farms, settled areas with isolated structures in diverse sizes and types, appeared in the Hellenistic Period and continued to be established in the Roman Imperial and Late Antique Periods in Rough Cilicia. Since farms are usually found in isolated areas near villages or cities, they tend to be perceived as a group of buildings rather than as a settlement. The aforementioned settlement typology used by Vandeput and Köse suggests that farms and settlements constituted different categories. Similarly, Aşkın uses the expression "rural settlements and farms" in his reports, which also implies a perception of farms as a different category.[276]

The Cambridge Dictionary defines a *settlement* as "the place where people have come to live." Thus, whether farms should be considered among the settlement types depends on how people used the farms. The farms of Rough Cilicia in particular show that substantial investment was made in the farmsteads so that groups of people composed

[276] Aşkın 2010, 243.

of landlords and workers could live and produce. This investment is evident in the farmhouses themselves, fortifications around the farms, and funerary elements, such as tombs and *sarcophagi*.[277] In the light of these remains found in the region, which points to a permanent living/settlements, farms will be considered a settlement type in this thesis.

A farm settlement of Rough Cilicia is characterized by a farmhouse that is surrounded by several buildings of various purposes, such as workshops and storerooms, press installations, cisterns, threshing floors, and agricultural terraces.[278] Besides, tombs could exist on the farms.[279] Even though the farmhouses had no standard plan and design, they usually had a courtyard in which large-sized cisterns were located.[280] These farmhouses indicate the presence of land ownership in the region. The farmhouse at Paslı, for instance, has a courtyard of 300 m^2, which covered almost half of the entire occupation size and had a large cistern cut out of the bedrock.[281] As seen in some of the farmhouses in the region, these courtyards could have a peristyle design, as evidenced by the presence of columns or related architectural elements. The lintel and doorposts of the farmhouses have higher archaeological visibility since they are generally made of monolithic limestone blocks, which are more durable than small ashlars. Various types of reliefs can be observed on these lintels, which gives clues regarding the date of construction and/or use of the houses. Olban symbols, such as Dioscuri caps, lightning bundles, Heracles' club, *phalloi*, shields, and *Kerykeia* (pl. of *Kerykeion* which refers to the staff of Hermes), are generally dated to the Hellenistic Period; a relief of a cross on a lintel indicates that the house was certainly occupied in a time later than the Roman Imperial Period.[282] The presence of architectural elements related to arches as well as beam holes among the remains of these houses suggests that the building probably had a second floor, which was usually the case with farmhouses in the region.[283]

[277] Aydınoğlu 2010b.
[278] Aydınoğlu 2013a, 228.
[279] Aydınoğlu 2010a, 178-79.
[280] Aydınoğlu 2010a, 179.
[281] Aydınoğlu 2013a, 230.
[282] Şahin 2008, 445.
[283] Aydınoğlu 2010a, 178. Özdizbay (2017, 202) reports that the farmhouse at Akkeçili in İmamlı could have an upper floor as arch stones found inside the building suggests. Beam holes were detected in a possible farmhouse named Y1 by the survey team at Allıören (Şahin and Özdizbay 2016, 507). On the Dedeveli example of a farmhouse where arches and beam holes were found together, see Şahin et al. 2010, 325.

Some, but not all, of the farmhouses have an enclosure wall on which one or more towers are located.[284] In this case, all the other buildings would have been placed in this protected courtyard.[285] Erten et al. point out one more component of the farm settlements in the region: the combination of a house, agricultural field, and a tomb.[286] The tombs in a farm settlement in the region are considered to have belonged to the farm owner and his family.[287] Their location was chosen based on the geological convenience, which is the presence of bedrock that could be easily worked for the construction of the tombs.[288]

Aydınoğlu argues that the farmhouses found in the region so far can be dated to the period between the Roman Imperial and the Late Antique Periods. Due to the lack of evidence of Hellenistic house architecture, a typology for the Hellenistic farmhouses of Rough Cilicia cannot be made at the moment.[289] Upon the transformation of the farms into villages, their occupation date could extend even into the Byzantine Period, as evidenced by the presence of churches with decorative elements of that period.[290]

In his work *De Re Rustica*, Columella described how a Roman farmhouse was composed of three parts: the *villa urbana*, the *villa rustica*, and the *villa fructuaria*. The *villa urbana* was the residential unit of the farm, where the bedrooms and a dining hall were located for the landowner and his family to live. The *villa rustica* was composed of a large kitchen, units for the workers to reside, and staples for animals. The last part, the *villa fructuaria*, was the structure where the agricultural products were stored. Erten and Özyıldırım interpreted the *villa urbana* as the equivalent of farmhouses identified in the region. The other units, *villa rustica* and *villa fructuaria*, were considered as the functional counterparts in the farms of Rough Cilicia.[291] Due to this organizational similarity between a Roman villa and a farm of the region, several buildings identified as *villa rustica* were recorded during the surveys in eastern Rough Cilicia.[292]

[284] Aydınoğlu and Mörel give a detailed description of one of those farmhouses with peristyle courtyards and enclosure walls at Sivrikale in Demirci (2015, 278-79).
[285] Aydınoğlu 2010a, 179.
[286] Erten et al. 2009, 54.
[287] An inscribed vaulted tomb was detected nearby the farmhouse at the site of Yağardıç. The inscription, which dedicated to a veteran soldier, has been dated to the 2nd and 3rd c. CE. Combined with the evidence of a cross motif on the house, Erten et al. argued that the farmhouse must have changed owners during Late Antiquity.
[288] Erten and Özyıldırım 2008, 202; Erten et al. 2009, 54.
[289] Aydınoğlu 2013a, 230. Rare examples of Hellenistic farmhouses can be found in the region. On the farmhouses noticed at Çukur Mahallesi of İmamlı and at the site of Güvercinlik in Demircili, see Aydınoğlu and Mörel 2016, 136-37.
[290] Aydınoğlu 2010a, 180.
[291] Erten and Özyıldırım 2008, 200-1.
[292] *Villa rustica* was translated into Turkish as 'çiftlik villası'; see Aydınoğlu 1999; 2007, 109; 2008, 428.

Ports

These sites, which have natural or artificial harbors by the sea or a river, have the function of being an access point to maritime activities for the hinterland.[293] Ports were not necessarily equipped with harbor works/structures, such as piers and docks if the coastal feature that they were founded next to is an inlet or cove that is well-protected from the prevailing winds and currents.[294]

Monastic Sites

These sites can be defined as the areas where a monastery complex was situated. Christian monasticism could be practiced in two ways, as eremitic monasticism and cenobitic monasticism. While the former refers to the state of reclusion when a person is alone, the latter means the reclusion as a community. In eremitic monasticism, a hermitage, in other words, the monks lived in isolated places such as deserts and caves on their own as hermits. The first representative of the Christian hermitage is St Antonius (251–356 CE) who left his farm and reclused from earthly affairs in the desert of Egypt. In cenobitic monasticism, the monks stayed in the same buildings, ate, and prayed together. The first regulations on cenobitic monasticism were made by St Pachomius (292–346 CE) who founded 11 monasteries in Upper Egypt.[295]

The founder of cenobitic monasticism in Asia Minor is St Basileus (329-79 CE) who was a theologian born in Kaesareia and is known as one of the "Fathers of the Cappadocian Churches". His monastic regulations and deeds suggest the foundation of small communities in the close vicinity of cities rather than in isolated places. Besides, his monastic order included engagement of the monks in agricultural production as well as other physical works to contribute to the maintenance of the monasteries.[296]

Based on the remains of St Pachomius' monasteries, a monastic complex is expected to have had a refectory where the monks ate, dormitories for them to sleep, isolated prayer spaces where the monks could seclude themselves, and one or more church(es) for the Eucharist.[297] Since their proximity to the city centers and their smaller scales, the

[293] Schörle 2011, 103.
[294] Houston 1988, 560-64.
[295] Özyıldırım and Ünalan 2011, 149-50.
[296] Popović 2009, 59.
[297] Özyıldırım and Ünalan 2011, 151.

monasteries in Rough Cilicia seem to have followed Basileus' order rather than Pachomius' regulations.[298]

Funerary and Sacred Sites

Funerary sites are described in this study as the sites which were designated for the burials, evidenced by the tombs of various types, such as *sarcophagi*, *chamosoria*, and rock caves and niches. A clear indication for a site with funerary characteristic is the presence of *kline* scenes on a rock relief. The tombs were likely only one part of the site since the survey techniques are not always sufficient to detect a site completely. Sacred sites are defined here as the cultic places where sanctuaries were located, often consisting of natural formations of the landscape such as caves, sinkholes, streams, and springs.

Forts

This type of settlement in Rough Cilicia, translated as 'kale yerleşim' and 'kale tipi yerleşme', is seen in the Hellenistic Period. Located on an acropolis, a fort was surrounded by a fortification wall that was provided by towers, built in polygonal masonry.[299] The emergence and spread of forts were caused by the military atmosphere of the Hellenistic Period, when the region was exposed to the constant struggles between different authorities.

3.2.2 Chronological Framework

Definition of Chronological Terms

Late Antiquity is a challenging period to be defined since how it is framed and named depends on the scholar's preference. In this thesis, this term covers the period between the last quarter of the 3rd c. and the mid-7th c. CE. As the starting point, Diocletian's reign (284-305 CE) has been chosen as his regulation had strong effects on the many aspects of the empire, while the end of this period is defined by the Arab sovereignty in Rough Cilicia.[300] Thus, the terms 'Late Antiquity' or the 'Late Antique Period' that have been used in this study cover several periods named differently by the scholars. These terms include the 'Late Roman Period', the 'Early Byzantine Period' as well as the 'Early

[298] Özyıldırım and Ünalan 2011, 152-53.
[299] Meydan Kalesi is a well-studied example to this type of settlement (Şahin et al. 2018, 166). Aydınoğlu mentions some of these in his survey reports: Imbriogon Kome in Demircili, the settlement in Karaböcülü (2013a, 228). Another example to fort settlements is Çatıören; see Mörel 2017a.
[300] Mitchell 2014, 5-11.

Christian Period'. As the integration of these different terms is difficult, I prefer using the surveyor's own chronological terms for the site descriptions. However, my interpretations of the survey data are framed with the following terms: the Hellenistic Period, the Roman Imperial Period, and the Late Antique Period.

3.2.3 Issues and Limitations

The challenges encountered in the study of the countryside of Rough Cilicia can be categorized under two titles: limitations innate in the studies of the ancient countryside and the problems caused by the current representation of the fieldwork. The first category includes the nature of the survey data, low visibility of sites due to dense vegetation, inaccessible areas, and poor preservation. The second category covers the lack of quantitative data, the vague use of chronological terms, insufficient geospatial information presented in the reports and publications, and translation issues.

Survey Methodology, Topography, and Preservation

Understanding the survey methodology helps to identify the issues in the data collection and to reduce their effects on the data interpretation. The present study aims to examine the site network and the settlement hierarchy of a subregion within Rough Cilicia on a regional level. Since a large portion of the information regarding the study area comes from survey data, acknowledging the strengths and deficiencies of archaeological survey methods is important to understand the scope of this thesis as well as its limitations. The most well-attested benefit of a survey is that it allows vast areas to be researched in a shorter time and for a lower cost. Since research agendas are heavily affected by budget and logistics, archaeological investigation on a regional scale is only possible with surveys.[301]

Since the traditional surveys focus on sites as a unit of analysis, defining a site constitutes one of the basic issues in archaeological surveys. Termed as site-based surveys, they have led to a series of discussions in the methodological literature since the identification of a site was dependent on the surveyor's judgment, which lacked scientific

[301] Cherry 1984, 119. With the emergence of 'New Archaeology' in the 1960s, survey techniques gained attention and became a central topic of the newly developed field of 'landscape archaeology'. On the importance of regional studies for understanding the change in cultural systems and carrying out landscape analysis, see Binford 1964, 426-27; Barker 1995, 3.

techniques for sampling, recording, and interpreting survey data.[302] The idea that people of the past and their activities were not present at only one site but extended over a region; leaving physical traces, such as terraces, agricultural equipment, burials, cultic areas, and so on, brought 'siteless' surveys to the attention of archaeologists.[303] 'Siteless' survey takes into consideration every kind of artifact density, and it aims to investigate human activities led to such scatters before assuming any criteria for site definition.[304] The need for quantitative data to define a site has been emphasized since otherwise the task of site identification is merely based on the surveyor's interpretation.[305] Thus, the criteria that his/her interpretation relies on must be quantitatively stated. This is directly linked to the artifact density values of a whole study region so that find densities can be plotted and shown. The relativity of density values from one place to another entails the intense survey of an entire region and the determination of 'background noise', or the low density of finds typical of a whole area.[306] Thus, intense survey methods employed by reliable techniques that consider the background noise are crucial to site identification.[307] In that sense, the distinction made between 'extensive survey' and 'intensive survey' is relevant to the ability to detect artifact concentrations within a study area. While extensive surveys target at covering larger areas to identify sites with almost no attention given to 'off-site' features, intensive surveys focus on smaller areas, adopting fieldwalking methods for a standard artifact collection.[308]

The issue of site definition in surveys has different levels of impact on the results, depending on the period and geography of the study. The concept of 'siteless' survey holds an extremely important position especially in the archaeology of prehistory due to the scant traces of habitation and the issue of poorly preserved finds. Surveys of Classical

[302] For an overview of the traditional approach to site definition and the issues that have been criticized by New Archaeologists, see Gallant 1986, 408. For debates concerning survey design and techniques, see Binford 1964; Foley 1981; Cherry 1984; Gallant 1986; Barker 1995; Mattingly 2000. On site definitions, see Binford 1964, 431-32; Gallant 1986, 416; Vanhaverbeke et al. 2004, 247.
[303] Alcock et al. 1994.
[304] On 'siteless' survey, see Foley 1981; Gallant 1986, 409. On artefact scatters, see Foley 1981, 158.
[305] Cherry 1984, 119; Alcock et al. 1994, 138.
[306] Alcock et al. 1994, 138. Areas with higher artefact density are presumed to be 'sites'. Yet, it should be noted that even with qualitative data, this threshold of density is arbitrarily chosen, which retains the interpretative character of site definition. On the debate about 'background noise', see Gallant 1986. He also discusses the relativity of this threshold from place to place and introduces the method of conducting a more intensive survey on certain loci after completing the first round of investigation in order to secure the reliability decisions made on the field. Furthermore, there have been many studies on the human activities of use and discard and their relation to the formation of background noise. On the "manuring hypothesis" as an explanation of low density artefacts that were scattered over a vast area, see Alcock et al. 1994, 143-45. For the effects of post-depositional processes, see Gallant 1986, 416.
[307] Gallant 1986, 413, 417.
[308] Alcock et al. 1994, 137.

period sites, on the other hand, often have the advantage of higher visibility due to surviving architectural remains. Yet, the commonsense technique that was employed by the traditional archaeologists to identify a site is a dangerous trap in classical archaeology, because of the tendency to overlook less visible sites, which could shed light on a wide range of past activities and the places which classical people used seasonally or for short periods.[309]

Several intensive surveys were conducted in Rough Cilicia, such as the Göksu Archaeological Project and the Rough Cilicia Archaeological Project. The Göksu Archaeological Project employed both extensive and intensive surveys in the study region, the Upper Göksu Valley. Since the construction of the Mut Dam would cause the flooding of the valley bottom up to 305 m high above sea level, the areas below that altitude were surveyed with intensive methods including systematic fieldwalking to have a more complete archaeological record regarding a region that had been understudied. The rest of the study region was extensively examined through the collection of surface materials, the recording of the architectural remains, and the guidance of the locals. Thus, the choice of the survey methods was made according to emergency and time constraints caused by the dam building. Besides, in both the extensive and intensive surveys, the project thoroughly studied the ceramic finds, which gave a better understanding of the region.[310]

No intensive surveys were employed in the study region of this thesis. Therefore, the data used in this study is based on the results of extensive surveys where the architectural remains were documented, and the surface ceramics were occasionally collected. In her archaeological project in the ancient city of Olba (Uğuralanı), for instance, Erten studied the architectural monuments and the surface finds including ceramics, roof tile fragments, metal, and glass finds.[311] No explanation regarding the methodology used in these surveys was mentioned in any reports, which are merely composed of detailed descriptions of buildings, monuments, and architectural fragments found in the survey region. The studies are usually based on either individual buildings and monuments or the inventory

[309] For a good example of Mediterranean surveys carried out with well-defined methodologies, see Barker 1995. Specifically, in Anatolia there have been several archaeological surveys which have dealt with the appropriation of reliable methods for the harsh topographical conditions. For the intensive survey methods applied in the Sinop Regional Archaeological Project, see Doonan 2011; for the Pisidia Archaeological Project which employed both intensive and extensive survey methods, see Vandeput 2009 and Vandeput and Köse 2013, 228-36; for the Isparta Arkeolojik Surveyi, see Hürmüzlü 2009; for the Balboura Survey Project in northern Lykia, see Coulton 2012a, 2012b.
[310] Elton 2005a, 331-36; Elton 2007, 237-45.
[311] Erten 2002.

of the architectural remains encountered in the fields within and adjacent to the ancient city of Olba. The only analysis regarding the surface finds appears to have been conducted within the city itself. Thus, the dating of the structures or the sites is based on the construction techniques used in the walls, the inscriptions, the tombs, and the reliefs.[312] Other projects in the study region adopted similar strategies. Therefore, the data retrieved from these reports pose several problems and difficulties, leaving some research questions unanswerable without further study.[313]

Site identification based on architectural remains only is one of the problems in Rough Cilicia. Due to a lack of artifact density data, the small settlements and temporarily used sites, which people used either seasonally or for a very short period, are often overlooked. Especially the small settlements are hard to identify due to the lack of preserved structures.[314] Secondly, for most of these sites, no records of ceramic finds are available in the survey reports. Without ceramic analysis, questions regarding many aspects of the site, such as chronology, and social and economic status, cannot be answered. Thirdly, data on land use which can give a large amount of information about agricultural practices that are archaeologically less visible, such as manuring and terracing, most of the time goes unnoticed when the survey is based only on architectural remains.

The rugged topography of the study region is another element causing problems during the fieldwork. The mountain ridges and areas of high altitudes present remarkably harsh conditions for the survey teams, which creates inaccessible zones in the study region.[315] Dense vegetation, such as shrublands and forests, also leads to gaps in the surveyed areas in the region. At some sites, the low visibility caused by heavy vegetation prevents the buildings to be mapped. Besides, the issue of poor preservation creates unclear building and site layouts, which is a general issue encountered in the field of rural archaeology, since the building materials used in rural settlements are expected to have been perishable, such as wood, mud, thatch or low-quality stone.[316] The well-preserved remains in the study region are the structures built of limestone as well as structures with

[312] Erten and Yıldırım 2006, 423.
[313] For an example to the limitations of non-intensive surveys in the Pisidian context, see also Vanhaverbeke et al. 2004, 248.
[314] Gregory 1997, 46-47. On non-habitation sites and their invisibility in the archaeological record retrieved by extensive surveys; Gallant 1986, 415.
[315] The Pisidian countryside suffered the same problems originating from the harsh topography, see Vandeput and Köse 2013, 241.
[316] Gregory 1997, 51. Keeping in mind that each region had its own resources, the availability of certain materials to the rural inhabitants needs further consideration.

rock-cut foundations. Yet, wooden constructions, which might have been widely built as the region was very rich in timber sources, have in most cases totally perished. In some cases, the beam holes found in the stone-built structures hint at the use of wood as a construction material.

Besides the use of perishable materials, the preservation status of the sites have been affected by human factors, such as modern occupation (e.g. Seleukeia and Tol), over construction (e.g., a water depot on a monumental tomb at Direktaş Mevkii in Hüseyinler Village),[317] modern agricultural practices, and illegal excavations. One of the obstacles that archaeologists have to face while documenting the region is the damage to the sites, especially on tombs, that is caused by illegal activities.[318] Another destructive factor is the occupation of the antique buildings by Yörüks, the nomad people of the Tauros Mountains, until the mid-20th c. CE.[319] Also, the coastal strip is often inconvenient for archaeological studies due to touristic development and modern use of beaches and shoreline areas.

To sum up, the present data is incomplete due to human and natural environmental factors. More evidence is documented from the region's Roman Imperial and Late Antique Periods than its Hellenistic phase, so the exact proportion of Hellenistic sites to the sites of later periods cannot be known. On the site level, the situation is the same. For example, calculating the number of houses within a site, an important criterion for site typology, is problematic due to the issue of poor preservation. In the survey areas where damage is high, plans of the buildings are too obscure to distinguish between houses or other structures such as workshops and storage buildings. Since the main criterion for identifying workshops in the survey area is the presence of production equipment inside the buildings, the numbers given in the survey reports should be cautiously evaluated.[320] Thus, all conclusions derived from the quantitative data are tentative due to the currently incomplete archaeological data.

[317] Durugönül et al. 2008, 91.
[318] The damage on the 'Heroon' located in the northeast of Susanoğlu was reported to have been deliberately damaged; see Durugönül et al. 2009, 292. Durugönül et al. (2007, 120) also notes the destruction of the tombs found in the close vicinity of Korykos.
[319] Aydınoğlu and Mörel (2014, 528), for instance, record the reason of the damage seen on the structures at Ada in İmamlı as use of these buildings by Yörüks.
[320] For instance, the report on Paslı mentions that around 50-60 houses, whose plans are obscure, have been detected at the site: see, Aydınoğlu 2012a, 217. In this case, it is uncertain whether all of these 50-60 buildings were houses and if this number includes no workshops at all.

Representation of the Survey Data

The biggest difficulty in assessing the survey data resulted from the descriptive reports and lack of quantitative information regarding site size and topography, location of sites, and the number of buildings and production installations found at sites. The lack of geospatial information regarding the sites in survey reports created difficulties of locating them on the maps and assessing their relations to their surroundings as well as their positions in the study region. Names of sites are given on a local scale, without identifiable toponyms. Besides, for some sites layout plans are unavailable, which makes the report purely descriptive and prevents other people from interpreting.[321]

The identification of building types in the survey reports has rarely been based on clearly formulated criteria. Instead of an objective description of the remains at a site, usually, their interpretation is given. Workshops, for instance, are rather challenging structures to distinguish from houses, and crucial to assess the production patterns of a site at the same time. As mentioned before, the use of settlement types without quantitative criteria is problematic as well.[322]

The use of chronological terms in the survey reports is vague and occasionally overlapping.[323] The most important reason for this is the absence of criteria employed in defining the periods, especially the frame of the Roman Period as it is unclear when it ends, and the Byzantine Period starts. Another issue is the use of 'vague' descriptions for dating of the buildings or sites could lead to incorrect chronological categorization of the settlements.[324] Furthermore, terms for overlapping periods, such as the 'Late Roman' and 'Late Antique' Periods, coexist in the description of the same sites.[325]

The criteria used for dating remains/sites are unspecified for some of the sites. Based on the explained criteria, it can be said that the following techniques were frequently used

[321] For instance, no specific name was given for the location of Şahar Mevkii. Giving the name of the district, Erdemli in this particular case, is insufficient to locate the site on map; see Aydınoğlu 2009, 101.
[322] Aydınoğlu (2010b), for instance, uses the terms 'farm' and 'farmstead' interchangeably.
[323] The use of the term 'Byzantine Period' is sometimes so vague that I am hesitant about considering the Byzantine sites as Late Antique. For an example, 'Akkum Mektep Damı', see Durugönül and Durukan 2006, 21. She separates the periods as Roman and Byzantine Periods, which omits 'Late Antiquity' as it overlaps with the Late Roman and Early Byzantine Periods. This frequently creates problems in understanding the settlement descriptions. However, I chose to include all of the sites that were identified as Byzantine into the settlement dataset of this study, because a site of the 5th-6th century CE could occasionally be identified as Byzantine. Thus, the term 'Byzantine' could encompass 'the Late Antique Period' as well as the Middle Ages; see Durugönül et al. 2009, 290. The coexistence of 'Early Christianity' and 'Early Byzantine' as chronological terms are confusing, too; for an example of this use, see Durugönül et al. 2009, 291. Sometimes I encountered the term 'later periods', in Turkish 'geç dönemler', which is another vague term; see Durugönül et al. 2009, 293.
[324] 'Later time' or 'Later periods' are just two examples to the imprecise time expressions.
[325] The description of Tol 3 in the report is an example of this; see Şahin 2013, 289.

for the dating of the remains in the survey reports.[326] One of the most direct ways of dating is the chronological analysis of epigraphical evidence. The study of inscriptions can suggest a certain period for the construction of a certain structure or monument. Secondly, reliefs found on fortification walls, door lintels, and tombs can provide chronological data.[327] Ceramic finds are also a reliable source of evidence to understand at the occupational history of the sites. Yet, a systematic analysis of ceramics for every site in the region is currently unavailable.[328] Another method, which is less direct, is the analysis of construction techniques of the architectural remains. Two main types of masonry have been encountered in the region: polygonal and isodomic. Polygonal masonry has been associated with the Hellenistic settlements so far. Yet, in Rough Cilicia, this type of wall construction was not limited to the Hellenistic Period, since it kept being adopted during the Roman Imperial and Late Antique Periods.[329] Thus, this continuation in building tradition creates a challenge for dating the sites. Another challenge for affixing a date for the structures is the continued occupation of sites, generally from the Hellenistic Period until Late Antiquity, which caused the loss of earlier material due to the important transformations buildings underwent. Therefore, the remains belonging to the Hellenistic Period are underrepresented in the survey data, whereas the Roman Imperial and the Late Antique phases of the sites are more visible.[330] The use of bedrock in architecture is another disadvantage. Production installations in particular are very hard to date since they were regularly cleaned so that the next operation could be carried out.

In case the above-mentioned techniques are inapplicable, a comparative method is employed. Dating isolated rock-cut structures such as tombs, reliefs, and presses, needs a comparative approach so that similar finds from other sites with better chronological data can shed light on their dates.[331] Another approach that has been undertaken in the production of the survey data is the deductive method, which is the attribution of a date to a certain element at the site through the analysis of general patterns noticed in the

[326] Şahin (2008, 437) explains the dating criteria employed in his project as the study of masonry techniques, inscriptions, reliefs, and ceramics.
[327] Relief motifs such as Dioscuri caps, garland, rosette, and cross are used for dating the remains; see Durugönül et al. 2010, 119.
[328] Şahin (2009a, 23), for instance, dates the site at Bademliyurt in Karadedeli to the Late Antique Period, based on the evidence of masonry of the houses in the settlement and the ceramic finds detected on the surface.
[329] For an example of a Roman polygonal wall at a site in Hasanaliler, see Durugönül et al. 2009, 293; for a Late Antique case at the site of Çoku, see Durugönül et al. 2008, 91.
[330] Aydınoğlu 2013a, 230; Aydınoğlu and Mörel 2016, 139.
[331] Erten (2004a, 15) attributes the rock-monument at Şeytanderesi to the 2nd and 3rd c. BCE on the basis of its similarity with the cult space at Sulucin that was securely dated thanks to its inscription.

region. For example, Erten suggests the Roman Imperial Period as the construction date for the tombs at Olba based on intense urbanization movements in the region that took place in that particular period.[332]

The gap in the use of terms for certain elements encountered in the survey region between the publications in English and those in Turkish is one of the reasons why the survey reports are often incomprehensible to the reader. Turkish reports and publications have various expressions for a particular feature. The term 'workshop', for instance, is used in the thesis for buildings designed to produce olive oil or wine. The Turkish term used for this structure in the reports varies from 'atölye', used by Aydınoğlu and Durugönül, to 'işlik atölyesi' by Şahin.[333] The terms 'press' and 'press installation', which were open-air structures if not found in workshops, could be expressed by the words 'işlik', 'pres', and 'pres yapılanması' in Turkish. Another concept that creates a challenge for translating is 'farm'. Firstly, there is a confusion which word corresponds with the farm as a settlement, and which with its architecture, namely a building located on the farmland. Aydınoğlu seems to be using 'çiftlik yapılanması' for 'farm settlement' and 'çiftlik yapısı' for the 'farm building'. Yet, this is very confusing since the description of a new site can begin with the discussion of a 'çiftlik yapısı'.[334] Durugönül names a farm settlement 'çiftlik yerleşimi'. Similarly, she probably uses 'çiftlik yapısı' for a farm building. More importantly, there is the possibility that 'çiftlik yapısı' and 'çiftlik evi', which mean 'farmhouse', can have been interchangeably used.[335] Regarding translation issues, the terms used for defense elements constitute another problematic area. The notion of 'tower' existing in farm settlements is rather confusing and becomes even more complicated with the Turkish terms. 'Kuleli çiftlik', which means 'farm with tower(s)', can be confused with 'kule-çiftlik', which is 'an isolated tower found in relation to a farmland'. The tower(s) referred to with the term 'kuleli çiftlik' is/are found as part(s) of an enclosure wall built around the courtyard of a farmhouse. This type of farm can be addressed as 'tahkimli çiftlik', meaning 'fortified farm'.[336] An isolated tower, on the other

[332] Erten 2003, 58.
[333] Although he generally uses the term 'işlik atölyesi', the seldom use of 'atölye' is also seen in his reports; see, Şahin et al. 2010, 323.
[334] In one of his reports, a site is defined as 'çiftlik yapılanması' and the next site starts with mentioning a 'çiftlik yapısı', which could mean just a farm building or the whole idea of a farm; see Aydınoğlu 2010a, 177.
[335] 'Çiftlik yapısı' is used to define one building at Allıören, probably to indicate a 'farmhouse', since a similar building at the same site is identified as 'çiftlik evi'. For the descriptions of these buildings, see Şahin and Özdizbay 2016, 507-8.
[336] Aydınoğlu 2010a, 179.

hand, has no relation to any enclosure walls. The Turkish terms used for the ‘forts’ are ‘kale yerleşim’ and ‘kale tipi yerleşme’. The enclosure wall, by which these settlements are attested, is called ‘kale’ which can be translated into English as ‘fort’, not as ‘castle’. The walls of a fort can be indicated with the English expression ‘fortification walls’, corresponding with the ‘sur duvarları’ in the Turkish reports.

Chapter 4:
ANCIENT ECONOMY IN EASTERN ROUGH CILICIA DURING LATE ANTIQUITY

Archaeological evidence has suggested that in the Eastern Mediterranean the number of rural settlements increased, agricultural land-use intensified, and even expanded to marginal landscapes such as deserts,[337] limestone massifs,[338] and alluvial flood-zones[339] during Late Antiquity. This period has also been associated with economic expansion and intense commercial activities in the region. The growth occurring in the economy and trade can mostly be attributed to the export of eastern products to Constantinople. These products were mainly wine and olive oil.[340] Eastern Rough Cilicia seems to have had its place in this commercial network, as the agricultural suitability of the region for dry farming helped people producing large amounts of wine and olive oil. Grain, though not on a large scale, was another agricultural production that the region cultivated during Late Antiquity.[341]

4.1 The Production of Wine, Olive Oil, and Grain

4.1.1 Wine

Wine production is closely related to growing healthy vineyards which requires certain conditions. First, vineyards grow best in regions with warm summers, mild winters, and low rainfall. Besides this, they need to be protected from spring frosts. The grapes best suited for wine-making are grown on rocky and sandy fields, which allows the farmer to adjust the sugar and acidity levels of the wine. Thus, vineyards for wine-making could be cultivated even on lands infertile for other crops. Since they can last for centuries, vineyards need a long-term maintenance strategy rather than seasonal care. This long term care involves many factors, such as temperature, sunlight exposure, humidity, and soil content. Since these conditions need to receive attention for the sustainability of the vineyard, wine-making requires farmers with skills and expertise of

[337] Rosen 2000.
[338] For Rough Cilicia, see Varinlioğlu 2007 and for Northern Syria, see Tchalenko 1953-1958; Tate 1983 and 1988.
[339] Baird 2004.
[340] Decker 2009; Lewit 2012, 142. For an overview of the Late Antique countryside, see also Chavarria and Lewit 2004.
[341] Varinlioğlu 2008, 14; Aşkın 2010.

several practices such as digging, fertilizing, planting, and terracing.[342] Wine-making is composed of three processes, which are the cultivation of grapes (viticulture), fermentation (vinification), and maturation so that the grapes picked in the vineyard transfer to a beverage that can be consumed and sold in the market.[343]

The inferences drawn by modern scholars about the ancient wine production has been based on textual, iconographical, and archaeological evidence. The ancient wine-making process can be textually retraced through the works of several authors, including Cato,[344] Varro,[345] Columella,[346] and Pliny the Elder.[347] However, only a few written sources shed light on the period after the 1st c. CE.[348] One of those writings belongs to Zeno of Verona, who wrote a book named *Tractatus* in the mid-4th c. CE.[349] He gives valuable details about the labor-intensive wine-making process. According to Zeno's account, the first step was to harvest the grapes during the vintage season. Then, in the workshop building, the workers would step on the grapes and press them with the aid of a beam and two boards.[350] Finally, the grape juice was transported to the storehouse where the fermentation process continued.[351] Palladius is another Late Antique author who gave

[342] Hanson 1992, 161, 163.
[343] Unwin 2005, 22. For detailed review of these three stages, see Thurmond, 2016.
[344] For the late 3rd-early 2nd c. BCE agronomist Cato's account on wine-making, see Cato *Agr.* 18.9. He emphasized the particular importance to the traditional ways of Roman farming techniques. In his book, Cato gives advices on farm management strategies for the commercial production of olive oil and wine, reflecting his own experiences of estate-running in Italy. For an overview of his work, see Unwin 2005, 85-87.
[345] The Late Republican author Varro (116-27 BCE) described the wine production process in his work *De Re Rustica*, see Varro *De Re Rustica*. Like Cato's, his work was on farm management, which was based on the advice that he gave to his wife about their new estate in Casinum, Italy. However, the settings where the characters have dialogues in his books are different places, including Rome and Epirus. See Kent 1938, 7-8. For more information on the author and his account, see also Unwin 2005, 87-88.
[346] Columella wrote in his book *De Re Rustica* (On Agriculture) on farming in the 1st c. CE; see Columella *De Re Rustica* 12.52.11. The author, who was born in Cadiz, lived in Italy, where he ran a farm in the vicinity of Rome. For a general overview of the work, see Unwin 2005, 88-90.The sections related to wine-making are Books 3, 4, 5, and 12, where he described a range of processes from how to tendvineyards to the manufacture of wine. For an overview of the subjects of each book in his work, see Henderson 2002, 119-21.
[347] Pliny the Elder (23/24-79 CE), born in Northern Italy, lived in several parts of the Empire, including Spain, Africa, and Gaul, as well as in Rome. For his account on wine-making techniques, see Plin. *Nat. Hist* 18. 317. On an overview of the *Natural History*, see Murphy 2004. Composed of 37 books, the section devoted to plants and their different uses encompasses Books 12-32. The vine as plant and wine were especially explained in Book 14.
[348] Rossiter 2007, 93. Quintus Aurelius Symmachus, whose letters describe the rural life in Italy, is a Late Antique author who wrote non-technical accounts on wine production. On his writings, see Matthews 1974 and Rossiter 2007, 95
[349] Zeno of Verona *Tractatus* 2.27.2.
[350] For a more detailed description of the treading process, see *Geoponika* 6. 11 and White 1975, 113. White suggests that the number of people who were involved in the process was minimum of two and could be up to seven or more per treading floor. Another detail given about this activity is the accompaniment of music to keep the pace high.
[351] Rossiter 2007, 96.

information on this topic. Living in the 4th c. and 5th c. CE, he wrote a book called the *Opus Agriculturae* where he shared much practical advice for the people who would cultivate or manage a farm.[352] The *Geoponika* ('Farm Work'), which was compiled by the 6th c. agronomist Cassianus Bassus, is another textual source that describes how wineries (workshops for wine production) were built and what kind of equipment was used for wine-making.[353] According to this account (6.1), the winepress was placed inside of a building that occupied enough space to accommodate the grape harvest that was stored to be pressed. Another valuable source for understanding the wine-making process is pictorial depictions such as reliefs, mosaic pavements, and wall paintings.[354]

The archaeological evidence found in the Eastern Mediterranean does not perfectly match the description of winepresses that is provided in the *Geoponika*. Although the textual evidence mentions only treading floors in covered structures, most of those found in the Eastern Empire were open-air installations.[355] What the archaeological findings portray about the wine-making process is more convincing than the assumptions made based on the texts, because grape juice needs sunlight for a quicker fermentation.[356] The ancient texts suggest that, since time management in the business of farming was very important, the pressing area should have been next to the treading floor so that the transfer of the juice from one to the other would take less time.[357] Multiple treadings could have been applied: the first treading produced the best quality wine, which was probably sold in markets, while the wine produced by the second and further treadings may have been consumed by the farmers themselves.[358] After pressing, the extracted juice was taken to the winery (*cella vinaria*) so that the juice could age and be stored in containers, such as *dolia* and *amphorae*.[359] Furthermore, next to the treading floor, some wine-making

[352] Palladius *Opus agriculturae*. His knowledge of agriculture was based on the experiences he gained on his own farms located in Sardinia and Italy. See also Simonovic 2015, 13-14.
[353] *Geoponika*. The work was a compilation of the writings belonging to different authors. Books 4 and 5 focus on the vineyards and quality of grapes; Book 6 is dedicated to the passages on wine-making. Book 7 is rather about the post-production process, including the stages of tasting, aging, storing, transporting, and consuming wine.
[354] For mosaics with vintage scenes, see Ḥachlili 2009, 149-54. On the agricultural representations at Pompeii in particular, see Mattingly 1990.
[355] Decker 2005; 2007, 82; Aydınoğlu and Alkaç 2008; Varinlioğlu 2008, 144.
[356] Bulut 2018, 687.
[357] Vitruv. 6.6.2; see also White 1975, 112. In his book *De Architectura*, Vitruvius described how a farmhouse should be constructed. For the account of the setting of a farmhouse, see Vitruv.6.6.
[358] Decker 2007, 82; McCormick 2012, 65.
[359] White 1975, 113. On the aging process, see Plin. *Nat. Hist* 18. Pliny wrote that the transformation of juice into wine takes 9 days under certain conditions. On the storeroom of wines where the product matured, see White 1975, 114-15. White describes the setting of storage places based on the archaeological evidence retrieved from Pompeii and Ostia.

installations were found to have had compartments where the grapes could wait for pressing.[360] Yet, the archeological remains suggest that simple treading floors, existing mostly in the form of rectangular rock-cut basins, were more common than these complex wine-making installations.[361]

4.1.2 Olive Oil

Olive oil, with its uses in various fields of life, such as cuisine, medicine, fueling, and cosmetics, was a product essential to the Roman economy.[362] Like viticulture, olive cultivation is possible on poor soil. Compared to vine cultivation, it requires less effort and expertise.[363] Yet, certain difficulties arise from the nature of olive trees. First, olive trees bear fruits every other year. Secondly, large scale oil production, in particular, required a substantial investment in equipment for crushing and pressing.[364]

Our knowledge of ancient olive oil production is mainly based on the archaeological evidence, since only a few authors, including Cato,[365] Varro,[366] Columella,[367] Pliny the Elder,[368] and Vitruvius,[369] mention olive oil production. Olive oil-making differed from wine-making in terms of the processes that took place before and after pressing. Once the olives were gathered, the seeds were crushed in crushing basins. Yet, it was important to avoid smashing the pits during this process, since it would make the oil worse in quality.[370] The crushing process produced a mush, which needed another treatment to be ready for storage and use: the separation of its lees (*amurca*) from the oil. To do that, the mush was pressed so that the oil was squeezed. The best quality oil was the one extracted

[360] Decker 2007, 83.
[361] Decker 2007, 82. For the examples of the complex wineries, see Hirschfeld 1983 and Roll and Ayalon 1981. These publications show wineries with compartments in Israel.
[362] White 1975, 225; Curtis 2001, 380
[363] Hanson 1992, 161, 166.
[364] Curtis 2001, 303-5.
[365] Cato *Agr.* 18.
[366] Varro *De Re Rustica*.
[367] Columella *De Re Rustica* 12.52.
[368] Plin. *Nat. Hist.* Book 15 and Book 17 contain information on olive trees and olive oil production.
[369] Vitruv. 6.6.
[370] White 1975, 226, 228; Curtis 2001, 381. White explained each type of milling equipment in Columella's list to prevent the kernel from smashing, which are the oil-mill (*mola olearia*), the revolving mill (*trapetum*), the clog and vat (*solea et canalis*), and little bruising device (*tudicula*). For the original account, see Columella *De Re Rustica* 12.52. 6-7. The author explicitly stated that the *mola olearia* and *trapetum* were much more preferred. The main distinction between these two mills was explained by the form of the crushing surface. Both having concave basin, but the *mola olearia* had a flat crushing surface, whereas the *trapetum* was provided with a round one.

first.[371] The oil that was obtained was collected in vats for settling and then transferred to jars to be stored indoors.[372]

In other words, only the principle of extraction was common to these two production processes. On the other hand, the main differences between wine and olive production were twofold: the olives needed to be crushed before pressing and the grape juice had to be kept in collection vats for a while for a quicker fermentation. Furthermore, the availability of water was essential to the oil-producing process as a great amount of it was used in different stages. First, water was used before the milling process when the seeds were crushed so that the unwanted material was cleaned from the olives. After cleaning, the olives would be left to dry for a few days.[373] Ancient writers suggested various methods for the softening process, which helped the mush be separated from the kernel more easily during the milling. One of them required hot water so that the seeds could be soaked.[374] Besides, water was added to the crushed olives to get rid of the bitter taste in the oil of the fruit. During the pressing, hot water could be used to extract the oil better. Hot water was also needed to clean the press surface to remove the remains from the operation. Lastly, water was helpful for the settling process during which oil rose to the surface, and lees sank to the bottom of the collection vat so that the oil could be separated.[375] Cato and Pliny wrote that the *cortina*, a type of cauldron, was used for skimming off the oil from the lees.[376]

The main installation for olive oil production was the crushing basin (*trapetum*), which was composed of the basin itself (*mortarium*) and the millstone (*orbis*). While the basins were mortar-shaped, the millstones were wheel-shaped or hemispherical. In the middle of the basin, a column (*miliarium*) was placed so that the center of the millstone could be connected to the center of the column using a wooden horizontal shaft with a

[371] Curtis 2001, 394. As Curtis writes, Columella suggested keeping the oil obtained from the different pressing sessions separate due to the quality difference in the product.
[372] White 1975, 229. For a detailed explanation of the olive oil production process, see also Curtis 2001, 381.
[373] White 1975, 226. This cleaning and softening process is illustrated by Columella who limited the duration of drying fruits to a maximum of three days.
[374] Pliny described the process of soaking the seeds in hot water; see Plin. *Nat. Hist* 15.23. Columella explained another method of preparing the seeds for the milling, which was smoothly pressing the olives with a lever press; see Columella *De Re Rustica* 12.52.10. White explains Columella's method as a precaution against the negative impacts of the hot water. For an overview and evaluation of the softening process, see White 1975, 226.
[375] On the four separation techniques explained by Columella, see Curtis 2001, 394. For a detailed discussion of the oil production process, see Frankel 1999.
[376] Cato *Agr.* 66.1 and Plin. *Nat. Hist*. 15.22. On an overview of this object, see White 1975, 134-36 and Curtis 2001, 393-94. The vessels made of bronze were used for cooking and boiling water; the lead ones were preferred in olive oil production since they did not contaminate the oil.

crank at the end. Turning the crank made the millstone turn around and circle in the basin (fig. 4). Cato's accounts show how sophisticated this mechanism was in his period, the late 3rd and the first half of the 2nd c. BCE.[377] According to his description, the bevel of the basin and the millstone should be the same and the shaft between the millstone and the column should be arranged in such a way that a 1.5 cm gap was left between the side of the basin and the millstone. The reason for this set up was to create space in the basin so that the millstone crushed only the fruit of the olives without smashing the seeds.[378] The collecting vat was another element of the olive oil production installations. Unlike grape juice, olive oil did not need to wait in vats for fermentation, so the extracted oil was likely to be directly collected in portable containers and taken to the storage.[379]

Wine and Olive Oil Production in Eastern Rough Cilicia

As far as we can archaeologically retrace, evidence for agricultural production in eastern Rough Cilicia goes back to the Hellenistic Period possibly due to the lack of stone architecture before this period and is seen in the presence of farms which encompassed towers, workshops, and presses.[380] During the Roman Period, the agricultural production capacity gradually increased, and it peaked in Late Antiquity. What made eastern Rough Cilicia agriculturally suitable was its topography, which consists of limestone hills and deep river valleys; so, both olives and vines could grow in this landscape.[381] Today, olive trees in the region appear in areas lower than 700-800 m, while vines can grow here in fields even above 1000 m. Although it is open for further investigation of how much the vegetation and climate have changed since antiquity,[382] the location of the ancient workshops suggests that olive trees concentrated in the areas of low altitude in Late Antiquity as well[383] and that vineyards were cultivated mostly along the river valleys and hill slopes.[384]

Due to its tough terrain, eastern Rough Cilicia had limited flat land that was suitable for farming. Terracing the slopes of hills near farms was therefore a common practice for

[377] Cato *Agr.* 20-22.
[378] Cato *Agr.* 22; Diler 1993, 506-7; Bulut 2018, 685.
[379] Diler 1993, 507. For the discussion on the collecting vat size and its role in the identification of the production type, see Varinlioğlu 2008, 148.
[380] For a better understanding of the farms, see Chapter 4.
[381] On the geographical characteristics of the region, see Mackay 1968, 1-16 and Chapter 2 in this thesis.
[382] For the study of the paleoclimate in Teke Yarımadası, see Bulut 2018, 676. The investigations showed that between 1200 BCE-500 CE, the winter temperature was higher than today.
[383] Aydınoğlu and Mörel 2015b, 159-60.
[384] Varinlioğlu 2008, 138; Decker 2015, 52.

the farmers to expand their agricultural lands. The terraced fields can give clues about which type of cultivation was made on these slopes. Small terraces or fields surrounded by circular walls are generally associated with olive cultivation, whereas the stepped terraces are considered to have been for vineyards. Yet, the task of differentiating ancient terrace structures from modern ones is difficult.[385]

An advanced organization of agricultural practices during Late Antiquity can be archaeologically observed in eastern Rough Cilicia. The main archaeological source for the region is the equipment that was used for olive oil and wine production as well as cereal production. The equipment, which was mainly composed of press installations, threshing floors, and cisterns, shows similarities with the one discovered in many other Mediterranean settlements,[386] thus, making comparative studies possible. The discovery of a high number of presses in the region is explained not only by the production volume but also by the fact that many facilities were cut into the bedrock. Since the presses, especially those for wine, were cut from the bedrock, they are well-preserved today. In contrast, wooden and/or portable equipment would not have survived. Thus, the surviving equipment should be evaluated in the light of these preservation factors.[387]

4.1.3 Grain Production

Cereal grains was one of the main elements of the Romans' diet as it was the cheapest source of energy and consumed in great quantities by masses. By grain, wheat and barley should be understood as they constituted an overwhelming majority of the grain production in the Roman Empire.[388] Grain could be cultivated best on fertile soils and in the Mediterranean climate.[389] After harvesting the grain, the farmers would thresh it with a wooden threshing sledge, which was drawn by animals. Then, they would winnow the threshed grain by exposing it to the wind with a wooden fork.[390] These two main activities would have taken place on threshing floors.[391] When the grain was threshed and

[385] Rackham and Moody 1992, 125; Diler 1994, 445. For instance, studies in Knidos and Asarcık showed that the terrace walls belonging to the period before the Middle Ages had large and high quality blocks, whereas the medieval terrace structures were made of small rubble retaining walls. See also Bulut 2018, 679.
[386] Aydınoğlu and Alkaç 2008, 283. For the Levant region, see Frankel 1999 and Dayyeh 2004; Southern Asia Minor, Çevik et al. 2003.
[387] Diler 1994, 446.
[388] Rickman 1980b, 261-62.
[389] Curtis 2001, 323.
[390] Varinlioğlu 2008, 149; Aşkın 2010, 246. Thus, windy locations were more preferred for the threshing floors.
[391] Varinlioğlu 2008, 149.

winnowed, the farmer had two options: milling the grain for flour production or storing it to be consumed later.[392] Ancient writers, such as Varro in the 1st c. BCE, Columella, and Pliny in the 1st c. CE, give descriptions on how to store the grain in granaries after harvesting and threshing and how to build these storage structures.[393] Making flour from grain was possible with the use of mills, either drawn by animals or human force.[394] Storing the grain for later use was another aspect that the ancient agronomists wrote about since poor conditions would lead to several issues, such as spoiling and vermin infection. The ideal grain storeroom is dry and dark with a cool temperature that is around 15º C at the highest.[395]

Despite its limited extent, Rough Cilicia's soil is very suitable for grain cultivation thanks to its soil type, *terra rossa*, the reddish well-drained soil type seen in the Mediterranean, and its climate.[396] However, the majority of the surface area is rocky, so the grain production must have been limited to the subsistence level.[397] Instead of exporting the grain, Rough Cilicia may have even imported it from Egypt or Cyprus to feed its urban population.[398] Studies on the funerary inscriptions found in the *necropoleis* of Korykos and Korasion have suggested that the professions related to grain-based products were those of wheat sellers, bakers, and pastry cooks, which constituted 22% of the food business.[399]

[392] Curtis 2001, 325.
[393] Cato *Agr.* and Varro *De Re Rustica*. Pliny devoted one book of his work to cereals; see Plin. *Nat. Hist.*18. For a detailed discussion of grain production, see Curtis 2001, 327-29.
[394] For the various types of mills, see Curtis 2001, 335-58. In addition to hand and animal drawn mills, Curtis mentions water mills as well.
[395] Rickman 1980a, 134-35; 1980b, 261; Curtis 2001, 325-27. In which ways people in the Roman Empire stored their grain depended on the geographical characteristics of the region. In dry regions, such as Kappadokia and Thrakia, the grain was kept in underground caves. However, granaries were raised over the ground in the regions with higher humidity. On this type of storage places, see Varro *De Re Rustica* 1.57.1; Columella *De Re Rustica* 1.6. 16-17. For more details on buildings of the military and civil granaries with archaeological examples from Italy, see Rickman 1980a, 136-38.
[396] Varinlioğlu 2008, 23-24.
[397] Varinlioğlu 2008, 25. Seleukeia on the *Kalykadnos* was one of the few places with fertile soil thanks to its location in the river basin/alluvial plain, as suggested by a passage of the 4th-century author Ammianus Marcellinus on the fertility of the city regarding cereal production. For the original account, see Amm. Marc. *Roman History* 14.8.1.
[398] Varinlioğlu 2008, 134.
[399] Varinlioğlu 2008, 23, 134.

4.2 Physical Evidence

The activities related to the production of wine and olive oil left several physical remains in Rough Cilicia. These include the buildings that were designed for production, presses, threshing floors, and cisterns.

4.2.1 Workshop Buildings

Workshop buildings are structures that contained production installations, such as presses and storage spaces. The workshops in Rough Cilicia were generally only associated with olive oil production since wine production could be better practiced outdoors.[400] Yet, both textual and archaeological evidence indicates that wine-making during Late Antiquity was performed indoors as well. As briefly mentioned before, Palladius describes how a winery (workshop designed for wine production) was built. Based on his account, a winery looked like a *basilica* with production facilities including a treading floor placed on a higher platform, and collection vats around the platform. He also mentions the presence of drainage channels, which were placed alongside the walls to transfer the wine to storage jars. These jars were mostly located at the bottom of the walls; however, in the case of a high volume of production, barrels could additionally have been put in the middle of the room. To store the wine, places around the baths, stalls, and garbage were avoided (fig. 5).[401] Archaeologically, a structure at Arykanda could be given as an example of a wine production installation that was inside of a building.[402]

Late Antique workshop organization in eastern Rough Cilicia can be understood from both excavations and surveys. Kanytellis[403] and Elaiussa Sebaste[404] have the only excavated workshops in the study region. Numerous olive oil workshops and related production equipment have been found in Kanytellis, which is one of the very few rural settlements that were excavated in the region. Three of the sixteen buildings that were used as olive oil workshops have been excavated here so far. These buildings give valuable information since they still preserve the production equipment inside.[405]

[400] Aydınoğlu and Alkaç 2008, 280. For information on the Beydağları Research, see Bulut 2018, 691. The author states that all olive oil workshops were covered structures.
[401] Rossiter 2007, 104-5. For the original passage, see Palladius *Opus agriculturae* 1.18.
[402] Bayburtluoğlu 1987, 140-41.
[403] Aydınoğlu et al. 2015; Aydınoğlu and Mörel 2015b.
[404] Equini-Schneider 2011.
[405] Aydınoğlu and Mörel 2015b, 159, 161.

The excavated workshops at Kanytellis are named Workshops 5, 6, and 7 in the excavation reports. The preserved size of the workshops ranges between 60 m^2 and 120 m^2. The olive oil equipment found in these buildings includes lever and screw presses, crushing basins, millstones, press weight stones, and screw weight stones. A platform of 1 m high, composed of small ashlars, pebbles, and mud, was built to carry the pedestal on which the crushing basin in mortar form was situated.[406]

However, the archaeological sources in the region pose several difficulties too. First, it is impossible to detect all workshops and presses in the region, even in a single settlement, due to preservation and identification issues. Thus, a complete picture of the countryside cannot be achieved. Secondly, the use of portable equipment, especially for olive oil production, hinders the capacity estimation.[407] Another problem is the chronology of the press installations in the region since they were continuously used from the Hellenistic Period up through the Byzantine Period. Thus, the workshops are generally dated based on the following factors: the ceramics found around the presses, the chronology of the settlement where the presses were found, and the economic history of the region.[408] The reason why the presses themselves cannot be dated is that the remains were removed from the surface after each use. As a result, most of the ceramic remains discovered around the workshops in Rough Cilicia date to the Late Roman-Early Byzantine Period. Yet, it should be kept in mind that the date of the sherds does not specify their date of construction but constitutes a *terminus ante quem* for their use.[409]

4.2.2 Presses

As described before, the pressing process was similar to both the production of wine and that of oil. The simplest technique used at this stage was to apply pressure on a pouch of olives or grapes to extract oil or juice with a lever mechanism. This setup comprised of a beam, which was placed inside a hole in a wall. This recess, where one end of the beam was put, functioned as *fulcrum* of the lever mechanism. At the opposite end of the beam, weight stones were tied, so that a force could be applied on the pouch to squeeze the fruits (figs. 6 and 7).[410] Having said that this system was the basic method, 5 types of

[406] Aydınoğlu and Mörel 2015b, 161-62.
[407] Aydınoğlu and Mörel 2015b, 160, 166.
[408] Aydınoğlu and Alkaç 2008, 284; Bulut 2018, 690.
[409] Diler 1993, 510.
[410] White 1975, 230; Curtis 2001, 228; Bulut 2018, 689.

presses in total with several subtypes have been identified during studies in the Eastern and Western Mediterranean.[411]

Press installations were composed of two main structural elements: treading floors[412] and collection vats,[413] which were placed side by side and connected through a drainage hole. While treading floors can be recognized from their rectangular form, collection vats are round and deep (fig. 8). Also, some collection vats have a square part, on which a lid was probably placed for the protection of the product.[414] It seems that standardization was applied to these press elements. The length of the treading floors in the region ranged between 2,10 and 2,85 m, while their width varied between 1,50 and 2,00 m. Their depth was 0,30-0,70 m. The collection vats had standard diameters of ca. 0,90 m. Yet, no standardization for the depth could be observed due to the field conditions and/or the state of preservation of the vats. Based on the average estimated depth, which is 1 m, the capacity of a collection vat has been calculated as approximately 900-1100 liters. Besides, the drainage hole separating the two elements is usually 0,10 m.[415]

Treading floors had a niche placed in one of their walls, to enable the insertion of a wooden beam inside.[416] The niches in Rough Cilicia are generally carved in one of the long walls, which was preferably carved from the bedrock.[417] The distinction between a workshop and a house in Kanytellis, for example, is based on the masonry of the wall where this niche for the wooden lever of the press is situated. These walls built of large ashlars are usually 0.90 m wide, whereas the width of all the other walls ranges between 0.50 m and 0.60 m. The reason why the wall with the niche was thicker than the other walls is that in this way the press lever could get strength from the structure and the wall could stand the power that was applied to the niche. Therefore, this wall was either built of bedrock or strengthened by large building blocks or by the addition of a second wall.[418] If utilizing the bedrock was not possible, a large block or a wall could be used to form the niche. A single treading floor could have more than one niche, the dimensions of which varied, possibly due to the number of grapes or olives to be processed. Also, two treading

[411] Curtis 2001, 384. The press types that were identified so far are the lever and weight press, lever and drum press, lever and screw press, and the wedge press.
[412] For a detailed information on treading floors, see White 1975, 130-2, 147-9, 164-5.
[413] On collection vats, see Aydınoğlu and Alkaç 2008, 280-81; Varinlioğlu 2008, 141, 144; Bulut 2018.
[414] Diler 1993, 509.
[415] Aydınoğlu and Alkaç 2008, 280-81. For the dimensions of these elements in Cilicia, see also Diler 1993, 509. Diler gives similar dimensions for these installations.
[416] Bulut 2018 686-87; Varinlioğlu 2008, 144.
[417] Aydınoğlu and Alkaç 2008, 281-82; Aydınoğlu and Mörel 2015b, 162.
[418] Aydınoğlu and Mörel 2015b, 161.

floors could share one collection vat located in the middle, which has been interpreted as an indicator of a higher volume of production.[419]

Differentiating olive oil and wine presses is a very challenging task for several reasons. Firstly, as mentioned above extraction processes in the production of olive oil and wine resemble each other very much, which dictates similar mechanisms on the presses to be used. The main difference between the two is the treatment they receive after pressing. Secondly, a press can be shared by the two processes during a year since olives and grapes have different harvest times. After the olives were pressed, the same press may have been cleaned for the extraction of grape juice.[420] Distinguishing olive oil and wine presses is mostly based on typological studies of presses examined in other regions, such as Cyprus, Syria, Palestine, and southern Asia Minor. Varinlioğlu suggests that excavations of and residual analyses on the presses of Rough Cilicia can shed light on the identification of presses. One of the criteria which could be looked for in survey data to identify a press is the weight of the press and its proximity to a water source, a cistern in this case since olive oil requires heavy equipment and an abundant amount of water during the pressing procedure.[421] Another criterion is the presence of crushing equipment in the press. Yet, the absence of crushing equipment does not prove that the press was only used for wine production since such equipment might not have been preserved.[422]

The press types that were encountered in Rough Cilicia are the lever and weight press and the lever and screw press (figs. 9 and 10).[423] The archaeological records on the study region of this thesis have revealed no traces of the lever and drum press, direct screw press, and wedge press so far. The lever and drum was the advanced version of the lever and weight press, which was achieved with the inclusion of a drum so that it could hitch the stone up (fig.11). This advancement offered an easier way of dealing with the weight of the beam.[424] The archaeological evidence of the wedge press, which was a very compact installation, has rarely been found so far in both the Eastern and Western

[419] Aydınoğlu and Alkaç 2008, 281-82; Varinlioğlu 2008, 143.
[420] Curtis 2001, 301; Varinlioğlu 2008, 140-41; 175.
[421] Varinlioğlu 2008, 142.
[422] Curtis 2001, 301; Varinlioğlu 2008, 149.
[423] Aydınoğlu states that screw press was used with lever and weight press in the region. Yet, it is not clear whether he meant the use of 'lever and screw press' or the coexistence of 'screw press' and 'lever and weight press'; see Aydınoğlu 2008, 427. I assume this as lever and screw press.
[424] Curtis 2001, 385-88.

Mediterranean.[425] According to Pliny's account, the direct-screw press was invented in the mid-1st c. CE after the emergence of the lever and screw press in the 1st c. BCE.[426] His description of this press type suggests that it was composed of a single press (fig. 12). In other words, the beam was removed from the mechanism so that the press occupied less space and functioned more effectively. Moreover, its operation was easier than that of the lever and screw press while also its portability was amongst its advantages.[427] Thanks to its small size, a direct-screw press would have better fit the small producer's needs than those of large farm owners.[428] Lewit explains her argument through the nature of the Eastern settlements. Since these settlements, which were predominantly villages, were composed of many households with production installations rather than large estates, the harvests of each farmer would have been smaller compared to those of vast farmlands. Thus, the villages in the Eastern Mediterranean might have needed the direct screw presses, which were very compact in size and material, instead of accommodating large lever presses, which were ideal to process large yields.[429]

The archaeological sources have indicated that the screw was installed on a stone bed on which the pressing occurred. Due to the poor preservation of wood, the screws of the presses could only be detected through their stone beds.[430] Yet, in some regions such as Cyprus, which was rich in timber, the beds could have been made of wood as well, which results in difficulties of identification of this type.[431] Like the lever and screw press, the direct-screw press also came into use in the Eastern Mediterranean much later than its invention date. The archaeological evidence suggests that it might have been introduced in the East of the Empire during the 4th c. CE. Although the lever and screw press was still common in the West during Late Antiquity, the East rapidly adopted the direct-screw presses.[432]

[425] On the description of the wedge press technology, see Curtis 2001, 385. Curtis suggests that this type, which has usually been found in urban contexts, was probably limited to the production of perfume due to its low capacity. For the interpretation of this press type for perfume manufacture, see Mattingly 1990.
[426] Plin. *Nat. His.* 18.317; see also Curtis 2001, 391, 393; Lewit 2012, 138.
[427] Curtis 2001, 421; Decker 2007, 80-1, 84.
[428] Curtis 2001, 393; Lewit 2012, 149.
[429] Lewit 2012, 148-9. On the predominance of villages and rural communities in the Eastern Empire, see Haldon 1990, 132-60; Banaji 2001, 10-12.
[430] Decker 2007, 81. For the extraordinary preservation status of wooden screws in Pompeii and Herculaneum, see also Lewit 2012, 141.
[431] Lewit 2012, 139-40. On the pressing evidence from Cyprus, see Hadjisavvas 1992.
[432] Decker 2007, 81; Rossiter 2007, 115; Lewit 2012, 139.

Lever and Weight Presses

The lever and weight press is the most basic type among the presses. The earliest evidence of this press type has been found on the Late Bronze Age Cyprus and in Syria.[433] As described earlier, it had a lever mechanism which was provided with a wooden beam and weight stones. In eastern Rough Cilicia, lever and weight presses have been mostly found in the open air, as rock-cut installations that were equipped with either bell-shaped or cylindric weight stones.[434] Lever and weight presses were used both for wine and olive oil production.[435]

Lever and Screw Presses

The lever and screw press, which was also used for both wine and olive oil production,[436] was invented during the mid-1st c. BCE in Greece, according to Pliny, and spread in the Western Mediterranean.[437] The use of the screw mechanism at the free end of the beam is the main difference between this type and the lever and weight press. The screw was carved out of wood and anchored on the floor with a socket and a stone counterweight. These weight stones used for balancing the screw are called screw-weights. Instead of applying power with weight stones on the beam, this press mechanism required turning the screw to lower the beam.[438] The invention of the lever and screw press led to a more advanced method of pressing, which offered more control over the power applied and thus a faster operation. Parallel to this advantage, the construction of its wooden screw and the operation of the mechanism required expertise.[439] Furthermore, the operation of the screw technology needed a larger labor force.[440] Contrary to the West, the East of the Roman Empire began to use the screw mechanism only in the Late Roman Period. As the screw could be easily integrated into the lever mechanism, its adoption in the Eastern Mediterranean gained speed and remained in use even in the Medieval Period.[441]

[433] Curtis 2001, 228; Decker 2007, 75.
[434] Aydınoğlu and Alkaç 2008, 277-80, 82; Varinlioğlu 2008, 143-44; Aydınoğlu 2010b.
[435] White 1975, 230; Varinlioğlu 2008, 151.
[436] Frankel 1999; Curtis 2001, 301; Decker 2007, 84.
[437] According to Pliny, this innovation occurred in Greece first; see, Plin. *Nat. His.* 18.317. See also Curtis 2001, 391, 393; Lewit 2012, 138.
[438] White 1975, 230; Decker 2007, 78.
[439] Decker 2007, 79; Lewit 2012, 138.
[440] Lewit 2012, 148. The author mentions that only one person could have been enough to operate a lever and weight press, whereas the lever and screw presses required at least two workers.
[441] Decker 2007, 80.

Lever and screw presses seem to have been adopted in southeastern Isauria during the 5th and 6th c. CE.[442] Even though the use of the screw mechanism was an advancement in ancient press technology, lever and weight presses continued to be used. The presence of weight stones used with lever and weight presses and the screw weight stones at Kanytellis show that the two types of presses coexisted, at least here, during Late Antiquity. The press type used in the workshops at Kanytellis were lever and screw presses. These workshops are assumed to have accommodated two presses, even though some have currently only one press. This assumption is based on the presence of two presses in most of the other workshops found in Rough Cilicia. Thus, it is likely that in some of the workshops at Kanytellis, the second press is not preserved today.[443]

4.2.3 Threshing Floors

Threshing floors were areas designed to thresh and winnow the grain before it was stored or transported to the mills for flour-making.[444] Şahin argues that the winnowing process could normally be performed in plain fields; but, due to the lack of these flat areas in the region, threshing floors had to be either paved or built out of bedrock. The examples in eastern Rough Cilicia are usually rock-cut circular areas, created by leveling of the bedrock. Another type of threshing floor that has been encountered is the circular ground that is paved by ashlars and, in some cases, surrounded by a low wall. In both cases, threshing floors are circular with a diameter varying between 7 m and 15 m (fig. 13).[445] For better wind exposure, which would help the winnowing process, the threshing floors in the region were generally built on a platform in open fields.

Varinlioğlu discusses the fact that threshing floors have been found in every settlement and proximity to presses and cisterns, suggesting that they might have had other uses as well. One of those possible functions could be the production of sun-dried fruits and the processing of animal products. Another use she suggests is that of crushing basins for the olive oil production process.[446] Rather than using the area in the press installation, the farmers might have used the threshing floors to save time by minimizing the number and duration of interruptions that would occur during the pressing. According

[442] Varinlioğlu 2008, 147.
[443] Aydınoğlu and Mörel 2015b, 161, 164.
[444] Curtis 2001, 325; Aşkın 2010, 243. For more information on the origins and various uses of threshing floors, see Ure 1955.
[445] Şahin 2008, 448.
[446] Varinlioğlu 2008, 150.

to Varinlioğlu's observations, the lever and screw presses equipped with rotary mills had no spatial proximity to any threshing floors because they needed no separate space for crushing.[447] The lever and weight presses, on the other hand, were not provided with rotary mills as the other press type was, so they might have needed the threshing floors for crushing purposes. I think it can be concluded that the lever and weight presses located nearby threshing floors might have been used for olive oil production; the others might have been used for wine-making, which simply did not require any crushing operations. Yet, this assumption may not always reflect the truth since it is known that some wineries in Palestine used cylindrical stone rollers, which might have been due to the need for the rapid production of wine.[448]

4.2.4 Cisterns

Cisterns were key to water supply management, especially in marginal zones.[449] Apart from supplying water merely for survival, these structures had an important role in agricultural production as well.[450] Since eastern Rough Cilicia received a low rainfall, cisterns were used to store water especially during olive oil and grain production (fig. 14).[451] Varinlioğlu argues that this productional relation was the reason why cisterns have been found in association with threshing floors and presses in eastern Rough Cilicia. As explained above, the abundance of water was crucial for olive oil production, which makes the proximity of cisterns to the presses very important. Secondly, the animals that were used during the threshing stage of the grain cultivation needed water.[452]

4.3 Olive Oil as Monoculture

Monoculture in agriculture is the cultivation of a single plant.[453] This type of farming became the subject of debates between archaeologists who studied the Eastern Mediterranean after Tchalenko had suggested that the well-off Late Antique settlements

[447] Varinlioğlu 2008, 149-51.
[448] Decker 2007, 84-85. The author states that installations with one type of these stone rollers found in a great number at the sites in Northern Syria were identified as olive oil presses. He suggests that the identifications of the presses should be revised in the future in light of further studies.
[449] On the need for water use in settlements, see Hodge 2000, 11-12; cisterns; Varinlioğlu 2008, 23. See also White 1975, 132-34.
[450] Varinlioğlu 2008, 149.
[451] Varinlioğlu 2008, 23.
[452] Varinlioğlu 2008, 149.
[453] Power and Follet 1987, 79.

in Northern Syria practiced monoculture farming of olives. In the 1980s and 1990s, Tate criticized this view by drawing attention to the other types of agricultural production.[454] The same debate was held between Hild and Hellenkemper and Varinlioğlu on Rough Cilicia. Hild and Hellenkemper have claimed that the olive oil might have been a monoculture in the region,[455] whereas Varinlioğlu criticizes this interpretation due to several reasons. First of all, as explained before, the difficulty of identifying the product solely based on the press remains obstructs making this claim. Besides this, the possibility of using the same press for both olive oil and wine is another issue of this hypothesis. Moreover, based on epigraphical evidence, the countryside of eastern Rough Cilicia is known to have also produced animal and forest products such as wool, goat hair, leather, and the wood of cedar and juniper trees.[456] Another point Varinlioğlu makes is the evidence for grain cultivation in the settlements as the presence of threshing floors suggests.[457]

4.4 Surplus

Archaeological evidence suggests that the settlement numbers increased, and land-use became intensified in Late Antiquity. Many scholars, such as Banaji, Decker, and Lewit, have interpreted the expansion of rural settlements with the increasing volume of agricultural production, which was beyond local needs.[458] The production capacity of a site can be estimated based on the number and dimension of the above-mentioned press elements as well as the pressing techniques used.[459] Another way of capacity assessment is to calculate the areas suitable for growing vineyards or olive orchards around the press installations.[460] A high degree of investment made for production equipment has been considered amongst the indicators of commercial agriculture.[461] Both olive oil and wine-making for subsistence economy require no advanced press technology since only crushing and treading would be enough for local needs; thus, even the evidence of a press can be considered enough to indicate a surplus production.[462] In this framework, the use

[454] For an overview of this debate, see Varinlioğlu 2008, 128.
[455] Hild and Hellenkemper 1990, 109.
[456] Varinlioğlu 2008, 128.
[457] Varinlioğlu 2008, 139.
[458] Banaji 2001; Decker 2007; Lewit 2007, 121-22. Lewit suggests that even small settlements like Sumaqa produced a surplus of production.
[459] For a discussion of subsistence farming based on the textual evidence, see White 1975, 216-17.
[460] Bulut 2018, 689.
[461] Decker 2007, 89. For the discussion on investment, see White 1975, 213.
[462] Decker 2007, 74; Lewit 2007, 124; 2012, 137.

of the screw mechanism is key to the embodiment of the investment concept. The investment in the screw technology in presses must have brought the desired results in products, both wine and olive oil. For wine-making, using only a treading floor did not result in the intended grade of the juice that would be sold in the market. Secondly, the time spent on extracting a certain amount of juice or oil must have been reduced via this system, which would be a very crucial strategy especially if a large-scale production took place on the farm.[463] Thus, it might have been profitable to invest in the screw technology if the producer paid attention to the customer's taste and delivery time of the product on the market.

The later adoption of screw presses in the East compared to the West has been discussed to better understand the relation between technology and commercial needs.[464] This phenomenon has been associated with the increasing commercial activities in the East of the Empire during Late Antiquity.[465] Decker suggests that the producers in the Eastern Mediterranean, especially those in the Levant where the industrial production rapidly intensified during the Late Antique Period, preferred investing in this technology which was neglected in this part of the empire for centuries because of the huge demands of Constantinople and the West for wine and olive oil from the East.[466] Thus, this shift in the production technology occurring in the East during Late Antiquity has been considered a sign of intensification in the scale of production and commerce.

The investment made in heavy, expensive and specialized presses, which were composed of screws, crushing basins, and millstones, have been interpreted as an indicator for olive oil export.[467] Besides, the lever and screw presses began to be used during the 5th and 6th centuries CE when the countryside flourished, as evidenced by the presence of well-built and large structures like houses and churches. Thus, the rural prosperity in the region might have originated from the olive oil surplus. The association made between the olive oil production and the increased wealth in the region during Late Antiquity is also supported by the fact that the buildings that have been preserved from

[463] Curtis 2001, 421; Decker 2007, 85. For the relation between the screw technology and commercial production, see Lewit 2007, 122. The author suggests that the invention of the screw in Antiquity created a leap in production technology similar to the one that the invention of lever had created in the Bronze Age.
[464] For a detailed discussion on this, see Lewit 2012.
[465] Decker 2007, 86; Lewit 2007, 119, 122, 124. For the exceptional situation in Tunisia and Tripolitania during the Imperial Period and in the Methana region of Greece in Late Antiquity, see Lewit 2012, 141, 147. In these regions, the screw technology seems not to have been adopted in spite of the high level of wine and olive oil production.
[466] Decker 2007, 86; Lewit 2012, 142. Lewit states that the eastern products flew from the Levant and the Aegean to the West.
[467] Varinlioğlu 2008, 147, 159, 161.

this period included lever and weight presses and that they were thus specifically equipped for olive oil production.[468]

The fields existing around the settlements and the workshops could also give clues about the volume of production. Kanytellis, for example, yields interesting results. As mentioned, a large number of workshops and production equipment have been discovered in this ancient village. Despite the intense use of equipment, only 4 ha of the surrounding land was found to be suitable for growing olive trees. Thus, Aydınoğlu and Mörel argue that Kanytellis might have functioned as a production center where olives cultivated in other places were brought, collected, and processed. Since the village was located near the ports of Elaiussa Sebaste and Akkale during Late Antiquity, the transportation of all products could have been much easier.[469] The stone quarry discovered in the east of Kanytellis is another indicator of the industrial production that took place in the ancient village, as unfinished crushing basins were found here.[470] With a similar understanding, the households could have brought their harvest to certain farm owners either within or around their settlements to process their products.[471] Bulut states that the small farms, which could not afford production installations, could have used neighboring workshops or presses.[472] Moreover, Lewit suggests that the manpower required for the screw presses could have dictated a cooperative work in the villages of the East.[473] If this was the case, some larger production installations within the settlements could have functioned as workshops that were collectively used by the community members.

[468] Varinlioğlu 2008, 147, 159, 161.
[469] Aydınoğlu and Mörel 2015b, 166-67.
[470] Aydınoğlu et al. 2015, 61; Aydınoğlu and Mörel 2015b, 167.
[471] On the communication and exchange between farmers and settlements, see White 1975, 217. In addition, Işıkkale and Karakabaklı constitute an example of an organic relationship occurring between villages. On these settlements, see Varinlioğlu 2008 and 2010.
[472] Bulut 2018, 694.
[473] Lewit 2012, 148.

Chapter 5:

SETTLEMENTS, ROADS, AND MARITIME CONNECTIONS

Products of wine, olive oil, and grain had to make a journey to be delivered to the consumers. McCormick explained this journey as a "chain of transactions" in which many people and commercial decisions were involved between the processes of production and consumption.[474] For the products that were meant for the local consumption, either as a subsistence economy or exchange between neighboring communities, this journey was rather short and contained a smaller number of transactions. However, the export products had to be moved to the ports so that they could be transported over longer distances by the sea. Thus, one of the main links in this chain of transactions was the transport of the products to the markets where both producer and seller came together.

Markets could be defined as local hubs where import and export products were bought and sold, as the "chain of transactions" was in operation from the perspective of the fertile countryside as a consumer. The import products brought by ships were unloaded and stored in warehouses in large cities.[475] The markets are expected to have been set in the areas close by the ports. Apart from being logistically reasonable, pictorial evidence also suggests that beaches were often preferred for market spaces. On a Late Antique mosaic, a market was depicted along a beach where the wares on board were moved to the shore and weighed. Furthermore, a 5th or 6th c. CE text from North Africa conveys a clergyman's description of a beach: "O how lovely the beach looks when it's filled with merchandise and it bustles with businessmen! Bundles of different clothing are pulled from the ships, countless people delight at the sailors' cheerful singing, and the rich man dances in the sand!"[476] This passage suggests that the beach was seasonally full of people as a market event took place there.[477] Thus, many of the markets are assumed to have been temporary, which makes it difficult to retrace them archaeologically.

Delivery of the products to the markets required overland transportation facilities, such as roads and bridges, especially if the production sites were located far from the fluvial or maritime routes. Although water transport was preferred to the overland due to its lower cost and speed, the regions with a large terrestrial hinterland that was lacking navigable rivers and remotely located to the sea, such as Palestine, the road network

[474] McCormick 2012, 61.
[475] McCormick 2012, 66.
[476] Pseudo-Fulgentius of Ruspe, Sermo 38, PL 65: 901-2.
[477] McCormick 2012, 53.

played a crucial role in the movement of the exports to the ports.[478] Our study region in Rough Cilicia is another good example of the importance of land-based road infrastructure in the local economy. The containers and the means of transportation were as important as the road network. Products, the liquid ones in particular, were probably carried by animal skins overland in many instances. It is known from Palestine that *amphorae* were also used for this purpose, which depended on the availability of water and clay sources to manufacture the ceramic containers.[479] The means of transportation varied from on foot to the use of pack animals and carts.

When the products arrived at the ports, probably after being sold to the middlemen or the sellers who were responsible for their delivery to the buyers at the destination ports, the shipping process started.[480] At this stage, wine and olive oil required to be contained in transport *amphorae*, which were manufactured at the kiln sites located in the coastal areas for logistic reasons.[481] As already mentioned above, the inland areas located close to wine and olive oil production equipment could have been provided with *amphora* production sites as well.

However, the transportation of grain had different dynamics as special attention had to be paid to its storage temperature and moisture level. In the first place, the grain needed to be kept in a cool and dry environment to prevent bacterial growth and infestation. For this reason, the grain ships had ceiling planks on top to prevent the cargo from water exposure.[482]Secondly, it was contained in sacks, rather than *amphorae* since it could break the clay when exposed to damp due to swelling. Furthermore, these sacks were stacked in comparted areas to prevent the grain from moving, which can potentially unbalance the ship.[483] The cargoes of the ships could be composed of different types of products at the same time so that the transport capacity was efficiently used. Thus, the *amphorae* and the products that were contained in sacks could be in the same cargo.[484]

Amphorae that were meant for shipping, transport *amphorae* in other words, showed distinctive features, which made them suitable for sea transport. Firstly, their elongated

[478] McCormick 2012, 60-70.
[479] McCormick 2012, 60-70.
[480] McCormick 2012, 65.
[481] Dyson 2003, 47; Autret 2012, 253; Autret et al. 2014, 594. The kiln sites found in relation to the harbors at Elaiussa Sebaste and Soli-Pompeiopolis are good examples showing the importance of proximity between *amphora* production and shipping process. For the kiln site at Soli-Pompeiopolis, see Autret et al. 2010, 203-7.
[482] Royal 2002, 114.
[483] Rickman 1980b, 261, 265.
[484] Wilson 2011, 54.

forms and pointed bottoms were ideal for being stacked in an upright leaning position as cargo in the vessels. This particular position made better use of the space as all the *amphorae* could be perfectly stacked. To prevent damage on the hull and the containers caused by strikes during the voyage, they were placed in dunnage. For more efficient use of the space, the shapes of *amphorae* changed to conform to the alterations in the form of merchant vessels.[485] Besides, the standardized forms of *amphorae* eased the commerce because they conveyed information about the volume and content as well as about the product quality.[486] Since *amphorae* were crucial parts of shipment and transportation, their study plays an important role in the reconstruction of the ancient economy and trade network.[487] Their presence in significant numbers at a terrestrial site suggests that either export activities or importation took place, so *amphorae* can shed light on the commercial links between the producer and consumer areas of a particular product. However, the information provided by *amphora* studies is not always explicit about these connections.[488]

Late Roman *Amphorae* 1 (LR1), produced between the 4th and 7th c. CE, formed the most widely distributed type among the *amphorae* produced in the East during the Late Antique Period.[489] These *amphorae* were widely distributed to many places of the Empire, including the Levant, Egypt, North Africa, the Black Sea, the Aegean, the Balkans, Spain, Portugal, Italy, South France, and England, and even the interior regions of Europe through river transportation over the Danube.[490] Despite its high frequency of presence over a large geographical area, LR1 *amphorae* give limited information about the commercial links established through wine and olive oil trade simply because their provenience needs refinement. Production centers of LR1 have been identified in Cilicia, Northern Syria, Cyprus, Rhodes, and Içmeler in Western Anatolia so far, which makes the assessment of the flow of goods challenging.[491] Based on its typological properties, LR1 is divided into two groups: LR1 A and LR1 B. The first group was produced in the period between the 4th and 7th c. CE; the B-group seems to have circulated later in the 6th

[485] Royal 2002, 114-15, 130-31.
[486] Autret et al. 2014, 594. For an overview of *amphora*e, see Grace 1979.
[487] McCormick 2012, 61; Pieri 2012, 28. On the relationship between *amphorae* and production, see White 1975, 122-27; between *amphora* production and the Roman economy, see Peacock and Williams 1991; Eiring and Lund 2004.
[488] McCormick 2012, 79-80.
[489] Pieri 2012, 29; Bilir 2017, 219-20, 222. For more detailed information on the LR *amphora* types, see Bonifay-Pieri 1995, 106-115; Decker 2007, 68-70. On LR1, LR4, and LR5 *amphorae*, see also Reynolds 2005. For the analyses on the *amphorae*, see Empereur and Picon 1989; Şenol and Kerem 2000, 94.
[490] Vroom 2006, 53; Alkaç 2012, 325-27.
[491] Alkaç 2015, 152.

and 7th c. CE.[492] For a better understanding of the direction of exchange, form and fabric analyses need to be conducted on the *amphorae* and the existing data concerning LR1 kiln sites should be pursued.[493]

From the point of view that was described above, I introduce the locations where production took place in our study region in Rough Cilicia, the terrestrial routes enabling the transport of the goods from the hinterland to the ports, and finally the maritime connections through which the distribution of both imports and exports were managed to understand the dynamics of the Late Antique economy and its reflections on the settlement pattern in the region.

5.1 Settlements

This section covers the current information regarding all the Late Antique sites that have been documented in the hinterlands of Korykos, Elaiussa Sebaste, and Olba-Diokaisareia (fig. 15). All these sites are described based on the available archaeological and epigraphical data and follow the categorization model explained in the 'Methodology and Issues' section. According to this model, I tried to identify the types of these sites and discussed the surveyors' identification in detail. This effort entails the understanding of the Late Antique phase of a site as well as its distant past if it was occupied before.

The site types encountered in the study region are villages, hamlets, farms, and monastic sites, ports, funerary sites, and sacred sites. The seven site types mentioned above are organized in accordance with the survey data but hamlets are put under the same heading with small villages since our categorization model avoids distinguishing between these two types. Another point that needs to be explained is the title "Sacred and/or Funerary Sites". An explicit division between these two characteristics of a site is not possible in some cases, because the same site could have been used as a burial place due to its sacredness. Lastly, the sites that could not be categorized due to limited data, are listed under the title "Unidentified Sites" (Appendix A, B, C) (fig. 16).

[492] Bonifay-Pieri 1995, 108.
[493] Leonard 2005, 897; Demesticha 2013, 178.

5.1.1 Korykos and Its Hinterland

Korykos

Korykos, one of the coastal cities of the region, is located on the borders of Kızkalesi, 22 km northeast of Silifke. The ancient city occupied an area of 0.55 km^2, starting from the northeast of Kızkalesi, and extended 1,25 km to the east. The city center was bounded by a promontory in the west. To the east of the promontory, an inlet where an ancient breakwater of 80 m long and 8-10 m wide with northeast-southwest orientation was built is present. Vann states that the core of the breakwater was mortared rubble, which was probably covered by ashlars.[494] Due to the presence of an ancient breakwater in this inlet, a harbor is assumed to have been located here. Another inlet, which shows no traces of a breakwater, is situated on the eastern shore. A valley called "the Necropolis Valley" started from the ancient harbor and extends almost 800 m towards the northeast. An island, on which a medieval castle stands, is situated 320 m off the south-westernmost shore of the mainland. To the west of Korykos, the Şeytanderesi Valley is situated. The area where the valley opens onto the sea constitutes a fertile plain that is 850 m long and 600 m wide at its widest part. Apart from this flat area, no land around the city center is suitable for agriculture (fig. 17).[495]

The foundation date of the city is unknown. The earliest account mentioning Korykos reports that it was among the Cilician cities Antiochos III (223–187 BCE) captured during the campaigns he waged against the Ptolemies in 197 BCE.[496] Thus, Korykos already had the *polis* status in the 2nd c. BCE. Yet, it became a *komè* (village) from the 3rd c. CE onwards, as the epigraphical evidence suggests. As archaeologically attested, at the beginning of the 5th c. CE the settlement regained its importance and flourished during Late Antiquity.[497]

Based on the surface remains, only a few structures dating to the Hellenistic Period have been found in the city. These are a 70 m long wall section of polygonal masonry running in the southeast-northwest direction in the city, and 34 tombs and six isolated towers that were discovered on the slopes around the center. Korykos seems to have had no specific place designated for burials during that time since the tombs were dispersed

[494] Durugönül and Aşkın 2015, 129; Vann 1997b, 261.
[495] Durugönül and Aşkın 2015, 129-31.
[496] Durugönül and Aşkın 2015, 131.
[497] Şahin and Özdizbay 2016.

all around the lands surrounding the core of the city. The presence of lever presses, threshing floors, and cisterns found in relation to the towers and tombs in the areas around the city show that an organization for agricultural production that was linked with the city existed in the Hellenistic Period.[498] In other words, the periphery of the city seems to have been dotted by satellite farms constituting farmhouses, agricultural fields, and tombs.

During the Roman Period, Korykos expanded towards the east and saw an urban transformation with the construction of many public buildings and structures, including the Harbor Gate, the Great Temple, the Small Temple (?), the Colonnaded Street, the Northern Gate, the Great Bath, the Small Bath, and the Columned Building. Korykos also had aqueducts that were constructed in the late 1st-2nd c. CE to bring water from the Lamos River. Due to the need for flat areas, the urban landscape must have been terraced in the Roman Period, especially during the 2nd and 3rd c. CE when building activities were intense in the region. The Roman construction date for the Harbor Gate shows that the harbor was active during that time. Besides, the *necropolis* of Korykos was arranged during the Roman Imperial Period. Tombs of various types, which date to the 2nd and 3rd c. CE, are concentrated in the valley located to the north of the ancient harbor.[499]

The Late Antique Period of Korykos is attested by the remains of a church converted from a temple, one church in the eastern part of the city, the *Extra Muros* Church in the northeast, a three-aisled basilica and an adjacent Late Antique structure in the northern necropolis, and four churches, namely the Transept Kilisesi, Mezar Kilisesi, Yörük Kilisesi, and Manastır Kilisesi, that are located along the 'Sacred Road', and a *tetrapylon* at the entrance of this road.[500] The aqueducts that were originally built in the Roman Imperial Period underwent several repair episodes during Late Antiquity.[501]

Korykos has provided no direct evidence of *amphora* production, such as kiln remnants, waste *amphora* pieces, and misfired fragments, so far. However, several groups of finds suggest that the city did produce *amphorae*. First of all, numerous *amphora* fragments were found in the city during the surveys and excavations. All the fragments were diagnosed as belonging to the LR1 B type, which was produced between the 6th and 7th c. CE.[502] Furthermore, a LR1 B *amphora* whose neck was stamped with the inscription *Korikou* was found in a 6th c. CE context during campaigns in Histria. Similarly, another

[498] Durugönül and Aşkın 2015, 132-36.
[499] Durugönül and Aşkın 2015, 136-39.
[500] Durugönül et al. 2005, 22-23; Durugönül and Durukan 2006, 17.
[501] Durugönül et al. 2010, 116-17.
[502] Alkaç 2012, 323-24, 328, 331.

stamp with the same inscription was found in Elaiussa Sebaste, suggesting that a production center of LR1 B *amphora* existed in Korykos.[503] Besides, epigraphical evidence provides valuable insights into this issue of the relationship of the city with *amphora* production. Funerary inscriptions found in the necropolis of Korykos have revealed that a group of people living in the city worked in ceramic manufacture. Based on the epigraphical studies of these inscriptions, in total 29 individuals were identified as ceramic producers, *kerameis*, which makes the pottery producers the most represented profession in the necropolis.[504] Lastly, as pointed out by Alkaç, the active role of Korykos in the Late Antique olive oil and wine industry, which is suggested by its productive hinterland and the presence of a substantial harbor, suggests that the city was very likely producing its own *amphorae*, which would have promoted the production and trade in the region.[505] In conclusion, the discovery of large numbers of LR1 B *amphorae*, evidence of *amphora* stamps with the name of the city, and the frequently mentioned professions that are related to ceramic production in the funerary inscriptions imply that Korykos produced LR1 *amphorae*.

Today the hinterland of Korykos covers coastal quarters, namely Kızkalesi of the Erdemli District in the east, Narlıkuyu of the Silifke District in the west and, as well as inland areas, including Hasanaliler, Cumhuriyet, Kızılisalı, and Hüseyinler (see the map on fig. 15).

Villages in the Territorium of Korykos

Adamkayalar

Adamkayalar is located 4.5 km northwest of Korykos, on a hilltop in Kız Kalesi, Erdemli (fig. 18).[506] Encompassing an area of 1700 m^2 (0.17 ha), the site is surrounded by a fortification wall with towers in the north and the east.[507] At the entrance, a well-preserved structure was detected. In the middle of the site, at least ten adjacent structures are present. In the periphery of these buildings, three cisterns and five rock-cut olive oil

[503] Alkaç 2012, 331.
[504] Iaocomi 2010, 24; 2014, 1889.
[505] Alkaç 2012, 332.
[506] Hild and Hellenkemper 1990, 153.
[507] Özdizbay and Dağlı-Dinçer 2016, 197; see also Şahin and Özdizbay 2016, 516.

and wine press installations were found.[508] The site is surrounded by terraced lands in the south and the west, where threshing floors were built. More presses, which are isolated, are located in the southern part of the site. The rock-cut tombs of the *chamosorium* type, on the other hand, are concentrated in the north of the site, while only one of them is situated in the northwest. On the cliff by the Şeytanderesi Valley, located to the west of the site, several tomb reliefs dating to the period between the 2nd c. BCE and the 1st c. CE, are found.[509]

Based on its finely built polygonal walls, the fortification system around the site was dated to the Hellenistic Period. Aydınoğlu interpreted the structure at the entrance as a Hellenistic tower, which was probably used in later periods as an olive oil workshop with some additions.[510] Ten buildings that are located next to each other in the center of the site were identified as houses by Şahin and Özdizbay, without providing any argumentation. Also, these 'houses' were considered to have been built during the Roman Imperial and Late Antique Periods, when the site went through a transformation with the construction of production-related facilities around the 'houses' and the arrangement of agricultural terraces in the periphery.[511]

This site was probably founded as a fort settlement in the Hellenistic Period, as its location on an acropolis surrounded by walls dating to this period suggests. At that time, the settlement seems to have been linked to the funerary cult of the Olbians. Depicting men in military outfits, after which the site has been named by the Turkish people, these reliefs on the Şeytanderesi Cliff were interpreted as symbolizing the priest-soldiers of the aristocratic family of the Olba Kingdom.[512] In the course of the Roman Imperial and the Late Antique Periods, the fort settlement must have been transformed into a village, as at least ten houses were constructed. Besides, the settlement seems to have grown in a relatively planned way, which is suggested by the allocation of buildings with varying functions. While the center of the settlement was allocated for houses, the periphery seems to have been dedicated to production activities. Furthermore, a separate area in the north seems to have been designated for the inhabitants' burials. Although no church has been found so far and the number of houses is fewer than 15, this site should be

[508] I assume the authors use the term 'işlik' as press structure, not as workshop in the way I described in Chapter 3, Section 2.
[509] Özdizbay and Dağlı-Dinçer 2016, 197-98; Şahin and Özdizbay 2016, 516-17.
[510] Aydınoğlu 2007, 107; 2009, 99.
[511] Özdizbay and Dağlı-Dinçer 2016, 197; see also Şahin and Özdizbay 2016, 516.
[512] Durugönül 1998b, 86, 102. The names inscribed below these depictions are the same as those in the lists of priest names at Korykos Antron.

categorized as a village, at least of small or medium size, rather than as a hamlet. The reason for this identification is the inhabited area (ca. 2 ha) extending towards the cult place on the Şeytanderesi Cliff.

Allıören Mevkii

Allıören is located in the Narlıkuyu neighborhood of the Silifke District. The site, which is 421 m in diameter (estimated surface of ca. 14 ha), is situated on the southern and southeastern slopes of a hill. Over the site, five building complexes in total were detected and 12 structures, which seem to have been occupied during the Roman Imperial and the Byzantine Periods, were found at Allıören. To the south of the site, agricultural fields with threshing floors, workshops, and a large building are located. Ten vaulted cisterns were found all over the site. Three tombs in total were detected at the borders of the site, which is surprisingly few. Also, an area outside of the site, located to the west of Allıören, seems to have been dedicated to rock-cut tombs.[513]

Three of the above-mentioned five complexes, Y1, Y3, and Y5, could be studied in detail thanks to their good preservation. Y1, built on the northwestern slope of the settlement, has been identified as a possible farm building of large size. Based on the polygonal masonry used in its walls, the building can be dated to the Roman Imperial Period. The beam holes found on the block at its entrance suggest that this building had a second floor. Complex Y3, located at the western edge of the site, was built of small rectangular ashlars in double-faced walls. At its northeastern and southeastern corners, a rounded hollow is present. These elements were interpreted as the basins of olive oil press installations. Şahin and Özdizbay consider Y3 as a possible farmhouse. Another building complex, Y5, is situated on the highest point of the settlement. The architectural remains dispersed around this structure, such as fragments of a pediment, an architrave, and a frieze with metopes and triglyphs, and a possible *sarcophagus* pedestal suggest that it was a temple tomb.[514]

Unlike these building complexes, no information on the location of the 12 structures, which were identified as houses, were given in the report. Thus, any knowledge regarding how the 'houses' of Allıören were spatially placed is lacking at the moment. Yet, a few elements concerning their architecture were reported. First, their number could have been more, since the 12 buildings represent those with a preservation status that is good enough

[513] Şahin and Özdizbay 2016, 505-9.
[514] Şahin and Özdizbay 2016, 507-8.

to be mapped. These buildings, which constitute the majority of the structures at the site, were assumed to have been continuously used from the Roman Imperial Period until the Byzantine Period. Like Y1 and Y3, these structures have second storeys and their size varies between 16 m^2 and 40 m^2. Besides, hearths were found in the walls of several of them. The structures, which were identified as olive oil workshops based on the presence of millstones, have rock-cut presses preserved inside. The cisterns found at the site were vaulted, and they are concentrated in the south and southeast of the site. Şahin and Özdizbay suggest that the olive oil produced here must have been sold either in Allıören or Korykos. Furthermore, the area where the rock graves were found, was considered to be the *necropolis* of the site.[515]

The site of Allıören was presumably founded as a farm settlement on the western slope of a hill in the Roman Imperial Period. While Y1 and Y3 can be considered as the core of the farm settlement; Y5, which might have belonged to the owner of this farm, complements the triple composition of a farmhouse, agricultural land, and tomb. Located on the summit of the hill, the tomb must have appeared remarkably monumental. In the course of the Roman Imperial Period, the first houses may have been built. The remains of min. 12 'houses' beside ten cisterns suggest the presence of a substantial population here. Combined with large agricultural fields around the southern slope, the presence of five workshops at Allıören was interpreted as a great capacity for olive oil export to the harbor at Korykos. Although no quantitative data was provided in the report. Şahin and Özdizbay reported that a high number of threshing floors were detected. Thus, grain was considered to have been exported as well.[516]

Despite the absence of any structures for public use, the Late Antique phase of this site can be categorized as a village due to several reasons. First, the occupation size of the settlement is extremely large, even though this value was calculated based on patchy information. Secondly, the number of 'houses' was probably more than 12, as the known ones were the only ones which the surveyors could count due to the damage the buildings suffered. Lastly, a separate area dedicated to burials implies the presence of an organization in settlement planning and a substantial population. In conclusion, Allıören might be an example of a settlement that was transformed from a farm to a village.

[515] Şahin and Özdizbay 2016, 505-9.
[516] Şahin and Özdizbay 2016, 509.

Çokumlu Zeytin 2

The site is located 10 km northeast of Narlıkuyu in Silifke. The finds are a structure of 8x5 m in the center, a block with relief, 30-40 buildings dating to the Roman Imperial and the Late Antique Periods, and a threshing floor. The structure located in the middle of the site was identified as a farmhouse. In front of the 'farmhouse', a block on which a bunch of grapes, a garland, and *Kerykeion* were depicted was found. To the south of this building, a threshing floor of 8 m diameter was detected. The buildings numbering 30-40 were interpreted as houses without any specific reasons presented for this interpretation.[517] Based on the number of houses, this site can be categorized as a village that might have originally developed from a farm settlement.

Dedeveli Kalesi

The site is located 3 km west of the Kavaklı quarter of Kızılisalı in Narlıkuyu. The finds are a structure with multiple rooms in the center, 20 to 25 other buildings, 15 cisterns, and a threshing floor. The structure, which has three or four spaces occupying 8x5 m, was identified as a farmhouse with a second floor, evidenced by the arches and beam holes. The other buildings were interpreted as Late Antique houses. The cisterns were found both in and around the site, while the threshing floor with a diameter of 8 m was placed in the northern part.[518] Dedeveli seems to have had a large capacity for housing and production during Late Antiquity. Thus, the site can be categorized as a village. However, more information regarding the date of the 'farmhouse' is needed to evaluate what kind of transformation Karadeveli underwent, if it had a previous occupation phase before becoming a village.

Gökören

The site is located in the Kızılisalı quarter of Kızılisalı Village in Silifke. Occupying an area of 100x50 m (0.5 ha), the site has a north-south orientation. The remains consist of ca. 20 buildings identified as houses, two presses of unknown production types, six cisterns, and two threshing floors. These production facilities are located around the 'houses'. Also, an ancient road of 2.5 m wide was recorded to the west of the site. As a date for the site, two occupation phases of Late Roman and Early Byzantine Periods were suggested. The dating is based on the masonry techniques of the houses and the ceramic

[517] Şahin et al. 2010, 326.
[518] Şahin et al. 2010, 325.

finds. Reliefs of cross motifs found on the door lintels belonging to the 'houses' also confirmed this chronological information.[519] This site can be categorized as a Late Antique village based on the house number. Besides, its proximity to an ancient road suggests that the village at Gökören possibly had a large production capacity.

Karadeve

Karadeve is located 2 km east of Allıören and 1.5 km west of Çele Mevkii in Hasanaliler village of Narlıkuyu. The majority of the remains here are 100 buildings that were thought to be the 'houses'. Some of the houses were accompanied by single-roomed buildings, which were interpreted as storehouses. Between the houses, an unspecified number of threshing floors are attested. The site is divided by an ancient road with an east-west orientation. On both sides of the road, agricultural fields are located. Şahin interpreted the existence of the threshing floors at the site as an indication of grain production.[520]

As was already suggested by Şahin, Karadeve could be categorized as a village due to the high number of houses. The presence of threshing floors between the houses and possible storehouses adjacent to the housing units shows that the village was highly production-oriented. A more detailed examination of the houses is required since the current data lack any chronological information. However, parallel to the predominance of large villages in the Late Antique East, I suspect that such a large village must have had a Late Antique phase.

Korykion Antron

Korykion Antron is situated around the Cennet-Cehennem Obrukları (the sinkholes) that are 5 km southwest of Korykos, in the Narlıkuyu quarter of Silifke. The site is composed of a temple, which was converted into a church in the basin of the Cennet Obruğu, six buildings identified as houses, two presses, two rock-cut cisterns, and another structure identified as a church.[521] The conversion of the Hellenistic temple was retraced thanks to the northern wall of the church, where a name list of the priest-kings who ruled during the Hellenistic Period was inscribed. These names were understood to be the same

[519] Şahin et al. 2010, 322.
[520] Şahin 2008, 438.
[521] Özdizbay and Dağlı-Dinçer 2016, 204; Şahin et al. 2011, 380-81; Şahin and Özdizbay 2016, 528.

as the ones who served in the temple of Diokaisareia.[522] The rest of the remains at the site lies in the area to the south of the temple-church. The 'houses' located in this area have multiple rooms and possible upper floors as the presence of arches suggests. In one of them, a press was found. The second church at the site was built in front of a sacred cave in the Cennet Obruğu.[523] The site was interpreted as a small rural settlement, which was originally a Hellenistic cult center. It was suggested that Korykion Antron kept its importance up to the Byzantine Period.[524]

Korykion Antron could be categorized as a Late Antique village of small size that was originally a sacred site during the Hellenistic Period. The site saw a drastic change in its function between these two periods, as Korykion Antron gained a residential and production-oriented character over time with the conversion from pagan religion to Christianity, which is evidenced by the presence of two churches.

Tol

Tol, which is currently occupied by a modern settlement, is situated in Hüseyinler Village, Silifke. A well-preserved building of the 5th or 6th c. CE, a structure with a collecting basin, an altar of round shape, abutments in alignment with a Roman road on the Şeytanderesi, and a funerary inscription are found at the site. Due to the present occupation here, fewer *in-situ* finds could be documented. The Late Antique building of good preservation was identified as a church. Based on the presence of the collecting basin, the building was interpreted as a workshop. On the altar, which was found side-by-side with its podium, three busts, one female and two male figures, were depicted. The busts were stylistically dated to the late 2nd and early 3rd c. CE.[525] The abutments found where the ancient road and the stream intersect have been identified as the remains of a Roman bridge. A Greek inscription ("MH"), which could be indicating the distance to the closest ancient city, was recorded on the eastern abutment. The funerary inscription, found on a rectangular block, is reported to consist of four lines.[526]

This site dates at least to the Roman Imperial Period, as the date of the altar suggests. If the workshop was already in function during that time, I would suggest that Tol could have been a farm settlement during the Roman Imperial Period. The altar with the busts

[522] Sayar 2003, 159.
[523] Şahin and Özdizbay 2016, 528-29.
[524] Özdizbay and Dağlı-Dinçer 2016, 204-5; Şahin and Özdizbay 2016, 529.
[525] Durugönül and Durukan 2006, 19-20.
[526] Şahin et al. 2011, 384.

could be a funerary dedication for the farm owner and his family. The construction of the church reveals that the activities at the site continued during Late Antiquity, but it is unclear on which level these were situated. Despite the insufficient data concerning the Late Antique phase of the site, its location on the ancient road and the presence of a church here suggest that Tol was an important settlement during that time. Thus, this site could be preliminarily categorized as a village.

'Unnamed Site' A

This site is located at a 1.5 km distance from Karadeveli Mevkii in the Hasanaliler Village of Narlıkuyu. The remains include a large structure dated to the 5th-6th c. CE without argumentation, several unidentified buildings, and a millstone in one of those buildings, *sarcophagi*, and a *chamosorium* tomb. The Late Antique structure of large size was identified as a church based on its preserved *narthex*. The other buildings could not be identified due to their poor preservation. The find of a millstone inside one of them suggests that the building could have been an olive oil workshop. Besides, funerary elements are located further in the western part of the site. Durugönül et al. defined the site as a large Byzantine settlement.[527] Considering the large size of the church and the occupation area described in the survey report, it could have been a village. Besides, the unidentified buildings could have been houses and workshops where the inhabitants resided and worked.

'Unnamed Site' B

The site is situated on the eastern slopes of a rocky hill, 2 km southeast of Türkmenuşağı and 1 km west of Allıören in Narlıkuyu. At the eastern edge of the site, the riverbed of the Kuruçay is located. Nearly 50 buildings as well as a threshing floor of 8 m diameter and three rectangular cisterns were detected in the southwestern part. In the riverbed, a rounded altar with a possible Athena relief was found. The site was dated to the Late Roman-Early Byzantine Periods in the report, without further elaboration. The buildings, which have various dimensions ranging between 2x3 m and 5x7 m, were identified as houses.[528] The high number of 'houses' suggests that the site could have been a village. It is interesting to see that, despite the high number, the houses in this settlement are much smaller in size when compared to the ones in Allıören.

[527] Durugönül et al. 2009, 290.
[528] Şahin 2009a, 24.

Hamlets/Small Villages in the Territorium of Korykos

Demirciören 2

This site is located 4 km east of Narlıkuyu in Silifke.[529] The remains are ca.15 buildings, two threshing floors, and three cisterns. The buildings, which are built with rectangular plans, were identified as houses. The threshing floors, which are 7 m in diameter, and the cisterns were located between the 'houses'. The site was reported to have been a Late Roman-Early Byzantine settlement with an east-west orientation.[530] Based on the number of 'houses', I categorize Demirciören 2 as a Late Antique hamlet/small village.

Kapıtaş 2 Mevkii

Kapıtaş 2 Mevkii is situated in Hüseyinler, Silifke. In the center of the site, a structure with three rooms accompanied by a 5x5 m building is present. In total, 20 buildings identified as houses were recorded. At the northeastern part of the site, a large threshing floor and a building nearby were detected. The triple roomed structure was identified as a farm building. The adjacent structure located to the west of the 'farm building' was considered a possible storehouse. No details regarding the date or location of the 'houses' were given in the report. The remains of production facilities are located outside the center, at the northern edge of the site. The threshing floor, which is 15 m in diameter, has a rather large size. The building located to the southwest of the threshing floor was identified as an olive oil workshop, based on the remains of a *mortarium*. The site as a whole was dated to the Late Antique Period, although the criteria on which this dating is based was not given in the reports.[531]

The central position of the 'farmhouse' suggests that the 'houses' might have been built at a later stage, which means that Kapıtaş 2 Mevkii was possibly a farm settlement in its first occupation phase. Alternatively, the 'farmhouse' may have belonged to a privileged person, so his residence might have looked different than the other housing units. In any case, this site can be categorized as a hamlet/small village due to the presence of multiple but still few houses as this shows the residential character of the settlement.

[529] Şahin et al. named the site Demirciören (2010, 322). Since there is already a site with the same name, Demirciören Mevkii, seen in earlier reports, I renamed it as 'Demirciören 2'.
[530] Şahin et al. 2010, 322.
[531] Şahin 2012, 236.

Kıraçhavlı

The site is located ca. 14 km north of Narlıkuyu in Silifke. Four more sites, Arılık, Fakıoğlu, Yukarı Kömürlük, and Kocanın Hayratı, were discovered in this area at distances less than 1 km from each other, but, none of them have been dated to the Late Antique Period. The remains at Kıraçhavlı include eight to ten buildings identified as houses, a threshing floor with a diameter of 6 m, and a press. These production facilities are located in the eastern part of the site. The site was dated to the Early Byzantine Period, presumably based on the 'houses'.[532] Kıraçhavlı could be categorized as a hamlet/small village.

Ökkeşyurdu

This site is situated 5 km north of Narlıkuyu in Silifke. The center of the site is composed of ten buildings identified as houses, a threshing floor, and a workshop of 5x3 m with a millstone. In the vicinity of the site, two cisterns were documented. The site was dated to the Early Byzantine Period.[533] The presence of the millstone suggests that the workshop was used for olive oil production. In the light of the current finds, I categorize this site as a hamlet/small village.

Öveklik 1

The site is located 9 km north of Narlıkuyu, Silifke. The remains are composed of 15 buildings assumed to be 'houses' and 4 tombs of the *chamosorium* type. 30-40 m to the north, a *sarcophagus* was detected. A lion is depicted on its lid. To the south of the 'houses', a press installation composed of one treading floor and double collecting basins was placed. Around the press, ceramics dating to the Late Antique Period were detected. Overall, the site was dated to the Late Roman-Early Byzantine Periods.[534] Öveklik 1 can be categorized as a hamlet/small village.

Öveklik 2

This site is located 300 m west of Övelik 2, 9 km to the north of Narlıkuyu, Silifke. The finds consist of ten buildings identified as 'houses', an isolated building accompanied by a cistern in the western part of the site, and a *chamosorium* with a cross motif at the

[532] Şahin et al. 2010, 326.
[533] Şahin et al. 2010, 322.
[534] Şahin et al. 2010, 322.

westernmost edge. The building found in the west was identified as a workshop for an unspecified production type. Dated to the Late Roman-Early Byzantine Periods, the site was interpreted as a possible continuation of Öveklik 1.[535] The site shows the features of a hamlet/small village based on the number of houses. If Öveklik 1 and 2 formed one settlement, the two together can be categorized as a village.

Sakırgalık Mevkii

Sakırgalık is located in Kızılisalı, Silifke. A structure, which was identified as a workshop, occupies the center of the site. Besides, five buildings accompanied by press installations and cisterns were interpreted as houses.[536] Dated to the Late Antique Period by Şahin et al., Sakırgalık could be placed into the category of hamlet/small village due to the presence of a few houses. Yet, further information regarding the site is required for a better understanding of its history and function.

'Unnamed Site' C

The site is located 200 m south of Aşağı Mahalle of the village of Hüseyinler, Silifke. Ten buildings identified as houses, another building located in the eastern part, one olive oil press, and one threshing floor with 30 m diameter were recorded. The building to the east, which measures 10 x 8 m, was identified as an olive oil workshop, based on the presence of a *mortarium* inside. An ancient road with northwest-southeast orientation was detected in the southwest of the site. The site was dated to the Late Roman Period for reasons not specified in the report.[537] A preliminary categorization of hamlet/small village could be applied to this site. However, its proximity to the ancient road which probably merged into the Korykos-Olba road, and the large production capacity suggests that this site could have been much larger than it is preserved today.[538]

[535] Şahin et al. 2010, 322.
[536] Şahin et al. 2011, 382.
[537] Şahin 2010, 236.
[538] On the Korykos-Canbazlı road, see the fifth of the Olban roads explained in the second section of this chapter.

Farms in the Territorium of Korykos

Burcunkale (Burç Kale)

Burcunkale (Burç Kale) is located in Hüseyinler, Silifke. The site is attested by a structure built in small ashlars. A door lintel with garland and club reliefs was detected. Based on the poorly fitted joints, the door seems to have originally belonged to another building. Behind this structure, a building with a millstone and a threshing floor were recorded.[539]

The door lintel was dated to the Hellenistic and the Roman Imperial Periods based on the *terminus ante quem* established by the use of garland and club symbols. The structure to which the lintel is currently attached was interpreted as a tower dating to a later period, presumably to a time after the 2nd c. CE. The building behind the 'tower' was considered to be a farm structure, which seems to have been built later.[540]

Burcunkale might originally have been a farm, composed of an isolated tower during the Roman Imperial Period. The function of this tower can vary, as it could have been used as a farmhouse or a lookout. If it were agriculturally oriented, then cisterns and presses could have existed around the tower. Over time, a farm structure with production facilities was additionally built in the settlement. The presence of a millstone indicates olive oil production; the threshing floor suggests that grain was produced at this farm too. In conclusion, Burcunkale either continued to be a farm but on a larger scale if the tower was already functioning as a farmhouse in the Roman Imperial Period or it may have changed its character from a purely military post into an agricultural settlement in Late Antiquity.

Demirciören Mevkii (Demirci)

Demirciören Mevkii (Demirci) is located in the village of Boynuinceli, Narlıkuyu. This site is composed of a structure with an adjacent cistern and a building identified as a workshop, another building, a wall in polygonal masonry, and five vaulted tombs. Besides, an ancient road leads to the site. [541]

[539] Durugönül et al. 2010, 119-20.
[540] Durugönül et al. 2010, 120.
[541] Durugönül et al. 2007, 122.

The structure accompanied by the cistern and the workshop was identified as a tower.[542] Aydınoğlu suggested that the workshop near the tower must have produced olive oil.[543] The other building was categorized as a house, which dates back to the Late Hellenistic or Early Roman Periods. One of the tombs is built out of bedrock. Another tomb bears a circled Maltese cross motif on its northern wall built of small ashlars. Based on the motif and the masonry technique, the tomb was dated to the 4th-5th c. CE. The wall of polygonal masonry, on the other hand, was broadly dated to the Roman Period. Thus, the site seems to have been continuously occupied between the Hellenistic Period and Late Antiquity.

Demirciören was probably founded during the Hellenistic or Roman Imperial Period as a farm consisting of a tower and production facilities. This represents the typical agricultural organization, the combination of a tower, a workshop, and a cistern. The house, which was probably added later than the tower, must have expanded the size of the farm settlement. The presence of the tombs confirms the permanent occupation at Demirciören until the Late Antique Period. Since no Late Antique houses and church are attested at the site, it can be suggested that Demirciören probably remained a farm.

Tol 3 Mevkii

Tol 3 is located 4 km northwest of Hüseyinler Village in Silifke. The remains consist of a building identified as a workshop, rock-cut presses placed in the western part, and a funerary altar with a round shape nearby the site (fig. 19). No details regarding the workshop were given in the site description. The staircases built out of bedrock were used to reach the presses. The altar, located 30 m north of Tol 3, has a relief of two busts. The site has been described as an agricultural settlement of the Late Antique Period, oriented in a northeast-southwest direction.[544] I think this site shows the patterns of a farm, as the agricultural facilities and a funerary monument appear together. Yet, more research is needed for a secure assessment.

[542] Durugönül 1998b, 78; Aydınoğlu 2009, 101.
[543] Aydınoğlu 2009, 101.
[544] Şahin 2013, 289. The identification of the workshops relies on the observations of the surveyor, which are not sufficiently explained.

Monastic Sites in the Territorium of Korykos

Çoku

The site of Çoku is located in the Çoku neighborhood of Hasanaliler Village in Narlıkuyu. Remains of a polygonal wall, an east-west oriented building with an apse, remains of a millstone and a crushing basin, and a small cistern were recorded at the site. The apsed structure has a basin inside, which is connected via a channel to a cistern located next to the entrance. Besides, two presses with treading floors are present to the south and west of this building. The building with an apse was identified as a church and the basin inside was considered to be part of a baptistery. The cistern located next to the church must have provided the necessary water used in the baptistery and the church.[545]

This site was dated to the Byzantine Period, based on the masonry type of the wall remains and the presence of a church. Due to the existence of production-related facilities, such as cisterns and presses/workshops around the church, the site might have formed a monastic complex of which the housing units for the monks are not preserved. In conclusion, I suggest that Çoku can be preliminarily categorized as a monastic site due to the presence of production facilities as well as that of a church.

Ports in the Territorium of Korykos

Kızlarhamamı Mevkii

Kızlarhamamı is located in the area overlooking an inlet in Narlıkuyu, to the west of Kızkalesi. In the center of the settlement, an arched structure composed of several spaces in which one lever and screw press were discovered, is located. Besides, a large building and a cistern of large size were found in the same area. The press equipment found at the site is not limited to the lever and screw press, as six lever and weight presses, millstones, and weight stones were also recorded. In the periphery of the site, three tombs of the *chamosorium* type were detected. Also, a structure built out of irregular polygonal stones is leading down to the sea in the southwest of the site. Durugönül et al. interpreted the arched structure as a possible two-storied production building, based on the presence of the press installation. Some of the blocks used in this building are *spolia* belonging to an

[545] Durugönül et al. 2008, 91.

earlier structure. The large building, on the other hand, was reported to be a church based on the presence of a block of a twin-window and a collapsed area at the east looking like an apse. The cistern next to the church has a remarkably well preserved upper structure, which is covered by a vaulted roof of rectangular blocks. Apart from their type, no further details regarding the tombs found out of the center, such as their chronology and location, were given. The remains of polygonal stones were considered to be a border wall resembling the one between Elaiussa Sebaste and Korykos, which indicated the boundary between the two cities.[546]

As stated by Durugönül et al. 2009, Kızlarhamamı could have been a Late Antique port due to its proximity to the sea and the presence of an inlet suitable for mooring. This idea is supported by the evidence of intense production activities at the site, especially in the centrally located arched structure.[547] The lever and screw press found inside this building points towards olive oil production. Based on the current data, the settlement shows no residential character due to the absence of houses. Yet, a large church suggests that a substantial community must have existed in the vicinity of Kızlarhamamı. In conclusion, the site might be categorized as a port with a production focus, which attracted producers and traders as a rural center.[548]

Funerary Sites in the Territorium of Korykos

Alören

The site is located in Alören Valley, to 500 m north-northeast of Hasanaliler Village of Silifke. In this valley, many rock caves and niches are present. The finds at the site include a painted inscription discovered in one of the caves and the rock-tombs located to the east of this cave. The inscription, which was painted with red ochre on the bedrock, revealed that this area was the burial site of a monastery. One of the rock tombs had a relief depicting a man reclining on a *kline*. The rock tombs to the east also bear three inscriptions, which were dated to the 6th c. CE. Besides, the niches found in the valley have inscriptions associated with the Roman Imperial cults and several graffiti dated to the Late Antique Period. This valley in general was interpreted to have been a Roman

[546] Durugönül et al. 2009, 291-92.
[547] Durugönül et al. 2009, 291.
[548] For further interpretation, see the section 'Maritime Connections' in this chapter.

cave cult area, which kept its importance during the Early Byzantine Period.[549] In the light of these finds, this area can be categorized as a funerary site for Christians.

Halilören (Alveren) Mevkii

Halilören (Alveren) Mevkii, attested by a relief of a male figure reclining on a *kline*, is situated at Gedikkonuş. The relief was dated to the Late Roman Period based on its unrefined style.[550] Due to the limited data concerning the location and the few remains on the site; more research is needed to evaluate the character of the settlement. Yet, I preliminarily categorize Halilören Mevkii as a funerary site.

Sacred and/or Funerary Sites in the Territorium of Korykos

Bağlıçukur

Bağlıçukur is a site located in Hüseyinler, Silifke. This site is attested by low reliefs of two standing figures on the same rock, a female figure on another rock close by, and three funerary inscriptions. The taller figure on the relief holds a tassel shaped object in his/her hand, whereas the other carries an object with a square form (fig. 20). The relief of a woman has been found in possible association with the tombs that have inscriptions of the symbols of the half-moon and the sun (fig. 21). A similar kind of relief was found at Çataleni, the site located to the east of Bağlıçukur. This has two male figures engraved on top of each other on a bedrock. The man in the upper position carries a cross in his left hand and a square object in his right one, while the other figure holds a lancer and a rounded object. Together with these figures, incised symbols of the half-moon and the sun were detected on this rock (figs. 22, 23).[551]

Due to the stylistic similarity of the depictions at this site with the relief at Çataleni, Durugönül et al. dated these two sites to the Late Antique Period and later based on a cross symbol depicted on one of them. This cross might have been added to the depiction later. However, this possibility was not mentioned in the survey reports.[552] Also, the inscriptions dated to the 5th-6th c. CE confirm that this site was used during Late

[549] Sayar 1998a, 344; 2007, 280.
[550] Durugönül et al. 2007, 123.
[551] Durugönül and Durukan 2006, 20; Şahin 2009a, 21; Durugönül et al. 2010, 120.
[552] Durugönül et al. 2010, 120.

Antiquity.[553] The figures in standing position were thought to be clergy members taking place in a Christian ceremony.[554] Based on the current evidence for the reliefs and the inscriptions, this site seems to have had religious importance during Late Antiquity. No houses and production facilities are attested in the settlement due to either the poor preservation conditions or the purely sacred character of the site. In conclusion, Bağlıçukur can be categorized as a sacred and/or funerary site.

Çataleni Mevkii

The site, attested by a low relief of two male figures on the bedrock (see figs. 22, 23), is situated to the east of Bağlıçukur in Hüseyinler, Silifke. Both figures show characteristics similar to those of the reliefs in Bağlıçukur; one of the figures at Çataleni bears a cross motif, which places the site into the Late Antique Period or later.[555] Similar to Bağlıçukur Mevkii, this site seems to have been religiously important as well and can be categorized as a sacred and/or funerary site.[556]

Unidentified Sites in the Territorium of Korykos

Akkum Mektep Damı

The site of Akkum Mektep Damı is situated in Akkum, a modern settlement that is 5 km west of Kızkalesi. A large structure in polygonal masonry dating to the Byzantine Period is present at the site, which was interpreted to have been occupied until the 19th-20th century CE.[557] Due to the limited data retrieved from the settlement, it is currently too early to apply any categorizations on the site of Akkum Mektep Damı.

Arpalık

This site is located almost 6 km northwest of Narlıkuyu in Silifke. The finds include a column with a funerary inscription in the center, two threshing floors, and two presses in the southern part. The function of the presses was not specified in the report. It was

[553] Şahin 2009a, 21.
[554] Durugönül and Durukan 2006, 20.
[555] Durugönül et al. 2010, 120.
[556] For a detailed discussion of the similarities between Çataleni and Bağlıçukur, see 'Bağlıçukur' above in this section of the thesis.
[557] Durugönül and Durukan 2006, 21. The term 'Byzantine Period' in the report was assumed to be used interchangeably with 'Early Byzantine Period', which covers at least the 5th-6th centuries.

reported that the site can be dated to the Late Roman and Early Byzantine Periods.[558] The column in the funerary context suggests that this site could have been a farm. However, more information regarding the chronology of the finds is needed.

Dedeveli

This site is located nearby Dedeveli in Kızılisalı of Narlıkuyu. The remains consist of a wall, a building behind the wall, and two-column capitals. The structure of which only one wall is preserved was identified as a house dating to the Byzantine Period. The 'house' has a wall bearing two arches and another wall where only the window opening is preserved. The building behind the 'house' was interpreted as a church but no criteria for such identification were specified in the report. Besides, the survey report did not describe the capitals and their find place.[559]

This site needs more investigation to be categorized. Yet, a few comments could be made on the existing finds. Since no buildings except for one single house were detected around the church, this settlement might have served the communities living in other rural settlements in the vicinity. In this case, I would categorize Dedeveli as a sacred site. Alternatively, other houses may not have been preserved; thus, based on the presence of a church, Dedeveli could be categorized as a village.

Hoyrazakarşı (Kelleci)

Hoyrazakarşı (Kelleci) is located on the western side of the modern highway leading to Adamkayalar, approximately 4 km north of Kızkalesi, Erdemli. A structure with walls in polygonal masonry and an arched structure with a Maltese cross motif on its door lintel were discovered in Hoyrazakarşı. Opposite of the site to the west of the highway, two tombs were recorded. The structure built in polygonal masonry was identified as a Hellenistic tower. The function of the other building is not specified, but the arch points to a second storey. Based on the cross motif found on the lintel, this building was dated to the Late Antique Period. The area where the tombs are found was interpreted as the necropolis of Hoyrazakarşı. The stylistic analysis of the relief on one of the tombs showed that it was used during the Severan Period (193-211 CE).[560]

[558] Şahin et al. 2010, 321-22.
[559] Durugönül et al. 2009, 293.
[560] Durugönül and Durukan 2006, 19.

Even though no remains of any production facilities were found around the tower, this site might originally have been a farm settlement in the Hellenistic Period. The tombs indicate that the activities here continued during the Roman Imperial Period. The Late Antique building could be a farmhouse of which the production facilities are either not preserved or have not been found yet. Therefore, this site needs more investigation to be better understood.

Kepezüstü

The site is located 6 km east of Keşlitürkmenli village in Silifke. Surrounded by agricultural fields in the north, the site was dated to the Roman Imperial and Late Roman Periods. The remains are an unspecified number of buildings in the northern part and a press with double basin accompanied by weight stones ('press taşları') to the south of this group of structures. The buildings located in the north were identified as farmhouses with dimensions of 6x4 m.[561] The information regarding the number and plans of these buildings is scanty. Thus, the criteria for this identification is unknown. Based on the current data, it is too early to make any categorization of this site.

Kökdibi Mevkii

Kökdibi is located next to a valley in Hüseyinler, Silifke. The site consisted of several polygonal walls of a structure. This structure was dated to the Hellenistic Period, but later additions were recorded as well.[562] Due to the insufficient data concerning its remains and their chronology, no assessment can be made on this site at the moment.

Murtluboğaz Mevkii

Murtluboğaz Mevkii is situated in Narlıkuyu, Silifke. The remains recorded at this site are a structure with an apse, door lintels, and building blocks. The structure, which has an apse of which only half is preserved, was identified as a Late Antique church with an entrance from the west. The lintels and blocks, located to the north of the church, are considered to have belonged to houses.[563] The current data retrieved from the surveys are scanty, so the information for the chronology of 'houses' and the remains of the site, in general, is inadequate.

[561] Şahin et al. 2010, 325.
[562] Aydınoğlu 2007, 107.
[563] Şahin et al. 2011, 382.

Şıhdede Mevkii

Şıhdede Mevkii is located next to a well-preserved ancient road in Hüseyinler, Silifke. The finds from the site are polygonal wall remains of a structure next to the road, and several buildings nearby. The only chronological information comes from these buildings, which are dated to the Late Antique Period.[564] Due to the vague and missing information on the date and function of the remains, no evaluation can be made. Yet, the proximity of the site to the ancient road suggests that further studies here might bring valuable data regarding the settlement pattern of the region.[565]

'Unnamed Site' D

The location of this site is described as on the western side of the Paşa Deresi Valley, lying at the border between Korykos and Elaiussa Sebaste. Two tombs, a structure with polygonal walls, and several other buildings with unclear plans have been documented. One of the tombs was dated to the Hellenistic Period based on its polygonal masonry. The other tomb, which has a vaulted form, was dated to the Roman Period. The rest of the buildings one of which is built in large ashlar was dated to the Byzantine Period.[566]

The site seems to have been continuously occupied between the Hellenistic and the Late Antique Periods. The earliest phase of the site, composed of a tower and tomb, can be interpreted as a Hellenistic farm. Yet, more information about later additions on the site is required for an assessment of its Late Antique phase.

'Unnamed Site' E

This site is situated almost 100 m west of Keşlik Sokağı in Hasanaliler Village of Narlıkuyu. The finds are three *chamosorium* tombs, column drums, a console block, and a structure built of polygonal walls. It was reported that the tombs and the console block might be evidence for a Roman monumental tomb with a freestanding column in front of it. The structure of polygonal masonry was dated to a later period, which I assume is the Late Antique Period.[567] In the light of the current evidence, the Roman Imperial phase of the site could be categorized as a farm settlement, which continued to be occupied during

[564] Aydınoğlu 2007, 107.
[565] For detailed information on this road, see the Olban road numbered the fifth in the second section of this chapter.
[566] Durugönül and Durukan 2006, 22.
[567] Durugönül et al. 2009, 292.

the Late Antique Period. However, whether the farm was transformed into a new type of settlement cannot be evaluated at the moment.

'Unnamed Site' F

The site is located to the north of Yukarı Hüseyinler Village in Silifke. The remains at the site are a monumental tomb with a column, an *in situ* millstone, a cistern, and polygonal walls of unidentified structures. The polygonal masonry walls are dated to the Hellenistic Period, which represents the earliest phase of the site. The column shaft, its Doric capital, and the console of the tomb with the busts of two figures were found together. The tomb and the column were dated to the Roman Period. Other unidentified structures were reported to have belonged to the Byzantine Period, which likely means that the site was continuously occupied from the Hellenistic into the Late Antique Period.[568]

Based on the presence of the monumental tomb and the production facilities such as the millstone and cistern, the Roman Imperial phase of the site might be categorized as a farm settlement. The possible future identification of Byzantine structures will perhaps determine the interpretation of the Late Antique occupation phase of this settlement.

'Unnamed Site' G

This site is located nearby the northern exit of the modern city of Kızkalesi, 200 m to the west of the modern highway. The remains are some walls and door lintels. A circular cross motif was found on one of the lintels. Nearby these remains, a tomb, a press, and a rock-cut cistern of small size were detected. The tomb was dated to the Hellenistic Period based on its polygonal masonry. The site was categorized as a small farm settlement by Durugönül et al.[569] For its Hellenistic phase, this categorization seems very possible. However, how the settlement transformed over time cannot be evaluated based on the current data.

'Unnamed Site' H

The site is located 20-30 m east of the Extra Muros Church, in the close vicinity of Korykos. The finds are composed of remains identified as Byzantine structures.[570] Thus,

[568] Durugönül et al. 2009, 296.
[569] Durugönül et al. 2008, 88.
[570] Durugönül et al. 2008, 86.

whether this site was occupied during Late Antiquity is uncertain. Besides, the current information on the remains is insufficient to identify its function.

'Unnamed Site' I

This site is located in the area to the southwest of the point where the ancient road coming from Elaiussa Sebaste intersects with the road leading to Korykos presumably from the north.[571] The remains found at this site are a building with multiple spaces and a cross detected on one of the lintels belonging to that building, which was identified as a farm structure. Based on the motif on the lintel, the site can be dated to the Late Antique Period.[572] Yet, it is too early to comment on the site type due to insufficient data.

'Unnamed Site' J

This site is located ca. 300 m west of Boyan Kalesi, around Göztepe Mevkii in Hasanaliler village of Silifke. The remains here consist of an apsed building identified as a church, a column capital, and ruins dated to 'the later periods', presumably meaning the Late Antique Period.[573] Due to the insufficient data regarding the remains and their chronology, no categorization could be applied to this site.

5.1.2 Elaiussa Sebaste and Its Hinterland

Elaiussa Sebaste

Elaiussa Sebaste, an ancient coastal city of Rough Cilicia, is located in Merdivenlikuyu, the Ayaş neighborhood of the Erdemli District. The city was founded on an island, which later became a promontory connected to the mainland due to siltation.[574]

The *polis* was originally founded on the island in the Late Hellenistic Period, and it extended towards the mainland during the Roman Imperial Period (fig. 24).[575] Emperor Augustus (30/27 BCE–14 CE) appointed the Cappadocian king Archelaos as the governor of Rough Cilicia at the end of 1st c. BCE. Thereafter, Elaiussa Sebaste prospered and

[571] The description of this location in the survey report is extremely vague. I assume that the road intersecting with the Elaiussa Sebaste road is running to the north of Korykos based on the information that tombs and *sarcophagi* were found during the studies undertaken in the north and northeast of the city.
[572] Durugönül et al. 2008, 88.
[573] Durugönül et al. 2009, 293.
[574] Equini-Schneider 1996, 1997.
[575] Equini-Schneider 1996, 368; Equini-Schneider and Borgia 2010, 318-20.

became the regional center of culture, art, and trade as Archelaos made it the capital of his kingdom. The city was a *metropolis* until the end of the 2nd c. CE; yet, this drastically changed in Septimius Severus' reign (161–180 CE), according to a hypothesis made by Durukan, due to the throne struggle between the generals Septimius Severus, Niger, and Albinus.[576] Since Elaiussa Sebaste seems to have supported Niger during the war, Septimus Severus may have likely punished the city. Epigraphically, no evidence of such punishment exists; yet, the architectural remains support Durukan's hypothesis. He reported that, although the whole region flourished during the Severan Period (193–211 CE), which is attested by the buildings belonging to that time, very few traces from this period have been detected in Elaiussa Sebaste. One element of evidence related to the decline of Elaiussa Sebaste in the Severan Period is the construction date of its temple tombs. The temple-shaped tomb, which was a strong indicator of the Roman culture, appeared in Elaiussa Sebaste during Hadrian's reign (117–138 CE), which was fifty years earlier than it did in other places of the region. Strikingly, the temple tombs in Elaiussa Sebaste ceased to be built after Marcus Aurelius' reign (161–180 CE), whereas other settlements adopted this funerary form from the Severan Period (193–211 CE) onwards.[577] Excavation results have shown that the city was abandoned by the mid-7th century CE.[578]

During this phase of prosperity, which continued until 170–180 CE, many structures including two harbors, the Imperial Temple, the theatre, the agora, several baths, and aqueducts were built.[579] During the Late Antique Period, the appearance of the city changed due to the construction of a church on the Agora, and the conversion of the temple as well as that of the Great Baths into Christian basilicas.[580] More transformations included the area called "domestic and artisanal quarter", which was composed of houses with one or two storeys and was possibly in the 1st c. CE built on a terraced surface of a hill overlooking the southern harbor of Elaiussa Sebaste.[581] The house units were rearranged in the Late Antique Period when new walking levels were created and the spaces were enlarged by new perimeter walls, while the southern part of the area was devoted to a Late Roman I *amphora* workshop, where containers for wine and olive oil

[576] For an overview of this struggle, see Chapter 2.
[577] Durukan et al. 2013, 349-51, 354, 358. For a detailed discussion of the funerary architecture of Rough Cilicia, see Er-Scarborough, 2017.
[578] Equini-Schneider and Borgia 2010, 318-20.
[579] Equini-Schneider and Borgia 2010, 318-20; Durukan et al. 2013, 349-50.
[580] Equini-Schneider 2008a, 45-54, 68-70, 125-38; Iaocomi 2013, 314.
[581] Iaocomi 2013, 320.

were manufactured.[582] Furthermore, the temple in the southwestern part of the city, an area overlooking the Southern Harbor, became a monastery complex composed of a small church and several rooms during the 5th c. CE. Equipment for oil and wine production is attested in several spaces of the building, which suggests that the monastery played a role in the production and storage of food.[583] Also, a Byzantine palatial complex was built in the 5th c. CE on the island.[584]

Amphora production in Elaiussa Sebaste started in the Roman Period, with the manufacture of Pompei 5, Dressel 2-4, and Agora M54 *amphorae*. In the Late Antique Period, the city began to produce LR1 *amphora*e, as shown by the excavations that took place in the so-called "domestic and artisanal quarter".[585] In total two kilns, which are dated to the 7th c. CE based on ceramic and glass analyses, were exposed during the campaigns.[586] In a cistern adjacent to these kilns, besides ca. 55 jugs, more than 700 *amphorae* were retrieved, mostly in intact form. All the *amphorae* found in the collapse debris of the cistern are LR1 that were probably produced as wine containers and date to the period between the mid-5th and the early 7th c. CE. The well-preserved state of the *amphorae* has been explained by the fact that the cistern must have been filled with some kind of liquid before they were deliberately placed into it.[587] To the south of the cistern filled with ceramics, a basin with plaster was found, which was used for the clay settling process of ceramic production. In one of the rooms in the eastern part of the quarter, Room IVg, another cistern was exposed, which again contained several LR1 *amphorae* that were well-preserved.[588] Furthermore, Room Ig located in the lower terrace is considered to have been a LR1 workshop, as evidenced by the ceramic findings found on the compacted clay floors.[589] Based on their closely situated locations, a direct link between this quarter and the southern harbor is likely to have existed.[590] Therefore, the intensified manufacturing activities in this quarter during Late Antiquity can be assumed to have existed conjointly with the increasing function of the southern harbor.

Excavations conducted in the south-western necropolis revealed a possible ceramic kiln in a large structure situated on two-level terraces in the middle of tombs. Here on the

[582] Iaocomi 2013, 313-14.
[583] Equini-Schneider 2011, 200.
[584] Equini-Schneider and Borgia 2010, 318-20.
[585] Ferrazzoli and Ricci 2009, 34; Equini-Schneider and Borgia 2010, 318.
[586] Equini-Schneider 2006, 565.
[587] Equini-Schneider 2007, 301; 2008, 179.
[588] Equini-Schneider 2008b, 180; Equini-Schneider and Borgia 2010, 319-20.
[589] Equini-Schneider and Borgia 2010, 318.
[590] Equini-Schneider 2008b, 179.

upper terrace, one *in situ* press, three press weights, one collection basin, and one hearth were found. Based on the studies of the pottery sherds, which have been identified as discarded LR1 *amphora* fragments, this possible kiln structure was suggested to be used in the period between the early 5th c. and the 7th c. CE.[591]

Based on topographical features, the borders of the *territorium* of Elaiussa Sebaste are presumed to have been the lands between the Paşaderesi River in the west and the Lamos River in the east. This area covers the modern coastal neighborhoods of Ayaş, Kumkuyu, and Limonlu that are located in the district of Erdemli. The hinterland extends towards the north, where the inland villages of Çanakçı, Karaahmetli, Batısandal, Esenpınar, and Sömek are situated.

Villages in the Territorium of Elaiussa Sebaste

Çatıören

Çatıören, which occupies ca. 8.5 ha, is located on a hill in Ayaş, Erdemli.[592] An ancient road crosses the valley lying to the north of the hill, which provides the site with a good view on the route that was connecting Elaiussa Sebaste and Diokaisareia.[593] Situated on an *acropolis*, the site is surrounded by a wall where three towers are located. Besides, many cisterns inserted in the walls were found. The fourth tower is detached from the fortification wall. The production equipment found inside suggested that the tower was used as an olive oil workshop in later periods. To the west of the fortification wall, a two-storied structure identified as a garrison was detected.[594] A large structure of ca. 18 x14 m was recorded in the eastern section of the hill. Identified as a farmhouse, it is accompanied by a tower and a grave in house form. The tower, located 17 m northwest of the farmhouse, is provided with a rock-cut lever and weight press next to it. To the north of these buildings, a grave house built in polygonal masonry was detected.[595] A gable-roofed *aedicula* tomb, which is another monumental tomb type founded at Çatıören, was identified on the eastern slope based on the remains of a pediment, two

[591] Iaocomi 2010, 24.
[592] Özdizbay and Dağlı-Dinçer 2018, 175.
[593] Mörel 2017a, 9-10. For a detailed overview of this road, see the sixth of the "Olba Roads" in the second section of this chapter.
[594] Mörel 2017a, 4-5. Durugönül (1996, 253-55), on the other hand, mentioned only three towers at Çatıören, two of which are attached to the walls.
[595] Mörel 2017a, 5-6.

columns, and their consoles. It was dated to the 2nd c. CE based on an inscription dedicated to the deceased, his wife and children. Close by the tomb, a rounded altar was found. The shaft of the altar has the relief of four busts depicting two male adults, one woman and possibly a boy. Besides, a monumental column placed on a rock-cut platform was discovered.[596]

Another remain recorded at Çatıören is the so-called "Hermes Temple", a structure built in polygonal masonry that was dated to the 2nd c. BCE. The reliefs of two *Kerykeia* and two inscriptions found in the temple showed that it was dedicated to Hermes. Based on their date, it was confirmed that Hermes kept being worshipped during the Roman Imperial Period as well.[597] Besides, a structure with three elongated sections was detected at Çatıören. Identified as a basilica, this structure was dated to the 6th c. CE based on the column capitals used in the western wall of its *naos*. Around the church, two inscriptions dating to the Roman Imperial Period were detected. The content of these inscriptions suggests that this area might have been a gathering place for the Jewish community at Çatıören.[598]

In total, four buildings were identified as olive oil workshops based on *in situ* remains belonging to crushing basins and millstones inside. Three of them, provided with several presses, are situated next to the ancient road, whereas the fourth workshop is the above-mentioned tower situated at the southern corner of the fortification wall.[599] The buildings identified as houses were located southwest of the area where the temple stands. Due to their poor preservation, the plan of only one building identified as a house could be drawn. This 'house' covers a large area and was composed of two rooms.[600]

The fortification wall and related towers, the 'garrison', the cisterns inserted in the defense walls, the group composed of the farmhouse, tower, and grave house, and the "Hermes Temple" were all dated to the Hellenistic Period.[601] According to Mörel, the site was a fort in this phase. During the Roman Imperial Period, the settlement extended towards the slopes of the hill with the construction of the gable-roofed *aedicula* tomb, many *sarcophagi*, buildings interpreted as olive oil workshops, structures identified as houses, and several buildings that are considered to be storehouses. In the Late Antique

[596] Mörel 2017a, 11, 16; Şahin et al. 2018, 169.
[597] Şahin 2012, 238; Mörel 2017a, 7.
[598] Mörel 2017a, 3-4, 18-19.
[599] Mörel 2017a, 17.
[600] Özdizbay and Dağlı-Dinçer 2018, 175-76.
[601] Mörel 2017a, 2-3, 14-15.

Period, a building composed of three compartments, identified as a church, was built. Besides, structures thought to be olive oil workshops, and many buildings identified as houses were constructed in the settlement and the already existing ones continued to be used.[602]

Mörel defined the Roman Period of Çatıören was described as a "complex settlement", and its Late Antique phase as a small or medium-sized village.[603] I think that the group composed of farm buildings might have been a satellite settlement of the fort due to its strong character as an isolated farm located at a certain distance to the acropolis.[604] Since the data on the construction dates of the houses is insufficient, it is difficult to evaluate the Roman Imperial phase of Çatıören. However, the increasing number of production equipment and the tombs suggest that the settlement started to become a village during that time. For Late Antique Çatıören, a large village as site category is very plausible due to the presence of a church and a remarkably large occupation area. Because no quantitative data on house numbers is currently available, any comparison with other villages is not possible at the moment.

Kanytellis

Kanytellis is located ca. 10 km northwest of Elaiussa Sebaste, around a sinkhole of 120 m by 60 m and 40 m deep in Ayaş, Erdemli (fig. 25).[605] This settlement was a *komè* of Elaiussa Sebaste as attested by an inscription written on one of the tombs found in Kanytellis.[606] The remains found here include a tower, wall sections in the surrounding areas north and south of the sinkhole, a large number of buildings identified as houses in the center, 16 structures specified as olive oil workshops, four burial areas located to the north, northeast, southeast, and west of the sinkhole, and four buildings identified as churches.

Based on the tower and wall remains, the earliest occupation here was dated to the Hellenistic Period.[607] Only a wall section to the north of the sinkhole and the surrounding *necropoleis* belong to the Roman Imperial Period. Kanytellis drastically expanded in Late

[602] Mörel 2017a, 22; Özdizbay and Dağlı-Dinçer 2018, 175-76.
[603] Mörel 2017a, 2, 22.
[604] Aydınoğlu (2008, 424) argues that some isolated sites such as farms, *villae rustica*, and production sites could have been satellite organizations having strong bonds with larger settlements.
[605] Ceylan 2006, 49.
[606] Aydınoğlu et al. 2015, 52.
[607] Ceylan 2006, 49; Şahin 2013, 288.

Antiquity with the addition of houses, olive oil workshops, and churches.[608] The tombs found in the four *necropoleis* were dated to the period between the 2nd-3rd c. CE and the Late Antique Period. They are situated on the northern terraces of 4.5 ha, on the slopes situated 750 m northeast, in the area located southeast of the sinkhole, and in the area named Çanakçı, which is 350 m further to the west of the sinkhole.[609] As the presence of unfinished crushing basins suggests, an ancient stone quarry was located to the east of Kanytellis, at Çanakçı.[610]

Buildings identified as houses, which concentrated in the center of the settlement, were dated to the Late Antique Period. These buildings, generally provided with a walled courtyard, included production equipment inside.[611] Almost half of the occupation area of these houses was reserved for the courtyards, which suggests that open-air production activities played an important role.[612] In total, 16 olive oil workshops were detected in the settlement as the production equipment, such as lever and weight presses, crushing basins, millstones, press weight stones, and screw weight stones, was still preserved inside of these structures.[613] Besides, Kanytellis was located on the route that originated in Akkale and led to Olba.[614]

As in the case of Korykos, Kanytellis has not been proved to have been an *amphora* production center. Yet, some evidence related to LR1 *amphorae* was found during the excavations, as a number of them have been discovered in Workshop 5. The fragments (11 in total) include both LR1 types but LR1 B is dominantly represented in the assemblage with ten pieces. The only fragment of LR1 A in the group was dated to the 5th and the early 6th c. CE based on typological comparison with fragments found in the Taşucu Museum, Elaiussa Sebaste, and Soli-Pompeiopolis.[615] The LR1 B fragments, on the other hand, are dated to the 6th and mid-7th c. CE, as similar forms have been found in Elaiussa Sebaste, Korykos, and Anemorion.[616]

Alkaç suggested that the LR1 found at Kanytellis might have come from Elaiussa Sebaste as the studies on the paste color and inclusions of several samples revealed

[608] Ceylan 2006, 50; Aydınoğlu 2012b, 213; Özdizbay and Dağlı-Dinçer 2016, 200.
[609] Aydınoğlu 2012b, 213-15.
[610] Aydınoğlu et al. 2015, 61; Aydınoğlu and Mörel 2015b, 166-67.
[611] Şahin and Özdizbay 2016, 522.
[612] Aydınoğlu 2012b, 216.
[613] Aydınoğlu and Mörel 2015b, 159-61.
[614] On this route, see the seventh road explained in the 'Roads' section of this chapter.
[615] Alkaç 2015, 149.
[616] Alkaç 2015, 150.

similarities with those produced in the city.[617] Another possibility is that Kanytellis produced its own *amphorae* so that the olive oil, in particular, could be transported to the port, which is very likely if the necessary resources for ceramic production such as clay, water, and fuel, were available for the inhabitants.[618] Yet, it is known that the river mouths were convenient for pottery production since they provided clay and water, and were located nearby the harbors so that the transportation cost was reduced.[619]

The settlement has been addressed as a town ('kent' in Turkish) by Ceylan and Aydınoğlu, probably due to its monumental character and large extent.[620] Occupying a remarkably large area, Kanytellis seems to have been an extremely important settlement surrounded by extensive arable lands, multiple *necropoleis*, a high number of houses, 16 olive oil workshops revealing a large volume of production, and four monumental churches. Thus, the site could be categorized as a large village, as is both epigraphically and archaeologically attested.

Öküzlü

Öküzlü is located 9 km northwest of Kumkuyu, Erdemli. Situated on a hill, the site overlooks the adjacent fertile plains and terraces lying in the west. The remains of the site are an unspecified number of buildings identified as houses, three constructions identified as churches, three structures identified as olive oil workshops, production installations, and threshing floors of an unmentioned number, and tombs of various types. Also, the site is located on an ancient road. Indicated as being numerous in the survey reports, no exact number for the 'houses' could be given because of two reasons: their low visibility due to dense vegetation and the damage caused by their recent use by Yörüks. Several of these 'houses' and the workshops were detected along both sides of the ancient road. The churches were also connected by another road with the stone pavement. Between some of the 'houses', narrow streets are attested. These features in the layout were interpreted as urban characteristics appearing on a rural site. Aydınoğlu and Mörel suggested that the site was continuously occupied from the Hellenistic to the Late Antique Periods.[621] Some

[617] Alkaç 2015, 152.
[618] On the clay acquisition process for ceramic manufacture, see Peacock 1982, 52-53; Santacreu 2014, 65-66; on the papyrological evidence of *amphora* production in Greco-Roman Egypt, see Gallimore 2010, 164-68.
[619] Dyson 2003, 47.
[620] Ceylan 2006, 49; Aydınoğlu 2012a, 213.
[621] Aydınoğlu and Mörel 2016, 139-40; Aydınoğlu 2018, 499-500; see also Mimaroğlu and Aydınoğlu 2017.

walls in Hellenistic polygonal masonry were mentioned in the survey reports but no remains were explicitly dated to the Roman Imperial Period.[622]

Öküzlü can be categorized as a large village due to several reasons. First of all, the high number of 'houses' reveals the residential character of the settlement. Secondly, the presence of three churches reflects a substantial investment in formal public structures. Besides, the site shows some urban qualities, such as the organized settlement layout, suggested by the presence of a street network within the site. Lastly, the site had a very advantageous location, which was on the ancient route linking Akkale to Olba through Kanytellis. Thus, the favorable location of Öküzlü in the regional network might have helped the settlement to grow economically and socially.[623]

Örendibi

Örendibi is located on a hill around the karst collapse near the village of Sömek, Erdemli. The site is composed of a structure of 25x24 m (0.06 ha) identified as a farmhouse, a vaulted cistern, a round altar, *sarcophagi*, a building identified as a church, a collecting basin assumed to have been used for olive oil, several rock-cut lever and weight presses, and weight stones on the terraces of the hill as well as remains of several buildings in the areas around the hill. Also, a large unidentified structure with polygonal walls was detected to the south of the hill.[624]

Örendibi must originally have been a farm, which became a village later on in the Late Antique Period, which is suggested by the construction of a large church. The unidentified buildings might be the remains of houses that were added in the process of becoming a village.

Özköy

Özköy is located in a rugged area composed of two hills and their slopes in a valley of Sömek, Silifke. Situated 12 km north of Limonlu, the site is composed of two buildings interpreted as towered farms, a large structure identified as a farmhouse, a large number of buildings assumed to be houses, many press installations, two monumental tombs,

[622] Though not specified in the reports, I suspect that the statement of continuous occupation originates from the possible date of the tombs.
[623] For detailed information on this route, see the seventh road in the second section of this chapter.
[624] Aydınoğlu 2007, 107; Aydınoğlu 2010b, 247-48.

many *sarcophagi*, a building identified as olive oil workshop, and two structures identified as churches.[625]

One of the 'towered farms', Kuleli Çiftlik 1, is located on the western slope of the hill. The structure built in polygonal masonry has a rectangular plan of 18x12 m, with a possible second floor as the presence of arches suggests. The sections with different wall types were interpreted to have been added in later periods. This building has a fortified courtyard provided with a rock-cut lever and weight press that contains one collecting basin and double treading floors. Immediately outside the enclosure walls, a cistern is located. The other 'towered farm', Kuleli Çiftlik 2, is located 25 m northeast of Kuleli Çiftlik 1, nearby the agricultural fields. Built in polygonal masonry, this building has a squarish plan of 15x13 m. This 'towered farm' has also some sections built in different masonry techniques. To the south of the building, a cistern is located. Besides, a lever and weight press composed of two treading floors and one collecting basin was found outdoor, in the southeast of the building. These two buildings were interpreted to have 'tower' forms, reinforced by enclosure walls. Due to their similar plans and masonry techniques, the construction dates of the two buildings were considered to be contemporary. The 'farmhouse', built in rectangular ashlars, is located on the southern slope of the hill. The arches found inside the building point to the presence of a second floor. The 'olive oil workshop' provided with a lever and weight press, a crushing basin, and millstones, is located 5m east to the 'farmhouse'. A pavement road was detected in the area between the two buildings. The relation of the 'workshop' to this road was interpreted as an indication that the building was built in a later period while the pavement is from the earliest phase of the 'farmhouse'.[626]

Situated on different hills, both churches have three apses. The church located on the southern hill, Kilise 2, is rather isolated as the remains are concentrated on the northern hill. It is poorly preserved due to its current use as a stable by Yörüks.[627] Another group of remains that occupy both hills is the tombs. Mostly composed of *sarcophagi*, two monumental tombs were found as well. A temple tomb at the site was detected around the 'farmhouse' based on the concentration of fragments that are typical for temple tomb architecture, such as architrave blocks with three *fasciae*, plastered column pedestals, and corniches with consoles. The other monumental tomb found here is a barrel-vaulted

[625] Aydınoğlu 2007, 107; 2008, 428; 2009, 100; Mörel 2010.
[626] Mörel 2010, 9-17, 32.
[627] Mörel 2010, 68-71.

aedicula tomb, located next to Kilise 1. Evidenced by the fragments of arch consoles and the preserved elevation, this tomb was adjacent to the church. In this area, a relief depicting a woman and a man on a block and a rounded altar were detected as well.[628]

At Özköy, ceramic finds from the surface and the deposits revealed by illegal excavations on the western slopes were recorded. These finds include imports, such as pieces of African Red Slip Ware and Late Roman D Ware, which can be dated to the late 6th c. CE and the 6th-7th c. CE, respectively. Besides, fragments of both types of LR1 *amphorae*, LR1 A and LR1 B, were found as well.[629] These containers are dated to the period between the 4th and 7th c. CE.[630]

Based on the 'towered farms', the earliest phase of Özköy was dated to the Late Hellenistic-Early Roman Periods. The construction of the 'farmhouse' was dated to the Roman Imperial Period when the site extended with the building of monumental tombs and *sarcophagi*. Mörel suggests that the 'towered farms' kept being used as storage buildings during this period when a new farmhouse of Roman-style was constructed. In Late Antiquity, an unspecified number of 'houses', an olive oil workshop, and two churches that were occupied until the 7th c. CE must have been built at the site and Özköy expanded. Mörel interpreted the site during its Hellenistic and Roman Imperial phases as a farm, while he categorized it during its Late Antique phase as a village of small/medium size.[631] Due to the presence of two churches, and the addition of many houses in Late Antiquity, I also categorize Özköy as a village. However, an evaluation of to what extent the village grew cannot be made, since no quantitative information on the site size is available. Besides, a comparison with other villages in the study region could not be made due to the unspecified number of 'houses'.

Ports in the Territorium of Elaiussa Sebaste

Akkale

Akkale, an ancient coastal site, is located in the Kumkuyu neighborhood of the Erdemli District.[632] The most monumental remains of the site belong to a building

[628] Mörel 2010, 43-45, 52-53.
[629] Mörel 2010, 78-80; Mörel 2014, 155-56.
[630] On the LR1 *amphorae*, see the second section of this chapter.
[631] Mörel 2010, 81-96.
[632] Tünay 1999, 55; Aydınoğlu and Mörel 2016, 142; Mörel 2017b.

complex located in the center. The complex is composed of a two-storied building and a stone ramp in its northeastern section. Although it has been identified as a palace or a private residence by different researchers,[633] Aydınoğlu and Mörel argue that the complex was an inn. Built in ashlar masonry, this two-storied building has dimensions of ca. 40 m x 35 m. At its southern facade, the building has three vaulted entrances to the main space. Several spaces with a row of arches are attested, suggesting that the building was divided into units that could be spaces for public use. At the north-east corner of the 'inn', a tower-like structure with a ramp was detected. This was identified as a lighthouse based on its elevated position overlooking both the site and the inlet in the south, which was interpreted as a harbor basin. No passage between the 'lighthouse' and the 'inn' was found. Next to a courtyard located to the south of the 'inn', a structure composed of four rooms is situated. This structure, which occupies an area of ca. 25 m x 8 m, was identified as a bath. While the bath and the 'inn' are located next to each other, two cisterns were detected at the opposite side of these buildings. Cistern 1, which is ca. 24 m x 9 m, is located in front of a domed structure that was identified as a *mausoleum*. Cistern 2, which is ca. 34 m x 20 m, is connected to Cistern 1 by water channels. These structures were assumed to have had two functions, which were supplying water for the whole settlement and the bath in particular (fig. 26).[634]

In the north of the settlement, possible remains of an olive oil workshop were detected. Besides, in the area to the west of the 'inn' and the bath, a rock-cut wine press was found. Both the bath and the domed *mausoleum* bear inscriptions in which the name of a provincial governor, Illus, is mentioned. The name of this governor who served between 458-473 CE, also appears on the aqueduct at Lamos. Based on the inscriptions, Akkale was dated to the 4th-5th c. CE. [635] The inlet, which was assumed to have been the harbor, must have been damaged due to the recent construction of a marina. Yet, Eyice reported that the basin had a very small mooring place so only two galleys could fit so no specific information regarding the size of the harbor is available.[636] Tünay also mentioned that the harbor was formed by a recess carved in the rocks on the shore. He reported the presence of a mooring place at the westernmost tip of the harbor basin.[637]

[633] Eyice 1981; Tünay 1996, 327; 1999, 57.
[634] Mörel 2017a, 103-4.
[635] Mörel 2017, 101-3, 106.
[636] Eyice 1981, 881.
[637] Tünay 1999, 56.

The site was interpreted as a port by Aydınoğlu and Mörel.[638] According to the settlement model Mörel suggests, the 'inn' must have served the crews whose ships moored in the harbor. He also emphasized that Akkale was very close to Kanytellis, where numerous olive oil workshops were found, and that it was accessible from/to Karaahmetli, Yanıkhan, Çanakçı, and Özköy. For these reasons, Mörel categorizes Akkale as a port settlement that had regional importance.[639] This categorization seems plausible since Akkale had a central position for access to several important sites.

Sacred Sites in the Territorium of Elaiussa Sebaste

'Unnamed Site' K

The site is located in a natural cave 1.5 km north of Hıdır Kalesi, on the eastern side of the Paşa River in Ayaş, Erdemli. The only find from this site is a dedicatory inscription in Ancient Greek, which was dated to the 3rd-4th c. CE by Şahin; yet the content of this dedication was not specified in his report.[640] The site might have had a sacred character since the caves in the region were frequently used in a religious context from the Hellenistic Period up to the Medieval Period. However, more information on the inscription and the site, in general, is required to make any substantial evaluations.

Unidentified sites in the Territorium of Elaiussa Sebaste

Batısandal

The site is located in the modern village of Batısandal (Sandalköy), 8 km north of Elaiussa Sebaste. The remains consist of some wall sections in which *spolia* of the Early Byzantine Period were inserted and a three-aisled structure identified as a church. Located out of the center, the church was dated to the late 5th or 6th c. CE. Overall, the site was defined as a Late Roman-Early Byzantine village.[641] Besides, Sayar mentions the presence of a necropolis where a column with a funerary inscription dating to the Roman

[638] Aydınoğlu and Mörel 2016; Mörel 2017b.
[639] Mörel 2017b, 105-6.
[640] Şahin 2012, 237.
[641] Hild and Hellenkemper 1990, 212.

Imperial Period was found.[642] I think the provided information is too limited to securely categorize the site as a village.

Hayat Mevkii

The site is located in Köşek Alanı of Sömek, Silifke. The remains include a large number of structures built with polygonal walls, presses, and cisterns. For this site, no quantitative information is available. Other than the structures that have been occupied until present times, no details on the chronology of this site were given in the report.[643] The current information is too limited to make any evaluations regarding the site type and the date.

Karaelif Mevkii

The site is located in the village of Esenpınar, Erdemli. Only some wall remains belonging to the Late Antique Period were detected at this site. Due to heavy vegetation, the plan of the structures to which the walls belong, could not be studied.[644] No evaluation regarding the settlement character can be made because of the limited data.

Örentepe Mevkii

Örentepe is located on a hill in Esenpınar, Erdemli. The site contains wall remains, *sarcophagi*, and presses. The wall remains were interpreted as a Hellenistic fortification with towers. Aydınoğlu categorized the site as a Hellenistic fort settlement, which kept being occupied in 'later periods', based on the numerous building remains in the area.[645] In the light of the available survey data, no assessment regarding the settlement chronology and its function in Late Antiquity can be made.

Örentepesi (Güvere)

This site is located in the southern part of the modern village of Esenpınar in Erdemli. The remains include rock cisterns, building blocks, monolithic door lintels as well as some ruins in the eastern section. Örentepesi was identified as a Roman-Early Byzantine hamlet or a small village by Hild and Hellenkemper.[646] Sayar mentioned an area that was

[642] Sayar 1995, 56.
[643] Aydınoğlu 2007, 108.
[644] Aydınoğlu 2007, 108.
[645] Aydınoğlu 2007, 108.
[646] Hild and Hellenkemper 1990, 264.

probably the necropolis of the settlement. Here three rounded inscribed altars and a *sarcophagus* elevated on a podium were found within a few hundred meters distance.[647] Furthermore, Sayar noted that an ancient road, which was linking Yeniyurt on the eastern side of the Limonlu River and Elaiussa Sebaste, passed through the site.[648] Based on the current evidence, no evaluation of the site type can be made.

5.1.3 Olba-Diokaisareia and Its Hinterland

Olba-Diokaisareia

Diokaisareia, located in Uzuncaburç, was the center of the Olban territory, which was ruled by a priest-kingdom during the Hellenistic Period until the region became a part of the Roman province of *Cilicia* in 72 CE.[649] The absence of secular structures dating to that period suggests that the place was the center of only administration and religion, which was composed of the Zeus Olbios Temple, a tower, and a sacred area used by priests. Olba (Uğuralanı), located on an acropolis currently named Kale Tepe, which is 4 km east of Uzuncaburç, was the closest settlement to Diokaisareia and linked to this center by a road. The city extended to the valleys and slopes around the acropolis located 1100 m above sea level (fig. 27). Also, it was situated on the junction point where many routes linking the coast to the plateau met.[650]

In 72 CE, during Vespasian's reign, Olba (Uğuralanı) was added to the territory of the Roman Empire. Thus, Olba-Diokaisareia became a Roman *metropolis* through the investments that were specially made by Trajan (98–117 CE) and Hadrian (117–138 CE). The theater, the *nymphaeum*, and *gymnasium* as well as the water supply system were constructed during the 2nd c. CE.[651] In the Late Antique Period, a monastery complex composed of several churches was constructed and it remained in use until the 7th c. CE.[652]

The *territorium* of Olba-Diokaisareia was dotted by recessed plains called karstic dolines, around which many rural sites were founded.[653] Its hinterland is presumed to

[647] Sayar 1995, 56.
[648] Sayar 1995, 56-57.
[649] For more detail on this process, see the section titled 'Historical Background' in Chapter 2.
[650] Erten 2002, 185. See 'Roads' in this chapter.
[651] Özbay 1998, 121.
[652] Erten et al. 2011; 2016. For a detailed study of the monastery complex and the church, see Özyıldırım 2016.
[653] Zeynelin Çukuru, around which several rural sites have been found, is a well-known example of this topographical feature in the region. Eserli, a possible farm settlement that was occupied from the Hellenistic to the Late Antique Period, was located on a hill overlooking small, recessed plains. Another site which was identified as a farm settlement, Tirekli, also overlooked recessed plains; see Aydınoğlu et al. 2018, 494-96.

have covered the inland area between the Lamos River in the east and Uzuncaburç in the west, which includes the modern neighborhoods of Uzuncaburç, Canbazlı, Yeğenli, and Seydili. Based on the topographical evidence, this *territorium* excluded the interior neighborhoods of Ovacık, Hüseyinler, and Karaahmetli, since they must have been located in the hinterlands of Seleukeia on the *Kalykadnos*, Korykos, and Elaiussa Sebaste, respectively.

Villages in the Territorium of Olba-Diokaisareia

Canbazlı

The site is located on a hill in the modern village of Canbazlı, specifically next to the valley where a mosque exists today. During the survey undertaken by Tünay in 1995, a church of the 5th c. CE identified based on its three naves and *temenos* wall, as well as funerary monuments dated to the Roman Period, were detected.[654] Ten years later, Aydınoğlu documented polygonal wall remains around the hill, two presses, one cistern, and an unspecified number of *sarcophagi*, but he did not mention the basilica.[655] Based on the remains of the enclosure wall dating to the Hellenistic Period, Aydınoğlu defined this site as a fort settlement.[656]

If Tünay and Aydınoğlu mentioned the same site, then, Canbazlı seems to have been continuously occupied between the Hellenistic and the Late Antique Periods. The presence of a church suggests a substantial community living either in or around the settlement. Thus, Canbazlı might have become a village in Late Antiquity at the latest.

Kurşun Kalesi (İsmailkale)

Kurşun Kalesi is located on a hilltop in Yeğenli, Silifke. The site occupying an area of ca. 300x200 m (6 ha), is composed of a temple and a *stoa* located on the summit of the hill, a small building with a rock-cut apse, ca. 20 buildings identified as houses, five cisterns, two presses with treading floors, and an arched tomb with a covered upper structure. The temple, of which the northern and western walls are collapsed, was

[654] Tünay 1996, 326.
[655] I suspect that the two might mention different sites located in the village of Canbazlı, but it is impossible to differentiate them based on their descriptions.
[656] Aydınoğlu 2007, 106.

identified based on the fragments of capitals, triglyphs-metopes, *mutuli*, and a pediment. Built in the Doric order, it was dated to the 1st c. CE as an inscription found nearby suggests the Vespasian Period as *terminus post quem*. Another inscription dating to the 3rd-4th c. CE, found on its architrave, revealed that the temple was transformed into a tomb later on. 50 m to the northwest of the temple, the *stoa* was located. The inscriptions found nearby the *stoa* indicate that it was commissioned through private benefactions as a dedication to Selene in the 1st-2nd c. CE, a date after the construction of the temple. The absence of shops within the *stoa* suggested that it had a sacred character rather than a commercial purpose (fig. 28). The discovery of only one tomb at the site was interpreted as an indication that a separate site for the necropolis could have existed in the surrounding. The 'houses' and presses were thought to have been added during the 3rd-4th c. CE. Şahin and Özdizbay argued that this was the period when the site became a settlement as it was originally a sanctuary. It was also suggested that the site could have been already a sacred area before the construction of the temple. The occupation of the site was assumed to have remained until the 7th c. CE as the apsed building at the site was identified as a church that seems to have been used till the end of Late Antiquity.[657]

Regarding the site size, which is ca. 6 ha, the Late Antique Kurşun Kalesi could be categorized as a large village based on the criteria used in Varinlioğlu 2008. The large number of 'houses' and the presence of a church support this idea since they imply that a substantial population lived in the settlement. Thus, Kurşun Kalesi is a good example of a Hellenistic-Roman Imperial sacred site, which transformed into a village during Late Antiquity.

Sayin

The site is located on a hill in the vicinity of Diokaisareia, near the village of Yeğenli, Silifke. The remains include three vaulted monumental tombs, a large number of buildings identified as houses, an unspecified number of cisterns and presses, a structure identified as a farmhouse, and two churches. The 'farmhouse', carved out of the bedrock, has a front façade built of ashlar masonry. In front of the house, a courtyard with a large cistern, niches, and presses was recorded. While the tombs were identified as Roman, the site was dated to the Roman-Late Antique Periods. Besides, the site was defined as a large

[657] Şahin 2008, 440-41; 2009a, 24; 2013, 289; Şahin and Özdizbay 2014, 476-77, 479; Özdizbay and Dağlı-Dinçer 2016, 201-2; Şahin and Özdizbay 2016, 522-24.

village.[658] No information regarding the location of the 'farmhouse' and the tombs was provided in the reports. If they were closely located, the categorization of the site as a farm would be convenient for its Roman Imperial phase. For its Late Antique phase, the site can be categorized as a large village based on the large number of 'houses' and two churches.

Hamlets/Small Villages in the Territorium of Olba-Diokaisareia

Keçiliköy

Keçiliköy is located 7 km south of the city. The site was recorded in 2004 and named Derbent Mevkii by Sayar.[659] The majority of the remains are ca. 12 buildings identified as houses. To the south of the 'houses', a building interpreted as a wine workshop was detected. The walls of the workshop bear reliefs of a bull, three bundles of lightning, an eagle, a fish, a winged *Kerykeion*, a goat, a possible krater, a *phallos*, and a male figure spreading his arms. It was perceived as rare to have all these motifs in a single workshop. Şahin defined the site as a farm complex that was occupied from the Late Hellenistic Period to the Late Roman-Early Byzantine Periods.[660] Presumably, his dating of the foundation to the Hellenistic Period is based on the Olban symbols carved on the workshop, while the houses must have belonged to the Late Antique Period. Yet, no explicit criteria for the dating were given in the survey report.

Since no farmhouse was discovered and almost 12 houses were found at the site, I categorize the site as a hamlet/small village rather than a farm settlement. However, it is possible that the site was originally a farm during the Hellenistic Period but was transformed into a hamlet or small village later on.

Yanıkköy

Yanıkköy is located in Uzuncaburç. The site is composed of ten to fifteen buildings identified as houses dating to the Roman Period, a structure with a courtyard and three rooms in the southwest, six or seven presses at the eastern end, four threshing floors in the east, north, and west, and a rounded funerary altar with an inscription dating to the

[658] Aydınoğlu 2008, 167; Aydınoğlu et al. 2018, 496.
[659] Sayar 2005, 3.
[660] Şahin 2008, 442.

3rd-4th c. CE. The structure located in the southwestern part of the site was interpreted as a possible farmhouse.[661]

Based on the current data, it is uncertain whether Yanıkköy was occupied during the Late Antique Period or just before this time. The site can be preliminarily categorized as a hamlet/small village, due to the number of 'houses'. However, the high number of workshops and threshing floors suggests that more houses and a possible church could have existed, in which case the categorization as a village would be more convenient. Also, it is possible that it was developed from a farm settlement and became a hamlet or a village. Yet, the chronological information on the site is too limited to make secure interpretations.

Yukarı Tol 2

Yukarı Tol 2 is located 3 km south of the Taşkıncık Quarter of Canbazlı. A structure with an inscribed funerary altar in the northwest, another structure of 20x5 m to the east, and a building identified as a house with the dimensions of 5x3 m in the eastern part were found. 10 m east to the site, an area with various building remains was detected. Due to their poor state of preservation, the plans and functions of the buildings could not be identified, but they were dated to a later period. The building in whose backroom a funerary altar is placed was identified as a farmhouse. Two buildings identified as olive oil workshops were located nearby the 'farmhouse'. Besides, each workshop was accompanied by a cistern. To the west of this area, two tombs of the *chamosorium* type were detected. In total, two threshing floors of ca. 15 m diameter were identified at the site, one in the east, the other in the west. In the area located 30 m to the north of the site, another *chamosorium* was detected. This tomb has a lion head relief on its lid. The site was dated to the period between the 2nd-3rd c. CE and the 5th-6th c. CE since the area with a farmhouse was thought to belong to the Roman Imperial Period, while the structures in the east, which seem to have been built in later periods, were dated to the Late Antique Period.[662]

The area with the 'farmhouse', workshops, cisterns, and the tombs in the west of the site might have constituted the core of the Roman Imperial farm. The later structures in the east were probably houses added in the Late Antique Period. In this case, this site was

[661] Şahin 2008, 440.
[662] Şahin and Özdizbay 2016, 510-11.

possibly a hamlet or a village during Late Antiquity. However, the eastern part of the site needs further study.

‘*Unnamed Site’ L*

The site is located on a hilltop that is 3 km east of Uzuncaburç. The remains include ten buildings identified as houses, two structures that were thought to have been workshops, and an unspecified number of presses placed in the eastern part of the site. Both the presses and ‘houses’ were recently damaged. Defined as an agricultural hilltop settlement by Şahin, the site was dated to the Late Roman-Early Byzantine period based on the ceramic finds on the surface.[663] Due to the number of ‘houses’, I categorize the site as a hamlet/small village.

Farms in the Territorium of Olba-Diokaisareia

Eserli

The site is located on a hill near the village of Yeğenli, Erdemli. Surrounded by depressions suitable for agriculture, it was composed of a building in polygonal walls. Identified as a farmhouse, it has repaired sections of small ashlars. The ‘farmhouse’ was dated to the Hellenistic Period while the repairs were thought to be Late Antique interventions. As already suggested by Aydınoğlu, this site can be categorized as a farm.[664]

Yağardıç

The site is situated in the quarter of Yağardıç to the west of the city of Olba, on the ancient route between Olba and Diokaisareia. It is composed of a monumental tomb with an inscription, a structure with several adjacent buildings, agricultural terraces, and fields in the periphery. This partly rock-cut structure with two rooms was identified as a farmhouse. A large threshing floor beside an area with a niche cut out of the bedrock was found in front of the ‘farmhouse’. Also, the survey team proposes that this area was a place where animals were tied. On one of its walls, a cross motif was inscribed. The

[663] Şahin 2009a, 23.
[664] Aydınoğlu 2018, 165; Aydınoğlu et al. 494-95.

inscription suggests that the tomb, which was dated to the 2nd-3rd c. CE and was dedicated to a veteran soldier. The cross motif on the wall of the 'farmhouse', on the other hand, was interpreted as an indication that either the farm was taken over by Christians or the owners adopted Christianity.[665] Based on the presence of a 'farmhouse', agricultural fields, and a monumental tomb, as already suggested by Erten et al. 2009, this site can be categorized as a farm which was used at the latest since the Roman Imperial Period until the Late Antique Period or later.

Monastic Sites in the Territorium of Olba-Diokaisareia

'Unnamed Site' M

The site is located ca. 300 m south of the aqueducts on the eastern slope of the Eastern Valley situated to the east of the ancient city of Olba. The remains belong to a two-storied complex composed of several structures (fig. 29). The building located in the north, partly built out of bedrock, has a basilical plan of 20.5x13.5 m. A stairway leading to the east where a niche is located was found in relation to this basilical structure. Another building of smaller dimensions with two aisles is located immediately to the south of the former. Next to the southern wall of this two aisled building, a closed space of 3 m^2 was detected. Outside the building, a rectangular water basin is arranged in front of the southern entrance. On the second floor of the southern building, a wide space, which was interpreted as a gathering place, and a rock-cut cistern of conical shape were detected. Here a staircase is also preserved, which leads to the cistern. Another element found in this complex is a north-south oriented vaulted structure, in which a tomb with east-west orientation is placed.[666]

The northern and southern buildings were identified as churches. With the additional structures, this complex was interpreted as a 5th c. CE monastery with a main church in the north and an isolated room of 3 m^2 as *enkleistra* (place of reclusion). The gathering place on the second floor was presumed to have been the dining hall where the monks had their meals. Erten et al. 2010 suggested that the conical cistern was seen as a holy

[665] Erten and Özyıldırım 2007, 39; Erten et al. 2009, 54-55.
[666] Erten and Özyıldırım 2006, 424-25; 2008, 204; Erten et al. 2009, 58-59; 2010, 277-78.

spring by the Christians. The tomb was identified to have a Christian identity; probably, it belonged to one of the notable ecclesiastics in the region.[667]

Erten et al. report that the plan of this complex shows similarities with monasteries in the East. Furthermore, it was emphasized in the report that the location of the complex is very convenient for ascetic life due to its proximity to the city, although it still had an isolated character. The suitability of this area for Christian monastic activity can be confirmed by the presence of foundation remains of another church 100 m north of this monastery, named 'Unnamed Site P', and a site composed of a cave-church and a basilica, named 'Unnamed Site O' in this thesis, located 1 km south in the same valley.[668] Due to the presence of a complex with prominent features of Christian religious architecture, I categorize the site here as a monastic site.

Funerary Sites in the Territorium of Olba-Diokaisareia

'Unnamed Site' N

The site is located on the western slope of the Eastern Valley, to the opposite of 'Unnamed Site' M on the eastern slope. The finds include a vaulted tomb, *sarcophagi* of the *chamosorium* type, and rock-cut niches. The vaulted tomb is located on a prominent rocky area where the Eastern Valley and the valley lying to the west of the city unite. Facing the Eastern Valley, this square planned tomb was built of rectangular ashlars. Under its vaulted superstructure, a *chamosorium* is placed. The *sarcophagi* and the niches were founded around this monumental tomb. Based on its plan and masonry, the tomb was dated to the 2nd-3rd c. CE. Despite the absence of finds dating to later periods, Erten suggested that the site might have been used during the Late Roman and Byzantine Periods as well, since a monastery complex situated at the eastern slope marks this section of the valley as an important area for the Late Antique people.[669] Although the current evidence is limited to date the site to Late Antiquity, it can be considered a funerary site.

[667] Erten and Özyıldırım 2006, 424-25; 2008, 204; Erten et al. 2009, 58; 2010, 277-78.
[668] Erten et al. 2009, 58.
[669] Erten 2005, 309-10.

'Unnamed Site' O

The site is located 1 km south of 'Unnamed Site M', in the Şeytanderesi Valley around the Damlayan Cave.[670] It is composed of a building with two apses on its eastern and southern walls on the western slope of the valley and, a cave of 20x14 m to the 20 m west (fig. 30). Identified as a church of the late 4th-early 5th c. CE, the building suffered severe damage caused by illegal excavations. The cave with an opening of 15.5 m and a height of 1,20-1,30 m has three apses with altars in its northern wall and one half-preserved apse in its western wall. Some decorations painted on the walls were detected. An opening was recorded on the southeast of the cave, which was possibly used for ventilation. On this opening, a cross motif was incised. In the light of this evidence, the cave was identified as a cave-church. Besides, it was suggested that the cave could be a place for private worship or a funerary chapel. Also, the possibility that the cave was used as a cult place for pagans before it was designed according to Christian architecture and symbols was mentioned in the survey report.[671]

The cave-church was thought to have been a hidden place for Christians during the Roman Imperial Period before Christian worship was widely accepted. However, with the official acceptance of Christianity at the beginning of the 4th c. CE, this site was not abandoned, as evidenced by the construction of a church in front of the cave.[672] Considering the continuation in the choice of the site for worshipping, this area can be categorized as a sacred site.

'Unnamed Site' P

The site is located on a terrace wall alongside the riverbed in the Eastern Valley, ca. 200 m south of the aqueducts and 100 m north of 'Unnamed Site' M. The only remains of a building identified as a church were detected here. It has a basilical plan and three apses.[673] The site can be preliminarily categorized as a sacred site based on the concentration of an isolated church and a monastery in this section of this valley.

[670] The location of the Damlayan Cave was described as 3 km away from the aqueducts located in the Eastern Valley near Olba; see Erten and Özyıldırım 2006, 425.
[671] Erten et al. 2009, 58; 2010, 278-79.
[672] Erten and Özyıldırım 2007, 56-57.
[673] Erten and Özyıldırım 2007, 57; Erten et al. 2009, 58.

However, future surveys might reveal more remains around the church and it can turn out to have rather been a village.

Unidentified Sites in the Territorium of Olba-Diokaisareia

Kavmil Ali'nin Kilisesi

The site of Kavmil Ali'nin Kilisesi is located 1.5 km south of the ancient city of Olba. The remains include a two-storied rectangular structure with six rooms, two adjacent buildings identified as olive oil workshops, and five small structures located 20 m to the south. The rectangular structure next to the workshops was identified as a farmhouse, whereas the smaller buildings were thought to be 'houses'. All the 'houses' including the 'farmhouse' were dated to the Early Byzantine Period.[674] Although the buildings near the 'farmhouse' were identified as 'houses', they could have been part of the farmstead itself. In this case, the site could be categorized as a farm settlement. Otherwise, the farm could have transformed into a hamlet/small village by adding houses.

Tomasboğazı

Tomasboğazı is located in the village of Canbazlı, Erdemli. The site is composed of remains of some structures built in polygonal walls, which were dated to the Hellenistic Period. Besides, some sections that belong to later periods were understood to have been added in later periods.[675] However, due to the limited information on the late constructions of the site, no evaluations can be made for now.

5.2 Roads

Land travel, which was enabled by roads, was fundamental to the movement of goods and people, especially in the terrestrial regions of the Roman Empire where maritime access was restricted. It was more secure than sea travel due to the absence of shipwreck risk and pirate attacks. Yet, in several places where the banditry was epidemic, as was the case in Rough Cilicia, travel by land could pose dangers.[676] Also, the passengers taking the roads in mountainous areas could suffer terrestrial hazards such as landslides. Another

[674] Sayar 2007, 277.
[675] Aydınoğlu 2007, 106.
[676] For a discussion of the banditry in the region, see the 'Historical Background' section of Chapter 2.

advantage of overland transport was that well-built Roman roads were available throughout the year, whereas sea travel became very risky during winter.[677] Yet, it should be noted that land travel in mountainous areas had the risk of blizzards in the winter season. Above all, the main disadvantage of overland transport was its high cost in comparison to fluvial and maritime transport.[678]

Land-based transport played an important role when production sites were located remotely from the coast where the process of shipping took place. One great example of such a case comes from Palestine where main wine presses were found in the Negev Desert and *amphora* production sites at Mefalsim, Nahal Bohu, and Beersheba, which are all located far from the ports such as Gaza and Ashkelon. The distribution of wine production areas and kiln sites reveals that wine had to be transported in *amphorae* to the coast during a journey of a few days, which was facilitated by the Roman road infrastructure in the desert, especially the highway linking Petra and Gaza (fig. 31).[679] Thus, the road network of a region gives insights into the economic integration of the hinterland on different scales. McCormick terms inland routes, whether terrestrial and fluvial, as "capillaries" and sea routes as "arteries" of the trade system.[680]

5.2.1 The Roman Road Network in Asia Minor

Roman roads were fundamentally built for logistic reasons by the army. As the territory of the Romans expanded, more well-paved highways were built in the newly conquered lands.[681] Roadbuilding in Asia Minor was a rather easy task as the main courses were already provided by the roads which had been constructed by the Assyrians, Persians, and the Greeks.[682] The major contribution of the Romans to the existing road network was a pavement for the stability, linear courses with sharp bends for the efficiency, and extensions for less accessible areas.[683] Today, some of the routes of the Roman roads are still in use with new technological advancements such as asphalt or railways.[684]

[677] Casson 1974, 149-50.
[678] McCormick 2012, 69.
[679] McCormick 2012, 60-70. For a detailed discussion of the production in the Negev villages, see Wickham 2005, 452-54.
[680] McCormick 2012, 87.
[681] Casson 1974, 164; Kolb 2019, 9-10.
[682] For a study on the roads built by the Persians, see French 1998.
[683] Casson 1974, 166; French 1981, 21; Kolb 2019, 10.
[684] Casson 1974, 165.

Roman roads needed to have firm foundations so that they could be used in all seasons. A well-drained construction held an important role in this goal. Another important element for roads to be reliable was the pavement, which needed durable material and neat workmanship. The tools used in road construction were picks, hammers, mattocks, spades, and baskets with which the excavated rock and dirt were carried away. The huge task in roadbuilding was removing large volumes of rocks to open a course for a road and tunnels in mountain areas. In general, the Romans chose to conform to topographical features, so rock removal was occasionally required work. To avoid drainage problems, a few precautions were taken by the army. On flat terrain, roads were built on higher ground compared to the surrounding. Furthermore, they preferred building roads on valley slopes rather than on bottoms to avoid the risk of flooding. Besides, inclinations were given to both sides of the road by raising the middle so that rainwater was drained from the slopes and prevented from accumulating on top of the road. Roads were constructed section by section, which is evidenced by the uneven joint areas. The choice of bed type that was used for the roads differed according to the soil and terrain. Thus, there was no standard method of roadbuilding.[685] The width of roads was important for the travel of carts and wagons, which was measured as max. 3 m in Asia Minor.[686] Wagons and carts were predominantly used in the Empire until the 6th c. CE when pack animals became the most prevalent means of transportation.[687]

The erection of milestones at every Roman mile on a newly built road was the last stage of road construction. The main reason for their erection was to inform the traveler about the distance he/she would go to reach the destination city by inscriptions on these monuments.[688] Among the fundamental information given by milestones were the starting point of the road, which was called *caput viae* in Latin. This piece of data was accompanied by distance figures showing how far the milestone was located to these two places.[689] Another information that was conveyed through milestones to the traveler was the name of the emperor who constructed or repaired the road. Thus, milestones could indirectly provide data concerning the construction and repair dates of the roads to archaeologists.[690]

[685] Casson 1974, 165-66, 168, 172.
[686] French 1981, 21.
[687] Koder 2012, 155.
[688] Casson 1974, 173.
[689] French 2014, 8.
[690] Kolb 2019, 12-13.

The development speed and the maintenance degree of the road infrastructure varied from region to region. The main factor was the shift of hubs (cities) around which the links (roads) were developed. Before the foundation of Constantinople as the capital, for instance, the road network centered on Ephesos held great importance as its port functioned as a direct maritime access point to Rome. However, from the 4th c. CE onwards, the roads leading to Constantinople, especially the ones in the northern provinces, gained importance whereas the western Anatolian roads lost their centrality.[691]

5.2.2 The General Road Network of Rough Cilicia

The main roads of the region follow the deep valleys formed by the Göksu River and its branches, which have connected Central Anatolia and the Mediterranean since Prehistory.[692] The Göksu River, which is more than 250 km in length, originates from the modern border between Antalya and Mersin, heads then towards Konya in the north and bends in southern direction, flowing into the Mediterranean Sea at Silifke. The river, which was named *Kalykadnos* in Antiquity, constituted an important route, which started from Ikonion and ended at Seleukeia, passing through Laranda, Klaudiopolis, and Olba. The Ikonion–Anemorion route was an alternative option for the Ikonion–Seleukeia route. Another route, which originated from Adrassos, led to Kiršu near Gülnar. Here, it merged with the road coming from Seleukeia and reached Kelenderis (fig. 32).[693] Besides, the Sertavul Pass gave access to the Konya Plateau from the coast and vice versa.[694] Another pass that enabled access from the plateau to the coast was the Gülek Pass, which was located further to the east. Known as the *Pylai Kilikias* (The Cilician Gates) in antiquity, the pass has connected Central Anatolia and Çukurova for centuries.[695] Even though the Sertavul Pass offered a shorter journey, people preferred using the Gülek Pass due to the danger caused by the rugged topography and bandits dwelling around the former route.[696]

The *Tabula Peutingeriana*,[697] which was thoroughly studied by Hild, Spanu, and French, provides information on the main roads connecting the Roman provinces of Asia

[691] Avramea 2002, 74-75. See Doonan (2011, 175), for example, associated the economic expansion of the promontory of Sinop with the foundation of Constantinople.
[692] French 1965, 177.
[693] Ramsay 1960, 401-2; Bardakçı 2018, 42.
[694] Bardakçı 2018, 43.
[695] Ramsay 1960, 387; Bardakçı 2018, 43.
[696] Bardakçı 2018, 44.
[697] For the *Tabula Peutingeriana* in general, see Rathmann 2016. For a detailed study of the presentation of Cilician roads on the *Tabula Peutingeriana*, see, Hild 1991; Spanu 2009; French 2016.

Minor. Most of the roads could be archaeologically verified, based on the presence of road-related features, such as pavements, rock cuttings, bridges, and milestones. Not all can still be observed today, but luckily, many travelers from the 19th century left their notes with remarks on the road remains. For Rough Cilicia, the map suggests three main roads that can be archaeologically retraced: Ikonion–Anemorion, Ikonion–Pompeiopolis, and Perge–Tarsos. While the first two roads connect the ports to the Anatolian Plateau, the road starting from Perge and reaching Tarsos is a very long coastal road (fig. 33).[698]

The existence of the Ikonion–Anemorion road is archaeologically supported by stretches seen to the south of Ikonion and north of Anemorion, and by several milestones.[699] However, the Ikonion–Pompeiopolis road can only hypothetically be constructed as follows: it passed through Laranda, Koropissos, and Tetrapyrgia, and ended in Soloi–Pompeiopolis.[700] Only the section between the last two places could be identified.[701] The coastal road connecting Perge and Tarsus passed, from the west to the east, through Sillyon, Aspendos, Potamos, Side, Selinos, Anemorion, Arsinoe, Kelenderis, crossed the river "*Krunis*", and continued via Seleukeia, Korykos, Soloi-Pompeiopolis, and Zephyrion. Stretches of this road have been observed to the east of Arsinoe, at the two sides of Kelenderis, Seleukeia, and Korykos.[702] Besides, this road is confirmed by the presence of five milestones.[703] Two milestones directly relate to our study region: one milestone dating to Hadrianus' reign (119/120 CE) is found in Ayaş, at a half-hour distance from the modern coastal road. Any information regarding the *caput viae* of this road is not seen on the milestone. The other milestone, whose date is unknown, was discovered *in situ*, located ca. 250 m northwest of the ancient road to the southwest of Narlıkuyu. The name of Korykos was inscribed on the milestone as the *caput viae* of this road. This part of the long coastal road is thought to have been constructed by Hadrian.[704]

5.2.3 Roads in the Area of Olba

All roads linking the coast and inland in the Olba region meet in Olba (Uğuralanı) (fig. 34). The reason why Olba was a junction point of roads from four directions is that

[698] French 2016, 10-11, 15, 31-32, 36.
[699] For the milestones found on this route, see French 2014, 50-52.
[700] French 2016, 31.
[701] French says it represents a genuine route, based on which I assume that he observed this part of the road.
[702] French 2016, 36.
[703] For information on these milestones, see French 2014, 26-29.
[704] French 2014, 26-27, 49.

access to the Anatolian Plateau was possible via the city by taking the road to the north. Another reason is its religious-administrative importance.[705] During the Roman Period, an extensive road network was established and maintained by Vespasian (69–79 CE), Hadrian (117–138 CE), Septimus Severus (193–211 CE), Caracalla (198–217 CE), Macrinus (217–218 CE), Severus Alexander (222–235 CE), Maximian (286–305 CE), Constantine (306–337 CE), and Valentinian (364–375 CE).[706]

One of the functions the Olba roads held was military and administrative since it is known that Septimius Severus used these roads to move his army to the East in 197 CE.[707] Considering that these roads enabled shorter passage from the plateau to the coast, they might have been an alternative route to the Cilician Gates for the army when the travel time was crucial.[708] Another function was to provide "capillaries" for the transport of products towards the coastal cities from where they were shipped overseas.[709]

The evidence related to the roads comes from pavements, remains of bridges, and milestones. Based on the survey data, a hierarchy within the roads could be mentioned. The main roads, sometimes, did not pass through the rural settlements, so lesser roads connected the settlements and the main road. In addition to these, survey data revealed that the settlements could have paved roads enabling connections between the different areas of the settlement.[710] In the following sections, I will describe what has been found regarding the main roads connecting the settlements so far.

Roads Linking the Coast to the Inland

The westernmost route was suggested to have started from Seleukeia and ended in Klaudiopolis (Mut) through Mara.[711] However, it was probably linked with Olba since a finely worked road with a stone pavement, which connects the city with the village of Keşliktürkmenli in the south, has been detected in the vicinity of the *Nympheion* at Olba (Uğuralanı). Thus, Aydınoğlu suggests that the westernmost route might have had a different course. The presence of the road linking Keşliktürkmenli and Olba (Uğuralanı) indicates that the route started from the coast (Seleukeia) and headed towards Olba through Keşliktürkmenli (see 1 on fig. 34). Therefore, this westernmost route was linking

[705] Aydınoğlu 1998, 139, 143.
[706] Aydınoğlu 1998, 142-43.
[707] Mitford 1980, 1249.
[708] Mackay 1968, 117; Aydınoğlu 1998, 143.
[709] Kolb 2019, 10.
[710] See the 'Settlements' section of this chapter.
[711] Aydınoğlu 1998, 139.

Seleukeia with Klaudiopolis through Olba and Diokaisareia.[712] The Seleukeia–Diokaisareia–Klaudiopolis route has yielded two milestones located in Kekikli near Yeniçıktı and Yenisu. The one found in Kekikli can be dated to Diocletian's reign, while the second milestone dates to 80 CE, meaning that the road was constructed by Titus (79–81 CE).[713]

To the east of this route, another road connecting the coast with the inland was detected. This road proceeds along the western side of the Yenibahçe River, passing through Karakabaklı, Işıkkale, and Sinekkale. In the village of Imamlı, it unites with the Seleukeia–Olba road and continues to Keşliktürkmenli and then to Olba (see 2 on fig. 34).

A third route connecting the coast and inland in the Olba region is located along the eastern side of the Yenibahçe River. This road started from the port of Korasion (today Susanoğlu) and reached Gökburç by passing through the settlements of Paslı and Tekkadın (see 3 on fig. 34). In Gökburç, it merged with a fourth road which originated in Korykion Antron and headed along the western side of the Şeytanderesi River, through Hasanaliler and Kızılisalı. After the two became a single road in Gökburç, this road merged with the Seleukeia–Olba road just before Keşliktürkmenli (see 4 on fig. 34).[714]

A fifth road, situated along the eastern side of the Şeytanderesi River, connected Korykos and Canbazlı. Between these places, many *in situ* milestones were recorded.[715] Only two of them could be dated: one milestone is dated to 197 CE (Severan Period) and the other is from 306-307 CE (Constantine Period). After reaching Canbazlı, this road is considered to have led to Olba (see 5 on fig. 34). Although no certain evidence proves the existence of a road between Canbazlı and Olba, three milestones (one of which is inscribed) have been found along the Şeytanderesi River, where a road is presumed to have been located as the riverbed of Şeytanderesi offers a natural corridor to pass through.[716]

The sixth road of this category, situated between the Paşaderesi River and the Göldini Valley, originated in Elaiussa Sebaste and ended in Diokaisareia, passing through the settlements of Çatıören and Emirzeli. A part of this road, which is stone-paved, has been

[712] Aydınoğlu 1998, 140.
[713] French 2014, 48-49.
[714] Aydınoğlu 1998, 140.
[715] Aydınoğlu 1998, 141.For all the milestones recorded on this route, see French 2014, 39-47.
[716] Aydınoğlu 1998, 141. No specific information regarding the content of the inscribed milestone was given.

found around Çatıören (fig. 35).[717] Furthermore, Mackay mentions a possible road here that may have merged with the Olba–Limonlu road in the village of Karaahmetli (see 6 on fig. 34). [718]

A seventh road is the one linking another port, Akkale, and the inland via Kanytellis and Karaahmetli. After reaching Karaahmetli, it unites with the Olba-Limonlu road before Esenpınar (see 7 on fig. 34). The stone pavement of this road can still be observed in some sections between Akkale and Kanytellis.[719]

An eighth road is the above-mentioned Olba–Limonlu road, which passed through Yanıkhan, Sömek, and Canbazlı. The part between Sömek and Canbazlı is attested by the presence of stone pavement, while the Elece–Sömek section is evidenced by two uninscribed milestones. The road is still used today and heads towards Kızılgeçit, over Efrenk (see 8 on fig. 34). Yet, no evidence related to its ancient use has been found.[720]

The last road is the Yeniyurt–Esenpınar road, which originated on the eastern side of the Limonlu Valley. A Roman bridge of 20 m long and 3 m wide was found at Taşgeçit Mevkii on the Limonlu River. The Roman road ran from the village of Yeniyurt down to the Limonlu Valley and then crossed the bridge. The stone pavement of the road was partly retraced up to Esenpınar. This road also reached Elaiussa Sebaste and Korykos on the coast, passing through Ören Tepesi (Güvere), the settlement located to the south of Esenpınar (see 9 on fig. 34).[721]

East-West Oriented Roads

Two milestones found on the ancient road linking Olba and Diokaisareia, which can be archaeologically traced, are from the Roman Imperial Period (see A on fig. 34). While the older milestone (Yeğenli 4), dating to 80 CE (reign of Titus), constitutes the earliest certain date, the other (Yeğenli 1) is dated to 197 CE (period of Septimus Severus). Beside Yeğenli 1, another milestone (Yeğenli 2) was found. This was dated to two distinct periods, 198 CE and 306-307 CE since it has two inscriptions, meaning that the road was constructed and repaired.[722] Thus, this road must have been first built in the third quarter of the 1st c. CE by Titus, and repaired at least two times in the following two centuries.

[717] Aydınoğlu 1998, 141; Mörel 2017a, 9-10.
[718] Mackay 1968, 50; Aydınoğlu 1998, 141.
[719] Mackay 1968, 41; Aydınoğlu 1998, 141.
[720] Aydınoğlu 1998, 141-42.
[721] Sayar 1995, 56-57.
[722] French 2014, 45-47. See also Aydınoğlu 1998, 140.

Together with the ancient road, several broken milestones have been documented between Uzuncaburç (Diokaisareia) and Olba (Uğuralanı) as well.[723]

Another east-west oriented route has been detected in the northern part of the region (see B on fig. 34). This road, which started from Olba, led to Kızılgeçit, situated in the northern section of the Limonlu River. After crossing the river, it merged with the Erdemli–Güzeloluk road that ran along the Limonlu. The second pass located on the river is located at Efrenk situated on the western side, which suggests that a bridge linking the two sides of the river could have existed here as well.[724]

5.3 Maritime Connections

Maritime connectivity in the Mediterranean context has been studied by many scholars from a varied chronological perspective and through the application of different models.[725] Tartaron's multi-scalar model in particular is useful. Although this model is applied to the maritime communities of the Aegean Bronze Age in his writings, the discussion of how geographical factors affected the ancient trade is relevant to other periods as well According to this model, interactions between the coastal communities of the Mycenaean world of the Bronze Age occurred on four geographical scales, which he termed as the coastscape, the maritime small world, the regional/intra-cultural maritime interaction sphere, and the interregional/inter-cultural maritime interaction sphere.[726]

Connectivity on the local scale is explained by 'the coastscape' which Tartaron defines as: "the coastal zone composed of shoreline, the settlement, and the adjacent coastal lowland inhabited and exploited by a maritime community; connective routes and openings into the interior, following natural paths connecting coast and hinterland; (...) the visual seascape, the everyday field of view that defines the cognitive horizon in seaward direction." The interactions between neighboring coastscapes constituted the second level of the geographical scales, which is 'the maritime small world'. It is described as: "They are constituted by habitual face-to-face interaction and cohesion based on shared origin, cultural traditions, language, economic ties, social networks,

[723] Şahin and Özdizbay 2015.
[724] Aydınoğlu 1998, 142.
[725] For studies on the maritime connectivity, see Hohlfelder and Vann 2000; Horden and Purcell 2000; Schörle 2011; Wilson et al. 2012; Leidwanger 2014a, 2014b; Scheidel 2014; Tartaron 2013, 2018. The aid of computational modelling has also been utilized in ancient maritime connectivity studies: Broodbank 2000; Knappett et al. 2008; Leidwanger and Knappett 2018.
[726] Tartaron 2018.

mutual protection arrangements, and so forth. (...) Proximity, intervisibility, and ease of travel enhance the cohesion of small worlds. The small world is the scale that dominates maritime interaction." The maritime shipping of 'the regional/intra-cultural maritime interaction sphere', on the other hand, required expertise in sailing, either coasting or open-sea, as the sailors had to go beyond their own 'small world'. Tartaron states that "Moving beyond 'the safe and familiar,' maritime travel was relatively infrequent and was in the hands of specialist sailors and merchants plying the seas in seagoing vessels. They possessed knowledge of sea routes, navigation in a range of conditions, open-sea and coastwise sailing, winds, currents, storms, landing sites en route and at the final destination, and personal relationships with people along the way." 'The interregional/inter-cultural maritime interaction sphere' refers to the geographically largest scale of shipping, which required long-distance sailing taking days to weeks to arrive at the destination port that was beyond one's 'maritime cultural area'.[727]

The current evidence for Roman shipping activities is dominated by traces left from long-distance maritime trade that was practiced by large ships with high cargo capacities. However, as suggested by Horden and Purcell, the large scale exchange carried out between large ports with harbor works was a natural outcome of these daily and more frequent seaborne trade.[728] This is also the reflection of the Braudellian approach to historical phenomena, which suggests taking notice of small scale patterns to explain larger systems. Repetitive events paved the way for creating more recognizable, large-scale patterns.[729] From this perspective, the Late Antique Mediterranean trade was composed of different scales of relations. The maritime links on the imperial scale formed the most visible layer of the picture due to the presence of large harbor facilities and high-volume cargoes found as shipwrecks; the regional and local connections constituted the majority of the activities. In other words, interactions on local levels in the 'microregions' constituted the most prevalent type of connections in the Mediterranean while large-scale interactions were happening occasionally.[730] Frequent, local maritime movements, taking only a few days, were practical with small vessels and natural anchorages. Since these movements happened daily, their fundamentality to the maritime economy should be

[727] Tartaron 2018, 72-76, 82.
[728] Horden and Purcell 2000, 140, 144, 366; Leonard 2005, 39.
[729] Horden and Purcell 2000, 151.
[730] Horden and Purcell 2000, 140-52, 365; Leidwanger 2014b, 33. Horden and Purcell (2000, 80) define the 'microregion' as "a locality (a 'definite place') with a distinctive identity derived from a set of available productive opportunities and the particular interplay of human responses to them found in a given period."

emphasized.[731] Furthermore, commerce that occurred on different scales was integrated and reciprocal. Interactions occurring on a local scale were under the influence of the social and political events happening on larger levels.[732] The foundation of Constantinople as the capital city in the 4th c. CE is an illuminating example of this due to its transformative effect on the shape of the network. The initial defeat of the Byzantine army in the war against the Persians and, later, more permanent defeat by the Arabs had a similarly strong impact.[733]

Large merchant ships became more common in the Late Republic and High Empire periods and declined by the 7th c. CE. Wilson sees a correlation between the increasing size of ships and the construction of large artificial harbors between 200 BCE and 300 CE, which has been explained by an increasing need for ships to transport large-volume cargoes.[734] Although large harbors could be built already in the 8th c. BCE,[735] the technological advancements achieved in harbor engineering during the time starting from the Classical Period until the Roman Period created opportunities to enlarge the harbor basins and, finally, to build breakwaters independently from natural features such as reefs and rocks through the invention of hydraulic concrete by the Romans in the Late Republican Period.[736] During Late Antiquity, cabotage and tramping,[737] rather than direct sailing of long distances, were more widely practiced. This is evidenced by the 4th c. CE official arrangements which allowed ship owners to coast and tramp during their *annona* shipping and by the use of a reduced scale of merchant ships in the 5th c. CE.[738]

One of the motivations for intensified long-distance maritime activities was the *annona* system, through which the staples required for the supply of the Roman capitals were brought from all over the Empire. The most commonly transported supplies were grain, olive oil, and wine. The distribution of grain to the public, which was originally a practice of the Hellenistic Greek cities, was adopted by the Romans in the Republican Period when Gaius Gracchus enacted a *Lex Frumentaria* in 123 BCE.[739] An office, the

[731] Hohlfelder and Vann 2000, 127; Leidwanger 2014b, 33-34.
[732] Tartaron 2018, 72.
[733] Mango 2009, 8-10, 12-13.
[734] Wilson 2011, 46-47, 54.
[735] For an overview of how the harbor constructing technology developed from the Bronze Age until the Hellenistic Period, see Blackman 1982a, 90-94.
[736] Blackman 1982b, 185.
[737] The term of 'cabotage' refers to a mode of commerce that is practiced as sailing along the coast, which is the opposite of open-sea sailing. Arnaud (2011, 62) describes 'tramping', another mode of coasting trade, as "sailing from port to port in search of markets for parts of the cargo."
[738] Arnaud 2011, 76.
[739] Rickman 1980, 156.

praefectus annonae, responsible for the management of the grain supply to the capital, was created under Augustus' rule. This office had several tasks to operate the *annona* system. The grains supplied from overseas were used to feed the population of Rome as well as the bureaucrats and the army of the Empire.[740] During the reign of Aurelian (270–275 CE), grain was replaced by bread, which changed the organization of the distribution process. While grain was distributed monthly, bread required to be delivered to the population daily.[741] As a result of this change, the bakers of Rome as a guild took a central role in the *annona* system. The state both controlled the guild through regulations of the inheritance and property rights of its members and supported the bakeries with the necessary equipment.[742] The main grain suppliers of Rome were North Africa and Egypt until the foundation of Constantinople in the 4th c. CE as in 332 CE, Constantine (306–337 CE) adopted the same practice of bread distribution.[743] Consequently, the grain sources of Egypt were reserved for the newly founded capital while the population of Rome had to rely on the supplies of the Western Mediterranean, mainly those of North Africa.[744]

Beside grain, and later bread, olive oil was also included in the *annona* system during the period of Septimus Severus (193–211 CE). It is known that the olive oil was brought to Rome from North Africa and Spain.[745] The wine brought to Rome was not free of charge even though Aurelian (270–275 CE) had plans to do so. However, the state offered the wine at lower prices compared to the market prices in Late Antiquity as the order given by Valentinian I (364–375 CE) suggests.[746]

As the *annona* system illustrates, the imperial authority had a substantial impact on large scale commerce in the Eastern Mediterranean during the Late Antique Period.[747] Beside the extensive organization through the designation of offices, the regulation of guilds, and workmen, the emperors' themselves took several actions to ensure the grain supply of Rome as well. During crises including shortages, delays of the cargoes, and political turmoil, the emperors took temporary measurements such as reducing the

[740] Casson 1980, 21-22.
[741] Jones 1964, 696; Rickman 1980, 197. For an overview of this operation starting from the collection of the grain in the ports of North Africa to its arrival at Rome where it was distributed, see Rickman 1980, 202-3.
[742] Rickman 1980, 205.
[743] Jones 1964, 696.
[744] Rickman 1980, 198.
[745] Jones 1964, 701; Rickman 1980, 197, 206.
[746] Jones 1964, 704.
[747] Mango 2009, 3.

number of recipients, bringing do you mean developing? a system of rationing, and setting maximum sale prizes with the necessary subsidies. Yet, these were seen as short-lived solutions by Claudius (41–54 CE) who contracted with the *annona* ship owners for delivery of the grain throughout a year to increase the annual amount of supply.[748] However, these measurements were seen as inadequate evidence for strong state intervention in the grain market by several scholars. Casson and Rickman state that the private entrepreneurs were very present in the grain supply of Rome. Also, the state controlled the price only during the crises. Secondly, the arrangement regarding the shipment during the winter as well as the sailing season was accomplished by incentives provided to the shipowners by the state, such as compensation for their loss in case of shipwrecks.[749]

This system regulated the transport of large volumes of staples overseas, which led to an increase in the interregional movements across the Mediterranean. This state-driven system collapsed in the 7th c. CE when Egypt, a very important grain producer, was lost to the Arabs in 618. The drastic changes that occurred on the Eastern borders in this century led to a fragmentation in political units. Mango described the trade between these different political entities, which were once categorized interregional, as international.[750] The *annona* shipment has been explained by the regional collection model according to which the goods from the hinterland of a region were gathered at central ports. This is exemplified by the olive oil that was brought to Carthage from the coast of northern Tunisia so that it could be directly transported to Rome.[751] The *annona* ships carrying grain are considered to have been among the largest vessels.[752]

Trade and transport of goods on an interregional scale were not always based on the shortage of certain products or needs. For example, even though most of the provinces could produce their wine, some products were preferred as imports.[753] The Gaza wine was certainly one of those luxurious products. As the Abydos Tariff[754] suggests, Constantinople was a chief buyer of this wine. Considering the relatively high expense of

[748] Casson 1980, 24-25.
[749] Casson 1980, 25, 29; Rickman 1980, 201. On the documents revealing the engagement of the private grain dealers from Pompeii, see Casson 1980, 26-29.
[750] Mango 2009, 8-10, 12-13.
[751] Wilson et al. 2012, 382.
[752] Wilson 2011, 40.
[753] Mango 2009, 8.
[754] This inscription known as the 'Abydos Tariff' is a 5th c. CE official record, which listed the custom fees that merchants needed to pay in return for their passage through the Dardanelles to arrive at Constantinople. On a study of the inscription, see Gofas 1975.

land transport, the Gaza wines that were produced in the areas remotely located to the sea were delivered to the consumer at premium prices. Furthermore, this additional travel cost indicates the high demand from overseas for the wine of this region.[755]

Parallel to the discussion of different geographical scales, ship and port sizes have been debated as well. Based on the categorization made by Parker, the ancient merchant ships can be divided into three scales: small, medium, and large. Small ships had cargoes of max. 75 tons; the medium ones carried up to 200 tons. The large group, on the other hand, consisted of ships carrying more than 200 tons.[756] Houston argued that the majority of the merchant vessels were small ships with an average of fewer than 60 tons of cargo capacity. His examples from records of chronologically and geographically varied pre-industrial societies such as the 13th c. China, the 16th c. England, the 19th c. India, and even the 20th c. Philippines demonstrated the overwhelming proportion of small vessels to all fleets.[757]

The port size is determined by how many ships its harbor could have accommodated at the same time. The ship capacity of a harbor is calculated by wharfage lengths. Harbor basin area measurements are another less direct way to estimate ship capacity. The largest harbors such as Portus, Alexandria, and Puteoli were not the norm but represented a minority in the varying scales in the Roman world.[758] The depth of the significant harbors is assumed to have been a min. 3 m due to the requirements of an average Roman freighter.[759] Most of the small-sized ancient ships had a draft of ca. 1 m, which enabled the use of even very shallow waters as anchorage places.[760]

The number of ports that functioned in the Roman Empire must have been much more than the attested ports, which sometimes had durable installations made of stone, wood, and earth, or concrete. According to Houston, many ancient Mediterranean ports had no man-made elements such as piers, breakwaters, seawalls, posts, and warehouses. Coastal places, which were either minimally altered or left completely natural, were often sufficient for shipping activities. They are difficult to be archaeologically detected since either wooden or other perishable materials were used in their arrangement or no

[755] McCormick 2012, 53-54, 60-70.
[756] Parker 1992, 26; McCormick 2012, 90.
[757] Houston 1988, 553-56. The assumption here was that the conditions of the ancient maritime world were retained until the industrialization in the 20th c. CE. Tartaron (2018, 83) also based his ethnographical studies on this hypothesis.
[758] Schörle 2011, 95-97; Wilson et al. 2012, 382.
[759] Wilson et al. 2012, 379.
[760] See Gassend et al. 1984. For examples from the Yenikapı excavations, see Jones 2017 and Ingram 2018.

intervention was made.[761] Thus, small ships could directly unload at natural harbors with shallow waters such as beaches, while larger ships anchored at a suitable place nearby the port so that the lighters could transfer the cargo to the coastland (fig. 36).[762]

No correlation between harbor size and the geographical scale of trade exists.[763] Medium size ports could have hosted large ships sailing long distances as well as smaller ships.[764] However, it should be kept in mind that small ports could not have hosted massive ships due to the lack of convenient mooring places.[765] Besides, the importance of ballast for massive ships was another factor because of which they had to be accommodated by well-equipped harbors with substantial facilities. Thus, Schörle suggested that goods were distributed to smaller ports once they were brought to a regionally central port.[766] Small ships, on the other hand, were not allowed to every harbor as some of them had rules restricting their access.[767]

In the light of the functions of different ships and ports, the Roman maritime trade must have occurred in several modes of voyages on multiple scales. These scales are clearly defined with measurement of time and distances as following: "Local is defined as a one-day transit time, or within a radius of less than about 50 km (31 miles) sailing, to a maximum of two or three days' travel on foot. (...) Above this limit and below ten days' is the regional level; in terms of distance, it corresponds to a radius of 100 to 300 kilometers (...) Interregional trade connects two different regions that each have a radius of 100 to 300 kilometers."[768] Direct sailing between distant central ports is the most acknowledged type of trade in the literature. The above-mentioned model of regional collection gets involved in this mode of transportation, as large ports functioned as hubs on a regional level. This required shipping activities between smaller local ports and the regionally central port.[769] Thus, small ports functioned as maritime extensions of the land-based routes that connected the hinterland and the regional center. In this sense, these ports of lesser scales were local hubs where the land met the maritime network.[770] Travel

[761] Houston 1988, 560-64.
[762] Houston 1988, 560-64.; Schörle 2011, 95.
[763] Schörle 2011, 103.
[764] Wilson et al. 2012, 385.
[765] Keay 2012, 41. The port system composed of Ostia and Portus at the mouth of Tiber that was developed for the increasing needs of Imperial Rome illustrates how the Romans took this issue into consideration as the only small sized ships could sail up to the riverine port of the capital.
[766] Schörle 2011, 96-97.
[767] Arnaud 2011, 73.
[768] Morrison 2012, 4-5.
[769] Leidwanger 2014a, 65.
[770] Schörle 2011, 103.

between neighboring coastal sites for the local exchange was another option that the smaller ports offered to the local network. Another type of large scale transportation involved cabotage as stopping by the larger ports located in different places. This enabled the integration of smaller ports into the long-distance trade network.

The maritime connections of Cilicia in general improved during the Imperial Period, which can be explained by two main factors. First, the *Pax Romana* had a positive effect on the extension of maritime activities in the region. The rule of the Mediterranean under the same authority brought political, institutional, and fiscal uniformity to trade, while it also removed most of the piracy in the region. The second factor is the *annona* ships traveling from Egypt and the Levantine coast to Rome and, later, to Constantinople. The increasing demand for the staples by the imperial capitals triggered the supply and, thus, production in the regions of the entire Empire. In parallel with this need, the imperial authorities required more ships to be built for the *annona*. Thus, the state exempted the elite people who built ships in service of the *annona* trade from the burden of *munera*. Besides, the imperial authorities constructed large ports to enhance the flow of goods to the capital. The increasing sea trade activities remained intense during Late Antiquity until the Persian attacks in the 7th CE.[771]

The maritime network of Rough Cilicia is discussed on three geographical scales which are local, regional, and interregional.[772] To unravel all the possible connections on each level that the region could have had in Late Antiquity, its coastal landscape needs to be better understood. The ports and harbors as well as environmental and topographical features of the shoreline shed light on how and on which levels the region participated in seaborne trade.[773] The regional level of maritime trade could be demonstrated with numerous case studies as Rough Cilicia was commercially engaged with several regions such as Pamphylia, Smooth Cilicia, Northwestern Syria, and Cyprus. In this study, I focus on Cyprus by narrowing down the study area to the Karpas Peninsula, which is the closest part of Cyprus to eastern Rough Cilicia. The large scale maritime activities of the study

[771] Wilson 2011, 54.
[772] The definitions of local, regional, and interregional trade are mentioned earlier in this section. See also the multiscalar approach by Tartaron in the beginning of this chapter.
[773] Tartaron 2018, 67-68. The importance of coastal features in the choice of port locations is well-known. The long-term coastal change caused by erosion, deposition, and tectonic movements, dictated where the ports were located and how they were utilized by people. The silted harbors at Miletus and Ephesus are good examples of long-term coastal change. Besides, the direction of prevailing winds and currents often determined exactly where the shore could be used as a safe anchorage or unloading site.

region, on the other hand, are discussed through the textual, epigraphic, and archaeological evidence, with an emphasis on its relationship with Constantinople.

5.3.1 The Coastline of Rough Cilicia

This part of the southern coast of Anatolia, the area between Taşucu and Mersin in particular, is today dotted by beaches and few coves. Compared to the Aegean side, this coast has fewer indentations that allow for natural protection from the winds.[774] The most evident information related to Rough Cilicia's maritime activities comes from its ports and harbor facilities. While the research on the ports of Korykos and Elaiussa Sebaste revealed harbors that required permanent port installations, the site of Akkale seems to have had a rubble pier as Eyice observed during the 1980s before the harbor basin was overbuilt by a modern marina. Moreover, the surveys revealed a possible anchorage along the coast of Kızlarhamamı Mevkii.[775] In addition to those four sites, the study region must have had more ports and landing places, which were small and possibly lacking any harbor installations such as piers and breakwaters as simple harbors and sheltered locations that have a water depth of min. 1 m could have been used as ports. Furthermore, siltation is a large problem along the Rough Cilician coast due to the presence of several river mouths (those of Şeytanderesi, Paşa, and Limonlu) where the sediment has accumulated over time. Thus, silted-up sites near the coast, which were once functioning as ports, can easily be overlooked without the aid of geophysical studies.

The coast of Rough Cilicia, like the rest of the southern coast of Anatolia, is under the influence of land and sea breezes which have different effects throughout the year. While the spring season has the most favorable weather conditions for sailing thanks to the weak winds, autumn and winter are the most dangerous seasons to sail due to the occasional katabatic winds blowing from the deep valleys to the sea. During summer when the breezes are influential, the prevailing winds depend on the time of a day. In the morning until noon, land breezes are blowing offshore and during the time between noon and evening, sea breezes blowing from the south and southwest are prevalent.[776]

[774] Heikell 2006, 289, 303.
[775] For background information on these settlements, see the 'Settlements' section in this chapter.
[776] Heikell 2006, 289.

Korykos

Archaeological investigations carried out on the coast of Korykos revealed that the city had an artificial harbor, of which the foundation date is not clear (see fig. 17). According to the textual evidence mentioning that the Seleucid King Antiochos III captured the site from the Ptolemies in the early 2nd c. BCE, it can be assumed that the harbor was active in that century or even earlier.[777] Even though the harbor was active as early as the Hellenistic Period, it was in the Late Antique Period, from the 4th c. CE until the 7th c. CE, when the region became a frontier zone, that it gained importance.[778] Besides, the funerary inscriptions found in the city revealed many maritime-related professions such as those of shipwright, sailor, and sail-maker, supporting the crucial place of the harbor and adjacent facilities in Korykos.[779]

During coastal surveys in the city, a rubble breakwater, various features on the shoreline, and a possible lighthouse were detected. The breakwater started from the southern corner of the Land Castle and extended in the south-western direction. Only its core built of mortared rubble is preserved as no remains of ashlar facings were found *in situ*. However, a large number of ashlars were observed around the breakwater (fig. 37).[780] The bay where the breakwater is situated seems to have been exposed to the prevailing winds as it is today.[781] Measuring 85 m in length and 8-10 m in width, the breakwater in Korykos was much smaller than the ones in Pompeiopolis, which are the most monumental of all on the southern coast of Asia Minor. The material used in the breakwaters of the two harbors were different as well. While the breakwaters of Soli-Pompeiopolis were constructed in hydraulic concrete, those of Korykos were built in mortared rubble, which was less durable against the corrosive effects of seawater.[782] In addition to the breakwater remains, the coastal features on the shore of the city were surveyed as well. The surveyors reported various forms of structures, such as fragments of sea walls, drains, rock-cut steps, and pits, which suggests that the shore was actively utilized for different activities. While the pits were interpreted as possible production installations, the rock-cut steps that could be associated with mooring activities imply that

[777] Vann 1997b, 259-65.
[778] Alkaç 2012, 329-30.
[779] Varinlioğlu 2011b, 178.
[780] Vann 1997b, 261.
[781] Heikell 2006, 304.
[782] For the harbor of Soli-Pompeiopolis, see Brandon et al. 2010a and 2010b. which enabled the engineers to build structures, such as harbors and bridges, that required to be installed underwater. The ingredients of this concrete consist of slaked lime, aggregate, and *pozzolana* which is a type of volcanic ash extracted from Puteoli in the Bay of Naples (Brandon 2010b, 195-96).

small-size vessels could have harbored along this shore. Furthermore, at the southern-eastern corner of the city wall, a poorly-preserved tower was documented. This tower was interpreted as a lighthouse, which was probably built to defend the harbor and guide approaching ships.[783] To the opposite of the coastline of Korykos, an islet where a Medieval castle stands, is situated. Today, the northern shore of the islet is the most convenient for anchorage, which is limited to the time between the morning and noon.[784]

Elaiussa Sebaste

Elaiussa Sebaste was another port that had artificial harbors in the study region. Even though the preliminary research detected two man-made harbors on the island of the city, further studies suggested that these two anchorages were probably natural harbors in the Late Hellenistic and Early Imperial Periods when they were utilized for more basic trade and fishing activities (see fig. 24). Whereas sedimentological studies that were conducted in the northern harbor showed that significant human interventions first occurred in the first half of the 2nd c. CE, a similarly certain date has not been established for the southern harbor. The study results are more helpful for dating the final phase of their use, as they revealed that the northern harbor was gradually silted up and went out of use in the 6th c. CE, whereas the southern harbor remained active until the 7th c. CE. A gradual siltation process occurred in this part of the city, where the northern and southern harbors were located, led to the formation of an *isthmos* connecting the island to the mainland during antiquity. Today the harbor basins are silted up and have become sandy plains that are 2 m above sea level.[785]

The island section of the city plays a very important role in understanding the maritime relations of this port center, not only due to its harbors but also thanks to *amphora* finds from various regions of the Mediterranean.[786] The study of the ceramics found in the city has shown that in the Imperial Period the commercial network of Elaiussa Sebaste already encompassed the Western Mediterranean. In Late Antiquity, products of African and Levantine origin flowed into the city. In the meantime, the city began to produce ceramics including *amphorae* and lamps for local use.[787]

[783] Vann 1997b, 259-65.
[784] Heikell 2006, 304.
[785] Melis et al. 2015, 567-81.
[786] Kızılarslanoğlu 2014, 231. This article focuses on the origin of Roman *amphorae* in Spain in particular.
[787] Ferrazzoli and Ricci 2009, 33, 35-36.

Kızlarhamamı Mevkii

Although the site has no known substantial harbor structures, it is situated near the northern cove of Akyar bay which was very suitable for mooring activities (see fig. 16). The lack of physical harbor remains here can be elusive because beaches or sheltered bays that functioned as ports were either equipped with installations in perishable materials, such as wood or could be natural. In both cases, they become archaeologically invisible. The remains detected during the survey point to olive oil production. Based on the presence of a possible harbor here, Durugönül speculated that the site functioned as a production center where raw material brought from neighboring settlements overland and by sea was processed.[788]

The study of Kızlarhamamı Mevkii is important to understand the exchange patterns of Rough Cilicia during Late Antiquity on multiple scales. First of all, it is closely located to Korykos, which could be defined as a central port with wider and busier maritime links. This geographical proximity gave a chance to the hinterland of Korykos to have another contact point with the maritime trade. Products from sites with better access to Kızlarhamamı could have been shipped here and transported to Korykos for wider distribution on regional and interregional scales. Alternatively, a part of the imports arriving at Korykos could have been transhipped and moved here so they could be put on the local markets. As combined with Durugönül's interpretation of the site as a production center, I suggest that Kızlarhamamı Mevkii could have been a coastal site where a market place was set up. The neighboring coastal sites could be accessed by the ships sheltered here, which was another mode of maritime transportation on the local scale. Since the prevailing winds blew from the south and southwest, sailing from this cove to the northeast, such as from the port of Korykos, might have been easier than the reverse direction during the afternoons in summer months. Besides, the port must have functioned on a regional level as the ships departed from here could directly sail to the central ports of other distant regions.

Akkale

This coastal site is situated between two important ports, at a distance of 16-17 sea miles (ca. 30 km) to the harbor of Soli and 6-7 sea miles (ca. 12 km) to the harbor of Elaiussa Sebaste. As discussed earlier, Akkale was identified as a port.[789] The harbor and

[788] Durugönül et al. 2009, 291.
[789] Mörel 2017b, 95-96; 105. See also the section 'Settlements' in this chapter.

its piers, located 1200-1500m to the south of the settlement, have not been preserved today as a modern marina named "Kum Kuyu Marina" was built over the harbor basin in 1996. Luckily, Eyice made valuable observations before the remains of the ancient harbor were destroyed. According to his records, the harbor had the form of a rock-cut inlet. He also reported some scattered rock pieces that must have belonged to a breakwater. The only detail he gave about the size of the harbor is that there is a place for only one or two galleys (fig. 38). For this reason, Eyice thought that the harbor was for private use. At the westernmost tip of the inlet, a slipway cut out of the rock was observed. From this slipway to the north, the remains of a road were recorded. Due to erosion in this area, only the first part of the road was visible. Eyice observed another slipway situated 15-20 m east of this harbor.[790]

During the 4th and 5th c. CE, when the harbor of Akkale was in use, the northern harbor of Elaiussa Sebaste started to be silted up.[791] Mörel suggested that Illos (458–473 CE), the provincial governor whose name was inscribed on the aqueduct at Lamos, as well as on a capital thought to be a part of the mausoleum, and on the bath at Akkale,[792] might have invested in Akkale to create an alternative port for Elaiussa Sebaste, which by this time might have failed to satisfy the needs of trade traffic between the coast and the hinterland.[793] In addition to its possible function as a counterpart of the harbor of Elaiussa Sebaste that was open for the regional/interregional market, Akkale might have played a significant role in local commerce. This can be explained by its proximity to Elaiussa Sebaste and its favorable position on routes leading to the prosperous hinterland. The goods produced in the villages, such as Kanytellis, Karaahmetli, Yanıkhan, Çanakçı, and Özköy could have been brought to Akkale first, and then distributed overseas from the still-active southern harbor of Elaiussa Sebaste, which had more sea traffic as it was a regional center. Another possible function that Akkale had might have been that of a resting spot for the provision of needs and the accommodation for *annona* ships coming from the East and heading towards Constantinople.[794]

[790] Eyice 1981, 881.
[791] Melis et al. 2015, 567.
[792] For the inscription of the aqueduct, see Mörel 2017b, 106; for the capital, see Edwards 1989, 46; for the baths, see Heberdey and Wilhelm 1896, 51; Eyice 1981, 879; Mörel 2017b, 103.
[793] Mörel 2017b, 105.
[794] On the East-West route that was used by *annona* ships, see 'Interregional Connections' in this chapter.

Possible Anchorages Along the Coast of Rough Cilicia

Terrestrial archaeological surveys fail to reveal the submerged, eroded, or silted features along the coasts. They rather assist the task of identifying natural harbors by the discovery of coastal sites where human activities took place.[795] In that sense, the current observations on the coastline of the study region are helpful to understand its maritime traffic in the past.

In the *territorium* of Korykos, several places that could have functioned as simple ports are present and currently used as anchorages for modern yachts. From the west to the east, these places could be listed as Akyar, Narlıkuyu, Akisu, and Akkum (fig. 39). The most suitable natural anchorage seems to be the small cove located in the south of the bay of Akyar, as it is totally protected against the southwest prevailing wind. In the northern part of this bay, another anchorage with a lesser degree of protection exists, where Kızlarhamamı Mevkii is located. Narlıkuyu, an inlet located to the north of Akyar, has two coves as well. While the northwest cove is equipped with a modern breakwater to prevent the southerly winds, the west cove, by which Korykion Antron must have been reached, is well-protected from the winds. Here a mosaic depicting three graces, which is today displayed in Narlıkuyu Mosaic Museum, was found.[796] Akisu, which is an inlet situated north of Narlıkuyu, is not as convenient as the bay of Akyar due to its exposed position to the south. To the east of Akisu, Akkum is situated. This cove is totally under the influence of prevailing winds, which make it less desirable for ships.[797] Furthermore, to the north of Land Castle in Korykos, a series of churches were built. The small bay located to the east of the city was linked to these churches via a paved road. Vann suggested that this bay might have been used as a harbor for the pilgrims who were visiting the ecclesiastical buildings inland.[798] However, this bay has no good shelter from the southerly winds today.

The rest of the coastline, from Korykos to the Limonlu River seems to have lacked natural harbors, as the current coastal topography suggests. To detect the natural harbors that were used in the past, coastal features such as sandy plains, dunes, lagoons, and reefs need to be investigated and geophysical studies revealing the dimensions of basins must be conducted as well.[799] Due to the siltation along the river mouths where the alluvial

[795] Tartaron 2018, 68.
[796] Vann 1997b, 259.
[797] Heikell 2006, 304.
[798] Vann 1997b, 261.
[799] Tartaron 2018, 68.

soils have been accumulating, the coves that were convenient for anchorage might have been covered by sands.

5.3.2 Regional Exchange: The Case Study of Cyprus

The maritime connectivity of Rough Cilicia on a regional scale can be exemplified through its relations with Cyprus, the Karpas Peninsula, in particular, based on their geographical proximity. The Karpas Peninsula, which is the easternmost part of the island that was the closest to our study region, presents fragmentary data in terms of its coastscape and possible relations to the Anatolian mainland (fig. 40). According to Tartaron's multi-scalar connectivity model, Rough Cilicia and the Karpas Peninsula can, at first, be evaluated in the category of the 'regional/intra-cultural maritime interaction sphere', as the sailing between the two required open-sea voyage and navigational skills. However, as Morrison suggested, the boundaries between the geographical scales became less clear as shipping activities occurred on a more intense level due to its cheap cost.[800] This would make the trade with places at short and moderate distances very profitable. The geographical proximity of these two regions with moderate sailing time and visual contact possibly made them natural trade partners. Thus, I suggest that the geographical scale on which the Karpas Peninsula and our study region interacted could be defined as somewhere between the maritime small world and the regional/intra-cultural maritime interaction sphere by Tartaron's terms. Moderate distances and inter-visibility point to interaction on the maritime small world scale; the relatively hard sailing conditions that necessitated navigational skills that were beyond the scope of local mariners suggest that it was a regional scale shipping.[801]

As Leidwanger stated, community-based local and regional commercial networks were established by the frequent transport of low volume cargoes over short distances. This scale of shipping activities required no substantial harbor works and was possible via small ports, such as beaches and natural anchorages.[802] I suggest direct commerce activities occurred between the communities of Rough Cilicia and the northern coast of Cyprus, especially the Karpas Peninsula where several anchorages were found that must have facilitated the shipping on this scale. Thus, after introducing the general conditions of Cyprus and its position in the maritime network during Late Antiquity, the following

[800] Morrison 2012, 4-5.
[801] On Tartaron's multi-scalar modal of maritime connectivity, see the introduction of this chapter.
[802] Leidwanger 2014b, 33.

section brings together the current ceramic evidence testifying exchange relations between the two regions and the coastal features of the Karpas Peninsula, such as small coves, inlets, and beaches that could have been convenient for such a regional and small scale maritime commerce.

Cyprus in Late Antiquity

Cyprus, the third largest island of the Mediterranean, is located 65 km south of Cilicia and 105 km west of Syria.[803] Thus, the island has a central position in the Eastern Mediterranean, being surrounded by southern Anatolia in the north, Syria and the Levant in the east, and Egypt in the south. Cyprus has engaged in intense seaborne activities since the 11th millennium BCE. The involvement of the island in ancient maritime activities could be explained by several reasons.[804] First of all, the island was situated on the routes between the Levant in the east and the Aegean in the northwest. These routes were shaped by the westerly prevailing winds in the Eastern Mediterranean, which eased the sailing from the Aegean to the Levant.[805] Another reason was that it offered both navigational reference points and shelters to ships that were sailing in the east-west direction. From the point of sailing, the landscape of Cyprus, which includes peninsulas, mountains, such as the Kyreneia and the Troodos, and capes, was full of landmarks that were recognizable for captains.[806] Furthermore, the island was provided with substantial ports as well as small anchorages at the service of passing ships. Another factor that made the island a nodal point in the maritime network was its agricultural and metallic resources, which helped to establish trade partnerships with neighboring regions.[807]

The formation of the main sailing routes around Cyprus during the Roman Imperial and Late Antique Periods could be explained by two factors: environmental factors, such as prevailing winds, currents and waves, and historical conjuncture. As dictated by prevailing winds, between mid-March and mid-November, the northern and southern coasts were more convenient for sailing from west to east. On the western coast, the ideal direction for ships was from north to south. Along the eastern coast, the most convenient sailing direction was towards the north and northeast. Thus, a ship departing from the western ports of the island is expected to have sailed along the southern coast to arrive at

[803] Leonard 2005, 321; Demesticha 2019, 1.
[804] Demesticha 2019, 1.
[805] Demesticha 2012, 80.
[806] Leonard 2005, 332.
[807] Demesticha 2019, 1.

the Levantine or Anatolian ports.[808] Despite the dangers and difficulties of sailing against the prevailing winds, voyages made in the opposite directions were also possible. On the south coast, for example, sailing to the west required attention and possibly stopping at a way station. During the winter season, from November to March, the direction of the prevailing winds changed. Along the western coast, the winds blew from the south while they blew from the east on the southern coast. The northern coast was under the impact of winds blowing from the east, while winter winds on the eastern coast came from the northeast or east. Furthermore, there were certain periods when the direction of the prevailing winds varied. On the northern coast, for instance, the wind blew from the northeast between March and November, which facilitated sailing from east to west. The currents were another element influencing maritime activities. The southerly direction along the western coast, easterly direction along the southern coast, northerly direction along the eastern coast, and westerly direction along the northern coast were more convenient for sailing due to the anticlockwise direction of the currents around Cyprus. The wave climate was influential in maritime traffic as well. The direction of the waves on the western coast is from east to west, while on the southern coast, the waves come from the west and northwest. The direction of the waves along the northern coast changes: they generally come from the southwest and west, and occasionally from the northeast and east. The wave data along the eastern coast is not available. Studies on the wave height showed that the waves along the northern and western coasts are higher than those on the southern and eastern coasts of the island. Among all these factors related to the marine environment, the prevailing winds had a decisive impact on the sailing routes.[809]

The establishment of the main routes is closely related to the historical context and the way Cyprus was under the control of the Late Roman and Early Byzantine Empire as well. First of all, the foundation of Constantinople as an imperial capital played a crucial role in the growing wealth of Cyprus, as the grain supply route between Egypt and the new capital made a stop along the coasts of the island. Secondly, Cyprus became directly subordinated to Constantinople during Justinian's reign in 536 CE. It was given the title of *quaestura exercitus*, which was formed to extract grains for the benefit of the military forces in the Balkans and it became a direct grain and mineral supplier of the capital.[810] The shift of the capital to Constantinople and Cyprus' new role as *quaestura exercitus*

[808] Leonard 2005, 339; Demesticha 2015, 69.
[809] Leonard 2005, 333-34, 336, 347-52.
[810] Rautman 2001, 242; Demesticha 2015, 68.

intensified sea voyages between the Aegean and the island. This strengthened the commercial relations and enabled Cyprus to benefit from the ships returning with Aegean products from the *annona* voyage. This is evidenced by the fineware assemblage of Kopetra, a large village located in the central-southern section of the island, as Phocean Red Slip constitutes a substantial portion of it.[811] Another maritime trunk that involved the island was the long-standing route between Alexandria and Cyprus, which is thought to have been reinforced already in the Hellenistic Period when both areas were ruled by the Ptolemies. As a consequence of the historical bond that had been established long before, southwestern Cyprus, the port of Paphos in particular, was a trade partner of Egypt during the Late Antique Period.[812] Furthermore, there were two main routes for the ships that sailed to Rome from Alexandria. One was the route along the north African coast, while the other required sailing to the north of Cyprus and following the southern coast of Anatolia.[813]

As the manifestations of the intense maritime activities that developed on the island, Late Antique Cyprus had three large ports, namely Paphos, Salamis, and Soloi, as well as many others on a smaller scale, such as Kourion, Lapethos, and Kyreneia. However, only a few natural harbors have been identified along the Cypriot coasts, such as Keratidhi Bay, Dhrousha-Kioni, and Fontana Amorosa off the western coast, and Potamos tou Liopetriou on the southern coast.[814]

The smaller ports, such as Zygi-Petrini on the southern coast, were exchanging goods and products with the larger ports of the island, which were more engaged in interregional trade than the local ones. In this way, imports gathered in the centers were distributed over the small ports via ships, and the exports were transported to the centers where they could be distributed overseas. Based on ethnographic evidence from the early 20th c. Cyprus, Leonard stated that the small ports must have been engaged in direct trade with the mainland as well as cabotage trade along the island. The small ports were also a part of the cabotage, which could be practiced on an interregional scale.[815]

The most abundantly exported agricultural products of Cyprus were olives, wine, and grain. Textile products including manufactured flax were another group of exports. The island was also rich in copper and silver, which were mined in the quarries of the Troodos

[811] Rautman 2001, 252.
[812] Leonard 2005, 837.
[813] Rickman 1980b, 266.
[814] Leonard 2005, 327, 954.
[815] Leonard 2005, 952-54.

Mountains running parallel with the southern coast of the island.[816] Cypriot Red Slip Ware was a group of fineware that was thought for a long time to have originated in Cyprus. However, recent surveys in the Pisidian countryside revealed seven production sites of this type. Therefore, Late Roman D Ware is now thought of as a more appropriate name for this group as the other name excludes its Anatolian provenience.[817] Cyprus produced local transport *amphorae* as well. Pinched-handle transport *amphorae*, dated to the 1st-4th c. CE, were produced probably in the southwestern part of Cyprus. Clay analyses on their fabrics showed that two types, micaceous and non-micaceous, existed in this group of *amphorae*. Studies on their production and distribution suggest that the ones produced in Cyprus were non-micaceous, while those in the group of micaceous were identified as Cilician in origin.[818] Another type of transport *amphorae* that was locally produced is LR1, whose manufacture has been detected at several places, namely Kourion, the harbor of Amathous, Paphos, and Zygi-Petrini. All located along the southern coast, evidence for kilns was only found in the last three sites. The content of these locally manufactured *amphorae* has not been identified yet.[819]

The presence of LR1 *amphorae*, which is the largest group of *amphorae* all over the island,[820] at certain sites does not necessarily suggest a Cypriot origin, as their production has been detected in several other regions too, such as in Cilicia, North Syria, and the Aegean.[821] LR1 A *amphorae*, the earliest series of LR1 which started to be circulated in the 4th c. CE, are considered to have been produced in Cilicia and Syria since only a small number of them were found in Cyprus. LR1 B appeared in the mid-5th c. CE with a different shape, which has its subgroups called Form 1, Form 2, and Form 3. Forms 1 and 2 were produced in Cilicia, whereas the third form has been identified as produced in Cyprus. LR1 C, dated to the 7th c. CE, was manufactured in Cilicia (e.g. at Elaiussa Sebaste and Soloi-Pompeiopolis), on Cyprus, and Kos.[822] Thus, a detailed analysis of the fabric and form of LR1 *amphorae* could give some clues on their provenance.

[816] Rautman 2001, 244.
[817] Jackson et al. 2012, 90-91.
[818] Lund 2000; Leonard 2000, 874-75; Leidwanger 2011, 320. For the examples produced in Anemorion, see Williams 1989.
[819] Demesticha 2013, 170.
[820] Leonard 2005, 892. Demesticha lists the sites where the predominant *amphora* group is LR1; Salamis, Amathous, Kopetra, Maroni, and Panagia Ematousa (2015, 68). It should be noted that these sites are located in the southern part of Cyprus, where more detailed studies have been conducted so far.
[821] On the production sites of this *amphora* group, see Section 2 of this chapter.
[822] Demesticha 2013, 172-73, 177.

Commercial Relations between Rough Cilicia and Cyprus during Late Antiquity

The commercial links between Rough Cilicia and Cyprus could be investigated by retracing import and export ceramics, such as Late Roman D Wares, and LR1 transport *amphorae*. However, the recognition and interpretation of both pose several challenges. The identification of their provenance requires meticulous work on the form and fabric. Based on the above-mentioned analysis made by Demesticha, the presence of LR1 A *amphorae* on a Cypriot site offers a possible Cilician link, but the discovery of the first and second forms of LR1 B *amphorae* more securely suggests a Cilician origin. The production of LR1 Form 3 *amphorae* in Cypriot kiln sites all along the southern coast of the island has been interpreted as having been made for a newly established trade route between the northern provinces and Cyprus during the 6th c. CE.[823]

The *amphora* evidence in Elaiussa Sebaste comes from the LR1 *amphorae* that the local kiln sites produced and other types identified as Palestinian, African, and Aegean. Thus, the city seems to have imported no LR1 *amphorae* from Cyprus. The picture is different concerning finewares, as these were predominantly imported from Cyprus, western Anatolia, and North Africa. For the cooking wares that were excavated in the city, three origins have been suggested: Cypriot, Cilician, and the western Aegean.[824] The evidence of Cypriot finewares comes from the area between the Hellenistic polygonal wall and the fortification wall dating to the Roman Imperial Period, where sherds of 96 Late Roman D Ware vessels were found. Even though stratigraphically disturbed, the find contexts of the sherds could be dated to the late 4th-6th c. CE as they were found with other types of ceramics. The finds here were divided into two groups based on their fabric features, which shed light on the provenance of the wares. The first group, which was less in number compared to the second group, was identified to be of Cypriot origin. The other group could have been produced either on Cyprus or somewhere in southwest Anatolia. Kızılarslanoğlu argued that these finds indicate the continuation of the commercial ties between Elaiussa Sebaste and Cyprus that already existed in the Roman Imperial Period. However, these wares represent the smallest group amongst the other Late Roman Slip Wares excavated in the city, which has also been interpreted as an indication for reduced

[823] Demesticha 2013, 177.
[824] Equini-Schneider 2008a, 159-63; Ferrazzoli and Ricci 2009, 37-38.

relations with Cyprus during the Late Antique Period.[825] Instead, in Late Antiquity African finewares flowed into the city.[826]

Evidence for Cypriot imports in the study region is not only seen in urban contexts but is also encountered in the hinterland. Özköy, located in the *territorium* of Elaiussa Sebaste, seems to have imported Late Roman D Ware, as a sherd belonging to this group was found among the surface ceramics of the site. Besides, fragments of LR1 A and LR1 B *amphorae* were detected here. Further studies on their form, especially of LR1 B *amphorae*, may give some clues about their provenance. Another rural site where a Cypriot connection could be looked for is Kanytellis. Ten of the LR1 *amphorae* found here were identified as belonging to group B.[827]

The Cilician ceramics identified on Cyprus belong to two groups of *amphorae*: the micaceous pinched handle *amphorae* and LR1 *amphorae*. They both were found in cities as well as in rural settlements in the southern part of Cyprus. The pinched handle *amphorae*, which do not necessarily shed light on the Late Antique Period due to their circulation from the 1st c. CE onwards, were found at Dreamer's Bay, suggesting a commercial link between the southern coast of the island and Rough Cilicia.[828] Furthermore, Form 1 and 2 of the LR1 B *amphorae* were retrieved in Amathous, a port city on the southern coast.[829] The Cilician manufactured LR1 *amphorae* might have penetrated even the villages of southern Cyprus. Kopetra, located in the Vasilikos Valley, is a well-studied example. As clay analysis carried out on the LR1 *amphorae* found in this Late Antique village showed, 60% of the assemblage was identified as of either Cilician or Syrian origin, while min. 20% was understood to be local products. Based on the fact that no pitch lines were detected, the *amphorae* were thought to have contained olive oil.[830] Rautman suggested that these products must have come first to the eastern ports, such as Salamis and the minor ones, probably together with other imports from Cilicia or Syria. Then, they must have been transported to Zygi-Petrini, a small anchorage in central-south Cyprus, to distribute imported products to Kopetra and other settlements in the Vasilikos Valley.[831] The concentration of Cilician import *amphorae* at the sites located along the southern coast might be due to the unbalanced distribution of the

[825] Kızılarslanoğlu 2018, 460-62, 465.
[826] Ferrazzoli and Ricci 2009, 36.
[827] See the descriptions of Özköy and Kanytellis in the second section of Chapter 5.
[828] Demesticha 2004, 198; Leonard 2005, 902-3.
[829] Demesticha 2013, 173.
[830] Rautman 2000, 253; Leonard 2005, 817.
[831] Rautman 2000, 322.

archaeological projects carried out in the northern and southern parts of Cyprus. However, their presence testifies that the southern sites consumed Cilician products, olive oil and/or wine, probably through cabotage trade rather than through a direct exchange.

The North Coast of Cyprus and the Karpas Peninsula

As Leonard put forth in his Ph.D. dissertation, the shoreline located between the tips of Cape Kormakiti (Koruçam Burnu) and Cape Andreas (Zafer Burnu) is defined as the north coast of Cyprus. The cities that dominated this part of the island were Lapethos in the west and Kyreneia in the east (fig. 41). As mentioned before, the prevailing winds along the north coast dictate sailing towards the east during most of the year. However, the northerly prevailing winds were occasionally influential as well, which made sailing difficult, as the ships were forced to the shore. Another disadvantage of this coast for sailors was the presence of high waves. Besides, sailing along this coast was avoided due to the rough winds blowing from the east during the winter season. For all the reasons listed above, Leonard argued that the route located along this coast must have been less frequently used than those along the other coasts.[832]

Despite its relatively difficult sailing conditions, Leonard specified several reasons why this coast of the island must have had an intense regional maritime traffic with the Anatolian mainland, including the region of Rough Cilicia. First of all, the north coast and its immediate hinterland were relatively cut from the rest of the island due to the positioning of the Kyreneia Mountains parallel to the coast, which probably forced this part of Cyprus to intensify its maritime activities so that it could connect to both the rest of the island and the southern coast of Anatolia. In other words, this region must have relied on maritime transportation rather than terrestrial routes to be able to join the exchange network. Secondly, one of the main trade routes that linked the Eastern Mediterranean to the west was located to the north of the island. The proximity to such an important maritime trunk must have been a considerable advantage for the ports located along this coast, as they could function as way stations for passing ships. Lastly, from the perspective of physical distance, the northern coast was very much oriented to Anatolia.[833]

The main ports of the north coast were Lapethos, Kyreneia, and Karpasia, lining from the west to the east. The first two ports were provided with harbor works that were smaller

[832] Leonard 2005, 326, 337, 339, 347, 351-52.
[833] Leonard 2005, 901.

in scale than those of Salamis, Paphos, Kourion, and Soloi.[834] These ports had hinterlands with limited agricultural fields. In these hinterlands, olive growing and animal husbandry, especially of sheep and goat, were widely practiced. Besides, the Kyreneia Mountains supplied timber for the hinterlands of Lapethos and Kyreneia. One of the largest springs of the island is located in Lapethos, which offered favorable conditions for vegetable and fruit growing in the westernmost part of the north coast. Karpasia, the narrow elongated promontory extending to the east, was rich in wool production and cereal crops, wheat in particular. Leonard suggested that one of the export products shipped from the local ports located along the north coast was probably olive oil, which was produced in the hinterlands of these ports. He linked the production activities here to the East-West trade route situated to the north of Cyprus. Also, he argued that the hinterland of Lapethos produced ceramics including transport *amphorae* and supplied to fulfill the needs of other regions on the north coast, Karpasia in particular.[835]

On the other hand, this part of the island lacked metal resources, especially bronze, which must have been provided from the northern slopes of the Troodos Mountains that are located in the southern part of the island through coastwise transportation. The reason for emphasizing the maritime transport as the primary means of exchange in this part of the island can be explained by the restricted terrestrial transportation facilities between the coastal strip in the north and the Mesaoira Plain, which is situated to the south of the Kyreneia Range. Communication between the two zones was possible through three passes located at Çamlıbel, Aghirda, and to the east of Melaounda, as well as via one road passing through Klepini and Kythrea.[836]

The minor ports on the northern coast of the island are understudied due to the current political situation, which has impeded fieldwork in North Cyprus for several decades.[837] Without substantial excavation and survey projects targeting especially the Roman Imperial and Late Antique sites along the north coast, an extremely unbalanced picture regarding the history of the island is represented,[838] since the intense fieldwork program in Southern Cyprus has revealed a great number of Late Antique sites, both along the coast and in the hinterland. Projects such as the Cyprus Coastal Survey,[839] the Episkopi

[834] Leonard 2005, 328.
[835] Leonard 2005, 948-49.
[836] Bekker-Nielsen 2016, 120.
[837] For the impact of the political situation on the cultural heritage of Northern Cyprus, see Summerer 2016.
[838] Zavagno and Kızılduman 2018, 233-34.
[839] Leonard 2005, 31-34.

Bay Survey,[840] the Sydney Cyprus Survey Project,[841] and the Vasilikos Valley Project[842] have attempted to reconstruct the exchange patterns established between the small anchorages and larger ports as well as the connection between the hinterland and the maritime network. A similar fieldwork strategy is needed for the north coast of the island, as this might reveal the minor ports where the Late Antique settlements found access to the regional and interregional maritime trade network.

Located on the easternmost of the island, the Karpas Peninsula has a very elongated form extending towards the northeast. In this part of the island, the Kyreneia Range continues in lower elevations, creating a rugged and hilly region. The peninsula has two coasts, a northern and a southern one. While the northern coast consists of a narrow strip, since the ridges rise abruptly, thus leaving limited flat areas along the shore, the southern coast is formed by sandy plains, opening on fertile valleys and dense forest. Furthermore, both coasts are characterized by numerous bays and islets. How much the Karpas Peninsula was physically oriented to the Anatolian mainland can be observed from its panorama, as the Tauros Mountains located between Anemorion and Tarsos could be viewed from the high ridges of the promontory. Besides, Mount Kasion (the modern Kel Dağı) is visible from Cape Andreas, the easternmost tip of the peninsula.[843]

The proximity of this region to Southern Anatolia was also mentioned by Strabo, as he emphasized the short distance between its northern coast and Rough Cilicia.[844] As a foothold, the peninsula was also mentioned in the historical account of the 1st-century BCE writer Diodorus Siculus, who discussed the victory that Demetrios I Poliorketes (294–288 BCE) gained against the Ptolemies at Salamis in 306 BCE. According to his writing, the Macedonian commander who left the mainland from Cilicia disembarked at Karpasia, a coastal town located on the northern side of the peninsula, and advanced to the interior of Cyprus to siege Salamis.[845] This piece of information implies the convenience of the Karpas Peninsula for Cilician travelers as a landing place.

Hogarth, a 19th c. British traveler and archaeologist, described the Karpasia Peninsula as a remote and isolated promontory, drawing attention to several ethnographic peculiarities of the communities living here.[846] His work is both the most extensive and

[840] Leidwanger and Howitt-Marshall 2006.
[841] Johnson and Knapp 1995; Given and Knapp 2003; Knapp and Given 2004.
[842] Rautman 2000, 2001, 2004; Todd 2004; Todd 2016.
[843] Hogarth 1889, 53-54, 81; Zavagno and Kızılduman 2018, 237.
[844] Str. *Geography* 14.6.1.
[845] Diod. 20.47; Hogarth 1889, 56.
[846] Hogarth 1889, 54-55.

detailed study of those dedicated to this part of the island.[847] Furthermore, the peninsula seems topographically detached from the rest of the island as well. Still, this statement could be only partially true as studies on the physical remains and written sources revealed a Roman road network connecting the tip of the peninsula with larger regional centers such as Salamis and Kyreneia. While the road coming from Salamis followed the southern coast of the peninsula up to Cape Elaia, the one originating from Kyreneia ran along the northern shore and merged with the southern road in Koilanemos. After having merged, a single road followed the northern shore up to the easternmost tip, passing through Agios Philon and Urania. [848] Wheel traces of the ancient road along the northern shore recorded by Hogarth suggest that these roads were convenient for carts.[849] At the eastern section of the peninsula, a road connecting the northern and southern shores at Agios Philon was mentioned by Strabo. The *Tabula Peutingeriana* also represents that a coastal road linked all the settlements on the northern shore of the island from the west to the end of the Karpas Peninsula.[850]

Both sides of the Karpas Peninsula are understudied because a limited number of excavations and surveys have been carried out in this part of the island thus far. The most extensive record of this region comes from Hogarth who compiled his observations on the landscape and ancient remains that were traceable along both the northern and southern shores of the promontory in his travel book.[851] In the following decades, the ecclesiastical architecture of the peninsula drew the attention of scholars as well and a great number of religious buildings were studied in detail.[852] During the late 1960s, an underwater excavation project was undertaken at Cape Andreas and near the adjacent islands.[853] In recent years, traces of the transition period between Late Antiquity and the Medieval Age were investigated in the southern plains of the peninsula.[854] An ethnological study conducted by Leonard sheds light on the hinterlands and forelands of the ports on the 19th century Cyprus. Preindustrial shipping activities were more or less similar to each other. Furthermore, the road infrastructure of the peninsula remained

[847] Leonard 2005, 92.
[848] Bekker-Nielsen 2016, 122-23.
[849] Hogarth 1889, 84.
[850] Bekker-Nielsen 2016, 122-23.
[851] Hogarth 1889.
[852] Jeffery 1918; Megaw 1946; Papageorghiou 1985; Stewart 2008; 2010.
[853] Green 1970, 1973, and 1976.
[854] Zavagno and Kızılduman 2018.

almost the same until the 20th c. CE. Thus, the use of this ethnographical data to better understand the ancient maritime network of the island is helpful.[855]

In the following section, the main sites that were possibly occupied during Late Antiquity and important coastal features of this promontory are described. As the northern part of the Karpas Peninsula has a very indented coast, Hogarth recorded on this shore several sites that are worth mentioning. As he traveled from the east to the west on the northern coast, his descriptions follow the same order. At the easternmost part of the promontory, he reported a harbor to the west of Aphendrika, where the ruins of ancient Urania are assumed to be located. It was described as a horse-shoe shape harbor whose entrance was a few yards wide. Four stones, which were identified as mooring posts, were observed on the beach. To the west of this structure, several tombs which Hogarth thought to have belonged to "a very early period" were located. Furthermore, the remains of four poorly preserved Byzantine churches were recorded in the hinterland of Aphendrika.[856] Even though no Late Antique remains were observed so far, this site and its vicinity could bear more information in the future. The ancient city of Karpasia, historically known as the place where Demetrios Poliorketes landed, was provided by a harbor during the Roman Period.[857] Hogarth's observations on the ancient port provided invaluable information about its harbor installations. Two artificial breakwaters built of large blocks were recorded here. Around the harbor, the church of Agios Philon is situated. Excavations conducted at the church by Megaw and Du Plat Taylor revealed that its foundation dates back to the early 5th c. CE and that it was rebuilt in the 12th c. CE.[858] Further to the west, several small coastal sites were recorded in Aphrodisium.[859] Although they were predominantly dated to the Medieval Period, their vicinity could yield traces of earlier periods. Makhaeriona, which was a small hamlet located in Yalousa (Yeni Erenköy), had a shallow bay of horseshoe form.[860] The 19th c. data suggest that here, if not at Makhaeriona, a port that served a large hinterland including Yalousa, Rizo-Karpaso (Dipkarpaz), Galinoporni (Kaleburnu), Korovia (Kuruova), Melanarga (Adaçay), and Agios Andronikos (Yeşilköy) was present. The products from Agios Symeon (Avtepe), and Neta (Taşlıca) were occasionally exported from this port as well. Ethnographical data

[855] Bekker-Nielsen 2004, 42; Leonard 2005, 380-81.
[856] Hogarth 1889, 88. With "a very early period", I assume Hogarth referred to the pre-Classical Period, probably the Bronze Age in particular.
[857] Blackman 2013, 570-71.
[858] Hogarth 1889, 90. For the excavations, see Megaw 1946.
[859] Hogarth 1889, 92-93.
[860] Hogarth 1889, 93; Jeffery 1918, 252.

on Yalousa shows that the producers from the villages from the southern coast of the peninsula, such as Galiporni and Korovia, also used the ports on the northern coast. This might have been related to the situation of the routes and short-distance between the two sides of the promontory.[861]

The sites near Platanisso (Balalan) were reported to have some coastal features that could have been convenient for ancient maritime trade. Galounia, situated at the very root of the Karpas Peninsula, is worth being mentioned due to the presence of a natural harbor on its coast. Hogarth emphasized a major disadvantage of this basin, which is its vulnerability to the westerly prevailing winds.[862] This site was among the records of the 19th c. ports as well. The hinterland of Galounia was specified as Eptakomi (Yedikonuk), the northern part of Komi Kebir (Büyükkonuk), and the eastern part of Davlos (Kaplıca).[863] According to Hogarth, the most advantageous landing place of the peninsula was the horseshoe-shaped bay at Gastria, because it is protected by the winds of all directions.[864]

A set of coastal sites was described along the southern coast as well. The westernmost site that could have been an ancient port is Boghaz, which was mentioned among the 19th c. ports of the island. The textual sources revealed that the port was exporting carobs that were produced in the southern part of Komi Kebir as well as other lands in its close vicinity. Palloura, which is today located along the isthmus in Bafra, is also mentioned as one of the local ports functioning in the 19th c. CE. Its hinterland was limited to the church of Agios Theodoros, which was located in its close vicinity.[865] Another site was Koma tou Gialou, the district of Kumyalı in Turkish. The site where several Byzantine remains were observed has a well-protected small bay, which could shelter ships. Besides, fertile plains are predominant in this area. Hogarth dated the site to the early 16th c. CE, when the island became open to Venetian settlers, based on the church remains around the village and an inscription of the date 1533 written in Roman numerals on a former church, which was reused as a quarry.[866] However, future investigations may reveal whether earlier phases of this settlement existed. I suspect that the combination of arable fields and a natural harbor could have been beneficial in the pre-Medieval Period as well.

[861] Leonard 2005, 765.
[862] Hogarth 1889, 92-95.
[863] Leonard 2005, 765.
[864] Hogarth 1889, 98-99.
[865] Leonard 2005, 765.
[866] Hogarth 1889, 68-69.

Evidence from 19th c. Cyprus revealed that this site had an important port that controlled almost the whole peninsula. Its hinterland included Koma tou Gialou, Galatia (Mehmetçik), Eptakomi, Komi Kebir, Tavros (Pamuklu), Vokolidha (Bafra), Platanisso, Leonarisso (Ziyamet), Agios Andronikos, Yalousa, Kilanemos (Esenköy), Vasili (Gelincik), Lytherankomi (unknown), Vathylakka (unknown), Agios Symeon, and Neta. As these places suggested, this port was connected with the lands on the northern coast as well as the ones along the south coast.[867] Another observation made by Hogarth that is important to better understand the south coast of the peninsula was the presence of a slipway on the ancient island of Kleones (modern Agia Pappou). This island is assumed to have been one of the *Nesoi Karpassiai* (the Karpasian islands) as addressed by Strabo. Located ca. 6 km away from the ancient port of Karpasia, Kleones had a shrine dedicated to Agia Pappou from which the island derived its modern name.[868] Hogarth recorded a possible slipway that was carved out of the bedrock to the west of this poorly preserved shrine. The so-called slipway, flanked by rubble walls at the two edges, was reported to be continuing undersea. Hogarth associated the presence of this structure with the possible function of this island in the maritime trade between the peninsula and the city of Salamis. He suggested that the ships could have loaded and unloaded goods and products here to avoid sailing around Cape Andreas for a secure sailing.[869] The 19th c. evidence supports his assumption regarding the direction of trade since it records that Famagusta was the foreland of this island that functioned as the port of Rizo-Karpaso.[870]

Zavagno has undertaken an extensive survey in Kaleburnu to research the settlement pattern of Early Medieval Cyprus corresponding to the period between 6th-early 9th c. CE. During the surveys, which employed the methods of photographing and site description, four major sites were documented: Panagia Daphnounda-Monastiraki, Panagia Aphendrika, Agia Varvara, and Trachonas. Identified as a monastery, Panagia Daphnounda-Monastiraki is located on the summit of a hill overlooking the survey region. Even though the monastery, which is poorly preserved, was dated to the Late Medieval Period, *spolia* detected in the building and some features seen in the chamber tombs found in its vicinity suggested that the occupation of the site goes back to a time preceding the Medieval Period.[871] Panagia Aphendrika, situated in the village of Sykhada,

[867] Leonard 2005, 765.
[868] Str. *Geography* 14.6.3.
[869] Hogarth 1889, 79; Blackman 2013, 570-71.
[870] Leonard 2005, 765.
[871] Zavagno and Kızılduman 2018, 239, 243-44.

went through three phases of occupation starting from the 5th c. CE. It was first built as a basilica during the Late Antique Period and transformed into a church with three aisles in the 8th c. CE. During the 11th-12th c. CE, the building started to be used as a chapel.[872] Agia Varvara, another church site in the study region, is situated nearby the sea, in the modern village of Kuruova.[873] The site was dated to the 8th c. CE with a preceding occupation phase as the remains of mosaic pavements suggest. Its proximity to the sea, which is only a few hundred meters, presumably offered access to the maritime traffic.[874] Hogarth reported that no harbor traces were visible in its bay. Also, he observed large stone blocks, a finely-worked water channel, several 'oil-stones' of large size, and pottery.[875] All three ecclesiastical sites were interpreted by Zavagno and Kızılduman to have presumably been part of rural settlements, which should be looked for in the areas around the churches in future investigations.

The last site documented in this study region is Trachonas, a coastal settlement located on the terraces overlooking a small cove. The site was noticed by Hogarth who recorded that it was a small Byzantine village located next to the place where the Karamani stream flowed into the sea. Although no name was given to the site, Zavagno and Kızılduman argued that this description must have referred to Trachonas. The scattered architectural elements including finely worked capitals and ceramic sherds at this site were preliminarily reported to be Hellenistic and Roman by the Swedish Expedition in Cyprus which undertook excavations in the study area during the 1920s and 1930s. Besides, several remains identified as fish tanks along the cove and some fragments assumed to have belonged to the piers were observed in the bay which the site is overlooking.[876] Due to the lack of detailed studies, I believe that Trachonas cannot be securely excluded from the Late Antique landscape of the peninsula.

Another important result of Zavagno's survey was the observation of ancient quarrying traces along the southern coast, attested by building blocks carved out the rock faces beside the sea. The unfinished ashlars found in a small area next to these cliffs together with a Roman and possible Late Antique ceramic concentration might be

[872] Hogarth 1889, 79; Zavagno and Kızılduman 2018, 243, 245. On the architecture of the building, see Jeffery 1918, Megaw 1946, Papageorghiou 1985, and Stewart 2008, 2010.
[873] Zavagno and Kızılduman 2018, 243, 246. For the church, see Jeffery 1918, Megaw 1946, Papageorghiou 1985, and Stewart 2008, 2010.
[874] Zavagno and Kızılduman 2018, 243.
[875] Hogarth 1889, 77. No clarification was added to the meaning of 'olive-stones', which I presume to be millstones.
[876] Hogarth 1889, 79; Zavagno and Kızılduman 2018, 241-45. On the results of the excavations at Trachonas by the Swedish archaeologists, see Mand and Gjerstad 1935; Whitling 2014.

interpreted as a possible indication of a Roman and maybe Late Antique use of the quarries along this coast.[877] In addition to the documented sites, several mounds are waiting to be studied in this part of the peninsula. One of them, the Mesovouni Mound, was mentioned by Guillou. He observed a large amount of ceramics scattered over an extensive area. These ceramics, which were considered remains from the Hellenistic and Roman Periods, need to be thoroughly examined to understand better the occupation history of the peninsula.[878] Hogarth noticed this mound during his travel as well and reported multiple 'earth-graves'. Besides, two sarcophagi, which he preliminarily dated to the Roman/Byzantine Period, were found in the village of Rizo-Karpaso situated ca. 1 km west of the mound.[879]

The underwater expeditions conducted at the easternmost tip of the Karpas Peninsula in 1969 and 1970 by Green also revealed important information about the maritime activities organized on the promontory. The expedition was not only limited to Cape Andreas but also targeted the Klidhes islands situated to the east (fig. 42). No occupation exists on these islands, which number ten in total. Only the sixth island counted from the mainland showed some traces of human activities in the form of ceramic sherds. The project aimed to document coastal features here and to locate shipwrecks. The small cove that was situated immediately to the north of the cape was described as a natural anchorage by the expedition team. Also, the team documented four possible shipwrecks during the campaigns.[880]

'Site 10', which might not be representing a wreck, yielded *amphorae* dating to the 4th c. CE. 'Site 17' was dated to the 8th c. CE based on *amphora* finds. The same type of *amphorae* was also detected at 'Site 24', which was interpreted as an association with 'Site 17'.[881] The excavated assemblages from the last two sites give information about the Late Antique commercial relations between the island and Cilicia. Leidwanger argued that these two sites might be representing one ship, which probably was broken into two before it wrecked. Alternatively, he suggested that one of the sites could be a shipwreck while the other one might be its jettison. The cargo predominantly included *amphorae* of three different types. The first group with wide bodies was identified as LR1 B1 *amphorae* dated to the early 6th and 7th c. CE. Although their origin cannot be detected,

[877] Zavagno and Kızılduman 2018, 241-42.
[878] Guillou 1998; Zavagno and Kızılduman 2018, 237.
[879] Hogarth 1889, 79.
[880] Green 1970, 7, 9; Green 1973.
[881] Green 1970, 14, 16; Green 1973, 161; Green 1976, 407.

the Bay of Iskenderun and Elaiussa Sebaste were among the possibilities. One of them is a group of LR1 B *amphorae* with a narrow body. Both their similarity with the LR1 *amphorae* produced in Elaiussa Sebaste and the grit inclusion in their clays point towards a possible Cilician origin. Yet, they could have been locally produced, as narrow-bodied LR1 *amphorae* were found in Cypriot cities too, such as Paphos, Kourion, and Salamis. Another type was tentatively identified as LR2 *amphorae*, which were produced either on Cyprus or Kos. In addition to *amphorae*, multiple broken sarcophagi made of terracotta were found among the cargo. The analyses made on their fabric suggested Cilicia as provenance.[882]

Conclusion

The number of local ports located on the Karpas Peninsula is underrepresented in the current picture due to two main reasons. First of all, only a limited part of the peninsula was thoroughly investigated so far. Secondly, as Leidwanger claimed, the surveys have usually failed to recognize traces of commercial activities that took place along natural anchorages that lacked artificial harbor installations.[883] Thus, many more coastal sites, which were used for shipping activities on local and regional scales, must have existed along the shores of the promontory.

The communities living in the peninsula during Late Antiquity, especially those at more isolated locations, needed access to the sea-borne trade to supply themselves. The southern side of the promontory seems to have been highly oriented to the Bay of Famagusta, where Salamis was located. The proximity of such a central commercial hub with relatively safe sailing conditions must have attracted the communities along the southern shore of the peninsula. As the written evidence suggests, the northern coast of the peninsula was a preferred location for sailors to disembark departing from the Anatolian mainland. Along this shore, the harbor at Karpasia could be utilized by small vessels for local and regional commerce as well as by interregional ships as a port of call. The westernmost part of the northern shore also seems to have had convenient coastal sites to engage in direct trade with the Anatolian mainland, as the sites in Makhaeriona, Platanisso, and Galounia were provided with natural anchorages. It should be noted that the merchants from Rough Cilicia might not have preferred to anchor in the ports along the southern coast as sailing around Cape Andreas posed dangers. Secondly, as

[882] Leidwanger 2011, 332-36. For the petrographic analysis, see Parks and Neff 2002.
[883] Leidwanger 2014b, 35.

ethnographical studies on the 19th c. ports have shown, access to the northern ports provided the ships with products of the southern lands of the peninsula as well as with those of the northern lands. Thus, sailing to the southern ports was both dangerous and unnecessary for the merchants coming from the Anatolian mainland.

The tip of Cape Andreas, on the other hand, sheds light on the exchange patterns between Rough Cilicia and Cyprus on a large scale, as the volume of the cargo found during underwater excavations suggests. This corner of the island seems to have been one of the passages actively used by ships during Late Antiquity. Carrying *amphorae* with possible Rough Cilicia connections, the ship corresponding to 'Site 17' and 'Site 24' might have been sailing directly from Rough Cilicia to Cyprus, possibly to Salamis. Merchants sailing to Cyprus from the ports of Rough Cilicia would have loaded their ships with Cypriot imports on the way back. It is impossible to know how the Cypriot finewares ended up in Elaiussa Sebaste and Özköy. Some of the imports must have been shipped from the harbor of Elaiussa Sebaste and distributed to the settlements in the hinterland. However, those settlements including Özköy might have fulfilled their needs through the local ports along the coast, such as Akkale and Kızlarhamamı Mevkii. Future studies on the other parts of the Northern coast can help to better understand the nature of the maritime connections both on the local and regional levels.

5.3.3 Interregional Connections

Rough Cilicia was located on one of the main sea routes that was bridging the two ends of the Mediterranean. Before the fall of Rome in the late 5th c. CE, the East-West maritime route, especially between the Levant and the West, was used for the transportation of large amounts of grain, wine, olive oil, and other products such as ivory and precious stones. The great demand for eastern wine in the West as a luxurious product and in Rome as *annona* is evidenced by the presence of pitched *amphorae* at ports and in shipwrecks.[884] By the time of the foundation of Constantinople as the new capital, this main trunk shifted its course to the north and began to be predominantly used by the *annona* ships that followed the coast of the southern Anatolia, turned to the Aegean and reached the city by passing through the strait of the Dardanelles. This shift in the maritime network is supported by the shipwreck evidence from the Mediterranean. The number

[884] Pieri 2012, 36.

and location of shipwrecks show that the West was more active than the East in the 4th and 5th centuries CE. During the 6th and 7th c. CE, on the other hand, the eastern part of the Mediterranean had a more vital maritime commerce. In other words, the dominance of Rome as a market in seaborne trade was taken over by Constantinople during the Late Antique Period.[885] The growing importance of the new capital as a large consumer city is evident from the Late Antique constructions of two new harbors at Constantinople, one in 362 CE by Julian (361–363 CE), and the other in the late 4th c. CE by Theodosius I (379–395 CE). The need for supply of the capital seems to have retained at least until the 6th c. CE when Justinian I (527–565 CE) built two new harbors as the already existing harbors suffered from siltation.[886]

Despite its advantageous position along this East-West route, there is no detailed information regarding shipwrecks on the coast of Rough Cilicia.[887] Therefore, maritime interactions of the study region on the interregional scale can only be indirectly retraced coast. Thus, very little concrete evidence that will help to assess the interregional function of the ports exists for now. However, the presence of high volume production to be exported from those ports might hint at a long-distance trade. The textual, epigraphical, and archaeological evidence implies that the region exported a large amount of olive oil and wine on an interregional scale.

The wine of Rough Cilicia frequently appears as an export product in the texts. In the 1st c. CE, Pliny described Cilician wine as a sweet white muscatel.[888] The 4th-century writer Ammianus Marcellinus told how fertile the *Kalykadnos* Valley was and mentioned Isaurian wine as a famous product.[889] Furthermore, the *Expositio Totius Mundi*, written

[885] McCormick 2012, 85.
[886] Wilson 2011, 52; Magdalino 2013, 13-14.
[887] Parker's catalog (1992) covers no shipwrecks from the coast of the region. The only evidence of shipwrecks found along this coast belongs to the Roman Imperial Period. Equini-Schneider (2013, 419) mentions the identification of two shipwreck cargoes on the eastern coast of the promontory based on the material concentration and some wooden fragments, which were thought to be the hull remains. In the following report, one of the cargoes was examined and *amphora* fragments of the 2nd-3rd c. CE were identified. The assemblage was composed of imports from the Aegean and the Iberian Peninsula as well as local *amphorae* (Equini-Schneider 2014, 566). Evidence of another shipwreck, which was identified based on a large number of both fragmented and intact *amphorae* of the same type, comes from the area that was located 60-70 m off the Yılanlı Island to the south of Kelenderis (Evrin et al. 2002, 7, 9). In addition, Öniz and Karademir (2018, 158) have reported a shipwreck off Narlıkuyu, which was identified by the presence of amphorae and an iron anchor.
[888] Plin. *Nat. His* 14.81-82; Elton 2005b, 692.
[889] Amm. Marc. *Roman History* 14.8.1; Varinlioğlu 2008, 138. In addition, Pliny comments on raisin wine of *Cilicia*, listing it as the second best after the Greek raisin wine. See Plin. *Nat. Hist.* 14.80-81.

in the 5th c. CE and giving practical information on both trade and geography, also suggests Cilician wines to the readers.[890]

The Abydos Tariff mentions the Cilician wine traders, offering a different tariff to the *naukleroi* on their transit, which was half of the standard fee, which points to the interregional characteristics of the wine trade organized in the region.[891] It was an exception that the tariff was specified by the geography as occurred in this case since the determining factor was the cargo type, the product that was transported to the capital.[892] Furthermore, the privileged taxation status of the Cilicians evidenced by the Abydos Tariff might be an indication of the *annona* shipping from Cilicia. The term *naukleroi* (pl. form of *naukleros*) is important to understand the character of the trade mentioned in the decree. While Durliat and Guillou defined *naukleros* as "a trader who transports the *annona* products", McCormick and Lopez thought that this term meant a merchant that was operating out of the *annona* system.[893] Some of the 5th-6th c. CE tombs in the Korykos *necropoleis*, which give insights into the professions of the people in Rough Cilicia, bear the name of the job that the deceased did during his life, and at least 15 wine traders have been attested among them.[894] An inscription from the necropolis of Korykos belongs to a person named *Sauelos* who was both a wine merchant and engaged in the shipping of the wine. The profession of this merchant fits in the definition of *naukleros* described in the Abydos Tariff.[895] Unlike wine, olive oil does not appear in any literary or epigraphical source as an export product of the region.[896] The presence of olive traders in the region is seen only through the funerary texts in Korykos and Korasion.[897] While four olive oil traders have been detected among the inscriptions in Korykos, six out of fifteen individuals were identified as olive traders in Korasion.[898]

Archaeological evidence suggests that the hinterlands of the ports in the study region were producing a surplus of wine and olive. The large number of open-air wine presses and olive oil workshops found in the study region as well as the vast areas dedicated to

[890] *Expositio totius mundi etgentium* 39; Elton 2005b, 691; Varinlioğlu 2008, 138-39. For a review of the work, see Gull 2014.
[891] Iaocomi 2010, 27-28.
[892] McCormick 2012, 64.
[893] Lopez 1959, 79; Durliat and Guillou 1984, 589-90; McCormick 2001, 104; Iaocomi 2010, 27.
[894] Iaocomi 2010, 22-24; 27.
[895] Iaocomi 2010, 21-22, 27. Varinlioğlu (2008, 136) also mentioned the same person who was shipwright and wine dealer.
[896] Varinlioğlu 2008, 139. Despite the lack of textual evidence, the name of Elaiussa (*elaion*), meaning "olive trees", suggests that the city should have been known for its olive orchards.
[897] Equini-Schneider 2008a, 8.
[898] Varinlioğlu 2008, 180-92; Iaocomi 2010, 22-24, 27.

agricultural production, such as fields and terraces, suggest a rural economy that was beyond the subsistence.[899] Varinlioğlu interpreted the high number and large size of presses found in the region as an indication of surplus in olive oil and wine that was produced for export at least on a regional scale, if not an interregional scale.[900] At the same time, she stated that one needs to be cautious about the estimation of production capacity based on the quantity and dimensions of these installations. The quality of the presses should matter in this estimation as the permanent character of the equipment, such as presses and mills, implies a substantial investment, which must have been possible only for commercial production.[901] Another indication for the existence of a surplus economy is the production sites of transport *amphorae*. Elaiussa Sebaste, and very likely, Korykos, are places where the evidence of LR1 manufacture has been found.[902]

The interregional distribution of LR1 *amphorae* gives indirect evidence for long-distance maritime links. As mentioned before, these transport *amphorae* were Eastern Mediterranean in origin. Their presence in the distant regions of the Empire, such as the West and the North, and their geographical distribution over centuries shed light on the general trends of the commerce. LR1 *amphorae* were found in lower quantities in the early 5th c. West, at Rome and Carthage in particular, compared to the African *amphorae.* This was explained by the fact that the African *annona* ships were procured by the State. However, Africa fell to the Vandals in the mid. 5th c. CE, causing the collapse of the *annona* shipments. In contexts dating later than this time, LR1 *amphorae* are more frequently seen, which was interpreted as a better engagement of the eastern merchants in the western market. In the Balkans, on the other hand, LR1 a*mphorae* were present in high quantities already in the 4th c. CE as the *annona* system operated for the supply of the army on the Danube frontier. The staples probably were transshipped at the harbors of Constantinople to be delivered to the military forces.[903]

[899] For a detailed discussion of physical evidence related to this agricultural organization, see the section on 'Ancient Economy' in Chapter 4 and the 'Settlements' section of this chapter.
[900] Varinlioğlu 2008, 139.
[901] Varinlioğlu 2008, 159.
[902] See the 'Settlements' section in this chapter.
[903] Elton 2005b, 693.

Chapter 6:
DISCUSSION AND CONCLUDING REMARKS

6.1 Discussion of the Three Territoria

6.1.1 Territorium of Korykos

Topography

The Late Antique sites found so far in the *territorium* of Korykos are located on hilltops and/or slopes, along the valleys, nearby the rivers, and around the sinkhole, which is the landform seen at Korykion Antron. It is seen that the valleys were dotted with the majority of the sites, as the topography here is composed of valley systems created by the Şeytanderesi River and its branches. Based on the available information on the topography of the newly founded Late Antique sites, including 'Unnamed Site' B and Kızlarhamamı Mevkii, no specific preference for a particular site location seems to have been made as they were founded on hill slopes and nearby sea, respectively.

Site Types

Fifteen out of 42 sites could not be identified. Among the 27 identified ones, the 'village' dominates the site typology. The other site types encountered are the hamlet/small village, farm, monastic site, port, funerary site, sacred and/or funerary site, which suggests that the *territorium* showed a great variety in typology (fig. 43).

In total, 27 sites were founded in the Late Antique Period. The types of eight sites are unidentified. Among the remaining 21 sites whose types could be identified, the 'hamlet/small village' comes first with eight in number. This suggests that all the sites identified as hamlet/small village were founded during Late Antiquity. The second most frequently seen type among the newly founded Late Antique sites is the 'village' with six in number, which constitutes the majority of the total village number in this *territorium* (fig. 44). These sites vary in size, as one village, Karadeve, could be distinctively categorized as large, while the rest seems to have been moderate in scale. It seems that two already existing farms continued to be occupied in the Late Antique Period and only one farm was founded during that time. The only port detected here, Kızlarhamamı Mevkii, was also apparently founded in Late Antiquity. However, along the coast in Narlıkuyu, several natural ports might have existed as well. Furthermore, the two sites

that were categorized as ‘sacred and/or funerary site’, Bağlıçukur and Çataleni Mevkii, were newly founded Late Antique sites where no earlier occupation phases were detected. With no surprise, the only site that was identified as monastic, Çoku, was also founded in the Late Antique Period.

Production

The *territorium* seems to have produced various products, such as olive oil, wine, and grain. Based on the presence of millstones, the settlements that certainly produced olive oil are Adamkayalar, Allıören, ‘Unnamed Site’ A, Kapıtaş 2 Mevkii, Ökkeşyurdu, ‘Unnamed Site’ C, Burcunkale, Demirciören Mevkii, Çoku, Kızlarhamamı Mevkii, and ‘Unnamed Site’ F (fig. 45). Although the village of ‘Unnamed Site’ A and the farm of Demirciören seem to have only produced olive oil, this might not be true as olive oil presses could have been used for wine production as well. Thus, evidence for wine production can be attributed to many places, even to the sites where only olive oil production equipment has been found. Grain production is attested in Adamkayalar, Allıören, Çokumlu Zeytin 2, Dedeveli Kalesi, Gökören, Karadeve, ‘Unnamed Site’ B, Demirciören 2, Kapıtaş 2 Mevkii, Kıraçhavlı, Ökkeşyurdu, Burcunkale (Burç Kale), and Arpalık (fig. 46).

Allıören as a large village seems to have produced surpluses of olive oil and grain, based on the high number of olive oil workshops, cisterns, threshing floors, and large arable lands. Moreover, a commercial link between this village and Korykos has been suggested. Kızlarhamamı Mevkii, which was possibly a port located to the west of Korykos, must have exported surpluses of olive oil and/or wine, as evidenced by its proximity to the sea, which could have given access to the maritime network for an exchange on differing scales. The large village of Karadeve might have produced a great amount of grain, which is suggested based on the presence of a large number of threshing floors and storage buildings here.

Networks

Several settlements were found to have been in relation to the ancient roads that could be associated with the fourth and fifth roads that followed the course of the Şeytanderesi River from two sides. While the fourth road connected Korykion Antron and Olba, the

latter was linking Korykos and Olba, through Canbazlı.[904] Thus, this part of the study region was very well connected to Olba and its hinterland. Allıören is suggested to have been somehow linked to Korykos, as the survey report mentions that its products were exported from Korykos. However, the location of the site in Narlıkuyu suggests that the shipping might have taken place in the small ports to the western side of the Şeytanderesi River, such as Kızlarhamamı and the cove of Narlıkuyu. Although Korykion Antron is thought to have been the starting point of the fourth road, I expect that it continued up to the west cove of Narlıkuyu. The large village of Karadeve whose location is not precisely given in the reports was possibly on the fourth road, either on the section between the coast and Korykion Antron or in the area to the north of Korykion Antron.

Demirciören Mevkii and Şıhdede Mevkii are also reported to be connected to an ancient road which I assume to be the fifth road. Tol is located on the road that was crossing the Şeytanderesi River via a bridge, which was connecting the two sides of the river. This depiction suggests that an east-west oriented road that originated from the west of the river might have been connected to the fifth road, passing through Tol. The sites of Adamkayalar and Hoyrazakarşı are situated on the route of a modern highway, which was probably once the ancient road of Korykos and Olba. Moreover, several settlements have been found in spatial relation to each other. Two sacred sites, Bağlıçukur and Çataleni Mevkii, are closely located in an east-west alignment. Karadeve was closely located to the other large village of Allıören at 2 km distance and the village of 'Unnamed Site' A at only 1.5 km distance. 'Unnamed Site' B, another village, is situated 1 km west of Allıören. Based on the current data concerning the spatial relations between the sites, the villages including Allıören, Karadeve, Korykion Antron, 'Unnamed Site' A, and 'Unnamed Site' B, were concentrated in a single area that is close by the sea, on the western side of the Şeytanderesi River. On the other side of the river, the coastal land was densely occupied as well. It is seen that the villages were not remotely located from the city in this *territorium*.

The southern cove at Akyar Bay, located to the south of Kızlarhamamı Mevkii, was very likely another access point to the maritime world as it offered good shelter. The western cove at Narlıkuyu Bay might also have functioned as a port and served to many sites located nearby such as Karadeve and Korykion Antron. The starting point of the fourth road is Korykion Antron, which suggests that the goods are expected to flow

[904] See the section 'Roads' in Chapter 5.

through the direction of Narlıkuyu. Thus, expecting port facilities here at the western cove is very plausible.

6.1.2 Territorium of Elaiussa Sebaste and Akkale

Topography

The sites in the *territorium* are located on hills, their slopes, nearby the sea, in a cave, and around a sinkhole. The predominant topography for the site location here is hilltops, as all villages except Kanytellis, and one unidentified site, Örendibi, were founded on hills and their slopes. In total three sites, namely Örendibi, Akkale, and Karaelif, were newly founded in the Late Antique Period, which suggests no tendency towards founding hilltop settlements during that time.

Site Types

Five out of 12 sites could not be identified. Among the seven identified ones, the 'village', 5 in number, dominates the site typology. The other two types seen in the *territorium* are the port and sacred site, each of which is represented by only one example. The *territorium* shows no variety of site types, as no evidence for any hamlets/small villages, farms, monastic sites, and funerary sites has been detected so far (fig. 47). Thus, it can be preliminarily concluded that the rural population in this *territorium* chose villages as residential sites. The absence of farms also suggests that the production conglomerated in the villages and possibly at ephemeral production sites around them, which have probably escaped the attention of archaeologists due to the application of non-intensive survey methods.

Only three sites, Örendibi, Akkale, and Karaelif Mevkii, seem to have been founded during the Late Antique Period (fig. 48). Except for Örendibi, all villages have been continuously occupied since the Hellenistic Period. Three of the five villages, namely Çatıören, Kanytellis, and Öküzlü have been categorized as large villages, which is a distinctively high ratio. Especially Kanytellis stands out among the villages with its four monumental churches, which refers to an accumulation of wealth.

Production

The hinterland of Elaiussa Sebaste seems to have produced three products, olive oil, wine, and grain. Among these, olive oil comes first as six out of 15 sites yielded physical

evidence for olive oil production, such as crushing basins and millstones. Those sites that were certainly producing olive oil are the villages of Çatıören, Kanytellis, Öküzlü, Örendibi, Özköy, and the port of Akkale (fig. 49). Evidence for grain processing was found only at one site, Öküzlü, as the discovery of threshing floors here suggests, which is a very low ratio compared to the *territorium* of Korykos (fig. 50).

Çatıören and Kanytellis probably produced surpluses of olive oil, as several workshops located next to an ancient road were found in Çatıören and numerous workshops were discovered in Kanytellis. Besides, Kanytellis was located 10 km northwest of Elaiussa Sebaste, which made its access to the maritime network easier. Moreover, Özköy might have produced surpluses of olive oil since the inhabitants seem to have been well-off and had a close relationship with long-distance maritime networks, which is evidenced by the import finds of possibly Cypriot and African origins. Öküzlü, on the other hand, could have produced surpluses of grain to sell on the local market, as it was located on the road network, which made the coastal strip of the *territorium* accessible for the inhabitants of this village.

Networks

Three sites in total, Çatıören, Öküzlü, and Örentepesi (Güvere), were found in relation to the known ancient roads based on physical remains. Çatıören is located on the sixth road, which connected Elaiussa Sebaste and Olba. Although it is unclear on which road Öküzlü was located, I think its wealth reflected in its large size and three churches suggests that the site was probably situated on the seventh road, which linked Akkale and Olba through Kanytellis.[905] Örentepesi (Güvere) is situated on the ancient road that was connecting Yeniyurt and Elaiussa Sebaste. I suggest that this road might have continued to Öküzlü and then reached Akkale as the valley routes here seems topographically accessible in the northwest-southeast direction. Özköy is located around an ancient valley route, which was interpreted by Mörel as a Sömek–Veyselli road connecting the two sides of the Lamos River.[906] I think this site might have been directly connected to Canbazlı in the west, Esenpınar in the east, and even further to Elaiussa Sebaste through Emirzeli and Çatıören. This hypothetical position in the road network in which Özköy was linked to the sixth and seventh roads would have provided the necessary access for the site to import oversea products from both ports in this part of the study region, Elaiussa Sebaste

[905] For detailed information on the sixth and seventh roads, see the 'Roads' section in this Chapter.
[906] Mörel 2010, 8, 83-84, fig.3.

and Akkale. Kanytellis, the largest village of this *territorium*, grew in Late Antiquity thanks to its proximity to Elaiussa Sebaste and Akkale, from whose harbors the surplus of olive oil was shipped. While the harbors at Elaiussa Sebaste was used by the village of Çatıören, Akkale must have served Kanytellis and Öküzlü.[907]

6.1.3 Territorium of Olba-Diokaisareia

Topography

The sites in this *territorium* are located on hilltops and valley slopes. The sites identified as monastic, funerary, and sacred sites, namely 'Unnamed Site' M, 'Unnamed Site' N, 'Unnamed Site' O, and 'Unnamed Site' P, were found in valleys, being concentrated in the Eastern Valley and the northern part of the Şeytanderesi Valley, which were located near the ancient city of Olba. Hilltops as site location were preferred for four sites, which are Canbazlı, Kurşun Kalesi, Sayin, Eserli and 'Unnamed Site' L. While the first four are sites that were occupied before the Late Antique Period, 'Unnamed Site' L seems to have been a hamlet/small village that was newly founded in Late Antiquity. Moreover, other sites that were founded during that time are 'Unnamed Site' M, 'Unnamed Site' P, 'Unnamed Site' R, and Kavmil Ali'nin Kilisesi, of which the first three were situated in valleys. Thus, it can be concluded that there seems not to have been an explicit preference over the hilltop locations in this part of the region during Late Antiquity. Instead, the deep valleys located to the east of Olba were utilized at that time.

Site Types

Two out of 15 sites could not be identified. Among the seven identified ones, the 'hamlet/small village' dominates the site typology. The other two types seen in the *territorium* are the village, farm, monastic site, funerary site, and sacred site (fig. 51). Thus, this *territorium* shows a variety in site typology as is the case in the hinterland of Korykos.

The sites that seem to have been founded in the Late Antique Period are one hamlet/village, one monastic site, two sacred sites, and one unidentified site, which suggests that no new villages were founded in this region during that time (fig. 52). All the villages, Canbazlı, Kurşun Kalesi (İsmailkale), and Sayin, were already occupied before Late Antiquity. While Canbazlı transformed from a Hellenistic fort settlement,

[907] On the harbors of Elaiussa Sebaste and Akkale, see the section 'Maritime Connections' in this chapter.

Kurşun Kalesi (İsmailkale) was a Hellenistic-Roman Imperial sacred site that became a Late Antique village. Sayin, on the other hand, was originally a farm, which was founded in the Roman Imperial Period. Since these sites grew in size during Late Antiquity, the absence of newly founded villages here cannot be correlated with a decline in rural wealth.

Production

This *territorium* produced olive oil, wine, and grain during Late Antiquity. The sites that yielded evidence of olive oil production equipment are Kavmil Ali'nin Kilisesi and Yukarı Tol 2, which is a very low ratio compared to the other two *territoria* (fig. 53). The only site that certainly produced wine is the hamlet/small village of Keçiliköy as a wine workshop was found here. The presence of threshing floors suggests that the villages of Kurşun Kalesi, the hamlets/small villages of Yanıkköy and Yukarı Tol 3, and the farm of Yağardıç produced grain (fig. 54). The hamlet/small village of Yanıkköy might have produced surpluses of olive oil and/or wine as six or seven presses were found at this site. Besides, this site must have produced a high amount of grain since four threshing floors are attested here. Yukarı Tol 2 is another hamlet/small village where the volume of grain that was produced could have been relatively higher than at the other sites in the *territorium*. The evidence of surplus production in general and the olive oil in particular is rare when compared to the *territoria* of Korykos and Elaiussa Sebaste. This was probably caused by that the economy here relied on pastoralism rather than on dry farming. Thus, the peasants of this *territorium* might have been exporting animal products instead of olive oil and wine.

Networks

The only site found on or nearby an ancient route is the farm of Yağardıç, which is situated on the road between Olba and Diokaisareia. The absence of evidence for a direct relationship between the roads and sites here is elusive as all the roads in the study region led to Diokaisareia, through Olba, which means that this *territorium* had strong links with the other two *territoria*. Olba seems to have been a junction point of the study region. The concentration of 'Unnamed Site' M, 'Unnamed Site' O, and 'Unnamed Site' P in the Eastern Valley and the Şeytanderesi Valley, which is located nearby the ancient city Olba, suggests that a network of Christian sites might have existed in this area. Moreover, three sites were found in the vicinity of Olba-Diokaisareia. As Kavmil Ali'nin Kilisesi is

reported to be located to the south of the ancient city Olba, it was probably located on/around the Seleukeia–Olba road. The hamlet/small village of 'Unnamed Site' L is found 3 km east of Diokaisareia. Yağardıç Mahallesi is situated in between these two centers. Canbazlı, on the other hand, must have been a secondary junction point as all roads located to the east of the Şeytanderesi River led to this village. Although no direct evidence shows that the ancient village located in modern Canbazlı was connected to those roads, I assume that the location of a village on a hill next to a valley offered easy access to these "capillaries".

6.2 Concluding Remarks

The capacity of the region in agricultural production and exportation dictated the emergence of a settlement pattern that is unique to its topography, economic relations, and history. The process of production necessitated the adoption of a rural architecture composed of farmhouses, workshops, storerooms as well as production facilities, such as presses, cisterns, and threshing floors. To sell those goods and products, marketplaces were arranged, both in rural and urban contexts. Another element that was connected to agricultural production is the road infrastructure, which enabled the transportation of goods and products. From a sociological point of view, all required a group of people who organized these activities of production, transportation, and marketing.[908]

In total, 69 sites were detected in the study region, which was composed of three *territoria*, namely those of Korykos, Elaiussa Sebaste, and Olba-Diokaisareia. These sites were assessed from various aspects including their topography, typology, economy, and positioning in the local network. To make this assessment, a common ground between multiple survey projects needed to be established as each study applied its terminology on the survey data. The real difficulty lies in the lack of explanations for the terms used for site typology and for the elements that help site categorization. Once the common ground was found in terms of terminology and data interpretation, various site types emerged in the study region, namely villages, hamlets/small villages, farms, monastic sites, ports, sacred sites, and funerary sites. The detailed examination of each site yielded useful information regarding the different aspects of the economy in the Late Antique countryside, as survey data hints at the production type and volume of the rural sites. Another aim of this thesis was to study the positioning of the rural sites on the network

[908] Aydınoğlu 2008, 424.

of terrestrial and maritime routes. The natural corridors passing through the valleys offered connections between the cities and countryside as well as access to the maritime network. From this perspective, the coastal land functioned as a bridge between the land and sea. Only through the ports, the inland communities were connected to the maritime world, which made them the centers of their microregions.[909]

The analysis of each *territorium* based on the milestones discovered has shown that the road facilities in eastern Rough Cilicia were significantly improved in the Roman Imperial Period and maintained in Late Antiquity. Both the coastal and inland routes in the region were enhanced, which provided a better regional network for the flow of products, such as olive oil and wine.[910] This meant easier and safer facilities for the producer in the countryside to transport his products to ports of varying sizes and harbor facilities. As the epigraphical evidence of the milestones suggests, the earliest road in the study region seems to be the one between Olba and Diokaisareia, which was built by Titus in 80 CE. The coastal road, on the other hand, is known to have been built by Hadrian in 119/120 CE. Despite general improvements brought to the region by the Romans, such as urbanization and road infrastructure in particular, the three *territoria* differed in several aspects.

The *territorium* of Korykos, which is in the lowlands, shows a pattern of closely spaced sites. Being of a varied typology, the sites were concentrated in the coastal zone. The hinterland seems to have had a high volume of olive oil and, probably, wine production and good access to the sea through the harbor of Korykos and well-protected coves that functioned as natural ports (fig. 55). Korykos probably served the sites located on and along the fifth road, which was at the eastern side of the Şeytanderesi River, whereas Kızlarhamamı and other possible small ports in Akyar and Narlıkuyu Bay must have been used by the sites on the other side of the river.

The *territorium* of Elaiussa Sebaste is hillier than that of Korykos. The sites, which are predominantly villages, were remotely spaced. No satellite sites such as hamlets and farms were identified around the villages. The production capacities of this *territorium*, especially of olive oil production, seems the highest of all when the ratio between the sites that certainly produced olive oil and the total site number is considered (see fig. 55). This capacity was evaluated on the broader market through shipping facilities along the coastal strip of this *territorium*, provided by the two harbors of Elaiussa Sebaste and the

[909] Tartaron 2018, 86.
[910] Bilir 2017, 220.

inlet harbor at Akkale. The increasing volume of olive oil and/or wine here in the Late Antique Period is also reflected in the city center of Elaiussa Sebaste where the transformation of the domestic area into workshops took place in the late 4th c. CE. However, the evidence for grain production in this *territorium* seems relatively rare compared to that in the other two *territoria* (fig. 56). The presence of many rural churches in the villages refers to the accumulation of wealth, which probably reflected the integration of the peasants here into the olive oil market through the ports of Elaiussa Sebaste and Akkale.

The *territorium* of Olba-Diokaisareia differs from the other two by its fully terrestrial character. Despite its lack of direct access to the sea, the *territorium* was well-connected with the coast as one of its centers, Olba, was the junction point of eastern Rough Cilicia. Also, the altitude of its lands is the highest in the study region. It is the only *territorium* that seems to have been not dominated by the village type. Instead, a great variety of site types dotted the landscape. In the Late Antique Period, wealth seems to have been invested in Christian sacred buildings rather than in the foundation of new villages adorned by large basilicas. The concentration of Christian sites in the close vicinity of Olba must have been related to the important role that the city played in the Christian world during Late Antiquity. Firstly, it was a bishopric center that was subordinate to Seleukeia on the *Kalykadnos*. The bishops of Olba attended several councils, important gatherings where Christian theology was discussed and decisions were made, between 381 CE, when the first council of Constantinople was convened, and 680-681 CE, the third council of Constantinople.[911] The evidence for olive oil production equipment in the *territorium* suggests the presence of significantly less production here compared to the other two *territoria*. This can be explained by the fact that olives grew in the areas near the coastal strip rather than on the highlands such as the hinterland of Olba-Diokaisareia. Because of the environmental and topographical conditions here, pastoralism must have been practiced more widely than olive and vineyard growing. However, due to the perishable character of the animal products, no physical evidence of its production and exchange has been found at the sites.

The comparison of the three territoria regarding the sites identified as villages shows interesting results in the application of a site typology as the characteristics of villages vary for each territorium. The sites that can be identified as villages in the hinterland of

[911] Erten and Özyıldırım 2008, 204; Özyıldırım and Ünalan 2011, 158.

Korykos generally had no churches, even though the presence of a church was among the criteria of this categorization model. This shows that those sites were identified as villages mostly based on their number of houses preserved. Whether this due to the poor preservation of architectural remains in this part of the region is debatable. I argue that the human factor must be more decisive than the natural process as the houses on these sites were in a much better condition and preserved in large numbers. The situation is different for the sites that were identified as villages in the *territorium* of Elaiussa Sebaste since they all meet the criterion of having at least one church. Interestingly, several villages here had more than one church. The sites that fall under the village category in the hinterland of Olba-Diokaisareia had churches as well. Yet, it seems that having multiple churches on those sites was uncommon. Instead of villages, the churches in this part of the region seem to have been concentrated on the religious sites.

In terms of its position in the maritime network, Kanytellis was different than Korykos and Elaiussa Sebaste, which are other places where *amphora* production likely occurred in the study region. While the cities were ports with facilities with direct access to the sea, Kanytellis was a village reaching the ports only through terrestrial routes. Thus, agricultural products, such as olive oil and wine, had to be first transported overland to either Elaiussa Sebaste or Akkale. This process of transportation could have been done either by animal skins loaded on pack animals, such as mules, donkeys, and camels, or *amphorae*.[912]

This thesis demonstrated that its study region was well-connected on different scales, local, regional, and interregional as a holistic approach was adopted on the region, taking its coastscape together with the land-based network, and regional and interregional interaction spheres into consideration. Different modes of maritime exchange could be reconstructed based on the data presented in this study.

Korykos and Elaiussa Sebaste, the larger ports of the region which were well-equipped with harbor works, were prone to long-distance shipping activities as they were on the East-West maritime route that especially served *annona* ships heading Constantinople. The fame of Cilician wine in ancient literature, the special mention of Cilician wine merchants in the Abydos Tariff as well as the intense manufacture of LR1 transport *amphorae* in the region suggest that the study region had strong interregional maritime links during Late Antiquity. Although olive oil production of Rough Cilicia is

[912] McCormick 2012, 65. See also Varinlioğlu 2008, 132, 157.

absent in textual sources and the olive oil trade was little mentioned in the epigraphical corpus of the study region, the archaeological evidence concerning olive oil equipment at sites suggests that export of olive oil was one of their sources of income.

The maritime exchange activities of the study region took place on a regional scale as well, which was illustrated by the case study of Cyprus. The people of the Karpas Peninsula of the island were inclined to trade with the coastal communities of Rough Cilicia for several reasons. The moderate sailing time, the presence of convenient ports and harbors along the northern coast of the peninsula, and the familiarity of their coastscapes to the people of the two regions since the Hellenistic Period until the 20th c. CE might have made our study region and the coastal communities of the Karpas Peninsula trade partners. As the ancient maritime world was dominated by small ships carrying small cargoes, the exchange on this geographical scale could have been possible with small ships as well as moderate and large ships sailing between larger ports. Thus, the communities located around the coves of Narlıkuyu might have directly traded with the peninsula through the use of natural harbors in both regions.

On the local scale, the natural harbors might have functioned as extensions of the roads that linked the rural sites to the regionally central ports, Korykos and Elaiussa Sebaste. Since land travel was much more expensive than sea transportation, the goods produced at the sites located nearby the small ports, such as Kızlarhamamı Mevkii and Akkale, were brought to these larger ports through small ships via the sea. Similarly, the imports collected in Korykos and Elaiussa Sebaste were distributed to the countryside through small ports. Furthermore, the small ports, especially Akkale, could accommodate ships passing by the East-West route.

The subject of connectivity in eastern Rough Cilicia could be investigated more in-depth and extent in the future. The application of intensive survey methodologies is suggested to be undertaken on the coastal strip between Korykos and Elaiussa Sebaste in the future so that kiln sites or coastal sites can be identified. The unbalanced distribution of archaeological projects over the region is another problem since it causes the underrepresentation of certain areas due to the absence of fieldwork. I believe that the *territoria* of Korykos and Olba-Diokaisareia were much more studied than that of Elaiussa Sebaste as the eastern side of the Paşa River seems to need more research. Besides, the road network in this *territorium* needs revisions by revisiting sites and applying topographical research as the relation between roads and sites here is poorly understood.

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FIGURES

Figure 1: Map of Cilicia, showing the borders of Rough Cilicia and Smooth Cilicia (drawings by Pınar L. Alkan, adapted from *DARMC* base map).

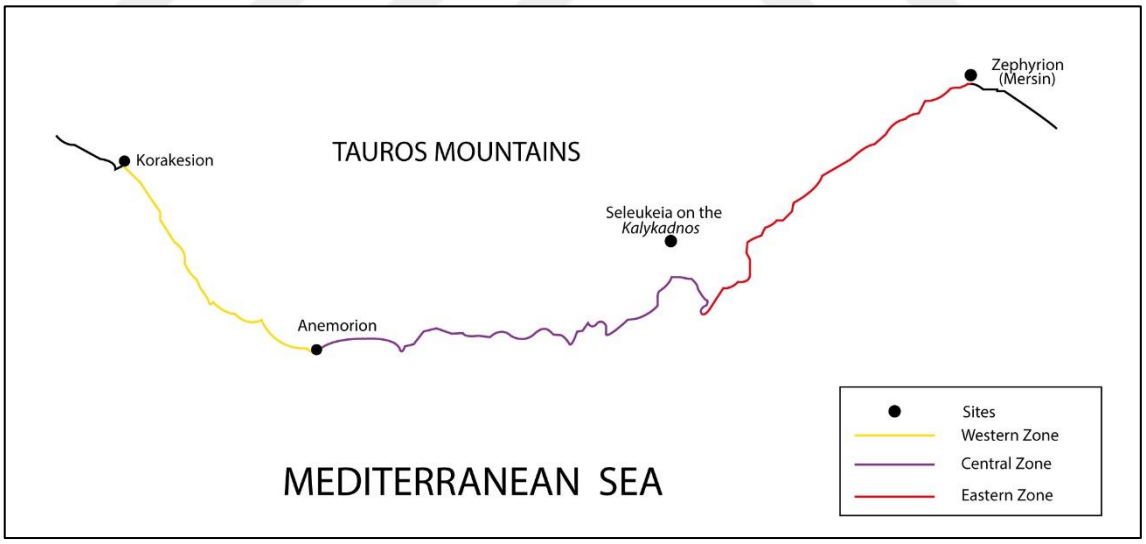

Figure 2: Vann's three zones along the coast of Rough Cilicia (drawings by Koraycan Albay, after Vann 1997a, fig. 1).

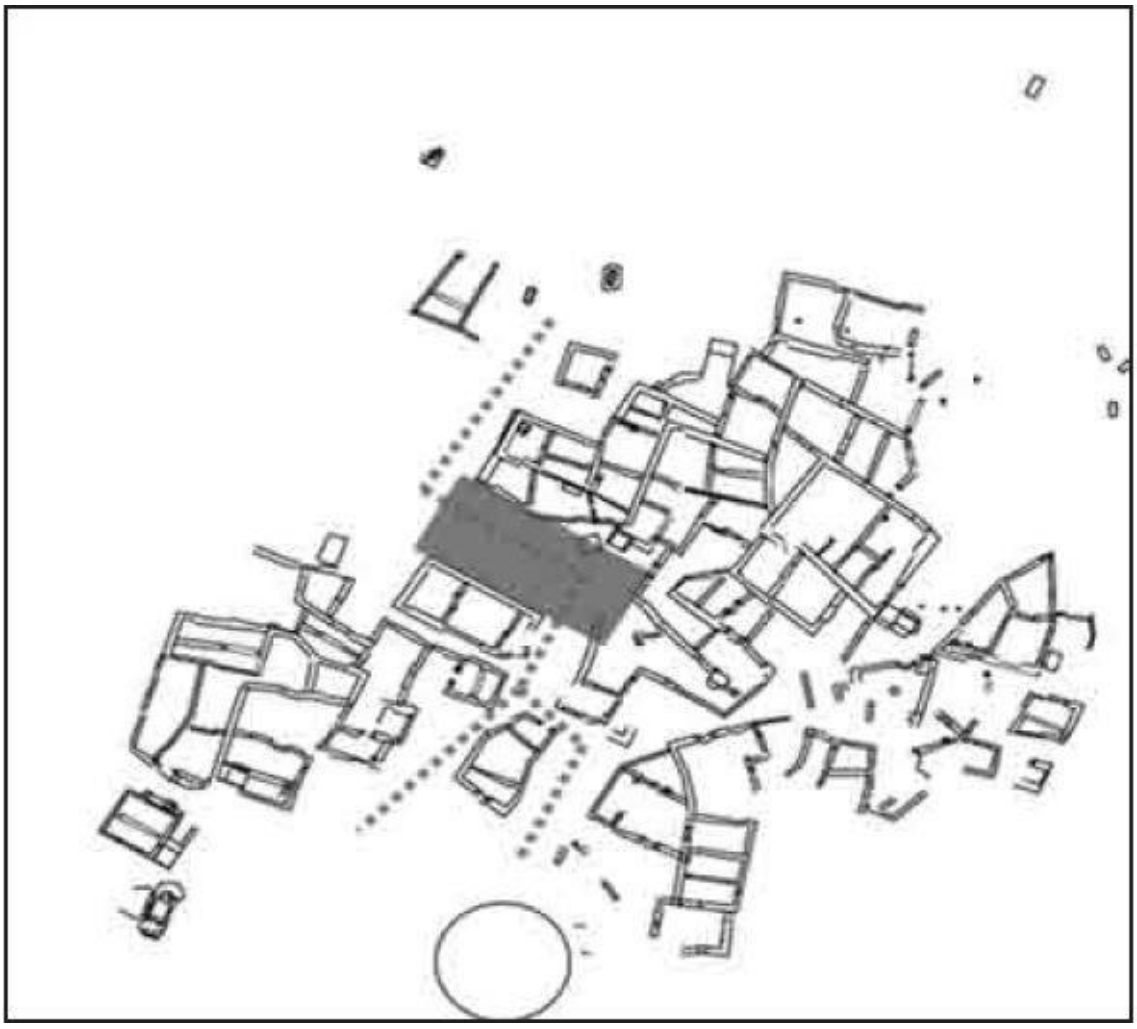

Figure 3: The open area at Işıkkale, displayed in dark grey (Varinlioğlu 2010, pl. 3).

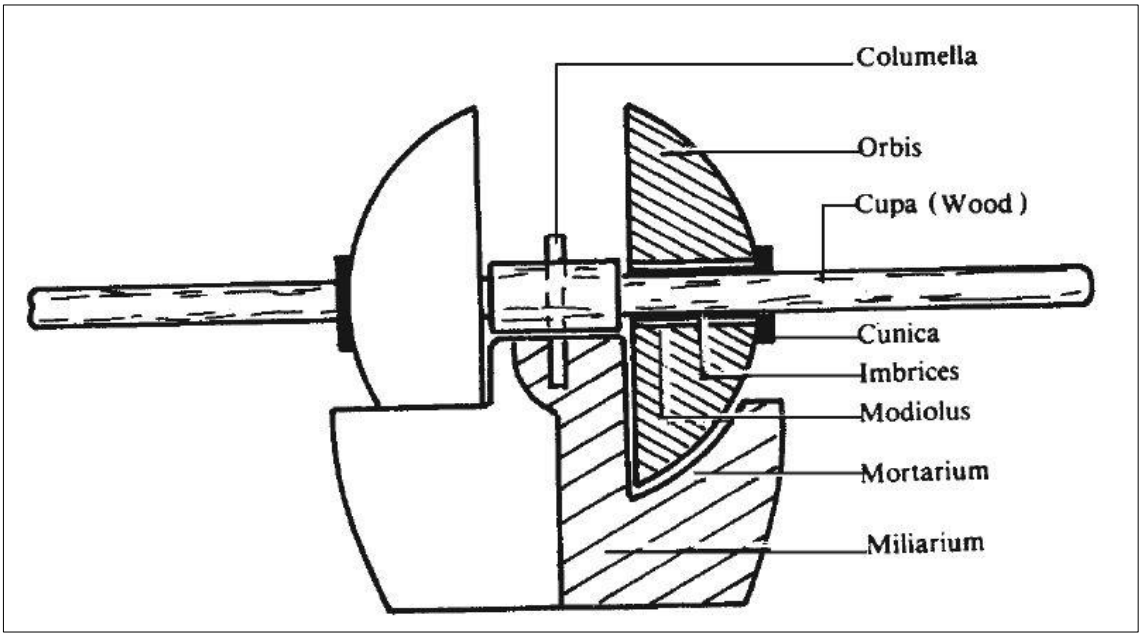

Figure 4: Olive crushing equipment (Frêne 2001, fig. 6).

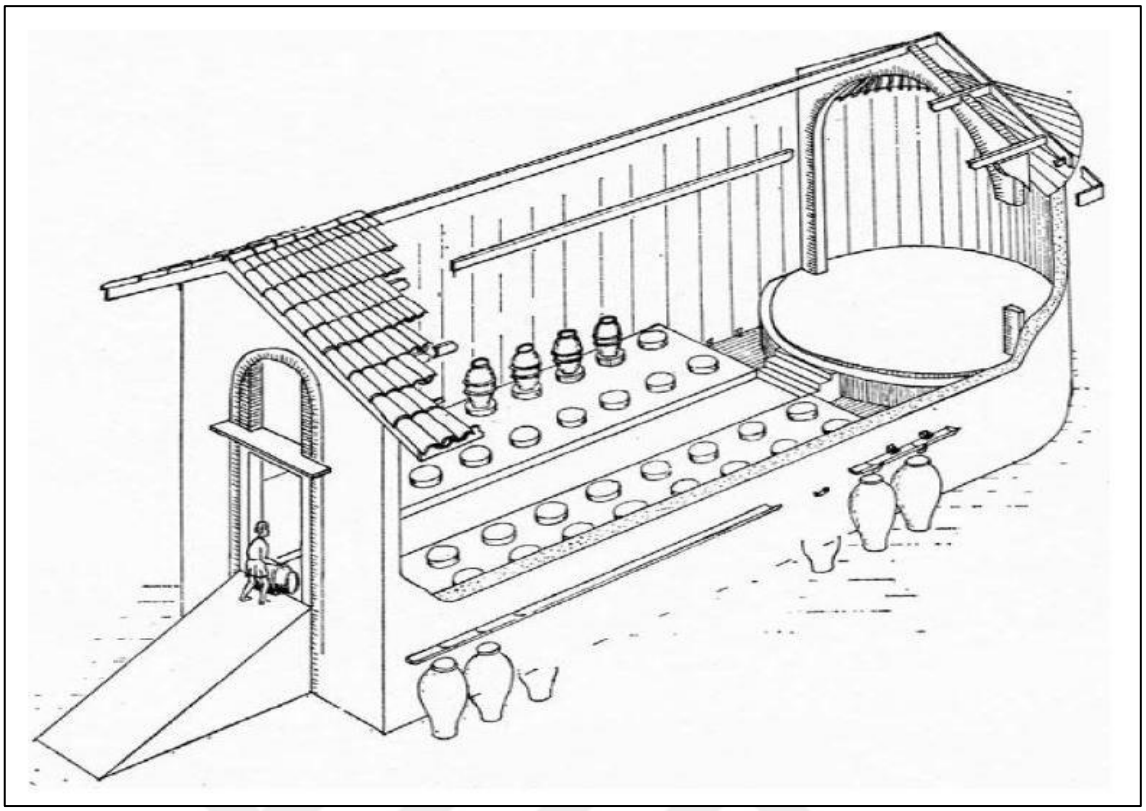

Figure 5: Reconstruction of a winery based on Palladius' description (Rossiter 2007, fig. 5).

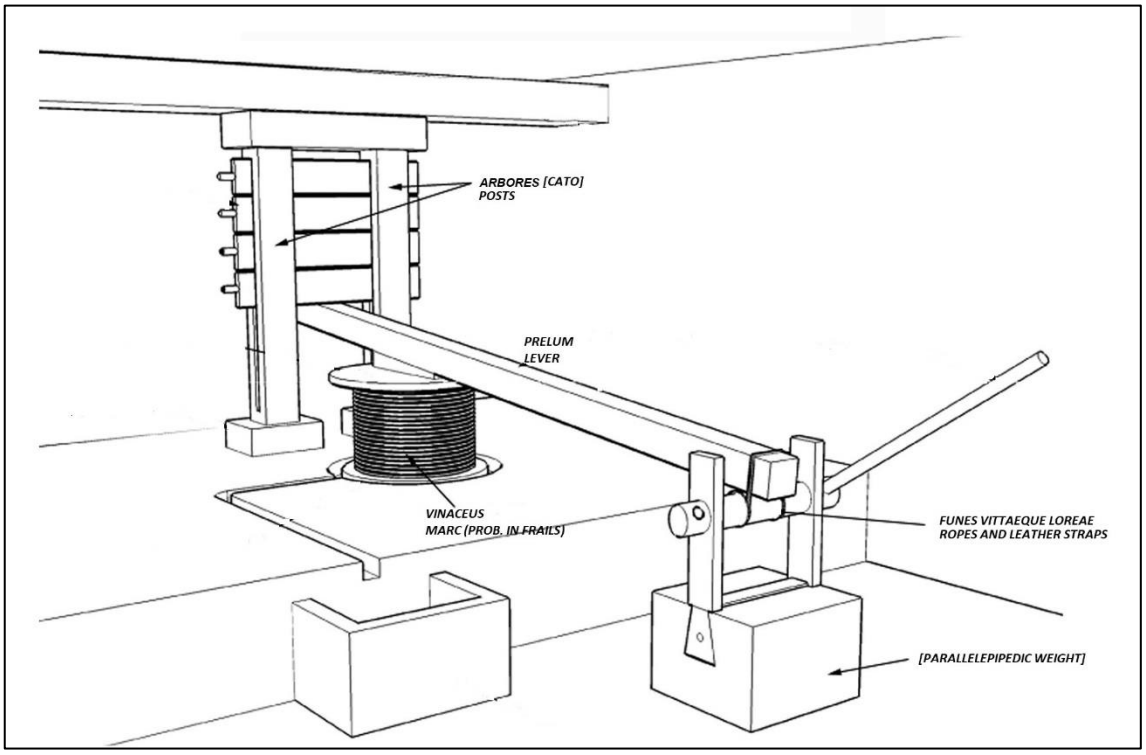

Figure 6: Reconstruction of a lever press with single counter-weight (Burton and Lewit 2019, fig. 3).

Figure 7: Bell-shaped weightstone at Çıldıremez (Aydınoğlu and Alkaç 2008, fig. 12).

Figure 8: Treading floor with a collection vat at Batısandal (Aydınoğlu and Alkaç 2008, fig. 4).

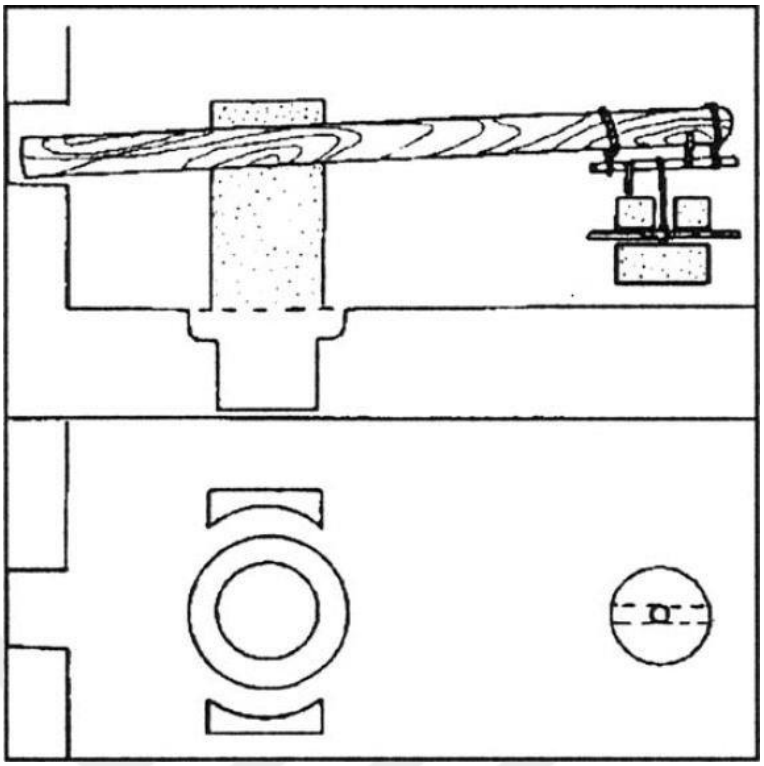

Figure 9: Lever and weight press (Decker 2007, fig. 1).

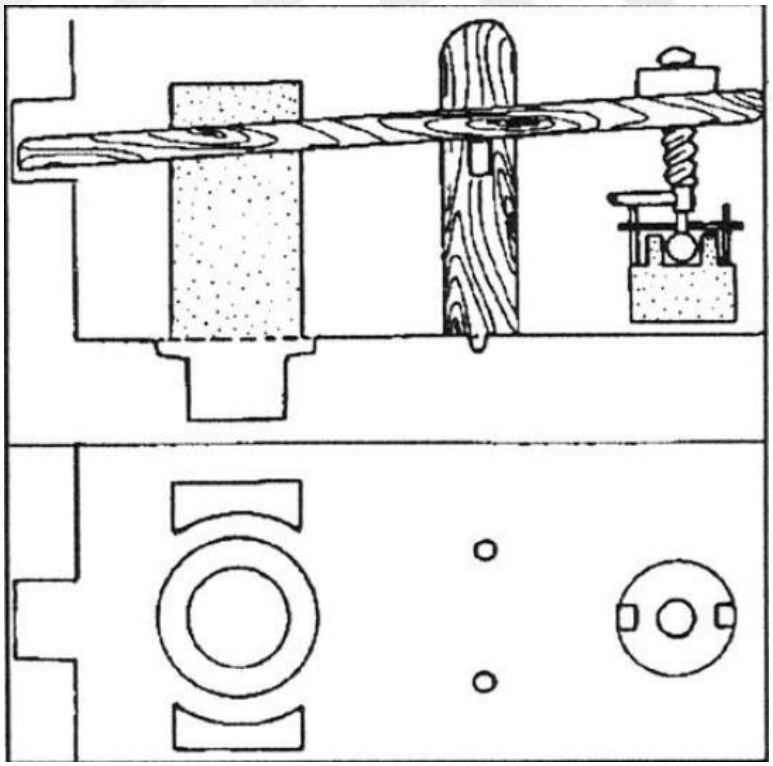

Figure 10: Lever and screw press (Decker 2007, fig. 3).

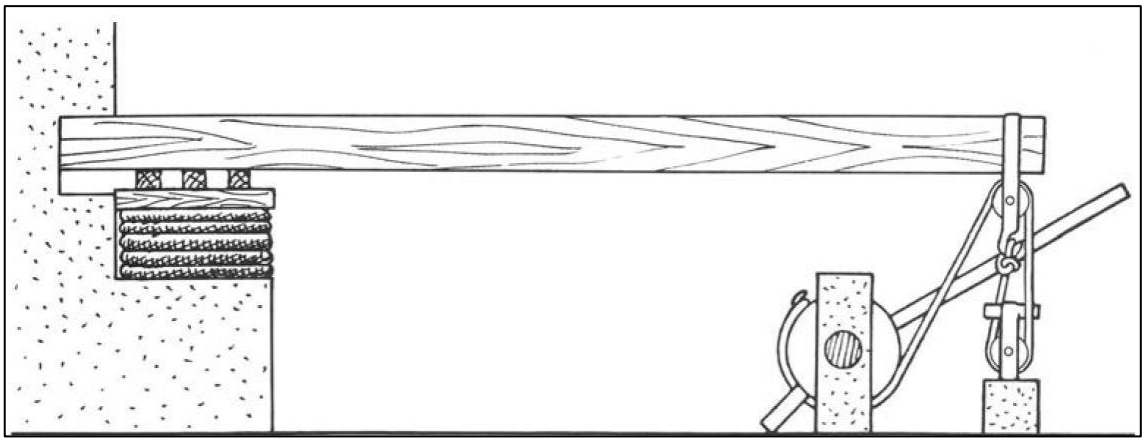

Figure 11: Lever and drum press (Decker 2007, fig. 2).

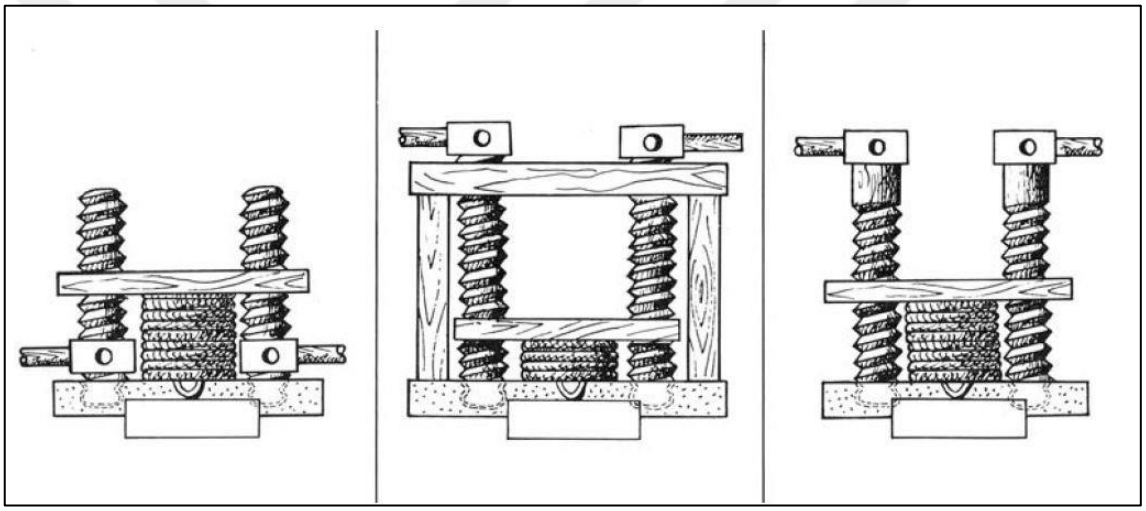

Figure 12: Direct-screw press types (Decker 2007, fig. 4).

Figure 13: Threshing floor found at Işıkkale (Varinlioğlu 2007, fig. 10).

Figure 14: Cistern found at Körüklük (Şahin and Özdizbay 2016, fig. 16).

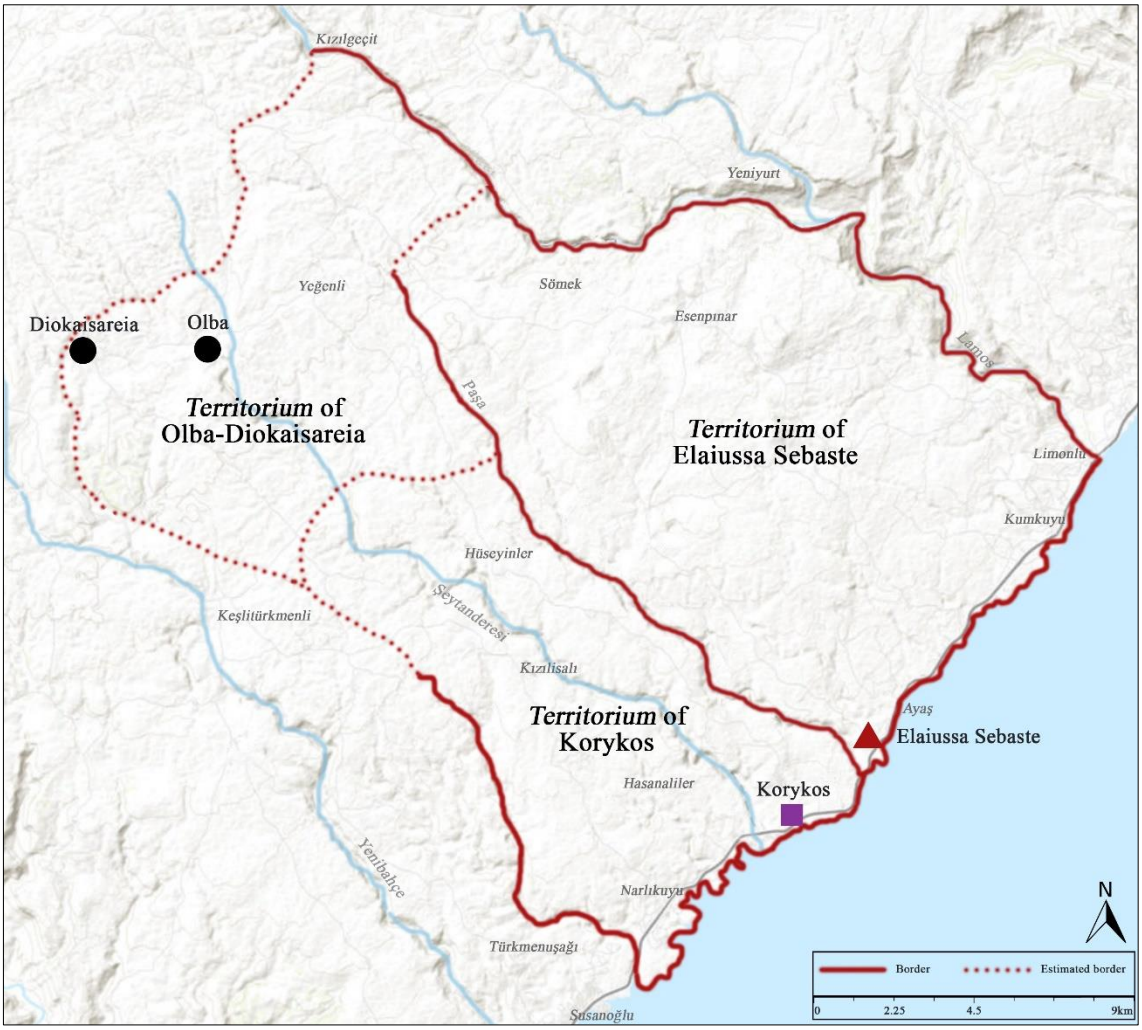

Figure 15: Map of the *territoria* of Korykos, Elaiussa Sebaste, and Olba-Diokaisareia (drawings by Pınar L. Alkan, adapted from the DARMC base map.

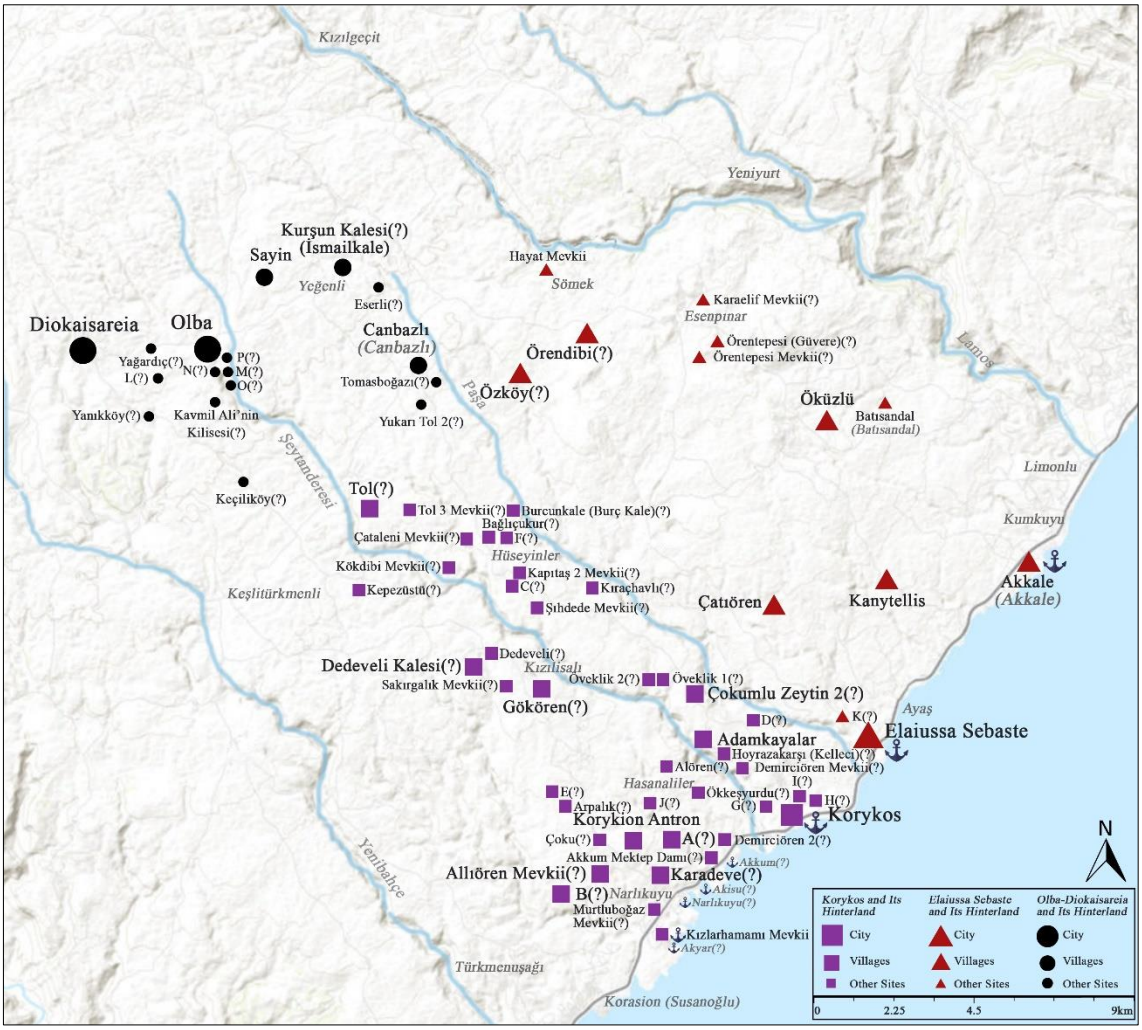

Figure 16: Map of the sites identified in the study region (drawings by Pınar L. Alkan, adapted from the DARMC base map).

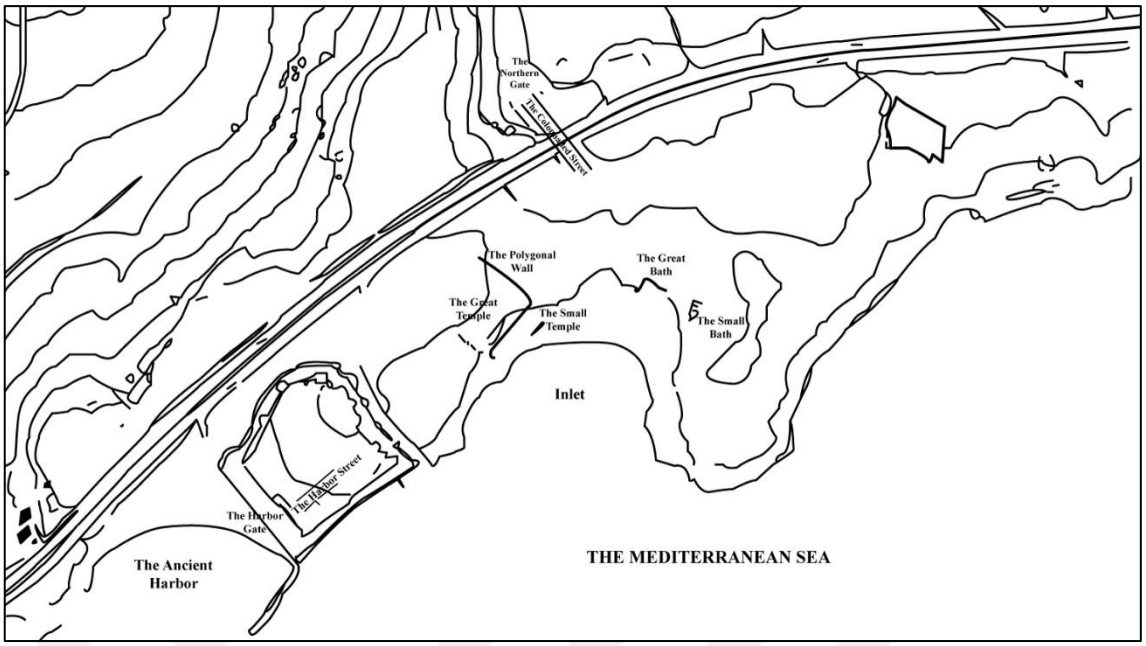

Figure 17: City plan of Korykos, showing the Colonnaded Street in the north, the polygonal wall, the temple, and the baths in the south, and the ancient harbor in the southwest (after Durugönül and Aşkın 2015, fig. 16).

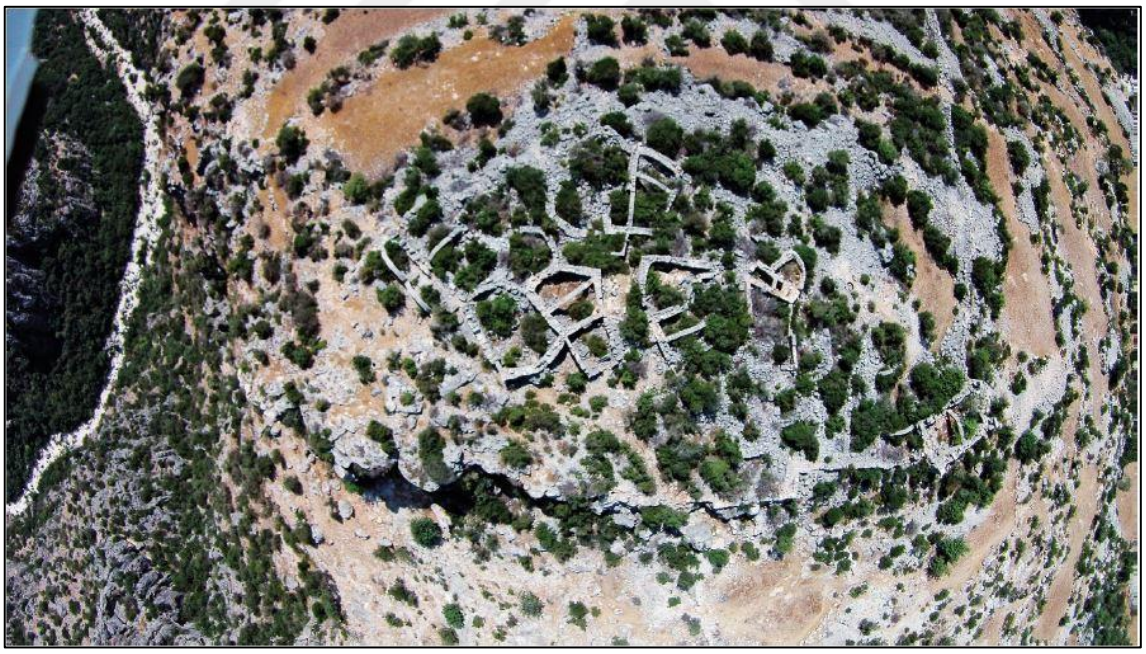

Figure 18: Aerial view of Adamkayalar (Özdizbay and Dağlı-Dinçer 2016, fig. 1).

Figure 19: Presses found at Tol 3 (Şahin 2013, fig. 4).

Figure 20: Reliefs of two standing figures at Bağlıçukur (Durugönül et al. 2010, fig. 1).

Figure 21: Relief of the female figure at Bağlıçukur (Durugönül et al. 2010, fig. 2).

Figure 22: Relief of the male figure in the upper position on the rock at Çataleni (Durugönül et al. 2010, fig. 4).

Figure 23: Relief of the male figure in the lower position on the rock at Çataleni (Durugönül et al. 2010, fig. 5).

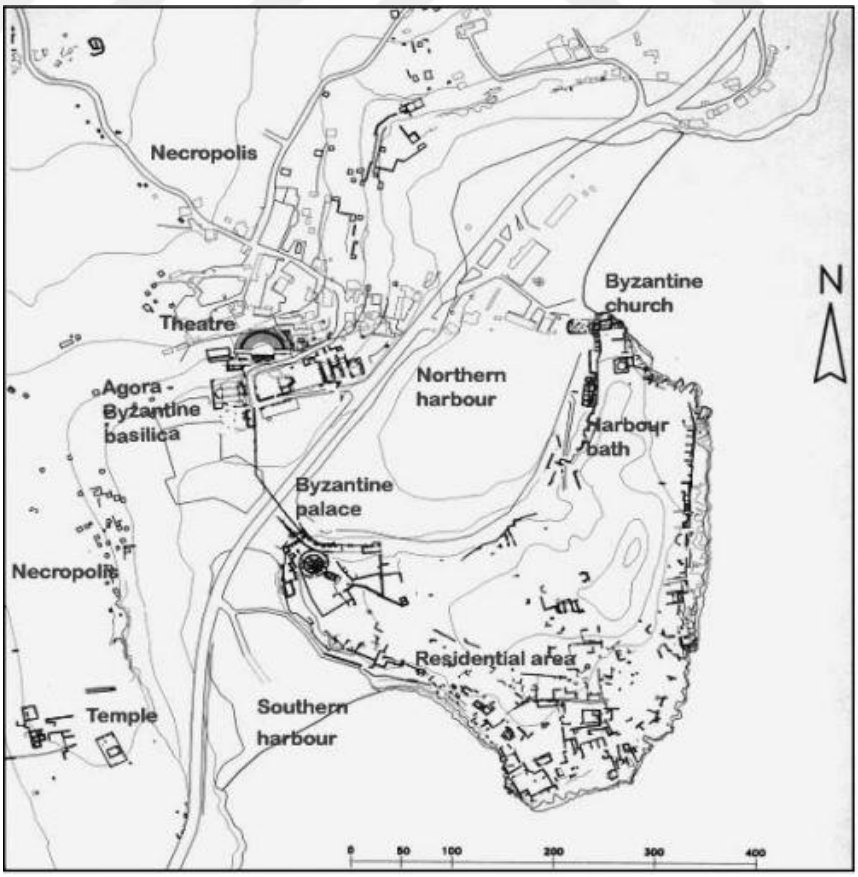

Figure 24: City plan of Elaiussa Sebaste (Equini-Schneider 2007, fig. 1).

Figure 25: General view of Kanytellis (Aydınoğlu 2012a, fig. 1).

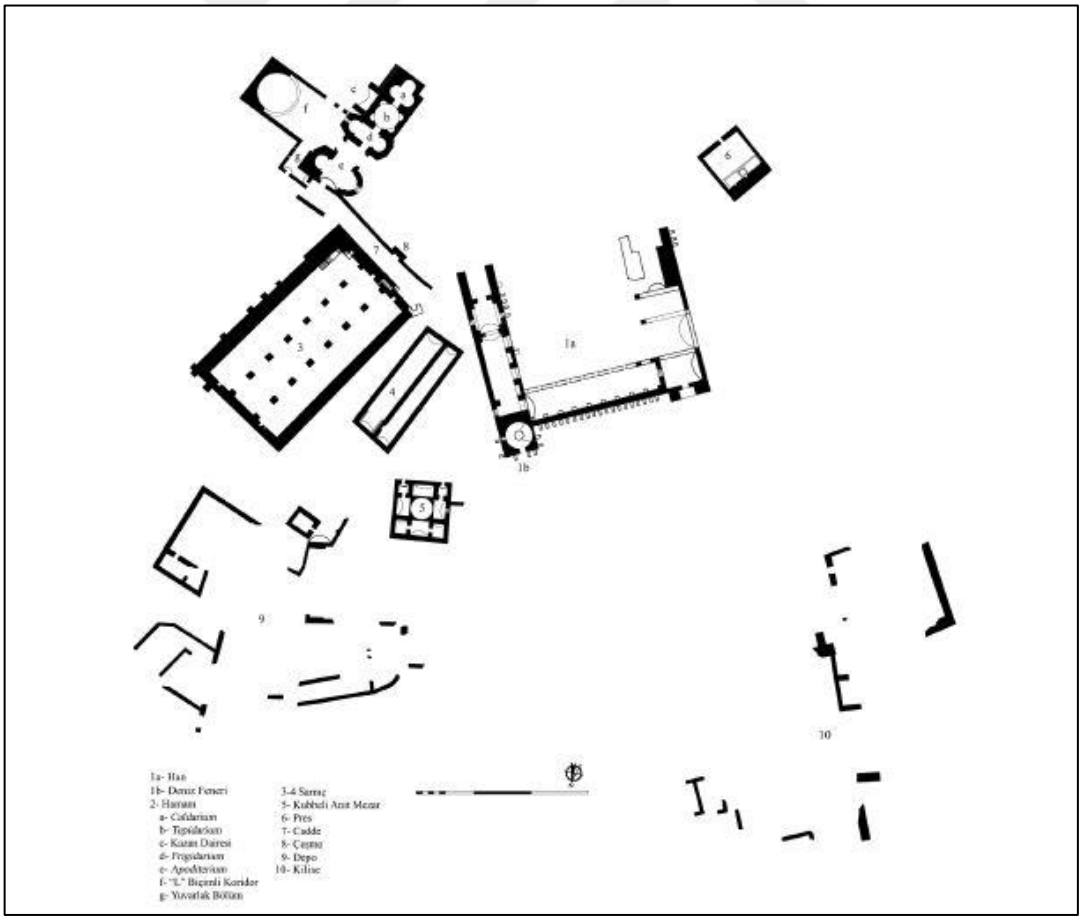

Figure 26: Site plan of Akkale (Mörel 2017b, fig. 2).

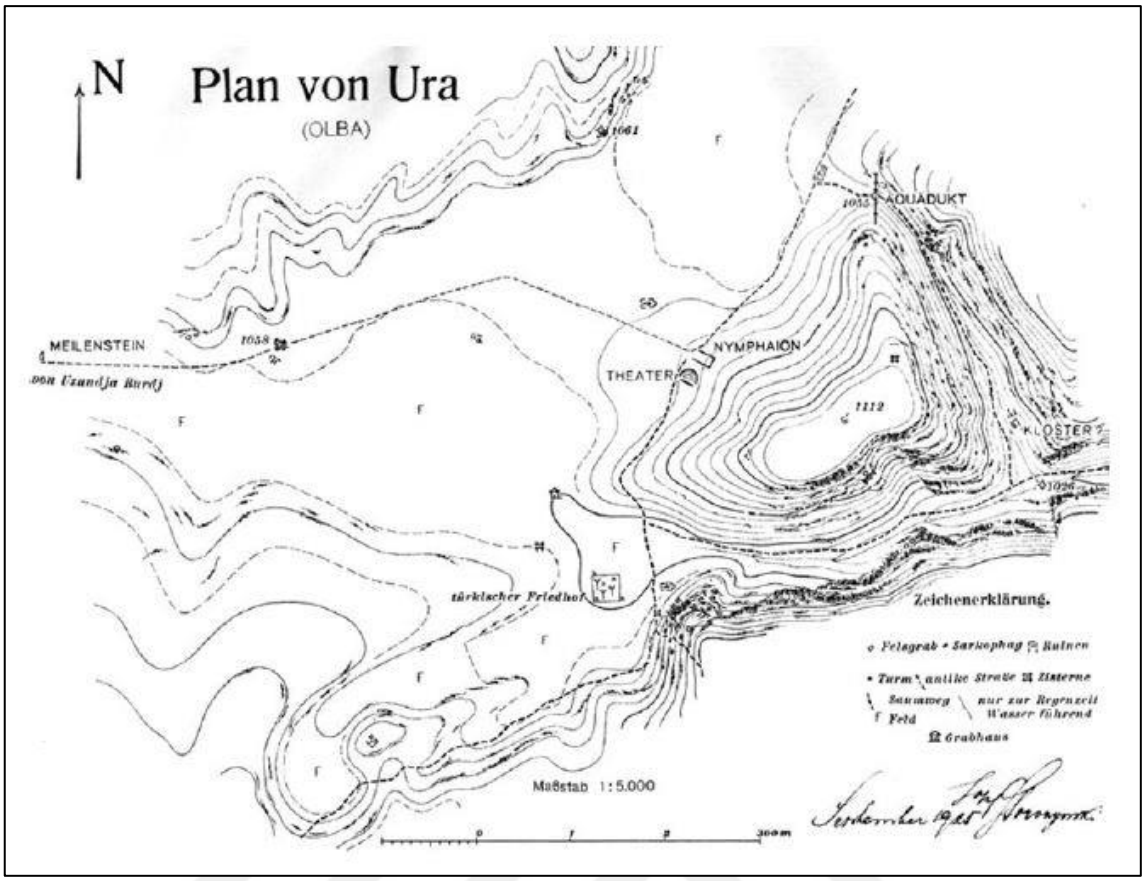

Figure 27: City plan of Olba (Keil and Wilhelm 1931, pl. 35).

Figure 28: Temple at Kurşun Kalesi (Şahin 2013, fig. 6).

Figure 29: ‘Unnamed Site’ M (Erten and Özyıldırım 2008, fig. 7).

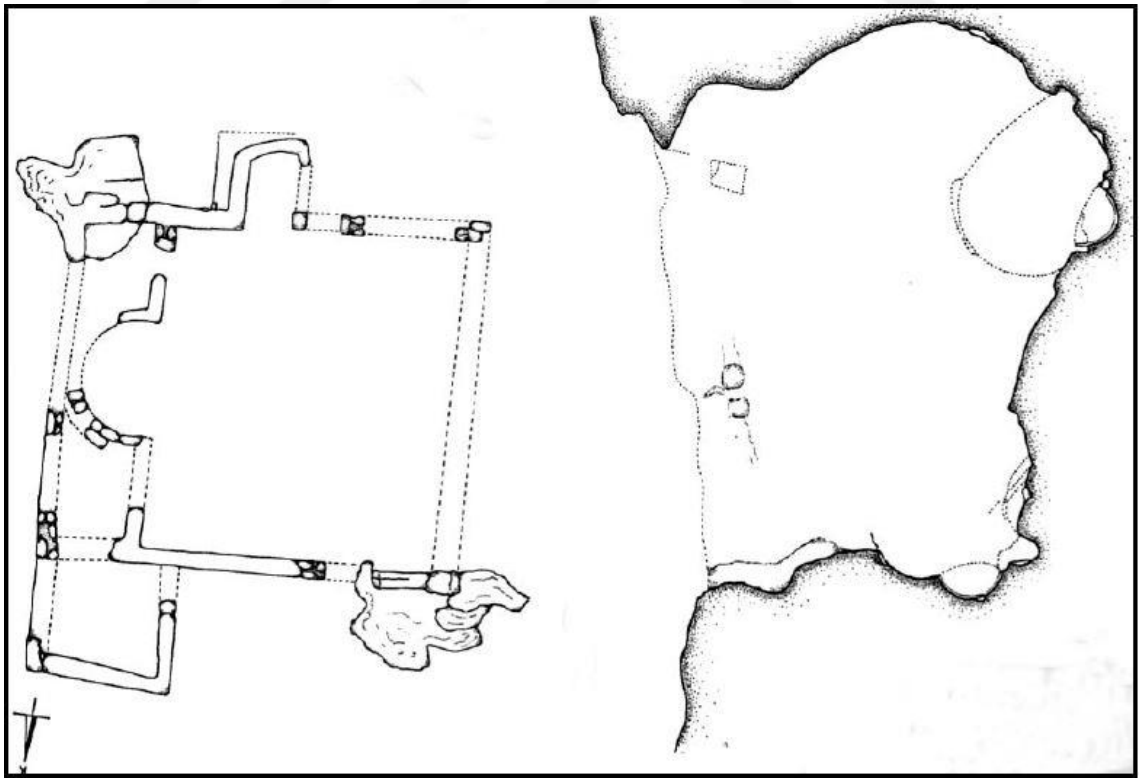

Figure 30: Plans of the cave and the church at ‘Unnamed Site’ O
(Erten and Özyıldırım 2007, fig. 1).

Figure 31: Late Antique church floor mosaic found in the western Negev, showing a man traveling with a camel the burden of which is a group of *amphorae* (McCormick 2012, fig. 3.9).

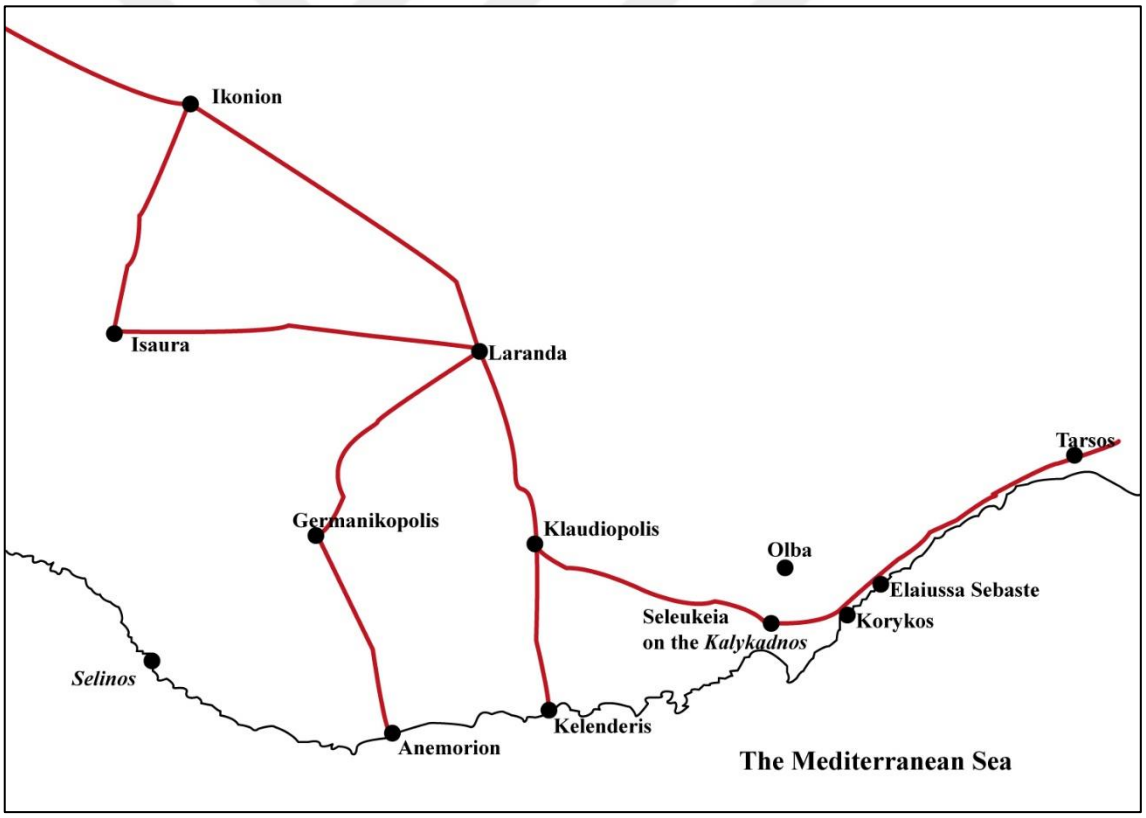

Figure 32: The roads connecting the plateau and the Mediterranean (after Bardakçı 2018, map 2).

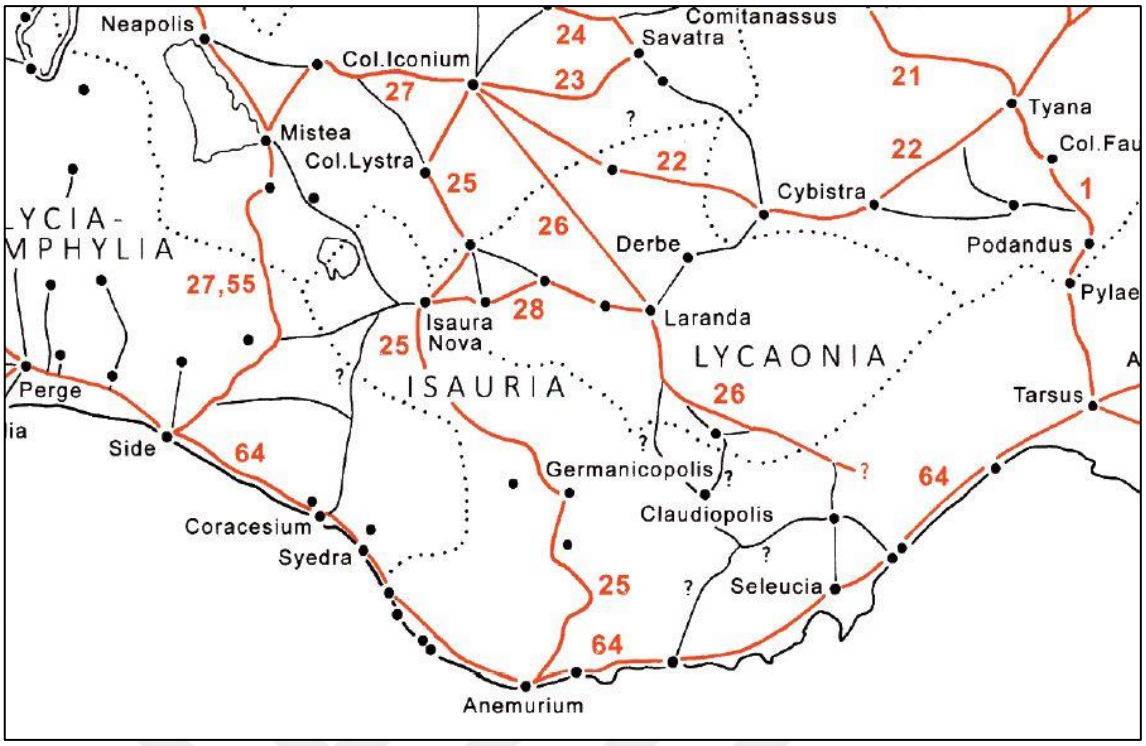

Figure 33: Roads on the Tabula Peutingeriana, showing the roads linking the Anatolian Plateau and the coast of Rough Cilicia as well as the coastal road between Perge and Tarsus (French 2016, fig 4).

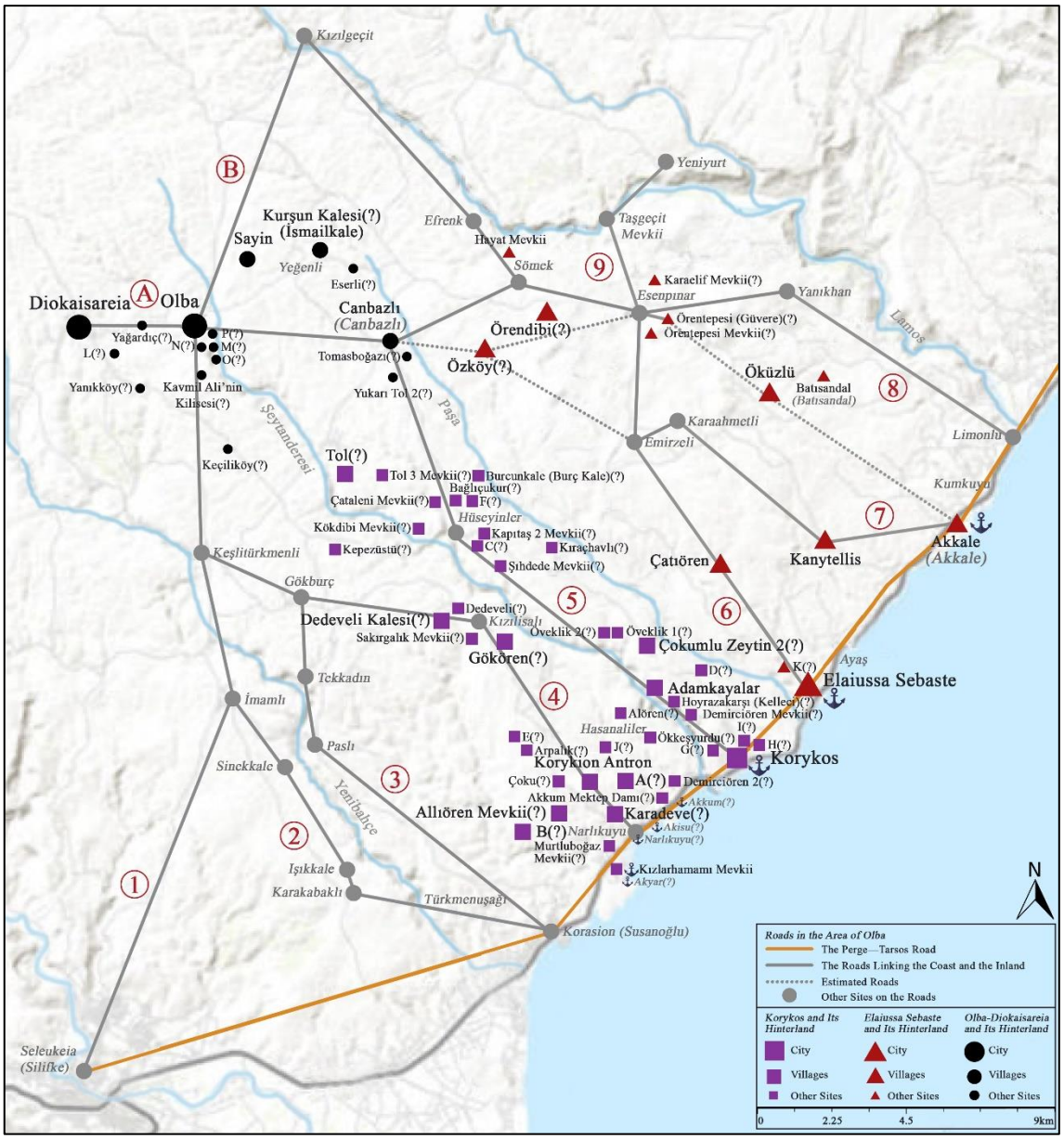

Figure 34: Roads in the area of Olba and the sites (drawings by Pınar L. Alkan, adapted from the DARMC base map).

Figure 35: Ancient road passing through Çatıören (Mörel 2017a, fig. 11).

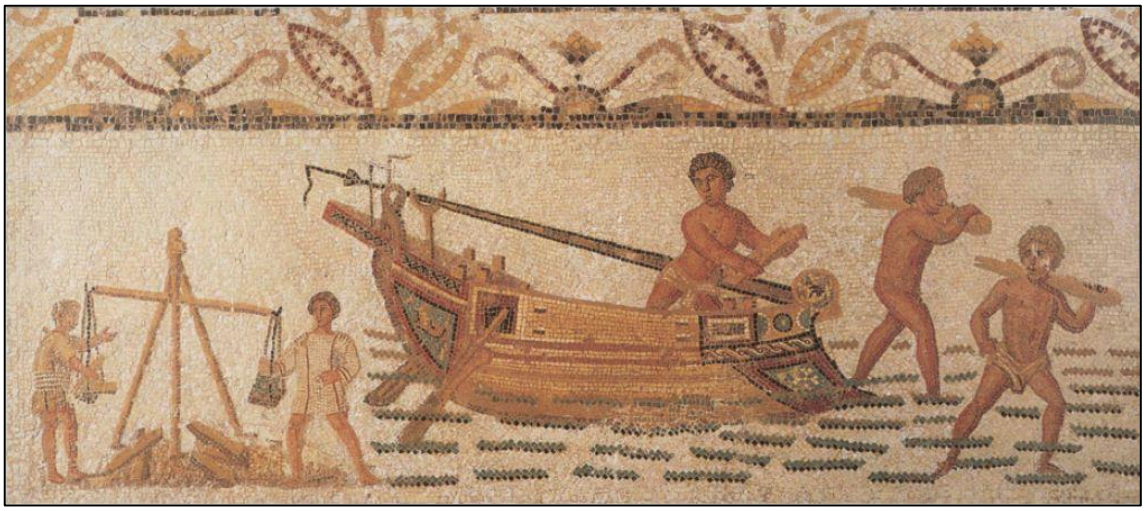

Figure 36: Late Antique mosaic showing the act of cargo unloading from a ship at the beach (McCormick 2012, fig. 3.15).

Figure 37: Rubble breakwater at Korykos (Vann 1997b, fig. 3).

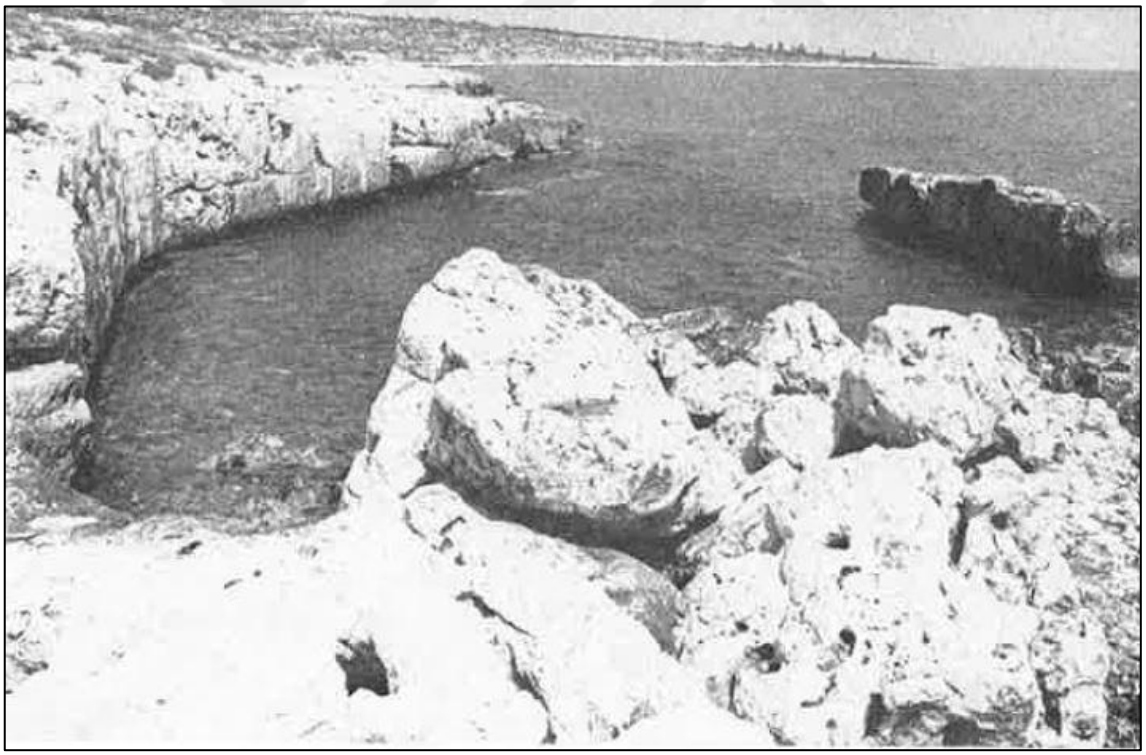

Figure 38: Harbor basin at Akkale (Eyice 1981, fig. 28).

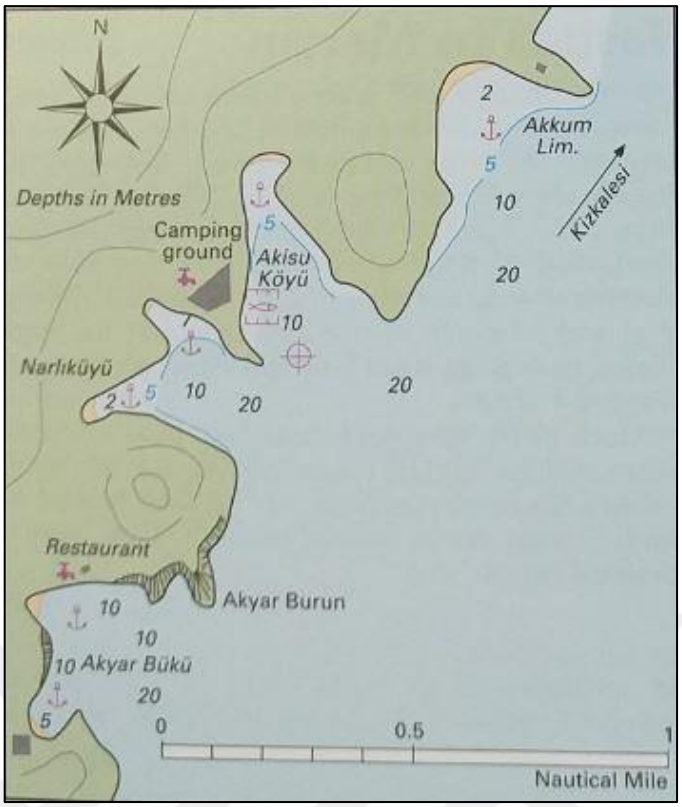

Figure 39: Sheltered coves in the *territorium* of Korykos today (Heikell 2006, 304).

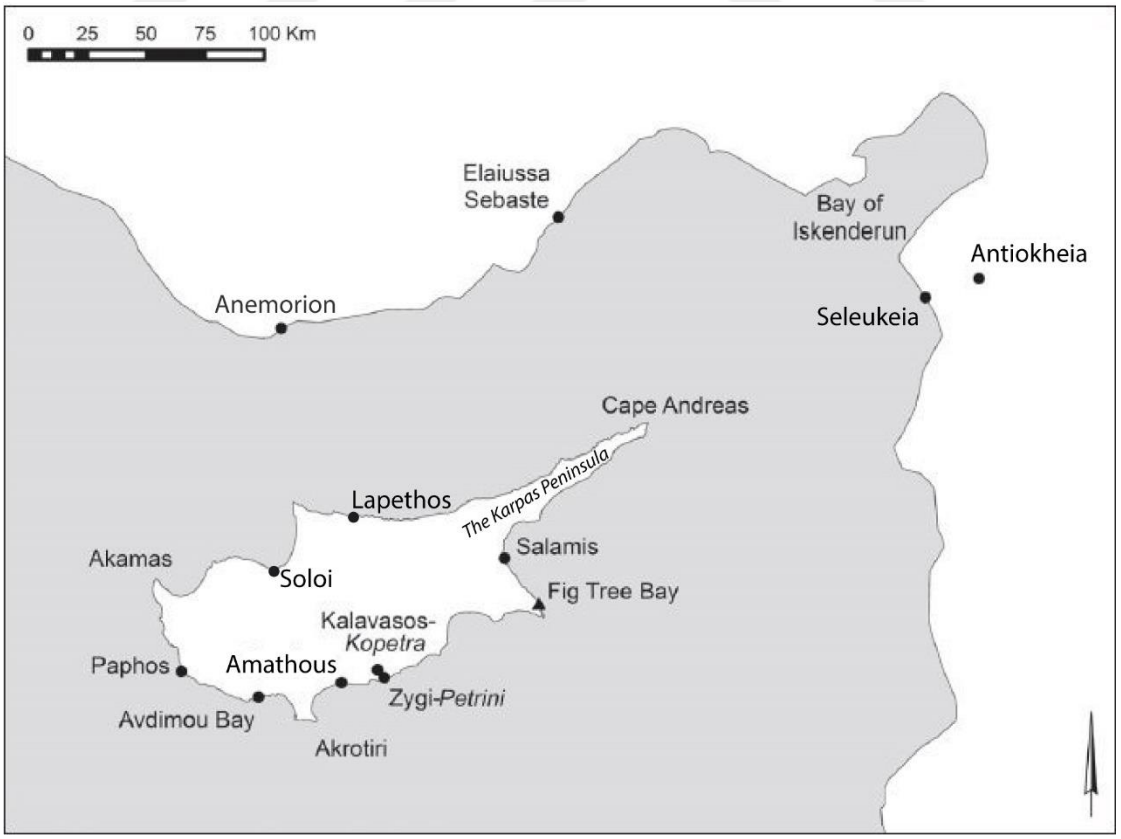

Figure 40: Cyprus with several important sites and its position on the regional scale (drawings by Koraycan Albay, modified from Leidwanger 2014, fig. 1).

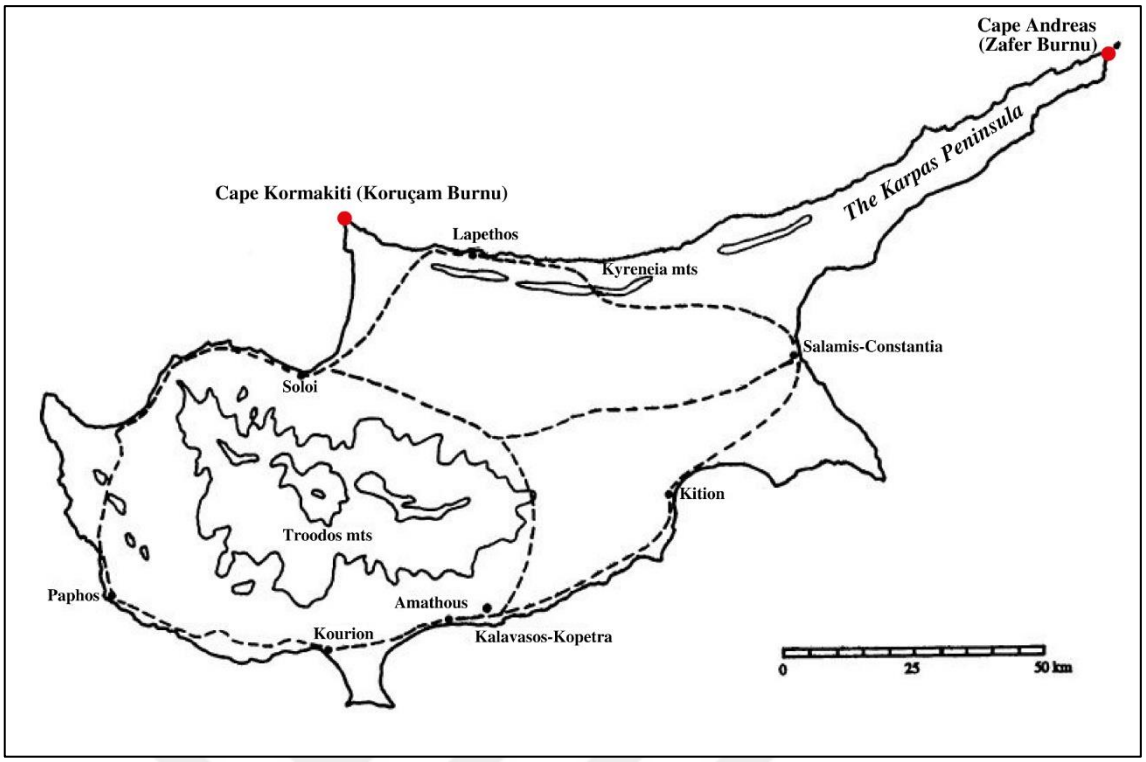

Figure 41: Map of Cyprus, showing important places on the northern part (drawings by Koraycan Albay, modified from Rautman 2001, fig. 1).

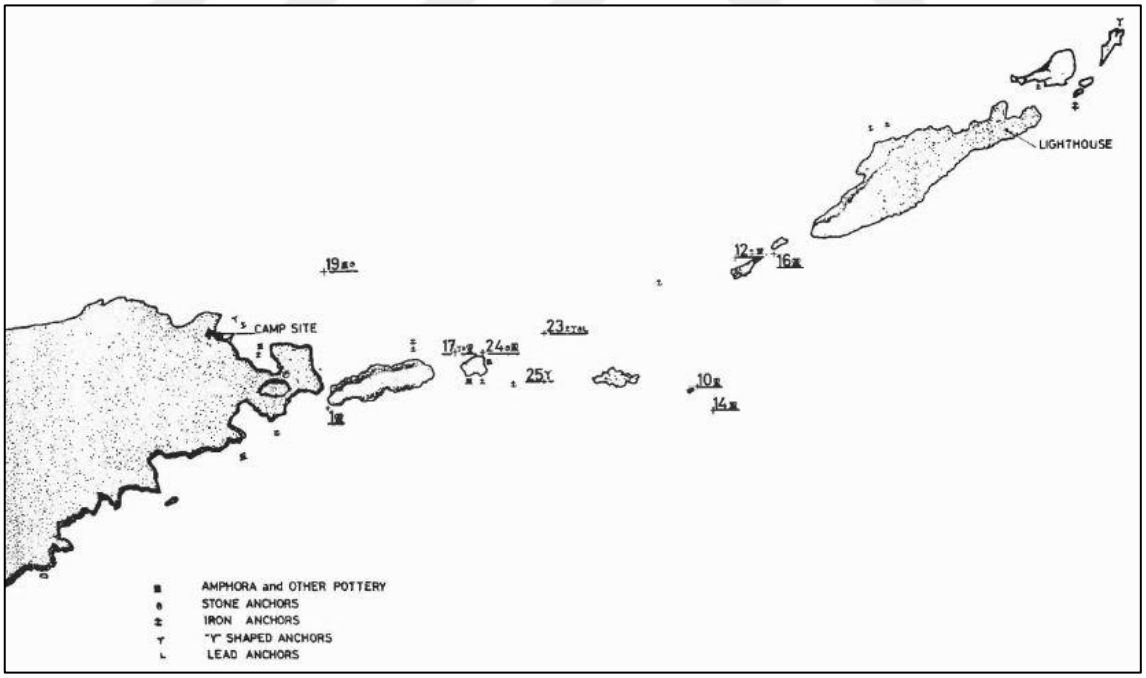

Figure 42: Cape Andreas survey area (Green 1970, fig. 6).

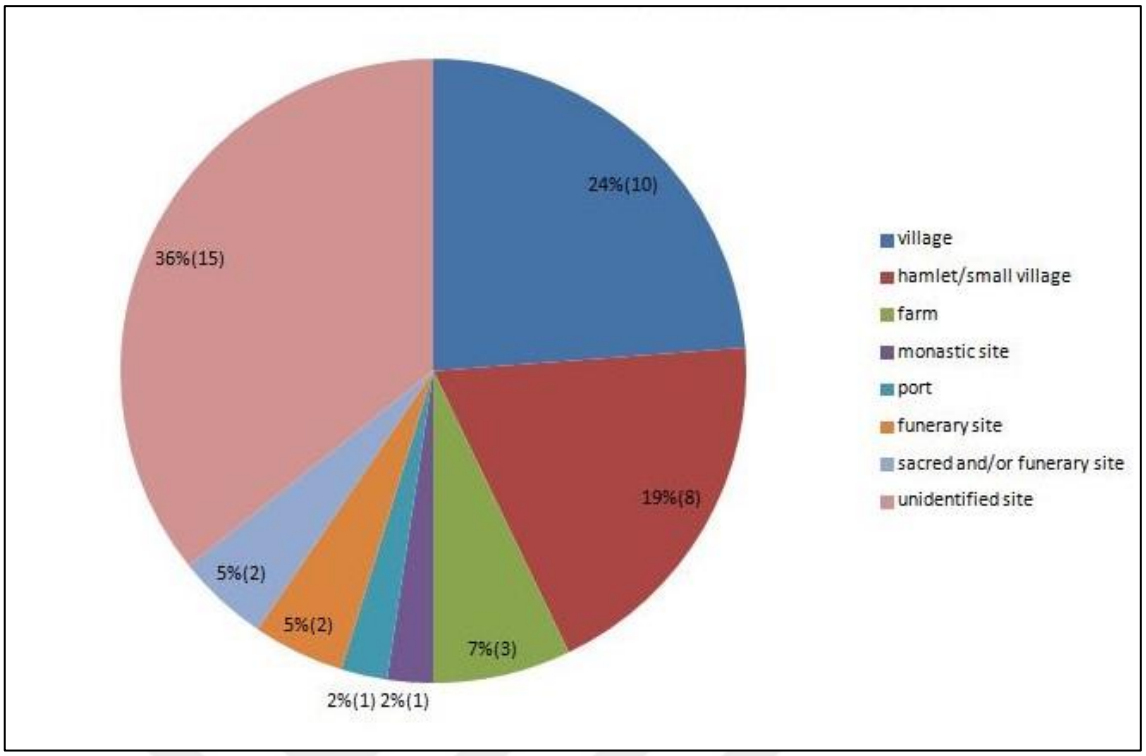

Figure 43: Distribution of Site Types in the *territorium* of Korykos.

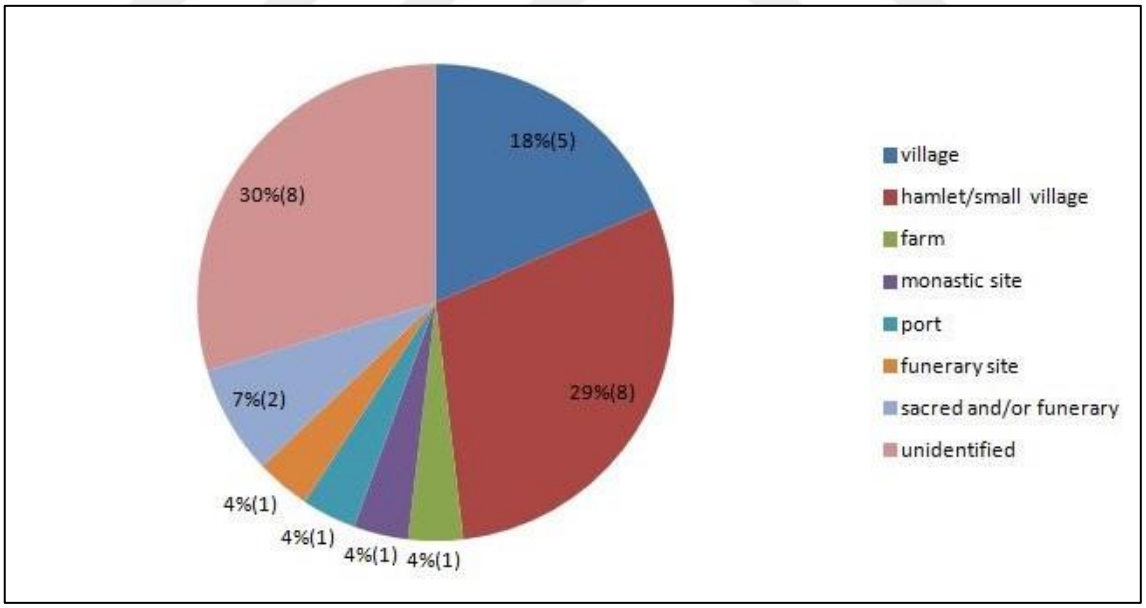

Figure 44: Distribution of the Newly Founded Sites in the *territorium* of Korykos.

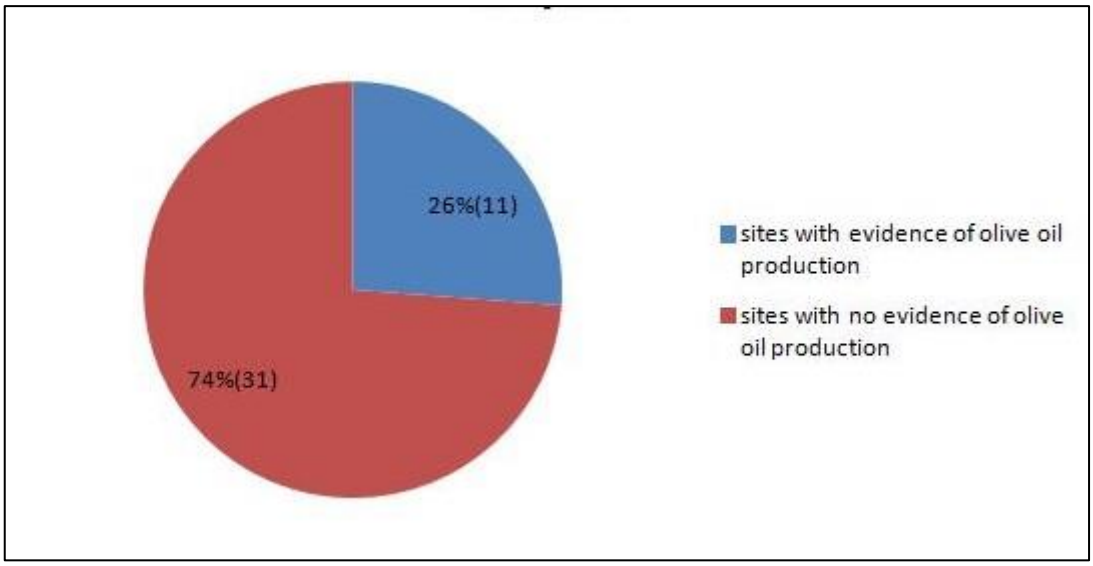

Figure 45: Olive Oil Production in the *territorium* of Korykos.

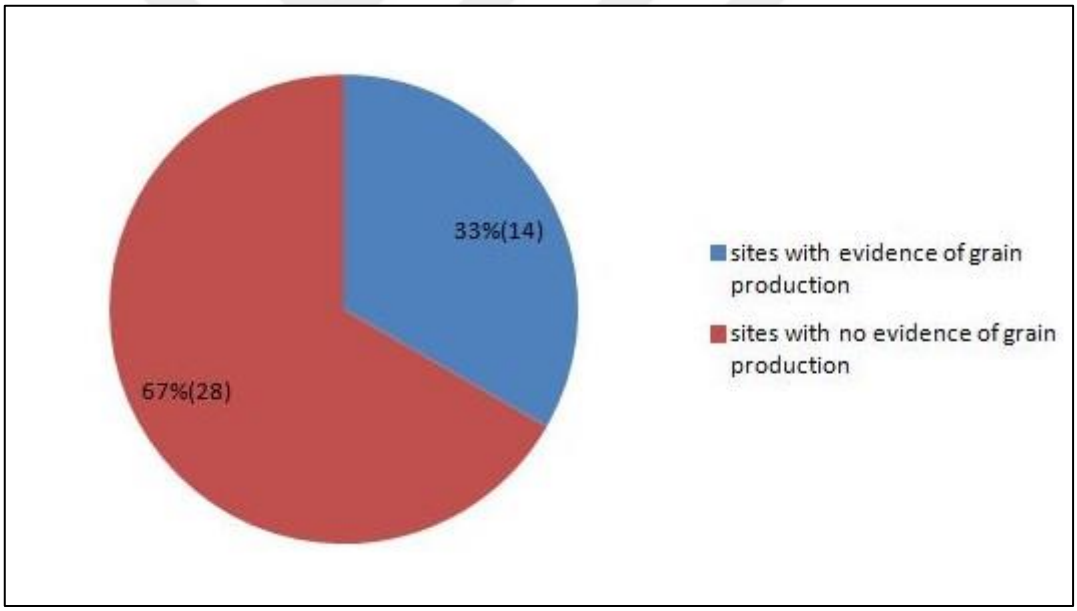

Figure 46: Grain Production in the *territorium* of Korykos.

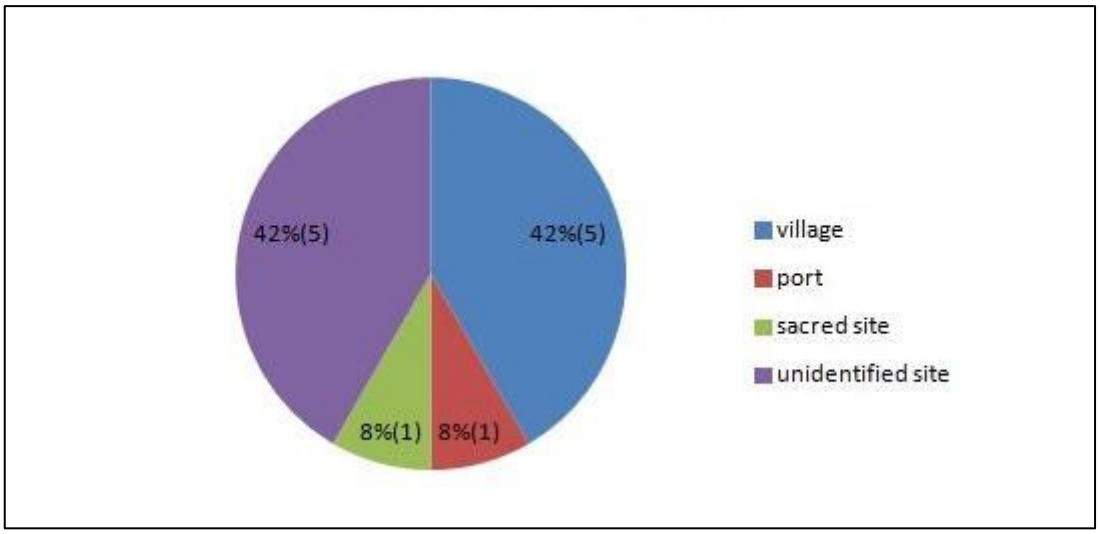

Figure 47: Distribution of Site Types in the *territorium* Elaiussa Sebaste.

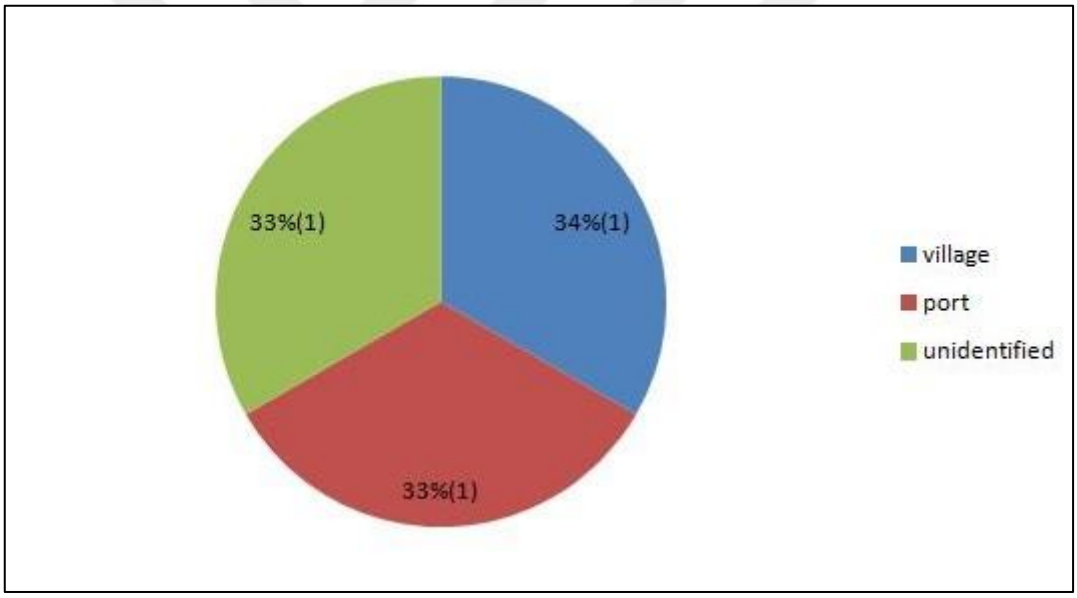

Figure 48: Distribution of the Newly Founded Sites in the *territorium* of Elaiussa Sebaste.

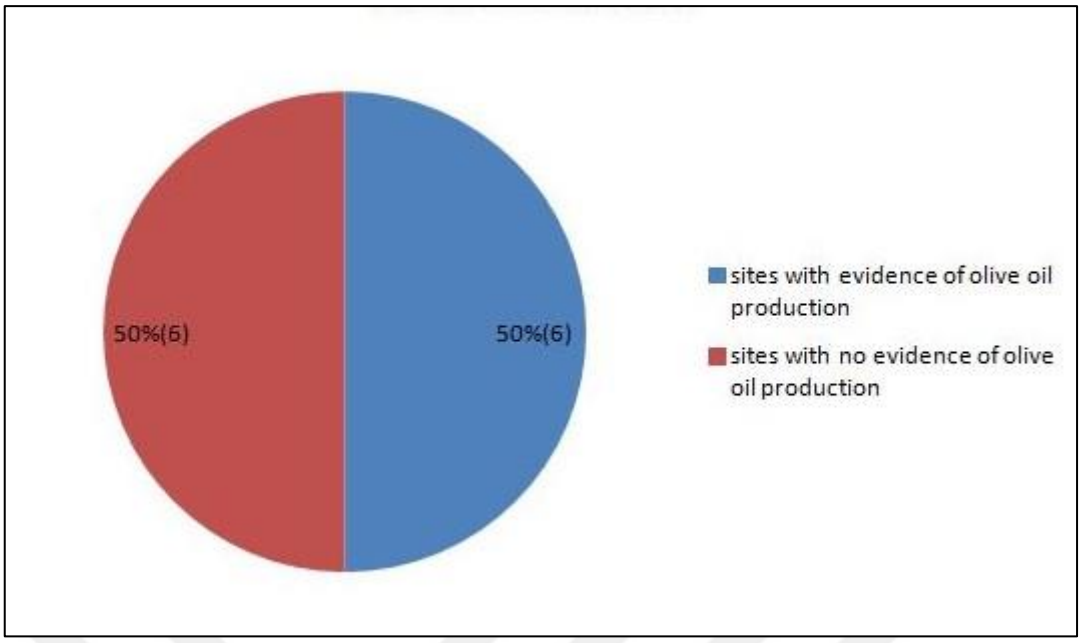

Figure 49: Olive Oil Production in the *territorium* of Elaiussa Sebaste.

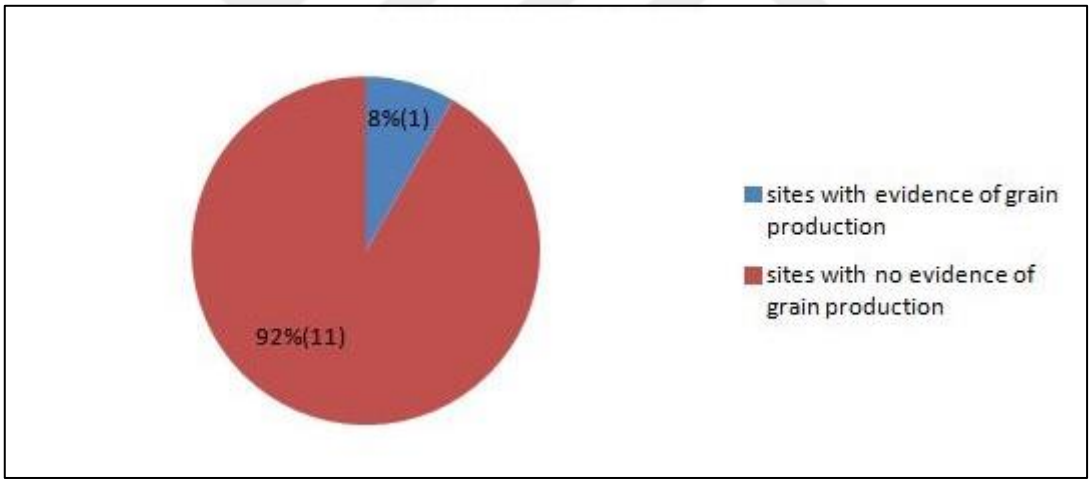

Figure 50: Grain Production in the *territorium* of Elaiussa Sebaste.

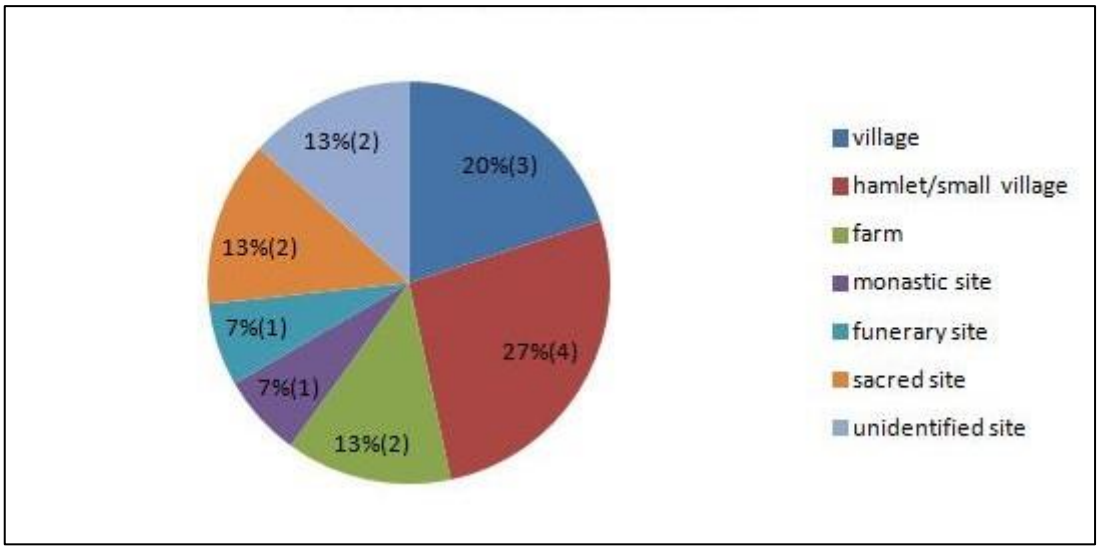

Figure 51: Distribution of Site Types in the *territorium* Olba-Diokaisareia.

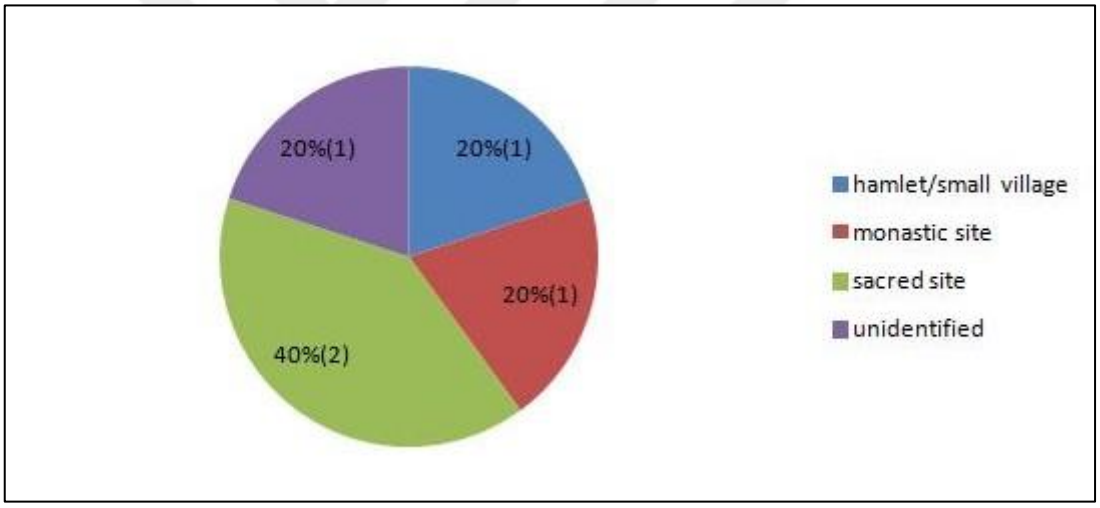

Figure 52: Distribution of the Newly Founded Sites in the *territorium* of Olba-Diokaisareia.

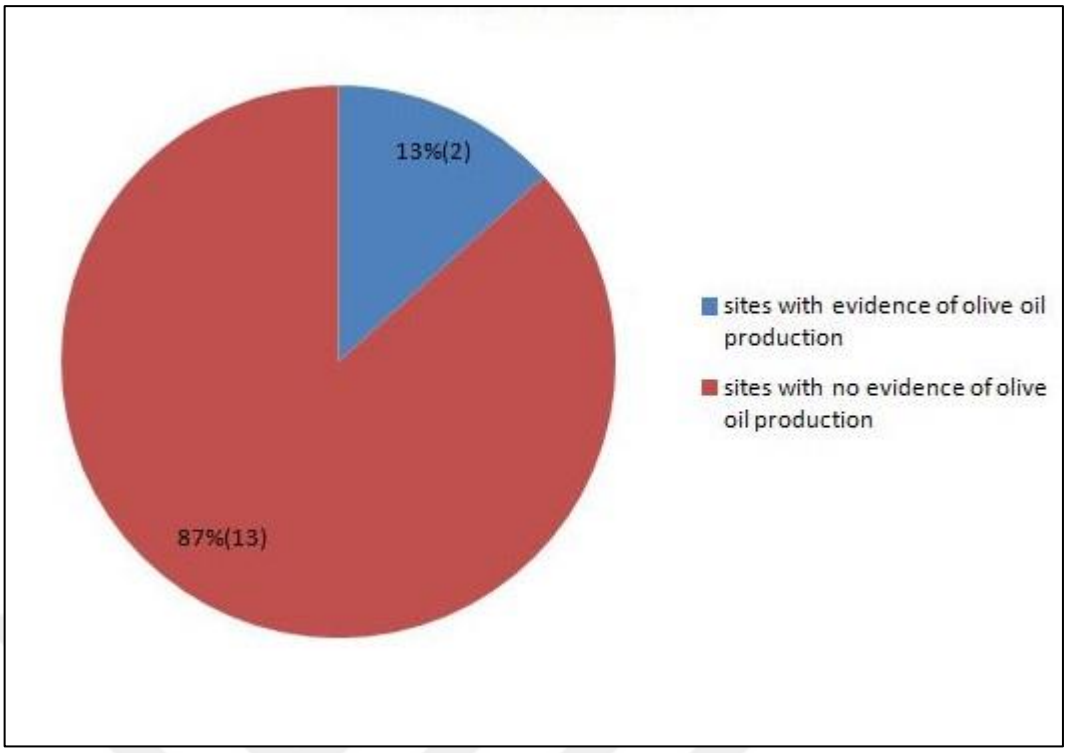

Figure 53: Olive Oil Production in the *territorium* of Olba-Diokaisareia.

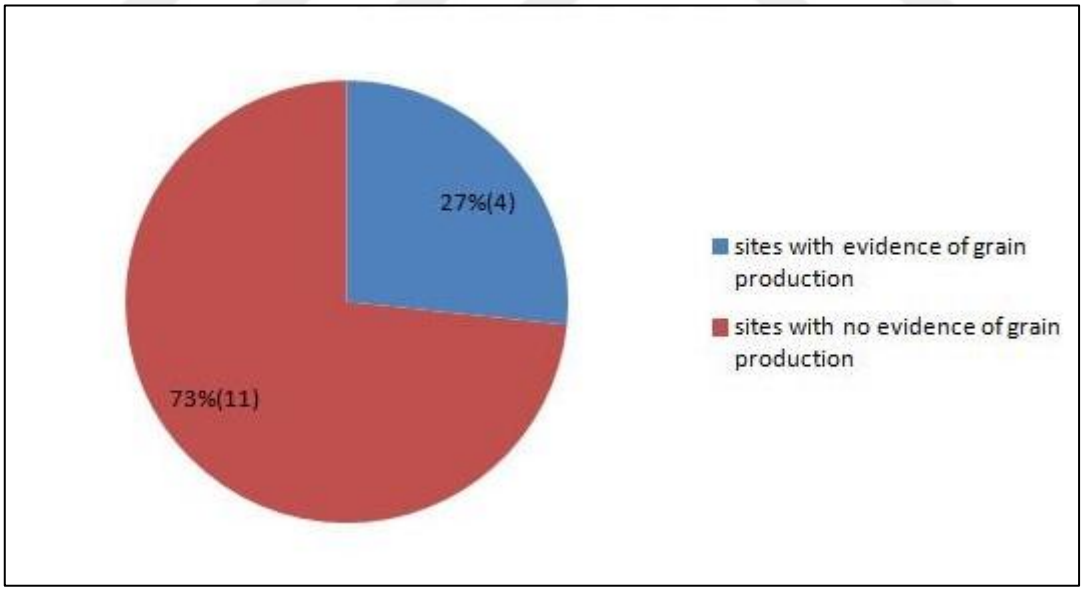

Figure 54: Grain Production in the *territorium* of Olba-Diokaisareia.

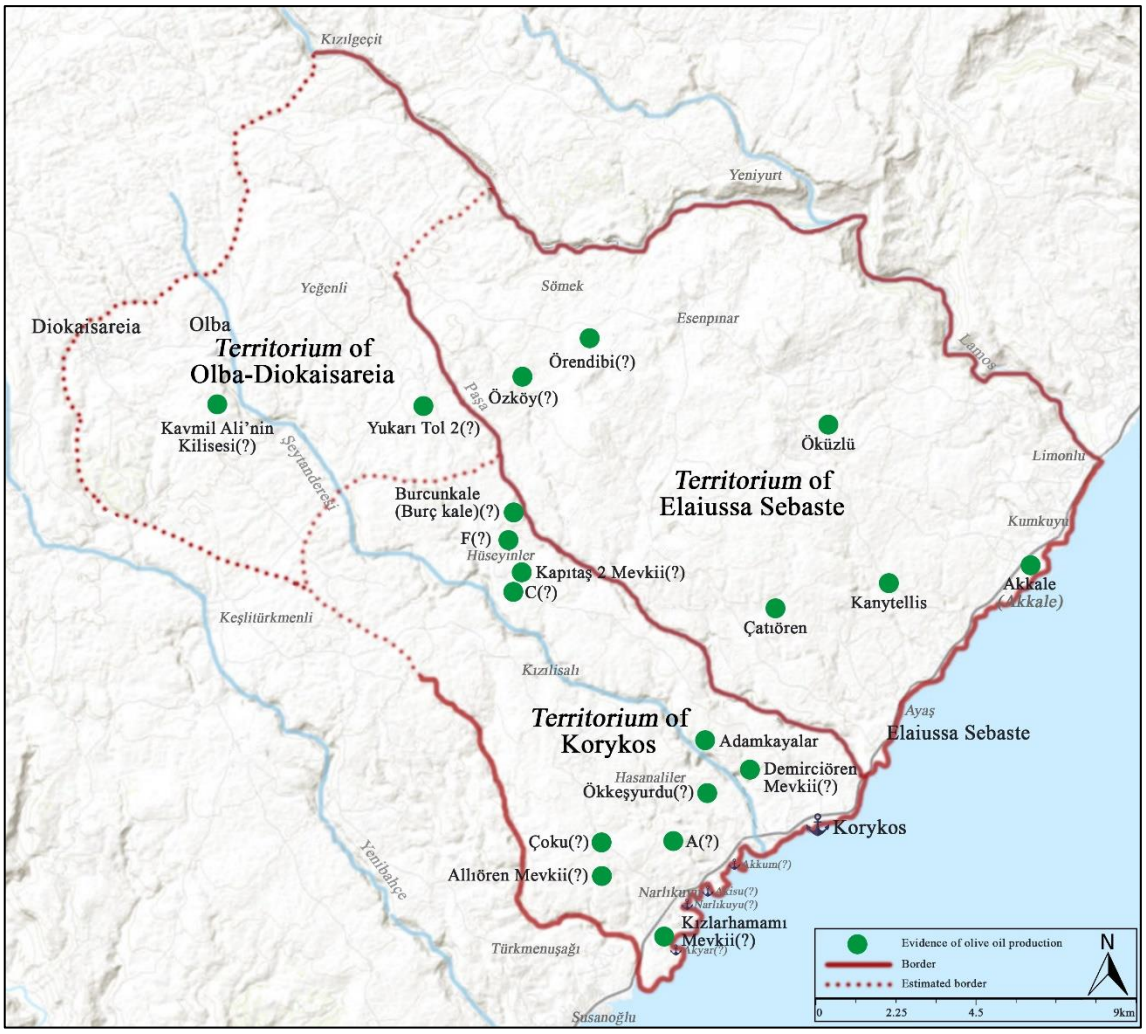

Figure 55: Evidence of olive oil production in the study region (drawings by Pınar L. Alkan, adapted from the DARMC base map).

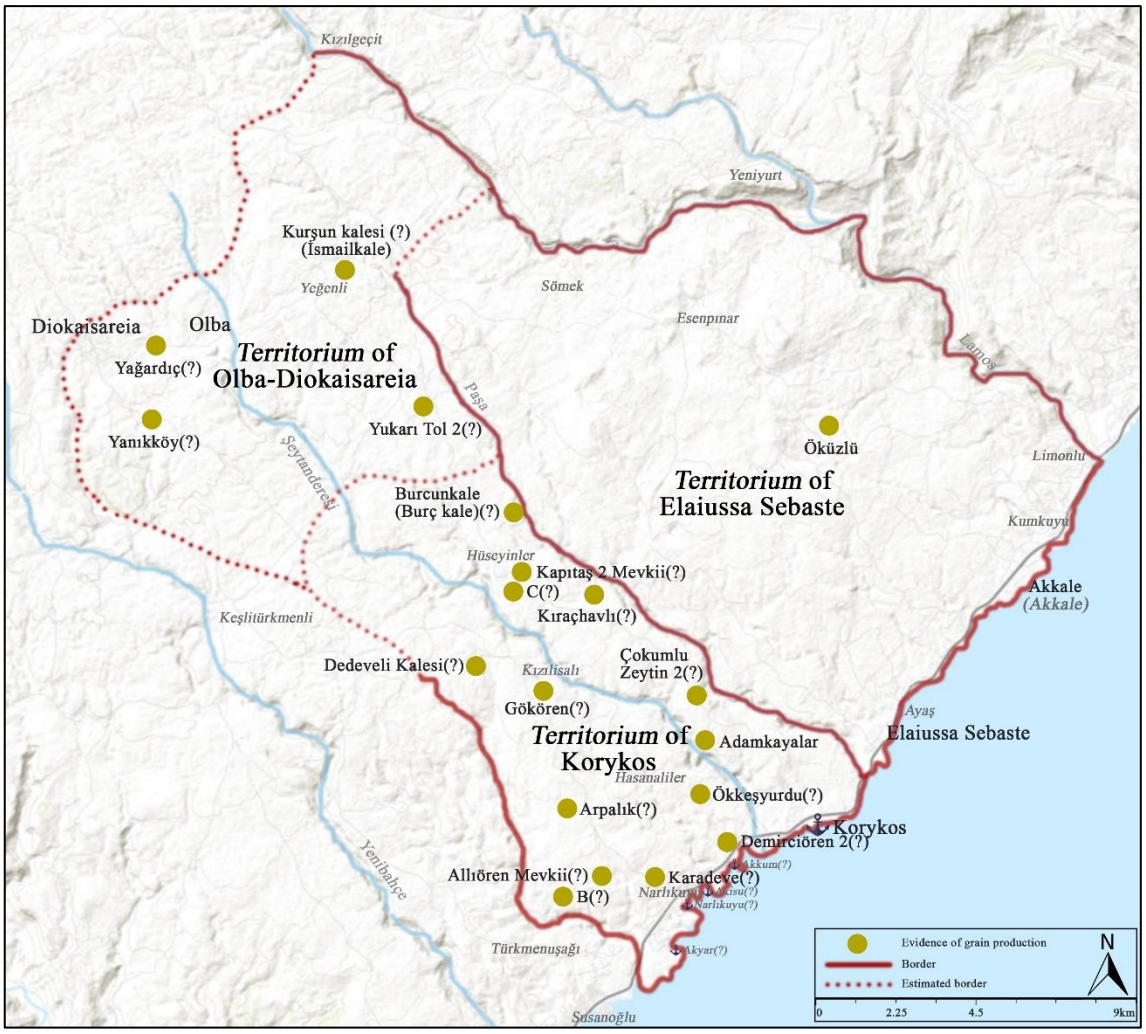

Figure 56: Evidence of grain production in the study region (drawings by Pınar L. Alkan, adapted from the DARMC base map).

Appendix A: The Sites in the *Territorium* of Korykos.

H: Hellenistic Period RI: Roman Imperial Period LA: Late Antique Period (?): Uncertain

NO	SITE NAME	SITE TYPE	CHURCH	LOCATION	CHRONOLOGY	TOPOGRAPHY	PRODUCTION	NETWORK
1	Adamkayalar	Village	none	Kız Kalesi	H, RI, LA	On hilltop	Olive oil, wine, grain	4.5 km NW of Korykos
2	Allıören	Village	none	Narlıkuyu	RI, LA, B	On hill slopes	Olive oil, grain	-
3	Çokumlu Zeytin 2	Village	none	Narlıkuyu	RI, LA	-	Grain	-
4	Dedeveli Kalesi	Village	none	Kızılisalı	LA	-	Grain	-
5	Gökören	Village	none	Kızılisalı	LA	-	Olive and/or wine, grain	Ancient road at W of the site
6	Karadeve	Large Village	none	Hasanaliler/ Narlıkuyu	LA(?)	-	Grain	2 km E of Allıören. An ancient road passes through the site.
7	Korykion Antron	Village	2	Narlıkuyu	H, RI, LA, B(?)	Around sinkholes	Olive oil and/or wine	5 km SW of Korykos
8	Tol	Village	1	Hüseyinler	RI, LA	Nearby river	Olive oil and/or wine	On an ancient road with a Roman bridge crossing the Şeytanderesi River
9	'Unnamed Site' A	Village	1	Hasanaliler/ Narlıkuyu	LA, B(?)	-	Olive	1.5 km to Karadeve
10	'Unnamed Site' B	Village	none	Narlıkuyu	LA	On hill slopes	Grain	1 km W of Allıören
11	Demirciören 2	Hamlet/small village	none	Narlıkuyu	LA	-	Grain	-
12	Kapıtaş 2 Mevkii	Hamlet/small village	none	Hüseyinler	LA	-	Olive oil, grain	-
13	Kıraçhavlı	Hamlet/small village	none	14 km N of Narlıkuyu	LA	-	Olive oil and/or wine, grain	-
14	Ökkeşyurdu	Hamlet/small village	none	5 km N of Narlıkuyu	LA	-	Olive oil, grain	-
15	Öveklik 1	Hamlet/small village	none	9 km N of Narlıkuyu	LA	-	Olive oil and/or wine	300 m E of Öveklik 2
16	Öveklik 2	Hamlet/small village	none	9 km N of Narlıkuyu	LA	-	Olive oil and/or wine	300 m W of Öveklik 1
17	Sakırgalık Mevkii	Hamlet/small village	none	Kızılisalı	LA	-	Olive oil and/or wine	-
18	'Unnamed Site' C	Hamlet/small village	none	Hüseyinler	LA	-	Olive oil, grain	Ancient road at SW of the site
19	Burcunkale (Burç Kale)	Farm	none	Hüseyinler	H(?), RI, LA	-	Olive oil, grain	-
20	Demirciören Mevkii (Demirci)	Farm	none	Narlıkuyu	H(?), RI, LA	-	Olive oil	Ancient road leads to the site
21	Tol 3 Mevkii	Farm	none	4 km NW of Hüseyinler	LA	-	Olive oil and/or wine	-
22	Çoku	Monastic Site	1	Hasanaliler/Narlıkuyu	LA, B	-	Olive oil, wine	-
23	Kızlarhamamı Mevkii	Port	1	Narlıkuyu	LA	On area overlooking an inlet	Olive oil	W of Korykos, proximity to a suitable inlet
24	Alören	Funerary Site	none	Hasanaliler/ Narlıkuyu	RI, LA	In valley	-	-
25	Halilören (Alveren) Mevkii	Funerary Site	none	Gedikkonuş (not found)	LA	-	-	-

26	Bağlıçukur	Sacred and/or funerary site	none	Hüseyinler	LA	-	-	W of Çataleni Mevkii
27	Çataleni Mevkii	Sacred and/or funerary site	none	Hüseyinler	LA, B(?)	-	-	E of Bağlıçukur Mevkii
28	Akkum Mektep Damı	Unidentified	none	Akkum/ Narlıkuyu	LA(?), B	-	-	5 km SW of Korykos
29	Arpalık	Unidentified	none	6 km NW of Narlıkuyu	LA	-	Olive oil and/or wine, grain	-
30	Dedeveli	Unidentified	1	Kızılisalı/ Narlıkuyu	LA(?), B	-	-	-
31	Hoyrazakarşı (Kelleci)	Unidentified	none	4 km N of Kızkalesi	H, RI, LA	-	-	On the same route with Adamkayalar, W of modern highway
32	Kepezüstü	Unidentified	none	6 km E of Keşlitürkmenli	RI, LA	-	Olive oil and/or wine	-
33	Kökdibi Mevkii	Unidentified	none	Hüseyinler	H, RI(?), LA(?)	Next to valley	-	-
34	Murtluboğaz Mevkii	Unidentified	1	Narlıkuyu	LA	-	-	-
35	Şıhdede Mevkii	Unidentified	none	Hüseyinler	LA	-	-	Next to an ancient road
36	'Unnamed Site' D	Unidentified	none	On the western side of the Paşa Deresi Valley	H, RI, LA, B(?)	Next to a valley	-	Lying at the border between Korykos and Elaiussa Sebaste
37	'Unnamed Site' E	Unidentified	none	100 m W of Keşlik Sokağı in Hasanaliler Village of Narlıkuyu	RI, LA	-	-	-
38	'Unnamed Site' F	Unidentified	none	N of Yukarı Hüseyinler Village in Silifke	H, RI, LA, B(?)	-	Olive oil	-
39	'Unnamed Site' G	Unidentified	none	Nearby the northern exit of the modern city of Kızkalesi, 200 m W of the modern highway	H, RI(?), LA	-	Olive oil and/or wine	-
40	'Unnamed Site' H	Unidentified	none	20-30 m E of the Extra Muros Church, in the close vicinity of Korykos	LA(?), B	-	-	In the vicinity of Korykos
41	'Unnamed Site' I	Unidentified	none	The area to SW of the point where the ancient road coming from Elaiussa Sebaste and the road leading to Korykos presumably from the north intersect	LA	-	-	At intersection point of Korykos-Olba road and Korykos-Elaiussa Sebaste road
42	'Unnamed Site' J	Unidentified	1	300 m W of Boyan Kalesi, around Göztepe Mevkii in Hasanaliler village of Silifke	LA(?)	-	-	-

Appendix B: The Sites in the *Territorium* of Elaiussa Sebaste.

H: Hellenistic Period RI: Roman Imperial Period LA: Late Antique Period (?): Uncertain

NO	SITE NAME	SITE TYPE	CHURCH	LOCATION	CHRONOLOGY	TOPOGRAPHY	PRODUCTION	NETWORK
1	Çatıören	Large Village	1	Ayaş	H, RI, LA	On hilltop	Olive oil, wine(?)	Ancient road in the valley to N of the site
2	Kanytellis	Large Village	4	Ayaş	H, RI, LA	Around sinkhole	Olive oil, wine(?)	10 km NW of Elaiussa Sebaste, on the Akkale-Olba road
3	Öküzlü	Large Village	3	9 km NW of Kumkuyu	H, RI, LA	On hilltop	Olive oil, wine(?), grain	Ancient road passes through the site
4	Örendibi	Village	1	Sömek	LA	On hill around karst depression	Olive oil, wine?	-
5	Özköy	Village	2	Sömek	H(?), RI, LA	Two hills and their slopes in a valley	Olive oil, wine(?)	-
6	Akkale	Port	none	Kumkuyu	LA	Nearby sea	Olive oil, wine	Proximity to an inlet
7	'Unnamed Site' K	Sacred Site	none	Natural cave 1.5 km N of Hıdır Kalesi, on the eastern side of the Paşa River in Ayaş	RI(?), LA(?)	In natural cave	-	Eastern side of the Paşa River
8	Batısandal	Unidentified	1	Batısandal (Sandalköy)	RI, LA	-	-	-
9	Hayat Mevkii	Unidentified	none	Sömek	H(?), RI(?), LA(?)	-	Olive oil and/or wine	-
10	Karaelif Mevkii	Unidentified	none	Esenpınar	LA	-	-	-
11	Örentepe Mevkii	Unidentified	none	Esenpınar	H, RI(?), LA(?)	On hill	Olive and/or wine	-
12	Örentepesi (Güvere)	Unidentified	none	Esenpınar	RI, LA	-	-	The Yeniyurt-Elaiussa Sebaste road passes through the site

Appendix C: The Sites in the *Territorium* of Olba-Diokaisareia.

H: Hellenistic Period RI: Roman Imperial Period LA: Late Antique Period (?): Uncertain

NO	SITE NAME	SITE TYPE	CHURCH	LOCATION	CHRONOLOGY	TOPOGRAPHY	PRODUCTION	NETWORK
1	Canbazlı	Village	1	Canbazlı	H, RI, LA	On a hill next to valley	Olive oil and/or wine	-
2	Kurşun Kalesi (İsmailkale)	Large Village	1	Yeğenli	H, RI, LA	On hilltop	Olive oil and/or wine, grain	-
3	Sayin	Large Village	2	Yeğenli	RI, LA	On hill	Olive oil and/or wine	In the vicinity of Diokaisareia
4	Keçiliköy	Hamlet/ Small Village	none	Uzuncaburç	H, RI, LA	-	Wine	7 km S of the ancient city of Olba; the closest ancient site to the city
5	Yanıkköy	Hamlet/ Small Village	none	Uzuncaburç	RI, LA(?)	-	Olive oil and/or wine, grain	-
6	Yukarı Tol 2	Hamlet/ Small Village	none	Canbazlı	H, RI, LA	-	Olive oil, grain	-
7	‘Unnamed Site’ L	Hamlet/ Small Village	none	Uzuncaburç	LA	On hilltop	Olive oil and/or wine	-
8	Eserli	Farm	none	Yeğenli	H, RI(?), LA	On a hill, surrounded by depression	-	-
9	Yağardıç	Farm	none	Uzuncaburç	RI, LA	-	Grain	On the Olba-Diokaisareia road
10	‘Unnamed Site’ M	Monastic Site	2	300m S of the aqueducts on the eastern slope of the Eastern Valley that is E of Olba	LA	On valley slope	-	100 m S of 'Unnamed Site’ P, 1 km N of ‘Unnamed Site’ O
11	‘Unnamed Site’ N	Funerary site	none	On the western slope of the Eastern Valley, that is E of Olba	RI, LA(?)	On valley slope	-	At the opposite of ‘Unnamed Site’ M
12	‘Unnamed Site’ O	Sacred site	2	In the Şeytanderesi Valley around the Damlayan Cave	RI(?), LA	In valley	-	1 km S of ‘Unnamed Site’ M
13	‘Unnamed Site’ P	Sacred site	1	On a terrace wall alongside the riverbed in the Eastern Valley, ca. 200 m S of the aqueducts	LA	Alongside riverbed in valley	-	100 m N of ‘Unnamed Site’ M
14	Kavmil Ali’nin Kilisesi	Unidentified	none	Uzuncaburç	LA	-	Olive oil	1.5 km S of the ancient city of Olba
15	Tomasboğazı	Unidentified	none	Canbazlı	H, RI(?), LA(?)	-	-	-