

**DEVELOPMENT OF BURGAZ (PALAIA KNIDOS) AND ITS HINTERLAND
IN CONTEXT OF SETTLEMENT PATTERN ANALYSIS**

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ABSTRACT

DEVELOPMENT OF BURGAZ (PALAIA KNIDOS) AND ITS HINTERLAND IN CONTEXT OF SETTLEMENT PATTERN ANALYSIS

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The main aim of this study is to understand the political, economic and social position of Burgaz (Palaia Knidos) settlement within the Datça Peninsula from Geometric to Hellenistic Period. Through the examination of archaeological evidence obtained from the excavations conducted at Burgaz, combined with the survey data of Datça Peninsula recorded by Prof. Dr. Numan Tuna in early 1980s this dissertation endeavors to explain the processes took place at Burgaz and the peninsula. Methodology of the research is based on settlement pattern analysis supported by theoretical background of the polis concept. The evaluation of site distribution through time and space revealed the formation processes of Burgaz, its hinterland and the peninsula. The results of the study indicate that even though Burgaz may not appear to be a polis in sense of the idealized concept, urbanization and state formation processes, which are accepted as two main indicators of polis formation, can be observed through settlement pattern analyses. Based on the outcomes, Burgaz may be identified as the social, political and economic urban center of the peninsula until the synoikismos took place after 360 BC.

Keywords: Settlement Pattern Analysis, Burgaz, Palaia Knidos, polis, Datça Peninsula



ÖZ

BURGAZ VE HİTERLANTININ YERLEŞİM MODELİ ANALİZİ BAĞLAMINDA GELİŞİMİ

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Bu çalışmanın temel amacı Burgaz (Eski Knidos) yerleşiminin Geometrik Dönem'den Helenistik Dönem'e kadar uzanan süreçte Datça Yarımadası'ndaki politik, ekonomik ve sosyal konumunun anlaşılmasıdır. Bu kapsamda Burgaz ve Datça Yarımadası'nda gelişen süreçlerin, Burgaz'da yürütülen kazı çalışmalarından elde edilen arkeolojik veriler ile Prof. Dr. Numan Tuna'nın 1980'lerin başında yürüttüğü Datça Yarımadası yüzey araştırması verilerinin incelenmesi ile açıklanması hedeflenmektedir. Çalışmanın metodolojisi yerleşim modeli analizini temel almakta ve teorik olarak polis konsepti literatürüyle desteklenmektedir. Arkeolojik buluntu yerlerinin zamansal ve mekânsal dağılımlarının incelenmesi Burgaz ve hinterlandı ile Datça Yarımadası'nın genelini kapsayan oluşum süreçlerini açığa çıkartmaktadır. Çalışmanın sonuçlarına göre Burgaz'ın kavramsal olarak idealize edilmiş polis tanımlamasına uymamasına karşın, polis oluşumunun iki ana göstergesi olarak kabul edilen kentleşme ve devlet oluşum süreçlerinin Burgaz ve Datça Yarımadası için yerleşim modeli analizleri ile gözlemlenebilmektedir. Çalışmanın sonucunda Burgaz'ın M.Ö. 360 sonrasında gelişen

sinoikismos sürecine kadar Datça Yarımadası'nın sosyal, politik ve ekonomik kent merkezi olarak tanımlanabilmesi mümkündür.

Anahtar Kelimeler: Yerleşim Modeli Analizi, Burgaz, Eski Knidos, polis, Datça Yarımadası



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CHAPTER I

1. INTRODUCTION

This study aims to explain the political, economic and social position of Burgaz (Palaia Knidos) settlement within the Datça Peninsula from Geometric to Hellenistic Period. Methodology for the thesis will be based on literature review, settlement pattern analysis, comparison between the sites and regions (like Klazomenai and Bozburun), and sampled survey as well as fieldwork. Data base of the study is the sum of information obtained from the studies, surveys, and excavations conducted in the region of Datça peninsula and combine it with the accumulated data provided by the excavations of Burgaz (Palaia Knidos).

Study area chosen for this thesis is called Knidian Territory which is the Datça Peninsula, belonging to ancient Caria region. Ancient Caria region can be defined by natural borders of Büyük Menderes Valley in the north, Dalaman River in the south, mountain range of Babadağ-Honozdağ-Bozdağ in the east, and the Aegean Sea on the west¹. Datça Peninsula is located at the southwest of Caria region and measures 65 km in length and 17 km in width at the widest part, from İnceburun Tepe at north to İnce Burun at south. Burgaz, one of the most prominent settlements in this area, is located on Burgaz Plain, 2 km northeast of modern Datça. Site is situated at the intersection of small protrusion of land and sea. The length of this small peninsula is roughly 400 m and the altitude can go up to 12 m high (Fig. 1).

¹ Tirpan, 1996, pp. 459-476.

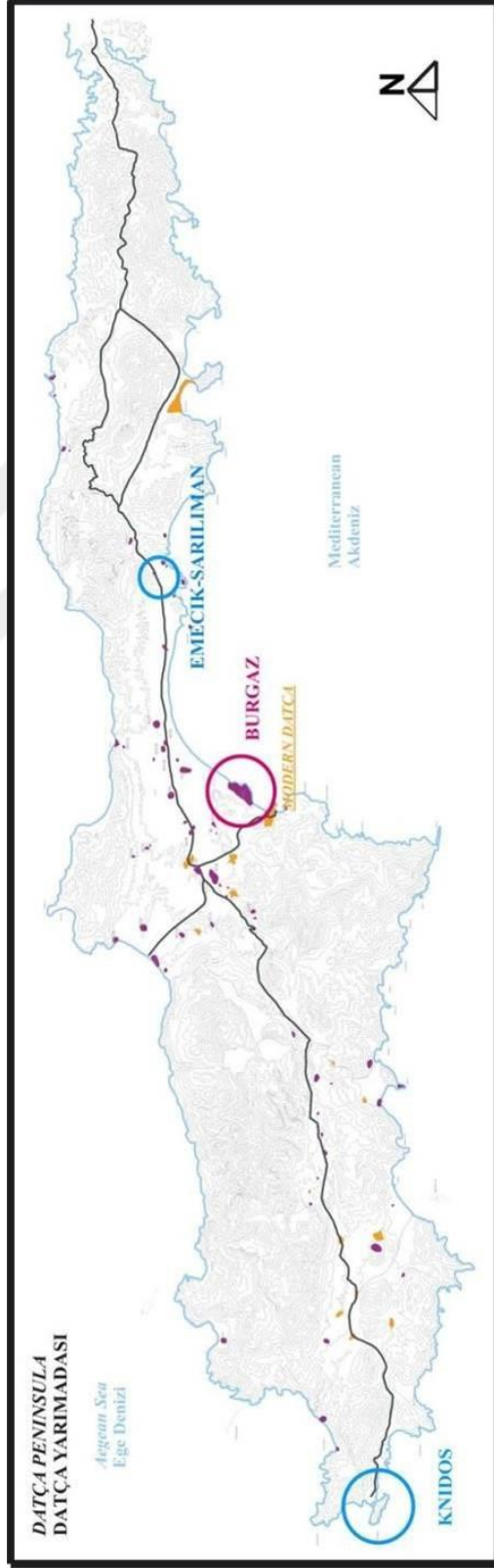


Figure 1. Map of Datça Peninsula

The relation between Knidos and Burgaz has been a point of disagreement because of the hypothesis of Bean and Cook² which suggests that Knidians moved their city from Burgaz to the western tip of the peninsula, Cape Krio. Even though there are many fieldworks conducted by different researchers, the debate still remains inconclusive. This debate is actually an expression of a major issue concerning the region's social, political and economic mechanisms. Archaeological evidence clearly points that during the 4th century BC an important change occurred in the peninsula; there has been a shift of function and power in the region. Similar processes can be observed during the same period in other geographic contexts and generally mentioned within the framework of *synoecism* and *polis* formation. This thesis aims to present a wholesome understanding of what the term *polis* encompasses and argue the validity of previously offered *polis* definitions and suggests that confined definitions of city, state or *polis* are not necessarily applicable to each and every site. With this suggestion in mind it may be possible to understand Burgaz's position before, during and after the moving in late 4th century BC.

For a better understanding of this changing environment, the whole peninsula needs to be considered in addition to settlement scale analysis. Recent studies at Burgaz mainly focus on intra-site spatial organization of Burgaz however, there are not any regional scale studies within this framework since the comprehensive survey and research conducted by Prof. Dr. N. Tuna³ in the early eighties. For regional scale studies the data from survey done by Tuna was digitized with the help of a proper Geographical Information Systems (GIS) software. Using GIS tools will provide visual support for analysis of the patterns in the region. Site distribution for each archaeological period in the given region will be analyzed and sites will be classified into function and size on maps and tables. By examining the sites and their settlement patterns in Datça Peninsula

² Bean & Cook 1952, pp. 204 - 212.

³ Tuna, 1983.

it is possible to understand the social, political and economic organization of the territory.

To introduce this thesis, chapter 1 provides a brief introduction to the issues regarding the political, economic and social environment in Datça Peninsula and the position of Burgaz in the region.

Chapter 2 includes the theoretical issues regarding the study and the suggested methodological approaches. Both site scale and region scale analysis and use of GIS based approaches are suggested as useful methods to more clearly understand what happened during the transition period mentioned above and hopefully bring a new perspective to discussions regarding the relationship between Burgaz and Knidos. Literature review brings together all the prominent literature about *polis*, city-state and urbanization. This is inevitably a large part of this thesis due to the confined nature of the term *polis* and the need for a more flexible *polis* definition. Intent of the literature review is to point out what different definitions of *polis* are there and comprehend the essence of the issue regarding these definitions. Methodology of the study is described as well as the nature of evidence and the importance of legacy data. Software solutions and analysis methods applied within the scope of the study is also introduced in this chapter.

Chapter 3 is the analysis part of the thesis. Definition of the study area includes a brief background of archaeological researches at Burgaz as well as the historical background of the site. In the settlement pattern analysis section of the chapter 3, changes in function and size of the settlement at Burgaz during different periods are analyzed with the help of plans and tables. Regional scale analyses that are based on Tuna's survey data managed and manipulated with GIS tools in order to grant visual support. Investigation of similar cases to Burgaz in matters of *polis* formation and *synoecism* provides missing components of Burgaz model and aids the study in a complementary sense.

Chapter 4 is made of discussions on information gathered from literature sources and a general summary of analysis results from chapter 3. Chapter 5 is the conclusion of this thesis and recapitulates the essence of the research. A self-evaluation of the study and comments on suggested further research on the matter is presented.



CHAPTER II

2. THEORIES ON POLIS FORMATION AND METHODS OF APPROACH

2.1. Literature Review on Polis Concept

As Aristotle (Aristotle, Politics 3.1.) suggests “He who would inquire into the essence and attributes of various kinds of governments must first of all determine ‘What is a state?’”. Undoubtedly, inquiring the conventional Greek city-state model, which in general is derived solely from ancient texts and examining the homogeneous ensemble of poleis which are accepted as the ideal, is not a new approach to the subject. Understanding what the term *polis* means and establishing a solid definition is considered a priority for this study. However, the tendency to conceptualize the *polis* as a singular model still constitutes a serious impasse. Aristotle expressed his doubts in *Politics* about how to define the essence of the *polis*, even though he was a citizen of such community.

Even today the questions of “What is *polis*?” and “How does the *polis* formation proceeds?” are the main concern of many classical archaeologists. There are endless list of terms and definitions aiming for clarification on the matter.

In *La Cité Antique*, de Coulanges looks for the explanation to rise of *polis* in primitive religion⁴. Beginning with Greek family, laws and beliefs constituted all associations of the community until it became a city as an entity that developed through a series of revolutions. De Coulanges argues that as the development continued, the primitive

⁴ De Coulanges, 1866. p. 7.

religion became more and more regulated, to such a degree that it morphed into private law and led to the political institutions. De Coulanges himself inquires the prospect of finding solid ground for his predictions, asking if it is possible to recover knowledge of something as intangible as beliefs and opinions of people who lived in such a distant past. He finds the solution for this problematic in written sources, stating that a large part of this knowledge was captured in ancient texts.

According to Glotz's opinion explaining the *polis* formation as a systematical process with unperturbed logic as de Coulanges suggested is improbable and states that "... they (human societies) are not geometrical figures, but living organisms..."⁵ proposes that the influence of the nature was also a great factor in the process of the *polis* formation; the landscape and the historical events were both determining factors in the rise of the *polis*. The movements and migrations of people groups would create an alloy of ideas and customs which would first cause sporadic improvements then, inevitable degeneration. Glotz argues that state formation occurred in three phases: in the first stage, families voluntarily bow down to city's common good, in the second, the city commands isolated individuals for its purposes and in the last stage, with the rise of individualism city is overthrown and a new formation, state, was founded in its place⁶.

Ehrenberg defines *polis* "...as the abstract representative of an enormous number of concrete independent States widely differing in form and development..."⁷ and like de Coulanges, falls back upon written sources for explanation of the *polis* formation process. In his paper in 1937 "When Did the Polis Rise?" Ehrenberg uses the term *polis* exclusively for state and informs that *polis* was actually the center of the city in Mycenaean kingdoms and later this center was named *acropolis*. Thus the foundation of

⁵ Glotz, 1929. p.4.

⁶ *Ibid.* p. 5.

⁷ Ehrenberg, 1937, p. 2.

polis concept was established in 8th century BC and in several centuries *polis* became “the walled and closely populated town which could not exist without hinterland”⁸.

Morris also sees the *polis* formation as long period, a natural outcome of Dark Age (c.1100–750 BC) society which was already very hierarchical. According to him “*polis* was a complex hierarchical society built around the notion of citizenship”⁹ and in order to understand the *polis*, the city and the state, one must deal with abstractions. Morris clarifies his use of *polis* term and that he means an ‘ideal type’ of society. Like de Coulanges and Ehrenberg, Morris also refers to ancient texts, however, his attempt to explain the urbanization process, mainly revolves around archaeological data.

De Polignac joins Morris in utilizing the archaeological record, suggesting that archaeological evidence may shed light upon the formation process of the *polis*¹⁰. He does not meddle with the terminology at all and just uses the term *polis* as synonyms with the city and leaves at that, on the other hand, approaches the problem from a completely new angle. According to de Polignac, cults were the key to *polis* formation and “Participation in religious rituals guaranteed a mutual recognition of statuses and set the seal upon membership of the society, thereby defining an early form of citizenship.”

As one can see from 4th century BC with Aristotle to this day *polis* continues to be an unsolved problem. With a comprehensive survey of the literature it is possible to detect issues regarding the definition and meaning of the term *polis*.

Most basic factor contributing to the problem lies in the etymology of the word *polis*. It is originally πόλις in Ancient Greek and translated as city-state in modern languages, possibly based on Aristotle’s comment about *polis* meaning both the city and the state in Greek world. It is possible that some nuance has been lost in the translation since there are uses of the word *polis* meaning just the city, just the state or both at the same time. In

⁸ Ehrenberg, 1937, p. 156.

⁹ Morris, 1991, p. 26.

¹⁰ De Polignac, 1995, p. 153.

classical archaeology the term *polis* has been used for a long time without giving a second thought whether the society and its related settlement is actually a *polis*. Morris argues that even though classicists point out the poor translation, this ambiguity continues to be an issue¹¹. Of course it is not difficult to detect the problem with the etymology since most of the literatures presented above extensively discuss the roots and the meaning of the word *polis*. In fact, for a long time the concept of *polis* was solely examined through the literary sources because the archaeological data was considered inadequate.

At this point another issue with the literature presents itself. Although there is much to learn from ancient texts, accepting written sources as the only means of obtaining knowledge of the past has not proved useful. With studies of Morris and De Polignac the value of archaeological record increased due to the equivocalness of the ancient philosophers and historians. De Polignac questions the studies based upon these texts, pointing that they are mainly focusing on Athens, even though it is a widely accepted fact that Athens was a profound exception among poleis, and he expresses doubt about the trustworthiness of the transparency of the texts¹². In his 1997 dated paper *The Origins of the Greek Polis*, Davies remarks that use of the word *polis* may be unhealthy considering not all the Greek polities were poleis and he suggests the use of microstate term instead, for a larger scope¹³. Hansen introduces the term “city-state culture” in addition to an already unmanageable list of terms, describing the difference between city-state and a cluster of city-states, in other words city-state culture¹⁴. He claims it is necessary to entertain the concept of city-state in a regional scale and examine the relationships between the cities and states may yield answers to the discussions. In his book *Polis*, Hansen does not only examine Greek *polis* but many various city-states from

¹¹ Morris, 1991, p. 25.

¹² De Polignac, 1995, p. 3.

¹³ Davies, 1997, p. 14.

¹⁴ Hansen, 2006, p. 9.

different periods and regions. From Uruk, Lagesh and Ur of c.3100 to c.2350 BC, to The Dutch Republic founded by the Union of Utrecht in 1579 AD, numerous communities were represented as city-states¹⁵. Greek *polis* has long been introduced and accepted as a singular phenomenon that requires specific conditions to occur and thrive. However, Hansen's larger scope on the matter may prove as a most constructive approach yet. As de Polignac emphasizes, all the literary sources exploit a terminology and concepts that are produced from the final version of the notion they set to investigate¹⁶.

Most of the studies presented here assume that *polis* formation and the urbanization are closely related processes, even if not simultaneous in most cases. Certain characteristics of urban center are also considered vital for the *polis*; sturdy walls surrounding the settlement, a citadel located on higher ground and several architecturally distinct public buildings are a few of the essentials. There is a highly idealized, elaborately planned and build *polis* image that is promoted by Enlightenment politics in order to provide an example for the evolving societies of the 18th century¹⁷. However, ancient historians who had the chance to visit and live in a *polis*, such as Aristotle, Pausanias and Pseudo-Dicaearchus hardly describe poleis as a pleasant view. Pounds, in his study *The Urbanization of the Classical World*, examines the nature, form and function of the *polis*, and inquires whether it was in fact as "urban" as some authors assumed. The role of Greek *polis* in shaping the western civilization has given it an immense historical importance, however, Pounds claims that except a very few of the poleis, they were mainly autonomous, small discrete regions which were controlled from a city-like central place¹⁸ and hardly played any great role in the history of civilization.

Emergence of cities and state formation is one of the most fundamental inquiries of archaeology as well as the general social science literature. In archaeology discussions

¹⁵ Hansen, 2006, pp. 17-20.

¹⁶ De Polignac, 1995, p. 3.

¹⁷ Koparal, 2011, p. 43.

¹⁸ Pounds, 1969, p. 135.

have revolved around few basic modes; an idealized model of urbanization as a physical structure like city versus urbanization as representative of social structure. Both of these perspectives have also been approached from social evolutionary perspective as well as historical schemes.

For earlier scholars, state was usually synonymous with civilization¹⁹. On the other hand, Childe²⁰ and Adams²¹ suggested that the term civilization was interchangeable with urban, an idealized model of city. Childe even developed a check-list that consists of variable criteria such as size, socio-economic stratification, institutionalized political administration, ability to produce surplus and sustain long-distance trade, monumental architecture and use of writing. Another list was presented by Weber in his monumental work “The City”, states that a full urban community settlement must display the following features: a fortification, a market, a court of its own and at least partially autonomous law, a related form of association, and at least partial autonomy and autocephaly²². However, many of the criteria given in these lists are often impossible to measure or observe archaeologically²³.

Due to the development of new technologies and data such as regional and spatial analysis, later discussions tried to articulate process in terms of social evolutionary models. Social, political and economic factors began to be discussed. Childe, with his theory of urban revolution, again played a role in this phase as well as studies of Sherratt²⁴ and Zeder²⁵. These scholars argued that formation of cities is as much about social relations as it is about economy and politics.

¹⁹ Service, 1975, pp. 85-280.

²⁰ Childe, 1950.

²¹ Adams, 1966.

²² Weber, 1958, pp. 80-81.

²³ Aufrecht, *et al.*, 1997, p. 180.

²⁴ Sherratt, 1981.

Osborne²⁶ suggests that towns can be explained by economic, social and political aspects however it is not necessarily the only way to look at the matter. Osborne simplifies the question and approaches to poleis as towns or cities “relatively densely populated” settlements with shifting functions.

This misconception of Greek *polis* being displayed as the ideal model for city and state introduces an impasse for the aims of this thesis. The problem is that the definitions of *polis* are mainly based on highly idealized cases like Athens, and the handful of selected idealized poleis does not represent the majority, especially when dealing with settlements in Asia Minor.

After considering the general theories which take shape around the word *polis*, it would be logical to turn back to the foundation of the concept and begin with the simple truth that *polis* meant the “settlement” and the “community” both. Archaeological methods are devised to comprehend the settlement since the community is irreversibly lost to the researchers. As Ehrenberg and Morris expressed, *polis* is an abstract concept. In order to reveal the abstract features of the *polis*, the physical *polis* should be defined. Plenty of valuable studies endeavor to present a definition of *polis*, however, with each attempt to establish a new definition, *polis* term becomes more and more confining, thus loses its practicality. As Finley states “The block in definition arises from the difficulties, apparently insuperable, of incorporating all the essential variables without excluding whole periods of history in which we all know cities existed, and on the other hand, of settling for a least common denominator without lodging on a level of generality that serves no useful purpose”²⁷. Presenting a new definition is not the purpose of this thesis, what this study aims to achieve may be better described as “un-defining” the *polis*. What un-defining means in this context is stripping as many layers as possible from what the *polis* term came to imply.

²⁵ Zeder, 1991.

²⁶ Osborne, *et al.*, 2005, p. 13.

²⁷ Finley, 1977, pp. 307-308.

It would be most practical to take the *polis* term in the largest sense possible without sacrificing its essence. An all-encompassing *polis* definition should help the *polis* studies of any location or time period. Presenting another list of characteristics of city-state, or producing a new checklist would be the opposite of what this thesis aims to achieve. The best approach to take on the matter of *polis* definition is to keep in mind that every settlement has a rather unique settlement form and different criteria. Applying a predefined check list may not prove healthy since every settlement is shaped by its own geography, population and socio-political conditions.

Since, choosing a definition that suits the purpose of the study best and forcing the data at hand into that predefined pattern is an unacceptable method for scientific research, this study will first analyze the data obtained from excavations, surveys, and literature.

2.2. Methodology

Within the scope of the study, aforementioned intra-site study is based upon the data obtained from Burgaz excavations. The settlement plan and its changes throughout different settlement periods defined for Burgaz is examined and compared to each other in order to comprehend the change of physical settlement and the transformation of its functions.

Methodology adopted for the analysis of the survey data was operated digitally with the technical aspect of ArcGIS tools and theoretical approach of settlement pattern analysis.

The digital map of Datça Peninsula was manually produced from the scans of 1:25.000 scaled topographical map sections, elevation values represented with contour lines at 50 m intervals, acquired from T.C. Harita Genel Komutanlığı. This map sections were combined and converted into Digital Elevation Model (DEM) of the region, later, locations of the sites were transferred to the DEM. Every group of information deemed

necessary were added as different layers that can be taken into account for certain analysis. All of these steps provided the essential base for analyses. Spatial Analyst Tools were utilized for surface computations such as aspect, viewshed and observer point analyses, and Map Algebra tool was used for site size calculations. Spatial Statistics Tools were used for Average Nearest Neighbor Analyses.

Digital analyses are definitely versatile methods when working with spatial data, however even the best software tools are null without theoretical base. Within the scope of this thesis settlement pattern analyses are suggested as a way of looking at the region as a whole and how each site interacts with the others, rather than examining the sites individually. Settlement pattern analysis was first introduced in the 1930s as a method to understand the relation between settlement distribution and environment of a region. Willey in his ground-breaking study of Viru Valley in South Africa was the first one to use settlement pattern term²⁸. Distribution of sites in a region and their distance to each other are significant calculations for determining economic, political and social relations between those sites.

One of the techniques used for distribution analyses, was offered by work of Clark and Evans for an ecological study in 1954 introduced as nearest neighbor analysis²⁹. Since then many archaeologists adopted this technique in order to explain spatial distribution of the sites in a region, or distribution of findings in a site, yet the reliability of the results has been a point of discussion³⁰. In order to avoid possible error, one must know how the analysis work, so the interpretation on the results could be done accordingly. First of all, nearest neighbor analysis calculation is based on average distance from each feature to its nearest neighboring feature. Nearest neighbor index results displays the ratio of Observed Mean Distance to Expected Mean Distance and calculated average

²⁸ Willey, 1953, p. 155.

²⁹ Clark & Evans, 1954, pp. 445-453.

³⁰ Pinder, *et al.* 1979.

distance is the expected distance between the sites³¹. If the index is smaller than 1 the outcome of the analysis will represent clustering, and if it is smaller than 1, analysis result will show dispersion³². If the calculation results in a null hypothesis, then the pattern is random and therefore, inconclusive. The most important value that should be included in the computation is the study area. If the area is not identified in proper measurement units, a minimum rectangle which encloses all the input features will be automatically used. This may result in a false regular or dispersed settlement pattern. In this study, the exact surface area is calculated and used as input for the analysis. The formula used for the analysis is like below:

The Average Nearest Neighbor ratio is given as:

$$ANN = \frac{\bar{D}_O}{\bar{D}_E}$$

where \bar{D}_O is the observed mean distance between each feature and its nearest neighbor:

$$\bar{D}_O = \frac{\sum_{i=1}^n d_i}{n}$$

and \bar{D}_E is the expected mean distance for the features given in a random pattern:

$$\bar{D}_E = \frac{0.5}{\sqrt{n/A}}$$

In the above equations, d_i equals the distance between feature i and its nearest neighboring feature, n corresponds to the total number of features, and A is the area of minimum enclosing rectangle around all features, or it's a user-specified Area value.

³¹ Average Nearest Neighbor. (20.08.2016). Retrieved from <http://desktop.arcgis.com/en/arcmap/10.3/tools/spatial-statistics-toolbox/average-nearest-neighbor.htm>

³² Pinder, *et al.* 1979, p. 431.

The average nearest neighbor z-score for the statistic is calculated as:

$$z = \frac{\bar{D}_O - \bar{D}_E}{SE}$$

where:

$$SE = \frac{0.26136}{\sqrt{n^2/A}}$$

For this study, most probable problem which may occur as a result of nearest neighbor analysis is due to the quantity of input features, since the recommended number for this analysis is at least a hundred, whereas the dataset of this case is merely 16 at most. On the other hand, even though the number of sites given for the analysis is small, results are meaningful and reliable when considered the regular pattern of the sites in Burgaz territory is fairly observable by eye.

Central place theory and size-rank analysis are mostly adopted for political issues concerning the sites. Rank-size distribution of the sites within the scope of this study is based on physical size of the sites, however the data used for ranking needs clarification since the given size values include both settlement area of a site and other areas with different functions. Each one of the 16 sites analyzed here have settlement areas, but many of them also have one or more specific areas used for different functions such as *necropolis*, pottery workshop, ritual space, etc. Since the data at hand did not include separate surface sizes for each different functions, the total extent of the site is used for ranking. Another point requiring clarification on site sizes is that the size given for each site does not specify the extent of different periods, therefore the size of a site appears to be the same through the centuries, though this may not be the case. In general, estimation of a site's size by survey only reliable to a certain extent since the surface visibility may not represent the reality in some cases.

Most of the settlement pattern analyses are used for determining the exploitation of resources within a certain site's territory. This perspective is inevitably related to economic and environmental aspects of the site, adapting least-cost principle to site catchment analysis³³. Site catchment analysis was introduced by Claudio Vita-Finzi and Eric Higgs for analyzing the archaeological sites and their relation with environments³⁴. Fundamentals of this method mainly lay in cost-benefit principle, suggesting that the maximum land exploited by a certain site would have a 5 km radius for agricultural activities. The 5 km radius limit is based on an hours walk in ideal terrain conditions, however several ethno-archaeological studies showed that farmers rarely walk more than 3-4 km to their fields³⁵. In the ideal settlement pattern, each site would have its own 5 or 3 km radius area to exploit and the circles would be adjacent but not overlapping. Even though site catchment analysis primarily adopted for prehistoric sites, agricultural practices seem reasonably similar in classical antiquity, therefore may prove useful for this case.

With the emergence of Processual Archaeology in the 1960s settlement pattern analyses, among other analytical approaches and techniques, began to gain popularity in archaeological studies. Settlement pattern analysis applications to archaeological studies became even more common in the 1970s³⁶ and continued to be utilized since then. However with the launch of Geographic Information Systems in the 1990s settlement pattern analysis became easier to apply and interpret.

The data at hand will be analyzed and interpreted based on the theoretical and methodological framework presented above in order to understand the political and economic environment of Datça Peninsula from Geometric to Hellenistic Period. The position of Burgaz within this environment is the primary question of the study.

³³ Johnson, *et al.*, 1997.

³⁴ Vita-Finzi, *et al.* 1970.

³⁵ Chisholm, 1968.

³⁶ Bevan & Connolly, 2006, pp. 218-219.

CHAPTER III

3. ANALYSES

3.1. Definition of the Area

3.1.1. Historical Background of the Site

Before presenting the archaeological evidence, a brief summary of historical background of the region could help better understanding the political environment which Burgaz was a part of. Historical information about Knidos is abundant in ancient texts, beginning as early as the 12th century BC with migrations of Aeolian, Ionian and Dorian to Anatolia. The Dorians founded Knidos after they colonized Rhodes and Cos³⁷. Knidos was one of the six cities forming the Dorian City League: Hexapolis along with Cos, Halikarnassos, Ialysos, Kameiros and Lindos³⁸.

The Persian domination over Western Aegean was especially strong during reign of Cyrus the Great from 550 to 529 BC who divided the land into satrapies and collected mandatory taxes from the Anatolian cities. As the Persian domination became stronger, development of Greek city-states was hindered and a number of them begin to form unions among themselves. In 478 BC Knidos was a member of such union, Attica-Delos Maritime League, one of the most prominent resistances against Persian hegemony. With the formation of "Delian Naval League", Persian threat was eliminated and the

³⁷ Gökdemir, 2006 p. 26; Atıcı, 2013, p. 26.

³⁸ *Ibid.*

Carian cities came under Spartan rule for a short period of time. City-states in the region renewed their independence following the Marathon Victory in 490 BC, which initiated a transformation from agricultural-based structure to a trade-based structure and accordingly, influenced and changed the urbanization of the city-states³⁹. The trade activities and urbanization processes, which were decreased as a consequence of the Peloponnesian Wars, was accelerated again in the more stable period due to the King's Peace in 378 BC⁴⁰. Small war ships were repurposed as trade ships as a consequence of the change from a semi-closed agricultural economy to a specialized agricultural production and economy⁴¹. Mediterranean communities became significant shareholders in maritime trade thanks to their position on the major sea route linking the markets of Black Sea to the East Mediterranean ports. This caused some changes in *polis* structure and paved the way for the emergence of trade centers formed by *synoecism* in Western Anatolia⁴².

The change of the settlement pattern in the Carian Region represents one of the examples of a *synoecism* process caused by commercial activities. Firstly, the *politai* in Rhodes came together to form a large *polis* in 408 BC⁴³. Located at a strategically important point at the transit route of maritime trade, at the northern tip of the island, the new *polis* became the political and trade center in the island. Following Rhodes, Cos also transplanted its old settlement to the east end of the island, again, at a strategically important transit trade route⁴⁴.

Similarly, since Burgaz was no longer located at the transit trade route, Knidians, after 360 BC, moved their cities to the north of the Knidian Peninsula, to Tekir (Krio) Cape,

³⁹ Tuna, 1996, p. 477-496.

⁴⁰ Cook 1962, pp. 139-140.

⁴¹ *Ibid.*

⁴² Tuna, 1996.

⁴³ Bean & Fraser, 1954, p. 95, Cook, 1962, pp. 142-143.

⁴⁴ Cook, 1962, pp. 141-142.

located at the tip of Datça peninsula, offering natural ports and an advantageous geographical condition as it was the junction point of sea routes⁴⁵.

3.1.2. Archaeological Researches at Burgaz (Palaia Knidos)

Archaeological interest at Burgaz began with the hypothesis of Bean and Cook, inspired by Thucydides, suggesting that the Old Knidos might have been located at Burgaz, and the Knidians after 360 BC have made an attempt to move their city to the west of Knidian Peninsula, in the vicinity of Tekir, located at the tip of Datça Peninsula. In the early 1980s Prof. Dr. Numan Tuna conducted an exhaustive survey of the peninsula and suggested that Burgaz was a possible location for Old Knidos, consequently beginning the systematic excavation of the site in 1993. Since then, 20 ha was intensively surveyed by archaeo-geophysical prospection; and a total area of 11675 m² was excavated compliant with the results of the survey. The investigations at four main sectors, namely NE, SE, *Acropolis*, and B11, explored the occupation areas such as the *acropolis*, ports, residential quarters, public building and the orthogonal layout of the city.

Earliest finds at Burgaz dates back to 8th century BC with pottery fragments from Geometric Period, which were mostly recovered from soundings⁴⁶. Even though Geometric pottery fragments found during excavations are important components of the site's stratigraphy, there are not any solid links between these and architectural features. Earliest architectural remains are the foundations of the walls from Archaic Period which points at the original settlement plan at Burgaz. Excavations revealed that settlement with its streets and parcels in early 6th century BC was orthogonal planned⁴⁷

⁴⁵ Bean & Cook, 1952, pp. 184-185.

⁴⁶ See the excavation reports published by Tuna, *Kazı Sonuçları Toplantısı* volumes ; 1998-2016.

⁴⁷ Tuna, 1996, p. 258 .

demonstrating that orthogonal plans existed long before Hippodamos⁴⁸. Reconstruction phases of later periods mostly abided to the original plan throughout the centuries of settlement⁴⁹. Two major reconstruction phases were observed during the excavation of various parts of the settlement. Main axes and boundaries were kept untouched during this phases. Earlier one is dated back to the middle of 5th century BC and the second large scale reconstruction phase took place during Late Classical – Early Hellenistic Periods, the 3rd quarter of the 4th century to be precise, concurrent with the transformation of the settlement function⁵⁰. Domestic areas were effectively altered to become workshops and storage units for agricultural activities and logistic purposes. Wine and olive oil presses, stilling basins and drains from this period were unearthed in buildings which used to be houses. There are also a number of pottery producing workshops and metal ateliers found in similar areas. In Hellenistic and Roman Periods a large part of the settlement was surrounded with fortification walls, which at places were built upon early domestic areas, somewhat constricting the settlement area. Other than these later period activities, extent of the settlement was mostly the same from 6th century BC to late 4th century BC.

The field practice currently focuses on exploring the extent and depth of occupation across the various sectors of the site (Fig. 2, Fig.3, Fig.4).

3.2. Settlement Pattern Analyses

Data used for intra-site analysis is based on the archaeological evidence collected and recorded during the excavations conducted at Burgaz. The extent of the settlement mostly remains unchanged, and the original orthogonal layout was also kept intact from

⁴⁸ Rykwert, 1988, pp. 85-88.

⁴⁹ Gökdemir studied the orthogonal layout of Burgaz settlement in detail for her thesis dissertation “The Classical Period Houses in Burgaz: An Archaeological and Architectural Overview”.

⁵⁰ Gökdemir, 2006, p. 36.

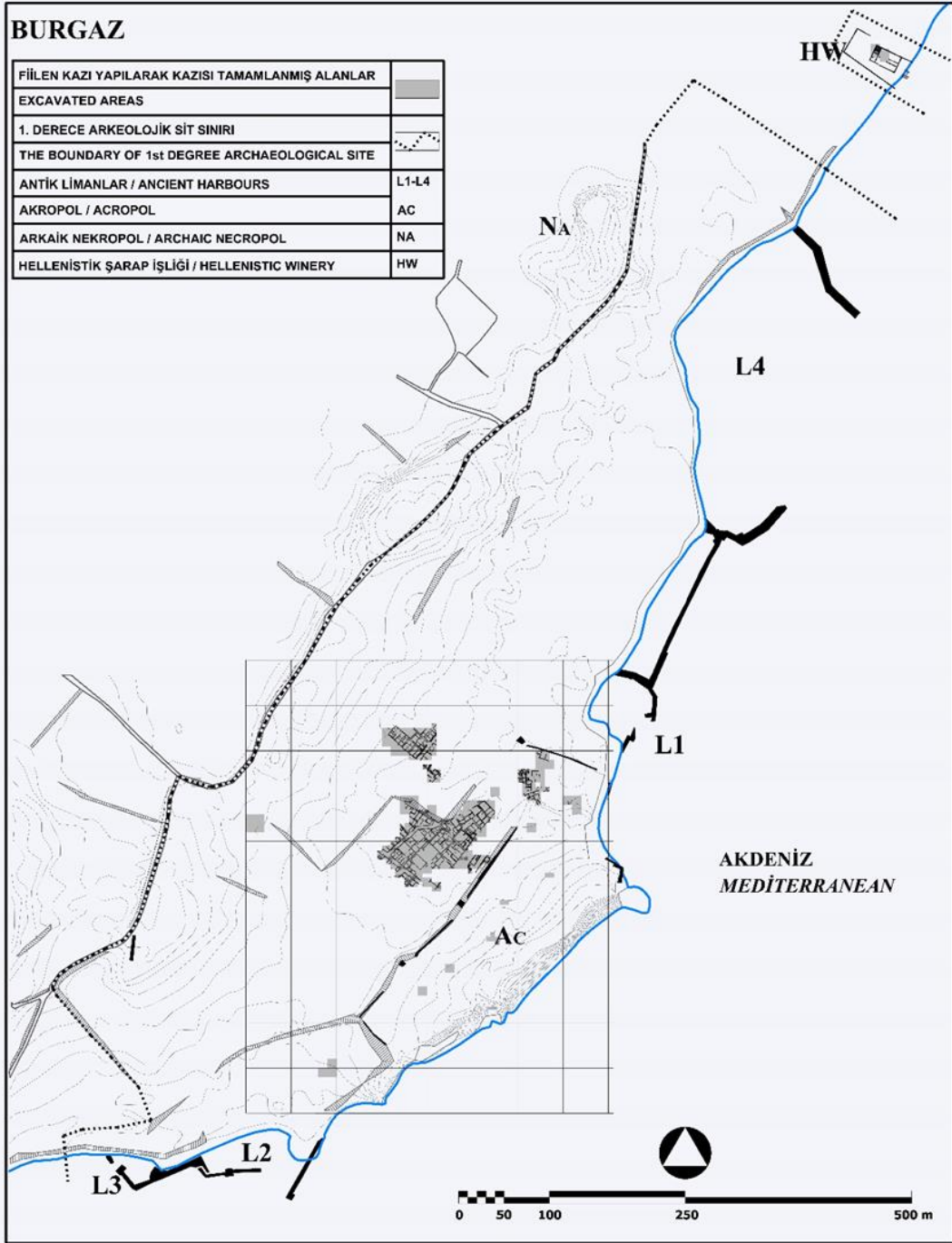


Figure 2. Site Plan of Burgaz



Figure 3. Burgaz settlement orthogonal layout



Figure 4. Public building at Burgaz⁵¹

6th century BC until the abandonment of the site. The stability of the settlement size is may not be useful for this study's analyses goals, since it prevents us from observing the relation between settlement size and site distribution of the region. However the change of site function can provide an even more utilizable data to compare with the regional changes.

For the regional scale studies a comprehensive archive research and complementary fieldwork deemed necessary for mapping out the patterns in the region. Data from the survey conducted by Tuna, is digitized and improved with recent visits to some of the sites. In order to use the archaeological data effectively, classification of the sites in terms of function, date and geographical features are marked on the map to visualize the settlement distribution and the settlement patterns for each archaeological period. Tuna

⁵¹ Retrieved from Burgaz Excavation Archive.

in his survey recorded 62 locations in total (Fig.5); however he only visited and defined 39 of them for the purposes of his thesis (Table 1).

Within the scope of this thesis 38 of those locations were classified and examined (Fig.6) and the one at Hisarönü is excluded, because this site is not actually located within the boundaries of the study. Out of these 38 locations, 10 sites were not clear on which periods they represented, thus they could not be shown on maps prepared for each period, or used for analyses for that matter. 12 out of 38 of the locations were dated to later periods such as Roman, Byzantine, Antiquity or Middle Age, making them somewhat irrelevant to the framework of the study. In conclusion only 16 locations which were dated to one or more of Archaic, Classical and Hellenistic Periods, were suitable for settlement pattern analysis.

It is quite possible that working with the survey data collected more than 30 years ago has been the most time consuming and challenging part of this study. Legacy data studies that became more prevalent in archaeology in past 10 years has been a great compass for this thesis, providing the perspective required for working with this type of data. Tuna's survey data is considered to be the foundation for the analysis of regional approach and carries a great value for several reasons. The most important aspect of this legacy data is that it cannot be recollected today since almost all of the sites defined and recorded within the dataset are heavily destructed by nature or human hand. Another significant benefit provided by legacy data is the advantage of working with both old and new data combined together, the most comprehensive dataset possible. Legacy data also presents a chance to re-analyze the old data with new questions and techniques, transforming somewhat obsolete data into reusable information. However, in order to work with this type of data one must digitize or update the digitized data, both are done in this thesis case. The data collected and recorded by Tuna, was digitized using 4th Dimension and MapGrafix software products on Mac OS in 1993 for the first time. Opening these software programs on modern operating systems was near impossible and required some

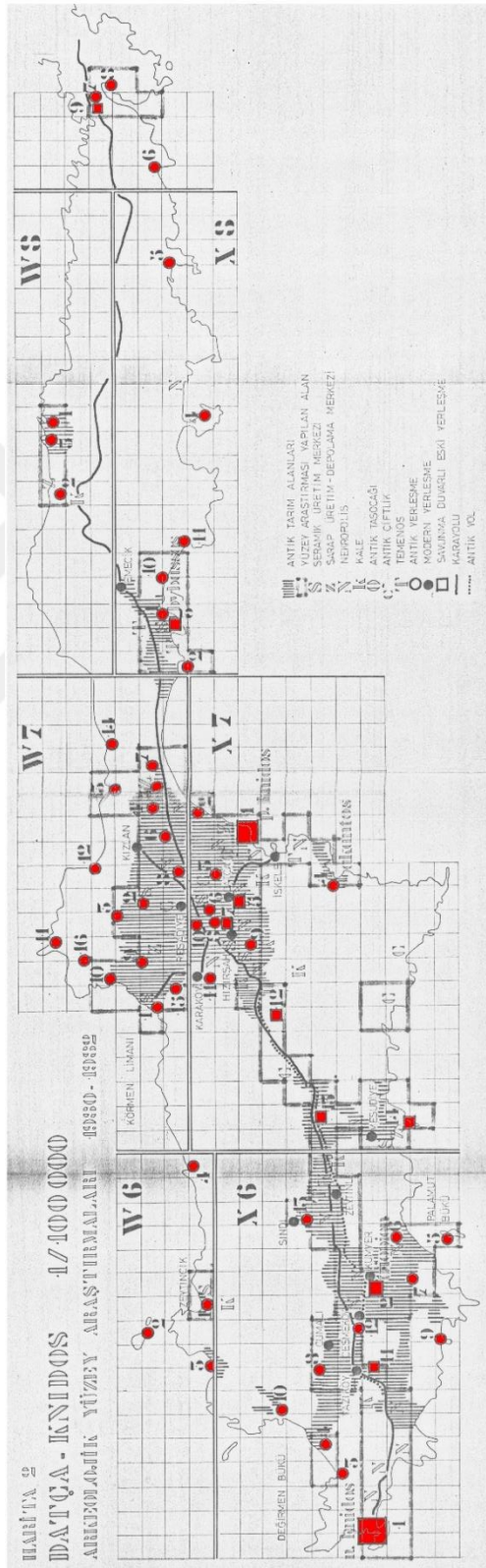


Figure 5. 62 sites defined by Tuna

Table 1. Sites of all periods and unknown dates as described by Tuna

No	Code	Name	Findings and Features	Period	Size (ha)
1	X7/1	Burgaz	Old (Palaia) Knidos	8th century BC – 7th century AD	51
2	X7/2	Karfitepe	Ritual Well (Archaic) Necropolis	6th-2nd centuries BC	10
3	X7/3	Gümüş	Olive oil presses Storage units Agricultural terraces Necropolis	unknown	3
4	X7/6	Kiliseyanı	Pottery workshops Clay bed Agricultural terraces	4th century BC – 2nd century AD	16
5	X7/9	Maltepe	Garrison lookouts (5th century BC) Fortification walls (Late 5th – 4th centuries BC) Agricultural terraces (Hellenistic – Roman) Olive oil and wine presses Necropolis (Archaic 8th-6th centuries BC)	8th century BC-2nd century AD	3
6	X7/10	Bağharımı	Agricultural terrace walls Olive oil and wine presses	Late Hellenistic	9
7	X7/11	Yassıdağaltı	Agricultural terraces (Hellenistic) Necropolis (Late Roman)	Hellenistic – Roman	3
8	X7/13	Döşeme Kalesi	Fortress (Late antiquity - Middle Ages) Olive oil and wine presses (Late Antiquity)	Late antiquity- Middle Ages	3

Table 1 (continued)

9	X7/14	Mesudiye	Fortified areas (Classical) Agricultural terraces (Hellenistic) Storage units (Hellenistic) Pottery workshops (Hellenistic)	Classical, Hellenistic and Byzantine Periods	3
10	W7/1	Körmen Limanı	Pottery workshops	Geometric, Hellenistic, Roman Periods	10
11	W7/2	Muhaltepe	Farmhouse (Late Hellenistic) Pottery workshops	Late Hellenistic	2
12	W7/3	Tekirlik	Unidentified surface pottery finds	unknown	1
13	W7/5	Yağtaşı – Devtaşı	Olive oil and wine presses	unknown	4
14	W7/6	Billiktepe	Unidentified surface pottery finds	unknown	7
15	W7/7	Kisletepe	Unidentified surface pottery finds	unknown	8
16	W7/8	Killiktepe	Surface pottery finds	Classical, Hellenistic, Late Antiquity	3
17	W7/9	Güznetepe	Olive oil presses	unknown	7
18	W7/10	Gerenci	Architectural features (Byzantine)	Byzantine	5
19	W7/13	Germe	Surface pottery finds	6th century BC – Late Roman	4
20	W7/15	Ölgün Boğazı	Pottery workshops	unknown	4
21	X6/1	Tekir (Knidos)	Hellenistic Knidos	Hellenistic, Roman, Byzantine Periods	57
22	X6/2	Kumyer Kalesi	Fortress (Hellenistic) Fortification walls (Classical) Inscriptions (6th century BC) Agricultural terrace walls Farmhouses Temple of Aphrodite (Late Hellenistic – Roman) Necropolis	Archaic, Classical, Hellenistic, Roman Periods	12

Table 1 (continued)

23	X6/3	Barkaz	Harbor	Late Antiquity	2
24	X6/4	Killik	Barrel-vaulted structures (Middle Age) Agricultural terraces	Middle Age	6
25	X6/5	Palamutbükü Adası	Unidentified surface pottery finds Seaport construction	unknown	1
26	X6/6	Palamutbükü, Kuzey Yamaçları	Agricultural terrace walls (Hellenistic) Storage units Necropolis	Hellenistic	1
27	X6/7	Karıncaı	Agricultural terrace walls Church (Byzantine) Fountain structure	Byzantine	2
28	X6/8	Kisleyanı	Inscription Agricultural terrace walls Church	Late Antiquity Bronze Age	4
29	X6/12	Çeşmeköy	Church Bridge Necropolis	unknown	1
30	X6/13	Asartepe	Fortification walls (Hellenistic) Olive oil press Inscription Ritual Temenos	Hellenistic	1
31	W6/1	Mersincik	Barrel-vaulted structures (Middle Age) Fortification walls Pottery workshops	Middle Age	5
32	X8/1	Emecik	Barrel-vaulted chapel (Middle Age) Fortress Terrace walls (Pre-Hellenistic, Archaic) Offering to Apollo (5th – 4th century BC) Doric Building remains (Hellenistic – Roman) Burial chamber	Archaic, Classical, Hellenistic, Roman, Middle Age	1
33	X8/2	Yolluca Adası	Fortress (Middle Age) Fortification walls	Antiquity, Middle Age	2
34	X8/5	Gavurdere	Architectural features Surface pottery finds	Late Antiquity	3

Table 1 (continued)

35	W8/1	Gölyeri	Architectural features Surface pottery finds	Late Antiquity	4
36	W8/2	Göktaş	Storage units Fortress (Middle Age) Fortification walls (Antiquity, Middle Age)	Antiquity, Middle Age	3
37	W8/3	Kepçemel Burnu	Surface pottery finds	Late Antiquity	1
38	W9/3	Balıkaşiran	Fortress (Middle Age) Chapel (Middle Age) Necropolis (Late Antiquity)	Late Hellenistic, Late Antiquity, Middle Age	11

unorthodox methods. An emulator software and interface for Mac OS 1993 was utilized for this purpose and only a part of the data could be read. In order to work with this data another set of files were used. These were a set of CAD files of Datça Peninsula maps and multiple layers of information such as forested areas, soil quality zones, modern roads and settlements, as well as surveyed areas. All these data in different formats were combined with ArcGIS 10.4 software to create a digital database of the region. Another group of data, including the elevation values, site functions and names from Tuna's Ph.D. thesis, was manually typed into the same software project. Digitization of these data provided an opportunity to analyze and observe the peninsula as a whole or only certain selected features.

Although Burgaz and Datça Peninsula has a great amount of data accumulated throughout the years, there can be still some missing parts of information that cannot be retrieved no matter how careful the archaeologist and researchers work. In order to obtain a well-rounded set of information, some sites with similar conditions, such as Klazomenai and Bozburun Peninsula will be compared to Burgaz to provide any missing components. Sites mentioned above were chosen because of the parallel process of *synoecism* they all went through around 4th century BC.

3.2.1. Topographic Analyses

Topographic base data used for the analysis consists of 1:25.000 scaled 11 sections of map acquired from T.C. Harita Genel Komutanlığı. Standard topological maps with contour lines representing features like mountains, plains, canyons and plateaus were digitized from scans in order to create a Digital Elevation Model (DEM) of Datça Peninsula (Fig.7). DEM shows the elevation change gradually from sea level to 1100m height, brown being the lowest and blue being the highest elevation value.

Datça Peninsula is an interesting geomorphological region in Southwestern Anatolia, located between the Gulf of Gökova in the north and the Gulf of Hisarönü in the south. The region is basically a ridge with its mountainous and hilly terrain, and has a severely indented coastline. However, the northern shores are comparatively smoother because of the east-west extension faults which controls the Gökova Graben⁵². As seen in the DEM at most places the coastal profile is quite steep and the sharp slopes on the coasts continues down under the sea, rendering most of the shoreline unfit for any kind of seafaring activities. Alluvial cones on stream mouths and coastal plains have limited space on the coastline of the peninsula. At central part of the Datça Peninsula, there is an northwest-southeast trending depression of nearly 5 km radius, named Datça Graben also known as Datça Isthmus (Fig.8). This area is the most densely populated part of the peninsula from Archaic Period to Late Antiquity, probably because of its relatively smooth terrain.

⁵²Dirik, *et al.*, 2003, p. 16.

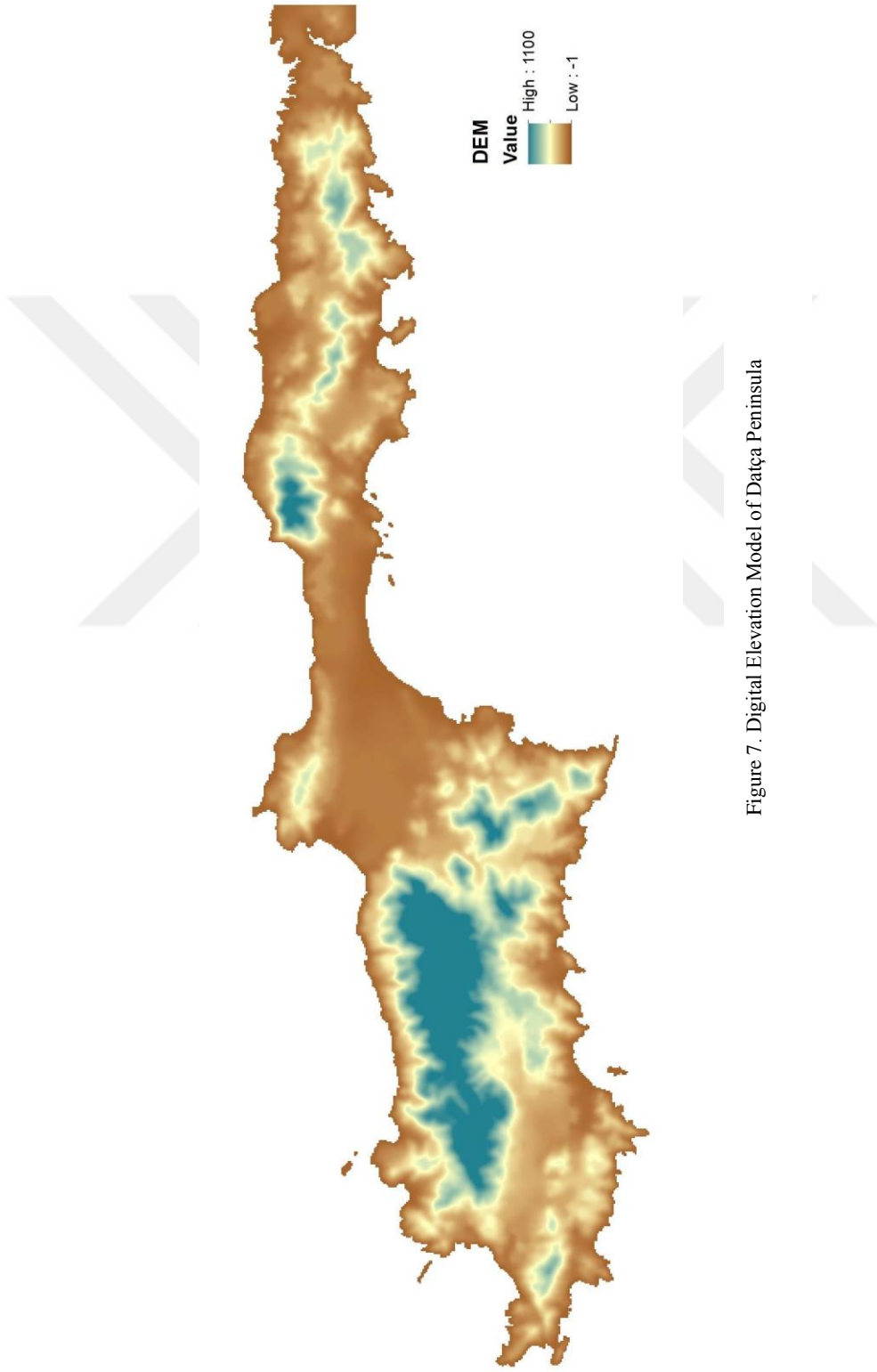


Figure 7. Digital Elevation Model of Datça Peninsula



Figure 8. Datça Graben⁵³

⁵³ Dirik, *et al.*, 2003, p. 16.

3.2.2. Soil Analyses

Soil analysis were based on two datasets, soil quality and slope values. These are considered the essential information for determining the arable lands. The soil quality classes were already defined by Tuna based on Mater's study of land classification on Datça Peninsula⁵⁴ as follows: alluvial deposit, reddish brown non-calcareous soil, reddish brown calcareous soil, and reddish brown Mediterranean (Terra Rosa). The soil quality map shows the three arable soil types combined with the existence of required soil thickness (Fig.9).

Data provided by Tuna includes the most accessible arable zones with different characteristics⁵⁵. First class soil type represents the alluvial deposits with 60cm thickness. Second class soil type is identified as reddish brown non-calcareous soil, usually less than 50cm in thickness. Reddish brown Mediterranean soil, which is also known as Terra Rosa, is classified as the third soil type with 1m thickness at certain parts. The intersection map of slope and soil quality indicates that all arable lands are on low slope value areas (Fig.10).

Slope values lower than 20 degrees are shown in grey tones in the map also represents the maximum slope value suitable for agricultural activities⁵⁶. Black areas corresponds to unsuitable slope values between 20 to 48 degrees, and the white areas stand for all three classes of soil type suitable for agriculture. As seen on the map, none of the white areas intersect with black areas which shows that all of the arable lands has also slope values lower than 20 degrees. Soil quality maps of Datça Peninsula (Fig.9, Fig.10) also show the locations of all 16 sites from Archaic to Hellenistic Period. Out of these 16 sites, 10 of them are not located on areas with quality arable soil. Sites which are on arable lands are located near the edges on these areas, with the exception of Killiktepe.

⁵⁴ Mater, 1977, pp. 189-209.

⁵⁵ Tuna, 1983, pp. 26-28.

⁵⁶ FAO, 1976.

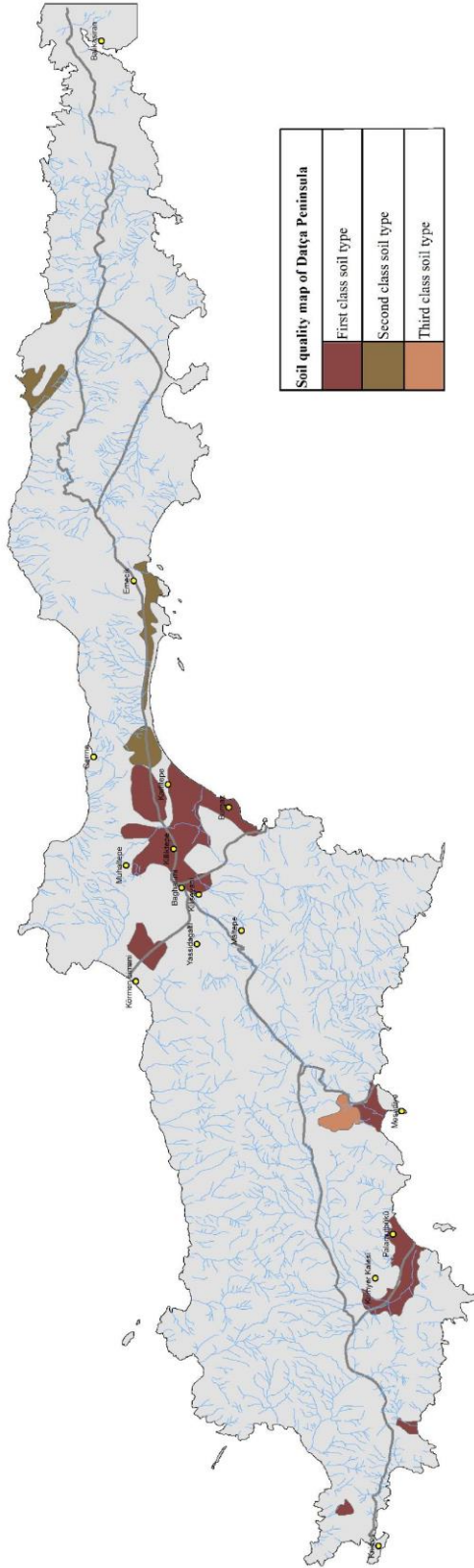


Figure 9. Soil quality map of Datça Peninsula

Even though the location of Killiktepe appears to be on alluvial deposit, the description of the site mentions that the soil deposit here is quite shallow. Terrace agriculture is a common application in Datça Peninsula and it is still possible to detect ancient agriculture terraces. Out of 16 sites, 7 of them have agricultural terraces and some of them do not appear to be located on arable areas however they are situated on small pockets of alluvial deposits where the slope allows the accumulation.

3.2.3. Site Type and Distribution

A. Geometric Period

Geometric Period in Datça Peninsula is not richly represented by archaeological finds. Only 4 sites shown on the map yields information of the period and Burgaz is only on this map because of the Geometric pottery fragments found there (Fig.12, Table 2, Appendix A). Other 3 sites on the other hand provides more information about their function.

Table 2. Geometric Period Sites

No	Code	Name	Site Type	Finds and Features	Size (ha)	Rank
1	X7/1	Burgaz	Settlement	Necropolis	51	4
2	W7,1	Körmen Limanı	Settlement	Pottery workshops	10	3
3	X7,9	Maltepe	Settlement	Necropolis	3	2
4	X8/1	Emecik	Ritual site	Sanctuary of Apollo	1	1

Most prominent site dating back to Geometric Period is without a doubt, Emecik with the Sanctuary of Apollo. The archaeological excavations conducted at the site between 1998 and 2006 concentrated on three main sections: Upper Terrace, Hellenistic Doric

Temple, and Lower Terrace⁵⁷ (Fig.11). The Lower Terrace was regularly used for ceremonial and sacrificial purposes since the Late Geometric Period and the sanctuary was used for cult practices dedicated to Apollo⁵⁸. The sanctuary was abandoned during the Classical Period until it was rebuilt in the 4th century BC. According to Tuna, evidence also suggests Emecik being a suitable location for Triopion⁵⁹, where the Dorians gathered to carry on their rituals dedicated to Apollo Triopios as quoted by Herodotus (Herodotus 1.144).

Other sites on the Geometric Period map are Maltepe and Körmen Limanı. Maltepe is a *necropolis* consisting of both tumuli type burial chambers and *pithos* burials dating back from 8th to 6th centuries BC. Körmen Limanı was the location of a pottery workshop.

Size distribution of the sites are given in Table 3 represents the extent of sites based on the surface visibility at the time of survey. It is no surprise that site distribution does not show any pattern since the number of sites are extremely few. Limited data on this period prevents a more detailed analysis, however it still illuminates the regions earlier occupation extent.

⁵⁷ Tuna, 2004, p. 41.

⁵⁸ Tuna, 2012, p. 18.

⁵⁹ *Ibid.*

EMECİK - SARI LİMAN - APOLLON KUTSAL ALANI

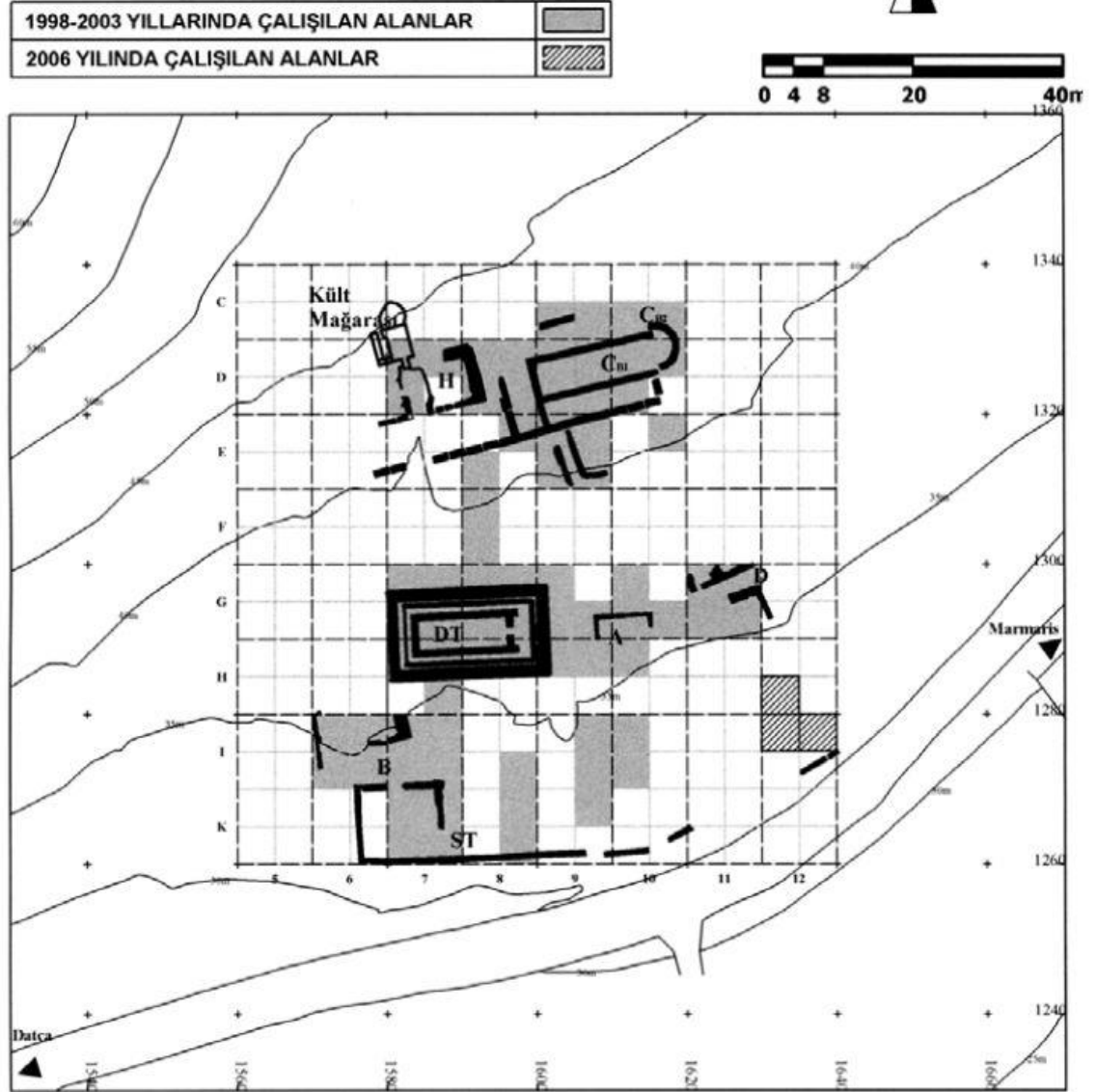


Figure 11. Emecik Apollo Sanctuary: Upper Terrace, Hellenistic Doric Temple, and Lower Terrace

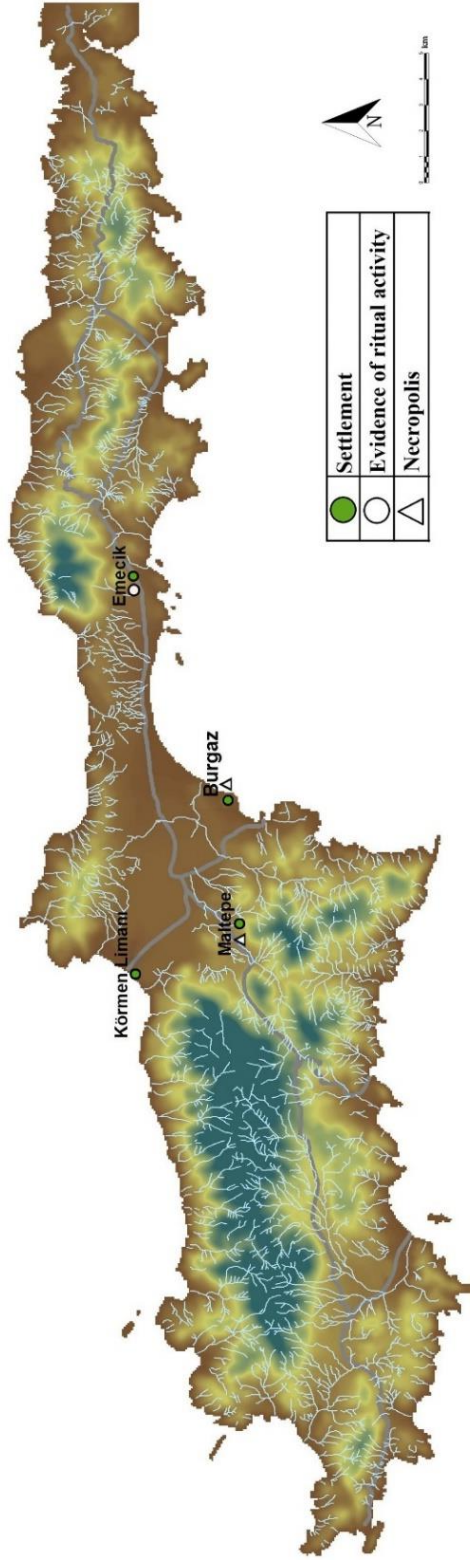
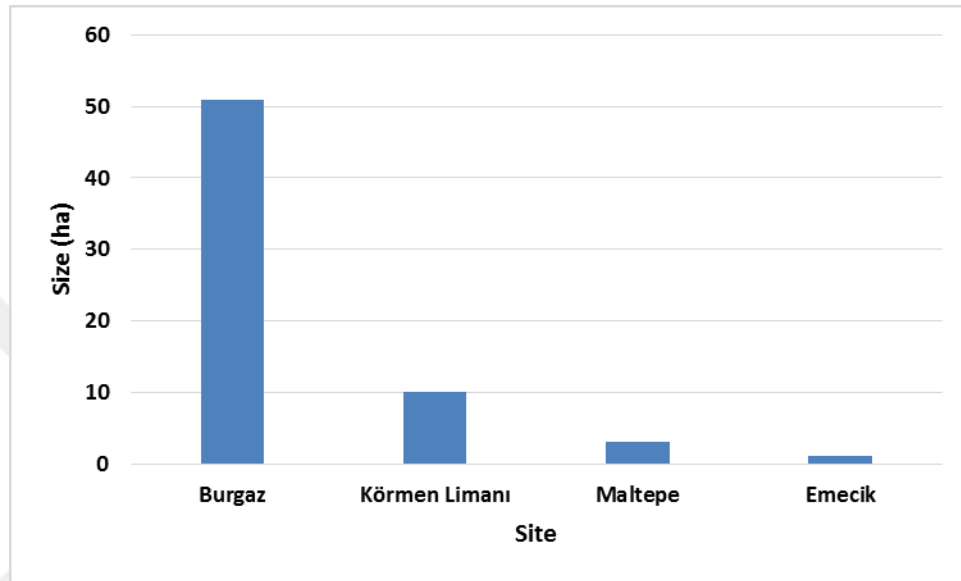


Figure 12. Geometric Period Sites

Table 3. Geometric Period site size chart



B. Archaic Period

The excavations at Burgaz determined the presence of original settlement phase dates back to Archaic Period. Almost all of the settlement was already planned and built during this phase for the first time. While a new city was rising at Burgaz, it is also important to think in regional scale. The number of sites increase up to 6 during Archaic Period (Table 4, Appendix A).

In the map, all settlements are marked with a green dot as well as specific symbols for each site type, displaying that regardless of its function each site has a settlement area according to Tuna's descriptions ⁶⁰(Fig.13). It is clearly visible that Archaic Period sites were mostly cult places either used as *necropolis* or for ritual activities. During this period if the Sanctuary of Apollo at Emecik, accepted as Triopion, "was the center of cults of Demeter, Poseidon, the Nymphs, and especially Apollo, celebrated by the

⁶⁰ Tuna, 1983, pp. 351-390.

Dorian pentapolis of Lindus, Ialysus, Camirus, Cnidus, and Cos to the exclusion of other Dorian cities” according to Herodotus. Even if this hypothesis based on literary sources proves to be faulty, the existence of Sanctuary of Apollo at Emecik still indicates that there was an extra-urban cult place within Knidian Territory, close to Burgaz.

Table 4. Archaic Period sites

No	Code	Name	Site Type	Finds and Features	Size (ha)	Rank
1	X7/1	Burgaz	Settlement	Necropolis	51	4
2	X6,2	Kumyer Kalesi	Settlement ?	Inscriptions	12	3
3	X7,2	Karfitepe	Settlement / Ritual site	Ritual well Necropolis	10	3
4	W7, 13	Germe	Settlement	Surface pottery finds	4	2
5	X7,9	Maltepe	Settlement	Necropolis	3	2
6	X8,I	Emecik	Ritual site	Sanctuary of Apollo	1	1

Another ritual place was recorded at Karfitepe location, a rectangular well for sacrificial rituals. Pottery sherds collected from the well shows that the location was used continuously from 6th century BC to 2nd century AD. There is also a *necropolis* positioned on the slopes of the bedrock hill. *Necropolis* at Maltepe also continued to be used during this period, as well as the one at Burgaz settlement.

Ritual places can be an important show of power, trust or conflict. In order to determine the nature of relationships in the region, viewshed analysis for ritual locations were prepared (Fig.14).

Visibility of a site from surrounding areas or the visible areas from the sites practically overlap. Light grey areas represent the visible land, while dark grey stands for non-visible land.

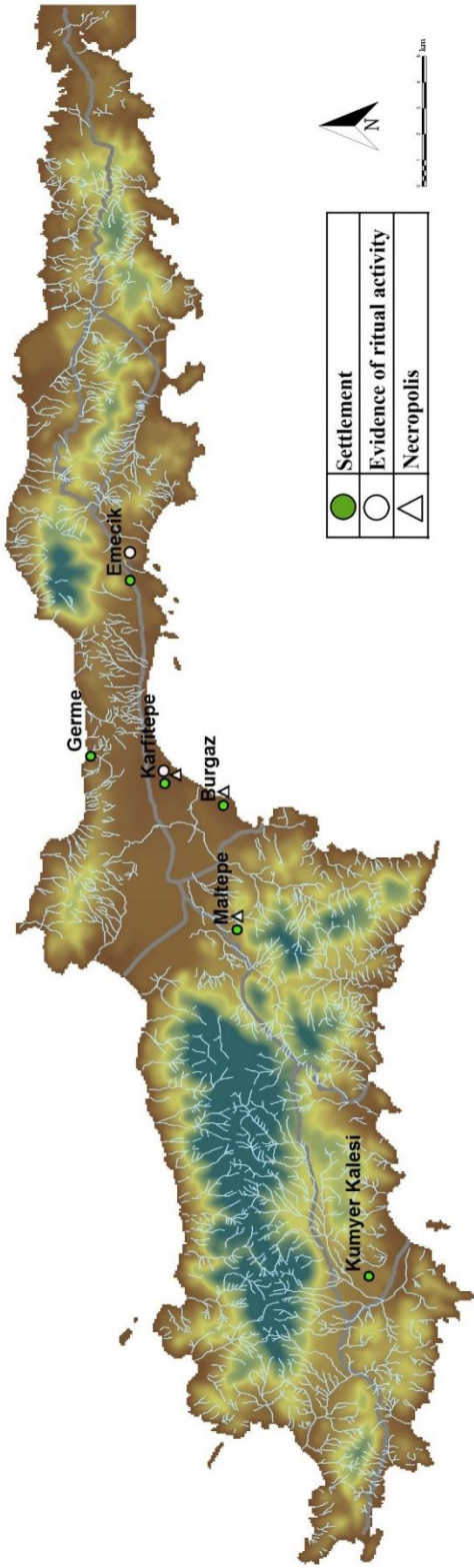


Figure 13. Archaic Period Sites



Figure 14. Viewshed of Ritual Locations for Archaic Period

According to viewshed analysis above it is possible to comment on the high visibility of the ritual locations, Emecik and Karfitepe. First of all high visibility registers as dominant presence on a map and implies the control of the land, resources or people. The visibility of Emecik from the position of Burgaz may be interpreted as the appearance of monitoring the area as the hosting *polis* for visiting groups from other settlements.

Kumyer Kalesi is another interesting site because of two inscriptions from Archaic and Hellenistic Period were found there⁶¹ (Appendix, Fig. 43, 44). One of the inscriptions is especially significant because of the letters ΚΝΙΔΙ written on it.

The size is a significant variable for determining the site hierarchy and settlement pattern, thus the Archaic Period sites in the region were ranked according to their sizes (Table 5, 6). The highest rank, 4, is given only to the largest settlement to see the distribution of other settlements around it. Third order sites are larger than 10 ha, second order sites vary from 3 ha to 10 ha and first order sites are smaller than 3 ha.

Ranking enables us to determine the site hierarchy which is essential to comprehend the settlement pattern. According to Christaller's Central Place Theory in an ideal model of settlement pattern one settlement is considerably larger than the others and serves as the urban/political center of the region⁶². Rank-size table above fits to the ideal model well, however because of the very small number of sites given for the analysis, it is hard to evaluate more on the quantitative distribution of the third, second and first order settlements. A similar situation is also encountered with nearest neighbor analysis: the results are meaningful as far as the settlement distribution is concerned, despite the small number of sites. According to the results of nearest neighbor analysis, Archaic Period sites distributed regularly around the settlement center Burgaz, indicating a regular organization of the land (Fig. 15).

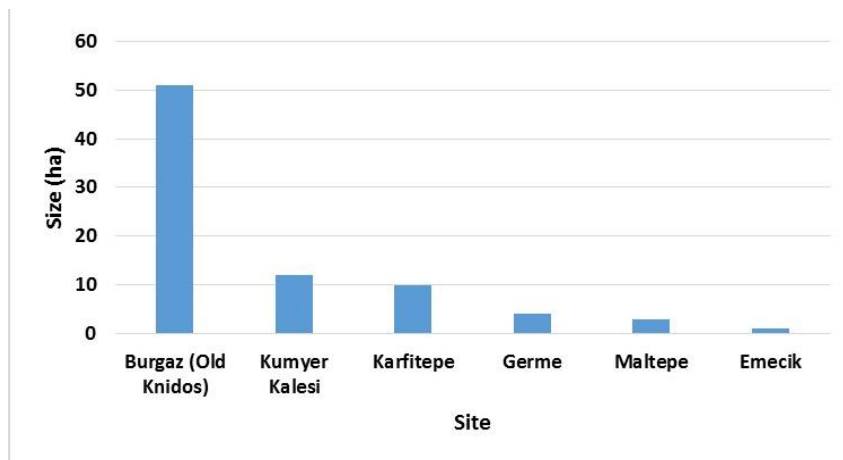
⁶¹ Bean & Cook, 1952, pp. 193-194.

⁶² Christaller, 1933.

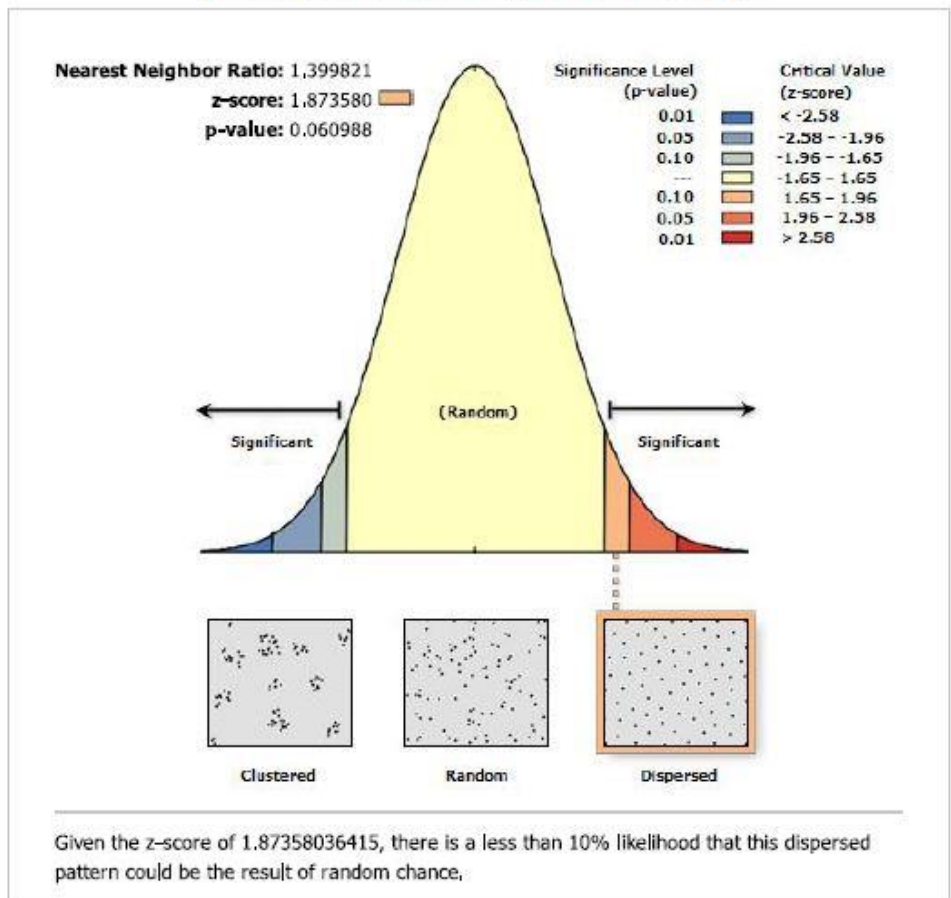
Table 5. Rank-size order of Archaic Period sites

Name	Size (ha)	Rank
Burgaz	51	4
Kumyer Kalesi	12	3
Karfitepe	10	3
Germe	4	2
Maltepe	3	2
Emecik	1	1

Table 6. Archaic Period site size chart



Average Nearest Neighbor Summary



Average Nearest Neighbor Summary

Observed Mean Distance:	5893.5465 Meters
Expected Mean Distance:	4210.2138 Meters
Nearest Neighbor Ratio:	1.399821
z-score:	1.873580
p-value:	0.060988

Dataset Information

Input Feature Class:	Archaic points
Distance Method:	EUCLIDEAN
Study Area:	425421602.000000
Selection Set:	False

Figure 15. Archaic Period average nearest neighbor analysis

C. Classical Period

It is generally accepted by scholars that the reliability of historical sources is always questionable and in archaeological interpretations, they must be referred cautiously. Ancient texts describe Classical Period in Western Anatolia as a turbulent phase with many wars and changing alliances. Marathon Victory, Delian Naval League, Spartan hegemony, Peloponnesian Wars were the major events that left their marks on the period. Until the King's Peace many city-states and empires were unstable for a long while. According to historical sources Knidos was one of the poleis which experienced the phase of turmoil. When the archaeological evidence at hand analyzed and mapped (Fig.16, Appendix A), it can be observed that site number increases up to 8 in Classical Period because of the fortresses built at Maltepe, Mesudiye and Kumyer Kalesi locations (Table 7). However, as for the rest of the peninsula, there are no visible changes in regional scale. In settlement scale, Burgaz remained unchanged in terms of settlement plan, except additional fortification walls at certain spots. The sudden appearance of fortresses during Classical Period in Datça Peninsula may be the result of a need for defense. In that case the archaeological evidence suggest that the environment was not calm and peaceful during this period. Of course this is not sufficient to neither confirm nor reject the information offered by historical sources, it can only be said that the archaeological evidence does not conflict with them.

Table 7. Classical Period sites

No	Code	Name	Site Type	Finds and Features	Size (ha)	Rank
1	X7/1	Burgaz	Settlement	Necropolis Harbors Public building Fortification walls	51	4
2	X7,6	Kiliseyanı	Settlement	Pottery workshops Clay bed Agricultural terraces	16	3

Table 7 (continued)

3	X6,2	Kumyer Kalesi	Settlement	Fortification walls	12	3
4	X7,2	Karfitepe	Settlement / Ritual site	Necropolis	10	3
5	W7,1 3	Germe	Settlement	Surface pottery finds	4	2
6	X7,9	Maltepe	Settlement	Garrison lookouts Fortification walls Necropolis	3	2
7	X7,14	Mesudiye	Settlement	Fortified areas	3	2
8	W7,8	Killiktepe	Settlement	Surface pottery finds	3	2

In order to comprehend the coverage of the region in terms of defense, a viewshed analysis for fortresses is produced (Fig.17). Since the original fortress heights were not protected, standard 5 meters for minimal height of a two-story building were virtually added to ground level for more realistic calculations.

Results of the viewshed demonstrates s strategical coverage of land and sea. While Maltepe location has the high visibility over the most densely populated area and central settlement Burgaz, Kumyer Kalesi is located at an overseeing spot for the less densely populated areas to the west of the peninsula. Fortress at Mesudiye has an advantageous spot, non-visible from the lands behind but has expedient visibility over the sea.

Rank-size order in Classical Period Datça Peninsula remains the same since the only addition to already existing sites are fortresses, which are inconsequential to the ranking (Table 8). Nearest neighbor analysis on the other hand, shows non-negligible changes. By positioning the fortresses strategically over the land, regular distribution of the sites was distorted, resulting nearest neighbor analysis to output random distribution (Fig 18).

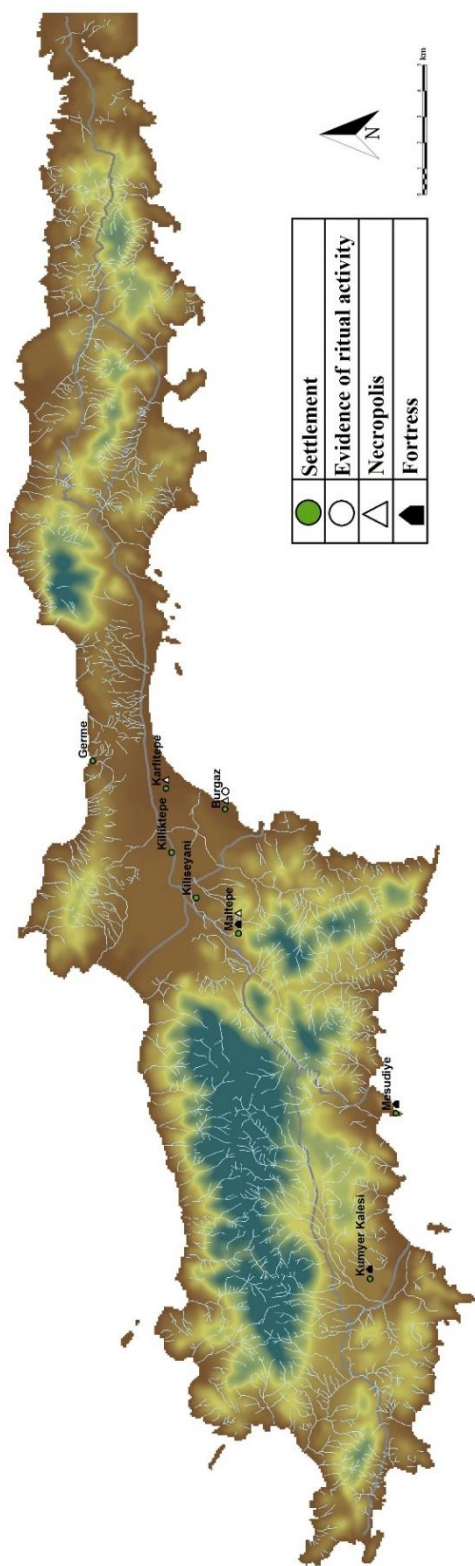


Figure 16. Classical Period Sites

Table 8. Classical Period site size chart

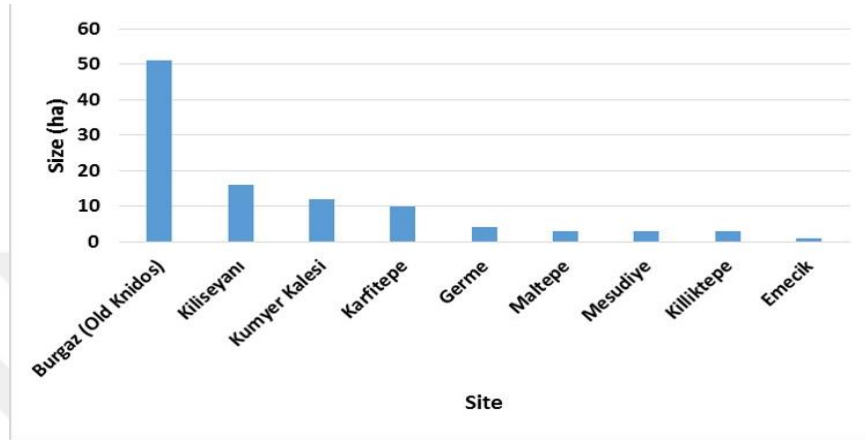
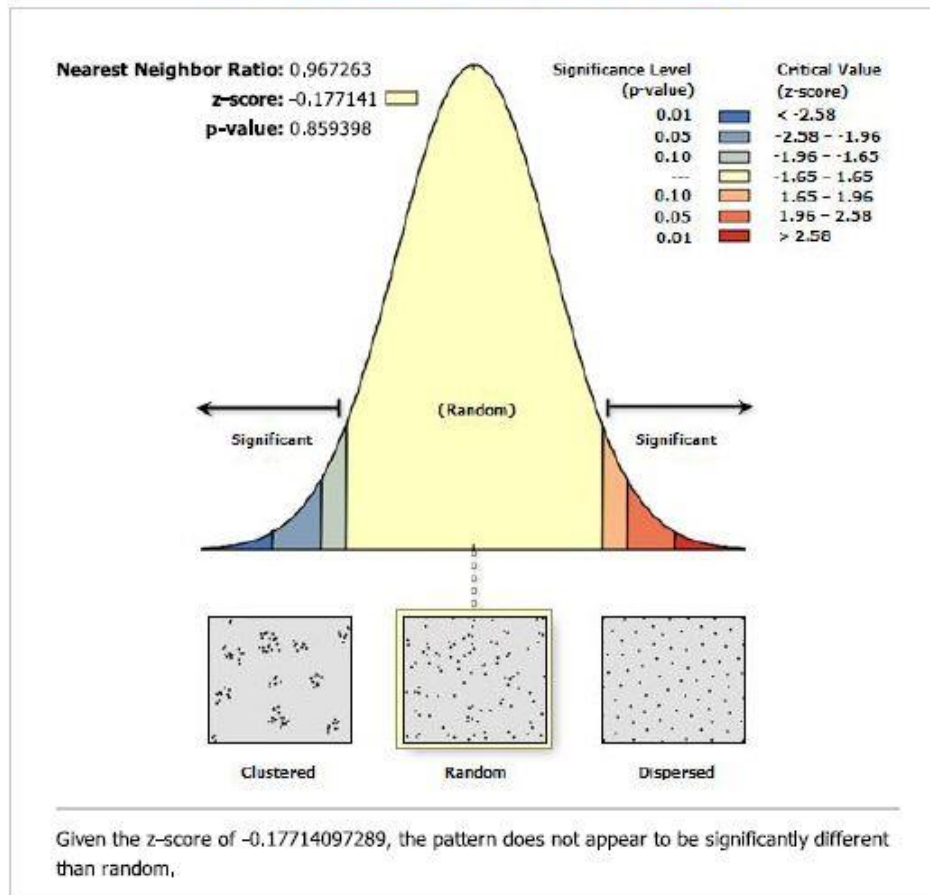




Figure 17. Viewshed of fortresses for Classical Period

Average Nearest Neighbor Summary



Average Nearest Neighbor Summary

Observed Mean Distance:	3526.7868 Meters
Expected Mean Distance:	3646.1521 Meters
Nearest Neighbor Ratio:	0.967263
z-score:	-0.177141
p-value:	0.859398

Dataset Information

Input Feature Class:	Classical points
Distance Method:	EUCLIDEAN
Study Area:	425421602.000000
Selection Set:	False

Figure 18. Classical Period average nearest neighbor analysis

D. Hellenistic Period

Transformation of site function observed at Burgaz in Late Classical Period also reflects the transformation of the whole peninsula. Results of this transformation can be clearly seen on Hellenistic Period Datça Peninsula map (Fig.19, Appendix A). The region became more densely settled, due to the change from a semi-closed agricultural economy to a specialized agricultural production economy and the change of sea trade routes⁶³. New sites related to wine and olive oil production can be defined by agricultural terraces, presses and storage units, as well as pottery workshops (Table 9). Agricultural terraces for vineyards are located at Palamutbükü, Mesudiye, Yassıdağaltı, Maltepe, Kiliseyanı, Bağharımı and Muhaltepe. Presses at Maltepe and Bağharımı, storage units at Mesudiye and Palamutbükü were located. Pottery workshops were found at Mesudiye, Körmen Limanı, Kiliseyanı and Muhaltepe. Sakarya's recent study on trade relations of Burgaz from Archaic to mid-4th century BC based on amphorae evidence may clarify the reason behind sudden increase of these type of sites⁶⁴. It can be suggested that even though there was production of wine at as early as 7th century BC, there is no sign of export until 4th century BC. Between 7th and 4th century BC Knidos played the role of middleman for trade for Corinth, Thasos, Chios, Milet, Samos, Kos, Rhodes and Cyprus⁶⁵. Only after late 4th century BC Knidos became a major shareholder in trade as a producer.

The change of economic position of Knidos cannot be explained solely based on internal affairs of the region since the shifting dynamics of Hellenistic Period caused the reorganization of political, economic and social orders on international scale, including Datça Peninsula. Though the Hellenization of Western Anatolia began much earlier with first colonization movements, during 4th century BC influence of Hellenism became

⁶³ Gökdemir, 2006, p. 27.

⁶⁴ Sakarya, 2016.

⁶⁵ *Ibid.* p. 145.

more tangible in institutional and architectural forms⁶⁶. Both old and emerging poleis prospered as they became a part of strong structure of peer polities⁶⁷. It can be suggested that Knidos also benefited from its position within the new organization brought on by the renewed Hellenization of 4th century BC.

Table 9. Hellenistic Period sites

No	Code	Name	Site Type	Findings and Features	Size (ha)	Rank
1	X6,1	Tekir (Knidos)	Settlement	Theatre buildings Sanctuaries Fortification walls Harbors Necropolis Agora Stoa Treasury Inscriptions	57	4
2	X7/1	Burgaz	Settlement	Old (Palaia) Knidos	51	3
3	X7,6	Kiliseyanı	Settlement	Pottery workshops Clay bed Agricultural terraces	16	3
4	X6,2	Kumyer Kalesi	Settlement	Fortress Temple of Aphrodite ?	12	3
5	W9,3	Balıkaşiran	Settlement	Surface pottery finds	11	3
6	X7,2	Karfitepe	Settlement / Ritual site	Necropolis	10	3
7	W7,1	Körmen Limanı	Settlement	Pottery workshops	10	3
8	X7,10	Bağharımı	Settlement	Agricultural terrace walls Olive oil and wine presses	9	2
9	W7,13	Germe	Settlement	Surface pottery finds	4	2

⁶⁶ Ober, 2015, p. 259.

⁶⁷ Ma, 2003, p.36.

Table 9 (continued)

10	X7,9	Maltepe	Settlement	Agricultural terraces Olive oil and wine presses	3	2
11	X7,11	Yassıdağaltı	Settlement	Agricultural terraces	3	2
12	X7,14	Mesudiye		Agricultural terraces Storage units Pottery workshops	3	2
13	W7,8	Killiktepe	Settlement	Surface pottery finds	3	2
14	W7,2	Muhaltepe		Farmhouse Pottery workshops	2	1
15	X6,6	Palamutbükü, Kuzey Yamaçları	Settlement	Agricultural terrace walls Storage units Necropolis	1	1
16	X8,1	Emecik	Ritual site	Sanctuary of Apollo Doric building remains	1	1

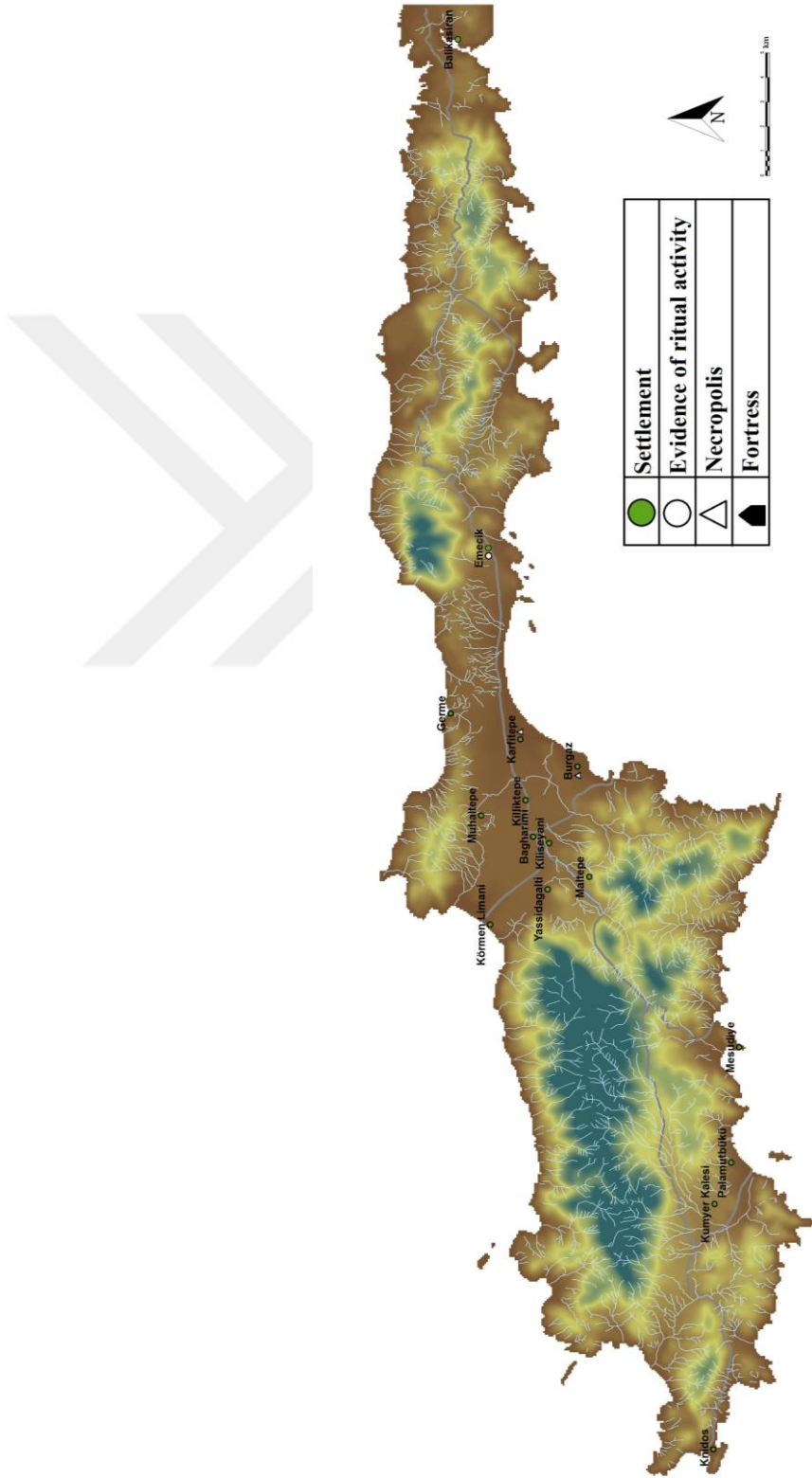


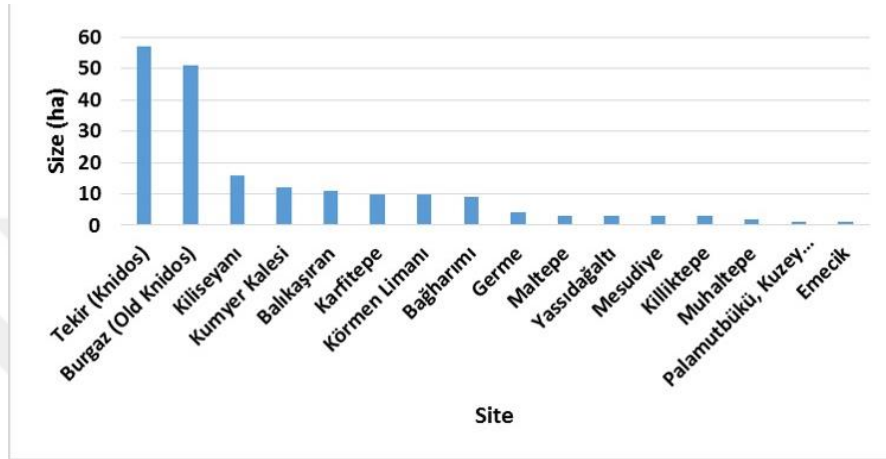
Figure 19. Hellenistic Period Sites

Ranking of the sites in Hellenistic Period shows a drastic change, Knidos at Tekir becomes the new fourth rank settlement because of its size (Table 10, 11). Burgaz is one of the 6 third rank settlements in this period, number of second rank sites is also 6, and 3 sites are first rank. Ranking in Hellenistic Period is also meaningful according to Christaller's theory, the distribution of the ranks represents the new central settlement and other sites in the territory. Nearest neighbor analysis showed meaningful results as well, the settlement pattern is once again regular and distribution of the sites in the region indicates a well-organized territory (Fig. 20).

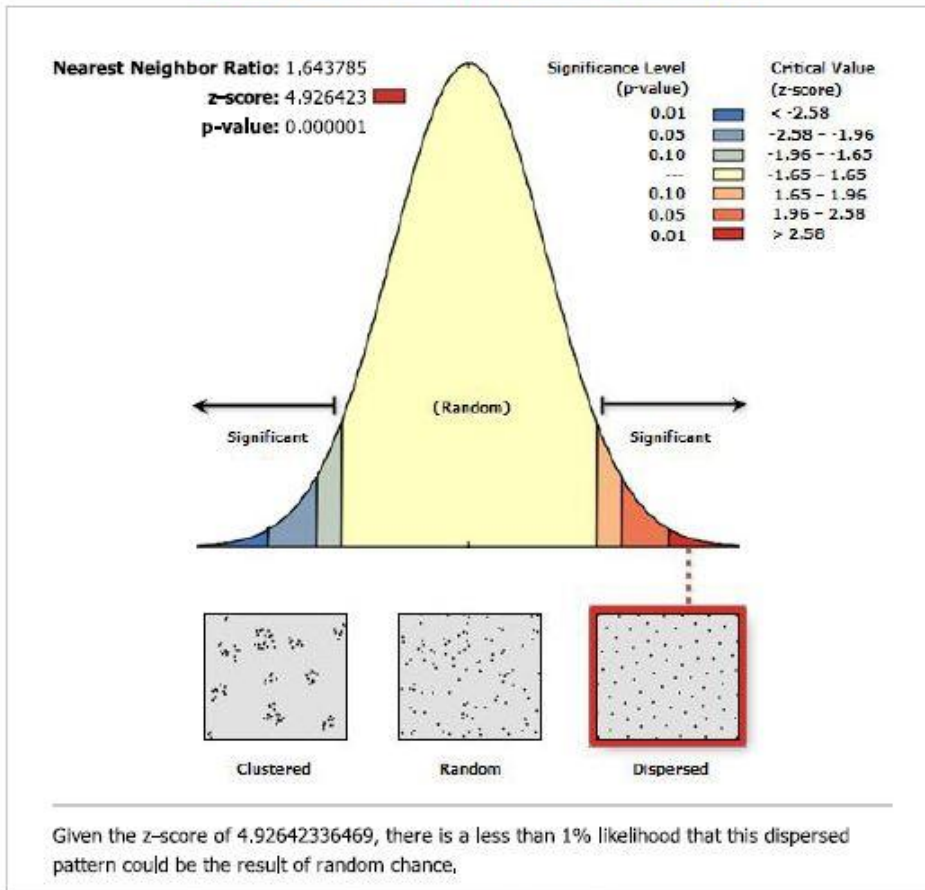
Table 10. Rank-size order of Hellenistic Period sites

Name	Size (ha)	Rank
Knidos	57	4
Burgaz	51	3
Kiliseyani	16	3
Kumyer Kalesi	12	3
Balिकासiran	11	3
Karfitepe	10	3
Körmen Limani	10	3
Bagharimi	9	2
Germe	4	2
Mesudiye	3	2
Maltepe	3	2
Yassidagalti	3	2
Killiktepe	3	2
Muhaltepe	2	1
Palamutbükü	1	1
Emecik	1	1

Table 11. Hellenistic Period site size chart



Average Nearest Neighbor Summary



Average Nearest Neighbor Summary

Observed Mean Distance:	4238.0375 Meters
Expected Mean Distance:	2578.2189 Meters
Nearest Neighbor Ratio:	1.643785
z-score:	4.926423
p-value:	0.000001

Dataset Information

Input Feature Class:	Hellenistic points
Distance Method:	EUCLIDEAN
Study Area:	425421602.000000
Selection Set:	False

Figure 20. Hellenistic Period average nearest neighbor analysis

E. Later Periods

Amongst 38 sites described by Tuna there were 12 sites which only had finds or architectural features dating back to Roman, Byzantine, Antiquity Periods or Middle Age. Sites which had earlier occupation also continued to be used in later periods. In total 25 sites are visible on later periods map of Datça Peninsula (Fig.21, Appendix A). In consistent with earlier period developments, site numbers increase as the centuries pass. This indicates that Datça Peninsula is a favorable location in all periods for wine and olive oil production and trade.

3.2.4. Patterns of Centralization at Datça Peninsula

A wholesome evaluation of the analyses points at a specific area where the occupation and exploitation of the land can be observed continuously from Geometric Period to this day. This area is the geographical center of Datça Peninsula, which is a northwest-southeast trending depression of nearly 5 km radius, named Datça Graben also known as Datça Isthmus. This area has many qualities which enables Burgaz to flourish. Datça Peninsula mainly consists of steep slopes and rough terrain. The graben on the other hand, has a smooth terrain due to its tectonic geomorphological formation. As mentioned before, this area is also the largest arable land in the peninsula. The existence of clay bed and quarry are other factors contributing to the popularity of the area.

At this point of the thesis in order to explain the apparent popularity of Datça Graben the most basic site catchment analysis method was applied. The theoretical 5 km radius adopted from catchment analysis and 3 km radius from ethno-archaeological studies proved meaningful in context of understanding the relationships between the sites in this area.

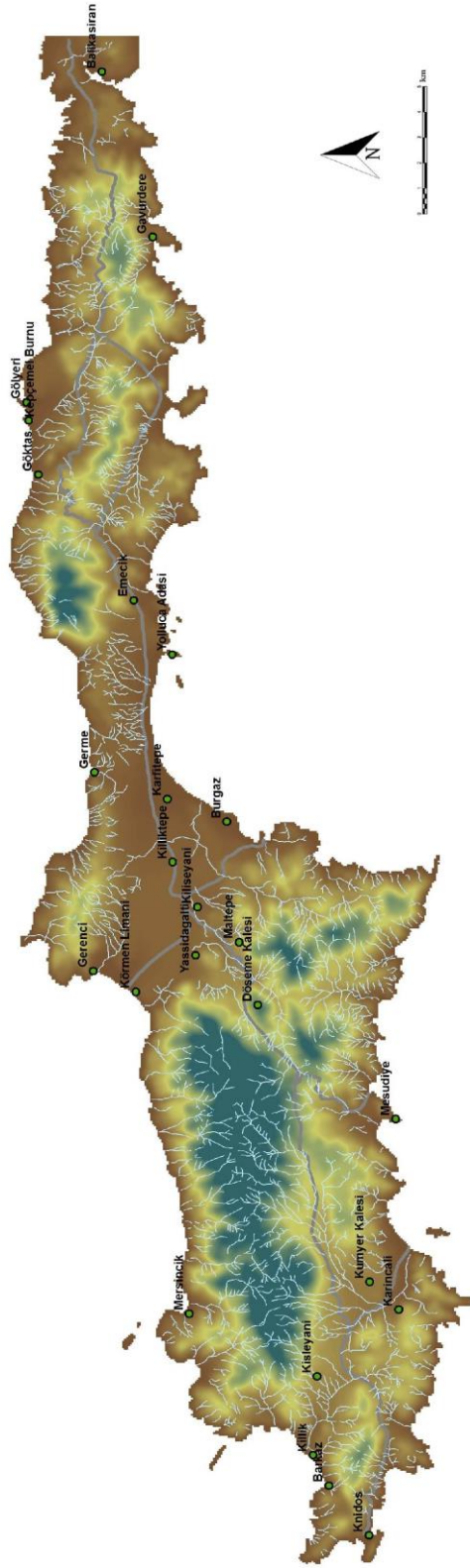


Figure 21. Sites in Later Periods

Application of these circles on the maps helped to understand the dynamics of the land even as early as Geometric Period. Excavations at Burgaz did not yield any architectural features from this period however, the locations of Burgaz, Maltepe and Körmen Limanı demonstrates the very first phase of centralization process (Fig.22, Appendix A). The position of Maltepe as a ritual place at the intersection of the 5 km radius of circles of Burgaz and Körmen Limanı indicates that, some type of political relations between these two sites located at the opposite sides of the valley are conducted over ritual identities.

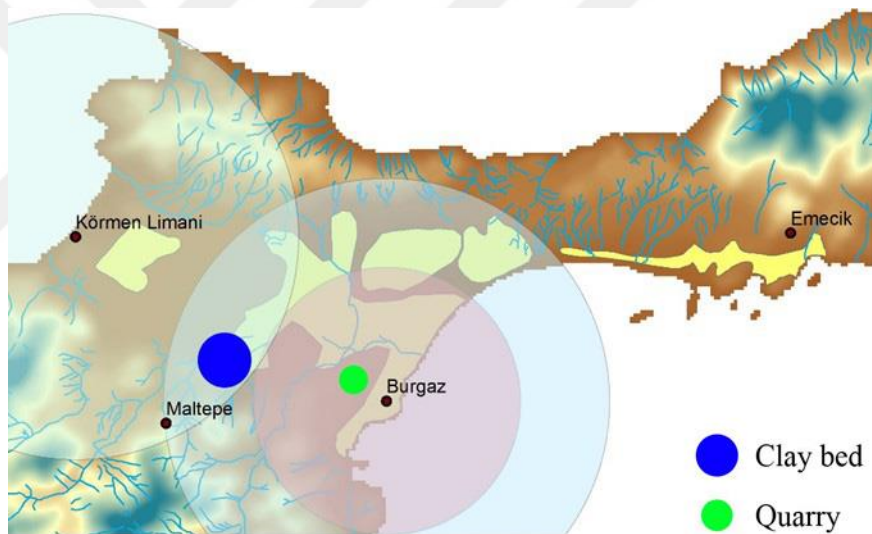


Figure 22. Burgaz and its hinterland during Geometric Period

Maltepe and Emecik are two ritual sites during Geometric Period with approximately 15 km between them. Another map showing Maltepe and Emecik as the center of 15 km radius circles is provided below (Fig. 23, Appendix A). While the 15 km radius area around Maltepe is occupied with sites like Körmen Limanı and Burgaz, the same size circle around Emecik is empty. This may suggest Emecik to be interpreted as a neutral area which was probably supported by several independent entities, perhaps poleis. In that case Burgaz is the only urban center in close proximity of the Sanctuary of Apollo and may be the host for visiting groups.

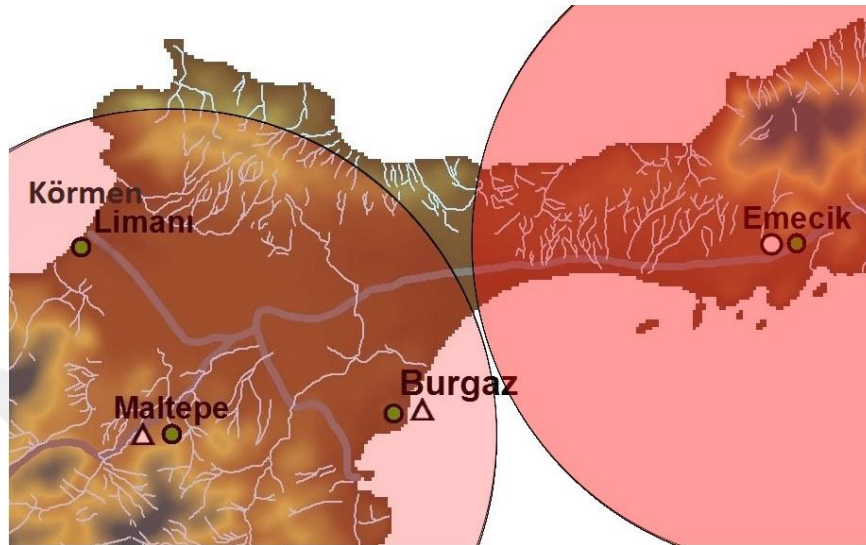


Figure 23. Geometric Period ritual sites

A similar arrangement can be observed during the Archaic Period (Fig. 24, Appendix A). As the urbanization of Burgaz begins in this period with the establishment of the orthogonal planned settlement, the number of sites increases and the political relationships with these sites were continued to be managed over new ritual locations. As seen on the map, at the intersection of 5 km radiuses of Burgaz and Germe, Karfitepe takes the position of connecting ritual site. Survey data at hand shows Germe as an ever-present location through the centuries, however there are no sign of archaeological evidence other than surface pottery finds spreading over a 4 ha area. This map displays Germe as a possible, well-established settlement location.

Classical Period maps show no change other than fortresses built at strategically advantageous locations (Fig.25, Appendix A). Even though this period is rather unstable for Aegean and Mediterranean world, there is no sign of decline at Datça Peninsula. As a matter of fact, before the middle of 4th century BC. Signs of a grand transformation begins to make itself known with gradually changing settlement center at Burgaz.

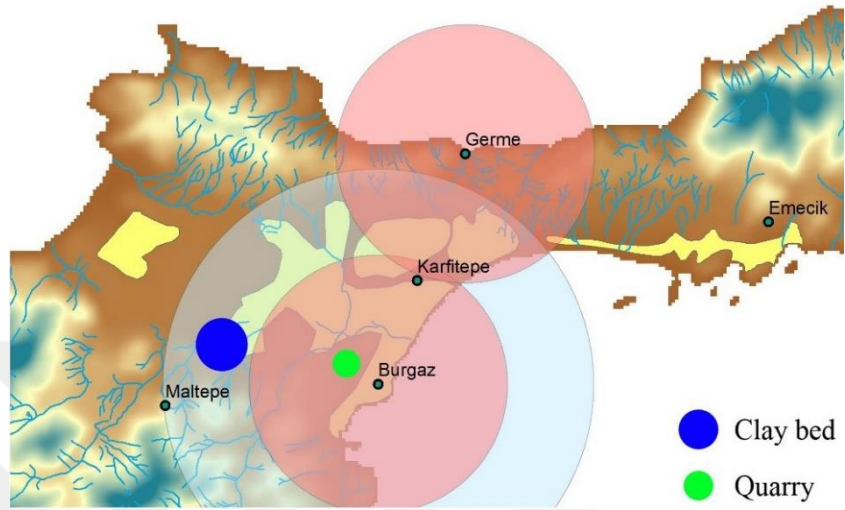


Figure 24. Burgaz and its hinterland during Archaic Period

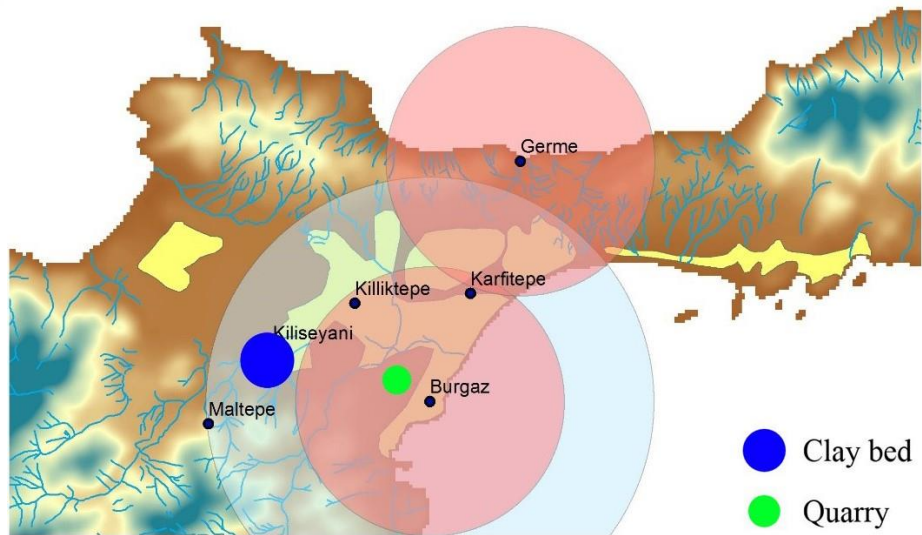


Figure 25. Burgaz and its hinterland during Classical Period

Full effect of changes can be observed at Burgaz in Hellenistic Period (Fig.26, Appendix A). As the advantages of new sea trade routes provides considerable amount of income, the domestic areas transforms into workshops and storage units at Burgaz. It must have been a profitable period for Burgaz, since they were able to afford a new political center at Tekir Cape. This phase is defined as the abandonment or *synoecism* process for Burgaz, however neither Burgaz, nor its hinterland becomes obsolete. In fact, it is quite the other way around: number of sites related to wine and olive oil production and trade increases considerably during Hellenistic and even later Periods. That being said, almost none of these sites appear in the vicinity of the new political center at Tekir.

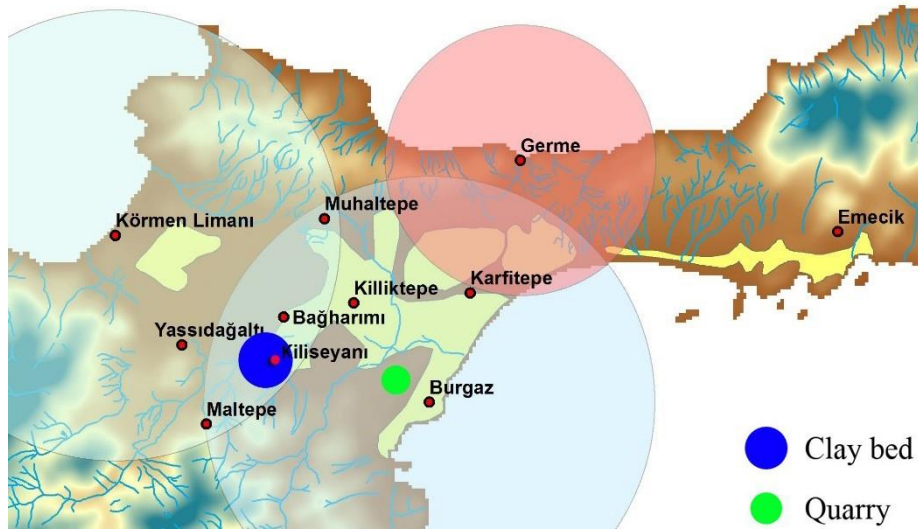


Figure 26. Burgaz and its hinterland during Hellenistic Period

CHAPTER IV

4. DISCUSSION

Knidian territory has the natural border by seas almost all around except a small land called Balıkaşiran connecting the peninsula to mainland. Geographical location of the land provides the exact borders of the territory. Data processing for comprehending the settlement pattern within this territory yielded useful information on the formation of Burgaz settlement and its hinterland. Settlement analyses conducted especially for Archaic, Classical and Hellenistic Periods provided noteworthy outcomes about the processes urbanization and *polis* formation.

Analyses showed that both state formation and urbanization processes began in Archaic Period, initiating the *polis* formation as early as 6th century BC. Even though the number of sites are very small, they clearly represent a core established by the settlement center at Burgaz. Positions of the cult places alone indicate a conscious effort towards the control over the hinterland of Burgaz, while the locations of the *necropoleis* declare its claim over the area. Regular positioning of the sites is a sign of the beginnings of organized territory.

Classical Period can be identified as a period of turmoil in Aegean and Mediterranean regions. Wars, short-lived peacetimes and precarious alliances brought on a period of stasis in terms of economic growth, however Knidian Territory came through without any wounds to mention of. Excavations at Burgaz did not reveal any signs of destruction and the only indications of a hostile environment can be observed by strategically positioned fortresses. Apparently Knidos was a politically formidable participant during this period, considering by the early 4th century BC, it has recovered and adapted to the

new order successfully. In this period a great change can be observed at Burgaz, as a result of the *synoecism* process⁶⁸. Domestic areas were effectively altered to become workshops and storage units for agricultural activities and logistic purposes. Wine and olive oil presses, stilling basins and drains from this period were unearthed in buildings which used to be houses. There are also a number of pottery producing workshops and metal ateliers found in similar areas. This process of transformation is regarded as the abandonment of the settlement, however the activities of production, storage and loading continued for a long time, indicating that the site was not actually abandoned in late 4th century BC, only changed its function due to the external and, inevitably, internal occurrences mentioned above.

Ramifications of this shift in site function can be observed in a regional scale during the Hellenistic Period. This increase in production and trade provided Knidos with sizeable income and prestige, enabling the settlement to be moved to Tekir Cape. Hellenistic Knidos became the new political and economic center of the peninsula however the production sites were still established around Burgaz, as the settlement itself became a location for production, storage and loading.

Change of settlement patterns and formation of poleis on Greek mainland and islands have been the focus of plentiful researches, however studies on Western Anatolian settlement patterns and *polis* formation are not as numerous. Two case studies selected for comparisons, Klazomenai and Bozburun were chosen because of their similar approaches to the matter at hand.

Bozburun, another peninsula in Caria, just to the south of Datça Peninsula, provide a good comparison with the settlement patterns of Datça Peninsula, mainly because both regions share similar geographical features, which is considered as a major factor effecting the distribution of settlements. Oğuz, who conducted a thorough research on the rural settlement pattern of Bozburun Peninsula, focuses on The Phoinix deme as a case study and discusses the distribution of agricultural terraces and rural settlements in

⁶⁸ Tuna, 1983, p. 357

khorai, as well as the development of central settlement during Classical and Hellenistic Periods⁶⁹. The Rhodian Peraea, which includes The Phoinix deme, is identified as a “peninsula settlement” – a network of rural sites arranged in dispersed models and conurbation of at least 7 demes. Here, the Peraea is described as a focal point of the Carian Chersonesos, equivalent to a *polis* of a moderate/large size territory in Classical Period, comparable to position of Burgaz within Datça Peninsula. There is a possibility that with the decrease of Hecatomnid authority a dioikismos process transformed the land in sense of settlement type⁷⁰. During Hellenistic Period, with the Rhodian takeover, Peraea became a deme of Kamiros, one of the three old poleis of Rhodos.

The Phoinix settlement pattern of the *Acropolis*, farmsteads and dwellings yields a dendritic pattern with complex-nucleated settlements linked to plain areas and the dispersed settlements located at the pocket plains in the khora. The model of distribution of the sites as well as the existence of agricultural terraces located within the area indicates at an agricultural economy, quite similar to Burgaz. Peraea does not appear to have an administrative center, though the network of fortresses throughout the land may be interpreted as both military and administrative functioning. Oğuz mentions that Peraea lacks a central space for creational and economic activities, and that aesthetics is not a part of its architectural features⁷¹. The same can also be said for Burgaz, though there are buildings interpreted as public space in Burgaz settlement. Absence of a theatre-like buildings also interpreted as a sign of rural settlement, however that statement is based on authors comment on Peraea being “Far from the idea of a *polis* perhaps in the physical sense...⁷²”. Regardless of its architectural shortcomings, Peraea seems to have a well-established economic status due to its widespread land use for agricultural production, not only in sense of self-sufficiency but also the production of

⁶⁹ Oğuz, 2013.

⁷⁰ *Ibid.* p. 323.

⁷¹ *Ibid.* p. 325.

⁷² *Ibid.* p. 325.

surplus for trade. On the other hand, the existence of some features at the settlement center at the Phoinix, such as *acropolis*, *necropolis*, *naiskos* dedicated to Apollo, fortification system with gates and *pyrgoi* indicates at an urban settlement. The high density of settlement observed at *acropolis* slopes is suggested to be an indicator of demes center being the hub and described as a “miniature *polis*” referring to a certain extent of urbanization. The most striking difference between Phoinix and Burgaz is that Phoinix seems to be adapting to economic and political changing environments in an accommodating way. Both Phoinix and Burgaz are mainly sustained by agricultural economies, however during Hellenistic Period while Phoinix became a deme of Rhodes, Burgaz appears to continue prospering as a seemingly independent settlement. Reason behind that could be the long term trade relationships Burgaz began to establish with other poleis like Corinth, Thasos, Chios, Miletus, Samos, Kos, Rhodes and Cyprus, as early as the 7th century BC⁷³, which could help Burgaz to be recognized as a peer among those instead of a subservient provider of agricultural products.

Another study which would contribute to the argument of this thesis, is meticulously brought together by Koparal. Koparal in her Klazomenian Khora study considers *polis* formation as a two folded process; urbanization and state formation⁷⁴. State formation which requires an organized stratified society with institutions linked to the organization of territory. Urbanization process is associated with organized settlement layout at the settlement center, and increased population. Urbanization and state formation processes in Klazomenai are not simultaneous, while the state formation begins in Late Geometric - Early Archaic Period, beginning of urbanization is observed in Late Archaic Period. The state formation observations are based on evidence from settlement center and the deliberate distribution of settlements within the Khora implies the establishment of an administrative system. Population estimations based on land potential shows the increase from Late Geometric period to Late Classical Period with a significant instability during the 5th century BC. According to Koparal, Late Geometric Period is likely to be the

⁷³ Sakarya, 2016, p. 145.

⁷⁴ Oğuz, 2013, p. 253.

phase when Klazomenai aimed to claim its khora⁷⁵. The existence of extra-urban cult centers in Late Geometric Period implies the beginning of conscious planning of territory. The locations for these sanctuaries were relatively inaccessible geographies and served as markers of political borders. Tumuli were also considered as intentionally positioned markings of the boundaries of the khora in Early Archaic Period. Settlement patterns linked to agricultural activities suggests that settlements clustered at certain points of the given region were probably using the wide plains in a cooperative manner. Construction of city walls and coin minting in Late Geometric - Early Archaic Periods were also interpreted as signs of an organized community as well as the organization of the khora which yields to the state formation.

Organized settlement pattern and fortification walls surrounding the settlement center, division of domestic and industrial sectors and coinage, as well as mass production of olive oil and pottery indicates that, urbanization was achieved in Late Archaic Period. Increased number of settlements and their distribution are interpreted as the existence of urban population. Koparal states that, organization of territory, in addition to organized settlement center, imply the urbanization of Klazomenai⁷⁶. In conclusion, the *polis* formation process of Klazomenai is observed from the settlement pattern analyses and settlement center characteristics in terms of state formation and urbanization.

The same approach adopted by this thesis yielded valuable results for understanding the development of Burgaz. Parallel processes of state formation and urbanization are observed in Burgaz with inevitable dissimilarities. It is only expected that settlement development of each region is fundamentally shaped by their unique cultural and environmental conditions, thus the similarities and dissimilarities between Klazomenai and Burgaz can be explained.

Distribution of sites within the both regions show some common characteristics, especially for the agricultural land use. Settlements associated with agricultural activities

⁷⁵ Oğuz, 2013, p. 186

⁷⁶ *Ibid.* p. 258.

were mainly formed around fertile plains and exploited collectively, suggesting that well-established agricultural economy supported the settlement center's autonomy. Existence of extra-urban cult centers, located intentionally for better administration of the territory is another commonality of the both settlements, though in Klazomenai example these ritual sites were placed at almost inaccessible geographic locations in order to establish the borders of the khora. At Burgaz however, ritual sites can be seen at strategic locations marking halfway between the settlement center and smaller (third or second order) settlements, suggesting that administrative relations were conducted over ritual practices. The organization of defensive network through Klazomenian khora is contemporary with the establishment of urban settlement layout in Late Archaic Period. Koparal suggests that purpose behind positioning of both the ritual places and the fortresses, is mainly marking the frontiers of the khora. In Burgaz case, the locations of neither the ritual places nor the fortresses indicate at an endeavor to mark the boundaries of the territory, though they are contemporary with the original construction phase of the orthogonal planned settlement center, like in Klazomenai. On the other hand, there is no evidence of any fortress built on Knidian Territory before Classical Period, and even the ones built during Classical Period do not show any signs of an effort to establish the borders. Positions of fortresses at Maltepe and Kumyer Kalesi indicate that they are located at places which oversee the areas with most agricultural potential, while the one at Mesudiye mostly watches over the coastline and sea. If they were to mark the borders of a territory, they would be expected to appear at frequent intervals, at least roughly surrounding a certain area. Of course the seemingly nonexistent attempt to mark the boundaries of Burgaz hinterland may be the result of geographical circumstances. Knidian Territory is a peninsula surrounded by the sea except for a piece of land connected to mainland and as far as the archaeological evidence suggest there are no other poleis or other settlement centers on the peninsula that would require Burgaz to claim its territory in a domineering manner.

CHAPTER V

5. CONCLUSIONS

The main purpose of this study is to explain the social, economic and political position of Burgaz within Datça Peninsula from Geometric to Hellenistic Period. Instead of accepting predefined characteristics, this thesis tries to strip as many layers possible from the *polis* term, suggesting that every settlement has its own unique conditions that cannot be generalized. In any case *polis* is an abstract concept which is impossible to generalize. *Polis* is accepted as the highest form of community in ancient Greek and the physical attributes of the *polis* are expected to be as prestigious as possible. High expectancy distorts the essence of *polis* by forcing researchers focus more on the monumental architecture or strictly hierarchical communities. Within the scope of this thesis *polis* is taken in its simplest form in order to understand Burgaz as the urban center and shed light to the changes which occurred before, during and after the 4th century BC. To reach this goal, regional scale data used for various settlement pattern analyses.

Evaluation of site distribution through time and space revealed the formation processes of Burgaz, its hinterland and the peninsula. Defining site functions for each site and period provides a set of information on how these processes occurred. Positioning of *necropoleis* and ritual sites demonstrates that certain relationships between the settlements in Datça Peninsula were carried out over these ritual related locations. Beginning with Geometric Period, sites emerging around the settlement suggest that development of Burgaz is closely related to these locations. This argument can possibly explain how Burgaz came to be the central place, as the rank-size order indicated.

Another aspect of the centralization at Burgaz identified as the agricultural potential of the land it was built on. Soil quality analysis displayed that hinterland of Burgaz was located on the most fertile and largest arable area of the peninsula which enabled the settlement to become economically autonomous. It is possible to deduce that smaller settlements in the vicinity of Burgaz nurtured the site.

Outcomes of the nearest neighbor analyses also verifies this argument. Results show that the territory has a dispersed settlement model which is considered as a sign of well-organized territory of an agriculture-based economy.

A wholesome evaluation of the analyses suggests that a specific area where the occupation and exploitation of the land can be observed continuously from Geometric Period to this day, may be the key to understand the reasons behind the development of Burgaz as a political and economic central urban settlement.

Burgaz was founded as an orthogonal planned settlement over a 51 ha area during 6th century BC, however Geometric pottery sherds and mention of Knidos by Herodotus (Herodotus 2.178) as one of the cities contributed to building of the Hellenion Sanctuary at Naukratis in late 7th century BC indicates at an earlier occupation phase. References to Knidos in ancient texts continue through the 6th and 5th centuries: according to Thukydides (Thukydides 3.28), Knidians participated in colonization movements at Sicily and Southern Italy and they settled the cities of Gela, Lilybaeum, Kamarina, and Lipari Islands⁷⁷. Knidos erected a treasury in Delphi, one of the earliest marble buildings in the Aegean world⁷⁸ which may point out the role of Knidos in the 6th and 5th centuries BC⁷⁹. Ancient literature portrays Knidos as a powerful city that could participate in major colonization movements and sponsoring costly buildings, which can only be the signs of a well-established city-state. Archaeological evidence and analyses

⁷⁷ Graham, 1964, p. 20; Matreaux, 1978, pp. 31-33.

⁷⁸ Bommelaer, 1991, pp. 141-142.

⁷⁹ Atıcı, 2013, p. 27.

clearly show that the settlement at Burgaz was the only urban center on Datça Peninsula during this period.

Evaluation on the results of the analyses suggests that Burgaz had its own unique features that can identify it as a *polis* and *polis* concept may not be as strict as claimed by many modern researchers. Urbanization process at Burgaz and organization of its territory indicates that a *polis* is not only identifiable by its monumental architecture. Even though the predesigned *polis* definitions and check-lists would not regard Burgaz as *polis*; site function, rank-size and nearest neighbor analyses clearly identify Burgaz as the social, political and economic urban center of the territory until the *synoecism* took place after 360 BC.

Both the historical literature resources and settlement pattern analyses provide reason to believe that Burgaz was indeed the Old Knidos. As mentioned before Bean and Cook was the first to argue that political center of Knidos moved from some other site to Tekir Cape. The reason behind this argument was the fact that no archaeological finds from Tekir belonged to an earlier date than 4th century BC. Robert and Robert⁸⁰, Hornblower⁸¹, Bresson⁸² and Berges⁸³ were some of the researchers who supported this argument. Since Bean and Cook first enounced their argument, archaeological researches at Tekir revealed finds that predate 4th century BC and caused some researchers like Love⁸⁴, Demand⁸⁵ and Blümel⁸⁶ to argue against the movement of Knidos. Brenson lastly compromised with the suggestion that there were two urban centers on the peninsula but the political center was at Burgaz at first. Even though

⁸⁰ Robert & Robert, 1954, p.168.

⁸¹ Hornblower, 1982, p. 101.

⁸² Bresson, 1999, pp. 83-104.

⁸³ Berges, 1994, pp. 5-16.

⁸⁴ Love, 1972, p. 393-405.

⁸⁵ Demand, 1989, pp. 224-237.

⁸⁶ Blümel, 1992, pp. 131-132.

recent excavations at Tekir revealed black-glazed pottery fragments dated back to 5th century BC⁸⁷, there are no architectural features, monumental or otherwise, solidly dating the settlement before 360 BC. Lack of architectural evidence prevented this study from including the settlement to Archaic or Classical Period analyses. If there was a settlement at Tekir before 4th century BC, it is highly improbable to think it was a well-established *polis*, since such settlement undoubtedly would leave considerable amount of archaeological evidence behind.

Studies on Klazomenai and Bozburun Peninsula, as well as this thesis, mainly based on settlement pattern analysis show that it is possible for a settlement to complete *polis* formation process even if it does not fit the ideal *polis* image. *Polis* seems to be a product of urbanization and establishment of an administrative system, granted the settlement is autonomous in both the political and the economic sense. The results of this study on Burgaz and its hinterland also suggest that urbanization and state formation processes, which imply the existence of *polis*, can be observed by intra-site and regional scale settlement pattern analyses, even if there are not any direct epigraphic evidence or ideal *polis* architecture.

The most challenging and time consuming part of this study is without a doubt working with legacy data. The data collected by Tuna during his survey of the peninsula, is unclear at some places, especially for dating and size of the sites. To avoid computational errors unclear data is excluded from the analyses, causing a much smaller dataset. Even though data at hand provided meaningful results, some of the analyses conducted could definitely benefit from a larger dataset. To amend the lack of reliable data, a legacy survey project could be suggested, however one-day visits to several of the sites with Tuna unfortunately demonstrated that relentlessly increasing modern urbanization in the region is causing the majority of the archaeological sites to basically disappear. In other words, digitized data within the scope of this thesis serves as a rescued archive.

⁸⁷ Doksanalti, 2007, pp. 6-7.

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APPENDICES

APPENDIX A - SITE CATALOGUE

The data presented here, in forms of information on the sites, photograph and drawing, is retrieved from Prof. Dr. Numan Tuna's Ph.D. Thesis "Batı Anadolu Kent-Devletlerinde Mekan Organizasyonu Knidos Örneđi" submitted in 1983.

Karfitepe

Site No: X7/2

Size: 10 ha.

Function: Settlement, ritual, necropolis

Morphology: Plain

Period: Archaic, Classical, Hellenistic

Findings: Rectangular ritual well used from 6th century BC to 2nd century BC. Tombs carved into the bedrock with simple stone cover are found in this necropolis area.

Ceramic Finds and Dates:

- 1- Bowl, body sherd, Archaic Period
- 2- Bowl, body sherd, Archaic Period
- 3- Bowl, body sherd, Archaic Period
- 4- Amphora, neck sherd, 5th century BC
- 5- Amphora, neck sherd, 5th century BC
- 6- Amphora, body sherd, 5th century BC
- 7- Amphora, body sherd, 5th century BC
- 8- Bowl, body sherd, Archaic Period
- 9- Bowl, body sherd, Archaic Period
- 10- Bowl, body sherd, Archaic Period
- 11- Bowl, body sherd, Archaic Period
- 12- Plate, body-base sherd, Archaic Period
- 13- Plate, body sherd
- 14- Plate, base sherd
- 15- Kylix, tondo sherd, early 5th century BC
- 16- Kylix, body sherd, early 5th century BC
- 17- Bowl, rim sherd, 5th century BC
- 18- Kylix, body sherd, 5th century BC
- 19- Bowl, handle
- 20- Plate, base
- 21- Kylix, body sherd
- 22- Bowl, body sherd, 5th century BC
- 23- Oinochoe ?, rim sherd
- 24- Bowl, body-handle sherd, 5th century BC
- 25- Lamp, sherd, early 5th century BC
- 26- Lekythos, rim sherd
- 27- Bowl, body-handle sherd, 5th century BC
- 28- Bowl, rim sherd, Classical Period

- 29- Oinochoe ?, handle**
- 30- Daily use coarse ware, body sherd**
- 31- Bowl, base sherd**
- 32- Daily use coarse ware, body sherd**

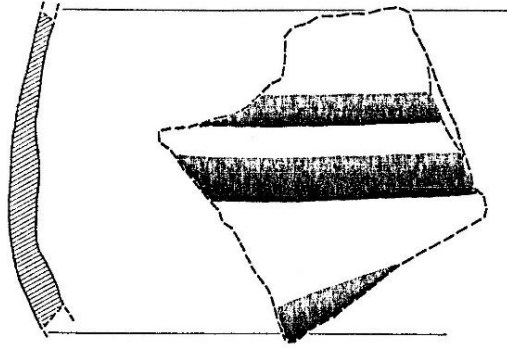


Figure 27. Karfitepe general view

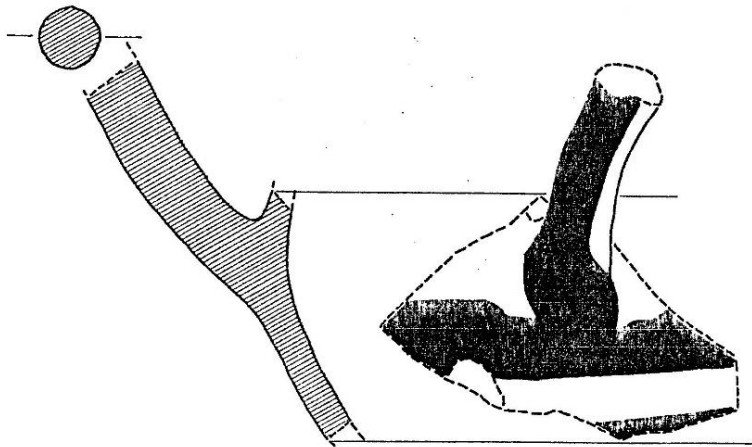


Figure 28. Karfitepe ritual well

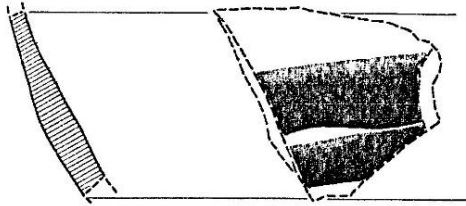
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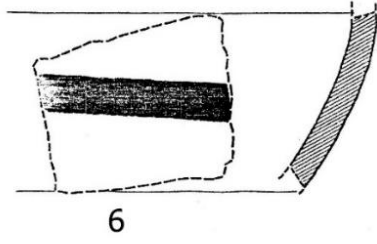
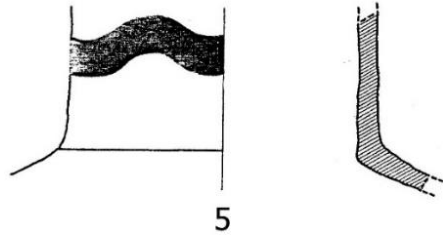
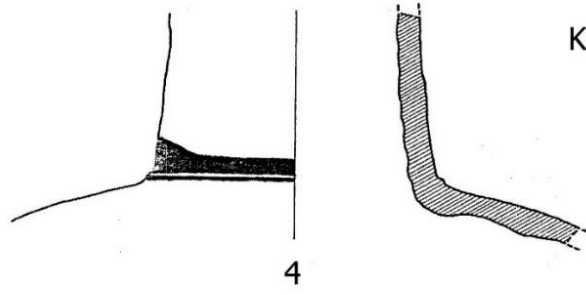
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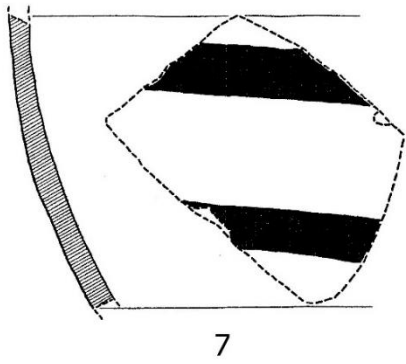
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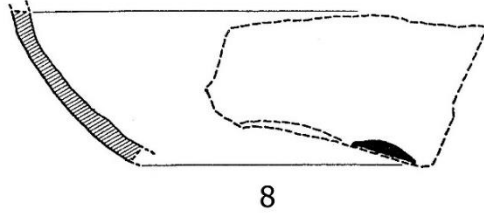
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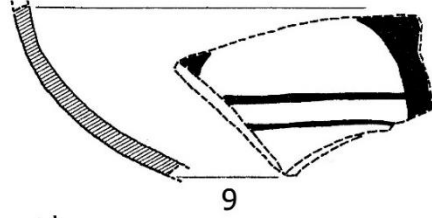
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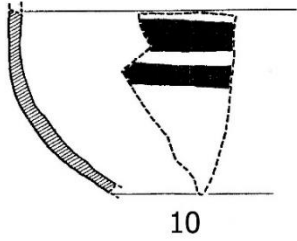
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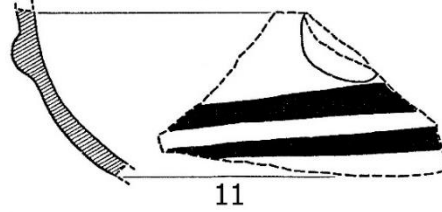
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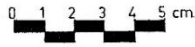
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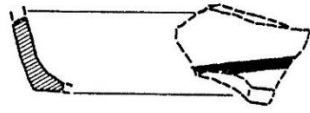
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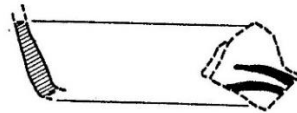
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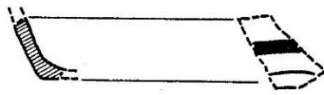
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12



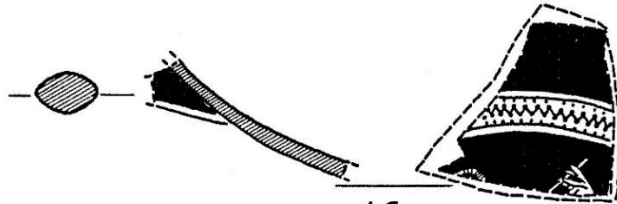
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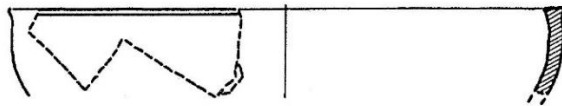
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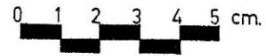
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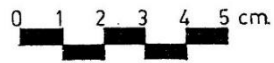
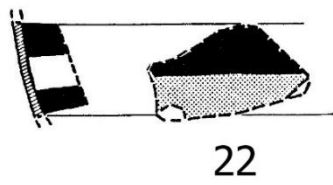
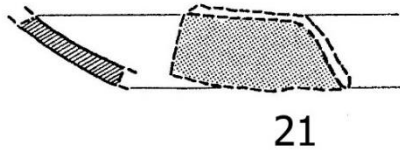
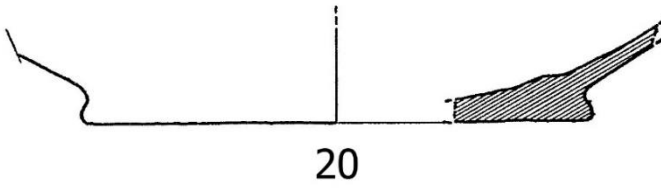
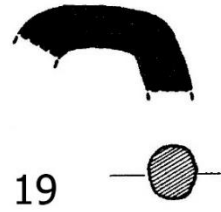
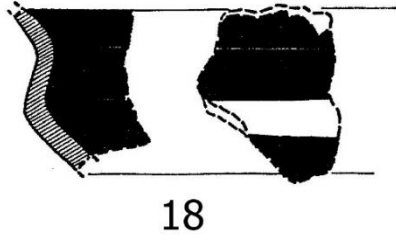
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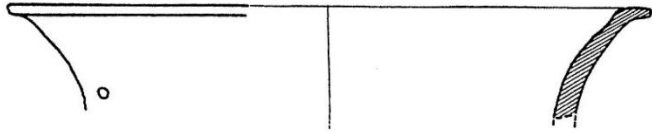
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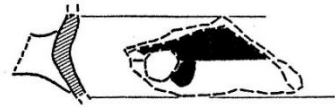
KARFİTEPE X7 / 2



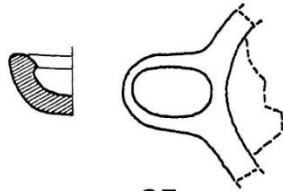
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23



24



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26



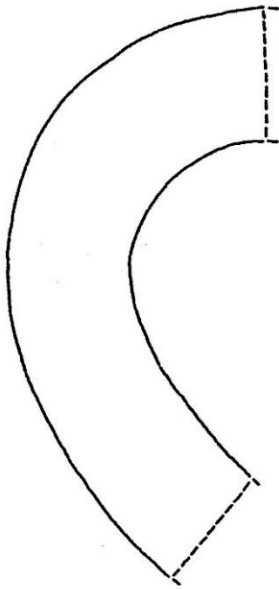
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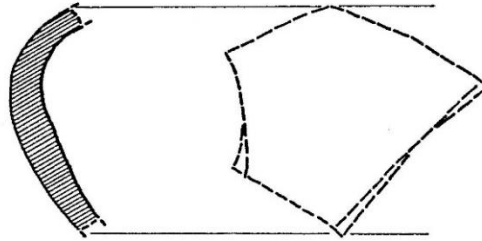
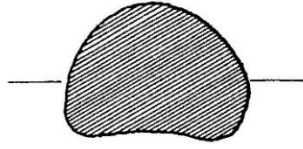
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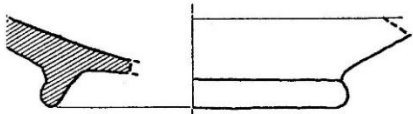
KARFİTEPE X7 / 2



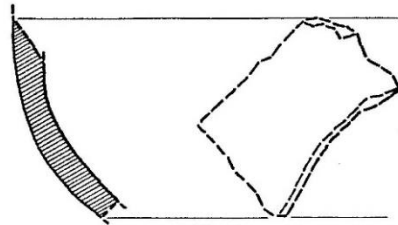
29



30



31



32



Kiliseyanı

Site No: X7,6

Size: 16 ha.

Function: Settlement, pottery workshops, agricultural terraces

Morphology: Plain, hillslope

Period: Classical, Hellenistic, Roman

Findings: Refuses of pottery workshops created large conical mounds. Materials from these mounds include Knidian amphorae, daily use kitchen wares which dated to 4th century BC – 2nd century A.D. In terms of amphora stamps it was observed that in these workshops amphorae with stamped handles were produced during late 3rd and 1st century BC

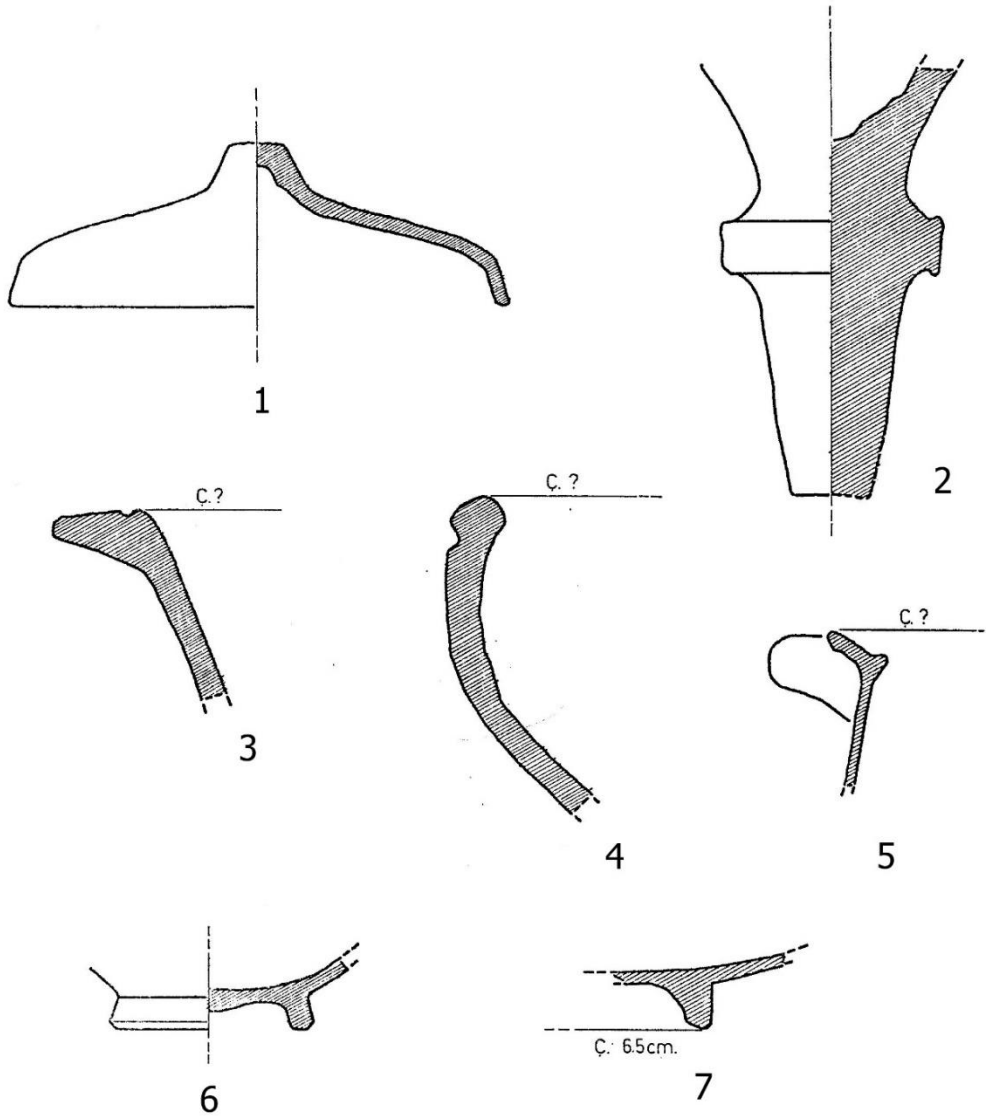
Ceramic Finds and Dates:

- 1- Cooking ware, lid, 1st century BC**
- 2- Amphora, foot, 2nd century BC**
- 3- Daily use coarse ware, rim sherd, 1st century BC**
- 4- Bowl, rim-body sherd, 4th century BC**
- 5- Cooking ware, rim-handle sherd, 2nd century BC**
- 6- Bowl, base sherd, Classical Period**
- 7- Bowl, base sherd, Classical Period**



Figure 29. Kiliseyanı Google Earth image

KİLİSEYANI X7 / 6



Maltepe

Site No: X7,9

Size: 3 ha.

Function: Settlement, garrison lookouts, fortification walls, necropolis

Morphology: Hillslope

Period: Archaic, Classical, Hellenistic, Roman

Findings: On northern slopes some terraced building remains were found. On southwest, there are remains of a rectangular building, as well as remains of a square building. On higher slopes remains of some other building remains, late period amphorae, roof tiles and terrace walls were observed. On the northern slopes of Maltepe an Archaic Period necropolis area was identified by 3 tumuli with burial chambers in diameter of 10 m and large pithoi burials.

Ceramic Finds and Dates:

- 1- Amphora, foot, 2nd century BC**
- 2- Amphora, foot, 2nd century BC**
- 3- Bowl, base sherd, 4th century BC**
- 4- Amphora, foot, 2nd century BC**

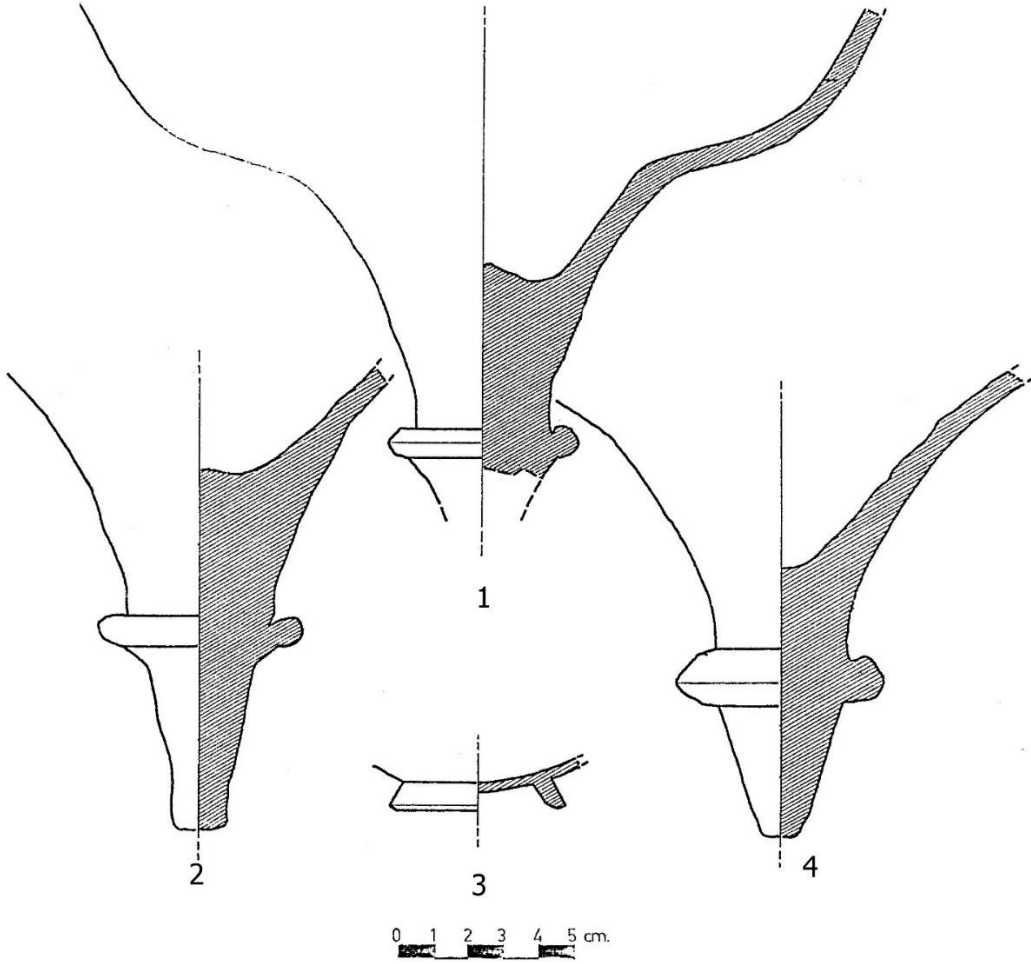


Figure 30. Maltepe view from Hızırşah village



Figure 31. Maltepe hill view

MALTEPE-Kovanlıkönü X7 / 9



Bağharımı

Site No: X7,10

Size: 9 ha.

Function: Settlement, agricultural

Morphology: Hilltop, hillslope

Period: Hellenistic, Roman

Findings: Most of cultural layers were eroded because of the bedrock being close to surface. Around dried river beds in colluvial deposit a small number of pottery fragments were observed. Olive oil/wine presses were discovered around the site. As an architectural feature on the eastern slope, in situ terrace walls dated to Hellenistic period were found.

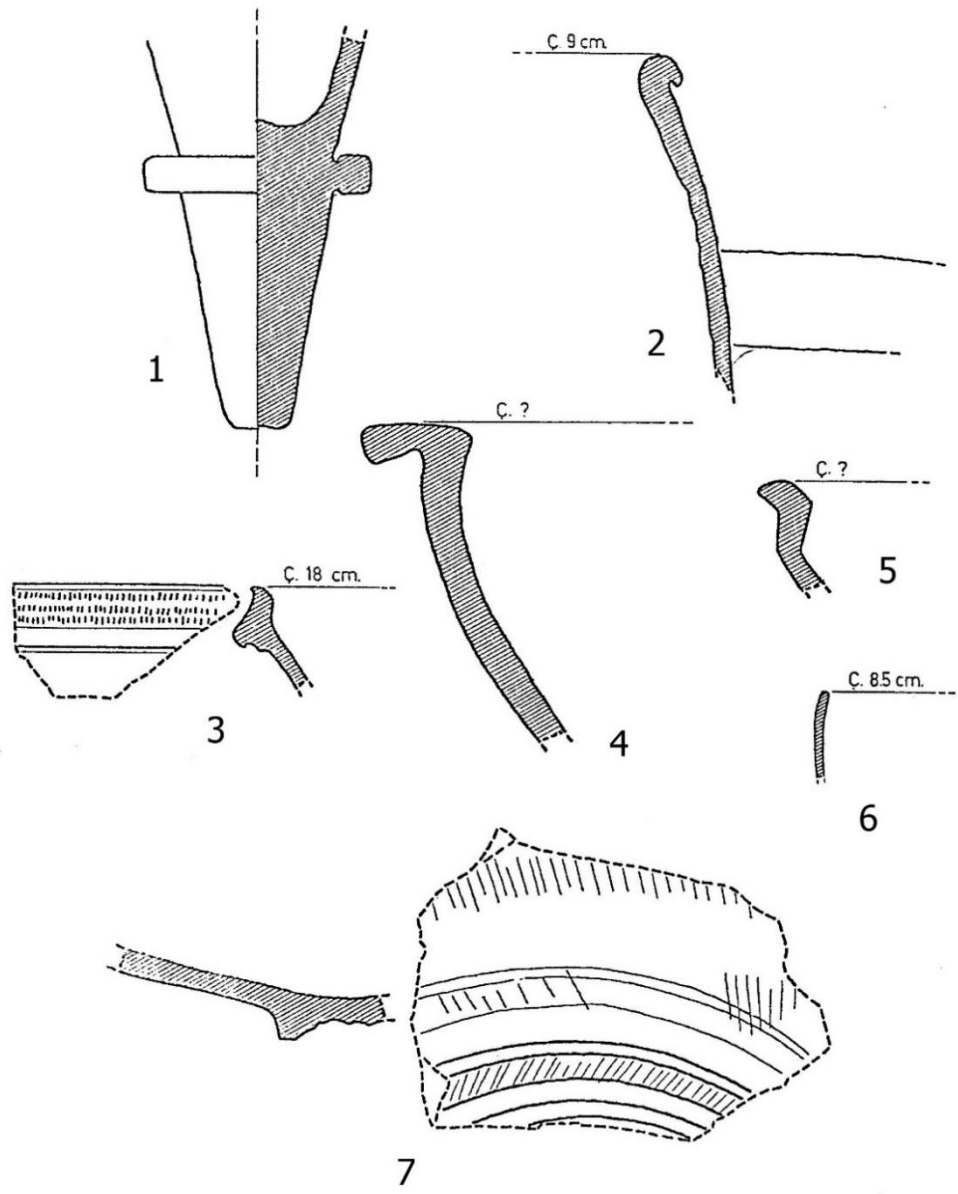
Ceramic Finds and Dates:

- 1- Amphora, foot, 2nd century BC**
- 2- Amphora, rim- handle sherd, 2nd century BC**
- 3- Plate, rim sherd, 1st century BC**
- 4- Lekane, rim sherd**
- 5- Bowl, rim sherd,**
- 6- Skyphos, rim sherd, 3rd - 2nd century BC**
- 7- Plate, base sherd, 1st century BC**



Figure 32. Bağharımı Google Earth image

BAĞHARIMI X7 / 10



Yassıdağaltı

Site No: X7,11

Size: 3 ha.

Function: Settlement, agricultural

Morphology: Hillslope

Period: Hellenistic

Findings: On the slopes of Yassıdağaltı ancient agricultural terraces were observed. As surface material Knidian amphorae, roof tiles and daily use coarse ware fragments were recovered.

Ceramic Finds and Dates:

1- Amphora, foot, 2nd century BC

2- Daily use coarse ware, rim sherd

3- Cooking ware, rim sherd, 3rd – 2nd century BC

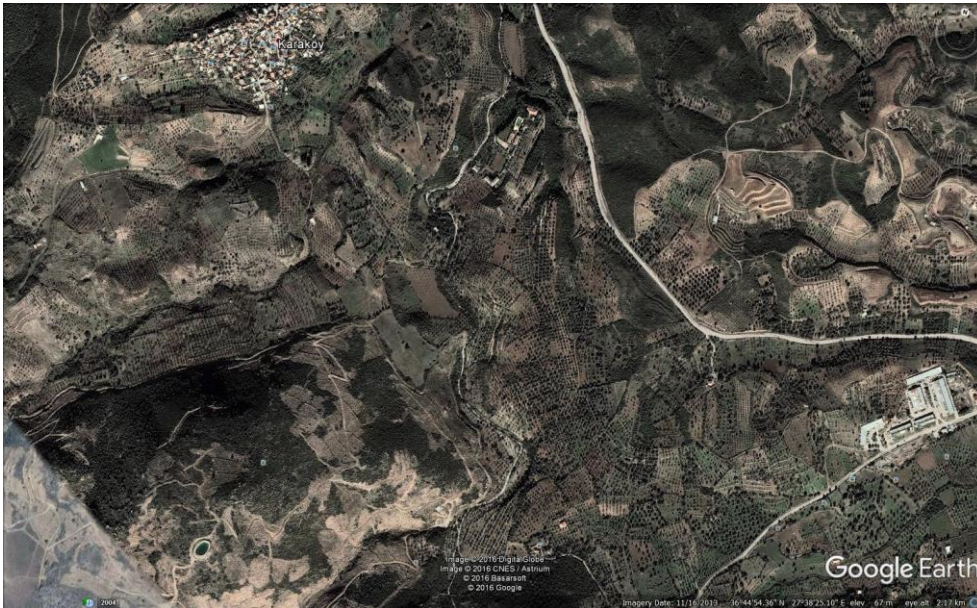
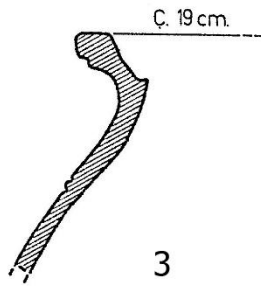
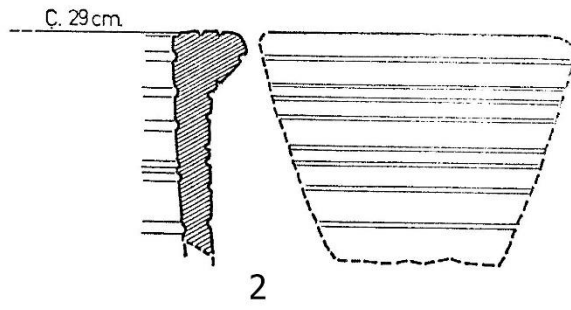
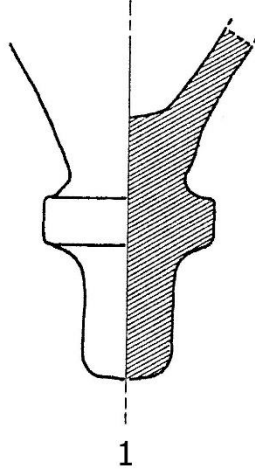


Figure 33. Yassıdağaltı Google Earth image

YASSIDAĞALTI X7 / 11



Mesudiye

Site No: X7,14

Size: 3 ha.

Function: Settlement, fortress, agricultural, pottery workshop

Morphology: Hilltop, hillslope

Period: Classical, Hellenistic, Byzantine

Findings: At 169 m altitude the fortress known as Mesudiye Kalesi, is situated as two fortified buildings. The wall building technique is the only indicator for the dating of the fortress, points at Classical Period. At the southern slopes there are remains of a Hellenistic building as well as a Byzantine Period church and cisterns. Agricultural terraces for vineyards were observed to northeast. Near the coast, several dolia units were found for storage purposes. Pottery workshops at the north were identified by kiln remains and numerous stamped amphora handles.

Ceramic Finds and Dates:

- 1- Cooking ware, rim sherd, 4th - 3rd century BC**
- 2- Bowl, rim sherd**
- 3- Daily use coarse ware, rim sherd, 3rd century BC**



Figure 34. Mesudiye general view

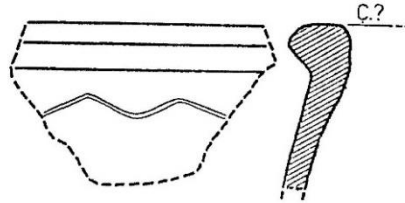
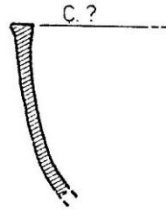
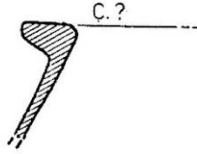


Figure 35. Mesudiye fortress wall



Figure 36. Mesudie dolium

MESUDIYE KALESİ X7 / 14



Körmen Limanı

Site No: W7,1

Size: 10 ha.

Function: Settlement, pottery workshops

Morphology: Hillslope

Period: Geometric, Hellenistic, Roman

Findings: At Yıldırım Tepe location within this site, pottery refuses determine the existence of pottery workshops. On the southern and the eastern slopes of the hill surface material yielded Geometric pottery fragments. On the northwest at Kalecik Tepe location, surface pottery finds dated to Late Hellenistic and Roman Periods were recovered.

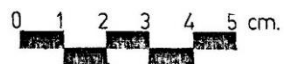
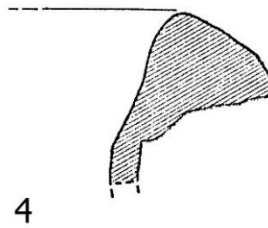
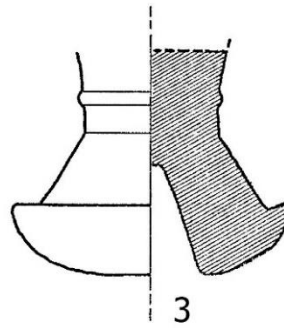
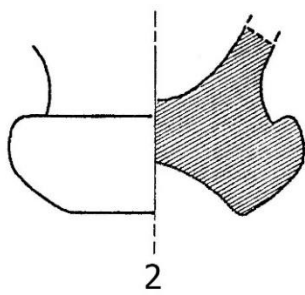
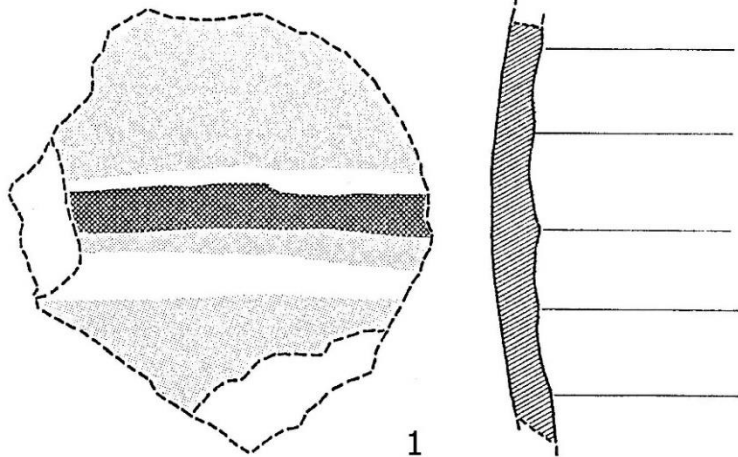
Ceramic Finds and Dates:

- 1- Amphora, body sherd, early Archaic Period**
- 2- Amphora, foot, 3rd century AD**
- 3- Amphora, foot, 3rd century AD**
- 4- Amphora, rim sherd, 3rd century AD**



Figure 37. Körmen Limanı general view

KÖRMEN LİMANI W7 / 1



Muhaltepe

Site No: W7,2

Size: 2 ha.

Function: Settlement, pottery workshop

Morphology: Hillslope

Period: Hellenistic, Roman

Findings: Muhaltepe is situated on hillslopes of river valley where surface material yielded pottery workshop refuse deposits. These deposits consist of amphora and coarse kitchen ware fragments. To the 200 km south of workshops, surface pottery finds indicate at a Late Hellenistic Period farmhouse.

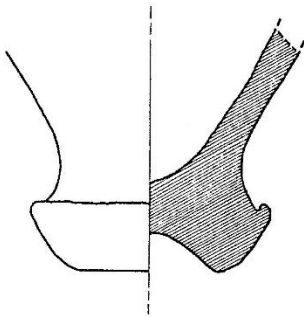
Ceramic Finds and Dates:

1- Amphora, foot, 3rd century AD



Figure 38. Muhaltepe general view

MUHALTEPE I W7 / 2



1



Killiktepe

Site No: W7,8

Size: 3ha.

Function: Settlement

Morphology: Hilltop, hillslope

Period: Classical, Hellenistic

Findings: On the hilltop and the south slope of the site surface pottery finds dated to Classical and earlier periods were found. To the east of Killiktepe, existence of pithos, amphora, fine ware sherds and roof tile fragments indicate at a settlement location.

Ceramic Finds and Dates:

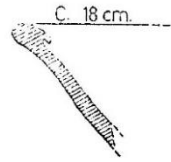
1- Plate, rim sherd, 3rd – 2nd century BC

2- Dinos, rim sherd

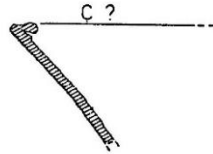


Figure 39. Killiktepe Google Earth image

KILLIKTEPE W7 / 8



1



2



Germe

Site No: W7,13

Size: 4 ha.

Function: Settlement

Morphology: Hillslope

Period: Archaic, Classical, Hellenistic, Roman

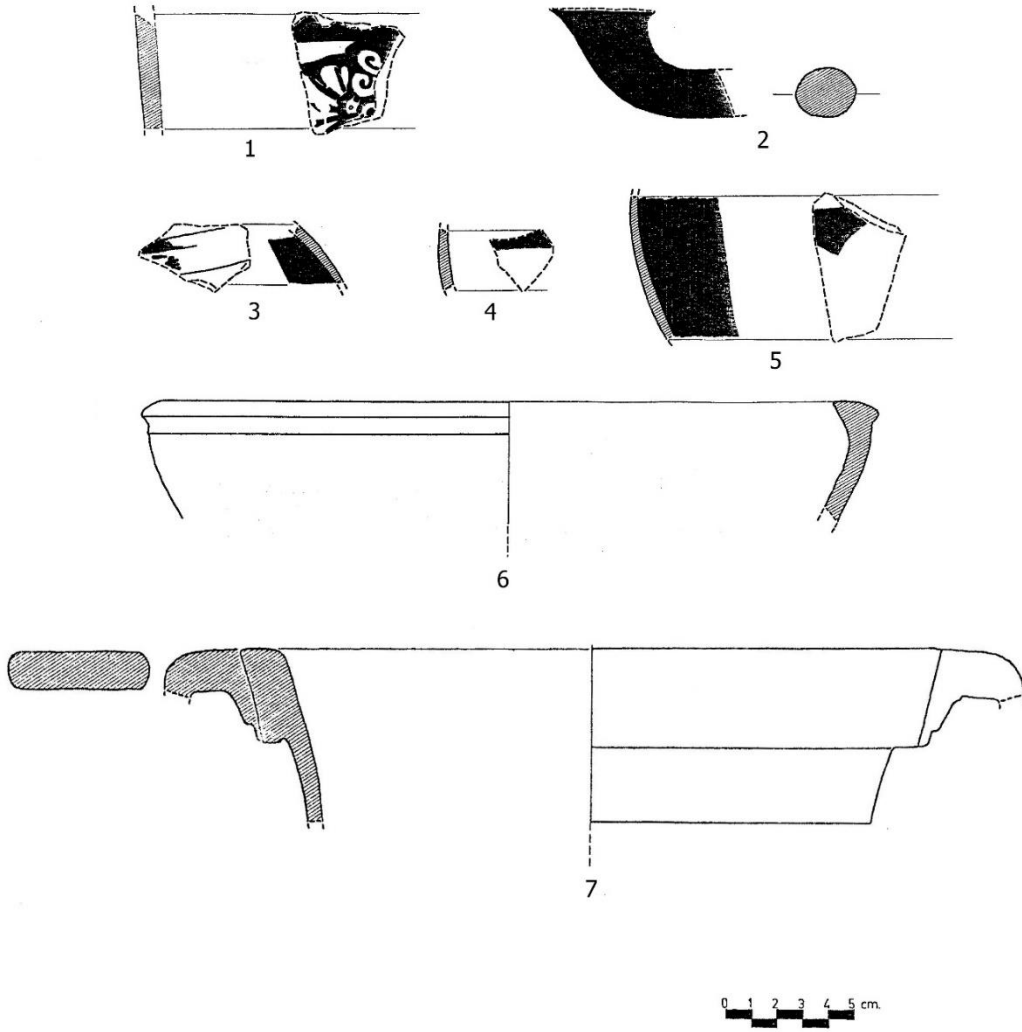
Findings: On the northern slopes of Germe abundant surface pottery finds dated from 6th century BC to Late roman Period were recovered. A necropolis area was determined on the western slopes of Germe.

Ceramic Finds and Dates:

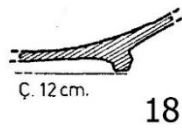
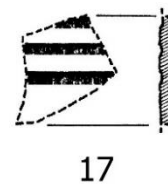
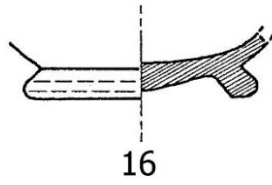
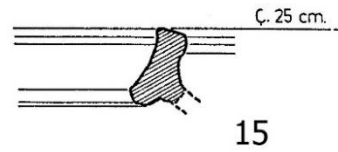
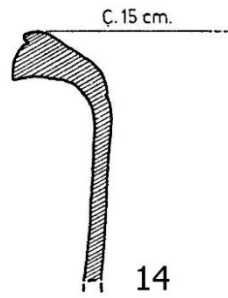
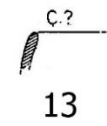
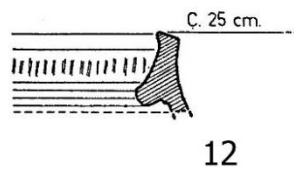
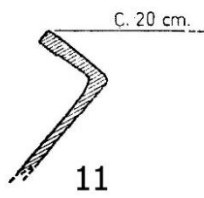
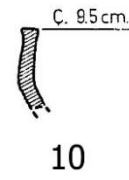
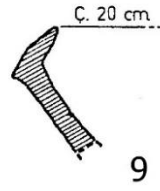
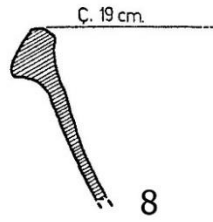
- 1- Krater, neck sherd, 4th century BC**
- 2- Krater, handle sherd, 4th century BC**
- 3- Bowl, body sherd**
- 4- Bowl, body sherd**
- 5- Bowl, body sherd, 5th century BC**
- 6- Bowl, rim sherd, 5th – 4th century BC**
- 7- Krater, rim sherd, 6th century BC**
- 8- Bowl, rim sherd, Roman Period**
- 9- Plate, rim sherd, 2nd – 3rd century AD**
- 10- Bowl, rim sherd**
- 11- Cooking ware, rim sherd, 2nd century AD**
- 12-Plate, rim sherd, 2nd century AD**
- 13- Bowl, rim sherd**
- 14- Amphora, rim sherd, 2nd century AD**
- 15- Plate, rim sherd, Roman Period**
- 16- Bowl, base sherd, 2nd century BC**
- 17- Bowl, body sherd**
- 18- Plate, base sherd, 2nd – 3rd century AD**
- 19- Bowl, rim sherd, Classical Period**
- 20- Bowl, rim sherd, Classical Period**
- 21- Bowl, rim sherd**
- 22- Bowl, rim sherd**

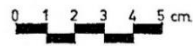
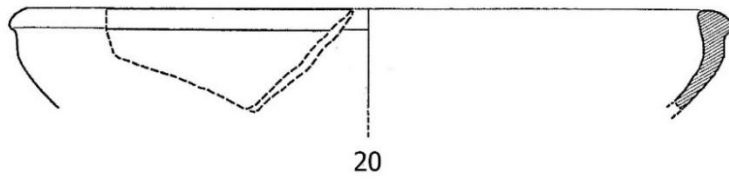
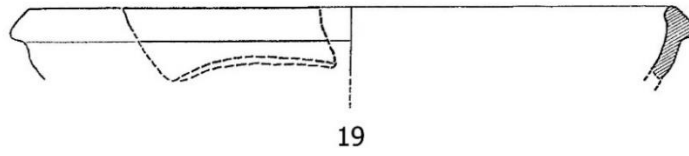


Figure 40. Germe Google Earth image



GERME W7 / 13





Kumyer Kalesi

Site No: X6,2

Size: 12 ha.

Function: Settlement, fortress, ritual, agricultural, necropolis

Morphology: Plain, hilltop, hillslope

Period: Archaic, Classical, Hellenistic, Roman, Middle Age

Findings: Kumyer Kalesi is located on the second largest plain of peninsula. Surface pottery finds and inscriptions identified by Bean and Cook represents the Archaic Period at the site. The fortress on the hilltop at Belentepe at 350 m elevation is dated into in Classical Period because of its wall construction technique which is built in polygonal style with small stones in the chinks. However, another construction phase observed by Maiuri, dated not earlier than 4th century BC. refers to a wall which was built in heavy fitted polygonal, regularly coursed at the corners and has vertical drafting on the angles. The agricultural terraces and farmhouses of Hellenistic Period are on the valley slopes. Finds from a small necropolis were recovered on the plain near the site. Bean and cook also mention that they acquired a sculptured marble fragment where a group of 9 marble Aphrodite figurines was reportedly found. Based on this findings, the location is suggested as one of the sanctuaries of the goddess.



Figure 41. Kумыer Kalesi general view



Figure 42. Kумыer Kalesi fortress walls

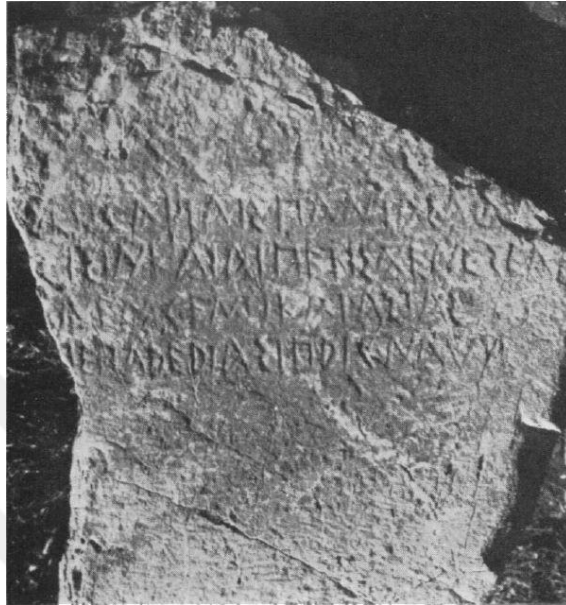


Figure 43. Kумыer Kalesi Archaic Period inscription

vacat

[- -]ι πολίταις πάντας ἀο[- -]
 [- -]οισιν καὶ αἱ πέ(ρ) τις ξένος ἔλ[θηι]
 [- -]νεμόεντι καταστάς *vac.*
 [- -]τε παρ' ἐργαστήριον αὐτ[ό?]
vacat

Translation is not clear. ‘...the stone may perhaps have been placed beside this path, inviting the wayfarer to halt in the ‘bosky glen’ (I. 3) and proceed ([έρ] πε. I. 4?) close up to the (wine ?) factory.’



Figure 44. Kумыer Kalesi Hellenistic Period inscription

τέμενος Ἀσκληπιοῦ
ἀποτελεῖν μίσθωμα
κατ' αἰεὶ κομιδὰς
ἐκ ποθόδου θυσιαῶν

'The sanctuary of Asklepios shall pay rent out of the revenue from the sacrifices, in proportion to the receipts from time to time.'

Palamutbükü, Kuzey Yamaçları (Doğu Yakası)

Site No: X6,6

Size: 1 ha.

Function: Settlement, agricultural, necropolis

Morphology: Hillslope

Period: Hellenistic

Findings: Surface pottery finds including roof tile, pithos and amphora fragments from Hellenistic Period as well as agricultural terraces were observed on the slopes and recently ploughed fields. To the 250 m west of the site, agricultural terrace walls as well as cylindrical storage units were observed. . To the 300 m northwest of the site a small area with burial chambers dug in to the slope was identified as necropolis, though there are no finds enabling the dating.

Ceramic Finds and Dates:

1- Amphora, foot, 3rd century AD

2- Mortar, rim sherd, 5th – 4th century BC

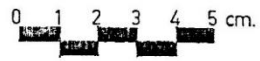
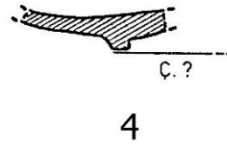
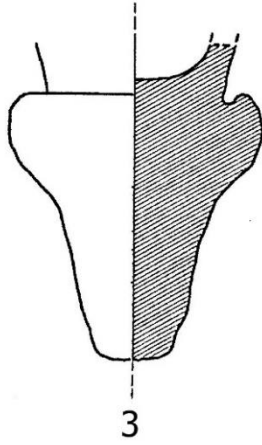
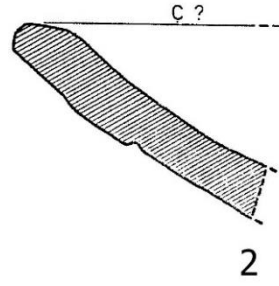
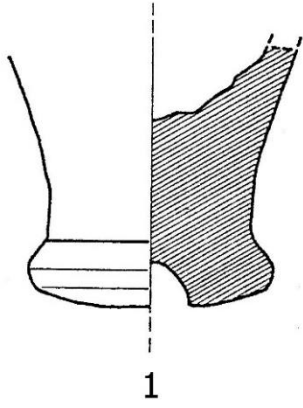
3- Amphora, foot

4- Plate, base sherd, 1st century BC



Figure 45. Palamutbükü Google Earth image

PALAMUTBÜKÜ DOĞU YAKASI X6 / 6



Balıkaşiran

Site No: W9, 3

Size: 11 ha.

Function: Settlement

Morphology: Plain

Period: Hellenistic, Middle Age

Findings: The most prominent feature at this site is a Middle Age fortress situated at 100 m altitude on hilltop. However, there is evidence indicating at an earlier occupation. At the southeastern slope of the site, remains of architectural features were observed along with Late Hellenistic Period pottery fragments including Rhodes type stamped amphora handles.

Ceramic Finds and Dates:

- 1- Bowl, rim sherd, 17th – 18th century AD**
- 2- Large bowl, rim sherd**
- 3- Amphora, rim sherd, 1st century BC**
- 4- Plate, rim sherd, 5th century AD**

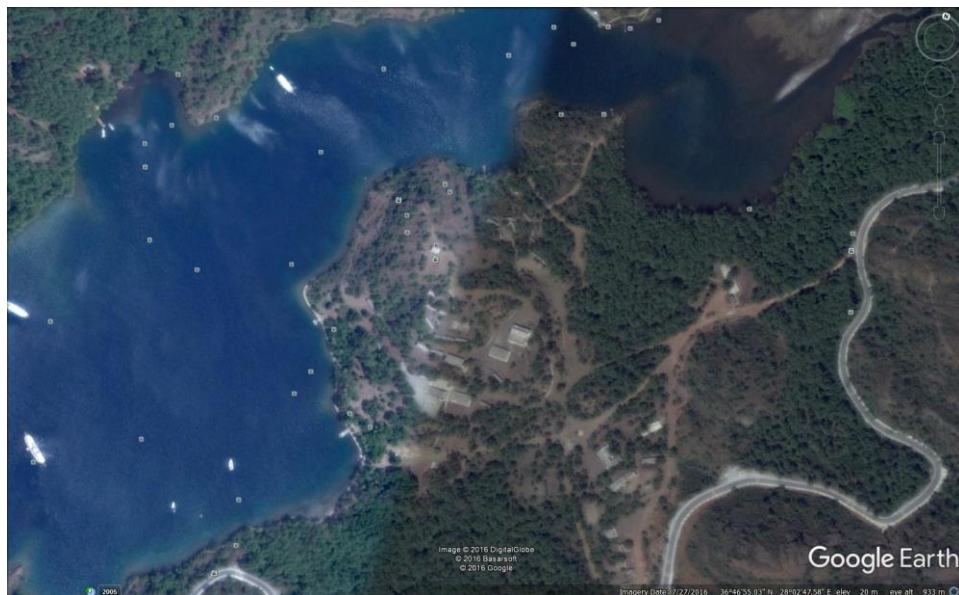
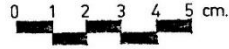
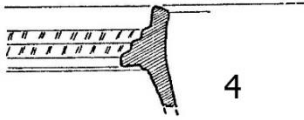
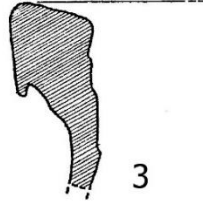
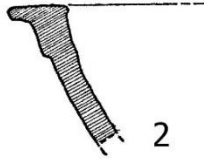
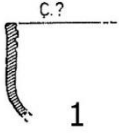


Figure 46. Balıkaşiran Google Earth image

BALIKAŞIRAN W9 / 3



APPENDIX B - TURKISH SUMMARY/TÜRKÇE ÖZET

Bu tezin temel amacı Burgaz yerleşiminin Geometrik Dönem 'den Helenistik Dönem'e kadar olan süreçte Datça Yarımadası içerisindeki sosyal, ekonomik ve politik konumunun anlaşılmasıdır. Bu çalışma çerçevesinde önceden tanımlanmış polis karakteristik özelliklerini kabullenmek yerine polis terimini mümkün olduğunca sadeleştirerek, her yerleşimin kendine özgü oluşum süreçleri olduğunu önerilmektedir. Polis, Antik Yunan kültürünün en üstün yaşam şekli olarak kabul edilmekte, buna bağlı olarak da polise ait fiziksel özelliklerin mümkün olduğunca etkileyici olması beklentisi oluşmaktadır. Bu tarz yüksek beklentiler, araştırmacıları anıtsal mimari ya da kesin bir şekilde sınıflanmış toplum düzenine işaret eden bulguları aramaya yönlendirerek polisin esas özünü ortadan kaldırmaktadır. Bu çalışma kapsamında polis en temel anlamıyla ele alınarak, yerleşim merkezi olarak Burgaz'da M.Ö. 4. yüzyıl öncesinde, sırasında ve sonrasında gerçekleşen değişikliklere ışık tutulması hedeflenmektedir. Bu hedefe ulaşılma doğrultusunda bölgesel ölçekli verinin yanı sıra yerleşim ölçekli arkeolojik veri de göz önüne alınarak yerleşim sistemleri analizleri yapılmıştır. Datça Yarımadası aynı zamanda Knidos Teritoryumu olarak da bilinmekte olup, antik Karya bölgesi sınırları dâhilindedir. Kuzeyde Büyük Menderes vadisi, güneyde Dalaman Nehri, doğuda Babadağ-Honozdağ-Bozdağ dağ silsilesi ve batıda Ege Denizi, antik Karya bölgesinin doğal sınırlarını belirlemektedir. Datça Yarımadası Karya bölgesinin güneybatısında yer almaktadır. Yarımada 65 km uzunluğunda ve en geniş kısmında kuzeyde İnceburun Tepe'den güneyde İnce Burun'a 17 km genişliğinde, dar ve uzun bir yapıdadır. Bölgenin öne çıkan antik yerleşimlerinden biri olan Burgaz, modern Datça yerleşiminin 2 km kuzeydoğusunda, Burgaz Ovası'nda konumlanmıştır.

Arkeolojik verilere geçmeden önce çalışma bölgesi olarak seçilen Datça Yarımadası ve Knidos ile ilgili antik kaynaklardan elde edilen bilgilerin kısa bir özetinin burada sunulması, Burgaz'ın da bir parçası olduğu politik atmosferin anlaşılmasında yardımcı olacaktır. Antik kaynaklarda Knidos ile ilişkili girdilerin sayısı oldukça fazla olup, en

erken M.Ö. 12 yüzyılda Aiolia, Ionia ve Dorların Anadolu'ya göçlerine dair bilgilerle başlamaktadır. Dorlar Rodos ve Kos'u kolonize ettikten sonra Datça Yarımadası'nda gelerek Knidos'u kurmuşlardır. Kos, Halikarnassos, Ialysos, Kameiros ve Lindos ile birlikte Knidos Dor Hexapolis'ini oluşturmuştur. Bu bölgede Dor kökenli polisler birlik oluşturarak politik bir güç olmayı sağlamışlardır. Herodotos'un verdiği bilgilere göre, etnik kökene dayalı bu birliğin kült merkezi olarak Triopion'daki Apollon Kutsal Alanı'nda Dorların her yıl Apollon adına düzenlenen oyunlara katılarak aralarındaki bağları kutsamaktaydılar. Batı Anadolu'da Pers etkisinin özellikle baskın olduğu II. Kiros yönetimindeki M.Ö. 550 – 529 yılları arasındaki süreçte topraklar satraplıklara bölünerek Anadolu kentlerinin vergi ödemesi zorunlu kılınmıştır. Başlangıçta Pers hegemonyasında Knidos'un özgür olduğu, denizaşırı ticari ilişkilerinin geliştiği bilinmektedir. Emecik Köyü yakınlarındaki Apollon Kutsal Alanı kazı sonuçlarına göre, Geç Arkaik dönemde Dorların birliğini temsil eden bu kutsal alanın daha da gelişme göstererek kullanıldığı anlaşılmıştır. Perslerin Ionia ayaklanmasını bastırması ve Hellas üzerine yürümleri üzerine baskının artması sonucunda gelişimleri sekteye uğrayan kent-devletleri kendi aralarında birlikler kurmaya başlamıştır. M.Ö. 478 yılında Knidos'un da bu şekilde bir araya gelmiş ve Pers hegemonyası karşısında duran önde gelen birliklerden biri olan Attik Delos Birliği'nin bir üyesidir. Attik Delos Birliği'nin kurulmasıyla Pers hegemonyası son bulmuştur. Deniz Birliği döneminde Atina'nın hegemonyası giderek artar, diğer üyeler gibi Knidos'un da özyönetimi kısıtlanır. Atina'nın M.Ö. 449 – 448'de para basma hakkını elinde toplaması ile diğer Birlik üyesi polisler gibi Knidos'un da para basmadığı görülür. M.Ö. 411'de Sparta saflarına geçtikten sonra Knidoslular düzenli olarak tekrar para basmaya başlarlar. Doğu Akdeniz'den gelen ve genellikle tahıl taşıyan ticaret gemileri dönemin deniz ulaşım teknolojisi gereği, kıyı boyu yolculuk yaparak Rodos-Knidos boğazına ulaştıklarında kuzeybatıya yönelerek Atina'ya geçerlerdi. Bu ticaret yolunu kontrol altına almak için Spartalılar yeni bağlaşıkları Knidos'u M.Ö. 412'den sonra önemli bir üs olarak kullanırlar. M.Ö. 490'da Maraton Zaferi'nden sonra bölgedeki kent-devletleri bağımsızlıklarını yeniden kazanarak tarıma dayalı yapıdan ticarete dayalı ekonomik

yapılanmaya geçmiştir. Bu durum kent-devletlerinin kentleşme süreçlerini etkileyerek değişime uğramalarına sebep olmuştur. Peloponez Savaşları sırasında sekteye uğrayan ticaret aktiviteleri ve kentleşme süreçleri M.Ö. 378'de Antalkidas Barışı'nın imzalanması sonucunda oluşan barışçıl atmosferde yeniden canlanmıştır. Yarı-kapalı tarım ekonomisinden özel üretime dayalı tarımsal ekonomiye geçiş yapılmasına bağlı olarak, küçük savaş gemileri ticaret gemilerine dönüştürülerek kullanılmıştır. Karadeniz'i Doğu Akdeniz'e bağlayan önemli deniz ticaret rotaları üzerinde konumlanmış olan Akdeniz kent-devletleri, deniz ticaretinde önemli bir rol oynamaya başlamıştır. Bu durum polis yapılanmalarında bir takım değişiklikler meydana gelmesine sebep olmuş ve Batı Anadolu'da sinoikizm ile ortaya çıkan ticaret merkezlerinin oluşumuna önyak olmuştur. Ticari aktivitelere bağlı olarak sinoikizm sürecini yaşayan Karya bölgesi yerleşim modellerinin değişimine iyi bir örnek teşkil etmektedir. İlk olarak Rodos polisleri M.Ö. 408'de bir araya gelerek tek bir büyük polis oluşturmuştur. Adanın deniz ticareti rotası üzerinde stratejik olarak avantajlı bir noktada yer alan kuzey ucunda kurulan yeni polis adanın politik ve ticari merkezi haline gelmiştir. Rodos'un ardından Kos da eki yerleşimi adanın doğu ucundaki, yine deniz ticareti rotası üzerinde avantajlı bir konuma taşımıştır. Aynı şekilde Burgaz da artık deniz ticareti rotası üzerinde yer almayan bir noktada konumlanmış olduğundan M.Ö. 360'dan sonra yerleşim Datça Yarımada'sının batı ucunda doğal limanlar sunan ve ticaret rotasında önemli bir bağlantı noktası olan Tekir Burnu'na taşınmıştır.

Burgaz'a ilişkin ilk arkeolojik araştırmalar Thucydides'den ilham alan Bean ve Cook tarafından sunulan Burgaz'ın Eski Knidos olabileceğine yönelik öneri ile başlamıştır. Bu öneriye göre Knidoslular M.Ö. 360'dan sonra yerleşimi Burgaz'dan Datça Yarımadası'nın batı ucundaki Tekir Burnu'na taşımışlardır. Bu hipotez üzerine 1980'lerin başında Prof. Dr. Numan Tuna Yarımada'nın neredeyse tamamını içeren kapsamlı bir yüzey araştırması yürüterek Burgaz'ın Bean ve Cook'un önerdiği gibi Eski Knidos için en uygun mevki olduğunu öne sürmüştür. 1980'lerden sonra Datça Yarımadası'nda görülen doğal çevredeki dramatik gelişmeler, Burgaz Mevkii'nde bulunan kırılğan yapıdaki arkeolojik kültür varlıklarını da etkilemiştir. Kısa sürede yok

olma tehlikesi karşısında bulunan Burgaz sit alanının belgelenecek kurtarılması ve korunması için Orta Doğu Teknik Üniversitesi, Tarihsel Çevre Değerlerini Araştırma Merkezi (TAÇDAM) tarafından 1993 yılında Burgaz Arkeolojik Kurtarma Kazıları başlatılmıştır. 1993'ten bugüne yaklaşık 20 hektarlık bir alanı kapsayan jeofizik araştırmalar yapılmış ve toplamda 11675 m² alan kazılmıştır. Kuzeydoğu, Güneydoğu, Akropolis ve B11 olarak adlandırılan dört ana sektörde gerçekleştirilen kazı çalışmaları yerleşim alanı içerisinde yer alan akropol, limanlar, konut yapıları, kamusal yapıya ek olarak ortogonal kent planını da açığa çıkartmıştır. 1993-2016 yılları arasında yürütülen kazı çalışmaları, öncelikle yerleşmenin yaygınlığı ve zamandizini üzerine bilgi elde edilmesi üzerine yoğunlaşmıştır.

Antik yerleşme yaklaşık 400 m uzunluğunda, deniz seviyesinden yüksekliği 12 metreyi bulan, küçük bir kara çıkıntısı üzerine kurulmuştur. Burgaz kazılarında ele geçen en erken arkeolojik buluntular M.Ö. 8. yüzyıla, Geometrik Döneme tarihlenen, çoğunlukla sondaj çalışmalarında açığa çıkartılan seramik parçalarıdır. Söz konusu Geometrik Dönem seramik buluntular yerleşimin stratigrafisi ve kronolojisinin anlaşılması açısından büyük önem taşısa da, bu bulgular ile net bir şekilde ilişkilendirilebilecek herhangi bir mimari kalıntıdan bahsetmek mümkün değildir. Tespit edilebilen en erken mimari kalıntılar, Burgaz'ın ilk yerleşim evresine ait Arkaik Dönem duvar temelleridir. Kazılar neticesinde büyük bir kısmı açığa çıkartılan yerleşimi oluşturan cadde, sokak ve yapı adaları, ortogonal yerleşim planının Hippodamos'dan daha erken bir dönemde, M.Ö. 6. yüzyılda Burgaz'da var olduğunu göstermiştir. İlk yapı evresinden daha sonraki dönemlerde gözlemlenen yeniden yapılanma faaliyetleri, büyük oranda orijinal kent planına sadık kalmışlardır. Kazılardan elde edilen bilgiler ışığında yerleşimin iki farklı yeniden yapılanma evresi geçirdiği, bu evrelerde ana aks ve parsel sınırlarının korunduğu belirlenmiştir. İlk M.Ö. 5. yüzyılda gerçekleşen yeniden inşa evresinin ikincisi M.Ö. 4. yüzyılın 3. çeyreğinde, Burgaz yerleşiminin fonksiyonunun değişimiyle eş zamanlı olarak meydana gelmiş olduğu görülmüştür. Söz konusu değişim sonucunda konut alanları etkili bir şekilde işlik ve depo alanları haline getirilerek tarımsal ve lojistik faaliyetler için kullanılmaya başlanmıştır. İlk kullanım evrelerinde konut yapısı olarak

işlev gören binaların içerisinde Erken Helenistik – Geç Klasik döneme ait şarap ve zeytinyağı pres taşları, dinlendirme havuzcukları ve oluklar açığa çıkartılmıştır. Benzer şekilde bazı konut yapılarının ise seramik üretim atölyelerine veya metal işliklerine dönüştürüldüğü gözlemlenmiştir. Helenistik ve Roma Dönemlerinde yerleşimin duvarlarla çevrelendiği ve bu duvarların yer yer konut alanlarının üzerine inşa edilerek yerleşim alanını daralttığı belirlenmiştir. Bu geç dönem aktiviteleri dışında yerleşim alanı M.Ö. 6. yüzyıldan 4. yüzyıla kadar önemli bir değişiklik göstermemektedir.

Burgaz'da gerçekleştirilen kazı çalışmalarından elde edilen arkeolojik verilere ek olarak bölgesel ölçekli analizlerde kullanılmak amacıyla 1980'li yılların başında Prof. Dr. Numan Tuna tarafından yürütülmüş olan Datça Yarımadası yüzey araştırması veri tabanı çalışma kapsamında değerlendirilmektedir. Yüzey araştırması verilerinin analizlerde kullanılabilmesi için veriler ArcGIS araçları ile dijital hale getirilmiş, analizler teorik açıdan yerleşim modeli analizleri ile ele alınmıştır. T.C. Harita Genel Komutanlığı tarafından temin edilen 11 paftadan oluşan 1:25.000 ölçekli Datça Yarımadası topografik haritası ArcGIS programı yardımıyla dijital hale getirilmiş, 50 metrelik aralıklarla temsil edilen rakım değerleri dijital haritaya aktarılmıştır. Bu harita kullanılarak Datça Yarımadası'nın Dijital Yükseklik Modeli (DEM) oluşturulmuş, daha sonra Tuna'nın belirlediği yerleşim lokasyonları modele eklenmiştir. Analizler için gerekli görülen toprak özellikleri, akarsular ve benzeri diğer veriler farklı tabakalar olarak dijital ortama aktarılmıştır. Bu işlemlerin tamamı daha detaylı analizler için temel oluşturmaktadır. Spatial Analyst araçları ile bakı, görülebilirlik ve gözlem noktaları hesaplamaları gibi coğrafik yüzey analizleri gerçekleştirilmiştir. Map Algebra aracı ile arkeolojik buluntu alanlarının yüzey ölçümleri ve Spatial Statistics aracı ile en yakın komşu hesaplamaları yapılmıştır.

Dijital analiz yöntemleri mekânsal veri ile çalışırken şüphesiz kullanışlı birer araçtır ancak en iyi yazılımlar bile sağlam bir teorik temel olmadan anlamsızdır. Bu çalışma kapsamında yerleşim modeli analizi yerleşimlerin tek tek incelenmesine ek olarak, bölgeyi bir bütün olarak ele alma ve bölge içindeki her bir yerleşimin birbirleriyle olan

ilişkinin anlamak için seçilen yöntemdir. Yerleşim modeli analizleri 1930'larda bölge içindeki yerleşim dağılımları ve çevresel faktörler arasındaki ilişkilerin anlaşılması amacıyla kullanılmaya başlanmıştır. Yerleşim modeli terimi ilk defa Willey tarafından, büyük ses getiren Güney Afrika'daki Viru Vadisi üzerine yaptığı çalışmada kullanılmıştır. Bir bölge içinde yer alan yerleşimlerin dağılımı ve birbirlerine olan mesafeleri ekonomik, sosyal ve politik ilişkilerin anlaşılması açısından büyük bir önem taşımaktadır. Dağılımların analizleri için kullanılan tekniklerden biri olan en yakın komşu analizi Clark ve Evans tarafından 1954 yılında yayımlanan ekolojik bir çalışmada sunulmuştur. Yerleşimlerin dağılımları ile ilgili kullanılabilecek diğer bir yaklaşım ise merkezi yerler teorisi ve sıra-büyüklik sıralaması olup, özellikle yerleşimlerin politik açıdan anlaşılmasında etkilidir. Bu çalışma kapsamında sıra-büyüklik sıralaması yerleşimlerin yüzeyde gözlemlenebilen buluntuları temel alınarak hesaplanmış büyüklikleri üzerinden yapılmıştır. Çalışmada başvurulan yöntemlerden biri de yerleşim toplama alanı analizleridir. İlk kez Vita-Finzi ve Higgs tarafından kullanılan bu yöntem, bir yerleşimin çevresindeki doğal kaynaklara ulaşma şekillerinin anlaşılması için etkin bir metottur. Temelde yerleşimin ekonomik ve çevresel yönlerini aydınlatan bu analizler en az çaba ile en çok fayda sağlanması mantığı üzerine kurulmuş olup, bir saatlik yürüyüş mesafesini 5 km olarak kabul etmekte ve bu çapta bir alan içerisinde yerleşimin ulaşabileceği kaynakları göz önüne almaktadır.

Çalışmanın teorik zeminini oluşturan polis, kent-devleti ve kentleşme ile ilgili literatür tarama önde gelen çalışmaları bir araya getirmektedir. Literatürde polis oluşumuna ilişkin iki farklı görüş vardır. Bunlardan biri geleneksel bakış açısı olup, polisi oluşturan fiziksel öğeler, özellikle de Atina örneğini temel alan idealize edilmiş polis modelini temsil eden anıtsal mimari göz önüne alınarak tanımlanmaktadır. Bu bakış açısına göre bir yerleşimde tiyatro, tapınak, stadium, agora ve benzeri yapılar gözlemlenebiliyorsa, o yerleşim bir polistir. Geçtiğimiz son 50 yıllık süreçte arkeoloji teorisi ve metodolojisindeki değişimlere bağlı olarak geleneksel yaklaşım eleştirilmeye başlanmıştır. Morris ve de Polignac gibi araştırmacılara göre bu geleneksel bakış açısı bölgesel devletleşme süreçlerini ve genel anlamda polisin ortaya çıkmasını sağlayan

kentleşme sürecini aydınlatacak alternatif açıklamalar sunabilecek arkeolojik verinin değerini göz ardı etmektedir.

Datça Yarımadası'nda bulunan antik yerleşimlerin bölge içindeki zamansal ve mekânsal dağılımlarının incelenmesi Burgaz ve hinterlandının arkeolojik süreçlerinin anlaşılmasında önemli sonuçlar göstermektedir. Her bir yerleşimin fonksiyon ve dönemsal dağılımlarının belirlenmesi bu süreçlerin nasıl geliştiğine ışık tutmaktadır. Özellikle ritüel yerleri ve nekropollerin konumlarına bakıldığında, Datça Yarımadası yerleşimlerinin bir takım ritüel kökenli anlaşmalar üzerinden iletişim kurmuş olabilecekleri akla gelmektedir. Geometrik Dönem'den itibaren Burgaz çevresinde ortaya çıkmaya başlayan ritüel karakterli yerleşmeler, Burgaz'ın söz konusu yerleşmeler ile yakın bir ilişki içerisinde olduğuna işaret etmektedir. Bu önermenin Burgaz'ın yerleşim sıra-büyüklik sıralamalarına göre merkez yerleşme olarak görülmesini de açıklaması mümkündür. Burgaz'ın merkezleşme sürecinin bir başka katmanı da yerleşimin tarıma elverişli topraklar üzerinde konumlanmış olmasıdır. Toprak verimlilik analizlerine göre Burgaz Yarımadasının en geniş ve verimli toprak özellikleri gösteren kısmında yer almakta, bu da yerleşimin ekonomik açıdan kendi kendine yetmesine olanak sağlamaktadır. Burgaz çevresinde, yine aynı verimli toprakların görüldüğü bölgede ortaya çıkan daha küçük boyutlu yerleşimlerin Burgaz'ı beslediği de önerilebilir. En yakın komşu analizlerinin sonuçları da bu öneriyi destekler niteliktedir. Yerleşimlerin bölge içerisindeki dağılımları düzenli oluşu, iyi organize edilmiş, tarıma dayalı ekonominin göstergesi olarak kabul edilmektedir.

Analizlerin tamamı göz önüne alındığında Geometrik dönemden günümüze kadar aralıksız olarak yerleşim görmüş bir bölge ön plana çıkmakta ve Burgaz'ın politik ve ekonomik açıdan bölgenin kentsel merkezi olarak ortaya çıkmasının sebeplerine ışık tutmaktadır. Söz konusu bölge Datça Yarımadası'nın coğrafi merkezi olan kuzeybatı-güneydoğu gidişli, yaklaşık 5 km çaplı bir çöküntü havzası olup, Datça grabeni ya da Datça Kıstağı olarak adlandırılmaktadır. Bu bölge Burgaz'ın gelişimini destekleyen birçok özelliğe sahiptir. Datça Yarımadası geneli dik yamaçlar ve engebeli yüzey

şekillerine sahiptir ancak söz konusu graben, tektonik jeomorfolojik oluşumu sebebiyle genele göre daha düz bir yüzey yapısı göstermektedir. Daha önce belirtildiği üzere, bu bölge aynı zamanda Yarımada'nın tarıma en elverişli topraklarına sahiptir. Bölgede yer alan kil yatakları ve taş ocağı da bölgenin tercih edilmesinde rol oynamaktadır.

Datça Grabeni alanında bulunan yerleşmeleri merkez olarak etno-arkeolojik ve yerleşim toplama alanı çalışmalarda kullanılan 3 km ve 5 km çaplı çemberler çizildiğinde, bu bölgede yer alan yerleşmeler arasındaki ilişkilerin anlaşılması açısından anlamlı sonuçlar gösterdiği tespit edilmiştir. Harita üzerinde yerleştirilen bu çemberler Geometrik Dönem'den itibaren bölgenin iç dinamiklerinin gözlemlenmesi açısından faydalı olmuştur. Burgaz'da yürütülen kazı çalışmaları bu döneme ait herhangi bir mimari kalıntıyı açığa çıkaramamış olsa da, Burgaz, Maltepe ve Körmen Limanı mevkiilerinin harita üzerindeki dağılımları merkezileşme sürecinin ilk aşamasının gözlemlenmesine olanak sağlamaktadır. Burgaz ve Körmen Limanı yerleşimlerinin 5 km çaplı alanları, bir ritüel yeri özelliği gösteren Maltepe yerleşiminde kesişmekte, bu da aynı vadinin iki ucunda konumlanmış olan Burgaz ve Körmen Limanı yerleşimleri arasındaki politik ilişkilerin bazı ritüel kavramlar üzerinden sürdürülmüş olabileceğine işaret etmektedir.

Benzer bir düzenleme Arkaik Dönem' de de gözlemlenebilir. Bu dönemde Burgaz ortogonal planlı yerleşim olarak kurulmuş ve kentleşme süreci başlamışken, Burgaz çevresindeki küçük ölçekli yerleşimlerin de sayısı artış göstermiştir. Yerleşim sayısı arttıkça bunlar arasındaki politik ya da ekonomik ilişkiler de yeni ortaya çıkan ritüel mekanlar üzerinden yürütülmeye devam edilmiştir. Haritalar üzerinde görülebileceği üzere Burgaz ve Germe yerleşimlerinin 5 km çaplı alanlarının kesişiminde Karfitepe lokasyonu bir nevi iletişim noktası olarak değerlendirilebilecek bir diğer ritüel karakterli yerleşimdir. Eldeki veriler Germe'nin herhangi bir mimari öge saptanamamış olmasına rağmen 4 hektarlık bir alana yayılan yüzey seramik buluntuları yerleşimin yüzyıllar boyunca varlık gösterdiğine işaret etmektedir. Buna göre Germe'nin Geometrik Dönemden Helenistik Dönem kadar iskân edilmiş, iyi yapılanmış bir yerleşim olabileceği düşünülmektedir.

Klasik Dönem haritaları stratejik olarak avantajlı noktalarda konumlandırılmış kaleler dışında herhangi bir değişiklik göstermemektedir. Ege ve Akdeniz toplumları için genel anlamda hareketli ve istikrarsız olan bu dönemde Datça Yarımadası'nda herhangi bir çöküş veya yıkım gözlenmemektedir. Ancak M.Ö. 4. yüzyılın ortasından hemen önce büyük bir değişimin göstergeleri yavaş yavaş bir dönüşüm geçirmeye başlayan Burgaz'daki yerleşim merkezinde ortaya çıkmaktadır.

Dönüşümün tam etkileri Helenistik Dönem itibariyle görülmeye başlanmıştır. Yeni deniz ticareti rotaları daha karlı bir ticaret ortamı sağlarken, Burgaz konut alanları işlik ve depolama mekânlarına dönüştürülmüştür. Bu dönem Burgaz için ekonomik anlamda oldukça verimli olduğu, Tekir Burnu'nda kurulan yeni politik kent merkezinin kurulmasının mümkün olmasından da anlaşılmaktadır. Bu dönem Burgaz'da terk edilme ya da sinoikismos süreci olarak adlandırılmaktadır ancak ne Burgaz ne de hinterlandı kullanım dışı kalmış görünmektedir. Esasında durum tam tersi gibi görünmektedir: Helenistik Dönem ve sonrasında bölgede şarap ve zeytinyağı üretimi ile ilişkili yerleşimlerin sayısı önemli oranda artış göstermektedir. Bununla birlikte, bu yeni yerleşimlerin neredeyse hiçbiri Tekir'deki yeni merkez yakınlarında yer almamaktadır.

Burgaz M.Ö. 6. yüzyılda ortogonal planlı bir yerleşim olarak kurulmuştur ancak burada ele geçen Geometrik Dönem seramikleri ve Herodot'un Knidos'tan M.Ö. geç 7. yüzyılda Naukratis'de inşa edilen Hellenion Tapınak yapısının kurulmasına destek olan kentler arasında sayması, daha erken dönemde iskân olabileceğine işaret etmektedir. Antik yazılı kaynaklar Knidos'tan bahsetmeye M.Ö. 7. ve 6. yüzyılda da devam etmektedir: Thukydides'e göre Knidoslular Sicilya ve Güney İtalya'daki kolonizasyon hareketlerinde de rol oynamış, Gela, Lilybaeum, Kamarina ve Lipari Adalarında koloniler kurmuştur. Bunlara ek olarak Knidos'un Delphi'de Ege'nin en erken mermer yapılarından biri olan hazine binasını da yaptırmış olması Knidos'un M.Ö. 6 ve 5. yüzyıllardaki konumunun anlaşılmasını sağlamaktadır. Yazılı kaynaklar Knidos'u büyük kolonizasyon hareketlerine dâhil olabilecek ve maliyetli yapıların inşa edilmesini sağlayabilecek güçlü bir kent olarak tasvir etmekte, bu da Knidos'un oturmuş bir kent

devleti olabileceğini önermektedir. Arkeolojik bulgular ve analizler Burgaz'ın erken dönemde Datça Yarımadası'ndaki tek kent merkezi olduğunu ortaya koymaktadır.

Analizlerin sonuçlarının değerlendirilmesiyle Burgaz'ın kendine özgü öğeleriyle bir polis olarak tanımlanabileceğini ve polis konseptinin belki de modern araştırmacılar tarafından iddia edildiği kadar kesin bir tanımlamasının olmayabileceğini düşündürmektedir. Burgaz'ın kentleşme süreci ve yerleşimin teritoryumunun organizasyonu, polisin yalnızca anıtsal mimarinin varlığına dayandırılarak açıklanması gerekmediğini önermektedir. Önceden tanımlanmış polis konsepti ve bir takım kontrol listeleri Burgaz'ın polis olarak tanımlanmasını mümkün kılmasa da, yerleşim fonksiyonları ve dağılımı, sıra-büyükölük sıralamaları ve en yakın komşu analizleri M.Ö. 360'dan önce gerçekleşen sinoikismosa kadar Burgaz'ın Yarımada'nın sosyal, politik ve ekonomik merkezi olduğunu açıkça görülmektedir.

Antik yazılı kaynaklar tarafından önerildiği üzere Burgaz'ın gerçekten de Eski Knidos olabileceği fikri, arkeolojik veriler ve yerleşim modeli analizleri ile de desteklenmektedir. Tekir Burnu'nda yer alan Knidos kentinin ilk aşamada başka bir yerde kurulmuş olup, sonradan buraya taşındığı önerisini ilk kez sunan araştırmacılar Bean ve Cook'tur. Bu önerinin arkasında yatan en önemli sebep, Tekir'deki Knidos kentinde M.Ö. 4. yüzyıla tarihlenebilecek herhangi bir arkeolojik buluntunun ele geçmemiş olmasıydı. Robert ve Robert, Hornblower, Bresson ve Berges bu öneriyi destekleyen araştırmacılardan bazılarıdır. Bean ve Cook'un bu öneriyi ilk defa sunmasının üzerinden geçen zaman zarfında Tekir'deki Knidos'ta yürütülen kazılarda M.Ö. 4. yüzyıldan daha önceki dönemlere ait heykeller ve seramikler gibi arkeolojik buluntular ele geçirilmiştir. Bunun üzerine Love, Demand ve Blümel gibi araştırmacılar Knidos'un taşınma fikrine karşı çıkmışlardır. Brenson Yarımada'da iki kent merkezinin olabileceğini ancak Burgaz'ın politik merkez olduğunu ekleyerek tartışmaya katkıda bulunmuştur. Yakın zamanda Tekir'de yürütülen kazı çalışmalarında M.Ö. 5. yüzyıla ait siyah firnisli seramiklerin ele geçtiği de bildirilmiştir ancak söz konusu buluntuların herhangi bir erken dönem mimari öge ve ya konteksti ile ilişkine dair sağlam bir

dayanak gösterilememektedir. Erken dönem mimari öğelerin ve buluntularının yayılım alanlarına dair verinin olmaması nedeniyle Tekir'deki Knidos yerleşmesi Arkaik ve Klasik Dönem harita ve analizlerine dâhil edilememiştir. Eğer iddia edildiği üzere Tekir'de M.Ö. 4. yüzyıldan daha erken bir dönemde yerleşim varsa dahi, eldeki verilerin azlığı bu muhtemel yerleşimin polis olmasını pek de mümkün kılmamaktadır.

Bu tez gibi yerleşim modeli analizleri temelinde oturtulmuş olan Klazomenai ve Bozburun Yarımadası üzerine yapılmış olan çalışmalar bir yerleşimin ideal polis imajına uymamasına karşın, polis oluşum süreçlerini tamamlamış olabileceğini göstermektedir. Polis politik ve ekonomik açıdan kendi kendini idare edebilen yerleşimlerde gerçekleşen kentleşme ve yönetim sisteminin kurulması sonucunda ortaya çıkan bir oluşum olarak görünmektedir. Burgaz ve hinterlandı üzerine yapılan bu çalışma, herhangi bir epigrafik bulgu ya da anıtsal mimari olmaması rağmen, polis oluşumuna işaret eden kentleşme ve devletleşme süreçlerinin yerleşim ölçekli ve bölgesel ölçekli yerleşim modeli analizlerinin uygulanmasıyla gözlemlenebileceğini önermektedir.

APPENDIX C - TEZ FOTOKOPİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü

Sosyal Bilimler Enstitüsü

Uygulamalı Matematik Enstitüsü

Enformatik Enstitüsü

Deniz Bilimleri Enstitüsü

YAZARIN

Soyadı: Sevimli

Adı: Ezgi

Bölümü: Yerleşim Arkeolojisi

TEZİN ADI: Development of Burgaz (Palaea Knidos) and Its Hinterland in Context of Settlement Pattern Analysis

TEZİN TÜRÜ : Yüksek Lisans Doktora

1. Tezimin tamamı dünya çapında erişime açılsın ve kaynak gösterilmek şartıyla tezimin bir kısmı veya tamamının fotokopisi alınsın.
2. Tezimin tamamı yalnızca Orta Doğu Teknik Üniversitesi kullanıcılarının erişimine açılsın. (Bu seçenekle tezinizin fotokopisi ya da elektronik kopyası Kütüphane aracılığı ile ODTÜ dışına dağıtılmayacaktır.)
3. Tezim bir (1) yıl süreyle erişime kapalı olsun. (Bu seçenekle tezinizin fotokopisi ya da elektronik kopyası Kütüphane aracılığı ile ODTÜ dışına dağıtılmayacaktır.)

Yazarın imzası

Tarih