

Preface

The seeds behind this work were first sown during the author's first participation in an archaeological campaign in Koumasa in 2017 and in the subsequent campaigns.¹ In addition to the experiences offered by the direct contact with the material offered, the topographical elements of the region could hardly be dismissed, and they inspired this work. Holistically, its purpose is to shed light on the archaeological area of Koumasa and its diachronic role as a liminal node between valley and mountain. Its main habitation phase is the Minoan, which – although it does feature in the literature of Minoan and Aegean archaeology, mainly due to the tholoi – has been until now relatively obscure. This is also applicable to the area of central Asterousia, within which Koumasa is located. The lower area of the tholoi is dominated by the nearby double peak of the Korakies hill and its corresponding plateau, which was early on dubbed a “settlement”, a use which is adopted in this work. Seemingly an isolated location, the finds there were not consistent with a refuge or a defended position but rather with elements of affluence spanning the whole Minoan sequence.

At the same time, the integration of Koumasa within the rising slopes of the Asterousia mountains strongly focused the author's attention on two fronts. The first is the attempt to identify the topography's impact in shaping the settlement itself on three levels: the plain, where the tholoi are located, the rising slope, where elements of building activity can be attested to, and the elevated plateau of the settlement, all dominated by the local peak, which is the area of the so-called sanctuary of Koumasa, which henceforth will be referred to as ‘sanctuary’. The second is understanding the position of the settlement within Minoan connectivity networks, the wider environment of southern-central Crete, and specifically around the liminal area between the Messara plain and the Asterousia mountains in which it is located. This is furthered by the effort to understand the seemingly anomalous fact of Koumasa's centrality in the Minoan period, which is followed by a gradual descent into obscurity. These two approaches are seen as relevant to the evaluation of the site and aim to act as context for the planned future Koumasa publications.

1 The interdisciplinary research programme on Minoan Koumasa commenced in 2012 under the auspices of the Greek Archaeological Society and with the cooperation of the Institute of Classical and Byzantine Archaeology of the University of Heidelberg under the direction of D. Panagiotopoulos. I would like to express my gratitude to Professor Panagiotopoulos for his support and trust throughout the period of my participation in this project since 2017, culminating with this study.

In this process, with the aid of the archaeological study of the site carried out, older theories will be critically revised, with careful study of both older and more recent hypotheses, which will help to settle the debate about this area, for which previous research has provided contradictory interpretations. For understanding the regional character, the greater Asterousia region, as well as the area adjacent to the settlement, the central Asterousia and the south-central Messara will be investigated. As for Koumasa itself, the analysis will focus on the Koumasa settlement, where the palatial phases have been identified, and specifically on the effect of the dynamic topography of the site, for which a holistic approach needs to be considered. The previous and ongoing excavation campaigns have unearthed ca. 25% of the whole settlement plateau, allowing for the presentation of preliminary conclusions.² The area of the tholoi – the publication of which is pending – will be briefly addressed with a consideration of the tholoi culture.

In understanding the impact of topography on the habitation behaviour within the microscale of Koumasa, special focus is given to the ‘sanctuary’ of Koumasa, which occupies the central and most prominent area of the settlement – which extends on a rocky area around the summit of Korakies – to the east of the Koumasa tholoi and it also overlooks the Messara plain. As the only connected stretch to have been fully excavated, this central and undoubtedly important area offers significant insights into the whole settlement as well as its centrality within the urban landscape, which is at the focus of this work. Previous small-scale campaigns there and the thorough investigation which commenced in 2012 have revealed sufficient evidence to allow a systematic analysis of the architectural remains and the finds from the ‘sanctuary’ area. These are further enhanced by what is known of the rest of the settlement to date, utilising finds of both older and current excavations with the aim of providing answers regarding the character and function of the area as well as its history.

The analysis will rely on models that allow for approaching a building complex, focusing on its environmental influences and agency within the community. A comparison with other contemporary sites will reveal the similarities of the internal arrangements and spatial organisation within a Minoan settlement, which will allow for a better understanding of the functionality of the various areas. Therefore, the evaluation of the topographical arrangement and the finds will be embedded within the theoretical framework of a relational approach. These methodologies will help elucidate the function and character of the building activity in prominent locations not only at Koumasa, but in similar sites as well.

The second layer of the study, constituting the meso- and macroscale research on the Asterousia as a whole, was prompted by the earlier works and field research of Sbonias and Vasilakis up to the more recent work by Vavouranakis, Sarris, and Déderix concerning the nearby and in many aspects parallel settlement of Apesokari, as will be

² See Footnote 88.

presented in this work. Publications on the latter relied strongly on GIS methodologies, which will also be implemented here, based on a long series of accumulated experiences with results pertaining to various archaeological research projects. It is notable that the aforementioned works were mostly concentrated on the western Messara; therefore, this study hopes to act not only as a parallel but also as an extension to these previous approaches, revealing the connectivity potential that Koumasa offered to its inhabitants. This approach is complemented by physically walking through the mountain passes indicated by GIS methodologies and by interviews with contemporary inhabitants who carry out rural activities. Those endeavours highlight the regional importance of Koumasa and reveal the presence of networks that were not hitherto considered. This is intertwined with the question of the site's importance within the Minoan sequence, as well as its subsequent decline.

Structure

This study is organised in five parts. In Part I, a holistic approach to the site and its region is endeavoured, elucidating the cultural landscape of this region and the scientific challenges in its approach. In Chapter 1 the site of Koumasa will be presented as well as the history of research pertaining to it, as, due to its remote location and its very early and rather hasty excavation, the ratio of references in scientific publications to actual research on site was for more than a century quite low, even by the standards of Minoan archaeology. Chapter 2 will tackle a historical overview of the site, encapsulating the broader sociopolitical changes in the surrounding region and their impact on the local cultural trajectories in Koumasa, as evidenced by archaeological finds. The diachronic perspective provides a comprehensive understanding of the distinctive role the site played during Minoan times in contrast to other time periods. The surrounding areas act as the background in the palimpsest of historic development, putting them into context and aiding in deciphering the particularities of individual time periods.

In Chapter 3, the position of the site within its cultural and physical environment is further elaborated, followed by a critical review of the theoretical background used in previous evaluation of the settlement's role in the wider Messara area in the Prepalatial and Palatial periods. The study places a particular emphasis on the topographical element as a main factor in determining the projection of the broader changes in specific regions. To tackle this, an analysis of the surrounding topography and the relation of valley to mountain use is presented as a basis of understanding, or rather, updating established views of the topography around Koumasa.

Part II is dedicated to the GIS analysis. Although it is at times technical, it is deemed that it should be included in the narrative of the work and not in an annex, as archaeological discourse and analysis are being tackled in these chapters. Chapter 4 introduces the GIS methodology and functions used and discusses their usability and limits of their implementation in archaeology, drawing on insights from recent studies. This is

followed in Chapter 5 by the presentation of the results of the work with the DEM models for the wider area of Messara. Least-cost-path analyses and the network connectivity methodology will be implemented, and the results of the algorithm will be critically reviewed, comparing the results of the various methods and the functions used in the bibliography. Following this, the Viewshed and Waterscape methodologies will be applied in the area under study.

At this point, the three-level study commences, beginning with the microscale level in Part III. First, in Chapter 6, the focus is placed on movement patterns and viewshed and movement within the Koumasa habitation area, utilising a DEM model produced locally, followed by an examination of the role of the architectural elements in defining the movement space and its use.

The study can draw from various areas of the ongoing excavation, but it will rely mostly on the preliminary discussion of main archaeological results of the modern excavations in the ‘sanctuary’ area (which were concluded under the supervision of the author), its layout and summary of the finds. The analysis showcases the role of the focal point within the Koumasa area and is the first step of the tripartite scale of this study, the micro-, meso-, and macroscale. Within this context, the rooms, layout, and a summary of the finds per category will be presented (Chapter 7). In Chapter 8, the specific topographical arrangements of the site are evaluated according to its correlation with frameworks of theory of architecture, as per its interface with the outside and the inside of the settlement (Chapter 8).

Then, in Part IV, the adjacent mesoscale will be analysed, examining the areas of interest in the environ of Koumasa and the connectivity networks defined by the topography and seen in the cultural activity. Here, the GIS methods presented in Part II will be utilised, taking into account visibility patterns (viewshed) and the most immediate connections as they expand in the Messara valley (Chapter 9). Chapter 10 will delve into the macroscale of Koumasa, concerning its location in central Crete, while addressing the question of state. In order to address the theories concerning the political landscape of the region in Minoan times, an overview of state formation theory will be discussed, presenting a summary of the “political” systems and this gap in the archaeological research of the Asterousia.

Part V concerns the impact of the mountain movement. Chapter 11 deals with the mountainous part of the mesoscale, the one in the *backyard* of Koumasa, taking into consideration the central Asterousia mountains, i.e. the broader region Koumasa is part of. Though very little of the settlement is directly visible, it is nevertheless utilised and accessible. This accessibility is examined first on the basis of the various *loci* on the mountain range and their connectivity, deduced from the GIS analysis, but also empirically by walking and experiencing the mountains. Connectivity to the sea, until now disregarded, is shown to be of especial importance, which offers an explanation for the recent data regarding a fish-supplemented diet that analysis of the bones from the Koumasa cemetery has offered. Finally, in Chapter 12, various theoretical principles for the relations of people with the mountains will be examined.

Given the multifaceted scope of this study, each chapter is designed to stand independently while employing strategic repetitions and cross-referencing to ensure a unified and cohesive whole.

Methodological Approaches

As the structure illustrates, this work tackles the questions of the topographically most prominent position within a settlement in terms of its role and symbolism therein. In other words, how is this expressed in the architectural implementation, but also in the broader characteristics, in order to understand the role of this settlement in its wider, archaeologically poorly known vicinity. This first approach belongs to the microscale of Koumasa, and the second extends to the macroscale, or macrocosm of which Koumasa is part of.

An examination of the research history not only in Koumasa but also in the region is deemed necessary. In connection with this, a critical view of the analyses of various societal formations will be undertaken based on traditional and newer concepts of characterisations of civilisation's development.

While continuing research on the material on site, it was seen as appropriate to focus the research of this doctoral thesis on the question of location and on three levels of scale out of the five possible ones.³ First, the focus lies internally within the settlement, or its microscale, from the point of view of the settlement's most topographically pronounced feature, the 'sanctuary' of Koumasa. Defined here as overlapping levels of experiencing everyday activities, the microscale of the settlement is characterised by the movements within it and the interactions with its topography and built edifices. Here, the space syntax analysis, as utilised within the frame of the analytical approach, is a useful tool to tackle this subject, alongside elements of architectural theory.⁴ Furthermore, as a second step, the phenomenological approach, as introduced in architecture by Norberg-Schulz, will be useful. This does not rely on the quantitative aspect of the data gathered *per se*, but allows for a second level analysis, in which the liminal nature and potentials of the architectural elements are taken into account.⁵

Secondly, the mesoscale will be examined, i.e. the surrounding environment in which Koumasa is integrated, with which the settlement has a direct connection, and which forms its immediate vicinity. Based on the geomorphology of the island, this region

3 The five possible scales defined here are the domestic, the microscale of a settlement, the mesoscale of the immediate vicinity and daily interaction, the macroscale of the region and finally, the global or international scale. These scales are rather specific to the study of topography and bound by geomorphology. Thus, they differ from other similar definitions, such as those proposed by Knappett, who described a microscale corresponding to the domestic and further defined a macroscale corresponding to the two separate scales of the mesoscale and macroscale as used in this study, which better fit the case of Koumasa (Knappett 2012, 394–396).

4 Hillier – Hanson 1984, 147–155.

5 Palyvou 2018, 3–5.

mainly consists of the adjacent slopes and part of the central Messara with which direct visibility is possible, as well as the area of the central Asterousia, including Kophinas and the seashore, to which Koumasa acts as an access point, especially coming from the direction of Phaistos. Neighbouring archaeological landscapes and the various interconnectivities will be evaluated with the GIS method of viewshed amongst others.

Third is the macroscale of Koumasa, meaning the region of the entire Asterousia, Messara and beyond. Indeed, Koumasa is but one of the many locations peripheral to the peak of Kophinas, which has received less attention in the history of research. The utilisation of GIS methods, combined with on-site observations and empirical experience via walking both known and unknown paths allows for an insight in this region on these three levels.

This serves to illuminate the liminal function within the settlement (on the microscale) and the relevant nearby areas of economic or social interest as well as the wider area of the Kophinas peak and the small harbours to the south of the Asterousia (on the second scale of the mesoscale) and wider central Crete (on the third scale).⁶ Thus, the region of the central Asterousia will be integrated into the ongoing research of Asterousia in general. Although separately presented, the intention is to avoid a strict top-down or bottom-up approach (as Knappett puts it)⁷, but to study each level individually. These views are augmented with the results of interviews with modern inhabitants of Koumasa, Kapetaniana, Loukia and Vassiliki, which offer insights into the traditional use of the mountain resources.

Focusing on these lines, the initial presentation of the archaeological results in Part III will allow for a new understanding not only of the particular area of the settlement but also of the regional dynamics.

The reason this is deemed fitting is that these characteristics of the site provide valuable insights into the discussion on topographic utilisation and the symbolic significance of the mountainous region, which is one of the focuses of this work. Hence this work aims at elucidating the site of Koumasa acting as an introduction to its updated presentation to the academic community, and exploring the impact and interplay with topography, both at a local level but also with its surrounding area.

The multilevel approach aspires to create a holistic approach of Koumasa and its area including elements of the methodological approach of *entopia*, addressing the area not only as a source of archaeological data but going beyond the mere material elements towards an understanding of a heritage landscape and the grammar of location, utilising elements of sociology, ethnology and history.⁸

6 Utilisation of GIS methods aims to use Koumasa as a case study within the fast-developing field of GIS archaeology used all around the world (Verhagen – Jeneson 2012; Herzog, I. 2013). For their consultation and advise on the matter and support for pursuing such an implementation within Aegean archaeology I would like to thank A. Sarris and S. Déderix.

7 Knappett 2012, 394.

8 Panagiotopoulos – Savvatianou 2022, 167–170; Panagiotopoulos 2023a 192–203. For the grammar of location, see Nixon 2006, 92–96.

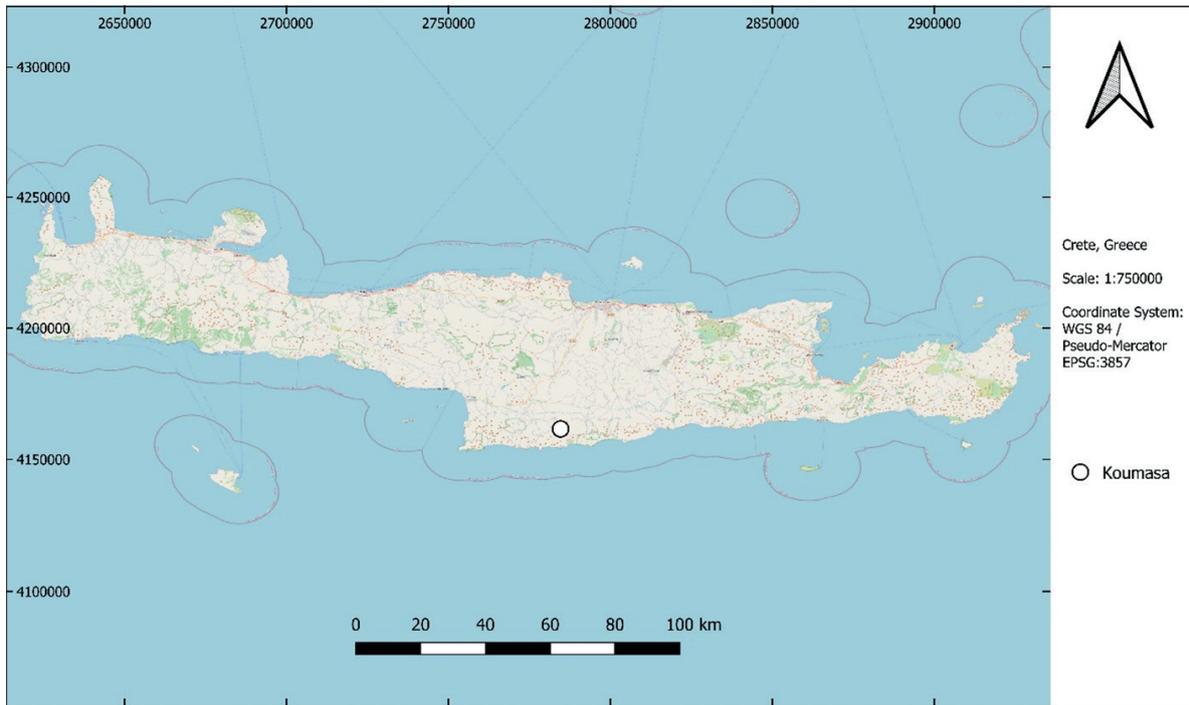


Figure 1: Location of Koumasa within Crete.

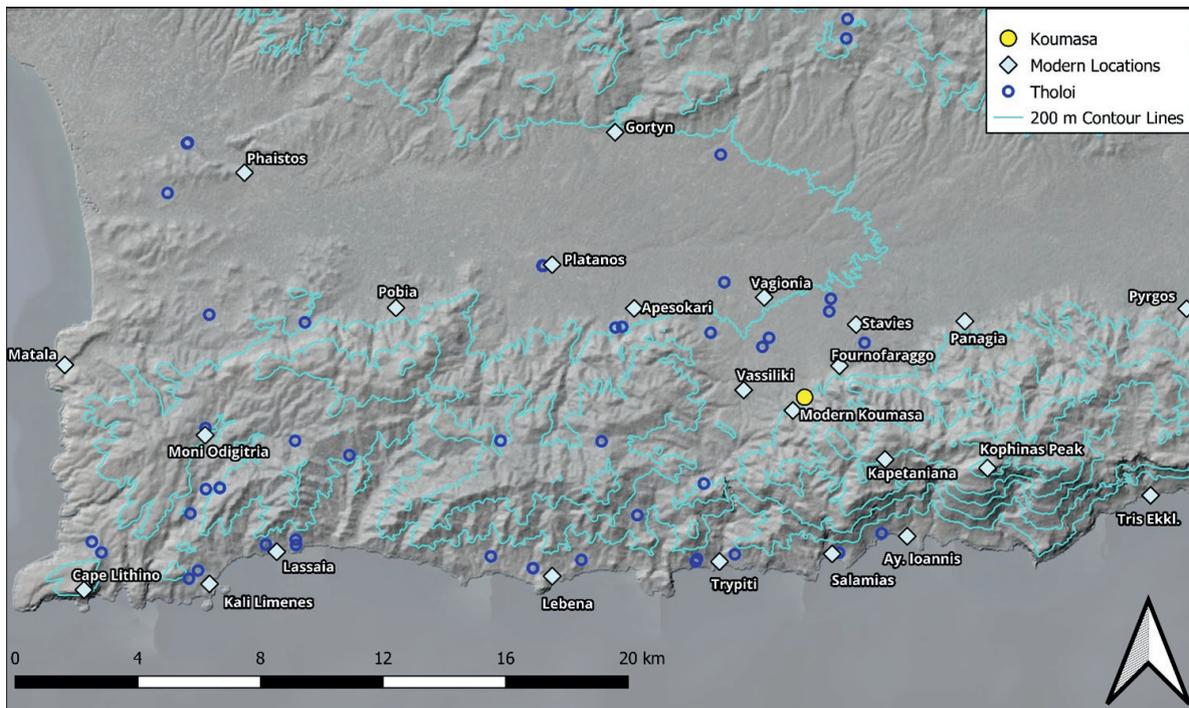


Figure 2: Location of Koumasa, within its region.