

Chryssi Island

*New Evidence on the Bronze Age Settlement Patterns of the Ierapetra Area**

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The following paper examines the Bronze Age settlement history of Chryssi, a small island located along the southeast coast of Crete. Excavations carried out by the 24th Ephorate on the island in 2008 and fieldwork conducted by the author demonstrated how Chryssi, today a marginal landscape, was extensively exploited for its natural resources since the Final Neolithic period. The density of sites recorded on the island corresponded to periods of wealth and prosperity on the opposite coast, along the southern Ierapetra Isthmus (i.e. Protopalatial, Neopalatial). A similar pattern was observed on other offshore islands around Crete (Gavdos, Pseira, Kouphonisi) that were most likely tightly connected to large administrative sites on “mainland” Crete. Hence, Chryssi presented a unique opportunity to study not only the large-scale exploitation of a Bronze Age landscape, but also to place this research within a broader network of island archaeology and maritime connectivity in the eastern Mediterranean.

Introduction

During the past decades, numerous archaeological projects along the North Coast of the Ierapetra Isthmus have yielded substantial evidence for the Bronze Age settlement history of the Mirabello Bay while the southern part of the Isthmus has remained largely unexplored.¹ Rescue excavations that produced limited evidence for Bronze Age settlement patterns of the south Ierapetra Isthmus took place throughout the 20th century at the sites of Hagia Photia, Episkopi, Myrtos, and more recently at Arapi Skala, Kalamafka, Bramiana, and Gaidourophas.² Brief archaeological surveys in the area have presented interesting results regarding the FN/EM I and LM IIIC settlement patterns of the Ierapetra region.³

The initial goal of my dissertation research in 2006 was to catalogue sites and document the settlement history of the Ierapetra region from the Bronze Age until the Roman period. After two seasons of archaeological and topographical survey in the area it became clear that cataloguing the various sites was nearly impossible due to dramatic landscape transformation around Ierapetra.

Natural formation processes and modern land use have transformed the landscape around Ierapetra since the Bronze Age. Contemporary agricultural practices, especially greenhouse agriculture, dominate the coastal plain west and north of the town. An area of approximately 8,000,000 m² around Ierapetra has been covered by greenhouses, affecting our understanding and interpretation of past human events in the region.⁴ In addition, the modern town of Ierapetra and the nearby villages are rapidly growing and expanding, threatening a number of archaeological sites in close proximity.

Chryssi Island is located only eight nautical miles south of Ierapetra and was therefore considered ideal in studying the “colonization” of an undisturbed islandscape and the way in which it was transformed and exploited

* This article is the result of fieldwork on the island of Chryssi as part of my Ph.D. dissertation at the Ruprecht-Karls University in Heidelberg. I would like to thank V. Apostolakou, former director of the 24th Ephoreia, for allowing me to study the settlement patterns of Chryssi Island as part of the ongoing excavations there. I am also grateful to P.P. Betancourt, T. Brogan, and my advisors Diamantis Panagiotopoulos and Donald Haggis for their constant support and guidance throughout this project. Ariel Pearce-Chalikias, Doug Faulmann, and Nikos Chalikias helped tremendously during the survey of the island. Doug Faulmann and Gianluca Cantoro designed many of the maps and instructed me on how to use the DGPS.

¹ For excavations at Mochlos, see Soles 2003; Soles et al. 2004, 2008; for Pseira, see Betancourt and Davaras 1998, 1999, 2000, 2002, 2003; Betancourt et al. 2004, 2005; for excavations and survey in the Kavousi area, see Gesell et al. 1983, 1985, 1988, 1995; Day et al. 2009; Haggis 1992, 1996, 1999, 2005; Haggis and Mook 1993; for Chalasmenos, see Coulson et al. 1995; Tsipopoulou and Coulson 2000; Tsipopoulou 2004; for Monastiraki Katalimata, see Nowicki 2008b; for Gournia, see Watrous et al. 2000; for Vrokastro, see Hayden 2003, 2004; for Azorias, see Haggis et al. 2007a, 2007b.

² Hagia Photia, see Hawes et al. 1908, 56; Betancourt 2000, 117; Xanthoudides 1920–1921, 157–62; Kanta 1980, 140–60; Warren 1972; Whitelaw 1983, 2007; Whitelaw et al. 1997; Cadogan 1977–1978, 1997; Knappett 1999, 2000; Apostolakou 1998; Eaby 2007, 50–1; Apostolakou, pers. comm.; Papadatos and Chalikias 2013; Chalikias and Papadatos 2014.

³ Nowicki 2000; 2002, 28–34; 2008a, 218–19.

⁴ Papadakis 2000, 99; Demos Ierapetras 2008, 35–8.

throughout antiquity.⁵ Moreover, Chryssi, an insular environment at the periphery of Crete, was seen as an extension of the socio-political and economic systems that shaped the opposite coast, a type of offshore-island archaeology that informed us about settlement developments on “mainland” Crete. Recent excavations by the 24th Ephoria on Chryssi Island uncovered the substantial remains of a Neopalatial harbor settlement that was specialized in the production of purple dye. Moreover, archaeological fieldwork on the island produced a large number of sites that date from the Neolithic until the Venetian period and reflect the diachronic changes and processes in settlement patterns that occurred along the south part of the Ierapetra Isthmus.

The Physical Landscape of Chryssi Island

Chryssi Island is almost 5 km long from east to west, about 1 km wide in the western part of the island and approximately 200 m wide at its narrowest point (fig. 1). The island covers an area of roughly 6 km² or 630.65 ha. Its highest point, 31 m asl, is located on the steep Kephala hill along the eastern part of the island.⁶ The western part of Chryssi has its highest point at about 30 m asl. The geology of the island consists of flysch deposits mixed with volcanic rocks that can be mainly found on the eastern and western part of Chryssi.⁷ The climate on the island is similar to the conditions found in the town of Ierapetra⁸. The rainy season is usually between October and April. Fresh water is almost nonexistent on the island and there are no natural springs or watersheds. Seven wells, dug by the locals, used to supply the agricultural fields and the animal herds across the island with water. Chryssi, and more specifically the central part of the island, is covered by sand dunes, shrub vegetation and juniper trees. Vegetation on the island consists of phrygana (garrigue vegetation) and dense concentrations of juniper trees (*juniperus phoenicea*, *j. macrocarpa*, *oxycedrus*), that can reach a height of up to 5 m mostly along the central and northeastern part of the island.⁹ The western half of Chryssi is covered with maquis vegetation and juniper trees (*juniperus macrocarpa*, *oxycedrus*) as well. Chryssi Island is connected to Ierapetra by boat only during the summer time. The island was used until recently by fishermen, farmers and shepherds, and is still visited during

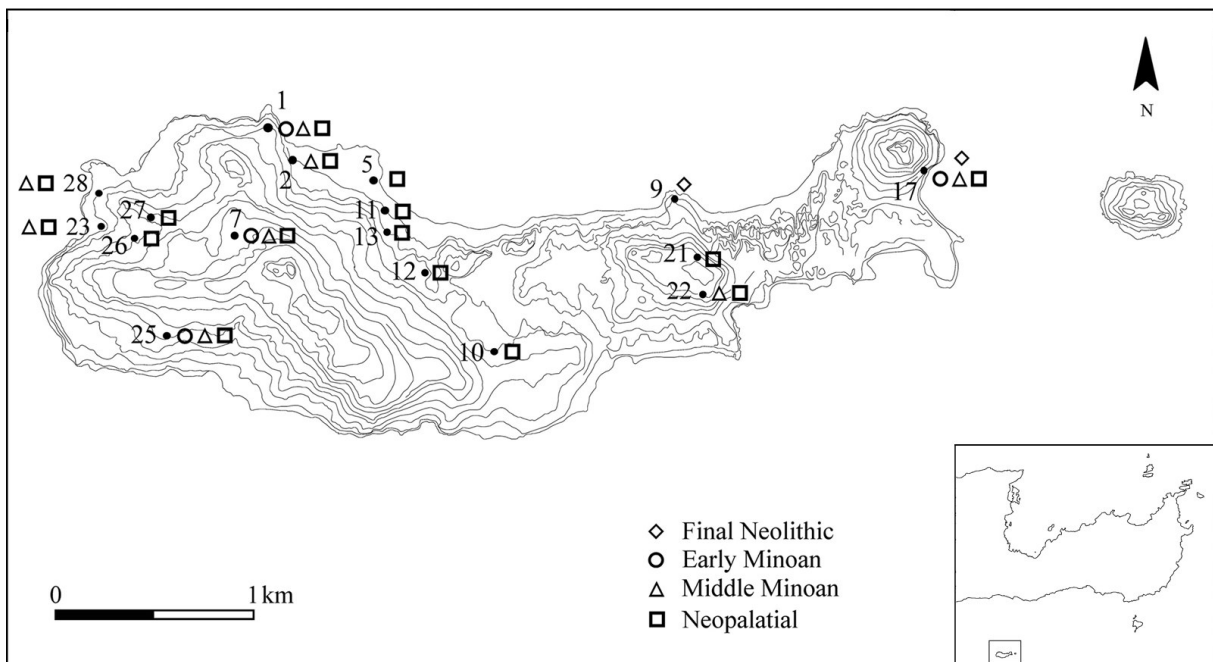


Fig. 1 Map of Chryssi Island with Bronze Age sites.

⁵ On the archaeological survey on Chryssi, see Chalikias 2013a.

⁶ Paragamian 2000, 7.

⁷ Le Guern 2004, 38; Paragamian 2000, 9.

⁸ <http://penteli.meteo.gr/stations/ierapetra/>

⁹ Bergmeier et al. 2001, 334.

the summer months by tourists and campers. The island has no infrastructure or modern settlements. The only buildings on Chryssi are two tavernas, two houses at Spilios harbor, a chapel dedicated to Hagios Nikolaos and several temporary huts used by fishermen and campers.

Recording Past Human Activity on Chryssi Island

The aim of the fieldwork on Chryssi Island was to catalogue archaeological sites and study concentrations of artifacts and architectural remains in order to draw conclusions about the periods of occupation on the island. No pottery or other artifacts (stone tools, obsidian) were collected during the fieldwork. Drawings and photo-documentation of diagnostic sherds, carried out on site, provided information about the date and sometimes the function of a site. The project was designed as a topographical survey with the extensive use of GIS technology. During the fieldwork, the use of differential GPS was essential for more accurate and detailed mapping and recording of the sites and their architectural remains.¹⁰ Additionally, aerial photos taken by G. Cantoro in 2008 were used in order to study the location of harbors, modern field paths, as well as temporary makeshift huts and shelters on the island. Moreover, these detailed aerial photographs have given us valuable insight into the natural landscape of the island, including geological formations, the location of sand dunes, and the distribution of vegetation.

The Final Neolithic Period

Two Final Neolithic sites were recorded on Chryssi (fig. 1).¹¹ The largest one is located on a small promontory along the northern coast of the island near Belegrina Bay (site 9). Architectural remains and pottery cover an area of approximately 40 m E–W x 60 m N–S. The pottery is badly eroded and consists mainly of red coarse ware fabrics similar to those found at Final Neolithic sites on the southern part of the Ierapetra Isthmus.¹² Final Neolithic pottery has also been reported on the southeast slope of the Kephala hill on the eastern side of the island (site 17).

The character of the Final Neolithic sites on Chryssi Island remains unknown, and it must be studied in relation to the changes in settlement patterns that occurred at the same time on the opposite coast. Final Neolithic settlements along the south Ierapetra Isthmus are generally located at naturally defensible places, such as Vainia Stavromenos, Koutsounari Karphi, Anatoli Pandotinou Koriphi, Anatoli Schistra, and Myrtos Charakas.¹³ Final Neolithic settlements on small islands around Crete are known from Kouphonisi, Pseira, Gavdos, and Dia.¹⁴ It is possible that these islands were “colonized” and exploited for certain natural resources as early as the Final Neolithic period. Chryssi was probably used for small-scale farming, pastoral activities, fishing, and the exploitation of chert outcrops that can be found in the western part of the island. Even though such a hypothesis has not yet been confirmed through excavation, chert appears to have been a valuable commodity for some Final Neolithic communities in East Crete.¹⁵ The lack of arable land and water resources on remote and almost deserted islands such as Chryssi could not support substantial population groups for a long period of time, and these circumstances made small islands around Crete dependent on the settlements of the “mainland”.

The Early Minoan Period

Evidence for Early Minoan activity on Chryssi comes primarily from the western part of the island and the Late Minoan I site (site 1). According to Philip Betancourt a very small number of sherds dating to the EM I–III periods were identified during the pottery study.¹⁶ The sherds were found mixed with Neopalatial pottery. The scarce evidence from the Neopalatial settlement suggests small-scale activity in the area during the Early Bronze Age. The location must have been chosen for its small and protected anchorage as well as the easy access to the arable

¹⁰ For the use of the DGPS in East Crete, see Faulmann and Stamos 2009, 1–3.

¹¹ See also Nowicki 2008a, 217–20.

¹² Nowicki 2002, 28–34; personal observation.

¹³ Nowicki 2002, 2008a.

¹⁴ Nowicki 2008a, 219; Betancourt and Davaras 2003, 2, 131–32; 2005; Kopaka 2000, 73; 2011; Pendlebury 1939, 45.

¹⁵ Haggis et al. 2007b, 682–87.

¹⁶ P.P. Betancourt, pers. comm.

land in the western part of the island. Chryssi must have been occupied or seasonally visited during the Early Minoan period judging from the pottery found in the LM I settlement and the sparse ceramic material that was found scattered across the west part of the island (sites 7, 25 and 26).

A small amount of EM I pottery was recorded at site 17, which is located along the southeast slope of the Kephala hill in the eastern part of Chryssi. Later settlement activity in the area may have obscured earlier habitation layers. The location of the site was probably chosen for its proximity to the small, protected bay that is located right across from the island of Mikronisi as well as the sparse arable land along the southern slope of the Kephala hill. The site's prime location is confirmed by its almost continuous use from the EM until the Ottoman periods.

Information about the settlement patterns of the Early Minoan period in the Ierapetra area is available from a few sites along the southern coast of Crete. Following the Final Neolithic period, a phase known for the foundation of sites in naturally defensible locations, a large number of settlements were founded during the EM I–II periods in close proximity to the lowland areas, and along the coast. Such a shift in settlement patterns could be related to the introduction of new economic practices that might have profited from a strong interest in sea trade.¹⁷

The site of Vainia Stavromenos, an important FN settlement located approximately 5 km northeast of the town of Ierapetra contracted in size during the EM I period and by the beginning of EM II seems to have been abandoned. It is possible that the population moved near the coastal plain of Ierapetra since there is evidence for EM II activity on a less defensible hill site located just north of the modern village of Vainia.¹⁸ This site was in close proximity to the valley of Ierapetra, and strategically controlled access to the arable coastal plain and mountain pastures.

The strategic location of certain sites during the EM I–II periods is further emphasized by the site of Aphrodite's Kephali, located on a steep hill immediately west of the village of Episkopi. According to Betancourt, the site which he interprets as a guarding post was founded there in order to control the Isthmus pass that connects the northern to the southern coast of Crete as well as access to the Meseleroi Mountains.¹⁹

The abandonment of "refuge" sites can be also observed in the area of Anatoli, only ca. 3 km northeast of Myrtos Phournou Koriphi. Several settlements there were founded on rocky defensible knolls during the Final Neolithic period and gradually abandoned during the succeeding EM I period. The sites of Pandotinou Koriphi and Elliniki Koriphi were given up in favor of the less defensible and more accessible sites of Schistra and Zoodochos during the EM I and EM II periods.²⁰ The population obviously chose to live in less defensible areas and closer to fertile land and coastal regions. Such a settlement pattern could be related to the introduction of new agricultural strategies during the EM I–II periods and the foundation of small hamlets and farmhouses in order to better exploit the surrounding landscape.

Similar settlement patterns existed at the same time in the area of Myrtos, located approximately 10 km west of Ierapetra. The site of Myrtos Charakas, a naturally defensible site dating to the FN/EM I period, was abandoned at the end of the EM I period, and its inhabitants most likely moved near to coastal areas.²¹ In close proximity the site of Myrtos Phournou Koriphi was built on a coastal hill that was naturally defensible, overlooking a cove that was probably used as a small harbor.²² The site dates to the EM II period and was founded at the same time as Myrtos Pyrgos, a settlement located only about 2 km to the west. Myrtos Pyrgos, in contrast to Phournou Koriphi was continuously inhabited until the LM IB period. The reason for the site's long history might be related to the settlement's location. Myrtos Pyrgos was situated in close proximity to the fertile Myrtos valley, had a protected harbor in close distance, and had easy access to good pastures in the Dikti mountain range.²³

The Middle Minoan Period

Evidence for MM I–II occupation on Chryssi was mainly recorded in the western part of the island with four sites producing MM II pottery (fig. 1, sites 1, 7, 25, 26). According to Apostolakou, MM IB–II pottery was found in several trenches during the excavation of the LM I settlement (fig. 2).²⁴ No architecture associated with the MM period was found during the excavation. It is possible however, based on the amount of the MM material

¹⁷ Day and Wilson 2002; Wilson and Day 2000; Whitelaw et al. 1997.

¹⁸ Nowicki 2002, 32; pers. comm.

¹⁹ Betancourt 2008.

²⁰ Nowicki 2002, 32.

²¹ Nowicki 2002, 34.

²² Warren 1972.

²³ Cadogan 1977–1978, 70–1.

²⁴ Apostolakou et al. 2010, 147.

found across the site that a small, most likely seasonal settlement existed here prior to the Neopalatial settlement. Even though the evidence is not sufficient enough to determine the function and nature of site 1, one should consider the possible exploitation of the island's marine resources during the Protopalatial period, especially the production of purple dye, since similar finds are known from the nearby island of Kouphonisi.²⁵ The nature of the settlement there is unclear but the large amount of murex shells found in MM II layers suggests that the settlement was somehow involved in the harvesting of murex shells for the production of purple dye.

A few MM sherds were recorded along the eastern part of the island at site 17. The site was built in a strategic location, overlooking the small protected harbor of Kataprosopo. The pottery consists mainly of cup sherds, and fragments of tripod cooking pots. The large number of MM sherds found across the western part of the island, consisting of cooking pots and storage vessels, is indicative of the island's exploitation for agricultural purposes.

There is a lack of evidence for the settlement history of the south Ierapetra Isthmus during the MM period. Information for the settlement patterns of the Protopalatial period comes primarily from the areas around the village of Vainia, and the site of Myrtos Pyrgos. Vainia Stavromenos, the large FN–EM I site along the eastern part of the Ierapetra plateau was abandoned shortly after the EM I period probably in favor of other settlements that were founded closer to the coastal valley. EM II–III surface pottery suggests that the site was occasionally visited during that period. The settlement was most definitely reoccupied during the MM I–II period, as evidenced by pottery material and several animal figurine fragments found in the area of the higher rocky acropolis and along the south slope.²⁶ The existence of an enclosure wall along the southwestern part of the site that seems to have been built in order to offer protection to the inhabitants of the higher acropolis is puzzling.²⁷ There is no way to securely date this structure but contemporary fortifications in the region are known from the sites of Oreino Petrokopia, Oreino Kastri, Mythoi Ellinika, and Myrtos Pyrgos.²⁸ Additionally, MM II habitation on the rocky defensible knoll of Charakas, immediately north of Vainia Stavromenos, as well as on the defensible and almost inaccessible site of Monastiraki Katalimata, along the north part of the Ierapetra Isthmus, suggests major safety concerns towards the end of the MM IIB period.²⁹

Myrtos Pyrgos, located approximately 10 km west of Ierapetra, is the only other site along the south part of the Ierapetra Isthmus that produced substantial evidence for the settlement history of the Protopalatial period in the area. The site, in contrast to Myrtos Phournou Koriphi, was continuously inhabited throughout the Prepalatial period and by the MM IB–II period it must have been the leading settlement in the Myrtos valley. Excavations

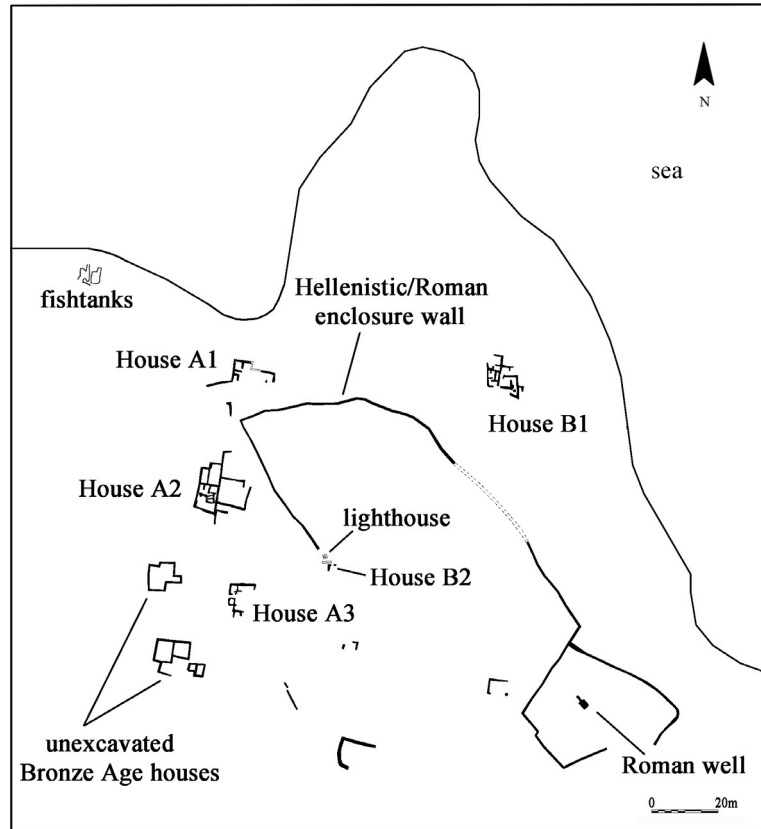


Fig. 2 Ground plan of site 1 (courtesy of V. Apostolou, P.P. Betancourt, and T.M. Brogan).

²⁵ Bosanquet 1902–1903, 276–77; 1939–1940, 72.

²⁶ Personal observation.

²⁷ Nowicki 2000, 88.

²⁸ For Oreino Petrokopia, see Nowicki 2000, 80–1; 2008b, 78; for Oreino Kastri, see Nowicki 2000, 73–7; 2008b, 78; for Mythoi Ellinika, see Nowicki 1998, 194; for Myrtos Pyrgos, see Cadogan 1977–1978, 74.

²⁹ Nowicki 2000, 88; 2008b.

at the site exposed the remains of a fortification wall with a tower, two large cisterns, and the sparse remains of a building on top of the hill, that could have been the predecessor of the later LM I “country house”.³⁰ The economic prosperity and strategic importance of Myrtyos Pyrgos for the broader region could have been related to settlement growth and economic stability in the area of the south Ierapetra Isthmus even though such a hypothesis has to be studied in more detail based on the lack of archaeological evidence.

The Neopalatial Period

Sixteen Neopalatial sites were documented during archaeological fieldwork on Chryssi, the largest of which (site 1) is located along the north-western part of the island (fig. 1). Bronze Age wall segments in association with large numbers of crushed murex shells were found in 2007 around a modern lighthouse on a small promontory called Mouri. The settlement (site 1) was partially excavated in 2008 and 2009 by the 24th Ephoreia of Prehistoric and Classical Antiquities with financial support from the Institute of Aegean Prehistory.³¹ Research at the site revealed the remains of six Neopalatial houses that date mainly to the LM IB period (fig. 2). The houses were constructed using only local stone material (limestone, volcanic stones). A more detailed investigation of the area surrounding the modern lighthouse exposed the remains of at least an additional 10–15 houses that most likely belonged to the Neopalatial settlement. The excavation produced copious amounts of pottery dating mainly to the LM IB period. A small number of MM III and LM IA pottery found within the houses suggests that the settlement could have experienced multiple phases of habitation and restructuring during the Neopalatial period.³² The finds include stone lamps, stone vases, bronze tools like fishhooks, knives, a needle and a saw, jewelry, and three seal stones. The preservation of the floor assemblages suggests that the settlement was suddenly abandoned during the LM IB period.³³

Preliminary results from the excavation suggest that the primary reason for the foundation of the large Neopalatial coastal settlement (site 1) on Chryssi was the exploitation of murex shells around the island for the production of purple dye.³⁴ Substantial amounts of crushed murex shells were collected outside the excavated buildings but also within the houses implying that some of the dwellings might have been used as workshops.

Large concentrations of murex shells have been found at several Bronze Age sites across East Crete, however the presence of large amounts of murex shells at sites such as Itanos, Kouphonisi, and Chryssi indicates a well-organized network of settlements that were involved in the production and distribution of purple dye.³⁵

Several small sites on the island of Chryssi produced evidence for Neopalatial activity (sites 7, 11, 12, 13, 17, 21, 23, 25, and 26). Even though it is difficult to determine the exact nature of these sites, it is possible that they were founded on Chryssi in order to exploit the natural resources of the island. Their size and the pottery found there suggest that they were probably small seasonal huts, shelters or farmsteads. The agricultural and pastoral exploitation of the island must have been important in order to supply the large Neopalatial settlement (site 1) on the western part of Chryssi with the necessary agricultural products.

Interestingly, the large number of sites on Chryssi Island during the Neopalatial period is a phenomenon well known from other small islands around Crete. The intensive exploitation of various natural resources during LM I combined with an increased interest in maritime trade networks is reflected in the foundation of permanent settlements on islands such as Pseira, Gavdos, and possibly Kouphonisi, and Dia.³⁶

Chryssi Island’s strategic location would have been ideal for ships that were looking for shelter or a safe harbor during their journey south of Crete. Moreover, the continuous use of the island since the EM period suggests that Chryssi could have participated in various Bronze Age trade and exchange maritime networks along the south coast of Crete (fig. 3).³⁷ Certain commodities found on Chryssi such as purple dye, salt, sponges, and chert, were

³⁰ Cadogan 1977–1978, 74; 1992, 202.

³¹ Apostolakou et al. 2010.

³² Apostolakou et al. 2010, 147.

³³ Apostolakou et al. 2010, 147.

³⁴ Apostolakou et al. 2010; Apostolakou et al. 2012.

³⁵ For Itanos, see Whitley et al. 2007, 96; for Palaikastro, see Stieglitz 1994, 50; for Zakros, see Platon 1951, 251; for Kouphonisi, see Bosanquet 1902–1903, 276–77; 1939–1940, 72; for Makrygialos, see Reese 1987, 204.

³⁶ For Pseira, see Betancourt 1995, 2004, 2009; Betancourt and Davaras 1998, 1999; 2000, 41–42; Betancourt et al. 2005, 257–62, 290–94; for Gavdos, see Whitelaw et al. 2007, 121; Whitelaw and Morgan 2009, 99–100; Kopaka 2011; for Kouphonisi, personal observation; for Dia, see Evans 1921, 298–99; Pendlebury 1939, 233; Kossyva 2006, 122.

³⁷ For Kommos, see Shaw 2004, 2006; Van de Moortel 2007, 182; for Trypiti, see Vasilakis 1989, 1995; for Plaka, see Hadjidaki 2004; for Keratokampos, see Hood et al. 1964, 82–3; Batten 1995; for Arvi and coastal sites between Keratokampos and Arvi, see Hood et al. 1964, 84–6, 89–93; for Myrtyos Pyrgos and Myrtyos Phournou Koriphi, see Cadogan 1977–1978, 1997; Warren 1972; for Gra Lygia,

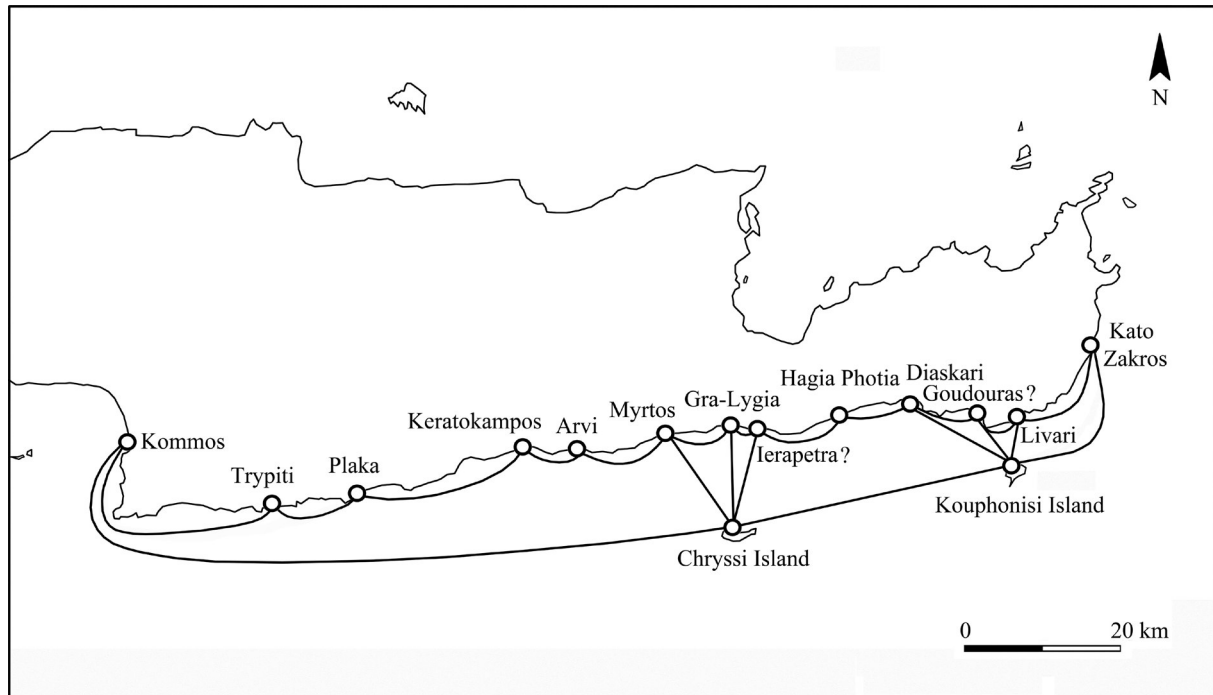


FIG. 3 Hypothetical Bronze Age maritime networks along the southeast coast of Crete.

valuable resources often desired by communities of the opposite coast. The foundation of settlements on Chryssi and the subsequent exploitation of its natural resources must have been therefore implemented by a larger settlement or settlements located on the southern coast of Crete and more specifically in the area of Ierapetra.

Brief excavations in the area of the south Ierapetra Isthmus have exposed traces of Bronze Age activity though they have not yet located the economic and administrative center that would have controlled the coastal valley during the Protopalatial and Neopalatial periods. Evidence for Bronze Age activity in the area comes from two Neopalatial pithos burials in Gra Lygia, a MM II sealstone and LM III pottery from the village of Kentri and several Bronze Age objects that were stolen from the Ierapetra museum.³⁸ Additionally, rescue excavations around Ierapetra have revealed cemeteries that date to the LM III period at the sites of Episkopi, Kalamafka, and Arapi Skala but were unable to locate the ancient settlements they belonged to.³⁹

Sites in close proximity to Ierapetra that demonstrate palatial architecture and could have functioned as administrative centers are Myrtos Pyrgos in the west, Makrygialos in the east and Gournia in the Mirabello Bay. However, the large size and specialized character of the Neopalatial settlement (site 1) on Chryssi suggests the existence of a dominant settlement along the south coast of Crete and most likely in the area of Ierapetra.⁴⁰ Site 1 on Chryssi measures approximately 1–1.5 ha, and is so far the largest Bronze Age settlement in the area of Ierapetra, even larger than Myrtos Pyrgos, a settlement that covered an area of ca. 0.5 ha.⁴¹ The main reason for the foundation of settlements on Chryssi was the exploitation of the island's natural resources, primarily the harvesting and processing of murex shells for the production of purple dye. Such a project could have been only initiated and organized by a larger settlement on the opposite coast, providing the "colony" with settlers, artisans, workmen, and food supplies. Since Chryssi Island lacks sufficient arable land and water sources, its inhabitants could not have been self-sufficient year round and must have been largely dependent on coastal settlements of the opposite coast.

see Davaras 1979, 405; for Ierapetra, see Gallimore 2011, 98–9; for Hagia Photia, see Hawes et al. 1908, 56; Betancourt 2000, 117; for Diaskari, see Davaras 1973, 591; 1974, 52–3; 1982, 391; 1997, 118–19; for Livari, see Schlager 2001, 192–212; Papadatos and Sofianou 2012; for Kato Zakros, see Platon 2002, 2010.

³⁸ Davaras 1979, 405; Brown 2001, 444, n. 254; Kanta 1980, 160; Papadakis 1997, 62–3.

³⁹ For Episkopi, see Seager 1907, 111; Xanthoudides 1920–1921, 157–62; Platon 1947; Kanta 1980, 146–60; Tsipopoulou 2005, 73; Eaby 2007, 50; for Kalamafka, see Pendlebury 1939, 296, 326; Dumbabin 1947, 191; Platon 1947, 632; Kanta 1980, 161; Nowicki 2000, 127–29; Eaby 2007, 50–1; for Arapi Skala, see Apostolou 1998.

⁴⁰ See Chalikias 2013b on the possibility of a palatial center in the Ierapetra area.

⁴¹ Apostolou et al. 2010, 147; for the size of the Neopalatial settlement at Myrtos Pyrgos, see Cadogan 1997, 100.

The idea of a large coastal site in the area of Ierapetra is further reinforced by archaeological evidence from the site of Vainia Stavromenos. The settlement there was abandoned in MM II suggesting that its population could have been relocated or absorbed by a larger coastal settlement.⁴² As has been demonstrated through archaeological projects in the Mirabello Bay, the dissolution of Protopalatial site clusters is closely related to nucleation around large coastal settlements.⁴³ Moreover, several sites in the vicinity of Episkopi and Kato Chorio were abandoned or shrank during the Neopalatial period implying that the population could have moved to the north coast of the Isthmus and around Gournia or to a new emerging settlement in the Ierapetra area.⁴⁴ Furthermore, it was noticed during the Gournia survey that the Neopalatial pottery fabrics found in the northern part of the Isthmus were less predominant at sites around the villages of Episkopi and Kato Chorio, suggesting that maybe the coastal valley south of the village of Episkopi may have been under the influence of a major economic and administrative center, located in the area of modern Ierapetra.⁴⁵

Conclusions

Archaeological research on Chryssi Island by the 24th Ephoreia sheds new light on the Bronze Age settlement patterns of the southern part of the Ierapetra Isthmus. Even though Chryssi has been considered a marginal landscape, extensive habitation from the Final Neolithic until the end of the Neopalatial period demonstrates the particular importance of the island for Bronze Age settlements of the opposite coast. Chryssi was explored for its various natural resources throughout the Bronze Age as were many other offshore islands around Crete. The level of exploitation on small islands such as Chryssi, Kouphonisi, Pseira, and Gavdos was largely related to settlement expansion and economic prosperity on the coastal areas of Crete. The “colonization” of island habitats around Crete for the exploitation of their natural resources took place mainly during the Middle Minoan and Late Minoan I periods. The emergence of the first palatial centers on Crete coincides with the foundation of permanent settlements on islands like Chryssi. Even though we lack substantial evidence for the Bronze Age settlement history of the southern part of the Isthmus, it is quite possible, based on excavations by the 24th Ephoreia, that site 1 on Chryssi was founded, controlled, and managed by a larger dominant coastal settlement in the Ierapetra area that has yet to be discovered.

⁴² Personal observation.

⁴³ Haggis 2005, 74; Hayden 2004, 115, 118.

⁴⁴ Schultz–Barrick 2007, 194.

⁴⁵ Schultz–Barrick 2007, 227.

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