

Klepini-Troulli: A Coastal Neolithic Settlement in Cyprus and Possible Mainland Interactions*

Klepini-Troulli: Kıbrıs'ta Bir Kıyı Neolitik Yerleşimi ve Olası Anakara Etkileşimleri



Erge YURTDAS** - Müge ŞEVKETOĞLU***

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This article provides a comprehensive reassessment of the Klepini-Troulli settlement located in Northern Cyprus. The study incorporates previous excavation findings and newly collected data from a survey conducted in 2004. The objective of this research is to reconcile the settlement's cultural significance within both the island's and the surrounding mainland's chronologies. There is a debate on whether Cyprus was influenced by the dominant culture on the mainland during the Late Neolithic Period or if it developed independently. During this period, Painted Wares were utilized in various regions from the 7th and 6th millennia BC, demonstrating cultural continuity. However, due to the isolation of the island, these developments occurred later on Cyprus than on the mainland. Further research may shed light on the Late Neolithic Period and the neighbouring cultures.

Anahtar Kelimeler: Kıbrıs, Klepini-Troulli, Halaf ilişkili Yerleşmeler, Son Neolitik Dönem, Boyalı Çanak Çömlek

Bu makalede, Kıbrıs'ın kuzeyinde yer alan Klepini-Troulli yerleşimi, eski kazı sonuçları ve 2004 yılında yapılan yüzey araştırmasından elde edilen yeni veriler doğrultusunda yeniden değerlendirilmiştir. Bu doğrultuda yerleşme, hem ada içindeki kronoloji hem de çevre anakara kronolojisi ile kültürel olarak bağdaştırılmaya çalışılmıştır. Buna bağlı olarak Kıbrıs'ın Son Neolitik Dönem'de, anakarada gözlenen baskın kültürün bir parçası mı, yoksa bağımsız gelişen bir kültür olup olmayacağı tartışılmaktadır. MÖ 7 ve 6. bin yıllarına ait boyalı çanak çömleğin çeşitli bölgelerde gözlenmesi, kültürel sürekliliği ortaya koymaktadır. Ancak ada izolasyonu nedeniyle Kıbrıs, bu gelişmeleri biraz geç takip edebilmiştir. İlerleyen araştırmalar, Kıbrıs'taki Son Neolitik Dönem'e ve çevre anakaralardaki kültürlere ışık tutabilecek niteliktedir.

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** Erge YURTDAS, İstanbul University, Institute of Social Sciences, Department of Archaeology, Prehistoric Archaeology, Fatih, İstanbul, Türkiye, Orcid: 0000-0003-4516-8790

*** Müge ŞEVKETOĞLU, Cyprus International University, Centre for Archaeology, Cultural Heritage and Conservation Nicosia, North Cyprus, Orcid: 0000-0003-1371-1234

Introduction

While our understanding of the early prehistoric periods of north Cyprus is somewhat restricted, the information we have indicates a wealth of diverse cultural groups that inhabited the island. Regarded by numerous experts as a link between the Levant and Anatolia, Cyprus has been home to various communities and cultures throughout its history (Şevketoğlu 2006; Özdoğan 2011; Knapp 2013; Peltenburg, Wasse 2004). Until fairly recently, it was widely believed that Cyprus was geographically close to the mainland but isolated from the surrounding cultural regions, resulting in a lack of consistent and comprehensive data regarding any direct interaction before the Bronze Age (Knapp *et al.* 1994; Knapp 2015: 25). Recent research and excavations have revealed substantial evidence of interaction between Cypriot, Anatolian, and Levantine cultures before the Bronze Age (McCartney, Peltenburg 2000; Şevketoğlu 2000; Guillaine, Briois 2001; Todd 2005; Moutsiou 2018). In the last fifty years, studies on the prehistory of Cyprus have been deemed “revolutionary” (Swiny 2001). While evidence of the genus *Homo* on Cyprus during the Paleolithic Age is limited to surveys and some excavations (Vita-Finzi 1973; Ammerman 2020; Strasser *et al.* 2016; Yurtdaş, Özerenler 2021), it is important to consider the possibility and significance of such findings, particularly in comparison to other island societies in the Mediterranean with Paleolithic discoveries. Recent surveys have shown potential Paleolithic sites on the north of the island, where archaeological research has long been dormant (Yurtdaş, Özerenler 2021). However, until these sites are excavated and their temporal contexts confirmed with C14 from archaeological contexts, caution must be exercised in our approach to understanding the Paleolithic Age in Cyprus.

Evidence of human presence on Cyprus dates back to the Late Epipaleolithic Period (11,000–9000 BC), with the earliest findings coming from the Akrotiri-Aetokremnos rock shelter in the south of the island. The remains of extinct endemic dwarf elephant and pygmy hippopotamus, along with manufactured stone tools, were discovered in context at Aetokremnos (Simmons 2001, 2012). Another early site, Vretsia-Roudias, has also been dated to the Late Epipaleolithic and PPNA (Tsakalos *et al.* 2021). Settlements from the Early Neolithic Period (PPNA-PPNB-Khirokitian), such as Agios Tychonas-Klimonas, Agia Varvara-Asprokremnos, Kissonerga-Mylothkia, and others, provide further evidence that fills the gap between the Akrotiri and Khirokitia Cultures. These findings have helped to establish the chronology of Cyprus, with the Khirokitia Culture maintaining a prominent position (McCartney 2010; Simmons 2012; Şevketoğlu, Hanson 2015; Simmons *et al.* 2018; Tsakalos *et al.* 2021).

The Khirokitia-Vouni settlement is a remarkable archaeological site in Cyprus, dating back to roughly 7000 BC (Swiny 2001). During the time of its discovery, the site held great significance as the earliest known Neolithic settlement on the island, despite being established later than those on the mainland. Although the settlement shared similar subsistence practices with the mainland PPNB, it displayed a unique and independent

culture that developed within the dynamics of the Eastern Mediterranean region. The settlement's roots can be traced back to Anatolian and Levantine regions through colonists in the PPNA and PPNB. However, it is worth noting that this unique culture was not solely a result of geographical isolation, but rather a culmination of economic and social adaptations to Cyprus's natural environment and resources over time. As such, Khirokitia offers valuable insight into the social structure of Cyprus during this period and serves as a testament to the adaptability and ingenuity of its inhabitants (Rainbird 2000; Le Brun 2001).

In recent decades, our understanding of early human settlements on the island of Cyprus has significantly evolved. While initial visits during the Akrotiri phase were sporadic, the discovery of Neolithic settlements predating those at Khirokitia (which date back to 9000-7000 BC) has shed new light on the island's history. Notably, the C-PPNA and C-PPNB settlements in Cyprus were contemporaneous with those on the mainland, suggesting that Cyprus did not develop in isolation. This discovery has effectively closed the gap in our knowledge of early Cypriot settlements (Steel 2004; Simmons 2012: 82).

Extensive excavations and surveys conducted in the early 1990s helped fill the unexplained chronological gap between Aetokremnos and Khirokitia. While the extent of acculturation with the mainland surrounding Cyprus was previously underestimated, recent findings have led to a revision of this perspective. The increase in the number of Cypro-PPNB settlements with animals of Levantine and Mesopotamian origin, as well as settlements with Central and Eastern Anatolian obsidian, indicates a greater degree of interaction than previously thought (Şevketoglu 2000; Guillaine, Briois 2001; Simmons 2001; Vigne *et al.* 2011).

Between 4400-3900/3700 BC, the Late Neolithic Period (Pottery Neolithic) emerged in Cyprus, marking the end of the Early Neolithic Period (Clarke 1992: 3, 2001: 69; Clarke *et al.* 2007). The introduction of pottery allowed for the discussion of a subsistence economy centred around agriculture, animal husbandry, and the intense continuation of hunting (Croft 1991: 69; Clarke 2001: 65-66; Boness *et al.* 2015).

During the Late Neolithic Period in Cyprus, there were two distinct types of settlements. The first were medium-sized settlements, such as Philia-Drakos A, Ayios Epiktitos-Vrysi, Sotira-Teppees, Kandou-Kouphouvounos, and Paralimni-Nissia, where architectural remains were discovered. The second type of settlement had no architectural remains but relied on data from pits, such as Dhali-Agridhi, Klepini-Troulli, Kalavassos-Kokkinoyia, Mari-Paliembeli, Khirokitia-Vounoi, and Kalavassos-Tenta. Pottery production emerged in Cyprus later than in Mesopotamia, Levant, and Anatolia. The reason for this delay could be due to preference, lack of technical knowledge, or the island's isolation. Despite some technological, typological, and stylistic differences from pottery found on the mainland, Cypriot pottery is primarily a part of the Neolithic Culture in the Eastern Mediterranean Region (Clarke *et al.* 2007: 61-63; Peltenburg 2014). Although there are similarities and differences with surrounding cultural regions, it is still challenging to

discuss data indicating direct contact with the mainland during the Late Neolithic Period.

The coastal Neolithic settlement of Klepini-Troulli (henceforth Troulli), located on the northern shores of Cyprus close to the Anatolian coast, offers valuable insights into the evolution of human societies on Cyprus from the Early Neolithic to the Late Neolithic Period. Troulli was first reported by R. de Bunsen and later excavated in the 1930s by the Department of Antiquities in Cyprus, led by P. Dikaios (Dikaios 1935). Unfortunately, the settlement was found to have been destroyed by erosion, looting, and other environmental factors. Despite these challenges, a trial excavation was carried out in 1935 and subsequently followed by further excavations in three areas in 1941, which uncovered important architectural remains of the settlement. In order to better understand the stratification of the site, a deep sounding of 5.4m was conducted on the southern slopes of the hill (Dikaios 1961b).

The Location, Environmental Setting and the Present State of Troulli

The settlement of Troulli is situated 15 km to the east of Kyrenia/Girne, previously recorded within the borders of Klepini/Arapköy village, and currently, it is located within the Platimatis/Gözübüyük locality, inside the boundaries of the Teknecik Electric Power Plant. This location features small streams flowing on both the east and west sides of a conical hill that protrudes from the coast, as noted by Dikaios in 1961. The southern part of the hill boasts a valley that reaches the foothills of the Kyrenia Range. Additionally, two bays on the east and west protrude towards the sea, with the eastern bay appearing like a natural, small anchorage in its current form (Dikaios 1961b).

The site has suffered significant damage over time due to two main factors. Firstly, its position, exposed to the sea, has left it vulnerable to marine impacts, which have eroded its fragile geological formation. As previously noted by Dikaios, erosion has been a persistent issue for the site. It is highly likely that the original settlement once occupied a broader area in prehistoric times but has since been eroded and submerged by the sea. Secondly, the construction of the Power Plant in 1995 and subsequent activities in the area have caused further damage to Troulli. As depicted in Figure 1, the construction of two circular gas stations near the site, which require further archaeological research, has also hindered our understanding of the original size of the settlement.

Klepini-Troulli Settlement

The earliest phase of Troulli dates back to the Early Neolithic Period (Khirokitian), referred to as Troulli I. Artefacts such as flint flakes, bone tools, obsidian blades, and fragments of stone vessels were discovered between depths of 5.4 -3.6 meters. No pottery was found, leading to the term “Aceramic Neolithic” for this phase. However, pottery was unearthed

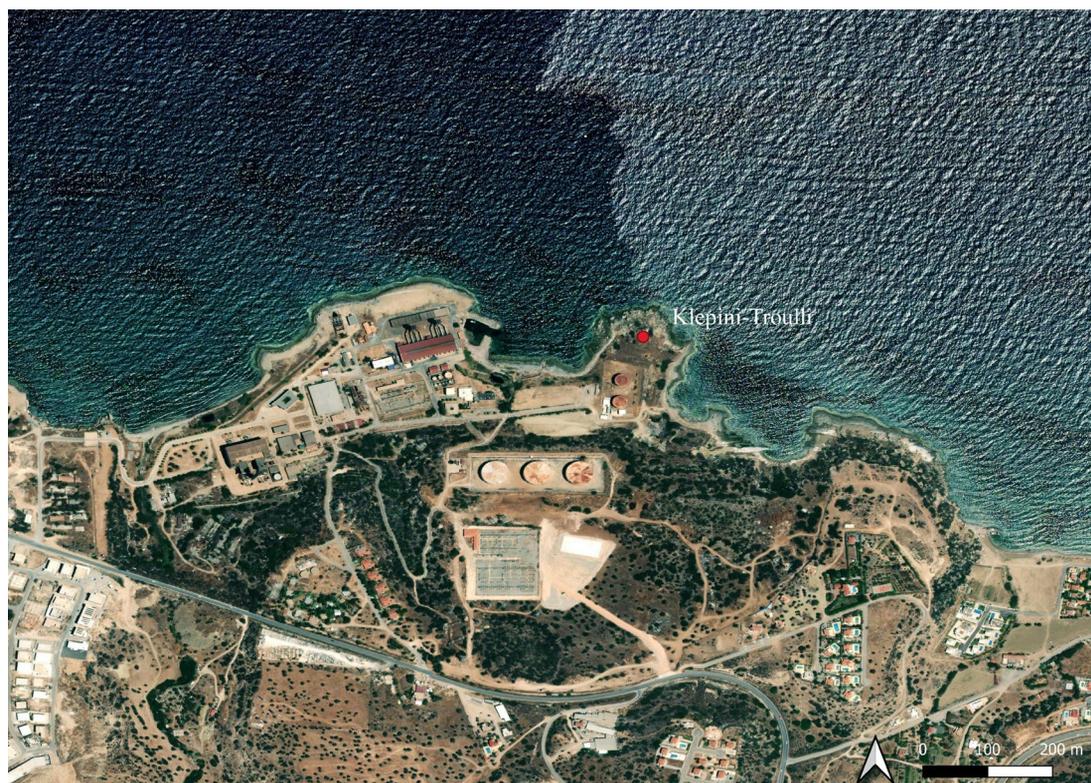


Figure 1. Map showing the location of the Troulli site and the Electric Power Plant.

in deposits above 3.6 meters, assigned to the Late Neolithic (Pottery Neolithic), known as Troulli II. While Dikaïos suggested that the Early and Late Neolithic strata were continuous (Dikaïos 1961b), Peltenburg's interpretation (Peltenburg 1979: 21, 26), based on Watkins's findings (Watkins 1973), indicates a sterile layer between the two strata, suggesting a break rather than continuity between the two periods.

Upon examining the early layers of Troulli, similarities with Khirokitia can be observed (Peltenburg 1979: 24). This suggests that the Khirokitia Culture was widespread and homogenised throughout the island. When considering the cultural material and context present on the island, it can be inferred from the relative chronology and stratification that Early Neolithic and Late Neolithic layers exist in Khirokitia-Vouni, Kalavassos-Tenta, and Klepini-Troulli. Nevertheless, there is no indication of the continuity between these two periods in any of the settlements (Stanley-Price 1975: 72). Unfortunately, there are no radiocarbon results available for the Troulli settlement. However, two sherds collected from the surface survey were subjected to thermoluminescence dating. The results indicate that the sherds were from the end of the Late Neolithic Period sequence, specifically dated to 3860 ± 480 BC and 3570 ± 445 BC. It is important to note that since the samples were collected from the surface, the context is not entirely clear, and the storage conditions of the sherds prior to analysis are unknown. Therefore, the thermoluminescence

results for the Troulli settlement cannot be considered reliable at this time (Clarke *et al.* 2007: 19-20).

During the excavation in area C, a circular architectural feature with stone foundations was discovered approximately 40 cm below the surface soil. Unfortunately, a significant portion of the structure was damaged (Dikaios 1961b: 63). The shape of the feature was extended to the east and west, resulting in an ellipse. The foundations were constructed using sandstone, and the maximum preserved wall height is 50 cm. Based on the pillars carrying the superstructure and remains pointing to the middle pillar, it is believed that the building had a stone foundation, and the superstructure was likely wattle and daub plastered with mud brick (Dikaios 1961b: 64-66). The wattle and daub tradition found at Troulli is consistent with Parekklesia-Shillorokambos A-B (8200-7500 BC) (Guillaine, Briois 2001: 37). At area C's summit, four irregular structures and traces of a central system separated from these structures by narrow passages were discovered. This central structure is at least 25 square meters (approximately 8 meters in diameter) and represents one of the largest Neolithic structures on the island (Fig. 2) (Peltenburg 1979).



Figure 2. *Klepini-Troulli Architecture (Digitalized)*
(Dikaios 1961b: 65, Fig. 33).

The discovery of the Troulli I settlement, which is estimated to date between the 7th and 4th millennium BC, is in line with other Khirokitia Culture sites discovered on the island. Although it is still uncertain how far the settlement spread, it is believed that the inhabitants might have migrated from the hill to the surrounding plain. This suggests that the residents tended to expand beyond the summit structures and slopes.

According to the report by Dikaos (1961b), the earliest pottery discovered in the Troulli II settlement was found 3.6 meters below the surface. The pottery consisted of four distinct groups: Red Lustrous Ware, Red on White Ware, Plain White Ware, and Black Lustrous Ware (Dikaos 1961b: 67). However, it is worth noting that the red-on-white ware group dominates the collection. Upon careful examination of the artefacts retrieved from the settlement, it appears that Dikaos's identification of four distinct ware groups may have led us astray due to the size of the fragments. Peltenburg (1979) suggests that the so-called Plain White pieces may be unpainted parts of the red-on-white painted pottery. Additionally, the sherds known as Black Lustrous could be the result of unintentional errors that occurred during the firing process for the red-on-white group. While not all shapes and forms are present in other settlements on the island, flat-bottomed bowls and cylindrical-necked pots are quite common (Dikaos 1961b: 67). At Troulli II, circular motifs were dense between depths of 3.20-1.60 meters, but as we move closer to 1.60 meters below the surface, we see a shift towards decorations made with thin lines and multi-brush techniques (Peltenburg 1979).

Material and Methods

The Troulli settlement is currently located within the boundaries of the heavily secured Tekneçik Power Plant. Visiting the site requires a permit and strict supervision by officials due to the high level of security in the area. Additionally, time constraints limit the amount of intensive fieldwork that can be conducted at the location. The objective of this paper is to reposition Troulli's chronology in Cyprus and evaluate its connection with the mainland's chronology. This will be achieved by re-evaluating the excavation results published by Dikaos (1961b) and comparing the interpretations made by Peltenburg (1979) and Watkins (1973). Additionally, new surface material obtained from a 2004 survey will be incorporated to support the already established knowledge. To provide comparative data, Neolithic sherds from the Istanbul University Prehistory Laboratory Collection (previously unpublished) will be included. Based on current knowledge of Cyprus's prehistory, Troulli and the Late Neolithic Period will be discussed within the cultural chronology and the other settlements it may have interacted with on the mainland. The newly introduced pottery data from the Late Neolithic Period will be analyzed technologically and stylistically.

In 2004, Şevketoglu conducted a survey and gathered 45 sherds, ten flint specimens, and one broken perforated disk from the surface (Fig. 3-6). Of the ceramic materials

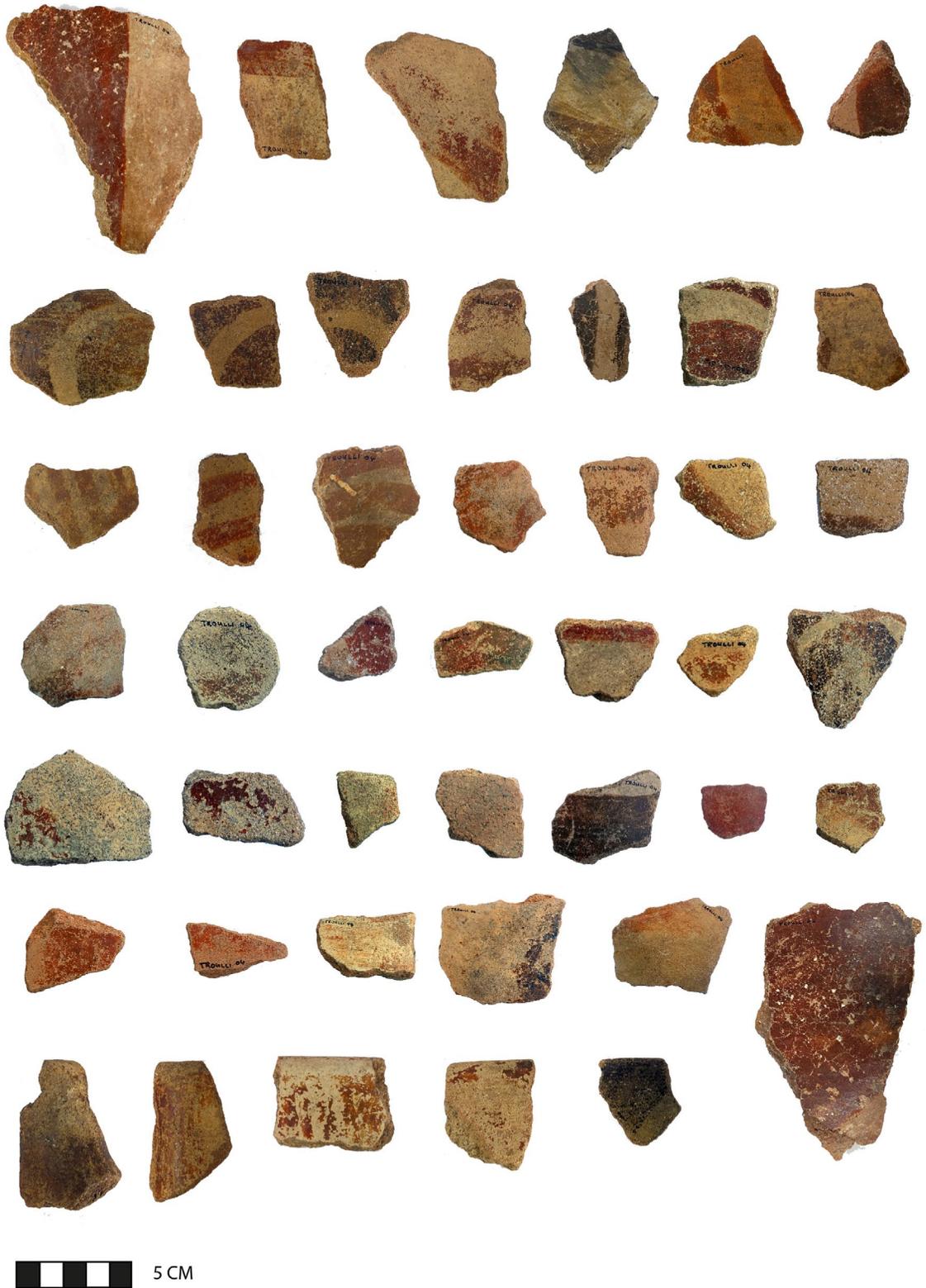


Figure 3. Klepini-Troulli sherds from the 2004 survey.

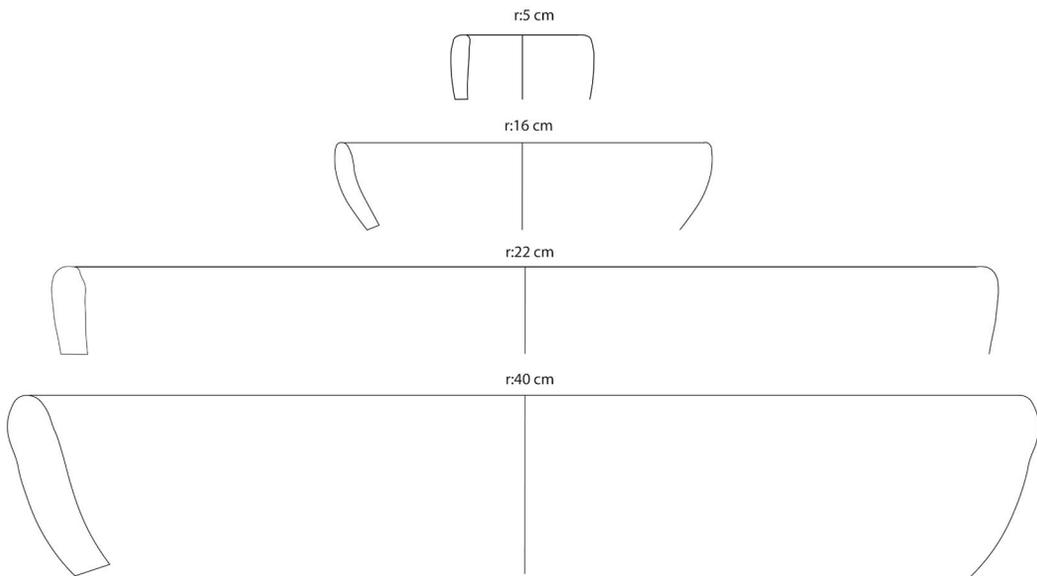


Figure 4. *Klepini-Troulli open form rims from the 2004 survey.*

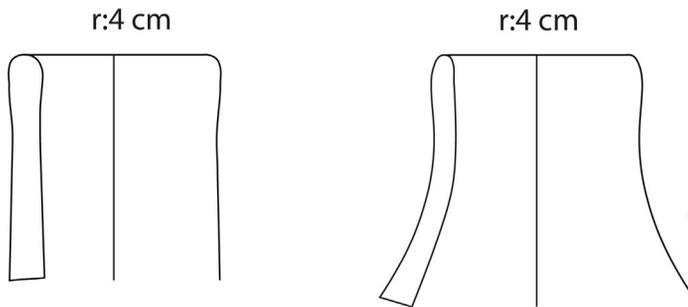


Figure 5. *Klepini-Troulli closed form rims from the 2004 survey.*



Figure 6. *Klepini-Troulli perforated disk from the 2004 survey.*





Figure 7. *Troulli painted pottery (Digitalized) (Dikaios 1961b: 69, Fig. 35; Peltenburg 1979 Fig. 1).*

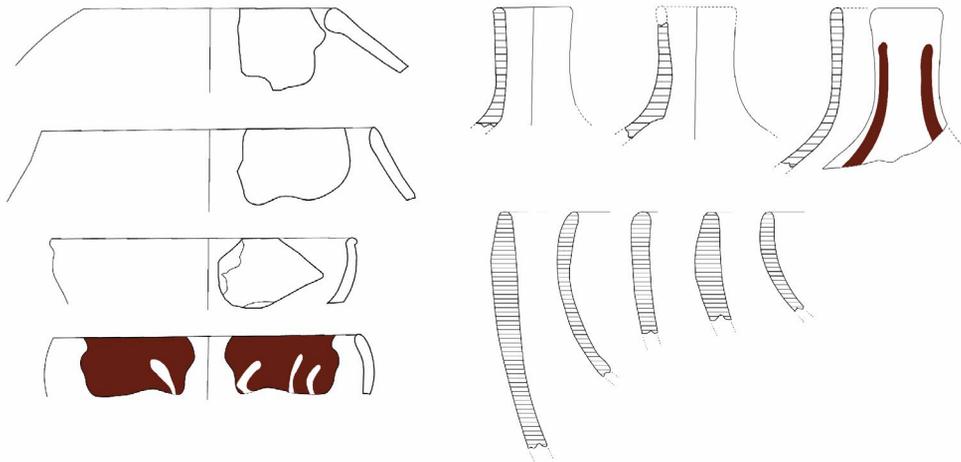


Figure 8. *Troulli rims (Digitalized) (Dikaios 1961b: 69, Figure 35; Peltenburg 1979 Fig. 2).*

collected, 43 belong to the painted ware, while two are from the undefined ware group. As per the Late Neolithic Pottery tradition in Cyprus, these two undefined sherds are regarded as unpainted parts of the painted pottery. The pottery sherds are hand-shaped and made of light brown clay mixed with sand, small gravel, organic additives, and sea-shells. They indicate medium firing quality and are friable likely due to uncontrolled temperature during preparation. The decorations typically feature thick broad bands and intertwined-filled circles. Despite meticulous decoration and surface treatments, microscopic analysis of the collected material reveals coarse paste-type ware groups. However,

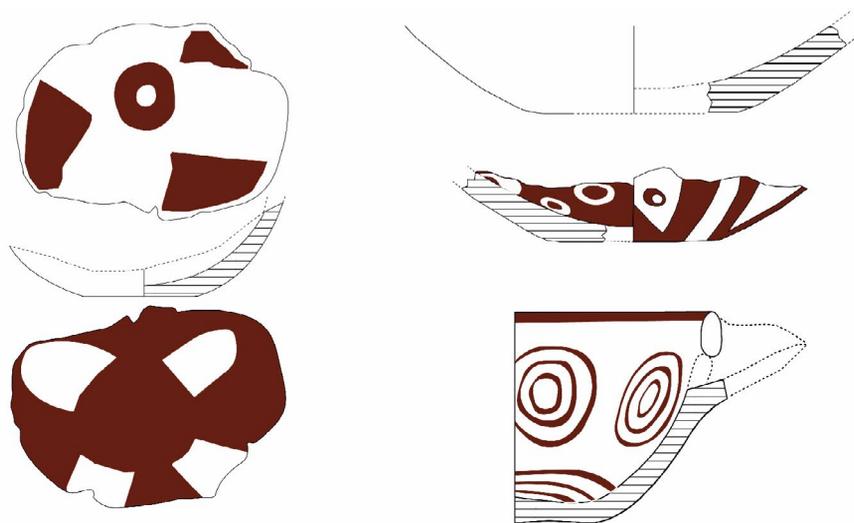


Figure 9. *Troulli bases (Digitalized) (Dikaios 1961b: 69, Fig. 35; Peltenburg 1979 Fig. 1).*

the surface treatment provides a fine appearance without requiring much effort.

Consistent with findings from previous research, the settlement reveals evidence of coarse ware, monochrome, and painted ware. Various vessel shapes are present, including spherical and hemispherical bodies, necked jars, and open, closed, and bridged mouths. Notably, bow-mouthed forms evolve into straight-mouthed and hole-mouthed shapes over time, as illustrated in Figures 7, 8, and 9.

In the Troulli material, a broken perforated disc was discovered (as seen in Fig. 6). This piece is evidence of the reuse of broken pottery, which is a common phenomenon in modern times and has significant economic, political, and social impacts on both individuals and society as a whole. As pottery production became more widespread, it became increasingly common to encounter examples of reused broken pieces, often identified by their easily distinguishable perforations as weights or spindle whorls. Spindles have been found in various regions, including Mesopotamia, Syria, and Anatolia, since the end of the 7th millennium BC. In the Proto-Hassuna phase, many settlements like Kültepe, Boueid II, Kashkashok II, Telul eth-Thalathat I, Tell Sotto and Umm Dabaghiyah produced pottery with holes in the middle as well as biconical spindle whorls (Kirkbride 1972; Fukai *et al.* 1974; Suleiman, Nieuwenhuys 2002; Nishiaki, Mière 2005; Marro *et al.* 2019; Petrova 2019). This tradition was also observed in Tell Hassuna, Yarim Tepe I, Shimshara, Kharabeth Shattani, Tell es-Sawwan, Matarrah, and Choga Mami, among others (Lloyd, Sayar 1945; Oates 1969; Mortensen 1970; Rooijakkers 2012: 101-103). Almost all Halaf settlements, such as Tell Arpachiyah, Tell Halaf, and Kharabeh Shattani, also produced similar items (Mallowan, Cruikshank Rose 1935; Oppenheimer 1943; Campbell 1995; Rooijakkers 2012). In Anatolia, finds made of stone, clay, and pottery sherds interpreted as spindle whorls have been documented in Çatalhöyük, Hacilar, Kuruçay, Yumuktepe

(Garstang 1953; Mellaart 1962, 1970; Duru 1994; Rooijackers 2012: 101-102). Perforated clay discs, commonly found in Neolithic settlements on the mainland, were also prevalent in Cyprus from the Late Neolithic to the Chalcolithic Period, primarily in Khirokitia, Ayios Epiktitos-Vrysi, and Kissonerga-Mosphilia, among other areas (Knapp *et al.* 1994). Perforated discs are often referred to as spindle whorls, but they could also have other uses, such as game and counting pieces, identification markers, ornaments, lids, or plugs (Gibbs 2008: 89).

Similar pottery products can be observed in both Troulli and Ayios Epiktitos-Vrysi, finished with relief decoration as depicted in Figure 10. This type of relief decoration is commonly found in culturally contemporary sites on the surrounding mainland and has been prevalent in Cypriot archaeology since the Chalcolithic Age. While some items from the mainland were experimented with on Cyprus during the Late Neolithic Period, they were not widely utilized based on the quantity recovered from the settlement.

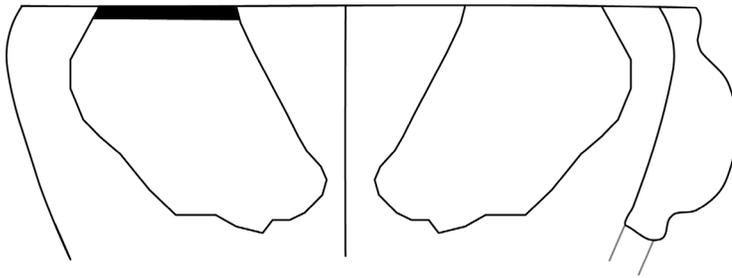


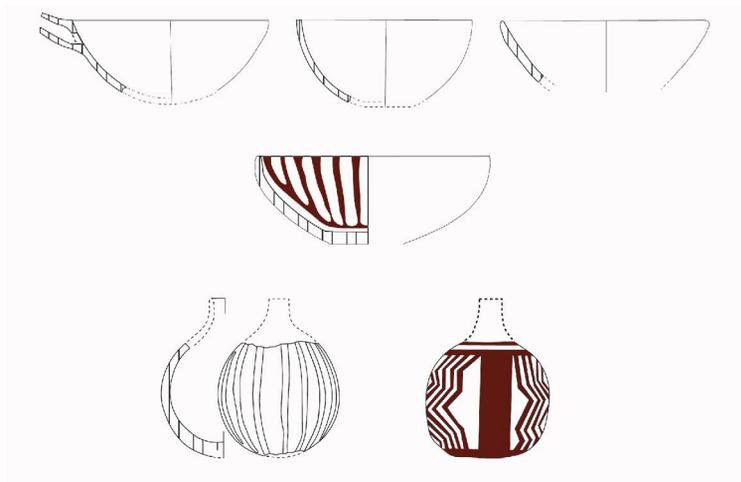
Figure 10. *Troulli Relief Decoration (Peltenburg 1979 Fig. 3.1).*

Regional Interpretation and Discussion

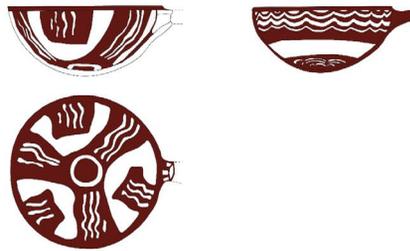
The Red on White Ware group, also known as the Northern Group, dominated a significant portion of Cyprus including the Troulli settlement throughout the late Neolithic period. The artefacts discovered in Troulli II indicate significant similarities to those found in Ayios Epiktitos-Vrysi, Philia-Drakos A, and Sotira-Tepees, both in terms of their technical aspects and design (as shown in Figure 11).

Upon observing the painted pottery across the island, one can discern that the designs are primarily simple and linear. Pottery samples from other settlements exhibit similar patterns of lines, chevrons, intertwined circles, and triangles, suggesting a certain degree of interaction and a preference for uncomplicated decorations that any potter can produce easily.

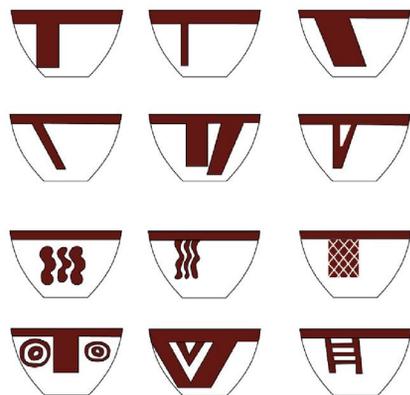
The process of replicating pottery styles can be quite intricate, often leading to unintentional errors during the learning phase. This can make it challenging to differentiate between variations in handcrafted pottery, whether they are intentional or not. Each potter in settlements across Cyprus might have a unique approach, and each household in the



Sotira-Tepees Group



Ayios Epiktitos-Vrysi Group



Philia-Drakos A Group

Figure 11. *Sotira-Tepees, Ayios Epiktitos- Vrysi and Philia-Drakos A Ware Groups (Digitalized).*
(*Dikaios 1961a, Fig. 43-44; Peltenburg 1975 Fig. 4; Clarke 1998 Fig. 10*)

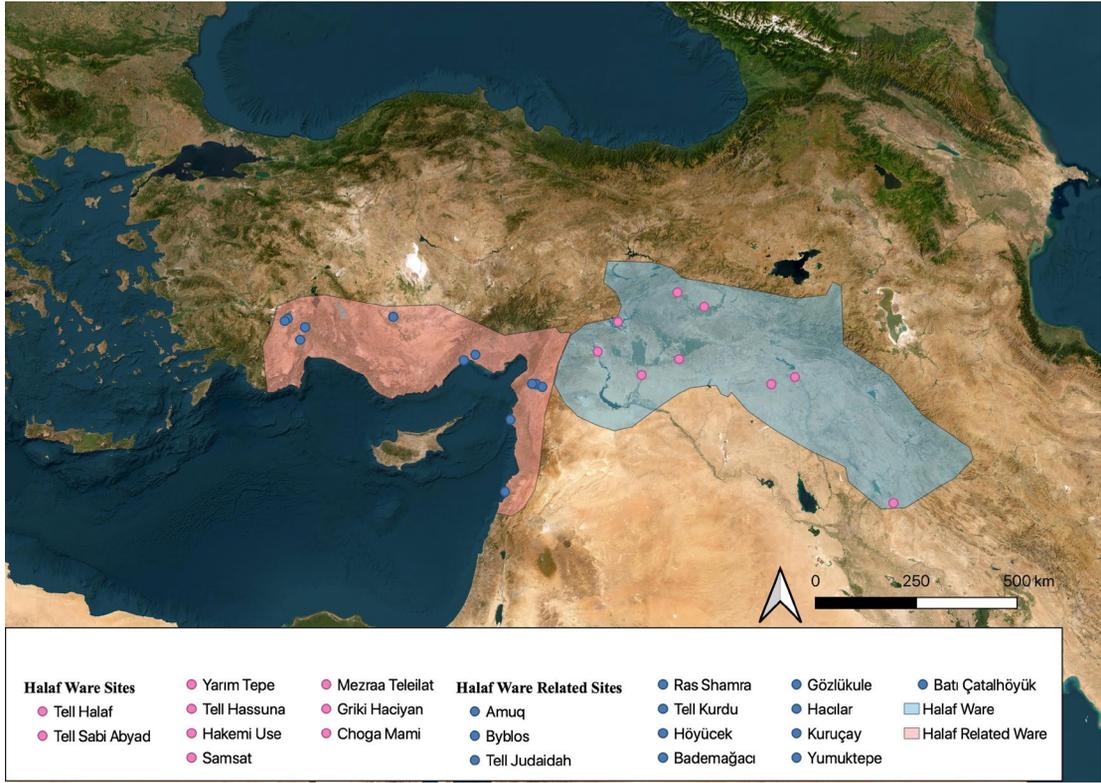


Figure 12. Map showing Halaf Ware and Halaf Ware Related Sites.

community has its distinct pottery production. As a result, differences in the design and production of pottery can be observed not only between neighbouring settlements but also among those in far-off locations on the island.

During the Late Neolithic Period, the Hassuna and Halaf Cultures dominated Southern and Southeastern Anatolia, Northern Levant, and Northern Mesopotamia (7th to 6th millennia BC). Although Cyprus developed alongside the mainland during the PPNA and PPNB periods, it is unlikely to represent an independent development in the Late Neolithic period. It is possible that the Neolithic Culture on the island adopted patterns from the mainland, but also allowed for unique variations to emerge based on individuals, their needs, and the natural environment. As more excavations and surveys are conducted on Khirokitia Culture settlements and subsequent Late Neolithic Period settlements, we will gain a better understanding of the similarities and differences. It is expected that the concept of “Independent Development of Neolithic Culture in Cyprus” will gradually diminish with time.

Upon conducting a comprehensive analysis of the painted ware groups discovered on the island, it is quite apparent that they serve as a significant representation of the painted wares that once dominated the Eastern Mediterranean Region during the 7th and 6th millennium BC. The origins of the Neolithic culture discovered on Cyprus remains

unknown, leaving us with uncertainties regarding any potential correlations between the Cypriot Neolithic culture and the mainland Neolithic cultures (Clarke 1992, 2001; Peltenburg *et al.* 2000; Guilaine 2003; McCartney 2004; Clarke *et al.* 2007: 30-35; Knapp 2013). To shed light on this matter and to attain a more comprehensive understanding of this period, additional research is imperative. Nevertheless, cultural interactions (Şevketoğlu 2006) between the surrounding mainland and Cyprus in the Early Neolithic Period suggest the possible continuity of contact, extending to the Late Neolithic Period. Considering the material from the Late Neolithic Period in Cyprus, it is thought that this culture interacted with the Halaf-related culture rather than developing as a distinctive island culture.

Upon studying the painted ware groups unearthed in the Northern Levant, Southeastern Anatolia, and Southern Anatolia settlements dating back to the 7th and 6th millennium BC, it is evident that they show resemblances to the painted ware groups found in Cyprus from the 5th and 4th millennium BC. This suggests that Cyprus was influenced by cultural trends that had already spread throughout the wider region but at a later stage. Pottery assemblages discovered in various locations, including Hacılar, Kuruçay, and Bademağacı in the Lakes Region of Anatolia, Yumuktepe in Mersin, Çatalhöyük West from the Konya Plain, Mezraa Teleilat and Samsat from the Euphrates Basin, as well as Hakemi Use and Griki Hacıyan from Tigris Basin, and Yarım Tepe from Sinjar Valley (Iraq), reveal undeniable similarities and some technological contrasts with those found in Cyprus¹ (Mellaart 1970: 57-74, Fig. 1.1-1.6, 1.9, 1.12, 1.20, 1.21, 1.23, 1.25; Goel 1974; Duru 1994: 53-60, Lev. 54, 55, 60, 63, 65, 78-81; Balossi-Restelli 2004; Tekin 2005; Gürdil 2006, cat.no. 25, 28-29, 33, 231, 237, 288; Caneva, Köroğlu 2010: Fig. 48; Umurtak, Duru 2019; Franz 2011 Fig. 95-98; Yurtsever 2011 Lev. 44-47; Petrova 2012 Fig. 1; Kalkan 2015 (see Fig. 13-20).

There is not enough radiometric dating available to accurately determine the chronology of Cypriot Neolithic pottery groups. Nonetheless, it appears that the painted pottery on Cyprus and the dominant painted pottery on the surrounding mainland are closely related. However, the relatively late radiometric analysis results on the island pose a challenge to this situation. We hope that new scientific studies will provide more up-to-date results, narrowing the extended time interval, especially in Troulli, and bringing radiometric results in line with the cultural scenario.

To gain a more comprehensive understanding of the situation at hand, it is crucial to take into account the location of Troulli and the presence of obsidian. Strategically situated close to the southern Anatolian coast, Troulli is only 88 km away from the mainland, making it an ideal location for overseas interaction. It is located 27 km from

¹ The pottery from Yumuktepe, Hacılar, Çatalhöyük West, Mezraa Teleilat, Samsat, Hakemi Use, and Griki Hacıyan was analyzed using the materials in the Istanbul University - Prehistory Laboratory Collection (Fig. 13-19).



Figure 13. *Yumuktepe Late Neolithic Period, Painted Pottery Samples (Istanbul University, Prehistory Lab. Collection).*



Figure 14. *Çatalhöyük West, painted pottery samples (Istanbul University, Prehistory Lab. Collection).*



Figure 15. *Samsat, Halaf-Obeid Transition painted pottery (Istanbul University, Prehistory Lab. Collection).*



Figure 16. *Hacilar I Painted Pottery Samples (Istanbul University, Prehistory Lab. Collection).*



Figure 17. *Griki Haciyan, Painted Pottery (Istanbul University, Prehistory Lab. Collection).*



Figure 18. *Mezraa Teleilat, Painted Pottery (Gürdil 2006 cat. no. 25, 28-29, 33, 231, 237, 288).*



■ ■
Figure 19. *Hakemi Use Painted Pottery* (Tekin 2020 Fig. 7b, 8a).



■ ■
Figure 20. *Yarim Tepe, Painted Pottery* (Petrova 2012 Fig. 1).

Akanthou-Arkosyko, which has the most obsidian on the island, making it an ideal location for inter-island communication. During the preliminary excavation, a total of 24 obsidian tools were discovered in Troulli. The majority of these tools were found in the Early Neolithic layers (Troulli I), with the remaining originating from the Late Neolithic Period (Troulli II). It is important to note that obsidian tools were not commonly found in settlements on the island during the Late Neolithic Period. These findings provide valuable insight into the potential exchange routes and interaction networks that may have existed during this period. The obsidian discovered in Troulli II layers may have been viewed sceptically due to possible contamination during the settlement's destruction. However, it should not be surprising that consistent raw materials and tools were preferred across settlements established in the same location at different times. It is worth noting that obsidian was frequently used in Anatolia, where the raw material of the obsidian found in Cyprus came from, and also in the Levant during the Late Neolithic Period (Cauvin *et al.* 1997; Moutsiou 2018; Bodet 2021).

There are a few settlements located near the coast, such as Mersin-Yumuktepe, Ras Shamra, Tell Kurdu, Tell ain el Kerkh, and Öküzini, where obsidian has been discovered

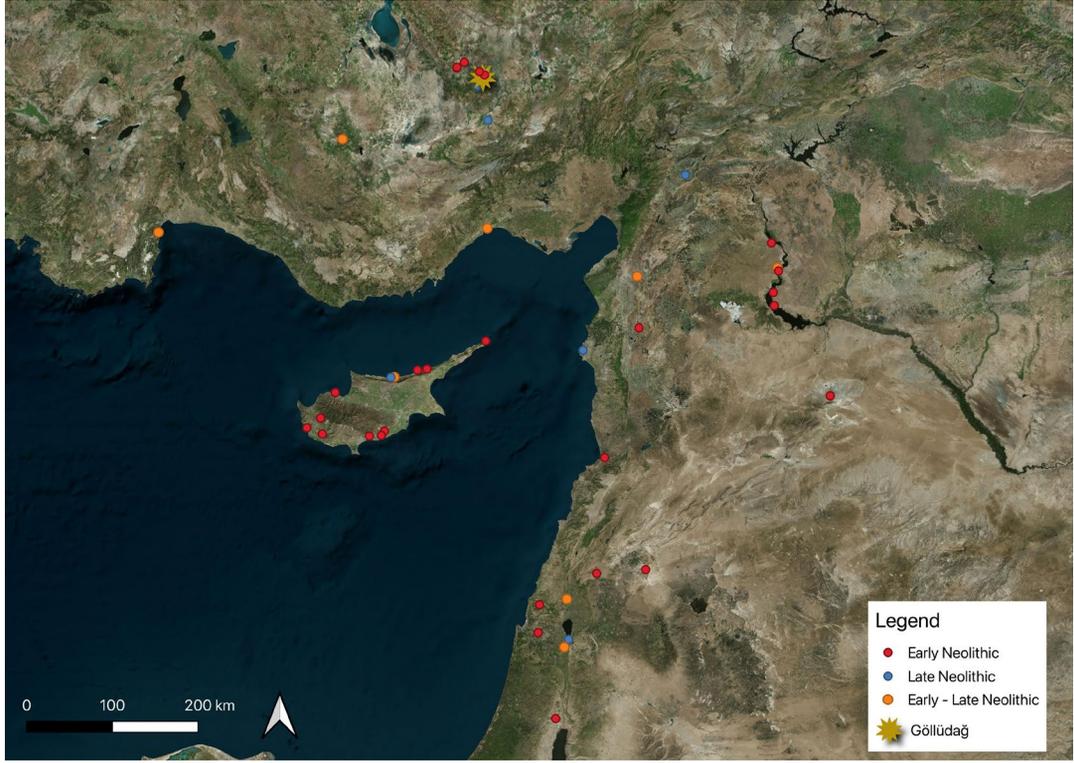


Figure 21. Map displaying the locations of obsidian sites in Cyprus and the surrounding mainland, along with the main sources of obsidian in the region: **Early Neolithic Sites:** Cape Andreas-Kastros, Akanthou-Arkosykos, Pımarcıklar, Petra tou Limniti, Krittou Marouttou-Ais Giorkis, Kissonerga-Mylouthkia, Kholetria-Ortos, Pareklissha-Shillourokambos, Kalavassos-Tenta Aşıklı Höyük, Musular, Balıklı, Sırçalıtepe, Kömürcü/Kaletepe, Dja'de, Jerfel Ahmar, Cheikh Hasan, Mureybet, Tell ain el Kerkh, El Kowm, Qdeir 1, Tell Arqa, Tell Aswad, Horwat Galil, Yiftabel, Jericho - **Late Neolithic Sites:** Domuztepe, Köşkböyük, Tepecik-Çiftlik, Sha'ar Hagolan, Ras Shamra, Ayios Epiktitos-Vrysi **Early-Late Neolithic Sites:** Çatalhöyük, Yumuktepe, Beysamun, Tell Halula, Öküzini, Tell Kurdu, Munhata, Klepini-Troulli, Khirokitia-Vouni) (Map produced by authors).

(Özbal *et al.* 2004; Caneva, Sevin 2004, Caneva *et al.* 2012; Yon 2006; Carter *et al.* 2011; Tsuneki 2012). These settlements could be useful for distributing the obsidian sourced from Anatolia to Cyprus (see Fig. 21).

Conclusion

For centuries, the Halaf culture has played a significant role in shaping Mesopotamia and its surroundings. It has been suggested that it was the first Mesopotamian culture to spread around the world (Frangipane 2002: 88), extending from the Zagros Mountains in the east to the Syrian coast in the west. The Halaf culture had a greater influence over a wider area than its predecessors, Hassuna and Samarra cultures. While it is easy

to differentiate from the culture that followed, the Obaid Culture, it can be difficult to distinguish between Halaf and its predecessors (Perkins 1949: 16). Hence, archaeologists often refer to Hassuna and Samarra cultures as “Pre-Halaf” (Perkins 1949: 1).

Painted pottery has played a significant role in shaping the identity of cultures such as Hassuna, Samarra, and Halaf. In fact, Anatolian communities were influenced by this cultural tradition of Northern Mesopotamia as early as the 6th to 5th millennium BC (Akkermans 2000: 49). Similarly, Cypriot communities could follow this trend during the 5th and 4th millennia. During the emergence of the Halaf, painted pottery became prevalent in Syria and Iraq. Nevertheless, South and Southeastern Anatolia have been considered the regions where the most abundant painted pottery has been discovered (Özdoğan, Özdoğan 1993; Campbell 2007: 106; Erdalkıran 2018; Tekin 2019: 321-331). This type of pottery is a defining characteristic of the southern coasts and lakes region of Anatolia during the late 7th and early 6th millennium BC (Mellaart 1970, Duru 2008). Painted pottery was also a predominant feature in the early 6th millennium BC, as seen in Çatalhöyük West and Can Hasan in the southern parts of Central Anatolia (French 2005; Orton *et al.* 2018; Brady *et al.* 2022)). Although the eastern shores of the Aegean Basin reflect a different pattern, there is evidence of painted pottery in the Greek mainland and in the Balkans (Kinzl, Schachermeyr 1977). This suggests that painted pottery was widely distributed during the late 7th and early 6th millennium BC, mainly associated with the Halaf culture, but also a defining element of village life based on farming. Braidwood’s studies on the Amuq Plain (Braidwood, Braidwood 1960; Spataro, Fletcher 2010) showed that in addition to the typical Halaf pottery, there were also locally-made imitations and imported pottery. While not direct, there is evidence of painted pottery tradition in Cyprus during that time.

The pottery produced by the Troulli community bears a striking resemblance to the Halaf-related ware groups at a macroscopic level. However, careful technological analysis reveals differences in the clay preference and production methods used in each region, which can be attributed to their unique natural resources and knowledge. These differences are also evident at a micro-scale, as observed in the various ware groups found on Cyprus. Interestingly, the painted wares of the late 7th and 6th millennia BC were widely adopted by communities in northern Mesopotamia, the eastern Mediterranean coast, the southern coast of Anatolia, and southeastern Europe. Therefore, it is not surprising that similar ware groups are present in Cyprus, pointing to a cultural continuity that extends to the island.

Through further research and newly gathered data, we can enhance our understanding of the Late Neolithic Period in Cyprus and the interactions between dominant cultures in the surrounding regions. It is clear that Cyprus remained connected to the dominant cultures in the surrounding areas in subsequent phases after the Neolithization process. However, due to the challenges of overseas travel and island isolation, it followed these developments and changes a little later. Excavations in settlements showcasing dominant

painted culture or yet-to-be-discovered settlements have the potential to alter our perception of the Late Neolithic Period in Cyprus and provide valuable insights.

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Bibliography

Akkermans, P.M.M.G. 2000

Old and New Perspectives on the Origins of the Halaf Culture. *La Djezire Et L'Euphrate Syriens de La Protohistoire a la Fin Du Second Millenaire AV.J.C.: Tendances Dans L'Interpretation Historique Des Donnees Nouvelles: 7*, M. G. Masetti-Rouault, O. Rouault, M. Wafler (ed.). Brepols, Turnhout: 43-54.

Ammerman, A. J. 2020

Cyprus: The Submerged Final Palaeolithic of Aspros Dive Site. *The Archaeology of Europe's Drowned Landscapes*, M. Mennenga, G. Bailey, N. Galanidou, H. Jöns, H. Peeters (ed.). Springer: 429-442.

Balossi-Restelli, F. 2004

The Pottery Production of levels XXVII-XXVI. *Yumuktepe-Mersin, a Reappraisal*, I. Caneva, V. Sevin (ed.). Congedo, Galatina: 135-141.

Bodet, C. 2021

Neolithic Cyprus: a reflection of the mainland, a reflection on society (2). *Academia Letters, Article 218*, <https://doi.org/10.20935/AL218> (Accessed on 04/11/2023).

Boness, D., Clarke, J., Goren, Y. 2015

Ceramic Neolithic Pottery in Cyprus -Origin, Technology and Possible Implications for Social Structure and Identity. *Levant* 47(3): 233-254.

Brady, J., Anvari, J., Franz, I., Naumov, G., Orton, D., Ostaptchouk, S., Biehl, P. 2022

Çatalhöyük West and the Late Neolithic to Early Chalcolithic Transition in Central Anatolia. *6000 BC: Transformation and Change in the Near East and Europe*, P. Biehl, E. Rosenstock (ed.). Cambridge University Press, Cambridge: 158-177.

Braidwood, R.J., Braidwood, L.S. 1960

Excavations in the Plain of Antioch I: The Earlier Assemblages, Phases A-J. The University of Chicago Press, Chicago.

Campbell, S. 1995

The Small Finds. *Excavations at Kharabeh Shattani* (Vol. II). D. Baird, S. Campbell, T. Watkins (ed.). University of Edinburgh Press, Edinburgh: 147-160.

– 2007

Rethinking Halaf Chronology. *Paléorient* 33(1): 103-136.

Caneva, I., Sevin, V. 2004

Mersin-Yumuktepe: A Reappraisal. Dipartimento di Beni Culturali Università degli Studi Lecce, Congedo.

Caneva, I., Köroğlu, G. 2010

Yumuktepe. Dokuzbin Yıllık Yolculuk. Ege Yayınları, İstanbul.

Caneva, I., Palumbi, G., Pasquino, A. 2012

The Ubaid impact on the periphery: Mersin-Yumuktepe during the fifth millennium BC. *After the Ubaid: Interpreting Change from the Caucasus to Mesopotamia at the Dawn of Urban Civilization (4500-3500 BC) Papers from the Post-Ubaid Horizon in the Fertile Crescent and Beyond International Workshop held at Fosseuse, 29th June-1st July 2009*, C. Marro (ed.) Publications de L'Institut Français d'Études Anatoliennes, Paris: 353-389.

Carter, T., Le Bourdonnec, F.X., Kartal, M., Poupeau, G., Calligaro, T., Moretto, P. 2011

Marginal Perspectives: Sourcing Epi-Palaeolithic to Chalcolithic Obsidian from the Öküzini Cave (SW Turkey). *Paléorient* 37(2): 123-149.

Cauvin, M.C, Keller, J., Pernicka, E. 1997

Obsidian from Anatolian sources in the Neolithic of the Middle Euphrates region (Syria). *Paléorient* 23: 113-122.

Clarke, J. 1992

The Ceramic Neolithic Period in Northern Cyprus. *Cahiers du Centre d'Etudes Chypriotes* 17(1): 3-16.

– 1998

Regional Variation in the Ceramics of Neolithic Cyprus: Implications for the Socio-Economic and Cultural Dynamics of a Prehistoric Island Society. University of Edinburgh, (Unpublished PhD Thesis), Edinburgh.

– 2001

Style and Society in Ceramic Neolithic Cyprus. *Levant* 33(1): 65-80.

Clarke, J., McCartney, C., Wasse, A., 2007

On the Margins of Southwest Asia: Cyprus in the 6th to 4th Millennia BC. Oxbow.

Croft, P. 1991

Man and Beast in Chalcolithic Cyprus. *Bulletin of the American Schools of Oriental Research* 282/283: 63-79.

Dikaïos, P. 1935

Some Neolithic Sites in Cyprus. *Report of the Department of Antiquities, Cyprus*: 11-13.

– 1961a

Sotira. *The Stone Age in Cyprus*. the Swedish Cyprus Expedition, Lund.

– 1961b

Troulli. *Stone Age in Cyprus*. the Swedish Cyprus Expedition, Lund: 63-72.

Duru, R. 1994

Kuruçay Höyük I. Türk Tarih Kurumu, Ankara.

– 2008

From 8000 BC to 2000 BC: Six Thousand Years of the Burdur - Antalya Region. Suna & Inan Kıracı Research Institute on Mediterranean Civilizations, Antalya.

Erdalkıran, M. 2018

The First Halaf Painted Fine Ware from the Tigris Valley in Turkey. *Workshop on Late Neolithic Ceramics in Ancient Mesopotamia: Pottery in Context*, A. Gómez-Bach, J. Becker, M. Molist (ed.). Museu d'Arqueologia de Catalunya (Monografies del MAC 1), Barcelona: 195-205.

Frangipane, M. 2002

Yakındoğuda Devletin Doğuşu. Arkeoloji ve Sanat Yayınları, İstanbul.

Franz, I. 2011

West Mound Pottery, Trench 5-7, Çatalhöyük 2011 Archive Report, 79-90. https://www.catalhoyuk.com/sites/default/files/media/pdf/Archive_Report_2011.pdf (Accessed on 04.11.2023)

French, D. 2005

Can Hasan I: The Pottery. The British Institute at Ankara.

Fukai, S., Horiuchi, K., Matsutani, T. 1974

Telul eth-Thalathat. Vol. 3, The excavation of Tell V, the fourth season (1965). Institute of Oriental Culture University of Tokyo, Tokyo.

Garstang, J. 1953

Prehistoric Mersin, Yümük Tepe in Southern Turkey. Clarendon Press, Oxford.

Gibbs, K. 2008

Pierced Clay Disks and Late Neolithic Textile Production. *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East*, M^a Córdoba, J., Molist, M., Pérez, M., Rubio, I., Martínez, S. (ed.). Actas del V Congreso Internacional de Arqueología del Oriente Próximo Antiguo, Madrid: 89-96.

Goel, T., 1974

Samosata Archaeological Excavations, Turkey 1967. National Geographic Society.

Guilaine, J. 2003

Parekklisha-Shillourokambos: Périodisation et Aménagements Domestiques. *Le Néolithique de Chypre (Actes du Colloque International organisé par le Département des Antiquités de Chypre et l'École Française d'Athènes (Nicosie, 17-19 Mai 2001))*, J. Guilaine, A. Le Brun (ed.). (Bulletin de Correspondance Hellénique 43), Athènes: 3-14.

Guilaine, J., Briois, F. 2001

Parekklisha Shillourokambos: An Early Neolithic Site in Cyprus. *The Earliest Prehistory of Cyprus: From Colonization to Exploitation*, S. Swiny (ed.). American Schools of Oriental Research: 37-54.

Gürdil, V. 2006

Güneydoğu Anadolu'da Halaf Kültürü'ne kadar Boya Bezemeli Çanak Çömleğin Gelişimi. İstanbul Üniversitesi Sosyal Bilimler Enstitüsü (Basılmamış Yüksek Lisans Tez), İstanbul.

Kalkan, E. 2015

Uruk Yayılım Kuramları: Tarihteki en Eski Koloniciler Barışçılar mı Savaşçılar mı?: Kuramsal bir Değerlendirme. Ege Yayınları, İstanbul.

Kinzl, K.H., Schachermeyr, F. (ed.) 1977

Greece and the Eastern Mediterranean in Ancient History and Prehistory: Studies Presented to Fritz Schachermeyr on the Occasion of His 80. Birthday. De Gruyter, Berlin.

Kirkbride, D. 1972

Umm Dabaghiyah 1971: A Preliminary Report. An Early Ceramic Farming Settlement in Marginal North Central Jazira, Iraq. *Iraq* 34: 3-15.

Knapp, A.B. 2013

The Archaeology of Cyprus: From Earliest Prehistory through the Bronze Age. Cambridge University Press, Cambridge.

– 2015

Prehistoric Cyprus: A Crossroads of Interaction?. *Multiple Mediterranean Realities: Current Approaches to Spaces, Resources, and Connectivities*, A. Lichtenberger, C. v. Rügen (ed.). Brill, Leiden: 15-30.

Knapp, A.B., Held, S.O., Manning, S.W. 1994

The Prehistory of Cyprus: Problems and Prospects. *Journal of World Prehistory* 8(4): 377-453.

Le Brun, A. 2001

At the Other End of the Sequence: The Cypriot Aceramic Neolithic as seen from Khirokitia. *The Earliest Prehistory of Cyprus from Colonization to Exploitation*, S. Swiny (ed.). American Schools of Oriental Research, Boston: 109-118.

Lloyd, S., Sayar, F. 1945

Tell Hassuna Excavations by the Iraq Government Directorate General of Antiquities in 1943 and 1944. *Journal of Near Eastern Studies* 4: 255-289.

Mallowan, M.E.L., Cruikshank Rose J. 1935

Prehistoric Assyria. The Excavations at Tall Arpachiyah 1933. Oxford University Press, London.

Marro, C., Bakhshaliyev, V., Berthon, R., Thomalsky, J. 2019

New light on the Late Prehistory of the South Caucasus: Data from the recent excavation campaigns at Kültepe I in Nakhchivan, Azerbaijan (2012-2018). *Paléorient* 45(1): 81-113.

McCartney, C. 2004

Cypriot Neolithic chipped stone industries and the progress of regionalization. *Neolithic Revolution: New Perspectives on Southwest Asia in Light of Recent Discoveries on Cyprus*, E.J. Peltenburg, A. Wasse (ed.), Oxbow, Oxford: 103-23.

– 2010

Outside the corridor? The Neolithisation of Cyprus. *Development of Pre-State Communities in the Ancient Near East: Studies in Honour of Edgar Peltenburg*, D. Bolger, L.C. Maguire (ed.). Oxbow, Oxford: 185-196.

McCartney, C., Peltenburg, E.J. 2000

The Colonization of Cyprus: Questions of Origins and Isolation. *Neo-Lithics* 1: 8-13.

Mellaart, J. 1962

Excavations at Çatal Hüyük. First Preliminary Report 1961. *Anatolian Studies* 12: 41-65.

– 1970

Excavations at Hacilar I- II Edinburgh University Press, Edinburgh.

Mortensen, P. 1970

Tell Shimshara the Hassuna Period. Munksgaard, Copenhagen.

Moutsiou, T. 2018

The Obsidian Evidence for Trans-Maritime Interactions in the Eastern Mediterranean: The View from Aceramic Neolithic Cyprus. *Journal of Mediterranean Archaeology* 31(2): 229-248.

Nishiaki, Y., Mière, M. 2005

The oldest pottery Neolithic of Upper Mesopotamia: New evidence from Tell Seker al-Aheimar, the Khabur, Northeast Syria. *Paléorient* 31: 55-68.

Oates, J. 1969

Choga Mami 1967-68. A Preliminary Report. *Iraq* 31: 115-152.

Orton, D.C., Anvari, J., Gibson, C., Last, J., Bogaard, A., Rosenstock, E., Biehl, P.F. 2018

A tale of two tells: Dating the Çatalhöyük West Mound. *Antiquity* 92(363): 620-639.

Oppenheimer, M.F. 1943

Tell Halaf: I, Die prähistorischen Funde. De Gruyter, Berlin.

Özbal, R., Gerritsen, F., Diebold, B., Healey, E., Aydın, N., Loyet, M., Nardulli, F., Reese, D., Ekstrom, H., Sholts, S., Mekel-Bobrov, N., Lahn, B. 2004

Tell Kurdu Excavations 2001. *Anatolica XXX*: 37-107.

Özdoğan, M. 2011

The Neolithic in Turkey: New excavations & new research in 2010. *Neo-Lithics* 11(1): 26-31.

Özdoğan, M., Özdoğan, A. 1993

Pre-Halafian Pottery of Southeastern Anatolia with Special Reference to the Çayönü Sequence. *Between the Rivers and Over the Mountains: Archaeologica Anatolica Et Mesopotamica Alba Palmieri Dedicata*, M. Frangipane, A. Palmieri (ed.). Università di Roma "La Sapienza", Roma: 87-103.

Peltenburg, E.J. 1975

Ayios Epiktitos Vrysi, Cyprus: Preliminary Results of the 1969-1973 Excavations of a Neolithic Coastal Settlement. *Proceedings of the Prehistoric Society* 41: 17-45.

- 1979

Troulli Reconsidered. *Studies presented in memory of Porphyrios Dikaios*, V. Karageorghis, H.W. Catling, K. Nicolaou, A. Papageorgiou, M. Loulloupis, D. Christou, I. Nicolaou (ed.). Lions Club of Nicosia (Cosmopolitan): 21-45.

- 2014

Ayios Epiktitos Vrysi, Cyprus: Preliminary results of the 1969-1973 excavations of a Neolithic Coastal Settlement. *Proceedings of the Prehistoric Society* 41: 17-45.

Peltenburg, E.J., Colledge, S., Croft, P., Jackson, A., McCartney, C., Murray, M.A. 2000

Agro-pastoralist colonization of Cyprus in the 10th millennium BP: Initial assessments. *Antiquity* 74/286: 844-853

Peltenburg, E.J., Wasse, A. 2004

Neolithic Revolution: New Perspectives on Southwest Asia in Light of Recent Discoveries on Cyprus (Levant Supplementary Series Vol. 1). Council for British Research in the Levant, Oxford.

Perkins, A.L. 1949

The Comparative Archaeology of Early Mesopotamia. University of Chicago Press, Chicago.

Petrova, N. 2012

A Technological Study of Hassuna Culture Ceramics (Yarim Tepe I Settlement). *Documenta Praehistorica* 34: 75-82.

– 2019

The development of Neolithic pottery technology in Eastern Jazira and the Zagros Mountains. *Documenta Praehistorica* 46: 128-136.

Rainbird, P. 2000

Islands out of Time: Towards a Critique of Island Archaeology. *Journal of Mediterranean Archaeology* 12(2): 216-234.

Rooijakkers, C.T. 2012

Spinning Animal Fibres at Late Neolithic Tell Sabi Abyad, Syria. *Paleorient* 38(1/2): 93-109.

Simmons, A.H. 2001

The First Humans and Last Pygmy Hippopotami of Cyprus. *The Earliest Prehistory of Cyprus: From Colonization to Exploitation*, S. Swiny (ed.). American Schools of Oriental Research: 1-18.

– 2012

Akrotiri- Aetokremnos (Cyprus) 20 years later: an assessment of its significance. *Eurasian Prehistory* 10(1-2): 139-156.

Simmons, A.H., DiBenedetto, K., Keach, L. 2018

Neolithic Kritou Marottou-Ais Giorkis, Cyprus — living in the uplands. *Bulletin of the American Schools of Oriental Research* 379: 171-95.

Spataro, M., Fletcher, A. 2010

Centralisation or Regional Identity in the Halaf Period? Examining Interactions within Fine Painted Ware Production. *Paléorient* 36(2): 91-116.

Stanley-Price, N.P. 1975

Patterns of Settlement in the Early Prehistory of Cyprus. University of Oxford, Oxford.

Steel, L. 2004

Cyprus before History: From the Earliest Settlers to the End of the Bronze Age. Bristol Classical Press, London.

Strasser, T.F., Runnels, C., Vita-Finzi, C. 2016

A possible Palaeolithic hand axe from Cyprus. Antiquity Project Gallery 90 / 350, <http://antiquity.ac.uk./projgall/strasser350> (Accessed on 04.11.2023).

Suleiman, A., Nieuwenhuys, O. 2002

Tell Boueid II: A Late Neolithic Village on the Middle Khabur (Syria). Brepols, Turnhout.

Swiny, S. 2001

Preface. *The Earliest Prehistory of Cyprus: From Colonization to Exploitation*, S. Swiny (ed.). American Schools of Oriental Research: xi-xiii.

Şevketoğlu, M. 2000

Archaeological Field Survey of the Neolithic and Chalcolithic Settlement Sites in Kyrenia District, North Cyprus Systematic Surface Collection and the Interpretation of Artefact Scatters. BAR International series 834, Oxford.

– 2006

MÖ 8000'de Anadolu Kıbrıs İlişkileri: Akanthou/Tatlısu Kurtarma Kazısı. *Anatolia* 30: 111-118.

Şevketoğlu, M., Hanson, I. 2015

Akanthou- Arkosykos, a ninth millennium BC Coastal Settlement in Cyprus. *Environmental Archaeology* 20(3): 225-238.

Tekin, H. 2005

Hakemi Use: a new discovery regarding the northern distribution of Hassunan/Samarran pottery in the Near East. *Antiquity* 79, Article number: 79008 < <https://antiquity.ac.uk/projgall/079/tekin79008.pdf> > (Accessed on 04.11.2023)

- 2019

Tarihöncesinde Mezopotamya, Yeni Yaklaşımlar, Yeni Yorumlar ve Yeni Kronoloji. Bilgin Kültür Sanat, Ankara.

- 2020

Hakemi Use Excavations Within the Ilisu Project. *Anatolia* 46: 147-165.

Todd, I.A. 2005

Vasilikos Valley Project 7: Excavations at Kalavassos-Tenta. Volume II (Studies in Mediterranean Archaeology 71/7). Paul Åströms, Sävedalen.

Tsakalos, E., Efstratiou, N., Bassiakos, Y., Kazantzaki, M., Filippaki, E. 2021

Early Cypriot Prehistory on the Traces of the Last Hunters and Gatherers on the Island- Preliminary Results of Luminescence Dating. *Current Anthropology* 62(4): 412-425.

Tsuneki, A. 2012

Tell el-Kerkh as a Neolithic Mega Site. *Orient* XLVII: 24-66.

Umurtak, G., Duru, R. 2019

Excavations at Bademağacı Höyük: The Neolithic and Early Chalcolithic. Ege Yayınları, İstanbul.

Vigne, J.D., Carrère, I., Briois, F., Guillaine, J. 2011

The Early Process of Mammal Domestication in the Near East: New Evidence from the Pre-Neolithic and Pre-Pottery Neolithic in Cyprus. *Current Anthropology* 52(4): 255-271.

Vita-Finzi, C. 1973

Palaeolithic finds from Cyprus? *Proceedings of the Prehistoric Society* 39: 453-454.

Watkins, T.F. 1973

Some problems of the Neolithic and Chalcolithic period in Cyprus. (Reports of Department of Antiquities Cyprus) Kkailas Press, Nicosia: 34-61.

Yon, M. 2006

The City of Ugarit at Tell Ras Shamra. Pennsylvania State University Press, Pennsylvania.

Yurtdaş, E., Özerenler, M. 2021

Morphou Bay Prehistoric Survey Preliminary Report: Pebble Tools from Orga-Kourvelia and Vasilia-Mosphilia. *Tüba-Ar* 29: 177-196.

Yurtsever, A. 2011

Neolitik ve Erken Kalkolitik Çağ'larda Burdur-Antalya Bölgesi Bant ve Geometrik Boya Bezekli Çanak Çömleği. İstanbul Üniversitesi, Sosyal Bilimler Enstitüsü, (Yayınlanmamış Doktora Tezi), İstanbul.