# Festschrift für Heide Froning

Studies in Honour of Heide Froning

Herausgeber/ Editors Taner Korkut – Britta Özen-Kleine



# Inhaltsverzeichnis

Tabula GratulatoriaXI
Vorwort (T. Korkut – B. Özen-Kleine)
Zum Geleit (W. Held)
Publikationen von Heide FroningXVII
Alexandropoulou, Anna
Ein protoattisches Kraterfragment aus Phaleron1
Amedick, Rita
Eine Achat-Schale aus der Elisabethkirche in Marburg und andere <i>Keimelia</i> in antike und Mittelalter
Coers, Birgitta
Antike Kulte, Naturauffassung und archäologische Landschaft im 18. Jahrhundert. Der Isis-Tempel in Saint-Nons <i>Voyage Pittoresque</i>
Delivorrias, Angelos
Zu einem sehr ungewöhnlichen statuarischen Typus der Artemis
Drougou, Stella
The Gold-Threaded Textile of Vergina-Aigai
Gans, Ulrich-Walter
Der Dresdner Zeus – Vom hochklassischen å $\gamma \alpha \lambda \mu \alpha$ zum kaiserzeitlichen Dutzendbild? 93
Held, Winfried
Zum Ursprung der Artemis Ephesia verwandten Kultstatuen in Anatolien und Syrien 109
Işın, Gül
An Archaic Kouros Figurine from Tlos
Kathariou, Kleopatra
Old Photos, New Tools for Vase Reconstruction
Koch, Guntram
Hellenistischer »Grabthron« oder kaiserzeitlicher Sarkophag?
Kokkorou-Alevras, Georgia
Head of Heracles from Ancient Halasarna on Cos and the Hero's Cult in the Deme of the Halasarnitae

Inl	hal	tsv	ver	ze	ic	hn	is	
	iu	101	01	20	IV.	uu	10	

Korkut, Taner	
Stadtgeschichte und urbanistische Entwicklung von Tlos in Lykien	165
Kotitsa, Zoi	
Grabgeflüster: Verbale Graffiti aus Pydnäischen Gräbern	185
Lezzi-Hafter, Adrienne	
Caresser La Bouteille. Tönerne Silen-Plastiken aus Westgriechenland	201
Lioutas, Asterios	
Polichni. A Pre-Cassandrian Settlement in the Region of Thessaloniki, Greece	213
Machaira, Vasiliki	
Multifaceted Aphrodite: Cult and Iconography in Athens. Several Years After	241
Manakidou, Eleni	
Aspekte weiblicher Repräsentation in Athen auf einer Pyxis und zwei Lekythen mit schwarzfigurigen Tanzszenen	255
Mattern, Torsten	
Bauen und Bauherren. Der römische Baubetrieb in zeitgenössischen Darstellungen	269
Mersch, Andrea	
Das Apollonheiligtum am Kap Zoster (Attika) in der römischen Kaiserzeit	289
Müller-Karpe, Andreas	
Die Juwelen der Königin Berenike. Antiker Schmuck zwischen Raubgrabungen und Wissenschaft.	313
Neumann, Sabine	
Wege durch Athen – Die Pflasterung des Akropolisareals durch Dimitris Pikionis	335
Oakley, John H.	
Early Attic Sarcophagi at the Queen's Tower	365
Özdemir, Bilsen Ş.	
The Cult of Dionysus in the Friezes of the Tlos Theatre	373
Özen-Kleine, Britta	
Zwei Mädchen aus Kaunos	389
Prignitz, Sebastian	
Ein falsch gelesener Buchstabe in IG IV <sup>2</sup> 107	407
Puritani, Laura	
Mythos, Kult, Theater? Überlegungen zu den Satyrn in Etrurien	411
Sezgin, Kudret	
The Chronology of Settlements Centrally Located in Tlos and Its Ceramic Repertoire Based on Findings in the "Stadium Area"	<u>1</u> 77
	····· ¬r∠ /

VIII

Shapiro, H. Alan	
Hesiod, Sophilos und Peleus' Hochzeit	457
Steinhart, Matthias	
Arion der Delphinreiter?. Cyriacus von Ancona und eine vergessene Inschrift auf Paros	485
<i>Tiverios, Michalis</i> Stephanephoron Eidolon of a Peripolos on a Loutrophoros-Amphora Attributed to the Dinos Painter	493
Uygun, Çilem	
The Temple of Kronos at Tlos	511
Vikela, Evgenia	
Familie als Wert-Chiffre: Die delische Trias als Bildsymbol. Überlegungen anhand	
der Ikonographie der Weihreliefs	531
Weiß, Carina Octavian auf einer Gemme aus der Zeit des 2. Triumvirats. Eine Erwerbung Karl Purgolds für die herzogliche Gemmensammlung im Schlossmuseum Stiftung Schloss	
Friedenstein Gotha	551
Yücel-Bahçetepe, Tijen	
A Warrior Relief in the Ancient City of Tlos	559
Zimmermann-Elseify, Nina	
Wehrhafte Ideale. Junge Reiter auf attisch schwarzfigurigen Lekythen in Berlin	571

## Tabula Gratulatoria

Adrienne Lezzi-Hafter Agnes Schwarzmaier Alan Shapiro Aliki Moustaka Andrea Mersch Andreas Kehler Andreas Müller-Karpe Angelika Schöne-Denkinger Angelos Delivorrias Anja Klöckner Anja Wienkemeier Anna Alexandropoulou Arbogast Schmitt Asterios Lioutas Avse Korkut Bilsen Ş. Özdemir **Birgitta** Coers Britta Özen-Kleine Carina Weiß **Christos Boulotis** Coskun Özgünel Cilem Uygun Dagmar Grassinger Dimitra Aktseli **Doris Bielefeld** Eleni Manakidou Elke Böhr Erika Simon Evgenia Vikela Georgia Kokkorou-Alevras Gerhard Kuhn Gül Işın Guntram Koch Heidemarie Koch Helga Bumke Irma Wehgartner John H. Oakley Julia Hertzer Jutta Stroszeck

Karin Kirchhainer Katharina Ulmschneider Kleopatra Kathariou Kudret Sezgin Laura Puritani Martin Kreeb Matthias Steinhart **Michalis** Tiverios Nadja Wöhner Nina Zimmermann-Elseify Orhan Bingöl Otto-Hermann Frey Panos Valavanis Pavlina Karanastasi **Rita Amedick** Sabine Neumann Sebastian Prignitz Semeli Pingiatoglou Sigrid Hofer Soner Özen Stamatis Fritzilas Stefan Klose Stefanie Luchtenberg Stella Drougou Taner Korkut Theodosia Stefanidou-Tiveriou Tijen Yücel-Bahçetepe Torsten Mattern Ulrich-Walter Gans Ute Verstegen Vassiliki Barlou Vasiliki Machaira Viktoria Sabetai Volker Scheunert Vuslat Müller-Karpe Wanda Papaefthimiou Winfried Held Wolfram Martini (†) Zoi Kotitsa

## Vorwort

Diese Festschrift ist Heide Froning, unserer lieben Freundin, Kollegin und Lehrerin gewidmet. Ihr 75. Geburtstag, den gemeinsam zu feiern uns eine große Freude ist, bildet den Anlass für diese Festgabe. Heide Froning kann an ihrem Jubiläumstag auf eine reiche und erfüllte universitäre Laufbahn zurückblicken. Sie wurde 1970 mit dem Thema "Dithvrambos und Vasenmalerei in Athen" an der Universität Würzburg als Schülerin von Erika Simon promoviert. Das Thema ihrer Dissertation bildet den Grundstein für einen ihrer Forschungsschwerpunkte, der im allumfassenden Sinn der Archäologie des griechischen Theaters gilt, ein Thema, welches sie bis heute nicht losgelassen hat. 1972/1973 wurde Heide Froning mit dem Reisestipendium des Deutschen Archäologischen Instituts ausgezeichnet, im Anschluss daran folgte die Assistentenzeit am Institut in Würzburg. 1979 habilitierte sie sich mit dem Thema "Marmor-Schmuckreliefs mit griechischen Mythen im 1. Jh. v. Chr.". In den folgenden Jahren als Akademische Rätin, später als Oberrätin erschien der Katalog der griechischen und italischen Vasen des Museums Folkwang in Essen sowie verschiedene Aufsätze zu Themen aus den Bereichen Skulptur, Keramik und Ikonographie. Diese Publikationen zeichnet bereits aus, was das wissenschaftliche Œuvre Heide Fronings insgesamt charakterisiert: Ausgangspunkt ist stets das Objekt, dessen fachmethodisch akkurate Bestimmung und Einordnung unerlässlich ist. Doch sind es die übergeordneten, die kulturhistorischen und -anthropologischen Fragestellungen, auf die das Wirken von ihr abzielt und deren Beantwortung sie als ihre eigentliche Herausforderung sieht. Dabei kann sich Heide Froning souverän eines überaus breiten allgemeinen und fachspezifischen Wissens sowie – begründet durch ihr Studium der Klassischen Philologie - hervorragender Kenntnisse der antiken Schriftquellen bedienen.

Nach Lehrstuhlvertretungen in Würzburg und Kiel erhielt Heide Froning 1991 den Ruf an das Seminar für Klassische Archäologie der Philipps-Universität Marburg, an dem sie bis zu ihrer Emeritierung 2009 wirkte. In dieser Zeit war sie die Seele des Seminars und widmete sich mit großem Engagement der Ausbildung der Studierenden. Diese fanden in ihr eine stets offene Ansprechpartnerin, die nicht nur in fachlichen, sondern oftmals auch in persönlichen Belangen mit Rat und Tat zur Seite stand. Aufgrund ihrer intensiv gepflegten Freundschaften zu Fachkolleginnen und Fachkollegen im In- und Ausland sowie eines aktiven wissenschaftlichen Netzwerkes fand sich schon bald in Marburg eine lebendige, internationale Schülerschaft ein, die bei ihr promovierte und die bis heute von diesem Netzwerk profitiert. Sagenumwoben ist dabei unter ihren Schülern der Zettelkatalog von Heide Froning, der – selbst zu den entlegensten Dingen befragt – noch erstaunliche Hinweise auf relevante Objekte und Forschungsliteratur hervorzauberte.

Neben der Ausbildung der Studierenden und dem oftmals schwierigen und kräftezehrenden universitären Verwaltungsalltag fand Heide Froning trotz allem noch Zeit, eigene Forschungen durchzuführen, wie etwa die Bearbeitung der figürlichen Terrakotten von Elis. Auch nach der Emeritierung verfolgt sie mit der ihr eigenen Wissbegierde und Lebhaftigkeit Projekte, die sich ihrem zweiten großen Forschungsschwerpunkt, der antiken Keramik, widmen und die sie immer wieder nach Vorwort

Griechenland führen. Neben einem Projekt zur spätklassischen und hellenistischen Keramik von Pydna ist jüngst die Bearbeitung von rotfigurigen Krateren aus dem Kerameikos hinzugekommen.

Diese Festschrift, liebe Heide Froning, ist wie ein Spiegel Ihres ereignisreichen wissenschaftlichen Lebens – international, interdisziplinär und ganz der klassischen Antike gewidmet. Wir möchten Sie mit diesem Band als Lehrerin, Kollegin und Freundin feiern und hoffen, dass die verschiedenen Aufsätze ihnen ein Genuss und Anregung zugleich sind.

Ad multos annos! Taner Korkut/ Britta Özen-Kleine

XIV

## Zum Geleit

Mit dieser Festschrift feiern wir Heide Froning als Wissenschaftlerin und Lehrerin, die ihr Fach erst in Würzburg und seit 1992 in Marburg entscheidend geprägt hat. Dass ihr Wirken dabei keineswegs auf diese beiden Universitäten begrenzt war, wird nicht zuletzt durch ihre Schülerinnen und Schüler verdeutlicht, die heute nicht nur in Deutschland, sondern auch in Griechenland und der Türkei lehren und forschen. Diese Qualitäten Heide Fronings sind durch ihre Publikationen, Lehrveranstaltungen und Vorträge wohlbekannt.

Eine weniger öffentlichkeitswirksame Eigenschaft Heide Fronings ist die Gewissenhaftigkeit und Beharrlichkeit, mit der sie sich für das Marburger Archäologische Seminar und seine Sammlungen einsetzte. Die Annahme des Rufs nach Marburg war für sie zugleich die Annahme einer Verpflichtung für die Institution, an der sie fortan tätig war. Ein Herzensanliegen war und ist ihr dabei insbesondere die Antikensammlung und die Abguss-Sammlung, die sie in Forschung und Lehre stets rege nutzte und auch um einige Abgüsse, wie zuletzt die Porträtstatue des Menander, bereicherte. Es waren schwierige Jahre, in denen die Universität gezwungen war, zu sparen und zu kürzen. Und so ist es durchaus keine Selbstverständlichkeit, dass Heide Froning diese Festschrift im Rahmen einer akademischen Feier in der Alten Aula der Philipps-Universität überreicht bekommt, sollte doch in den Jahren um die Jahrtausendwende das Archäologische Seminar geschlossen werden und das Fach Klassische Archäologie aus dem Curriculum der Philipps-Universität verschwinden. Es ist dem jahrelangen und unermüdlichen Einsatz Heide Fronings zu verdanken, dass ihr Fach in Marburg weiterhin vertreten ist.

Seit ihrer Pensionierung ist Heide Froning weiterhin im und für das Archäologische Seminar tätig. Dies umfasst neben ihren Forschungen zu rotfigurigen Krateren vom Athener Kerameikos insbesondere die Mitherausgabe und Redaktion des Marburger Winckelmann-Programms, das nach einer längeren Unterbrechung seit 2014 wieder regelmäßig erscheint. So bereichert sie auch heute das akademische Leben des Archäologischen Seminars und trägt mit ihrem kritischen Verstand auch zum Gelingen mancher Abschlussarbeit bei. Möge Heide Froning ihr segensreiches Wirken noch lange Jahre fortsetzen!

Winfried Held

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XVIII

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XX

# THE CHRONOLOGY OF SETTLEMENTS CENTRALLY LOCATED IN TLOS AND ITS CERAMIC REPERTOIRE BASED ON FINDINGS IN THE "STADIUM AREA"

## Kudret Sezgin

The content of this article is comprised of a short summary of a doctoral thesis analyzing the ceramics unearthed during excavations of the Tlos Stadium Area from 2005-2016<sup>1</sup>. Examinations of these vast and extensively numbered ceramics dating from the Prehistoric Era to the end of the 19<sup>th</sup> century are included within this work.

Tlos holds a geographical position on the upper slopes of the Xanthos (modern day Eşen) Valley, known as Western Lycia, which played the role of the main cultural center within the Lycian region and united the coastal and inland regions of the nation. The Stadium Area itself is located at the point where the western slope of the Akdağ mountain range descends into the valley and meets the Acropolis hill (**Fig. 1**). Due to its safe-guarded position perched in vigilance atop the valley, it was inhabited for a prolonged stretch of time<sup>2</sup>. At the same time, this position set the stage for serious invasion and devastation.

Through excavations and stratigraphic observations of the area, an irregular gradient in the stratification which runs west to east, conversely to the horizontal surface, has been observed. In the exploratory soundings done in 15 meter intervals on the east-west axis, the group of hand-made ceramics that were found 4 meters underground on the eastern side while on the western side they were detected just below the surface, starting from an average of -50 centimeters. Taking the distinguishable differences in period materials within the stratigraphic sections into account, it can be concluded that there must have been a mound-like settlement located in the center of Tlos at the Stadium Area and partially on the eastern slope of the Acropolis hill. Digs and drilling aimed at understanding the continuous chronology of the settlement, which started in the Mid-Chalcolithic Period and continued with only minor hiatuses until the Late Ottoman Period, were carried out in various places and depths throughout the area (**Fig. 2**).

## **Chalcolithic Period Ceramics**

Formed by hand without the use of the wheel, the Chalcolithic Period ceramics of Tlos involve three main groups of assets (Fig. 3). According to clay composition, temper, firing temperature,

<sup>&</sup>lt;sup>1</sup> I would like to thank my thesis advisor Prof. Dr. Gül Işın and the director of the excavation Prof. Dr. Taner Korkut for their support on my thesis work and for letting and helping me turn this work into a publication.

<sup>&</sup>lt;sup>2</sup> Takaoğlu et al. 2014, 111-118; Korkut et al. 2015, 37-49; Korkut et al. 2018, 548-555.

and surface color, these are red gritty, dark gritty and coarse wares. The shared characteristics of all of these aforementioned groups are their inclusion of stone granules, calcite, and sand as additives. Although the most extensively used additives were minerals, the use of straw as an additive was widespread enough to deserve mention. Although their surfaces are heavily deteriorated, occasional examples of slip and wet-smoothed surfaces have been discovered. There appears to be a lack of apparent standards in firing technique due to the fact that the clay composition at times possesses a grey core and at times is uniformly fired. Dysregulation of the kiln's atmosphere during the firing process led to differences in the coloration of the inner and outer surface of the wares, sometimes occurring on the same vessel face. Another noteworthy detail regarding the Chalcolithic Period earthenware vessels of the Stadium Area is the complete lack of glossy, burnished wares and examples belonging to painted categories.

Uniformity found in the composition of the clay is also manifested in the shapes of the vessels. The most prominent of these identified forms include: long necked urns, spherical bodied bowls, and outwardly prone, flat in form, conical bodied bowls. In addition, individual pieces of simple pottery with inwardly tapering closures and no necks, single-handled jugs, and the bodies of horn handled pottery were obtained.

Pertaining to surface colors, the most extensive group (numerically speaking) is made up of red or reddish-brown surfaced samples. The most distinctive features of these clays is the addition of concentrated amounts of various sizes of stone granules, calcite, and sand. This gives the vessels their grainy, unpolished texture. Although some changes in coloration may have taken place during the firing process, the most prevalent color is red. Due to the inadequate refining of the clay, large stone granules can be clearly seen in artifact fragments and the vessels' surfaces.

The second most prevalent group, that of the stone granule-added, dark-surfaced samples, generally resembles the first group in terms of clay and additives. The clay is characterized by large concentrations of course stone particles, calcite (limestone granules), and sand. They are distinguished by the black or blackish-grey color of their interior, exterior, or both of the two, caused by the atmosphere within the kiln during firing. Surfaces directly exposed to fire and smoke partially or completely develop a dark layer composed of soot.

The third group, made up of rough artifacts containing stone granules and straw, are easy to distinguish from the other sample groups due to their clay-color and surface texture. Without the surface application of any regulatory processes, these samples possess a coarse and abrasive appearance. The group containing straw possesses a pallid coloration, which is caused by differences in clay, the density of additive materials, and the firing temperature. The negative effects of the vegetal additive are evident on each of the two surfaces. Microscopic studies of materials revealed that the samples classified under this category possessed a fragile texture, low firing temperature, and black or gray core. The Chalcolithic Period ceramics of the Tlos Stadium Area were dated using typology comparisons in addition to fundamental analyses (Carbon-14) of the organic material (tooth) recovered from the strata. Based on the calibrated results, specimens from the layers of strata studied were dated to the period between 5040-4940 BCE.

## **Bronze Age Ceramics**

The Bronze Age ceramics recovered from the Tlos Stadium Area consist of artifacts belonging to the layer of strata carbon-dated to the beginning of the 15<sup>th</sup> century BCE (**Fig. 4**). The most substantial stratigraphic finding within this stratum was the 'pithos zone' found only at the lower fraction of the layers. The ceramics retrieved from the stratum above this bed correspond analogically to ceramic typology up to the 13<sup>th</sup> century. The radiocarbon analyses performed on artifacts obtained from the lower levels of the Tlos Stadium's stratification determined a date between 1500-1430 BCE; until new data is discovered, the Bronze Age artifacts of Tlos will be considered 'terminus post quem'. In typological comparisons, these show both direct and indirect similarities to the Middle and Late Bronze Age ceramics of Greece and the Islands and Western and Central Anatolia. They possess a general uniformity in clay texture. Their forms, presumably developed through outside interactions and the influence of their own culture region, were produced extensively by local craftsman.

Among the ceramics recovered during sampling in the Stadium Area, one noteworthy group of wares implemented a thin, glossy slip. The implementation of the same tone and quality throughout these separate form-based groups, which range from small bowls, to deep and broad kraters, thinwalled, carinated kylixes, and long-stemmed fruit bowls, exhibits the fact that a local or regional technical and aesthetic sensibility had been established. A very similar traditional use of red slip is found in some ceramics of Aigeria dated to the middle of the Late Helladic CIII Period (LHCIII)<sup>3</sup>. Schoop, who carried out studies involving Hittite pottery, attests that the usage of glossy, red slip on pottery-wheel made ceramics entered the Hittite ceramic repertoire during the period of the 'New Kingdom' (also known as the Hittite Empire) from foreign influences (it may have had its beginnings in Cyprus) and that it was widely used as a status symbol. He has also asserted that this practice disappeared with the fall of the Hittite Empire at the end of the Late Bronze Age<sup>4</sup>. The application of a thin red coat of slip possessing similar qualities is also present on the Early Bronze Age glazed pottery of the Bademağacı excavation mound<sup>5</sup>, as well as the on the surface of the thin, wheel-made bowls of the Middle Bronze Age strata<sup>6</sup>. Similarly textured red slipped ceramics dated to the Middle to Late Bronze Age were identified during archaeological surveys in the Germia settlement located within the borders of the mid-western Anatolian province of Eskişehir<sup>7</sup>.

The most remarkable group of ceramics dated to this period is that of the conical bodied kylixes whose long cylindrical stem sits atop a small disk-like base. Their long stems are usually hollow, with their exteriors descending straight down or in a wavy pattern. Their most distinguishing features are their nearly standard use of a dense slip in shades of red and clay composition possessing the same traits. Although these artifacts are now in small fragments, we can contrive an outline of their configuration by comparing recovered fragments of their mouths, stems, and bases to samples within the literature.

<sup>&</sup>lt;sup>3</sup> Gauss et al. 2013, 77, fig. 7, no. 1.

<sup>&</sup>lt;sup>4</sup> Schoop 2013, 366.

<sup>&</sup>lt;sup>5</sup> Üstün 2006, 12

<sup>&</sup>lt;sup>6</sup> Umurtak 2003, 53, fig. 8.3.

<sup>&</sup>lt;sup>7</sup> Niewöhner et al. 2013, 100, fig. 8.

Long-stemmed fruit bowl forms were prevalent in the ceramic repertoire of the Bronze Age. They are one of the most prevalent pottery forms (numerically speaking) in the ceramic culture of Beycesultan of Western Anatolia and Mycenae of the Aegean Islands. Long-stemmed fruit bowls and shorter-stemmed goblets were uncovered together throughout the Late Bronze Age strata at Beyce-sultan<sup>8</sup>. Known as Mycenaean type pottery on the Greek mainland and islands, the long stemmed, conical bodied specimens possess a characteristic form and similar ornamentation. This style of bowl, with its semi-circular body, long stem, with some samples possessing a disk-shaped base with a central hole, have been present since the Middle Helladic Period, most probably being a local form free from outside influence. The fact that the earliest examples were made of metal gives rise to the thought that these earthenware copies were imitations of the metal original<sup>9</sup>. Within Furumark's Mycenaean ceramic typology, those samples referred to as "Form 79" are deep bodied Minoan goblets with shorter bases, recognized as the early prototype to the long-stemmed bowls of discussion. It is universally accepted that these long stemmed specimens, having underwent some stylistic changes since the Late Mycenaean IIIA Period, coming to be described as 'kylix', originated during this period<sup>10</sup>.

Another group of ceramics is made up of distinctly carinated bowls in which the top of the mouth has been flattened. This deep bowl form consists of a conical body, a carination sharply protruding and widening out from the body center, a short neck extending up from the carination, and a mouth thickened on both the interior and exterior. The mouths of these bowls have diameters ranging from 11 cm at the smallest to 27 cm at the largest. Displaying similar attributes in terms of form and clay make up, these bowls can be divided into three categories including those with a red slip, matte dark grey slip, and specimens without slip.

Samples with a similar form have been discovered in various settlements throughout the Mediterranean and Anatolian basin. Examples found in the Late Bronze Age stratification in the East Anatolian Norsuntepe<sup>11</sup> and the Central Anatolian Bogazkoy<sup>12</sup> resemble those from the Apliki settlement in modern day Cyprus which have been dated to GH IIIC Period (1200 BCE)<sup>13</sup>. Another example of a vessel with a similar mouth and body is known as the 'bellied skyphos', found among the ceramics recovered during excavations at Knossos and dated to the Sub-Minoan Period (1100-1000 BCE)<sup>14</sup>.

Another noteworthy group of vessel forms recovered from Bronze Age Period strata is that of single handled carinated bowls. These thin walled forms consist of conical bodies extending up from their base, a sharply protruding carination in the middle of the body concavely ascending into a narrow mouth, and a rounded lip. The general body position forms an 'S' shape. With diameters ranging from 30 to 10 centimeters, these models are coated with varying shades of red, matte

<sup>&</sup>lt;sup>8</sup> Mellaart – Murray 1995, 9, P.1, P.10-12, P.30.

<sup>&</sup>lt;sup>9</sup> Furumark 1941, 56.

<sup>&</sup>lt;sup>10</sup> Furumark 1941, 56; Furumark 1992, pls.139-152.

<sup>&</sup>lt;sup>11</sup> Korbel 1985, pl. 115, nos. 5564, 2750.

<sup>&</sup>lt;sup>12</sup> Parzinger – Sanz 1992, 27, fig.19, Tip I 8.2.c.

<sup>&</sup>lt;sup>13</sup> vanWijngaarden 2002, 175, fig. 12.3.

<sup>&</sup>lt;sup>14</sup> Sackett et al. 1992, 61, pl.42, no.9.

greyish brown and black slip. Information regarding their bases and handles is lacking due to the fact that no complete forms have been recovered. However, wares with a similar mouth structure harboring short ringed bases or long stems are found within the published studies. In addition to single-handled samples, specimens with two handles facing each other are also known to exist. While similarly styled wares located among the artifacts of Agina<sup>15</sup> and Milet<sup>16</sup> have been dated to the Middle Bronze Age, those recovered from the Southwest Anatolian Menderes Valley prehistoric settlements of Aphrodisias/Asopos Tepesi<sup>17</sup> and Troia<sup>18</sup> have been dated to the Late Bronze Age. As for the artifacts from Beycesultan, they were used throughout the period from the Middle to the Late Bronze Age<sup>19</sup>.

Although few in number, bowls with horizontal (basket-like) handles above their mouth are nevertheless important forms of Bronze Age stratification. It's difficult to describe this form of pottery using only the pieces at hand. From what we can gather, they consisted of a simple, rounded mouth and descending spherical body. The round, vertical handle extends from the top of the mouth to again fuse horizontally with the mouth. Presumably, one or two vertical hanger-like handles facing each other were placed on each vessel. The composition of their clay is identical to the general composition of clay recovered from the Stadium Area, which was proven to be local through analyses. Other than small clumps of red clay and lime particles, almost no additive materials were found within their fine and cleanly refined clay mixture. All of these vessels possessed a coating of slip in shades of red, dark brown and brownish gray.

Fragments of numerous bowls, beaked jugs, and kraters with similar traits in terms of clay composition and the use of red slip with differences only in shape details have also been acquired. The wares within this group are generally considered to be locally made products due to the similarities in the composition of their clay and that traditionally used in Tlos.

Kitchen and daily-use pots from the Bronze Age stratification can be grouped into two main types; along with these, ungrouped individual styles have also been recovered. Since the identified types were found in an incomplete form, they have been grouped based on the style of their mouth and lip. All of these wares possess a coarse clay composition with extensive use of stone particulate, sand, and calcite. In some if not all of these vessels, burn marks from exposure to open flame have been observed along with exterior traces of black slip. The earliest examples of pottery of a similar form in Middle Anatolia are found extensively in the ceramic repertoire of the Hittites<sup>20</sup>.

During excavations of the Stadium Area, many pieces of pottery mouths, bodies, handles, and bases belonging to numerous individual storage vessels all possessing unique mouth styles were unearthed. Of these, the most clearly identifiable storage vessel possesses a thin neck and an outwardly extending round and wide mouth form. They are made up of a coarse clay mixture containing large quantities of stone particulate, sand, and calcite. Two mouth fragments and one body

<sup>&</sup>lt;sup>15</sup> Siedentopf 1991, pl.97, no. 594.

<sup>&</sup>lt;sup>16</sup> Raymond 2005, 189, pl. XLV.b; Raymond 2007, 224, fig. 26.1; Raymond 2009, 151, fig. 7; Zurbach 2011, 55, fig. 5.

<sup>&</sup>lt;sup>17</sup> Joukowsky 1986, 685, nos. 11-12; Dedeoğlu – Konakçı 2015, 200, fig. 5, nos. 1-7.

<sup>&</sup>lt;sup>18</sup> Pavúk 2002, 61, fig. 16, no.57; Aslan 2011, 393, fig. 11, no. 25.

<sup>&</sup>lt;sup>19</sup> Mellaart – Murray 1995, 60, fig. P30.

<sup>&</sup>lt;sup>20</sup> Müller-Karpe 1988, 52, pl. 9, KT 2c; Parzinger – Sanz 1992, 19, fig. 16, Tip B 4.4-B3.2.

fragment with raised bump-like decorations belonging to this form were recovered from the same stratum. Results of the C14 analysis performed on the bone and carbon samples found within a pithos thought to belong to this form group showed a stratigraphic date between 1500-1430 BCE. Along with the mouth and base pieces used to distinguish form, pieces of the body of an ornamental pithos of unknown form and of decorative handles were unearthed. While all of these body pieces appear to have a band shaped belt in relief, variation is found in the application and designs of this relief belt which include: chevron, thin slanted grooves, series of lines and notches, and sequences of small squares.

## **Iron Age Ceramics**

There is a general opinion that after the cessation of the central authoritarian kingdoms of Anatolia and Mainland Greece, which made their mark during the Bronze Age, they suffered a cultural collapse and a rural lifestyle began to predominate over urban expansion. Recent studies concentrating on this problematic question have begun to express the opinion that there must have been some sort of cultural permanency<sup>21</sup>.

Of the excavations performed in the Tlos Stadium Area, none were extensive excavations aimed at understanding the typology and chronology of the settlement in its entirety; however, certain layers of stratum and the archeological materials pulled from these layers have been dated with the use of radiocarbon analyses. Certain pottery forms found within the layers of stratification dated to the early stages of the Late Bronze Age have also been discovered in stratum closer to the surface using comparative typology, resulting in the conclusion that these forms persisted despite changes in customary ornamentation (Fig. 5). Data regarding the structural, political and cultural make-up of the city of Tlos, and the Lycian Region in general, during the Bronze Age is still lacking. The same can also be said for the transition period from the Bronze to the Iron Age. While the stratigraphy of Mainland Greece, the Greek Islands, and Western Anatolia can be unequivocally followed and the form and decorative typology of the ceramic repertoire within certain settlements' conforms to the chrono-cultural sequence, the fact that this pattern is difficult to grasp within the Lycian Region impedes the dating of available materials. Although to a certain extent it conforms with form and ornamental customs present in Attica, Corinth, and Western Anatolia during the period between the Proto-Geometric and Late Geometric Period, since it doesn't explicitly follow certain detail patterns, it seems improbable that the findings of Tlos could produce a period differentiation at this time. In this case one of the most important factors for consideration is the alternative, that the structure of local culture had a great effect upon ceramic production. The use of red slip from the Late Bronze Age into the middle of the Archaic Period continuing despite a reduction in quality, and again the use of the carinated bowl form with an outwardly thickened lip structure since the Mid-Bronze Age and its transition into the Iron Age with the addition of geometric designs, and into the Archaic Period with matte red and black slip are significant because of their indication of a consistent tradition partially free of outside influence in the production of these artifacts.

At the helm of the noteworthy forms of the Iron Age are the three-footed (tripod based) wares. These wares can be divided into different variations based on leg structure. The first of these

<sup>&</sup>lt;sup>21</sup> Ünlü 2016, 1-9, fig. 4-9.

#### The Chronology of Settlements Centrally Located in Tlos and Its Ceramic Repertoire Based on Findings in the "Stadium Area"

groups features handle-shaped feet that extend up from an undermost, narrow base and merge with the body. The vessel sits on these three feet while the actual pedestal is merely decorative. This style is utilized in different forms and sizes of pots and bowls such as pithos, amphora, krater, and pyxis. While these feet are generally fashioned out of a single round hoop, double and triple hooped examples also exist. Twenty-two pieces of this style of base were recovered from the Tlos Stadium Area. Of all of these, the complete form is discernable in only one bowl. According to the thickness of their walls and feet, only one of these is thought to have been a large amphora-type enclosed vessel, the others possessing small bowl-like forms.

Along with these three looped legs, the typical tripod vessels have also been recovered. Their bases are made up of a cone or horn-shaped clay addition acting as the supporting element of the lower body and technically completing the vessel. In general this technique is used in crude wares, but is also visible in delicate painted ceramics. The forms unearthed in Tlos possess feet made up of one, two, or three hoop structures. Although the majority of these samples have rounded tops, pointed and blade-like examples are also distinguishable. A large portion of these pieces are coated with red or reddish brown slip.

The carinated bowl form recovered from the Tlos Stadium Area is one of the forms present throughout a long stretch of time. These vessels' body shapes resemble one another: normally thin-walled, displaying skilled craftsmanship with a coat of slip on inner and outer surfaces. A uniformity and visible standard is clearly implemented in their slip colors, ornamentation and clay composition. These can be further classified into sub-variations based on their mouth/lip structure. All of these variations appear to be continuations of the characteristics of forms seen in the stratification since the Middle to Late Bronze Age. In this sense, this data holds an important place in our understanding of the ceramic production capacity of Tlos since early times along with the evolution of form and ornamentation. Samples of this form incorporating a red slip were concentrated in the Late Bronze Age stratification, while in the Iron Age strata the use of the same form was continued albeit with a divergent style of decoration. Traces of slip are found on all the Tlos samples. Most commonly these slips are red or dark brown, with matte shades of dark grey seen infrequently. These colors are also preferred for the surface decorations of these vessels. The most frequently seen characteristic designs of the bodies of these bowls are horizontal bands running along the mouth and carination with a motif of a row of teardrop shaped points between these bands, a series of triangles descending from the carination to the body with their centers decorated with a combed pattern, and thin horizontal line designs on the interior of the mouth.

In addition to these bowls, another group with thicker walls and larger diameters has been interpreted as belonging to the ceramic group known as kraters. The wares in this group can be divided into four different types based on the degrees of their mouth and bodywhich include: wide and deep bodies, bodies that narrow as they ascend, outwardly extending conical bodies, and narrow necked bodies that widen into a spherical shape. While samples with a complete coat ofslip in shades of red or brown on the outer body surface are most prevalent, wave patterns and rows of lines or chevron on their necks or mouths as well as horizontal bands with linear designs descending from these bands towards the body are also visible. The chief claim that these ceramics have embraced a certain standard in uniformity and production quality is indicated in their clay composition and the fact that the ornamentation seen on other bowl forms is also visible on kraters.

Closed vessels used for storing liquids, such as amphora or hydria, with four distinct mouth profiles have been located in this stratum of the Tlos Stadium Area. The mouth profiles of these forms, which generally possess a narrow neck, are as follows: those with a slightly thickened and rounded lip and an outwardly extending mouth, those with unmistakably thickened lips gravitating outwards, those with sharply angled outwardly extending and thickening lips, and those with a mouth extending outward and flattened on top. Their decorative schemas also seem to follow a definite standard. The most frequently encountered style of decoration is that of horizontal bands of various widths, wavy lines, and zigzags starting at the mouth and continuing towards the neck. Although the Stadium Area is void of complete forms and pieces displaying characteristic designs in their entirety, making the formation of a typological analogy difficult, it's possible to place these artifacts in the Proto-Geometric Period based on their general attributes and context of the findings.

Starting from the ground beneath the Archaic building complex in the stratigraphic sequence of the Stadium Area, a group of pieces of the decorated bodies of wares of unknown form were recovered in the two meters of stratum spanning to the Late Bronze Age. While the majority of these consisted of the bodies of closed vessels such as amphora, hydria, stamnos, and oenochoe, the bodies of open vessels like bowls and kraters have also been located. Horizontal band patterns are the most extensively used group of decoration visible on these painted body fragments. The most basic reason for this extensive use is that in addition to being applied on its own, these band patterns have been seen on the same body together with any of the multiple alternative designs. Among the colors utilized, dark matte brown formed the base with shades near red, reddish brown, and black also being favored. All decoration was applied directly to the vessels' surface. There are no traces of the use of extra slip beneath the bands.

The second prominent group of decorations within these painted goods is that of the triangles with a combed center. This style was implemented in the ornamentation of various vessel forms ranging from small oenochoe bowls and broad, shallow plates to large amphora. There are three standard colors used prominently in these decorations. These consist of matte shades of black, brown, and red. The center of the triangles is filled with either diagonal lines running in one direction of a network of crisscrossing lines as though a comb had been run through.

A necklace like motif of tongue shaped semi-ovals draping down from the neck onto the body comprises the third group of decorations. A band wrapping around the entire neck section is found on every example, with the motif hanging down from this band towards the body. In some samples the row of semi-ovals are shorter and thinner while in others they are longer and thicker. This is one type of ornamentation that has been used extensively since the Late Bronze/ Proto-Geometric Period. The forms onto which it's applied are closed vessels such as amphora or oenochoe.

Wavy lines and zigzags comprise the forth group of decorations. These decorations are sometimes present on the shoulders, but most frequently seen on the body. They are generally comprised of broad monadic waves or of combinations of two rows, one above the other, of shorter waves between horizontal bands. Red is the preferred color in these decorations, but shades of brown and black have also been identified. All of the wave designs belonging to this group possess densely spaced, short waves.

Another motif prevalent in great numbers among the ornamented vessel pieces consists of a pattern of concentric circles. Making a clear characterization of these was complicated due to their poor condition and small size of the recovered pieces. The designs were generally drawn on the bodies of these closed vessels using compasses. The variation of line width suggests that different sized brushes were used on some samples. This concentric circle design is recognized as one of the most distinctive motifs of the Proto-Geometric Period. Its use declined towards the end of the period: while at the start of the Geometric Period it was still seen rarely, in some regions such as Attica its use had completely come to an end, leaving in its place geometric designs with more defined lines such as a meander pattern<sup>22</sup>. This group of designs is seen as problematic, chronologically speaking, in the Lycian Region. With Attica at its center, this motif of concentric circles was one of the most significant designs of the ceramic tradition during the Proto-geometric Period, however, in the settlements of the Lycian Region it's found amongst ceramics from the 6<sup>th</sup>-5<sup>th</sup> centuries BCE. As one heads towards the northern parts of the region, artifacts begin to indicate a chronological disposition towards the Geometric Period. Artifacts from Eceler Höyük<sup>23</sup> and Çaltılar Höyük<sup>24</sup>, whose positions put them closer to the culture of the Southwestern Anatolian Plateau and Western Anatolia from there, have been dated to the Mid-Iron Age (9th-7th century BCE). Wares decorated with concentric circles found among ceramics from another artifact hotspot in the region, the Uylupinar necropolis, have been identified with the 8<sup>th</sup> century BCE context<sup>25</sup>.

## **Archaic Period Ceramics**

The groups comprising Archaic Period ceramics are made up of artifacts from the tombs around and inside the masonry context found 50 cm below the ground surface of the Stadium Area (Fig. 6). While the strata close to the surface contains a mixture of materials from later periods, Archaic Period artifacts alongside wares with forms and ornamentation frequently seen in Greece, the Islands, and Western Anatolia during the Proto-geometric and Geometric Periods were recovered from the strata farther below the surface. Within the Archaic Period building complex, seemingly also used as a burial site, lies what can be regarded as the only closed context, comprised of tombs dated on average to the middle of the 6th century BCE. Ovular bodied beaked askos and three-footed askos, cylindrical bodied pyxis with two vertical handles situated atop its shoulders, miniature vessel with trefoil mouth, single handled jug with thin spout, skyphos and similar vessels recovered from these tombs where found alongside jewelry made of gold and silver and a terracotta kore figurine. Located outside the tomb context but presumably related to these burials, the ram shaped rhyton is among one of the most interesting finds. The clay composition of all of the ceramics of this burial site is free of additives, fragile and brittle due to low firing temperature, nonporous and fine-grained. Based on their clay composition, slip, and ornamentation, it's likely that they were produced locally. For this reason, similar samples are more commonly found than identical samples within the literature.

<sup>&</sup>lt;sup>22</sup> Boardman 2016, 14.

<sup>&</sup>lt;sup>23</sup> Momigliano 2013, 183, fig.8 E-F.

<sup>&</sup>lt;sup>24</sup> Momigliano 2011, 87, fig. 29.

<sup>&</sup>lt;sup>25</sup> Dörtlük 1977, 14, figs.17-18.

Carinated bowls comprise the most numerically prevalent and noteworthy forms recovered from the Archaic Period strata. The most characteristic features of this form make up a profile consisting of a round open body with a carinate outward protrusion turning in from the shoulders down to the base. Exhibiting uniformity in clay composition and slip attributes, these bowls can be further divided into sub-variations based on their mouth positions and lip profiles. All of these variations follow a standard, local clay composition while shades of black and red were given preference on their surfaces. Along with these forms, many other examples of bowls recovered from Archaic settlements are seen in the same context. Although few in number, bowls with outwardly slanted mouths (Ionian cups), kylixes emulating the black figure technique, and Siana cups, which were all clearly imported, were also identified among the bowls roughly exhibiting local characteristics.

Alongside the vessels possessing a high-quality clay and slip composition, carelessly made kitchen/cooking utensils, lekanai, mortars, storage vessels, and amphora were also situated within the Archaic Period building complex in the Stadium Area. The consolidation of all of the sub-variations of these pottery forms produces a rich ceramic repertoire.

The decorated wares from the Stadium Area can be addressed in four separate groups. These groups include: concentric circle designs, horizontal and wavy line designs, combed triangle-net motifs, and various designs found on single examples which will be discussed together as one mixed group. The types of ornamentation located on the Archaic Period ceramics recovered during excavations and surface analyses carried out throughout the Lycian Region and its surroundings are all visible within the same context. For this reason, it has been proposed that all of these designs are given similar dates in dating procedures taking this complex into account. The aforementioned materials consist of the ceramics pulled from the strata located between the surface and the base of the underground burial area which was dated to the 6<sup>th</sup> century BCE within the general context.

The structure of these vessels as well as their slip and painted designs have suffered much deprecation due to the soft, fine clay composition of Tlos and surrounding areas, their low firing temperature, and most importantly, the fact that the area of study was subject to agricultural watering for many years. While most of the slip has been corroded, on some of the ceramics, only the negatives of the paint remain. Matte shades of black, red, and brown paints were generally used. Since these are only present in small fragments, the collection of wares onto which they were implemented is unclear. However, they presumably belong to closed vessels such as amphora, hydria, stamnos, and oenochoe based on their thick walled body pieces.

## **Classical and Hellenistic Period Ceramics**

Within the Stadium Area, no substantial context has been found within the proper strata which can be clearly dated to the Classical and Hellenistic Periods. There is a noteworthy divergence in the proportion of pottery pieces dated to the Classical and Hellenistic Periods when compared to other ceramics, which are found in great concentrations within this area. Those ceramics which could be identified include just 13 pieces belonging to a calyx krater, an echinus bowl, and skyphos-like forms relative to the 5<sup>th</sup>-4<sup>th</sup> centuries BCE. The surfaces of all of these are covered in a matte black varnish, sometimes bordering on green (**Fig 7**).

Because of the devastation caused by agricultural activities on the stadium plain, Hellenistic Period ceramics and Roman and Late Roman Period materials have accumulated together. The fact that few Hellenistic materials have been recovered despite the Stadium building being built during the Hellenistic Period suggests that much of this building may have been rearranged during the Roman Period. In total 16 pieces of Hellenistic ceramics were recovered. These include cooking vessels, mold-making bowls, and unguentaria (Fig. 7).

## **Roman and Early Byzantine Period Ceramics**

Numerous samples of multiple forms belonging to the ceramic repertoire of the Roman Period were acquired during excavations of the Stadium Area (Fig. 8). At the helm of these artifacts are daily-use vessels with a coarse clay composition. These wares, especially those of the Roman and Hellenistic Periods, are recognized throughout most of the geography of the ancient era. This group is easy to date by comparing them to samples recovered in multiple excavation areas with distinct stratigraphic layers. Different variations of pots, pans, and crocks are still similar despite having slight differences in clay characteristics and additives. When one takes into account the modern day (albeit rare) use of terracotta crockery shaped similarly to that used in ancient times, it seems that the most ideal and ergonomic cooking orientated forms were discovered in the ancient era. In general, high proportions of sand and calcite make the clay rough and gritty. The binding agents of sand and calcite increase durability and hardness when exposed to high heat. While reddish brown is the most prevalent color, some artifacts are dark grey or black due to either the composition of their clay or the firing process they underwent.

The cooking vessel form known as chytra, consisting of a deep and usually spherical body and a round base, approximately the same size as pots used today, was usedfor an extended period of time throughout a vast area in the ancient era. This form, which generally possesses either one or two upright handles or more rarely horizontal handles, contains concentrated amounts of strengthening materials such as sand and calcite; its rough walls are thin to promote the conduction of heat. Thanks to the circular construction of its base, they can be used by being hung over the fire by the rings attached to their handles or by being placed on a tripod over the fire. They show little variation over a long expanse of time due to their traditional form. For this reason, mouth profile and handle structure are more widely used in relation to dating<sup>26</sup>. Numerous artifacts categorized into this group and its sub-variations, dated to the wide span of time between the 1<sup>st</sup> and 7<sup>th</sup> centuries CE, were recovered from the Stadium Area.

The most interesting samples among these are the spouted cooking vessels. This style of wares diverges from the others in terms of both form and clay/slip composition. Of which five samples were located in the Stadium Area, this style of cooking vessel possess a fine-grained, clean clay with very little calcite and a coat of red slip on their exteriors and partially on the interiors of their mouths. No clear indication of them being used over an open flame for the purpose of cooking is present on their surfaces. Spouted cooking vessels with varying characteristics have been discovered in nearby Lycian Region cities such as Patara<sup>27</sup>, Xanthos<sup>28</sup>, and Rhodiapolis<sup>29</sup>. While one

<sup>&</sup>lt;sup>26</sup> Lüdorf 2006, 46; Rotroff 2006, 165.

<sup>&</sup>lt;sup>27</sup> Özdemir 2009, 65, nos. 270-274.

<sup>&</sup>lt;sup>28</sup> Pellegrino 2007, 234, fig.8, nos.7-8.

<sup>&</sup>lt;sup>29</sup> Firinci 2010, 29, Kat. no. 100.

#### Kudret Sezgin

subdivision of these possesses only a drainage hole and spout section, there is another infrequently seen form described as a double-walled pressure cooker, known as '*Kerotakis*' in the literature<sup>30</sup>.

Another form within the cooking vessel repertoire of Tlos is comprised of a turgid spherical body ascending into a narrow mouth of unknown profile with horizontal handles on the sides. There is fluting on the lower and upper body, while the center has been left smooth. The regional artifacts most resembling these samples were discovered among the finds found within the context of the Xanthos Acropolis identified as belonging to the 6<sup>th</sup> century CE; results of chemical analyses put them into a sub-category of Lycian-made ceramics<sup>31</sup>. Categorized as 'Type 150' by Pellegrino, spouted examples of this form also appear among the Xanthos samples<sup>32</sup>.

Alongside the pot and crock forms seen among kitchen vessels since the Classical Period, flat pans entered the cooking vessel repertoire during the period of the Roman Empire and in the 2<sup>nd</sup> century BCE in certain areas. This vessel form, known as *'tagenon'* in Greek<sup>33</sup>, first appeared under the Latin terminology as *'sartago'*<sup>34</sup>, and was also called *bridum, frixorium*, and *patina*<sup>35</sup>. With its squat body, wide and outwardly-opening mouth, and flat and broad base, it possessed an ideal form for frying operations and in turn quickly spread throughout the Mediterranean basin. This form can be further categorized into sub-groups based on variations seen in the concaveness or convexity of its body, its handle construction (hollow handle, ear shape adjacent to the mouth or coil-like ring) and the roundness or sharpness of the lines making up the mouth<sup>36</sup>. The most extensive studies directed at this form with in the Lycian Region were carried out on artifacts of Patara<sup>37</sup>.

One of the most prevalent forms of daily use ceramics acquired are lekanai. This vessel form, extensively found in the contexts of nearly every ancient settlement, is a multi-functional kitchen vessel. They can generally be described as a 'basin-like' form, possessing a wide, open body, inwardly prone/outwardly slanted straight or overhung mouth, horizontal handles, and channel or wave designs decorating their mouths in some samples, sitting upon a flattened or low ring-like base. In artifacts from the Hellenistic or Roman Period, the vessels are coated with a cream-colored slip while decoration is nearly non-existent<sup>38</sup>. It's most widespread functions in the kitchen are its use during the food preparation stage as a mixing bowl or to store prepared foods, while at times it was also used as a cooking vessel<sup>39</sup>. Since the functionality of this form remained in the forefront, monotony predominated, making the dating process troublesome. A total of 38 lekane mouth pieces comprising four main types were recovered from the Tlos Stadium Area.

Of all the storage vessels recovered from the Tlos Stadium Area, no pithos substantial enough to provide general information about its form as a whole has been found. This group of vessels

<sup>&</sup>lt;sup>30</sup> Korkut – Ercan 2008, 98, fig. 3.

<sup>&</sup>lt;sup>31</sup> Lemaitre et al. 2013, 201, fig. 13, LYC 2,5,108.

<sup>&</sup>lt;sup>32</sup> Pellegrino 2007, 234, fig. 8.

<sup>&</sup>lt;sup>33</sup> Liddel-Scott 1951, 1876; Dalby 2003, 102.

<sup>&</sup>lt;sup>34</sup> Lewis – Short 1966, 1632 "sartago" ;Plinius, Nat. 16, 11,22.

<sup>&</sup>lt;sup>35</sup> Hilgers 1969, 73, 245.

<sup>&</sup>lt;sup>36</sup> Wintermeyer 2004, 94-97; Lüdorf 2006, 41-43.

<sup>&</sup>lt;sup>37</sup> Korkut 2007a, 212-213; Korkut 2007b, 431-449; Özdemir 2009, 54-59.

<sup>&</sup>lt;sup>38</sup> Lüdorf 2006, 62.

<sup>&</sup>lt;sup>39</sup> Berndt 2003, 89.

located in the Hellenistic/Roman Period strata can be further divided into eight types based on certain variations in mouth and body details. Along with these types, broad disk-shaped lid pieces with engraved wave designs and centrally located handles, thought to belong to these forms, were also discovered. Depending on the size of their corresponding pithos, these lids range from 25 to 70 cm in diameter, and possess a disc-shaped form.

Although many pieces of amphora were obtained from the Hellenistic and Roman Period strata of the Stadium Area, none of them yielded a complete form. The amphoreus discussed within the content of this article possess six distinct mouth and three distinct base forms. Knidos amphoreus make up the most numerically prevalent group within this form. Knidos is one of the few centers in which amphora was continuously produced from the Archaic Period to the 7<sup>th</sup> century CE<sup>40</sup>. These generally possessed a form comprised of an outwardly thickened and round mouth profile, a cylindrical neck, a wide body tapering down towards the base, and a pointed bottom accessorized with a relief ring around it<sup>41</sup>. Similar amphora groups used as a trade commodity and found in many ancient settlements throughout the Mediterranean basin were dated to the period of time between the 1<sup>st</sup> century BCE and the 6<sup>th</sup> century CE by most prominently implementing stratigraphy rather than form comparisons.

Variations on the red slipped (terra sigillata) vessel forms, possessing one of the most distinctive characteristics within the Roman Period ceramic repertoire, appear within the Stadium Area. These can be grouped based on their forms which include: long necked bellied jugs, bowls with P-shaped or horizontal handles, wide crocks with horizontal handles, and small shallow bowls. In addition, numerous plate and bowl forms utilized until the Late Roman period were also recovered from the area. Similarities between Eastern Sigillata A, B, and C and the red slipped ceramics of Phocaea, Sagalassos, and Cyprus were observed during typological comparisons. However, because all forms generally display a near-identical clay composition and slip, the opinion that they were locally made has begun to predominate.

Numerous unguentaria with variations subject to period, excavation area, and forms dependent on their function were recovered from the Stadium Area. In addition to the functions of early examples, directed at the storage and transportation of cosmetic and medical goods, they were also commonly used as a type of funerary object or grave good<sup>42</sup>. While they generally possess a pipe shape and a simple mouth construction, samples with forms consisting of an outwardly extended/ thickened lip and a spouted mouth shaped by pressing on both sides also exist. Some small stoppers have been discovered inside mouth and neck pieces. These were made by applying pressure to small lumps of clay to form a disk shape; they fulfill their task as a simple cover with various diameters corresponding with the width of each mouth. There are two prominent types of unguentaria, distinguished by the shape of their base. Unguentaria with pointed bases possess widely fluted interiors and much thicker wall structures. Their exterior surfaces are rough due to the production process, residual clay and fingerprints are visible alongside traces of dripping reddish-brown and dark grey paint. The most intact samples measure approximately 18 cm in height, despite their

<sup>&</sup>lt;sup>40</sup> Şenol 2003, 34

<sup>&</sup>lt;sup>41</sup> Dündar 2012, 70.

<sup>&</sup>lt;sup>42</sup> Anderson-Stojanovic 1987, 114; Scarborough 1996, 38, figs. 10-11.

lack of mouth sections. As for flat-based samples, they possess thinner wall structures and smooth exteriors. A configuration of fluting is seen on their interiors.

Their clay composition is generally free of additives, fine-grained, and harshly fired. The clay of those with a pointed base is proportionately harder than those with flat bottoms. Two different clay colors, occurring due to firing technique, have been identified. While the most prevalent clay lands on a color scale ranging from light brown to dark reddish-brown, samples, especially those with pointed bases, made from gray clay also exist. The monogram imprints implemented on the Stadium unguentaria can be categorized into three main groups with sub-variations. Given the name "Chi Rho" in the published studies, these monograms consist of a cross (+) symbol in the center, combinations of letters connected to the end of the arms of this cross, and lastly, the letter 'X' placed in the center of the area of imprinting and the implementation of various combinations of letters and lines forming a border on either one edge or multiple corners.

## **Byzantine Period Glazed Ceramics**

During the Byzantine Period, the Stadium Area's original function was lost and was used as flat area in which surrounding walls, housing, water canals, and burial sites were constructed in different corners. According to identified archeological materials, it seems that these structures' construction began in the Late Ancient Period and was subject to various additions and subtractions until its final period of use in the 12<sup>th</sup> or 13<sup>th</sup> century CE. Despite its lack of a closed context, glazed ceramics discovered in connection to these structures all exhibited a similar clay composition in shades of red; the techniques used in their adornment can be classified into five distinct groups (**Fig. 9**).

The first among these, the "Green and Brown Painted Wares" generally possess a clay color in a shade of red. After a white coat of slip, the surfaces are decorated with designs of green and brown paint. The process is completed with a final coat of light colored yellowish lead glaze applied over the matte green and brown designs. Since the brown outlines of their green painted interiors are dark brown or black, this type of ceramics which was recovered from the Athena Agora were given the name "Black on Green Painted Ware"<sup>43</sup>. Likewise, artifacts discovered alongside examples of Sgrafitto in the 10<sup>th</sup> and 11<sup>th</sup> century contexts of Corinth possess paint colors ranging from shades of brown to black and were fittingly given the name "Green and Brown Painted" in general literature<sup>44</sup>. In Corinth, these green and brown painted wares began to appear toward the end of the 10<sup>th</sup> century and were all described as local products<sup>45</sup>. Based on the production remains of these wares found in Corinth, the theory that this decoration style originated in the textile design traditions of Persia was put forward<sup>46</sup>. Ernst J. Grube, when discussing Islamic artifacts of the Metropolitan Museum, asserts that early Byzantine ceramics were directly influenced by those of Syria and Persia, and therefore that early Islamic ceramics played a central role in the tradition of ceramic production that continues to this day<sup>47</sup>.

<sup>&</sup>lt;sup>43</sup> Waage 1933, 323.

<sup>&</sup>lt;sup>44</sup> Morgan II 1942, 27.

<sup>&</sup>lt;sup>45</sup> Morgan II 1942, 72.

<sup>&</sup>lt;sup>46</sup> Megaw 1968, 100

<sup>&</sup>lt;sup>47</sup> Grube 1965, 228.

While quality ceramics implementing this technique are seen with carefully drawn contoured designs, as time went on, retrogression emerged, colors flowed into one another, and bold lines grew more indistinct<sup>48</sup>. Concentric circles, prism designs, series of wavy lines, spirals, and botanical designs comprise the most prevalent decoration styles. These techniques are generally implemented on deep bodied bowls with a short ring shaped base and a long upright mouth<sup>49</sup>.

Comprising the second group, 'Slip Painted Wares' display a decorative tradition of painting with a thick coat of white, yellowish white, or cream colored slip atop a reddish brown base. For this reason, the base appears brown and the decorations in shades of white. The title 'Slip Painted Wares', now fixed into the literature, was first proposed by Waage<sup>50</sup>. These go through two firing stages. First, designs are thickly painted directly on the clay with light colored slip paint to create a relief-like effect before the vessel is placed in the kiln. During this stage the clay will take on a brown color and the light colored designs begin to appear more pronounced. As for the second stage, a transparent, yellowish or greenish glaze is applied to the vessels newly removed from the kiln before a second firing. In order to contribute to the distinct color contrast between the background and the designs, sometimes a dark brown slip was applied to the vessel's interior surface before the use of white slip paint<sup>51</sup>. Early examples were found in the 11<sup>th</sup> century context at Corinth<sup>52</sup>, while the finds obtained in excavations of the Saint Nicolas Church of Myra were dated to the 10<sup>th</sup> century<sup>53</sup>. In the same area and the ancient city of Myra, 12<sup>th</sup> century samples with slip paint decorations were also located<sup>54</sup>. Slip decorated vessels acquired from another artifact rich area of the Lycian Region, Cyaneae, were evaluated as belonging to the 13-14<sup>th</sup> centuries<sup>55</sup>.

Making up the third group, ornamented ceramics implementing the Champlevé technique cultivate the air of a relief or plastic design by creating a difference in depth perception between the main motif and the contours by means of incising the area around the design after a surface coat of slip. The color contrast of these vessels is then intensified with a final glaze. Generally the main design component is encompassed by a round frame<sup>56</sup>. The designs found on service vessels implementing this technique, which began to appear in 12<sup>th</sup> century Corinth and are known as 'Incised Wares', generally depict main themes such as individual rabbit, bird, and lion figures as well as lions in combat with various other animals and mythical creatures such as griffons<sup>57</sup>. Although these apply a different technique than 'Incised Sgraffito' wares, it should be mentioned that they resemble Sgraffito and Medallion-Style Sgraffito in terms of clay composition, glaze, and form and for this reason, have been given a date between the mid-12<sup>th</sup> to the 13<sup>th</sup> century<sup>58</sup>. The so called

<sup>52</sup> Morgan II 1942, 75, pls. XXIX, XXXI.

- <sup>55</sup> Rückert 2000, pl. 24, no.3; Böhlendorf-Arslan 2004, 261, pl. 151, no. 777.
- <sup>56</sup> Böhlendorf-Arslan 2004, 64.
- <sup>57</sup> Morgan II 1942, 162, figs. 139-144.
- <sup>58</sup> Morgan II, 1942, 165-166.

<sup>&</sup>lt;sup>48</sup> Frantz 1938, 430

<sup>&</sup>lt;sup>49</sup> Vionis 2001, 87, fig. 2.

<sup>&</sup>lt;sup>50</sup> Waagé 1933, 323, fig. 18.

<sup>&</sup>lt;sup>51</sup> Waagé 1933, 323; Morgan II 1942, 95.

<sup>&</sup>lt;sup>53</sup> Ötüken 1991, 178.

<sup>&</sup>lt;sup>54</sup> Ötüken et al. 1999-2000, 231, fig. 13; Acara-Eser 2006, 4, fig. 6; Fındık 2013, 217, nos. 21-22; Fındık 2015, 832, fig. 3, no. 2.

'Incised Sgraffito Wares' and 'Incised Medallion' wares found among the glazed Byzantine Period ceramics recovered from the Athens Agora, which implement a similar technique, were discovered within the 12<sup>th</sup> century context<sup>59</sup>. Artifacts displaying a similar technique from the settlements of Thebes and Chalcis in Greece were subjected to chemical analyses which indicated that they were locally made and were classified as belonging to the MBP (Middle Byzantine Production) group and given a date between the late 12<sup>th</sup> and the early 13<sup>th</sup> centuries<sup>60</sup>.

The 'Plain Glazed Wares' which comprise the forth group generally bear no trace of ornamentation. A coat of light colored slip (such as white or cream) was applied to their surfaces before being covered with a yellow, green, or brown glaze. Due to their ease of production, they were widespread and produced throughout a vast area<sup>61</sup>. Twelve mouth fragments belonging to this group were discovered in the Tlos Stadium Area. The clay of all of these samples was either light colored or a shade of reddish brown. Generally slip was found only on the exterior band running around the mouth along with traces of dripping glaze on their exterior surface. The remaining sections of the body's exterior were left unrefined; marks left by the pottery wheel and clay are visible. These plain glazed wares were further divided into sub-variations based on the color of their glaze, which varies from transparent to green and yellow. Similar wares, found in regional centers such as Cyaneae<sup>62</sup> and the Church of St. Nicolas of Myra<sup>63</sup>, were given a date ranging from the 12<sup>th</sup> to the 13<sup>th</sup> century.

The designs of the final group, the 'Sgraffito-decorated Ceramics', are created by carving deeply into an already slip-coated and fired piece of pottery with a pointed tool so as to reveal the inner clay once again. Later glaze is applied to the wares' surface, intensifying the contrast between the dark designs and the light areas where slip remains. This process is similar to the Champleve technique, however, in this method only the designs' contours are made up of thin lines. It is seen alongside other incision and painted design techniques in addition to being used individually<sup>64</sup>. Böhlendorf-Arslan, who are behind one of the most detailed studies of Byzantine ceramics in Turkey, express that the width of the incising tool implemented in the decorative process is an important factor in the typological and chronological classification of ceramics and that a thin needle-like tool was used during early ages, while thicker lines began to appear in the 12<sup>th</sup> century. In addition they state that the use of the Sgraffito technique began in the decorative tradition of the Middle East, especially that of the Persian ceramic repertoire, in the 9th century and that this technique became part of the Byzantine ceramic culture due to the direct influence of Persian ceramics. He goes on to say that, beginning in the 11<sup>th</sup> century, it became one of the most prevalently used decorative techniques throughout Greece and Anatolia, continuing its advancement until the 15th century<sup>65</sup>. Classified based on the technique implemented, sub-variations such as 'Fine Sgraffito' and 'Incised Sgraffito' were found in the Stadium Area.

<sup>&</sup>lt;sup>59</sup> Frantz 1938, 453, fig. 14, A78.

<sup>&</sup>lt;sup>60</sup> Waksman et al. 2014, 395, fig. 12 c-d.

<sup>&</sup>lt;sup>61</sup> Böhlendorf 1997, 391; Türe 2014, 57.

<sup>&</sup>lt;sup>62</sup> Böhlendorf-Arslan 2004, 262, pl. 151, no. 782.

<sup>&</sup>lt;sup>63</sup> Findik 2013, 499, nos. 166-202.

<sup>&</sup>lt;sup>64</sup> Morgan II 1942, 27; Bursalı 2007, 36.

<sup>&</sup>lt;sup>65</sup> Böhlendorf-Arslan 2004, 63; Lane 1947, 25-27.

## **Beylik and Ottoman Period Ceramics**

The Stadium Area ceramics belonging to this group with designs painted in white which were produced in Esenköy (Dont) are uniform in terms of clay composition and paint decoration (Fig. 10). They implemented a thin wash in place of a slip atop their rough and grainy clay which contained a high percentage of sand and calcite; white painted linear and stylized designs were applied to the exterior surfaces in addition to incised wave motifs. Based on ethnographical research, some better preserved artifacts were acquired from the cemetery located southeast from the ancient city of Tlos in the 'Shrine Locality' (Türbe Mevkii), named after its Seljuk Period shrine.

The Ottoman Period ceramics recovered from the Stadium Area, lacking in terms of diversity and form, make up one group possessing uniform clay and decorative composition. Until recent times the village of Dont has continued a limited production of ceramics possessing a rough clay and imprecise design composition which seem to have been produced to meet local needs. Further examinations into the form repertoire of these products which persisted until recent times shows that the most prevalent forms are single handled jugs with or without a spout, pots, teapots, and incense burners. While the spouted jugs were used in daily tasks such as performing ablutions, the fact that they are found on old graves in particular demonstrates the possibility that they were used as an offering or in some water-pouring ritual<sup>66</sup>. Small, open mouthed, and flat based with a single handle, these wares, known as 'Incense Burners', were used in rituals in which a type of incense made from the bark of the oriental sweetgum tree was burned to expel bad spirits<sup>67</sup>.

The most compelling form found within the late period ceramics is a spherical/ conical shaped ware. This form generally possesses a spherical upper and conical lower body, a short neck, and a small mouth structure. With an average height of between 12 and 13 cm, a diameter measuring up to 9-10 cm, wall widths of around 1 cm, and a hard constitution, these wares were quite heavy. Incision or various other designs along with paint, glaze, and stylized decoration appear on their surface. In addition, samples featuring the written name of their owner have also been discovered<sup>68</sup>.

There are different theories as to the functions of these wares. The most popular opinion is that they were used like a hand bomb or a Molotov cocktail to set fires during battle<sup>69</sup>. Contrary to this function, another group of researchers allege that they may have been mercury containers<sup>70</sup>, while other arguments stating that they may have been durable bottles used to store or carry wine, beer, perfume, or precious liquids used for medical purposes also abound<sup>71</sup>. Adahl points out that these wares may have been filled with oil or perfume and used for personal hygiene purposes in the public baths<sup>72</sup>. Keall propounds that these wares had a function complete different than the other theories and functioned as water pipes in the Middle East during and before the 17<sup>th</sup> century<sup>73</sup>.

<sup>&</sup>lt;sup>66</sup> Pala 2011, 319, fig. 8.

<sup>&</sup>lt;sup>67</sup> Çalışıcı 2003, 62, fig. 112; Pala 2011, 319.

<sup>&</sup>lt;sup>68</sup> Sharvit 2008, 101.

<sup>&</sup>lt;sup>69</sup> Sarre 1925, 21; Mercier 1952, 151-158; Gardin 1963, 51.

<sup>&</sup>lt;sup>70</sup> Ettinghausen 1965, 218.

<sup>&</sup>lt;sup>71</sup> Lane 1947, 27-28; Hildburgh 1951, 52; Ghouchani – Adle 1992, 74-78; Sharvit 2008, 101.

<sup>&</sup>lt;sup>72</sup> Adahl 1997, 64.

<sup>&</sup>lt;sup>73</sup> Keall 1993, 280, figs. 4-5.

One broken lower body fragment of this type was found among the ceramics of the Tlos Stadium Area. It possesses a dark grey and smooth clay composition that was rigidly fired. The interior surface of this ware is covered in a dark brown slip, while its thick walls were made to be very durable and impermeable. Dual channels running on the exterior surface from the spherical upper body towards the conical base split the entire body into separate pieces. These pieces were imprinted with a motif of groups of fish scales.

A single piece of cup was found among the Ottoman Period ceramics recovered from the Tlos Stadium Area. Botanical designs were painted in blue on its interior and exterior surface, atop its cream colored clay, before being coated in a transparent glaze. While the exterior design consists of a horizontal band running around the mouth and botanic motifs splayed over the body, the interior's decoration is made up of stylized motifs and a band forming a border around the mouth section. The tradition of blue botanical designs atop a white base appeared in the second half of the 16<sup>th</sup> century in the 'Iznik Cini' repertoire. One of the most important centers when considering the Ottoman ceramic repertoire, Iznik, began producing wares at the end of the 16th century until experiencing a decline in the 18th century after which Kütahya began to take control of production<sup>74</sup>. Taking inspiration from Iznik Cini, the ceramics of Kütahya generally continued the tradition of painting blue designs over a white or cream colored clay base, albeit in a simpler fashion<sup>75</sup>. Kütahya ceramics were of a high quality during the start of the 18th century, but to meet the market demand at the end of the 18th and start of the 19th centuries, they shifted to mass production and experienced a loss in quality<sup>76</sup>. Artifacts similar to these cups were discovered during excavations at the Izmir Agora, and were dated to the first half and the middle of the 18th century<sup>77</sup>. The mouth fragment of a cup recovered from the Tlos Stadium Area bears striking resemblance to 18th century Kütahya-produced cups, in regards to clay composition, design typology, and paint colors.

## Conclusion

The fact that C14 dating techniques clearly reveal the existence of materials dating back to 5000 BCE within the Stadium Area and in the Tavabasi Cave<sup>78</sup>, which was discovered even earlier by contemporaries, undoubtedly proves the previously controversial existence of the Middle Chalcolithic Period on the southwestern Anatolian Plateau. Similarities found between Bronze Age form groups of materials belonging to the late Mycenaean and Minoan or the Central Anatolian Hittite repertoire, indicate that between the 16<sup>th</sup> and 13<sup>th</sup> centuries BCE, the city fell under the influence of two separate political and cultural regions, thereby increasing the content and importance of this study. The first steps have been taken toward explaining the effects of the various cultural dynamics of Anatolia and surrounding areas during the aforementioned period in addition to answering questions regarding what type of cultural factors particular to the region existed. Ceramics belonging to the Iron Age reveal continuity in the ceramic culture and settlement of the ancient city of Tlos in particular, interactions with surrounding cultures, as well as the fact that these ce-

<sup>&</sup>lt;sup>74</sup> Miholjek – Kralj 2016.

<sup>&</sup>lt;sup>75</sup> Barlak 2007, 17.

<sup>&</sup>lt;sup>76</sup> Soustiel 2000, 106.

<sup>&</sup>lt;sup>77</sup> Doğer 2008, 33, pls. IV-V.

<sup>&</sup>lt;sup>78</sup> Korkut 2015, 51.

ramics possessed a form and ornamentation repertoire based on their own internal dynamics. The fact that Bronze Age forms have been combined with decorative elements of the Proto-Geometric and Geometric Periods along with the fact that different decorative designs were used together to create diversity are proof that the city's systematic ceramic production endured and that industry-specific specialization was present. Assuming that just a small section of this period's structural layers were unearthed, larger-scale excavations would clearly shed light on the settlement and chrono-typology of the period between the passage from the Late Bronze to the Early Iron Age and the Archaic Period, which are supposed to be lacking in the region. This continuity in ceramic chronology can be followed from the Classical Period into the Late Ottoman Period.

Comparisons of similar studies carried out in surrounding areas by means of studying local clay beds in the ancient city of Tlos and surrounding areas and chemical/petrographic analyses aimed at understanding local ceramic production capacity were discussed within this article along with the typological ceramic groupings<sup>79</sup>. Clay composition and color were taken into special consideration when choosing ceramics from among those found in the Stadium Area to undergo analyses aimed at understanding production capacity and the clay composition characteristic of Tlos and surrounding areas. Thusly, materials exhibiting variations in clay composition which could be typologically dated to the chronological period from the Byzantine to the Chalcolithic Period were chosen. Definitive results were acquired through comparisons between petrographic and chemical characteristics of ceramic artifacts belonging to different time periods with local clay samples. These findings show that the local clay beds of Tlos and its territories have been used since the Bronze Age, and that the city possessed a great production potential. In addition to the petrographic (strata) and chemical analyses performed, ceramic waste products, kiln cinders, and most importantly ceramic molds, which were discovered in various locations around the city center, provide proof of a production capacity adequate to meet the city's needs.

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<sup>445</sup> 

<sup>&</sup>lt;sup>79</sup> Sezgin 2017, 13.

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The Chronology of Settlements Centrally Located in Tlos and Its Ceramic Repertoire Based on Findings in the "Stadium Area"

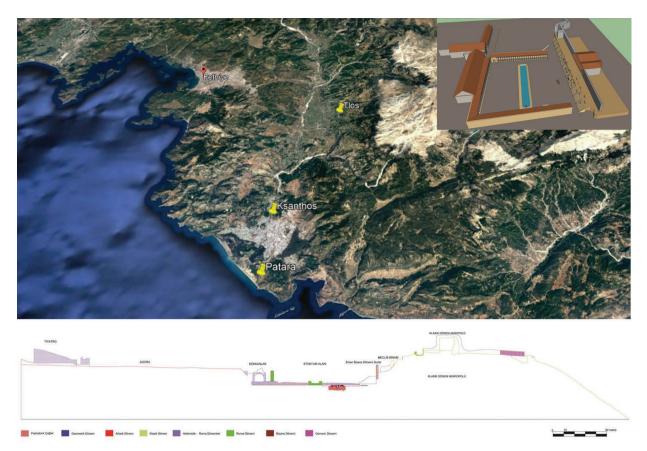


Fig. 1: The Location of Tlos and Stadium Area



Fig. 2: The Excavations and Stratigraphic Observations on the Stadium Area

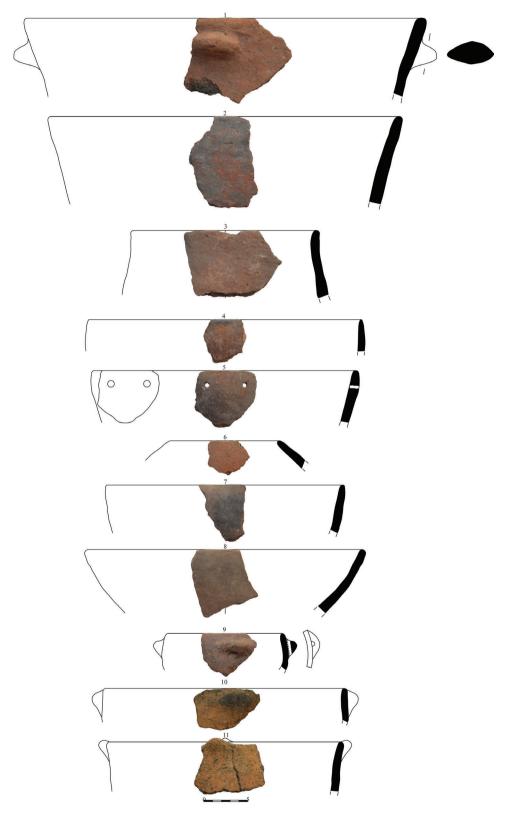
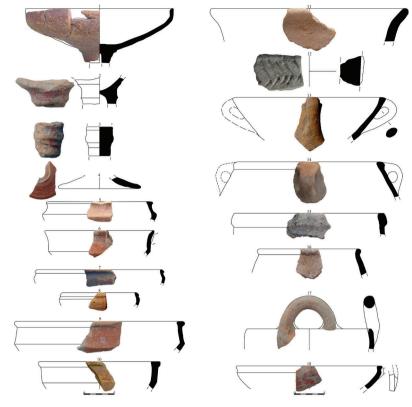


Fig. 3: Chalcolithic Period Ceramics



The Chronology of Settlements Centrally Located in Tlos and Its Ceramic Repertoire Based on Findings in the "Stadium Area"

Fig. 4: Bronze Age Ceramics



Fig. 5: Iron Age Ceramics



Fig. 6: Archaic Period Ceramics



The Chronology of Settlements Centrally Located in Tlos and Its Ceramic

Repertoire Based on Findings in the "Stadium Area"

Fig. 7: Classical (1-5) and Hellenistic (6-11) Period Ceramics

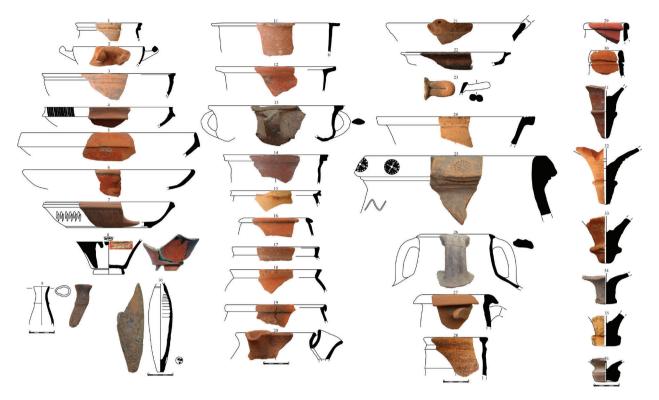


Fig. 8: Roman and Early Byzantine Period Ceramics

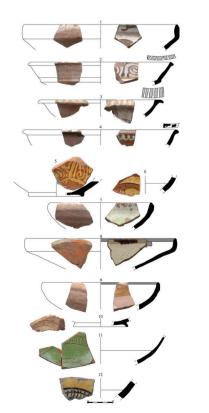


Fig. 9: Byzantine Period Glazed Ceramics

Fig. 10: Beylik and Ottoman Period Ceramics