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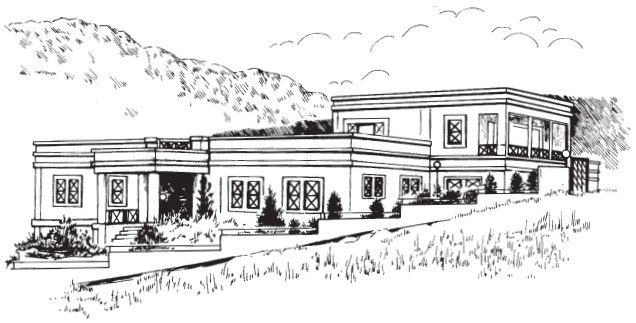

Work at the Study Center during the Covid-19 Pandemic

Eleanor Huffman and Thomas M. Brogan

Several months into the coronavirus pandemic, we want to take this opportunity to reflect on the many changes that COVID-19 has brought to both our lives and the operation of the Study Center in Greece. Work this spring and summer was dictated by the response of the Greek government to the pandemic. While reports of the virus had circulated since December 2019, the global situation worsened in February 2020 when the first case appeared in Greece. In early March, Dr. Sotiris Tsiodras, head of the Hellenic National Public Health Organization, along with Nikos Hardalias, Minister of Civil Protection, began nightly televised updates with the latest information for the public. These reports were well received, and they contributed to Greece's early success managing the pandemic.

Figure 1. Eleanor Huffman, Melissa Eaby, Matina Tzari, and Kathy Hall on the southern terrace of the Study Center. They staffed the center during the lockdown. Photo C. Henkel.

At the same time, we instituted new policies restricting the number of visitors to the Study Center and asking anyone who was ill or living with a sick family member to refrain from coming to work. Greek schools were closed on March 11, followed by most stores with the exception of pharmacies and supermarkets. On March 18, the Study Center closed along with the majority of Greek businesses as part of a governmental plan to control the spread of the virus. Some employees were placed in a federal program to preserve jobs, while others were able to work from home. A core crew of staff members continued to attend the building. On March 22, movement outside one's home was restricted throughout Greece to six destinations or reasons (doctor/pharmacy, supermarket, bank, funeral/wedding, exercise, and care of a person in need), which had to be reported via SMS text or on a printed form and presented upon request by police. Employees were required to carry an official form from their employer stating the hours and area in which movement was necessary to get to and from work. Fines were applied for travelling without the proper documentation.

The Study Center was allowed to maintain an emergency staff, and it followed the model of the Lasithi Ephorate of Antiquities: Eleanor Huffman remained in the building as our business administrator, Melissa Eaby continued archaeological work, and Kathy Hall and Matina Tzari worked on alternate days in the conservation laboratory (Fig. 1). This team took on other responsibilities like ground maintenance and cleaning, emphasizing high-touch surfaces. Several people (Tom Brogan, Chronis Papanikolopoulos, and Eleni Nodarou, who were in Athens, and Doug Faulmann, Lily Bonga, and Gabriella Lazoura in Crete) were able to work from home. Graduate students Ria Kiorpe and Luke Kaiser remained in the village of Pacheia Ammos, and they were not allowed to work at the Center. Instead, we arranged to deliver the books they needed for research.

As new routines developed, we began to appreciate the unusual level of calm. There was little foot traffic in the village and even fewer cars on the roads. Easter celebrations, among the

Figure 2. Maria Anastasiadou at work in the library during the pandemic. Photo E. Huffman.

most important religious holidays in Greece, really emphasized this new normal as churches were not allowed to hold services with parishioners. On Good Friday, the traditional mourning bells tolled louder than ever, but they were not followed by the usual evening processions. This inability to carry out time-honored traditions reinforced the seriousness of the situation. Midnight mass on the following night typically ends with crowds of parishioners leaving the church with candles accompanied by firecrackers, fireworks, and a bonfire near the sea before a traditional meal of Easter soup. This year, Holy Saturday ended in complete darkness broken only by the sounds of dogs barking, church bells, and a short mass broadcast over a loudspeaker.

From May 4, small numbers of Greek businesses were allowed to reopen each week, but operations like ours were not given advance notice of an exact date. We read the literature from the United States Centers for Disease Control (CDC), the World Health Organization (WHO), the Hellenic Ministry of Health, and the Hellenic Medical Society for Labor and Environment to formulate a best-practices strategy for our operation. As soon as supplies in the country were restored, we obtained antiseptic gel, masks, face shields, and desk barriers and instituted special cleaning procedures. After restrictions on travel to the Greek islands were lifted, Tom returned to Crete on May 11, and Eleanor began working from home in Mochlos. The Study Center finally was allowed to reopen on June 1.

During the period from March through July, we also communicated with our members and project directors, primarily based in the US, about opportunities to travel to Greece. In the end, nearly all the projects were forced to cancel their plans. A few members in Greece or living abroad with Greek resident permits were able to travel to Crete for study seasons. The first was Dimitra Michail, from the University of Dublin, who arrived in late June to study human bone remains from Chalasmenos and Kalo Chorio. In July, Natalia Poulou brought a small team from the University of Thessaloniki to continue her study of the Byzantine pottery from Pseira and Mochlos-Loutres. The next visitors were Tina McGeorge who continued her study of the skeletal material from Hagios Charalambos, Tom Strasser, and Don Evely who worked on material from Gournia.

In August, Metaxia Tsipopoulou brought a small team to finish cataloging the finds from Ceremonial Area 2 at Kephala Petras. That same month Anastasia Vergaki and Maria Anastasiadou (the recipient of the Harriet Boyd Hawes Fellowship in 2020; Fig. 2) worked in the library. In September, two more graduate students, Antigone Kalara and Charles Sturge (recipient of the Richard Seager Fellowship for 2020) arrived to study material from Stravromenos and Mochlos, respectively, for their doctoral theses. This year's petrography fellow, Stavroula Fouriki, arrived in October to study thin sections of Late Minoan IB–IIIB:2 pottery from Chania for her doctoral research. Finally, Gerry Gesell returned to Crete to continue her study of the Late Minoan IIIC shrine at Vronda Kavousi.

We close with a summary of our efforts to maintain a safe operation. To start, air conditioners were discouraged and windows were kept open. It was a hot summer in Pacheia Ammos, but we all adapted. Next, we limited the use of the common kitchenette by removing all cups, plates, and utensils; employees and members kept their personal dining implements at their desks. Throughout the Center antiseptic gel, disinfectant spray, paper towels, and antiseptic wipes were available for use. Physical distancing was maintained by limiting the number of people that worked in each room in accordance with government regulations.

As of late September, Crete has been very fortunate to have fewer than 500 cases of COVID-19 among a population of ca. 650,000, and fewer than 50 were recorded in eastern Crete. We hope that this trend continues until a vaccine becomes available.

WEBSITE RELAUNCH

We are very pleased to announce that the website of the INSTAP Study Center has been redesigned with new added features and a more user-friendly experience. Come explore www.instapstudycenter.net as if it is the first time.

Neopalatial Building B.2 on Chryssi Island

Chrysa Sofianou

Recent fieldwork on Chryssi by the Ephorate of Antiquities of Lasithi has targeted a large Minoan building (B.2) near the lighthouse on the western end of the island (Fig. 1). The work is part of a five-year project to document, protect, and promote the antiquities on the island (Apostolakou, Betancourt, and Brogan 2010; Apostolakou, Brogan, and Betancourt 2012; Brogan et al. 2019). The finds from Building B.2 attest to activity from at least five periods: Middle Minoan (MM) IIB, early Neopalatial, late Neopalatial, Late Hellenistic, and Late Roman. The most significant material comes from the late Neopalatial or Late Minoan (LM) IB levels, and it is shedding new light on the role of the settlement in the wider economy of southeastern Crete during the peak period of the Minoan palaces.

A handful of Early Minoan and Middle Minoan I sherds suggest that the island was visited sporadically during these periods. Of particular interest to the project is when this pattern of visitation changed to actual habitation. Although poorly preserved, the first built remains at the site indicate habitation began at the end of the Middle Minoan II period. In the northern portion of Neopalatial Building B.2, our team recorded MM IIB floors beneath Rooms 12, 13, 19, and 20 (Fig. 1). The pottery includes a typical mix of drinking and serving vessels, cooking pots, basins, and storage jars, some of which were imported from Gournia. Elsewhere on the site, MM IIB remains were recovered with substantial deposits of whole and crushed purple shells, linking this initial phase of habitation with the exploitation of marine resources to make purple dye.

Figure 1. Plan of Building B.2. The modern lighthouse is located directly west of Rooms 7 and 9. Drawing D. Faulmann.

The MM IIB settlement probably suffered from the wave of violence that destroyed all the Middle Minoan IIB sites on the isthmus of Ierapetra. At some point in MM IIIB (early Neopalatial), a new dwelling was built north of the lighthouse in the location of Rooms 12–16 (Fig. 1). The broken pottery in each room indicates that they were used continuously into LM IA.

Later in LM IA a larger building was constructed in the area—Building B.2. So far more than 20 rooms have been uncovered (Fig. 1). The lighthouse divides the plan of Building B.2 into two clusters of rooms. Room 1 is the largest space in the group of rooms to the south. Although its eastern half was disturbed in the later Hellenistic period, several impressive LM I vessels were preserved on the western side along with a pair of querns built into a platform above collecting vessels. A pair of stones located toward the center of the room (as seen in Fig. 1) may have served as a work surface and support for a column. Blocked doorways

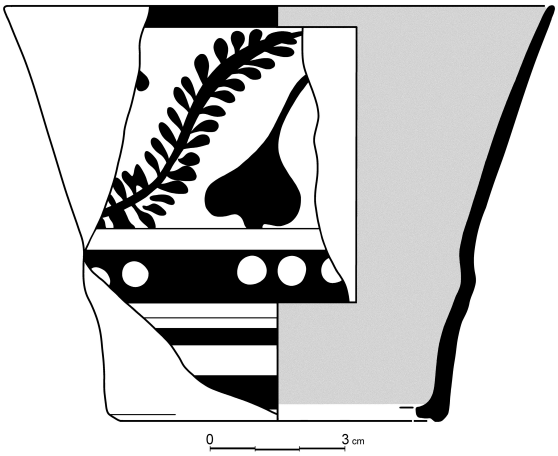

Figure 2. Late Minoan IA Vapheio cup (CHR 1946). Drawing L. Bonga.

Figure 3. Late Minoan IB cup (CHR 1898). Drawing L. Bonga.

were recorded on both the northern and southern sides of Room 1, suggesting that the space originally served as a polythyron surrounded by smaller rooms to the south and larger rooms to the north. To the south Rooms 3, 4, and 5 all preserve two or three floor surfaces with the latest resting above a distinctive layer of gray ashy soil. Our current hypothesis is that the earlier floors belong to the phase when these rooms communicated with Room 1 to the north and that the later floors belong to a phase when doors were blocked and access was from the west, south, and east. The pottery from the earlier phase includes LM IA Vapheio cups (Fig. 2) in Rooms 3 and 4 and a nodulus sealing in Room 3. The pottery from the later phase in Rooms 3, 4, and 5 is LM IB, and it includes vessels decorated in the Special Palatial Tradition (Fig. 3), ogival cups, and knob-handled bowls.

The rooms north of the lighthouse were arranged in two groups. Those to the west were entered from the west via a passage through spaces 13 and 14 (Fig. 1). Room 11 had two LM I floors and served as a kitchen. The pottery from the later phase is LM IB, and it included a large number of cooking pots and dishes.

Immediately to the east of Room 11, Rooms 9 and 10 probably communicated with Room 1 via Rooms 7 and 8, but the exact plan has been obscured by the construction of the lighthouse (Fig. 1). Excavation in Room 10 provided one of the great surprises of the project. The space appears to have served as a storage area next to Room 9 where several thin stone slabs may have served as the lower steps of a staircase that is unique for the LM IB settlement. The pottery on the ground floor of Room 10 included an LM IB ogival cup and an early Neopalatial pithos decorated with light-on-dark decoration (perhaps representing an heirloom). The room also contained a hoard of metal, glass, and stone objects. In the deposit we recovered a pair of copper ingot fragments and a jewelry hoard with a solid gold ring (Fig. 4), a solid gold bracelet, 26 gold beads, a silver bead, the bezel of a ring, and a bronze hook. With them were a large number of glass, carnelian, amethyst, and lapis lazuli beads and an agate seal with an image of a ship with an animal-headed prow.

In 2019 the team continued to search for the eastern limits of Building B.2, opening a single room that held an even greater surprise. In the southeastern corner, excavation uncovered a second metal hoard (Fig. 5), this time with two pieces of a copper ingot that join to form a complete ingot, half of another ingot, and fragments that form the sides and core of at least two more ingots. The total weight is 68 kg, and the shape of the ingots is closely paralleled by the ingots from LM IB levels at Hagia Triada, Knossos, Mochlos, and Zakros. In the hoard were also a large saw and two bronze vessels, one of which was decorated with a row of flowers in low relief. Remains of a tin ingot were stored inside this vessel, the third time tin has been recovered from Bronze Age levels in Crete, supplementing those found at Mochlos (Soles 2007, 252–253, fig. 29.3) and Gournia (Watrous et al. 2015, 436–437). Together these finds beg the question: who were the occupants of Building B.2, and what role did they play on Chryssi and in the greater Ierapetra region in LM IB?

For now we can only provide a preliminary answer. It begins with the observation that the finds from the LM IB destruction levels in Building B.2 include things not found so far in the other excavated parts of the settlement (e.g., Buildings A.2, A.3, and B.1): architectural features (e.g., a possible staircase with imported stone slabs), large storage jars, a nodulus sealing, exceptional pottery (vases of the Special Palatial Tradition), and a pair of metal hoards. Of perhaps equal importance, the excavations in Building B.2 have not revealed any evidence for the intensive craft activities found in the other excavated parts of the town (e.g., purple dye production in Building B.1). Together, these finds suggest that the occupants of Building B.2 instead played a managerial role both for the local production of valuable resources like purple dye and for the circulation of these materials and other exotic commodities like copper, tin, and jewelry. We assume the operation was controlled by of one of the Cretan

Figure 4. Gold ring (CHR 2694). Photo C. Papanikolopoulos.

Figure 5. Hoard of copper ingots, bronze saw, and vessels. Photo M. Eaby.

palaces, but which one remains the subject of future study. For now, we note that the evidence for such control appears to be growing.

Acknowledgments

The excavation by the Lasithi Ephorate of Antiquities of the Hellenic Ministry of Culture and Sports has been generously supported by the Regional Government of Crete and the Institute for Aegean Prehistory.

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"Intergenderism" in Neopalatial Seal Imagery with a Special Reference to Kato Zakros

Maria Anastasiadou

Like all modern and premodern societies, Minoan societies would have been confronted with issues related to nondimorphic sex or gender manifestations. While the majority of human bodies are either male or female, there are a small minority of bodies that combine physical traits of both sexes (intersex) and thus do not biologically belong to either of the two sexes. Also naturally occurring are humans with bodies of one sex who perceive themselves as belonging to the opposite gender or as situated somewhere along the spectrum of the female to male gender (transgender). The accommodation of these individuals

within the social order has led some societies to create third sex or gender categories, such as that of the Indian hijras, which integrates intersex humans and those born in male bodies but identifying as female (for hijras, see Nanda 1990, 1996). In other societies, those who cross from one gender to the other do it out of social necessity. Biological females living as social males—referred to as Sworn Virgins—are, for example, known from strictly patrilocal village societies in Albania and Bosnia-Herzegovina (Grémaux 1996). These biological women adopted male appearances and gender roles when no male offspring was available to carry on the lineage of the family into which they were born.

This contribution focuses on occurrences of "intergenderism" in Neopalatial (Middle Minoan [MM] III to Late Minoan [LM] I, ca. 1700–1450 B.C.) seal imagery that involves humans and composite creatures (hybrids) displaying human body parts or clothing. The term "intergenderism" is conventionally used here as an umbrella term to refer to a state of being that is situated between the male and the female sex (intersexism) or gender, and it is expressed by the combination of traits of both in one body. This state may be manifested solely physically (intersex), or it may have physical and psychological (e.g., transgender) or even social (e.g., social males or females) components. Irrelevant to the term as used in this contribution are sexless and genderless states of being manifested in imagery by bodies that display no sex or gender markers (core bodies) because it is not possible to draw any conclusions regarding the sex or gender identification of these representations.

Sex and Gender Markers of Human Figures on Neopalatial Seals

The sex or gender of a figure can be defined with the help of iconographic elements that function as sex or gender markers. In Neopalatial seal imagery, these may be biological traits, clothing, facial hair, and hair style.

The strongest biological markers of the female sex on human figures on Neopalatial seals are breasts (Fig. 1:a, c, d). The female pubic area is never rendered on female bodies, an absence also noted in other media such as wall painting (Newman 2017, 216). Curvy bodies and hourglass-shaped torsos that end with large rounded hips or bottoms are further signs of the female sex. A skirt-like garment that extends to the ankles or feet is, as is also the case on frescoes and figurines, consistently solely worn by women, and it therefore can be categorized as definitively female (Fig. 1:a–c; for other media, see Verlinden 1984, 104–107; Rethemiotakis 1998, 110; Chapin 2012, 298–299). The garment may represent an A-shaped skirt, a flounced skirt, or the combination of a long dress over which a flounced kilt is worn (Jones 2015, 57–225, 241–251). In certain representations a flounced kilt worn over a dress appears as wide pants (Fig. 1:c; Crowley 2012, 233, nos. 15–23; Jones 2015, 178–179). Calf-length kilts worn alone or over a skirt or dress are also exclusively female (Fig. 1:d). Thick

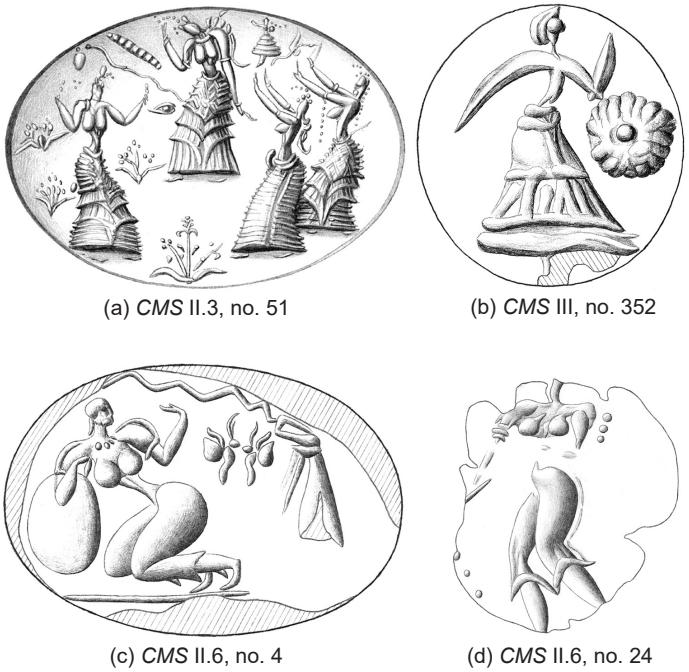
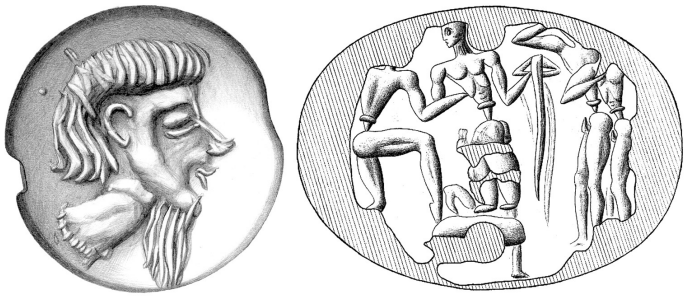


Figure 1. Examples of female sex markers on Neopalatial seals: (a) breasts, an hourglass-shaped figure, and a long skirt; (b) a long skirt; (c) a long skirt or kilt resembling wide pants; (d) a calf-length kilt. Images copyright and courtesy Heidelberg Corpus for Minoan and Mycenaean Seals.

bands around the neck that may end in two wing-like elements and that could represent scarves, garlands, or wreaths, furthermore, are always associated with women's necks (e.g., *CMS* II.6, no. 22; *CMS* VI, no. 278; see also Crowley 2012, 234, nos. 29–30; Jones 2015, 142, 173, 281–282; Davis and Stocker 2016, 640).

The penis and—very rarely, if ever, depicted in Neopalatial seal imagery—the testicles, either naked or covered by a codpiece, are clear male sex markers; a beard is as well (Fig. 2:a, b). Muscular bodies, long lean legs, and a triangular torso are, as in the case of Neopalatial wall painting, further male traits (Fig. 2:b, c; for wall painting see Chapin 2012, 299–301; Newman 2017, 217–218). A hairstyle short at the front and sides of the head but longer at the back and as far down as the shoulders (mullet) also appears to be predominantly male (Fig. 2:a, d). The hair of the (male) procession leader on the Harvester Vase and a series of bearded men's heads on several Neopalatial seals are styled in this manner (Fig. 2:a; for the image on the Harvester Vase, see Blakolmer 2007, 216, fig. 15; for the seals, e.g., *CMS* II.3, no. 196; *CMS* VIII, no. 110b; *CMS* IX, no. 6Db). There are rare cases of female figures whose hairstyles resemble a mullet; this, however, is probably a shorthand for longer or tied hair (e.g., *CMS* II.3, no. 170).

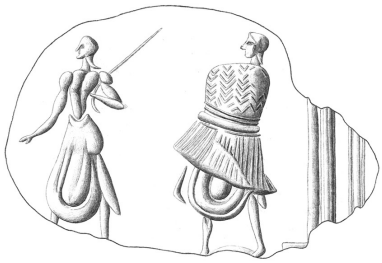
Nakedness is regularly associated with male bodies as are also garments covering parts of the pelvis and thighs on bodies that are otherwise left uncovered. Garments of this type are: a belt worn alone; a belt with a codpiece; a belt with a codpiece and backflap; and a pelvis-, thigh-, or knee-length kilt (Fig. 2:b, c; for



(a) *CMS* II.3, no. 13

(b) *CMS* II.3, no. 51

(c) *CMS* II.6, no. 36



(d) *CMS* II.6, no. 11

Figure 2. Examples of male sex markers on Neopalatial seals: (a) a beard and the mullet hairstyle; (b) long legs, triangular torsos, naked muscular bodies, a belt, a belt and a codpiece or penis; (c) a thigh-length kilt; (d) the hide-skirt and a naked upper body (left figure). Images copyright and courtesy Heidelberg Corpus for Minoan and Mycenaean Seals.

these garments, see Sapouna-Sakellaraki 1971, 88–139; Crowley 2012, 234, nos. 37–41; Jones 2015, 217–219). Two figurines that have been thought to represent women clad in this type of clothing either cannot be proven to be dressed in this manner or do not date to the Neopalatial period (Sapouna-Sakellaraki 1971, 125; Kamilari: Levi 1961–1962, 145–147; Novaro 2019, 445, 452, no. Mo 2; Malia: Verlinden 1984, 214, no. 187). Because a LM II or LM IIIA date seems more probable for the Knossian Toreador Fresco, the white-skinned figures dressed in a belt with a codpiece and backflap may not be used as evidence relevant to the Neopalatial period (for dating of this fresco, see Shaw 1995, 103; Hood 2005, 80). Moreover, because these figures do not have rounded breasts, the issue of their sex is open: they could be women, men, or nonbinary individuals (on females, see Evans 1900–1901, 94–96; 1921–1935, III, 211–219; on males, see Damiani-Indelicato 1988; Marinatos 1989; on nonbinary, see Newman 2017).

The hide-skirt, a garment extending from the waist to just under the knee or, rarer, reaching the calf is often worn by otherwise naked flat-chested figures with triangular, in some cases also muscular, torsos (Fig. 2:d; for this type of clothing, see Sapouna-Sakellaraki 1971, 122–123; Crowley 2012, 235, no. 46; Jones 2015, 251–256). The leader of the procession on the Harvester Vase has also been reconstructed as clad in this way (Blakolmer 2007, 216, fig. 15). Still, in the case of two figures from Kato Zakros, it is not possible to tell whether a peculiar protrusion on the chest may have represented breasts or something else (*CMS* II.7, no. 14). Women with no visible breasts in hide-skirts are known from the Hagia Triada Sarcophagus, but because this dates to LM IIIA:2, they cannot be used as straightforward evidence for the Neopalatial use of the garment.

Summarizing the above evidence, clear female sex markers in Neopalatial seal imagery are: breasts, an hourglass-shaped torso, a long skirt, and a calf- or ankle-length kilt. Clearly male sex markers are: a penis (and testicles), facial hair, triangular torsos, muscular bodies, the mullet hairstyle, nakedness, and pelvis- to knee-length garments worn over otherwise naked bodies. None of the other biological traits, attires, and hair styles may be used as definite male or female sex markers.

"Intergenderism" of Human Figures

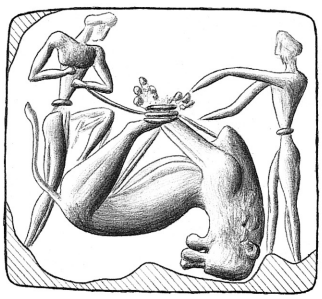
The combination of sex markers of human figures on Neopalatial seals allows for a mainly binary sex categorization: female and male. There are no indications of intersex bodies, which would be recognized iconographically with certainty only if male genitalia were combined with female breasts. Two images, however, in which biological traits recognized as female may be seen as combined with male clothing, are worth mentioning here.

The identification of the sex of the right figure on a soft stone lentoid seal with a lion hunt appears to have a large breast, a soft curvy body, and a short kilt tied with a thick belt-like element around the waist (Fig. 3:a). In this reading of the image, the figure would represent a woman present in a predominantly male activity, the lion hunt, and she would be dressed in a male garment. There are, however, two further possibilities for reading the figure: (1) the dress of the figure could be read instead as a long skirt or kilt, rendered in the area under the thighs by several pointy elements that protrude from the lower parts of the leg ("proper" woman); (2) the element read as a breast could actually represent the second upper arm of a male figure that is directed toward the animal as is seen on a comparable image from Kato Zakros (Fig. 3:b). The element that appears in the drawing as the second arm of the figure could well constitute a break of the seal face.

A tumbler with an apparently female breast on a Syro-Minoan cylinder seal from a Neopalatial tomb in Poros, Herakleion, is only wearing a belt (Fig. 3:c; Rethemiotakis 2007). The impression thus is created that this is a woman dressed in male clothing. It, however, is again possible that the element read as a breast actually constitutes the figure's second arm whose lower part is hidden behind the visible arm (Rethemiotakis 2007, 6). While the object comes from a Neopalatial context, it has been attributed to a Syrian workshop, and it therefore cannot be viewed as a clear product of Minoan Neopalatial cognition and social habits (on the Syrian workshop, see Rethemiotakis 2007, 13–15).

A question, albeit on a tentative basis, is worth posing here: if the figures discussed above were to ever be proven female, should their garments still be described as male, or would they be viewed

(a) *CMS* XI, no. 165



(b) *CMS* II.7, no. 33

(c) HMS 3739

Figure 3. Possible "intergender" images on Neopalatial seals (a, c): (a) image copyright and courtesy Heidelberg Corpus for Minoan and Mycenaean Seals; (b) Neopalatial parallel (Rethemiotakis 2007, 3, fig. 1) to the composition of CMS XI, no. 165, with permission of G. Rethemiotakis; (c) cylinder seal from Poros now in the Herakleion Museum, image copyright and courtesy Heidelberg Corpus for Minoan and Mycenaean Seals.

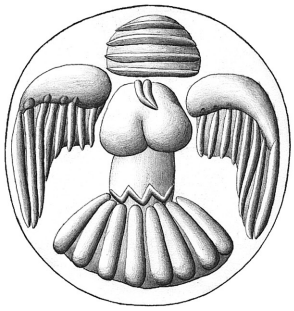
as unisex athletic garments? On Neopalatial seals, that attire seems to have been perceived as regular men's garments: they are consistently worn by males, both when they take part in athletic activities and when they are depicted in static poses (Fig. 2:b, c). Women participating in athletic activities dressed in these garments, then, might have done so rarely and, because of this, might have been perceived as females taking part in the male sphere of action dressed in men's attire. As such, they could have been viewed as humans with an "intergender" identity situated between the two sexes or as people biologically female but turned into males for the sake of the activities in which they were participating.

"Intergenderism" of Hybrid Figures with Human Body Parts or Clothing

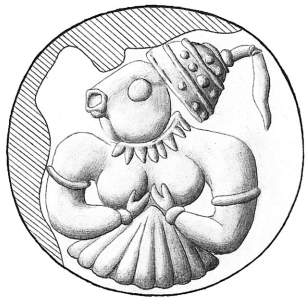
Judith Weingarten has suggested that some of the Zakros composite figures may display a mixed gender (Weingarten 2009, 141–142). One has a long-horned bearded goat head (male) and a flat chest (male), but it is wearing a long skirt or kilt (female) (Fig. 4:a). Another has a helmet (male) as a head, but it is clad in a long skirt (female) (Fig. 4:b; see also Fig. 4:c, d with helmets and breasts). A pig-headed composite has a flat chest (male) and a fan-shaped tail, which Weingarten views as a possibly female element because, she suggests, it is frequently combined with breasts at Kato Zakros

(a) *CMS* II.7, no. 141

(b) *CMS* II.7, no. 129A

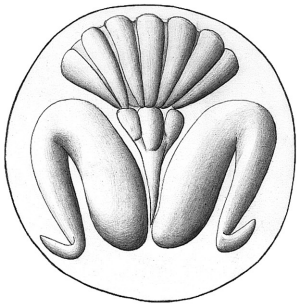


(c) *CMS* II.7, no. 134



(d) *CMS* II.7, no. 124

(e) *CMS* II.7, no. 149



(f) *CMS* II.7, no. 148

Figure 4. Possible "intergender" images from Neopalatial Kato Zakros. Images copyright and courtesy Heidelberg Corpus for Minoan and Mycenaean Seals.

(Fig. 4:e). To the above figures may tentatively be added an image of naked open legs combined with a linear element ending in three ovals and a fan-shaped motif above them (Fig. 4:f). If the legs are interpreted as female by association with the universal pose of birth or sexual display, as Weingarten suggests, and the linear element is seen as a penis, one could read here the fusion of male and female elements in one image (for the possible identification of the splayed legs as female, see Weingarten 2009, 142–143).

A closer look at the methodology of sexing these composites, however, reveals that the sex markers used for the identification of the female and male sex or gender may not always be proven to have an absolute connection with each. Elements from Kato Zakros that look like fantails are also encountered on images with no breasts (e.g., *CMS* II.7, nos. 161A, 167). Goatees are often encountered on goats with male genitalia, but they are also rendered on the chin of at least one female creature (*CMS* VII,

no. 68). Flat chests may not only be male but also female in cases of figures clad in a long dress or skirt (Fig. 1:b). Helmets are worn on the heads of a few men on Neopalatial seals, but potential female associations may not be ruled out because the surviving imagery of helmets worn by figures is scarce (e.g., *CMS* II.6, no. 17). Naked open legs are combined with breasts on one occasion at Kato Zakros, and they may be read as being under a long kilt or skirt on a couple more images, but the evidence again is too limited to allow definitive associations (e.g., *CMS* II.7, nos. 127, 145B). Even if the reading of female naked splayed legs and a penis were accepted, the two elements could also be read as engaged in sexual conduct as opposed to fused in one body. The sole elements that may function here as absolute sex or gender markers are therefore human female breasts and clothing.

Adequate iconographic evidence for proving "intergenderism" at Kato Zakros thus is lacking. Still, it is important to note that the potentially mixed signals sent by these combinations are not foreign to their own mixed nature. These combinations do not represent creatures with a standard form and behavioral traits, such as a human, a lion, or a griffin; they do not belong to one species. Each combination is instead unique in its composition, and most may be seen as variations in which body parts of one form have been exchanged for those of another (Anastasiadou 2016). Each of their parts, such as the bird wings, the animal heads, and the human torsos, constitutes an element of an iconographic repertoire that was available to the engraver(s) and was used interchangeably with others in order for a new and unique whole to be created in each case. From this perspective, the occurrence of opposite sex or gender markers in one image would simply represent an expression of the natural birth process of these composites: in the same manner that quadruped heads, human bodies, and bird tails could interchangeably be combined into a single body, so could male and female sex markers.

Conclusions

"Intergenderism" is hardly ever thematized in Neopalatial human glyptic imagery. The few images in which the phenomenon may be manifested are all ambiguous. When this ambiguity and the remarkably small number of cases in which the issue appears potentially thematized are viewed against the large number of human images available from Neopalatial glyptic, "intergenderism" appears as irrelevant to the material. The Toreador Frescos may not be used as an argument to support possible manifestations of the phenomenon in Neopalatial glyptic art because, on the one hand, they are probably later in date, and on the other, their white figures cannot be gendered.

Acknowledgments

This contribution presents the preliminary results of the study I undertook in the period from August to September 2020 during my research stay at the INSTAP SCEC as the holder of the 2020 Harriet Boyd Hawes Fellowship. My research benefitted greatly from the resources of the library at the INSTAP SCEC and the kind hospitality of its staff. I am particularly indebted to the director of the Study Center, Tom Brogan, its business administrator, Eleanor Huffman, and the librarian on duty during the period of my stay, Eleutheria Almasidou, who made my research in the library not only possible but also particularly pleasant. I am further thankful to Eleni Nodarou, Matina Papadaki, and Yiannis Papadatos for their friendly hospitality and support during my long workdays. Fritz Blakolmer and Robert Koehl supported my application for researching this topic, for which I am grateful. Diana Wolf has checked seal impressions under the microscope for me while I was at the Study Center, as she had access to the CMS Archive in Heidelberg. She also has shared with me her opinions on material, which she is studying for her doctoral dissertation, and she has, furthermore, proofread my English. I am finally grateful to the editors of *Kentro* for the detailed review of my manuscript, which has considerably raised the quality of my contribution. The images reproduced in the figures are copyright and courtesy of the Heidelberg Corpus for Minoan and Mycenaean Seals with the exception of Figure 3:c, which is reproduced with the kind permission of Giorgos Rethemiotakis.

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Collecting Information during Conservation: Bronze Artifacts from Gaidourophas

Kathy Hall and Yiannis Papadatos

The site of Gaidourophas is located in a small mountain valley (900 m asl) near the village of Anatoli, ca. 11 km northwest of Ierapetra in southeastern Crete. The excavations of the National and Kapodistrian University of Athens have revealed a monumental Neopalatial building dated to the Late Minoan (LM) I period. On the basis of its size, architecture, and finds—which include a bronze signet ring—the building appears to have had an administrative character: controlling the exploitation of the mountains, recording the produced goods, and distributing them to the lowlands (Papadatos and Chalikias 2019). Additionally, the occupants of the building also were involved in the trade of bronze from the coastline to the mountains, as suggested by the large number of bronze objects (some of which were probably stored for recycling) and the fragment of an ingot.

A large number of metal artifacts found in the building were conserved in the W.D.E. Coulson Conservation Laboratory this year for an exhibit in the Ierapetra Museum. While cleaning, data was collected for the director of the excavation. This included recording evidence of wear-marks, for which the new Leica EZ4W microscope camera was extremely useful (Fig. 1). These wear-marks make it possible to study how heavily the tools were used and to determine which artifacts were set aside for recycling and which were deposited in other ways. Another layer of information was provided by the new handheld X-ray fluorescent spectroscopy (XRF) instrument (Fig. 2), which is used to investigate visual differences in corrosion layers.

Information from three chisels is presented below as a small sample of the project. The preliminary data recorded and documented during conservation will be directed to the relevant materials specialists for presentation and interpretation in final publications.

Figure 1. The new Leica EZ4W microscope camera connected to a laptop showing the dedicated software. Photo K. Hall.

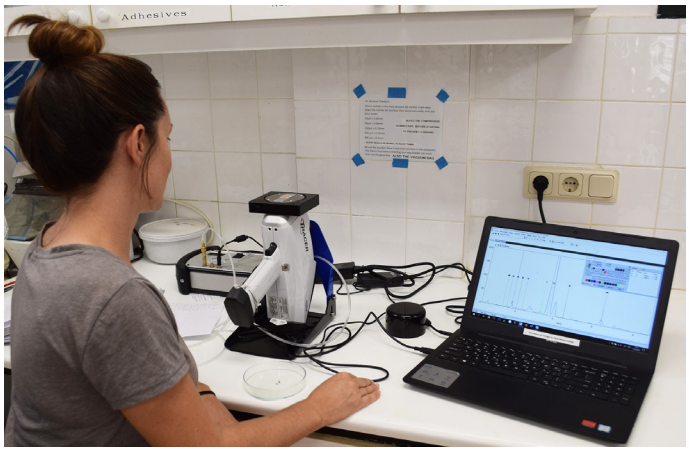

Figure 2. Carly Henkel using the new handheld XRF instrument in the conservation lab. Photo K. Hall.

Cleaning Copper-Based Artifacts

Typically, copper-based items are carefully cleaned using small hand tools under a microscope. Cleaning is stopped when a layer representing the original surface of the artifact is reached. Sometimes this is easy to find, sometimes not—experience always helps. Happily, the Gaidourophas artifacts have a compact layer that is very clearly the original surface of the item because it preserves ancient wear-marks made during the lifetime of the artifact. This type of exceptional preservation of the original surfaces is only found (for Crete, at least) at sites away from the coast and away from the soils that contain high amounts of chloride ions, which cause warty disrupted patinas.

Conservators can easily distinguish wear-marks, as well as modern damage, during cleaning. On one artifact, these marks were revealed as the upper brown layer of soil and carbonate corrosion product was removed (Fig. 3). Figures 4–7 show additional examples of wear-marks identified during the cleaning process using the new Leica microscope camera. Both long chisels (e.g.,

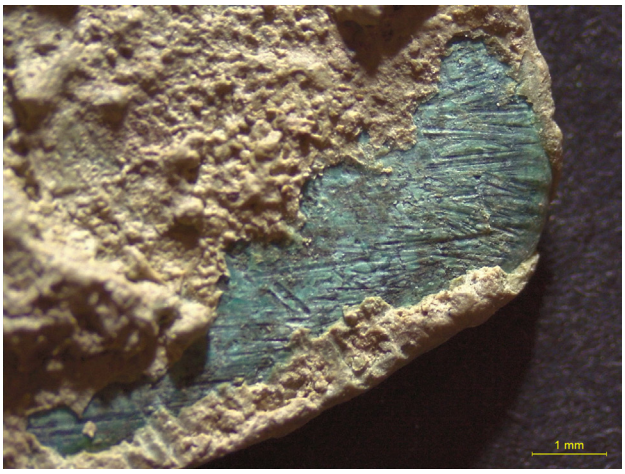

Figure 3. Wear-marks revealed on a copper-based artifact under the upper corrosion layer. Photo K. Hall.

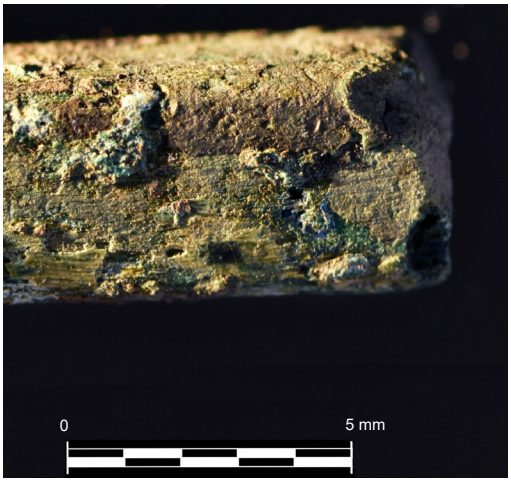

Figure 4. Damage to the striking end of a small chisel (exc. no. 16.4.1.14), which seems to have been heavily used. Photo K. Hall.

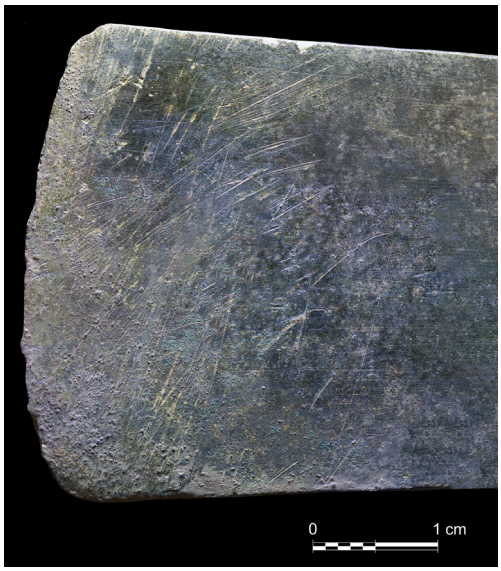

Figure 5. Heavily used cutting edge of a long chisel (exc. no. 30.4.7.7), asymmetrical and covered in inclined scratches on one side only. Photo K. Hall.

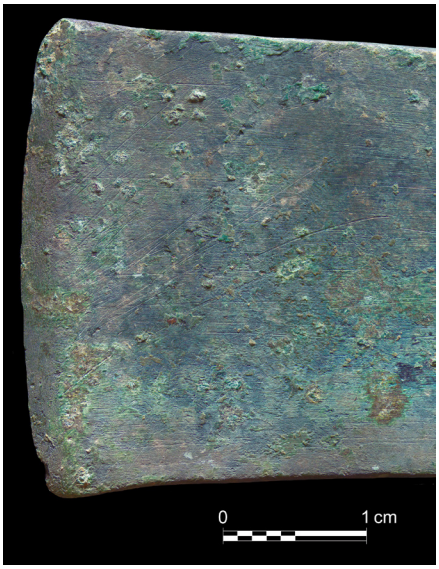

Figure 6. The cutting edge of a long chisel (exc. no. 31.3.2.19) has little evidence of use (chip at lower left is modern). Photo K. Hall.

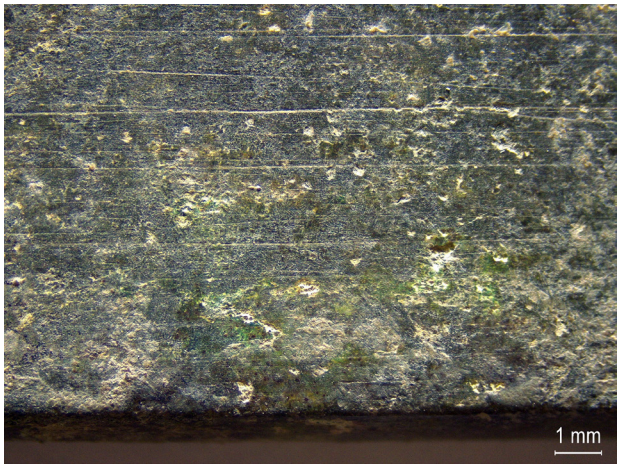

Figure 7. Many tools from Gaidourophas have parallel horizontal striations as shown here, which probably result from final grinding and polishing during manufacture. Photo K. Hall.

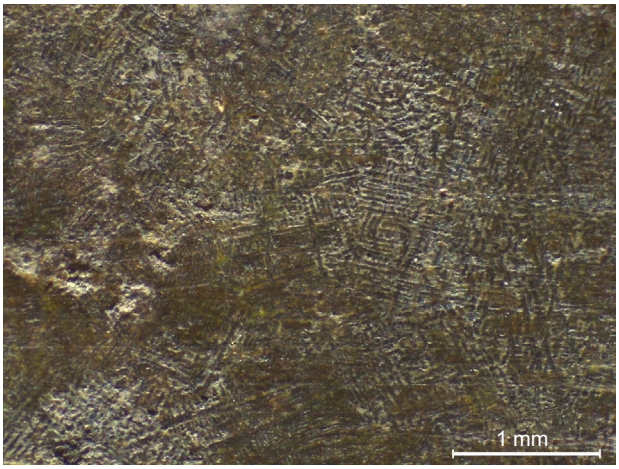

Figure 8. Under the microscope, a long chisel (exc. no. 30.4.7.7) shows the metallographic structure preserved in the corrosion product. Photo K. Hall.

Fig. 8) have hints of the metallographic structure preserved in the corrosion product (see Bertholon 2001).

Handheld XRF Analysis of Copper-Based Artifacts

Elemental analysis using the new Bruker Tracer 5i handheld XRF instrument was carried out to try to understand the variations in the differently colored patinas. The corrosion product on the longest chisel (excavation number [exc. no.] 31.3.2.19) is unlike that of the other two chisels. Further, the strange powdery yellow corrosion product beneath the brown original surface on chisel 30.4.7.7 is unusual. The results of the XRF analysis show that the differences in corrosion products must be due to slight differences in burial conditions, rather than to alloy content (Fig. 9). The alloy compositions of both long chisels (exc. nos. 30.4.7.7, 31.3.2.19) are very similar, with raised levels of arsenic. There are chisels from Mochlos with a similar composition (Soles and Giumlia-Mair 2018).

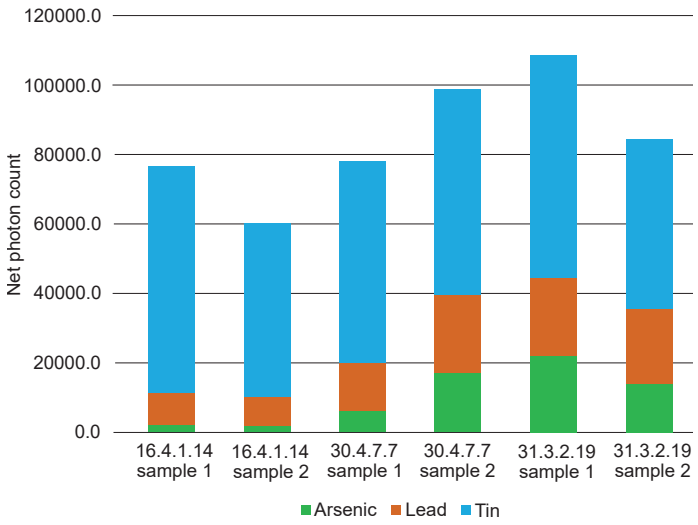

Figure 9. Handheld XRF results: photon counts (raw data) of arsenic, lead, and tin for the three artifacts (exc. nos. 16.4.1.14, 30.4.7.7, 31.3.2.19), sampling at two different spots on each chisel.

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The purchase of the Study Center's handheld XRF was made possible by a generous grant from the International Music and Art Foundation. We would like to thank Gligor Tashkovich for suggesting that we apply to the foundation for funding.

If you are a researcher at the Study Center, the Leica microscope and the Bruker handheld XRF are available for your use. Recently Maria Anastasiadou, Carly Henkel, and Sotiria Kiorpe have taken publication-quality photos with the Leica microscope of seals, seeds, and human skeletal remains, respectively. During the pandemic, we have also analyzed artifacts using the Bruker handheld XRF on behalf of Olga Krzyszkowska and Don Evely and have sent them their results.

Forthcoming Publication of the Early Iron Age Cemeteries at Kavousi Vronda

Leslie Day

The next volume in the Kavousi excavation series will include the material from two distinct Early Iron Age cemeteries at Vronda. The tholos tombs excavated by Harriet Boyd in 1900 had been constructed around the periphery of the abandoned Late Minoan (LM) IIIC settlement, and people were inhumed there sporadically from the later 11th into the 8th century B.C. (Boyd 1901, 131–137; Gesell, Day, and Coulson 1983). The second cemetery—found in the cleaning and excavations by the Kavousi Project between 1984 and 1992—consisted of rectangular, stone-lined enclosure burials that contained

multiple cremations (Gesell, Coulson, and Day 1991; Gesell, Day, and Coulson 1988, 1995). These burials had been made directly into the collapsed buildings of the earlier settlement between the middle of the 8th century and the third quarter of the 7th century B.C.

The Vronda cremations are unusual because the enclosures served both as the sites of the funeral pyres and the final resting places for the deceased. Cremation was prevalent in Crete and the rest of the Greek world at the time, but the bones were usually placed into containers and buried in a tomb. Only a few built enclosures with primary cremations have so far appeared on Crete at Eleutherna (Stampolides 1990, 381–388; 1996, 27–91), Vrokastro (Hall 1914, 154–172), and Anavlochos (Gaignerot-Driessen 2018). Although the Vronda enclosures were reused, the last cremation had been left undisturbed with bone fragments still in anatomical order, while the earlier burials had been shoved to the sides and sometimes even thrown out nearby. This situation required careful, collaborative excavation by trench supervisors, who recorded and dealt with the artifacts, and bioarchaeologist Maria Liston, who recovered the bones from the ashy earth (Fig. 1). Through extensive water sieving, we recovered small artifacts and tiny bones not seen during excavation, especially the remains of children and even fetuses. Despite the fragmentary condition of the bones, the careful excavation allowed for determination of the age and sex of many individuals. The population was generally healthy, but child mortality was high, and the life expectancy for women was much lower than that for men. The 30 enclosures produced the remains of 105 individuals together with grave goods: pottery, bronze jewelry, and iron tools and weapons. Vessels had been smashed by the stones heaped over the still warm enclosures, whether deliberately or accidentally. Because the pottery was badly fragmented, partially burned, and warped, piecing together vessels was difficult, especially since color and texture varied within the same vessel (Fig. 2). The numerous drinking vessels seem to have been used for rituals during the lengthy cremations. Iron weapons and tools were common and accompanied male burials. Women were generally provided with bronze jewelry, especially pins.

The graves at Vronda raise significant questions. Who were the people buried there? They probably lived on the Kastro peak, which was the location of the major settlement in the area at the time. It is likely that the tholos tombs belonged to the descendants of those who had lived at Vronda before its abandonment, but surely by the 8th century the people in the area had no actual memory of the LM IIIC village, although doubtless legends had arisen over the centuries about the past inhabitants. Perhaps the burying population was attempting to mark their identity as descendants of the earlier people. What is the meaning of the change in burial practices? There is no evidence for a cultural break in the area at this time, and we must look for other reasons. The rite of cremation would have lasted a long time: the smoke and flames widely visible, advertising a claim to the land and its associations. Although these people were less wealthy than the elite inhabitants of the Kastro—who placed their dead in large tholos tombs around the peak and during burial displayed rich metals and exotic objects from outside the island—the quantity of metals in the Vronda burials indicates some wealth, and cremation created a spectacle that may have been equal to the display of goods in the tholos tombs during burial, and it was more widely visible. Perhaps we see here a stage in the process of sociopolitical development that led from the old aristocracies to new organizations such as those seen in the rebuilt 7th century settlement at nearby Azoria. In this new social environment, identification with the past and competitive display of wealth were no longer important, and burial ceased at both Kastro and Vronda.

Figure 1. Excavation of one of the Vronda enclosure graves. Photo courtesy of the Kavousi Project.

Figure 2. Restored pottery from enclosure Grave 26. Photo K. May.

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Plugging Away During the Pandemic: Studies on Prepalatial Mochlos

Luke Kaiser

Back in February, I knew exactly how 2020 was going to play out. I would get to Crete on March 3rd and would work diligently on my dissertation about the Prepalatial ceramic material from the Minoan settlement of Mochlos until June 1st. Then the excavation team would arrive, and we would jump into a 10-week study season. When the season would come to a conclusion in mid-August, I would return to my dissertation, picking up where I left off in May, and I would push myself to complete as much as possible before my eventual return to the United States in November. Needless to say, 2020 has been full of surprises (Fig. 1).

The week after I arrived in Crete, the only businesses open in Pacheia Ammos were the two mini markets. Then, on March 22nd, the Greek government announced a quarantine due to the COVID-19 pandemic, restricting all non-essential movement. These measures lasted until May 4th, and they were some of the strictest orders in Europe. Greece was praised for its proactive treatment of the outbreak, and the death toll was among the lowest per capita in Europe (Stevis-Gridneff 2020; Tugwell and Nikas 2020).

How did all of this affect my Mochlos 2020 schedule? Shortly after my arrival, the Study Center closed along with all the country's museums and libraries on March 14th. Because the United States was having its own struggles with the disease and American students were not able to travel to Greece, the Mochlos study season was cancelled. The Study Center staff, however, helpfully kept me well supplied and updated on the latest developments.

Figure 1. A rainbow over Pacheia Ammos in spring (looking northeast from the southern terrace of the Study Center), the physical manifestation of my plans pre-pandemic. Photo L. Kaiser.

Due to the unusual circumstances, the few members who were working at the Study Center when the quarantine was announced were allowed to take home books from the library. We therefore continued to make progress on our various projects and degrees, and I was able to write the first chapter of my dissertation.

Even though the assistance that the staff of the Study Center gave me was more than welcome, there is no denying that those months were difficult. Foreign researchers throughout the country were faced with tough decisions. Do we stay here in Greece

and ride it out? Should we go home? I chose to stay and thus began my long struggle with hot plates and landladies.

One of the most difficult aspects of quarantine was the passage of time. My parents sent me a calendar to count the days as they went by, but the days still felt like they passed both incredibly quickly and cripplingly slowly. No matter what I did to keep my mind fresh, I could not stop myself from falling into a routine. All tavernas were closed, so, despite having a landlady that forbade me from leaving the house, I snuck out after sunset to shop for groceries in order to cook for myself every night. Through trial and error, I created my own version of lentil soup that turned out pretty well. Also, fortunately, in February I started a social media company with two friends, so I distracted myself with our podcasts on sports and history topics.

The quarantine ended on May 4th, the country slowly began to reopen, and the Study Center allowed access to members again on June 1st (Fig. 2). Though there is no better place for

Figure 2. Back to the pottery tables! Photo L. Kaiser.

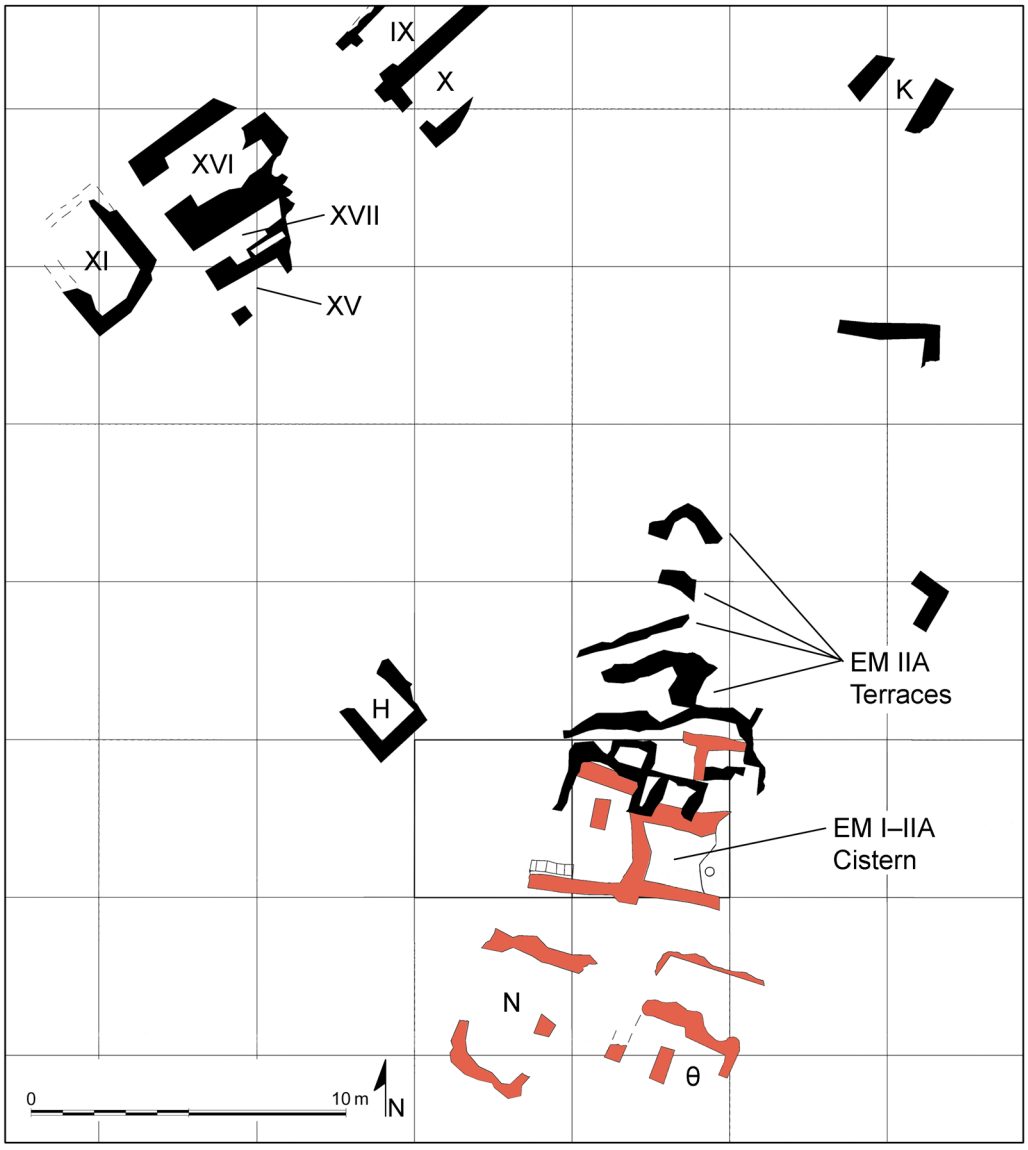

Figure 3. The Northwest Sector of the Minoan settlement showing Prepalatial structures and the neighboring tombs on the islet of Mochlos. The red walls represent the first phase of occupation on the island, and the black walls represent a second phase of construction in the area. Drawing D. Faulmann.

introspection than Crete in spring, I was more than ready to get back to work on my dissertation.

During my 2020 dissertation research, I analyzed Prepalatial deposits at Mochlos dating from Early Minoan (EM) I to Middle Minoan (MM) IA. I began my study in the Northwest Sector of the island in domestic and funerary spaces located east of the house tombs that were excavated by Richard Seager (Fig. 3; Seager 1912). Both the earliest material as well as some of the best preserved remains from the Prepalatial period are found in this sector. This part of the settlement was never disturbed by later occupation at Mochlos, which allowed me to perform intensive statistical analysis on these pottery deposits. An intriguing aspect of this area was the way that the architecture was terraced against the exposed bedrock. This has been interpreted by Jeffrey Soles as a potential water management system in place during the first half of the Prepalatial occupation at Mochlos, and the suggestion is supported by the presence of a large cistern (Soles 2011). The cistern has provided an opportunity to study stratified ceramic material from the EM I period through to the end of the EM IIA period because the cistern was filled slowly with ceramic debris throughout the occupation (Kaiser 2016; Brogan, Kaiser, and Nodarou 2018). Additionally, there was a large amount of obsidian found immediately south of this feature, in Building/Tomb N, as discussed by Tristan Carter (1999, 118–120, tables 5.1, 5.2). This area therefore seems to have been a confluence of funerary and domestic activities ranging from cist burials and obsidian blade production to water management in the EM I–IIA periods.

During the late EM IIA to EM IIB periods, the settlement pattern at Mochlos expanded across the island, and most Neopalatial structures have a substantial amount of Prepalatial material

Figure 4. Prepalatial House 6 (red) beneath the Neopalatial House of the Lady with the Ivory Pyxis (black walls). Drawing D. Faulmann.

and architecture found buried below them. In my dissertation, I investigate four such Prepalatial houses that are located beneath the Neopalatial settlement (Figs. 4, 5). The first one that I studied was the EM IIB deposit in Prepalatial House 6, found beneath the House of the Lady with the Ivory Pyxis (Fig. 4). This deposit originally would have contained a set of Vasiliki jugs, but these were found during the construction of the Late Minoan (LM) IB structure and were preserved as heirlooms to be discovered millennia later during excavation leaning against the northern wall of the LM IB house, clearly above the elevation of the highest

Figure 5. Prepalatial houses under Neopalatial buildings (black walls) in the Minoan settlement on the islet of Mochlos. From left to right: Prepalatial House 5 (yellow), Prepalatial House 3 (red), and Prepalatial House 4 (purple). Drawing D. Faulmann.

stone in the underlying Prepalatial structure. The other remains from Prepalatial House 6 were quite fragmentary because they were heavily disturbed by this Neopalatial phase.

The next deposit that I investigated came from Prepalatial House 5 (Fig. 5), which was found under the central and eastern portion of Building C.2, the West Corridor, and the southeastern corner of Building C.3. The most substantial architectural remains from Prepalatial House 5 delineate three rooms separated by a T-shaped wall running east into a D-shaped room whose walls are lost under the Neopalatial wall and the West Corridor (Fig. 5). These rooms date from EM IIA to EM IIB. Though the floor remains were scrappy, Room 2 has the full array of cooking and dining shapes and fabrics as well as five hammerstones, a mortar, and a biconically perforated weight. Rooms 1 and 2 both have predominantly EM IIA material with some dating to EM IIB. Room 3, the space inside the D-shaped construction, has predominantly EM IIB pottery with a series of Vasiliki jugs as well as more domestic stone tools, namely hammerstones and obsidian.

Building C.7 was extremely valuable in identifying the range of late Prepalatial material at Mochlos, though only a single preserved floor was excavated. Nearly every Neopalatial floor in Building C.7 sits upon a substantial EM III–MM IA fill. Thomas Brogan (2013) has preliminarily discussed this situation, and the results of my own investigation of this area support the interpretations.

Building C.7 is not only notable for the EM III–MM IA debris that exists under its Neopalatial floors. The western half of the Prepalatial material beneath Building C.7, known as Prepalatial House 3, is defined by a room with three separate phases (Fig. 5; Soles and Davaras 1996). The eastern wall of the room is a double wall initially built in the first phase but reinforced during its third and final use. All three phases represent three distinct floors from the EM IIB period, dated by the presence of Vasiliki Ware, with the second floor bearing extensive evidence of burning before the double wall was completed. I have not been able to identify any notable ceramic changes that take place across these three EM IIB phases that could indicate changes in dining or food preparation, but the burned layer could indicate a destruction event happened due to the unrest at the end of the EM IIB period.

Just northeast of Prepalatial House 3, a deposit was excavated that preserves the best snapshot of the prehistory of the island from the Neopalatial Building C.7 down to the Prepalatial layers. The Neopalatial deposit belongs to a perfume workshop, and as the excavation moved through those floors, a MM IIB floor was found. A small amount of the EM III–MM IA fill described above was found beneath the MM IIB floor, and that fill, in turn, sat on top of what is known as Prepalatial House 4 (Fig. 5). This house has distinct evidence of craft production belonging to the EM IIB period, as shown by the evidence for obsidian blade and textile production found together in the same Prepalatial floor deposit. Again, this phase was dated to the EM IIB period due to the presence of Vasiliki Ware on the floor.

Lastly, the changes in settlement pattern throughout the Prepalatial period at Mochlos support the interpretation of Mochlos as a well established site during the EM IIB period. Initially, the EM I settlement was located higher up the hill where the Northwest Prepalatial Sector has been identified, but as Mochlos entered the EM II period, the settlement expanded down toward the coastline on the southern edge of the islet during the same period that the incredible wealth found in the house tombs appeared. This was not to last, however, as Mochlos experienced a series of destructions, either through catastrophe or conflict, that reduced the footprint of the settlement, this time to the southeastern sector of the site during the EM III–MM IA period.

Further interpretation of these patterns in architecture and ceramics requires a more nuanced line of data, which will appear in my dissertation despite the problems of pandemic life encountered in the year of infamy, 2020.

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Late Minoan III Structures on Hills I and II of Petras, Siteia

Adrianos Psychas

Petras is widely known for its use during the early and middle stages of the Bronze Age. The Final Neolithic settlement and the Early Minoan (EM) to Middle Minoan (MM) cemetery established on Hill II as well as the Protopalatial buildings on Hill I occupy more of the spaces on both hills. Paradoxically, the hills of Petras also provide a recognizable Late Minoan (LM) III phase enriched with well-defined architectural buildings, features, and ceramic patterns (Tsipopoulou 2012, 2017a, 2017b; Rupp 2017).

The LM III finds from Petras, Siteia have been under examination since 2017 as part of the author's doctoral degree at the University of Athens. The study has been warmly encouraged since the beginning from the director of the Petras excavations, Metaxia Tsipopoulou, and fully supported by the director of the INSTAP Study Center for East Crete, Thomas Brogan, who has allowed for the storage, photography, and creation of artwork of the material at the Study Center's facilities.

As an almost landlocked valley surrounded by mountain ranges on three sides, the Siteia hinterland formed safe areas and hills for settlement patterns (Kanta 1980, 179–198). The hills of Petras are situated at the northeast end, and they controlled the northerly access to sea routes and provided visual contact of both the bay and the valley. The dispersion of LM III walls, tombs, and artifacts all over the hinterland of Siteia suggests an intensive web of occupation and/or land use, with the most recognizable elements coming to light on the Petras hills (Tsipopoulou 1995, 2012, 2017a).

Specifically, on Hill I—where the MM II palace is located (Fig. 1)—remains of LM III structures and scattered ceramics have been found (Tsipopoulou 2012, 59–60). Two structures called the East and West Houses (according to their position) provided LM III pottery sherds and mixed masonry of raw stones and reused architectural blocks from the Middle Minoan palace. Both houses, however, have a fragmentary character due to the use of the area for burials during the Byzantine period (Poulou-Papadimitriou 2012). The variety of ceramic assemblages found on Hill I covers many categories: food (deep bowls, kraters; Fig. 2) and drink (cups, goblets, kylikes) consumption, food preparation (basins, cooking pots), short- and long-term storage (amphorae, pithoid jars, pithoi), serving vessels (jugs), and vessels of specialized use (alabastra, flasks, pyxides).

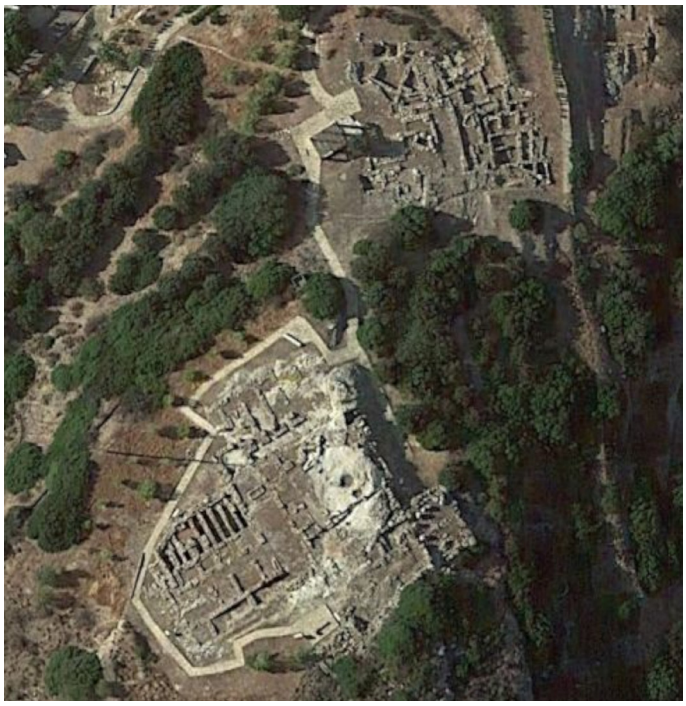

Figure 1. Hill I of Petras showing the palace at bottom (north is at top). Photo courtesy Petras Excavations Archive.

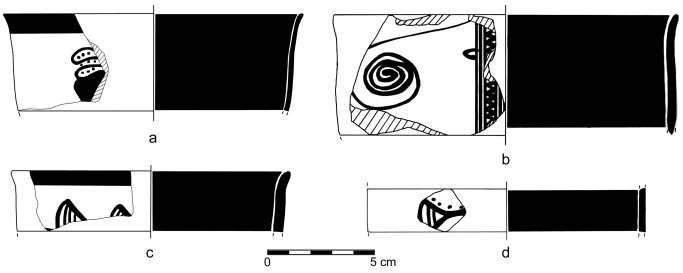

Figure 2. Late Minoan III pottery from Petras: (a) deep bowl from Hill I; (b) deep bowl from Hill II; (c) and (d) cups from Hill II. Drawings A. Psychas.

A better defined image, however, can be attested on Hill II, located immediately east of Hill I. There, a series of LM III structures and features have been uncovered together with pottery on top of the Final Neolithic settlement and the Early to Middle Minoan cemetery (Figs. 3, 4; Papadatos 2012; Tsipopoulou

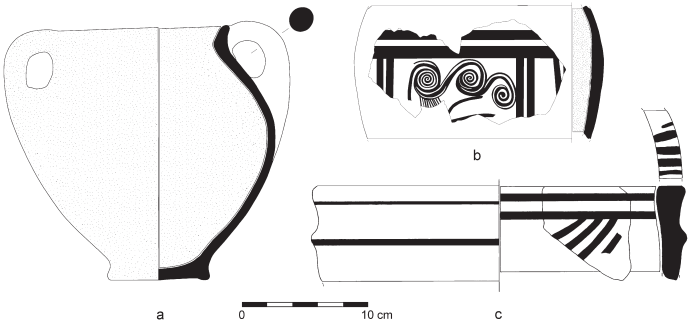

Figure 3. Late Minoan III pottery from Hill II of Petras: (a) cooking pot, (b) pithos, and (c) pithoid jar. Drawings D. Faulmann (a and b) and A. Psychas (c).

2017b). Until now, several LM III contexts have been excavated: five structures (Rectangular Building, Room of Pithoi, Structure A, Structure B, and Square Platform); two shallow cavities filled with ceramics, ashes, and organic materials; and an enclosure wall on the western side of the flat area on top of the hill where the cemetery is situated. All the LM III structures have well-built masonry with right angles, and they are enriched in places by square and rectangular blocks (Fig. 5)—upon which chisel marks can be seen—which were probably transferred there from the ruins of the palace, an indication that symbolically connects the LM III use of both hills (Rupp 2017). The largest structures (Rectangular Building and Structure B) cover areas up to 65 m^2,

Figure 4. Plan of Petras cemetery. Image courtesy Petras Excavations Archive.

Figure 5. Interior of the Rectangular Building showing reused blocks (circled in yellow) used for supporting the roof. Photo courtesy Petras Excavations Archive.

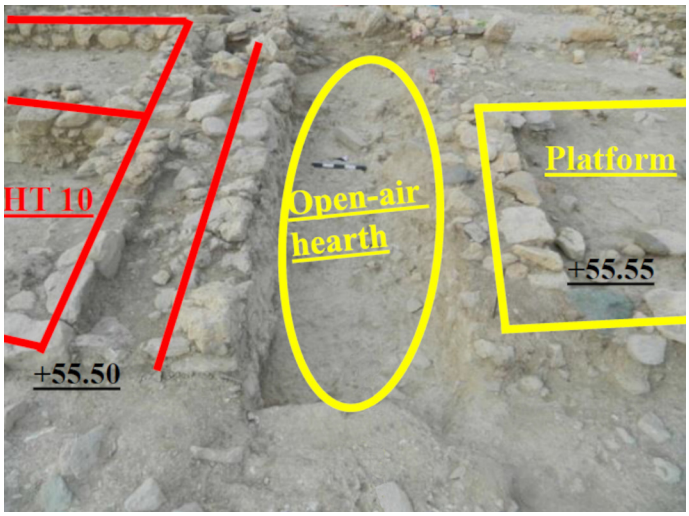

Figure 6. House Tomb 10 and the LM III platform and open-air hearth showing the heights of the relevant structures. Photo courtesy Petras Excavations Archive.

Figure 7. Late Minoan III pottery from Hill II at Petras: (a) deep bowl and (b) pithos. Photos C. Papanikolopoulos.

while most of the flat area of the hilltop was in use as indicated by the exposure of fragmented walls all over the area. Each LM III structure could be approached by only one entrance, which was created as an opening between walls, and the most well-built ones (Rectangular Building, Structure B, Room of Pithoi) provided evidence for supporting a roof by the discovery of stone base columns and square blocks in their interiors. Noteworthy at the same time is the relation of Late Minoan structures to the destroyed house tombs. The abandoned tombs were still visible above ground when the LM III structures were erected (Fig. 6). Nevertheless, the house tombs were not severely damaged by the new construction, but in very few cases due to the topographic dispersion of the LM III structures, it seems that the latter were integrated among the cemetery buildings in places that were mostly unused. In very few cases where the Rectangular Building is located, the architecture of the underlying tombs has been altered. The pottery groups that were collected from Hill II provide a safely dated use of the structure between 1400 and 1200 B.C., and the pottery covers a variety of uses: food (deep bowls, kraters; Figs. 2, 7) and drink (cups, goblets, kylikes; Fig. 2) consumption, food preparation (basins, cooking pots; Fig. 3), short- and long-term storage (amphorae, pithoid jars, pithoi; Figs. 3, 7), serving (jugs), and specialized shapes (alabastra).

The stratigraphically documented ceramic deposits can be attributed to two periods; the first is from late LM IIIA until late LM IIIB, while the second deposit—less in quantity—dates from late LM IIIB until early LM IIIC. The macroscopic examination of the fabrics so far demonstrates the participation of the Petras community in the network of wider northeastern Crete (Cunningham 2017; Zoitopoulos 2017). At a local level, the coarse and semicoarse fabric with low-grade metamorphic rocks (phyllite or quartzite) that was used for cooking vessels and storage jars is particularly recognizable. This fabric is superior to the fine and semifine fabric of cups, deep bowls, amphorae, and jars with a few metamorphic rocks. A large percentage of the ceramic samples, especially dating to the first period (late LM IIIA to late LM IIIB), reveals, however, close contacts with the easternmost coast of Crete, and it is strongly represented by a fabric (fine red, quartz rich) found at Palaikastro used for amphorae, jugs, goblets, deep bowls, cups, and pithoi. At the same time, more imported fabrics can be attested but at a lesser scale: granodiorite in amphorae, jugs, and pithoid jars; fine fabric with clay pellets in kylikes, goblets, and small stirrup jars; and serpentinite coarse fabric in pithoid jars.

The destruction of the palace during LM IB led to a gap in use of the two hills of Petras (Watrous and Hadzi-Vallianou 2004). This absence of architectural remains and ceramics changed during the LM IIIA:2–IIIB periods. The parallel activity and use of the two hills differentiates their appearance and places this coastal location in the wider context of settlements and cemeteries in the hinterland of Siteia and also of eastern Crete in general (Langohr 2017). The close proximity of the two hills, their nearness to the sea, their visual control of the bay of Siteia and the adjacent valley, as well as the abundant building material from previous buildings were all used to the fullest extent. A special feature of the LM III buildings on both hills was the reuse of the square blocks from the ruins of

the palace in prominent places of the LM III structures (both on exterior and interior walls; Figs. 1, 5). Their transfer from Hill I to Hill II could possibly take on a symbolic meaning, as a kind of continuity and connection of the two places.

The transition from the 14th to the 13th century in the valley of Siteia and the hinterland was particularly important in light of the emergence of new settlements. Petras was one of these new places, and its location at the northern entrance to the valley would be key to its development, especially during LM IIIB—a period of prosperity according to the extant architecture and ceramics. The contact network of the site, most likely inland, indicates relations from the easternmost coast of Crete to the area of the Mirabello Bay and Ierapetra Isthmus to the west.

In summary, the changes at the political level after the destruction of the palaces at the beginning of the Late Bronze Age worked beneficially in the long run for smaller and more remote areas and valleys during the Postpalatial period. A typical example is the hinterland of Siteia and the establishment of new settlements such as Petras during the transition from the LM IIIA to IIIB period. The structures at Petras occupy the top of the two hills closest to the sea, and they were founded upon the ruins of the palace and the cemetery, respectively, offering control of the area between the valley and the sea. Rectangular blocks from the palace were also used in most of the structures, possibly revealing an indirect attempt to connect with previous communities in the area and to create a sense of autochthony. The inhabitants of Petras were anything but introverted. The imported pottery—especially from the eastern coast of Crete—indicates only a part of their identity. Completing the first preliminary results, it seems that Petras was another link in the network of Postpalatial settlements in the area of Siteia, and it actively participated in trade contacts with neighboring areas.

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A New Look at Legacy Data: Re-examining Assemblages from the Vrokastro Regional Survey Project

Grace Erny

In November and December of 2019, I conducted doctoral research at the INSTAP Study Center for East Crete (INSTAP SCEC) for my dissertation titled "Landscapes of Inequality: Social Differentiation in Geometric through Classical Crete" (Stanford University). This project is a multiscalar archaeological investigation of inequality and social differentiation in Cretan communities from the late 8th to the 4th centuries B.C.E.

My work at INSTAP SCEC was related to the second part of my dissertation, which uses evidence from intensive regional surveys to better understand social differentiation outside of nucleated settlements. Archaeological surveys provide vital information about rural settlement and agricultural production, and they help archaeologists contextualize excavated sites within their broader regional setting. Over 30 surveys have been carried out in Crete since the early 1970s, but no island-wide synthesis of survey evidence has yet been attempted for post-Minoan periods. For my dissertation, I have built a geographic information system (GIS) database that contains the locations and attributes of Geometric through Classical sites for 10 different Cretan surveys. I include information on site size, the presence or absence of different categories of artifacts (e.g., pithoi and fineware), the presence and nature of surface architecture, and the duration of use. This GIS allows me to conduct spatial analyses that explore the relationship between site location and various landscape features, including elevation, slope, aspect, and viewshed.

In addition to providing a new framework for analyzing legacy survey data, my project moves beyond traditional interpretive paradigms that use survey evidence primarily to construct site-size hierarchies and to track patterns of nucleation and dispersal. In these older paradigms, multiple small dispersed settlements are interpreted as evidence for small-scale landholdings and agricultural intensification, while fewer large nucleated settlements indicate consolidation of land in the hands of a few landowners. Even though changes in site number and site size are important, I argue that surface assemblages can also be used to make inferences about site function. Considering the diversity of the surface record can lead to a more nuanced understanding of the different activities taking place in archaeological landscapes.

My analysis of the survey material culminates in two case studies where I reinterpret the published and unpublished assemblages from the Vrokastro Regional Survey Project (VRSP) and the Western Mesara Survey (Hayden 2004, 2005; Watrous, Hadzi-Vallianou, and Blitzer 2004). The VRSP was conducted in an area southwest of the Mirabello Bay in the mid-1980s under the direction of Barbara Hayden and Jennifer Moody (Fig. 1), and the material collected by the survey is currently housed at INSTAP SCEC. The VRSP produced some of the most impressive evidence for Archaic and Early Classical rural settlement on Crete, including sites with significant surviving architecture on the Schinavria ridge and in the Meseleroi Valley. At INSTAP SCEC, I had the opportunity to restudy the finds collected from 13 Vrokastro survey sites: the major settlement of Istron on the coast (occupied between the 7th and the 2nd century B.C.E.) and a string of smaller inland settlements that range in date from the late 7th through the 4th century B.C.E. For each settlement, I examined all ceramics collected and sorted them into functional categories: fineware, medium coarse ware, coarse ware, pithos, amphora, and figurine. This allowed me to gauge the proportion of different types of finds recovered from different sites. I also was able to refine the chronology of some survey finds based on recently published excavated material from the nearby settlements of Azoria and Priniatikos Pyrgos (Haggis et al. 2004, 2007, 2011; Erickson 2010).

Figure 1. Istron and the little peninsula of Priniatikos Pyrgos, looking northwest from the settlement of Vrokastro in the VRSP Survey Area. Photo C. Judson.

In addition to beginning my work on the Vrokastro survey material, I enjoyed the peaceful atmosphere of Pacheia Ammos in the winter and spent a memorable Thanksgiving at a taverna

by the sea with the staff of INSTAP SCEC. I would like to thank Barbara Hayden, Jennifer Moody, and the Ephorate of Antiquities of Lasithi for their permission to look at the material, Ioanna Damanaki from the American School of Classical Studies at Athens (ASCSA) for her assistance in securing the permit, Tom Brogan and Natalia Vogeikoff-Brogan for their help and hospitality at the INSTAP Study Center, and Florence Gaignerot-Driessen for allowing me to borrow her car.

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Fragmentary Late Minoan IIIC Cooking Pots: Are They All They're Cracked Up to Be?

Andrew Cabaniss

A visitor to a home in the Ierapetra Isthmus during the Late Minoan (LM) IIIC period (ca. 1200–1100 B.C.) would have been invited into a large rectangular room, often accessible directly from the outside and comprising the main living space of the small house (McEnroe 2010, 149–150). Lit by hearths, provisioned with bins and benches, and scented by cooking stews, these rooms formed the setting for activities ranging from labor-intensive food preparation and fabric production to less materially visible discussions and sleeping (Day, Klein, and Turner 2009, 121). These intimate contexts made it possible for daily life to be as visible or as hidden as families wished it to be.

With ready access to each other's homes, hearths, and habits, individual households could make a range of decisions about how to adopt and adapt domestic practices ranging from organizing space to the repeated motions required to prepare a particular recipe. The potential access to this type of domestic information makes it possible for us as archaeologists to investigate the role of individual and household agency in adopting and adapting lifestyles during a critical moment of transformation in Cretan prehistory by looking at material patterning.

The density of excavated LM IIIC sites in the isthmus and the dating of different houses to subphases make it feasible to compare contemporary and diachronic practices within and between settlements. While my research focuses on household behavior through a multidimensional analytic lens, the systematic study of alteration traces on cooking pots illustrates many of the complexities and potentials of such an approach.

Ceramic use-alteration analysis focuses on the physical and chemical changes to pots as they were dragged across floors, stirred with spoons, placed in fires, covered with lids, filled with food, and reused after breakage (Skibo 1992). By looking holistically at all types of alterations to vessel surfaces, complex histories of individual vessels can be discerned, while systematic comparison based on the types and anatomical location of surface alterations distinguishes whether vessels' histories are similar to each other (Yasur-Landau 2006; Banducci 2014). Further, because domestic assemblages reflect multiple temporalities and compress habitual use alongside abandonment processes, individual fragments of vessels can be compared with more complete vessels to assess whether particular modes of usage appear only in abandonment material or whether they were also enacted in earlier times.

To conduct this type of detailed object study, I spent several weeks in January and February of 2020 at the INSTAP Study Center for East Crete, mostly examining cooking pottery excavated at Kavousi Vronda, Katalimata, and Chalasmenos. The

Figure 1. View of the Cha Gorge from the northwest, with the hill of Chalasmenos adjacent to and south of the gorge, the cliffs of which are home to the settlement of Monastiraki Katalimata. Photo A. Cabaniss.

latter of the two sites are located next to and in the Cha Gorge on the eastern side of the Ierapetra Isthmus (Fig. 1). For those unfamiliar with LM IIIC cooking pottery, these vessels appear in a relatively limited array of shapes, but their highly fragmentary preservation often complicates their study and precludes easy characterization of individual vessels or assemblages. While I am still writing and conducting quantitative analyses, there are a few patterns that appeared qualitatively to me as I worked across assemblages. These patterns need to be verified by statistics that account for the small sample sizes involved. These patterns are less conclusions than impressions of the hundreds of vessels and vessel fragments examined.

A major impression was the dominance of post-depositional chemical alteration across vessels. Many vessel surfaces appear covered with a dark purplish-black lustrous patina, which appears to be related to the ferromanganese patinas found on pottery elsewhere (Daniels 1981; O'Grady 2005) and matches the ferromanganese minerals accessible in local soil profiles (Timpson 1992; Morris 1994). These patinas could be confused with soot or anthropogenic slips depending on the preservation of the vessel surface, and in some cases they make the vessel surface unusable for alteration analysis.

To better understand these patinas, multiple analytic approaches were used. The portable X-ray fluorescence spectrometer (pXRF) at the INSTAP SCEC was used to densely sample a single vessel with a range of surface features, including sooting and patination. The pXRF lacks a calibration to link X-ray spectra with elemental concentrations, and we need to develop a standard based out of one of the laboratories in Greece before we can do replicable quantitative pottery studies. Until then, the heterogeneity and irregularities of vessel surfaces, coupled with the lower density of the ceramic compared to the metals for which the device was originally designed, pose serious challenges to the use of the pXRF for ceramic surface analysis.

Initial semi-quantitative pXRF readings of one vessel in particular indicated that the variation in the iron (Fe) and manganese (Mn) signatures is large compared to other detectable elements like silicon, and it suggests we are not dealing with variation in silicate minerals. The appearance of high Fe and Mn, however, does not systematically differ between patinated and unpatinated surfaces, such that there are no clusters among the spectral data and significance tests of difference fail. This weird result actually matches the only published pXRF analysis of a ferromanganese patina, which found that while other techniques (X-ray diffraction [XRD] and electron microprobe as part of a scanning electron microscope [SEM] among them) were able to identify the patina as ferromanganese oxides, pXRF was particularly unhelpful, possibly because the patina is rather thin compared to the depth of return for the X-ray beam (O'Grady 2005; 2009, ch. 6).

In addition, the morphology of the patina and other vessel alterations were taken into account. The patina must be post-depositional given that it occurs on sherd edges in many cases. It likely also depends on the vessel's orientation in the burial environment with respect to water saturation due to rain, as one surface or side of a vessel tends to have much more mineral discoloration than another. Bringing together these different lines of evidence, the patinas are almost certainly platy-to-crystalline ferromanganese oxides that leach from the soil and interact with the ceramic substrate over the course of millennia of winter rains. While it could be something else, it would need to be a chemical alteration without clear published parallels in ceramic studies or in the geological literature on weathering that I have been able to find. To aid future study of such ceramics, I am now preparing a methodological article addressing these types of surfaces on Early Iron Age coarse wares in East Crete, taking into account the difficulties in studying and identifying these patinas using non-destructive techniques.

In terms of probable anthropogenic alterations on vessels, it seems that household units within the same house block have similar patterns of vessel usage. Late Minoan IIIC house blocks are often argued to be the homes of families expanding into lineages, which would suggest both children and their spouses inhabiting agglomerated structures (Day 2017). Similar traces on cooking dishes in one house block, which contrast with traces on dishes from other house blocks, would suggest that specific modes of cooking were both transmitted within these lineages and enculturated among those who married into the lineage. The highly fragmentary nature of the domestic assemblages makes this pattern particularly difficult to check statistically, and it is difficult if not impossible to rule out the role of preservation biases in producing these material patterns.

Another impression is the consistency in use-traces between more fragmentary and more complete vessels. Many assemblages seemed to have fragments of vessels with very similar use-traces compared to the more complete examples that were intact or recently intact at the time of abandonment. This suggests that in most cases there were not substantial changes in the way cooking took place around the time of abandonment, which constrains our interpretations of what this abandonment looked like. I would posit that neither the cooking nor the eating group radically changed and that families continued their ways of life until they abandoned the houses. This contrasts with a mode of abandonment where a household dwindled in size because an older generation stayed and younger generations left.

While the architecture and activities of hearth rooms have received a good deal of attention, we are still exploring the systematicity of the lifestyles that these rooms represent. Were most LM IIIC households in the Ierapetra Isthmus engaging in a common lifestyle? Were hospitality practices inherently more visible to visitors, and did they therefore spread more widely than other less salient activities? Did communities distinguish themselves based on markers like cuisine? We are not quite to the point of using the cooking pots to answer these types of questions, but this research will open these avenues for exploration.

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Behavioral Aspects of Aegean Pottery: Toward a Metrical and Volumetric Analysis

Charles Sturge

Overview of the Project

Aegean pottery tends to be studied from primarily a chrono-typological viewpoint (e.g., Betancourt 1985; Furumark 1941; Momigliano, ed., 2007) to establish trade and connectivity or more recently to focus on production techniques (Choleva 2012; Jeffra 2013; Roux and Jeffra 2015). Despite the fact that the Aegean has some of the richest and best known Prehistoric pottery sequences after 100 years of excavation and study, less attention has been paid to socio-behavioral changes (a few exceptions are Tournavitou 1992; Day and Wilson 2004; Christakis 2008; Lis 2015, 2017a, 2017b; Hruby 2017). My dissertation project explores changes in drinking and dining practices in a comparative manner, from various sites in Crete and the Greek mainland through a metrical and volumetric analysis

between Middle Minoan (MM) IIIA and Late Minoan (LM) IIIA:2.

Because the way in which people consume food and drink is culturally specific, it is hoped that interregional variation may shed light on the manner in which various groups differed from one another. Studies from other branches of Archaeology (e.g., Hally 1984, 1986; Pauketat 1987; Blitz 1993; Mills 1999; Boudreaux 2010) have used changes in the range and size of vessels in use to successfully analyze social and behavioral questions, suggesting that Aegean pottery is ripe for such an interrogation.

To analyze these questions, I adopt a "big data" approach, in which I aggregate published information from a range of sites into a single database that converts diverse publications into a single, repeatable set of information that allows for comparability between sites. Because the study crosscuts different regions, time periods, and, in the case of Crete and the mainland, different potting traditions, I focus on intrinsic variables of the pots: their size as expressed by diameter and volume; I exclude sherds that do not yield any metrical information.

Since pots are fundamentally containers, which are sometimes specialized for a particular function (Braun 1983), changes in the range and size of types in use in a given period has the potential to inform us about consumer preferences and perhaps changes in the manner of consumption. Additionally, the focus on innate attributes, to some extent, mitigates the problems of variable publication priorities, excavator discard, and my own selectivity. At the same time, the level of resolution of this study is site wide rather than purely contextual—even our best floor deposits tend to represent primarily storage rather than a "fossilized" table set, meaning that the emphasis of analysis is shifted onto the vessels themselves rather than the specific context in which they are found (although this is, of course, recorded and, where relevant, discussed).

Nonetheless, some problems are insurmountable for a purely quantitative study, in particular: the discard or lack of inclusion of many plainwares or an overemphasis on only the most chronologically diagnostic types. Quantitative analysis of changes in size and volume therefore is backed by a more qualitative examination of each period. For example, at Knossos there is a large published sample of decorated rounded cups—such that it is possible to track changes in size and volume quite precisely—but by comparison, plain shapes such as the champagne cup (Popham 1969; 1984, 16–17; Hallager 1997, 30, 36–38), despite being extremely numerous in LM IIIA:2–IIIB, are significantly underrepresented in the dataset, requiring a blended qualitative and quantitative approach.

Volumetric Measuring at the INSTAP Study Center

One of the key metrics for this research is volume, which provides the best absolute measure of size because even small changes in profile, height, or diameter can provide a dramatic change in volume. Measuring capacity has been an understudied metric in archaeological studies (Thalman 2007), particularly in the Aegean where, even if datasets have been collected, they are rarely synthesized (Alberti 2012; Aulsebrook 2015; Rethemiotakis and Warren 2014, 75); alternatively, estimates have been used (Rutter 2011; Whitelaw 2014). The main reason for this is that complete vessels are rare, particularly from settlement contexts, and sometimes delicate, meaning that filling these artifacts with liquid is out of the question. Estimates from profiles, however, are extremely time consuming and can be quite inaccurate—one study found that even the best manual estimates could have a margin of error up to 40% (Rodriguez and Hastorf 2013; see also Senior and Birnie 1995).

New digital methods have become available (Engels, Bavay, and Tsingarida 2009), making it possible to calculate volume quickly from a line drawing. These tools expand the sample dramatically because many hundreds of profile drawings can now yield data, and, perhaps more excitingly, I have found it is possible from incomplete vessels to record "preserved" volume, in the way one might record "preserved height," which expands the sample far beyond just complete profiles. This data can then be integrated with the complete vessels and rim diameter information to build a far richer and more nuanced picture of volumetric variation at a site than has been possible before now. Certain controls must still be exerted—for instance, using partial volume only to compare sherds within a similar height range to account for differential fragmentation rates.

The principle method for this work has been to use the software provided by the University of Brussels (http://capacity.ulb.ac.be; Fig. 1). Published images are extracted into individual digital files, then they are "cleaned" for suitable use in the software (Fig. 2), and finally the results are recorded in the database.

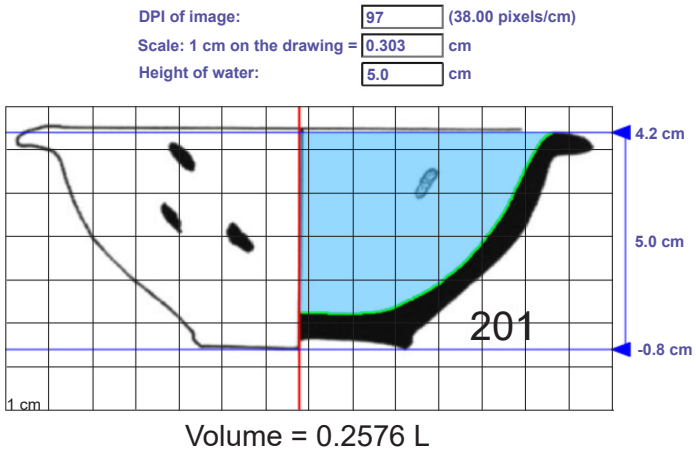

Figure 1. Screenshot of volume measurement (http://capacity.ulb.ac.be) of a MM IIIA ledge rim bowl (drawing of bowl after Rethemiotakis and Warren 2014, fig. 3:10.201).

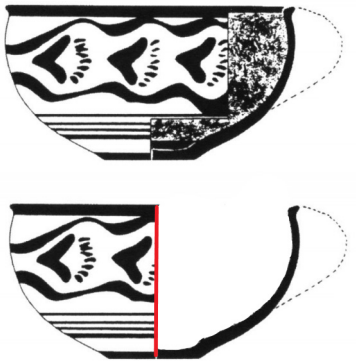

Figure 2. Preparation of original line drawing (top, after Hatzaki 2005, 162, fig. 4.24:1, cat. no. 255) extracted for volume measurement (bottom).

Much relies on the accuracy of this software. Preliminarily, testing it against a published volume dataset of Hellenistic pottery (Hudson 2016), it seems very accurate; I, however, wish to test this for myself. During my time at the Study Center, I have selected vessels from the published material of Mochlos (Barnard and Brogan 2003; Smith 2010), dating from LM IB to LM III, to take physical measurements using rice or lentils and to compare these measurements with the software I have used for volumetric calculation.

The pottery from Mochlos provides a good dataset for this research because a good number of full profiles and even complete vessels are stored at the Study Center, in contrast to Knossos where many complete vessels have been sent to the Herakleion Archaeological Museum. Additionally, for some of this pottery, volume measurements have already been published (almost all complete vessels from the Limenaria cemetery at Mochlos have volumes recorded in their catalog entries, for discussion, see Smith 2010, 19, allowing for a set of controls and expectations to my own study. Furthermore, I hope to be able to test the accuracy of "preserved" volume readings by experimental reconstruction of selected incomplete vessels with cunning application of tape and card; while these measurements will not be particularly accurate, they will be useful to check if the digital readings of partial profiles are relatively accurate. Finally, it is useful to examine in person a set of East Cretan material to balance my own primary experience with Knossian pottery.

Results of Metrical Analysis from Knossos: LM II Goblets

At the time of writing, my work at the Study Center is ongoing. In lieu of results from my Mochlos study, I offer a brief overview of one of the more striking patterns in the data I have so far collected, which demonstrates the potential of this kind of close metrical synthesis. As the volumetric dataset is not yet complete, I consider rim diameter as a proxy for size.

The appearance of the decorated goblet in Crete in LM II, in conjunction with changes in burial practices, has long been interpreted as a sign of Mycenaeanization or even a Mycenaean invasion (e.g., the papers in Driessen and Farnoux, eds., 1997; see also, Hood 1985; Brogan, Smith, and Soles 2002). Also, it has long been known that the Ephyraean goblet, as produced in Crete, is somewhat divergent from its mainland counterpart, with a wider range of motifs, the use of a secondary motif, and for having hollow stems compared to mainland solid stems (Popham 1969; Mountjoy 1983; French 1997). This invites the question of whether "Mycenaean" drinking customs were being emulated, or if in fact the shape was adapted to suit a local Knossian behavior.

To gain a provisional answer to this question I examined the metrical attributes of over 100 published goblets from LM II settlement contexts at Knossos (the largest groups are from Popham 1984; Momigliano and Hood 1994; Mountjoy 2003). Because published pure LH IIB settlement contexts are rare from the mainland (the period being best represented by cemeteries), I then compared this material with published mixed LH IIB–IIIA:1 material from Asine (Frizell 1980; but see Frizell 1996 for further discussion of this chronology). To control this chronological discrepancy I also analyzed the LH IIB stylistic material from within the Asine assemblage.

Sorting the material into groups at 2-cm increments of rim diameter yielded a very interesting pattern (Fig. 3): while there is overlap between the sites, Knossian consumers had a preference for a size of goblet not recorded at Asine—a pattern only strengthened by considering the LH IIB vessels alone. Considering this in conjunction with the fact that the range of decorated shapes in use in LM II is much wider than that in LH IIB (Hatzaki 2007, 199–214; cf. Mountjoy 1986, 37–50), the possibility emerges that although morphologically similar, consumers at the two sites used the Ephyraean goblet in very different fashions. At Asine it was overwhelmingly the dominant decorated shape, and it must have been multifunctional by being used both

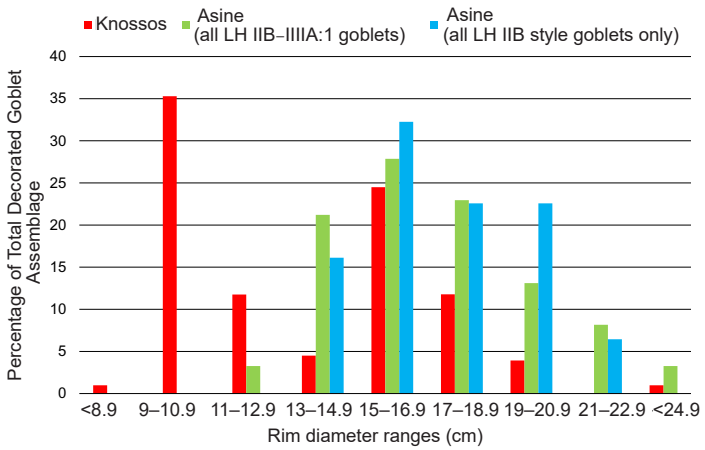

Figure 3. Rim diameters of decorated goblets from Knossos and Asine.

for eating and drinking. In contrast at Knossos, while it is also the most popular shape, its extra small-sized version, combined with the continuation of the "teacup" and the two-handled bowl, suggests a more specialized function within the overall dining assemblage.

Perhaps we should be more critical when discussing a supposed Mycenaean presence at Knossos in LM II. One cannot deny that there are significant mainland influences at Knossos in the ceramic and burial assemblages of LM II, but need it have a purely external explanation? In analyzing LM II burial customs, Laura Preston argued we need not rely on an invasion to explain the LM II phenomenon (Preston 2000, 112–134; 2004), seeing rather a local elite negotiating status through conspicuous adaptation and manipulation of both traditional and foreign—not just limited to Myceanaean—style objects and architecture (Preston 2007, 293–295). I rather wonder whether the addition, but heavy local adaptation, of the Ephyraean goblet in LM II to an assemblage that in most other respects is clearly derived from LM IB adds further weight to this line of argument.

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Meet the Librarian

Eleftheria Almasidou was awarded the Librarian Fellowship at the INSTAP Study Center for the summer of 2020. She studied history and archaeology at the Aristotle University of Thessaloniki and then received her Master's degree in Prehistoric Archaeology. She is currently studying there for her M.A. in Museology and Cultural Management. Eleftheria has participated in archaeological field projects in Greece, both excavating and working with flotation teams. She also has worked as a field archaeologist for the Greek Ministry of Culture at Amyndeon, Xanthi, in northern Greece. In addition, she has worked as a museum educator at the Museum of Olympic Games at Thessaloniki. Her research interests include the communication between archaeologists and the public with a focus on making museums and prehistoric archaeological sites an integral part of modern society. Working in the Center's library was an exciting experience. Eleftheria enjoyed interacting with the staff and having the chance to enrich the library's holdings with new material.

Eleftheria Almasidou in the library of the Study Center. Photo E. Huffman.

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The Richard Seager Doctoral Fellowship

Next fall we will be celebrating the 12th anniversary of the establishment of the Richard Seager Doctoral Fellowship. We are so grateful to all of you who have donated to this cause over the years. The Seager Fellowship was created with the goal of providing funds for doctoral candidates to use the resources at the INSTAP Study Center to help bring their dissertations closer to completion. With your help, we can reach our goal of $4,000 for the 2021 award and continue the fellowship's tradition. Our 2020 recipient, Charles Sturge, writes about his work at the Center on page 26 in this issue.

The Harriet Boyd Hawes Fellowship

Please donate to the Hawes Doctoral and Post-Doctoral Fellowship for Gender Studies so that in 2021 we can once again offer support to a qualified applicant. The Harriet Boyd Hawes Fellowship was established in 2016 with the goal of incorporating gender studies in Aegean Bronze Age archaeology to highlight various aspects of ancient life that have not yet received sufficient attention. The 2020 fellowship recipient, Maria Anastasiadou, has written an article about her research for this issue of our newsletter (see p. 5). This fellowship is open to those in the fields of Anthropology, Art History, Ancient History, and Classics. The recipient of the 2021 fellowship will use the Study Center's resources to aid his or her research. The Hawes Fellowship was founded with the generous support of the Ms. Foundation for Women. With your help, we can reach our goal of $3,000 for another fellowship in 2021.

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Please send your checks to Elizabeth Shank in Philadelphia (see p. 36). They should be made to the INSTAP Study Center, with either "Seager Fellowship" or "Hawes Fellowship" written on the memo line. If you would like to donate in euros through direct deposit, please contact Eleanor Huffman at eleanorhuffman@instapstudycenter.net. You may also donate online at http://www.instapstudycenter.net/general-information/donate.html.

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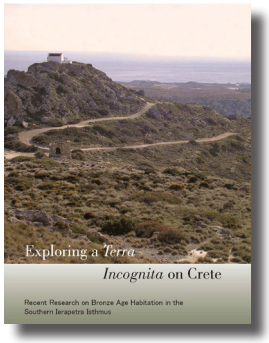


Exploring a *Terra Incognita* on Crete: Recent Research on Bronze Age Habitation in the Southern Ierapetra Isthmus

(2019) Edited by Konstantinos Chalikias and Emilia Oddo

This book brings together for the first time scholars working on the Bronze Age settlement patterns and material culture of the southern Ierapetra Isthmus, a region that participated in the coastal and maritime trade networks of East Crete. During the past few decades, the Ierapetra area remained largely neglected, a *terra incognita*. Yet the southern Ierapetra Isthmus played important roles in the cultural dynamics of Crete. Aiming to develop an archaeological understanding of this region, this book presents the status of the discipline and indicates future research trajectories.

166 pp, 67 figures in the text, ISBN 9781931534994. Paperback. ~~US$45.00~~ **US$36.00**, ~~GB£23.00~~ **GB£18.40**.

The Knossos Tablets

(*6th ed.*, 2019)

Transliteration by José L. Melena, with collaboration of Richard J. Firth

The sixth edition of *The Knossos Tablets* is the culmination of nearly 120 years of study of the Linear B inscriptions from the preeminent Cretan palatial site of the Late Minoan Bronze Age. The book presents accurate information on tablet joins, find spots, assignments of texts to scribes, sets of texts identified by subject matter and administrative purpose, and conjectural readings of partially preserved texts. The systems of reference to tablets have been streamlined. Appendices clarify classifications, locations, and the history of reconstructions. Plans of findspots are also included.

728 pp, 3 tables, 9 figures, ISBN 9781931534963. Hardback. ~~US$80.00~~ **US$64.00**, ~~GB£55.00~~ **GB£44.00**.

Keos XI: Wall Paintings and Social Context. The Northeast Bastion at Ayia Irini (2020)

By Lyvia Morgan

The results of the study of the wall paintings are presented, situating them in the social context of the island of Kea and the Aegean world. Contemporary with the well-preserved town of Akrotiri on Thera, Ayia Irini thrived 3,500 years ago. Unlike Akrotiri, Ayia Irini was not covered by thick volcanic ash. The collapsed paintings were fractured into thousands of pieces and mixed with debris. This study shows human action set within townscapes, landscapes, and the sea, depicting the social life and environment of the people from this harbor town. The social implications of the iconography are explored, whose setting within a fortification wall is quite extraordinary.

644 pp, 2 tables, 91 figures, 74 plates, ISBN 9781931534970. Hardback. ~~US$80.00~~ **US$64.00**, ~~GB£55.00~~ **GB£44.00**.

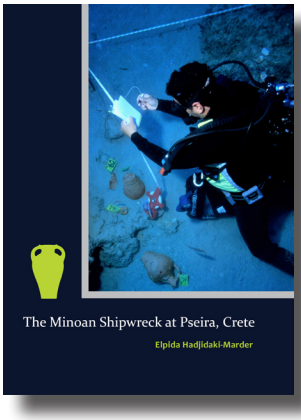
Forthcoming Titles

Alatzomouri Pefka: A Middle Minoan IIB Workshop Making Organic Dyes (*Prehistory Monographs* 62, expected 2020)

Edited by Vili Apostolakou, Thomas M. Brogan, and Philip P. Betancourt

One of the most important sites for the early history of dyeing ever found in Minoan Crete was discovered in 2007. A Middle Bronze Age (Middle Minoan IIB) workshop for making natural dyes and using them to color fabrics included several basins carved into the soft limestone bedrock. Excavations uncovered pottery, stone vessels and tools, animal bones, and botanical remains. The evidence provides information both for the manufacture of dyes and for the broader issue of the economic foundation for Minoan trade in textiles during the period of the Old Palaces.

334 pp, 12 tables, 107 figures, 23 plates, ISBN 9781931534253. Hardback. ~~US$80.00~~ **US$64.00**, ~~GB£55.00~~ **GB£44.00**.



The Minoan Shipwreck at Pseira, Crete (*Prehistory Monographs* 65, expected 2020)

By Elpida Hadjidaki-Marder

This volume describes the discovery and excavation of a Minoan ship that sank near the island of Pseira around 1725/1700 B.C. The cargo is the largest known corpus of complete and almost complete clay vessels from a single Middle Minoan IIB deposit in several categories. The activity of each season is described, followed by a catalog with extensive discussion of the pottery, a petrographic analysis, and catalogs of weights and stone tools. This ordinary transport boat was loaded with products from towns on the northern coast of East Crete, and it provides rich information on a society that revolved around seafaring.

160 pp, 4 tables, 27 figures, 15 plates, ISBN 9781931534291. Hardback. ~~US$80.00~~ **US$64.00**, ~~GB£55.00~~ **GB£44.00**.

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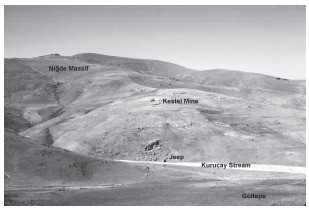
Forthcoming Titles

Gournes, Pediada: A Minoan Cemetery in Crete (*Prehistory Monographs* 63, expected 2020)

By Calliope E. Galanaki

The results of the excavation of an Early Bronze Age cemetery (37 tombs and an associated Minoan building) at Gournes in North-Central Crete revealed strong relations with the Cyclades during the time of the Kampos Cultural Group, as exemplified by the distinctive style of pottery and other types of burial objects such as obsidian pieces and metal items. Interconnections among Early Bronze Age sites within and outside Crete confirm the existence, since the Early Minoan I period, of a dense social network including the Cycladic islands and contacts with distant areas of Crete. The Minoan building was used from Early Minoan III to Late Minoan IA, and its ritual character in association with the funerary context suggests that it was originally constructed as a house tomb and was reused later as a support building for rituals after the abandonment of the Early Minoan IB cemetery. The book is profusely illustrated, and tables of data are presented.

466 pp, 119 illustrations, 17 tables, 90 figures, 132 plates, ISBN 9781931534260. Hardback. ~~US$80.00~~ **US$64.00**, ~~GB£55.00~~ **GB£44.00**.



Göltepe Excavations: Tin Production at an Early Bronze Age Mining Town in the Central Taurus Mountains, Turkey (*Prehistory Monographs* 64, expected 2020)

By Kutlu Aslıhan Yener

This volume presents many years of archaeometallurgy surveys and specifically the excavations of an Early Bronze Age miners' village, Göltepe, and its associated tin mine, Kestel. The results of the work demonstrate that processing of cassiterite-rich ore was the primary function of activities at Göltepe. Several lines of evidence include: tin-rich vitrified crucibles and ore, multifaceted molds, ingots, tin-bronze artifacts, and, significantly, over 60,000 ground stone tools for processing ore. These two EBA sites represent the unique highland production model, that is, the industrial tier 1, which entails the mining and smelting operations in metalliferously rich ore deposits and forests, usually located in the mountains, in this case, the central Taurus Mountains in southern Turkey.

546 pp, 26 tables, 103 figures, 84 plates, ISBN 9781931534277. Hardback. ~~US$80.00~~ **US$64.00**, ~~GB£55.00~~ **GB£44.00**.

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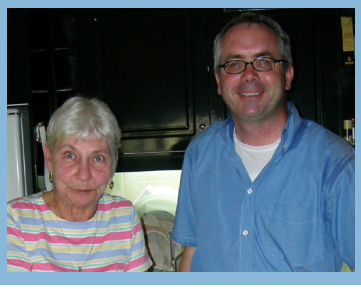

Remembering Mary

Mary A. Betancourt passed away on February 22, 2020. She and Prof. Philip Betancourt were married for over 60 years. Mary contributed in many ways big and small to his excavations in Crete and to the summer seasons at the INSTAP Study Center. Together here, our friends and colleagues remember Mary and her impact on the social and archaeological fabric of life in East Crete.

Mary Betancourt was kind and caring. She often spoke of her children, dogs, and experience in education. She thoughtfully prepared lunches with Phil's graduate students to show her respect for and appreciation of the hard-working employees and project members at INSTAP SCEC. Mary always had a soft smile and a kind word for you. *Lily Bonga*

Mary Betancourt was a tireless member of several archaeological projects at the Study Center. She was the consummate cataloger who ensured that artifacts moved rapidly through study and publication. Her greatest legacy, however, is not a database or publication. For me it was something less tangible but much more memorable. Its roots go back to what Paul Halstead found in the Greek Neolithic where "commensality beyond the household emphasized equality and cohesion" ("Feast, Food and Fodder in Neolithic/Bronze Age Greece: Commensality and the Construction of Value" *Journal of Ancient Studies*, 2012, p. 21). For two decades Mary put her own spin on this very ancient practice, organizing daily feasts for her team and the staff of the Study Center. Artists, conservators, and soil technicians joined senior scholars, students, and interns in a delicious ritual of Mary's creation, which bonded many archaeologists every day. I believe very strongly that these meals were a fundamental building block in the Study Center's successful launch and the true measure of Mary's genius. *Tom Brogan*

Mary was such a beloved person, and she was so close to me as a colleague, friend, and second mother. There are so many feelings that every time I think of her I just go back to the warmth of her smile and her hug . . . every time. And it's so hard to find words that can describe those feelings . . . The Study Center will never be the same again without her. *Stefie Chlouveraki*

I first met Mary Betancourt as a grad student working in Crete with Phil. Who can forget the elaborate lunches that we prepared every day under her direction? And of course, she was always so generous in sharing the meal with anyone who had a connection to the project. But most of all, I remember Mary for her love of family. She had met my mother on only one or two occasions, but every time I would see Mary at the AIA meetings, she would always ask about my mom. When I told Phil and Mary that I was going to have a baby, she was one of the first people to send a gift—one that he still uses every day. She was thrilled with the pictures that I sent her, the perfect honorary grandmother. I'm so grateful that I got to see her one last time at the 2020 meetings, and that she got to see my son and Phil's namesake. I'll miss seeing her in the summers and catching up in the winters. She was the matriarch of our own little archaeology family. *Miriam Clinton*

Seeing Mary was always a highlight of our visits to Crete. Her kindness and welcoming smile were very special. We also fondly remember our time with Mary, Phil, and Malcolm Wiener at Rancho Santa Fe. *Jack Davis and Shari Stocker*

After working next to Mary at the Center, I will always remember her for three things. First, her awesome organizational skills. She kept Phil and his team on track at all times. She did this with enormous charm and good humor, despite sometimes difficult circumstances. The second thing I will remember is that she was always positive and upbeat, as well as kind to those around her. Finally, I will remember her for her enormous generosity towards everyone, whether providing advice or amazing meals for a cast of thousands. *Leslie Day*

Mary Betancourt was the first person to teach me cataloging and registrar duties at the Pseira Excavations in the 1980s. She was always a "mother" to us students and made sure we always were safe and healthy. I have many great memories with Mary from as early as the Pseira excavations to the most recent excavation projects at INSTAP SCEC. She was a great teacher and a caring, loyal friend. *Heidi Dierckx*

If ever there was an accomplished woman behind the successful man, Mary Betancourt epitomized that euphemism. She co-managed the team, cataloged artifacts, and counseled students among many other aspects of supporting the excavation. I fondly remember digging in the cave of Hagios Charalambos in the Lasithi Plain. Our tent outside the cave entrance was filled with laughter from Mary, Jim Muhly, Stefie Chlouveraki, and Al and Mary Leonard while they cleaned, cataloged, and conserved objects and bones. Every time Phil and his students emerged from working inside the cold, dark, cramped cave, it was a soothing balm for us to sit in the warm sun, listen to their humorous stories, and learn how a great excavation should be run. Phil and Mary were the heart of the excavation team and a loving partnership in married life. *Susan Ferrence*

We will very much miss Mary. We spent so many positive, serene, and constructive hours working together at Pacheia Ammos and Herakleion, and we always had such a great time after work because of her dry sense of humor. She was a very special person; we'll never forget her. *Alessandra Giumlia-Mair and Josef "Sepp" Mair*

I remember her always for her kindness to me and all of the individuals with whom I worked. No matter how busy she happened to be, she always had time for a brief chat that included interest in our work and lives. The respect and concern she showed all of us will be remembered, and her hard work is a strong part of the many projects she helped to complete with Phil and many others. *Barbara Hayden*

An Unspoken Agreement about Snails

As everyone who has worked with Phil and Mary knows, meals were a communal affair. During the work week, our entire group, from senior researchers to students, had dinner together. The restaurants were pleased to have such a large group, and they would occasionally offer us delicacies in season such as cooked Cretan snails (σαλιγκάρια). Mary was not keen on snails, but she didn't want to turn away the well-intentioned gift from our hosts. More than once, as we were about to sit down to dinner, she caught my eye and nodded. I learned early on that, on nights we had snails—stewed or braised or in red sauce—I should sit next to Mary. Discreetly, she would place a few snails from her plate onto mine, and I ate them. We were both quite happy with this arrangement. *Jane Hickman*

"I'm Mary Betancourt. It's very nice to meet you." These were the first words that Mary said to me at a department party during my first year at Temple University. For the following seven summers, we cataloged pottery together at INSTAP SCEC. Her care and kindness made me feel immediately welcomed in a new place. Outside the Study Center, I was fortunate to have also spent much downtime with Mary and Phil. I loved seeing how the two of them spoiled each other. I enjoyed listening to her stories about their earlier years in Crete. I cherish deeply these memories. *Florence Hsu*

Among many other memories of Mary, her lunches were legendary—a small daily event of caring that brought staff and members of various projects (and even cats) together. *Eleanor Huffman*




For a few years, Mary Betancourt was a fixed figure during my summers as a doctoral student while working on Dr. Betancourt's team. She was not only the dig "mom," but she was also, in her calm, steady way, the glue that held the team together. She was supportive and always had down-to-earth advice. She also had one of the most brilliant, beautiful smiles that I've seen, and quite honestly, it's how I often remember her. *Beth Ann Judas*

A Tale of Two Marys

Mary Betancourt was a remarkable person who was able to do in just two hours what I had tried to accomplish for nearly two decades. Over dinner at a Mexican restaurant during the AIA meetings in 2000, assisted only by a margarita (or two), "Mary B" was able to convince my wife Mary to join me on an excavation. As a result, "Mary L" joined the team at Hagios Charalambos for the next two summers. Whether she was cleaning muddy bones with a souvlaki stick in a tent, or accompanying Mary B to/from the site (always with that seemingly mandatory stop at the bakery or cheese shop), she loved it all. I will always be grateful to Mary Betancourt for setting in motion the process that gave us two of the most memorable summers of our lives. *Al Leonard*

Mary was loved by everyone who knew her. I was astonished at first, but then I accepted it as the norm, that whenever and wherever I mentioned her name, the immediate response was "what a lovely lady." The response was unique and only for her. But I did understand why. Mary always reached out, put you at ease, made you feel she cared for you. Always cheerful, always helpful, and always kind and caring—that was Mary Betancourt. *Holley Martlew*

One quiet morning in the air-conditioned splendor of the Kentro library on a hot summer day, working away at yet another draft of a geoarchaelogy chapter . . . the stillness was interrupted by the door opening, and suddenly there is Mary standing before my desk, eyes smiling and dancing to ask if I would like to come and help her with shopping in Ierapetra. That must mean Jim Muhly cannot go, since he is her usual shopping companion. Yes—I save text and leap up—who could not? The opportunity of a quiet morning with Mary in Ierapetra talking and shopping while lunch is planned and a myriad of other stuff done is something delightful to anticipate, plus that incredible luncheon buffet to come! And then evenings at the hotel where I was almost always allowed to sit next to Mary at dinner and absorb her admonishments, especially concerning the laundry machines, chuckle at her thoughts, and discuss the world and the next evening's menu. Mary was a friend, a companion, a buddy—my life was enriched and happier with her in it, defining delightful summers of research mixed with social niceties. *Floyd McCoy*

I will always remember Mary for the lavish lunches she organized at the Kentro, her ability to make things run smoothly for our team, and her protectiveness of all of her "dig daughters." She was such a generous person and truly a force of nature. *Tanya McCullough*

Mary Betancourt lives in my memory as an inspirational lady, with a positive determined outlook, invariably cheerful, kind, considerate, empathetic, hospitable, and generous. As the "other half" in an archaeological couple, in her wise and characteristically understated manner, Mary made a significant contribution to excavation and study seasons not only diligently archiving archaeological data, but also creating a friendly, harmonious atmosphere and making sure that everyone was receiving sustenance! Mary was genuinely appreciated by generations of students and colleagues, including myself, who will miss and always remember her. *Tina McGeorge*

Life with Mary at the Study Center

For me Mary Betancourt was at the heart of everything that went on at the Study Center. She sat there, at her computer, surrounded by her cabinets, with drawers full of everything that you needed, her lockers, her files, and the excavated objects that she registered on a daily basis. Everyone who came to the Center checked with Mary to find out what was happening.

When Mary was still driving and had her own car, we went shopping every morning. First to the Lidl, for basic supplies, then into Ierapetra for some shopping and a visit to Veteranos, the delicious pastry shop. Back at the Center Mary began the preparation of another amazing lunch. It is safe to say that such a variety of food had never before been served on an excavation. It even included freshly baked cakes and cupcakes, with white frosting. Then there were the wonderful dinners at the Tholos Beach Hotel.

In a way I am glad that it was not possible to go to Crete in the summer of 2020. Everything was still too sudden, too raw. It will take me much time to deal with a life at the Center without Mary Betancourt. Life has to go on, but no one knows what 2021 has in store for us. *Jim Muhly*

I first met Mary Betancourt in 1996 as part of the Chrysokamino excavation team—she would check meticulously the login catalogs and accession sheets correcting all discrepancies. Through the years I have seen her innumerable times care for everybody's well-being and make sure that all members of Phil's team and everybody else around them had (more than) enough to eat. Thank you, Mary, for all the care and, on a more personal basis, for teaching me at a rather advanced age to eat peanut butter because it is "good for me." *Eleni Nodarou*

In the summer of 1998 I found a blind, starving puppy staggering across the road from Pacheia Ammos to Ierapetra. I rescued the puppy and took him immediately to Mary Betancourt at the Tholos Beach Hotel. Mary took one look at the puppy and said, "Well, we have to save him, and his name will be Lucky." That summer, Lucky had many adoring fans at the Study Center, but no one loved him like Mary. She understood that I couldn't keep him myself because of my cats, so she decided that she would insist that they would have to adopt Lucky—of course, this is exactly what happened. Lucky grew up to be a beautiful, very large Cretan hunting hound who lived a long and very happy life with Phil and Mary. This is my favorite memory of my relationship with Mary. She was bold, brave, helpful, kind, and above all, a tremendous lover of animals. *Elizabeth Shank*

The Betancourt family was with us at Kommos from the time that it was just a hillside with a few sherds to when the Greek sanctuary and large Minoan ashlar buildings around a large court were discovered during the decade after 1976. Phil, along



Top left to lower right: Phil, Mary, and Lily in Herakleion, June 2019 (photo L. Bonga); Mary and Tom preparing a meal at the SCEC, summer 2007; Phil and Mary meet Phil's namesake, Barrett Philip Umiker, with Miriam Clinton, January 2020 (photo C. Umiker); Mary on her way up to the Psychro Cave in the Lasithi Plain, summer 2000 (photo J. Hickman); the Betancourt team in the Lasithi Plain, summer 2000; Phil, Mary, and Florence at the Study Center, May 2010 (photo L. Bonga); Mary and Phil celebrating their 50th wedding anniversary at the Study Center, June 20, 2009 (photo T. McCullough); Floyd (back left) with the Betancourts and their team at Tholos Beach Hotel, Kavousi, June 2012; Mary with Sydney Sarasin and Tenninger Kellenbarger preparing one of her infamous lunches at the Study Center (with the help of Fred, the Kentro's cat), May 2018 (photo E. Huffman); Phil, Maria Chalkiadaki, and Mary after dinner at Tholos Beach Hotel, Kavousi, June 2012 (photo S. Ferrence); Gayla (far right) on a pit stop with the Betancourt team on the drive up to the Lasithi Plain, summer 2000.

with Vance Watrous, studied the pottery, while Mary Betancourt cared for her children. But she also helped care for our staff, becoming an expert with food shopping in nearby, chaotic Mires but also by baking weekly goodies, including pies and bread for a large, ravenous group. There were always cheers when she appeared, and always smiles and laughter. If we could only do it again, to make that discovery, but that is what made her contributions so very precious! *Joe, Maria, Alexander, and Robin Shaw*

Mary Betancourt will be remembered as someone who was always welcoming, especially when it came to mealtimes. I will never forget the summers spent in Crete working on excavations or just doing research, when she would have us go around and announce, "Lunch is ready!" to everyone who would like to join us. Although the meals were never fancy, usually fruit, salads, sandwich meats, and a pot of Maria's homemade Cretan goodies, the fact that everyone was invited made the meal more enjoyable and hearty. I particularly remember Mary making sure Phil took time from whatever he was working on to eat. Lunch was always a time to regenerate and catch up on news, and Mary ensured that the group, no matter how large or small, was always supplied with a variety of good dishes. *Antonia Stamos*

We will always remember Mary as a friendly person who made every effort to make any situation a positive one for all of us. Our conversations were wide ranging, and they often ended on an amusing note. She made the Center more humanistic. We miss her humorous, caring presence there.

Not only did she take attentive responsibility for the practical needs of the students on Phil's projects, she was also a very meticulous and efficient registrar of the finds.

And, who can forget her omelettes! *Metaxia Tsipoipoulou and David Rupp*

I remember when I first met Mary and Phil, I was so impressed by Mary . . . she seemed to run everything . . . she was so competent and precise. Then someone told me she was a high school principal! Yes, I could see that. After some time, I noticed much more—how carefully she took care of her sons and of Phil. A strong, generous, and loving woman! *Vance Watrous*

We often admire the great edifices of Minoan architecture, but we do not often celebrate the humble mortar that helps to build these monuments. It is, however, the mortar that allows the monuments to stand tall and endure the test of time. Mary Betancourt was the mortar for the monumental work of Prof. Philip Betancourt. As a member of his excavation teams for many years, I saw the importance of her contribution to his scholarship. Mary was not only skilled at cataloging the finds from every excavation (she knew her pottery!), but she also took care of the day-to-day needs of the team. Mary was a foodie at heart, and her lunches were legendary. On one of the digs, she and Jim Muhly would amble off in the morning and reappear at lunch time with the most amazing bread and cheese, which they had bought from a local cheesemaker. She always made sure that we were well fed and well taken care of. Mary was tough and practical, which kept the excavation team on track and organized, but her soft side always shone through, especially when cats or blind puppies were concerned.

Although Mary Betancourt may never be celebrated in a Festschrift as other archaeologists of great renown, her contribution is just as important. *Gayla Weng*

Mary Betancourt's acts of kindness over the years were beyond number. One I recall in particular. At an Annual Meeting of the AIA some years ago there was an event held away from the hotel at which we were staying. I suddenly became very dizzy. Mary insisted on walking with me back to the hotel on the freezing cold night. Mary enjoyed telling the story of my first meeting Phil, at the 1971 AIA Annual Meeting in Cincinnati shortly after I had been appointed General Counsel of the AIA. I spotted Phil on a bus taking us to a reception and grabbed the adjoining seat. Phil turned to me and asked whether I was interested in archaeology apart from serving as an attorney. I replied, "Yes, and may I ask you whether you think LM II and LM IIIA:1 were of about equal length or whether one period was significantly longer than the other?" (I suppose I was displaying an incipient interest in chronology.) Phil laughed loudly and replied, "I see that you are interested in archaeology." Mary retold this story with glee. *Malcolm Wiener*

Mary and Phil at Chamaizi in eastern Crete, summer 2006 (photo G. Weng).

Although I did not have the pleasure of knowing Mary Betancourt for all that long, I always felt comfortable in her presence. I met her in the fall of 2018, at the student orientation at Temple University. At the time I knew no one in Philadelphia, but Mary kindly spoke to me and made me feel welcome. I travelled to Crete with the Betancourts once, when Mary excitedly pointed out every important landmark to me that we passed on our travels from the Herakleion Airport to the Study Center in Pacheia Ammos. She was passionate about her life in Crete, and I was grateful to her for sharing it with me. *Lauren Wilson*

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