

# KENTRO

The Newsletter of the INSTAP Study Center for East Crete



Volume 3 (Fall 2000)

## MESSAGE FROM THE DIRECTOR

This past July, the INSTAP Study Center for East Crete and the American School of Classical Studies at Athens hosted "Crete 2000," a six-day conference celebrating the centennial of American and Greek-American archaeological fieldwork on Crete. The event highlighted the pioneering work of the first generation of American excavators on the island, Harriett Boyd, Richard Seager, and Edith Hall, and emphasized both the continuity and new direction of more recent research by American and Greek-American teams. Natalia Vogeikoff-Brogan, ASCSA archivist, organized an exhibition of photographs and letters from these early Cretan projects.

Crete 2000 had two parts: three days of lectures in Athens and a three-day field trip to Crete. The highlights of the first night in Athens were Gerry Gesell's introductory lecture on the early twentieth-century excavations, the warm words of US Ambassador to Greece, Mr. Nicholas Burns, and the opening of the exhibition, all followed by a grand reception in the lower gardens of the ASCSA. A large audience, including relatives of Harriett Boyd, attended two days of lectures, and the positive response was evident in the lively discussion that followed the sessions. A publication of the papers is planned by the conference organizers. Each day ended with dinners, the first hosted by Ambassador Burns at his residence.

The conference then shifted gears and locations as members of the INSTAP Study Center led a field trip to the Cretan sites where American and Greek-American teams have worked. More than 120 people packed into a fleet of seventeen pick-up trucks to visit the mountain sites of

Chrysokamino, Kastro, and Vronda, where they received tours guided by the excavators. With the help of a picnic lunch at Vronda, visitors withstood temperatures over 110 degrees and surely felt they had come much closer to understanding what it must have been like to work on Crete at the turn of the century.

That night, more than 300 guests attended a Cretan *glendi* at the Study Center, complete with local delicacies and live music, sponsored by Dick and Jeanette Sias. The highlight was the donation of Harriet Boyd's own copy of the *Gournia* publication by the excavator's grandchildren (pictured here).



The next day, the group was taken by boat to the Minoan harbor towns on the islands of Psira and Mochlos. The day ended with a complex but ultimately successful maneuver whereby all 120 guests were escorted to lunch at one of six tavernas at modern Mochlos before being taken to the site in small fishing boats.

On the final day, the tour made a visit to Seager's house, nestled in a small pine forest overlooking Pacheia Ammos, followed by trips to Gournia and Kommos.

On behalf of the INSTAP Study Center and the ASCSA, I would like to thank the many people who helped make the conference a success, particularly Liz Papageorgiou in Athens and Eleanor Huffman on Crete. The planners owe a great deal of credit to the staff of both institutions who always came up with timely solutions to all problems, both large and small. May those planning the future bicentennial only be so lucky.

Thomas Brogan

## PREPARATION FOR CRETE 2000: SITE SIGNS

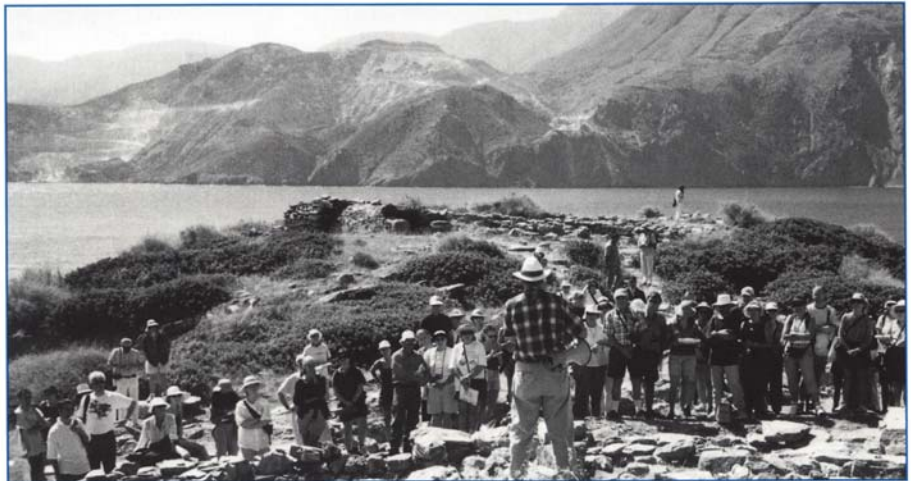
In preparation for Crete 2000, permanent signs in both Greek and English were erected at the American and Greek-American excavations. These signs, such as the one at Mochlos shown below, are intended to improve public access and understanding of the sites. Each director supplied the information as well as photographs, drawings, and plans used to compose the signs. Such topics as history of the excavation, archaeological features, building functions, construction techniques, and domestic and ritual use of the site are discussed. In conjunction with the project, a team cleaned up the sites and laid out new paths. So far, we have created signs for Chrysokamino, Kastro, Vronda, Mochlos, Halasmenos, and Vrokastro, and one indicating the many sites in the mountainous area above Kavousi.

Thanks are due to Evi Sikla who translated the text into Greek and Vili Apostolakou who proof-read the Greek text.

*Eleanor Huffman*



After disembarking at Pseira, the participants were treated to a guided tour of the archaeological remains by the excavator.





## The INSTAP Publication Team: Artist's Report

*Doug Faulmann*

The INSTAP Publication Team was created in 1998 to provide technical archaeological services for the preparation of publications. The Team includes a photographer (Kathy May), a conservator (Michel Roggenbucke), and an artist for pottery and small finds (Doug Faulmann). Thanks to the enthusiastic response from scholars, the Team has been kept busy.

As the Publication Team's artist, I have the responsibility of drawing and inking all types of finds including pottery, bronze, bone, and stone. Over the past year, I worked on a variety of interesting and diverse projects.

In the fall of 1998, I drew LM III tomb material from Mochlos. These objects were excavated by Nikos Papadakis (Director of Antiquities in East Crete) in the mid-1980s. They are housed in the Siteia Museum. He and Jeffrey Soles, who continued the cemetery's excavation in the early 1990s, will publish the tombs in the upcoming volume on LM III Mochlos. The cemetery yielded more than 300 pieces of pottery from a total of thirty tombs. Some of the more interesting pieces included a pyxis (Fig. 1) with a depiction of a griffin, two birds, and a lion and a chest larnax with two figures who seem to be dancing.



**Figure 1** LM III Pyxis from Mochlos

In the spring of 1999, I went to the Herakleion Museum to draw Neolithic material from Knossos for Eleni Banou. The objects from this sondage through the central court contained more than 600 sherds in addition to stone and bone tools. This incised Neolithic pottery was quite a departure from the often complete, and elaborately painted, LM III Mochlos vases. While illustrating these finds, I discovered that several pieces, described originally as fragments of a clay table, were actually parts of one or more Neolithic house models. During this time I also drew several finds from Richard Seager's 1908 excavations at Mochlos for Tom Brogan. These objects included a bridge-spouted jar with a painted lily design (Fig. 2) which is currently on display at the museum.

In January I went to the Aghios Nikolaos Museum to assist Philip Betancourt, James Muhly, and their team in drawing and cataloging over 1500 pieces of tomb material from the "Early Minoan" cemetery at Aghia Photia. Many of these finds, especially Early Cycladic imports such as pyxides, kernoï, fruit stands, and frying pans, are on display at the museum. Although much of the material is related to the consumption of food and drink, evidence of other activities is also represented by two clay crucibles and the longest obsidian blades on Crete. One of the most interesting finds is a bronze dagger that has been deliberately bent in half, or "ritually killed." The final publication of this material, one of the most fascinating assemblages in the Early Bronze Age Aegean, is eagerly awaited by scholars.

In addition to projects on Crete, in April of 1999, Cemal Pulak of the Institute of Nautical Archaeology (INA) asked for assistance illustrating material from the late-fourteenth-century B.C. shipwreck at Uluburun. I was able to travel to Bodrum, Turkey, to work in the Museum of Underwater Archaeology, which



**Figure 2** Lily vase from Seager's excavations at Mochlos

enjoys a beautiful location within the walls of a Crusader castle that divides the harbor. There I illustrated the cargo of Cypriot fineware ceramics, including bucchero jugs, decorated milk bowls, Base Ring bowls, and White Shaved juglets. While on the job, I got the chance to see some of the other cargo,

including the incredible wooden diptych and an ivory trumpet carved into a twisted ram's horn. The final publication of this shipwreck will surely be of great interest to Aegean Bronze Age archaeologists. My work there is not yet complete, and I am looking forward to continuing it this coming April.

Although the team travels often, we still do considerable work at the Study Center. In May of 1999, I worked for Cheryl Floyd on material from a Late Bronze Age (LM IB/LM III) farmstead at Chrysokamino. I have also drawn a large number of pots from Mochlos: LM I and later material for Tom Brogan and Natalia Vogeikoff-Brogan. I am currently working for Tristan Carter on the stone vases from Mochlos.

In addition to the larger, more time-consuming projects, I am requested occasionally to draw one or two objects for a special article or to create reconstructions of finds for museum displays. Last fall I drew two LM III larnakes for Alexandra Karetsoy of the Herakleion Museum. I also helped design a timeline, and reconstructed a small marble head of Ptolemy V for the museum's current Egypt/Crete exhibit. Another of my projects included the creation of a watercolor/gouache reconstruction of a plaster "offering table" from Palaikastro for the Siteia Museum. In addition, I drew seal stone impressions from the Aghios Nikolaos Museum. I am working currently on plans for the reconstruction of a cremation burial from the Geometric cemetery at Vronta/Kavousi, to be installed in the Ierapetra Museum later this year. □

Musicians entertaining the guests at the Study Center's reception for Crete 2000.





## Research and Activities at the INSTAP Study Center

*Thomas Brogan*

This proved to be another busy and successful year at the Study Center. In addition to the exciting preparations for Crete 2000, several independent researchers and members of six projects used the facility. We also provided tours of East Cretan sites for students from the summer program of the American School of Classical Studies at Athens.

In addition to the teams who regularly work here, several independent researchers used the Study Center as a base. Tristan Carter studied stone vases from Mochlos, Prepalatial obsidian from Mochlos, and obsidian from Quartier Mu at Malia. Lynn Snyder continued her study of the faunal remains from Kavousi. In preparation for a detailed palaeobotanical study, Kim Flint-Hamilton water-sieved all the soil samples from Halasmenos. In June, July, and August, Emmett Bennett utilized the Study Center's library facilities for his research on Linear A and B scripts. Donald Haggis studied a large deposit of Protopalatial pottery from the "Lakos" deposit at Petras, Siteia. Susan Allen water-sieved over 300 samples from Despina Hatzli-Valianou's excavations at Pitsidia and Smari in preparation for a larger palaeobotanical study.

Despina Damianidou and Eleni Papadimitropoulou from the Conservation School of the Greek Technical Institute spent three months working on a wide variety of metal and pottery artifacts in our conservation lab. A collaboration between INSTAP and the Foundation of Research and Tech-

nology, Hellas (FORTH) in Herakleion resulted in a test of the LIBS instrument (Laser Induced Breakdown Spectroscopy) for the elemental analysis of archaeological materials in the conservation lab. An application of the LIBS instrument is the identification of accretions and corrosion on ancient metals.

The Publication Team participated in projects at the Aghios Nikolaos, Siteia, and Herakleion Museums, the site of Palaikastro, and the Kaş shipwreck, part of the work of the INA, Bodrum, Turkey.

In August, we were honored to host a lecture by Christos Doumas, the director of excavations at Akrotiri, Thera. The highlights included slides of a recently found gold agrimi. □

### Projects/Teams at the Study Center, 2000

#### **Mochlos**

Jeffrey Soles  
Costis Davaras

#### **Chrysokamino**

Philip Betancourt  
Cheryl Floyd  
James D. Muhly

#### **Halasmenos**

Metaxia Tsipopoulou  
William Coulson

#### **Istron Project**

Barbara Hayden  
Jennifer Moody

#### **Kavousi**

Geraldine Gesell  
Leslie Day  
William Coulson

#### **Aghia Photia**

Philip Betancourt  
Costis Davaras

## The Istron Mapping Project 1999–2000

*Barbara J. Hayden and Terry Brennan*

A number of Bronze Age, Greco-Roman, and Medieval sites were identified through systematic survey of the coastal zone of the Vrokastro survey area between 1986 and 1990. This coastal area is known as Istron, a toponym derived from the name of a small Greek city-state, or *polis*, identified with this part of the Gulf of Mirabello coast. Because many of these prehistoric and later sites are threatened by on-going development, the Istron Mapping Project was begun in 1999 to document their size, location, and features. The area to be mapped stretches from the large coastal promontory of Ioan-

nimiti, located just north of modern Pyrgos village, east to the promontory of Vrionisi, and south, to the modern coastal highway. The map, when completed, will be furnished to the 24th Ephoreia and may serve as a basis for future exploration of this zone. The Istron Mapping Project is grateful to Nikos Papadakis, Director of the Ephoreia of Eastern Crete, for his support.

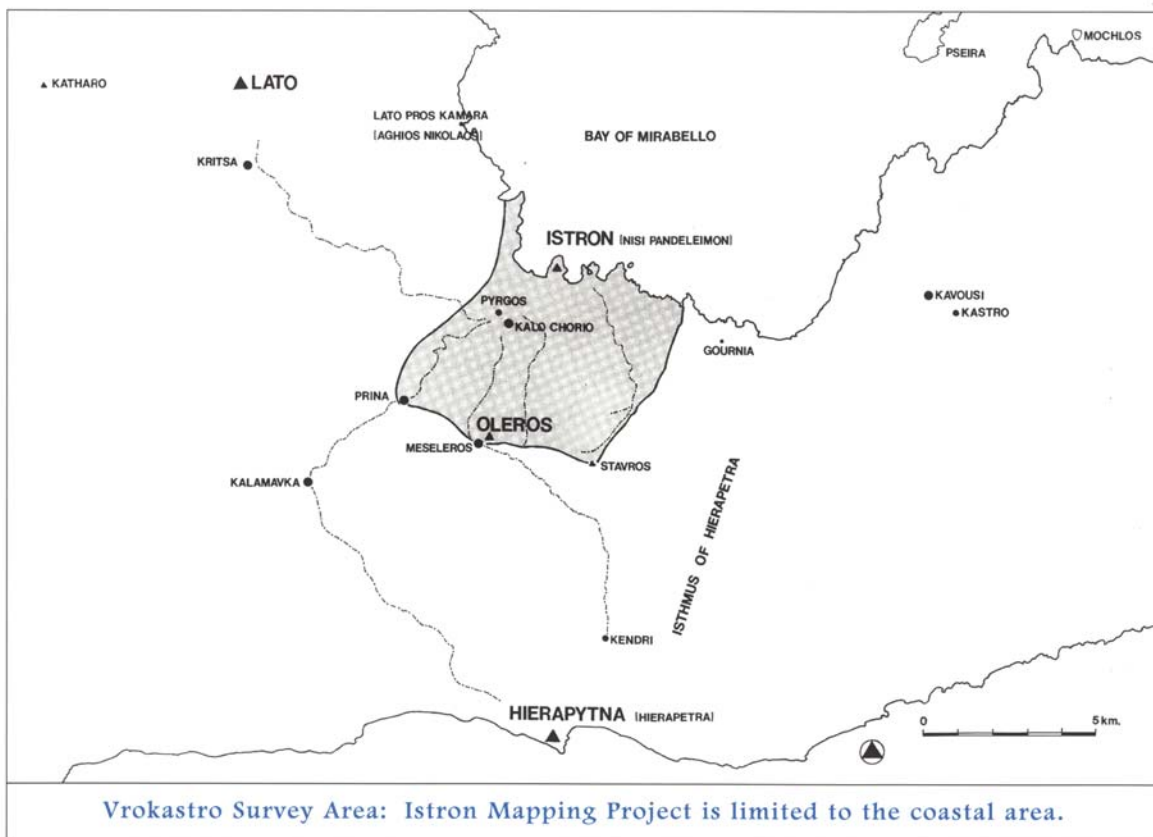
During the summer of 1999, a three-member mapping team began work on the large promontory of Nisi Pandeileimon. This large site was identified through survey as the probable location of the Greek

port-town of Istron. Habitations, larger storage or administrative buildings, and streets were mapped. An enclosure wall is on the east, west, and south sides of the promontory. Through mapping, it was determined that the walls in the water along the southeast side, interpreted previously as wharves, were actually submerged buildings, testifying to the degree of coastal subsidence that occurred here after the Roman period. A long enclosure wall along the east side may actually have encircled these submerged buildings, eventually joining the massive wall protecting the south base of the promontory.

Directly east, another large fortification wall of probable LM IIIC/Early Iron Age date was mapped along the south side of the promontory of Elias to Nisi, an area scheduled for development. This massive 6-m wide wall protects a very fragmentary contemporary settlement that is located above a small protected cove. On a seasonal basis, the cove could have served as the port for the Vrokastro settlement, which towers above this promontory. Other periods represented by pottery and a very fragmentary wall include a FN-EM I settlement on the western side of

the promontory. More evidence for FN-EM I was found in the coastal zone than in all other areas of the Vrokastro survey region.

To the west, the small coastal headland of Priniatikos Pyrgos, which was test-trenched in 1912 by Edith Hall, was also mapped. Hall's excavation revealed an important Bronze Age and Roman settlement on this small promontory and all features, including one of Hall's trenches, were mapped. This established the visible limits of the settlement as 250 m east-west by 150 m north-south on the basis of fragmentary rubble walls on the beach and in the water to the east and west of the promontory. The southern limits of the site are obscured by deep alluvium. Roman pottery also continues east toward the estuary of the Istron River, which merges with the sea between Nisi Pandeileimon and Priniatikos Pyrgos. This area is now filled in, but it is conceivable that the estuary of the Istron might have been used as a small harbor during the lifetime of the Minoan settlement at Priniatikos Pyrgos. The changing and complicated geomorphology of the area, as it relates to settlement here, requires further study. □





## Environmental Monitoring and Control at the Study Center

*Stephania Chlouveraki, Chief Conservator*

Since the opening of the Study Center, an effort has been made to provide a stable and safe environment for the archaeological material stored here. Thus, the focus has been as much on preventative conservation and environmental management as on the more traditional area of object “restoration.”

When an object enters a museum collection, the conservator’s main responsibilities are to maintain the object’s physical stability and to slow down the processes that cause decay. In order to stabilize the condition of the object, conservators must provide a stable environment, in accordance with the particular characteristics of the various materials. Archaeological materials are divided into two main categories: organic (those which have animal or vegetable origin, such as wood, ivory, bone, leather, and textiles) and inorganic (those which have a mineral origin, such as ceramics, stone, metal, and glass).

The environmental needs of artifacts, most importantly relative humidity (RH) and temperature (T), vary according to the material’s physical make-up. Table 1 displays the tolerance of RH and T levels for the most common archaeological materials. Also, the composition and condition of the objects affect the way they respond to the environment. For some materials, such as hygroscopic artifacts, the consistency of environmental parameters is more important than the actual value.

More stable materials, such as ceramics, stone, historic metal, and historic glass, are tolerant of conditions primarily designed for human comfort (RH of 30–70%). If, however, the same material is in an unstable condition, such as can be the case with glass or heavily corroded metal, its environmental requirements change. Thus, it is very difficult to provide the “ideal” environmental parameters for each object, but there are fundamental principles that can be applied to different classes of material.

The establishment of an environmental policy in a museum is quite a difficult task because of the wide variety of materials housed in most collections. In addition, visitors interact with the museum environment and expect comfortable conditions in the public areas. Institutional collections, however, are much easier to manage because the material is kept in storage with a minimum of interaction with people. Fortunately for the INSTAP Study Center,

the environmental needs of the collection were taken into account at an early stage of the building project.

The storage space was separated into “critical” and “noncritical” areas, making environmental management easier because control and monitoring could be divided into smaller sectors. The storage is located in the basement, which is less affected by the outside environment and shows smaller fluctuations in RH and T levels than the upper stories of the building. The storage area is divided into three sections: metals storage, a small anteroom to the metals storage, and the main storage area (the cage), which houses mainly ceramics.

The metals storage is furnished with a refrigerant dehumidifier (Munters M90L) with a dry air capacity of 90 M<sup>3</sup>/h. A fan forces the air of the room into a refrigerator system where it is cooled so that water condenses. The condensation is collected, and the dry air is warmed to an ambient temperature before it is returned to the room. The system is programmed to provide a relative humidity of 25–30%, the recommended level for archaeological metal.

The door of the metals storage area opens to a second room, which serves as an airlock between the main and metals storage rooms. If the doors of both the anteroom and the metals storage room are kept closed at all times, or if the door of the anteroom is closed before the door of the metals storage room is opened, the possibility of fluctuations in RH is small. The highest levels of RH in the metals storage occur during the summer months, owing to the increased number of visitors during the peak season of Center usage. Still, even the highest values recorded are within the comfort zone of archaeological metal. Fur-

**Table 1: Values of RH for storage of archaeological materials, at 18–20° C**

Material	RH
Archaeological Metal	20%
Historical Metal	40%
Unstable Glass	40%
Ceramics	30–70%
Stone	30–70%
Hygroscopic Material	50–60%

thermore, all metals are stored in sealed plastic boxes and packed with buffer (silica gel  $1\text{ kg/m}^3$ ), so that even if the RH level rises above the comfort zone, the stability of the objects is maintained.

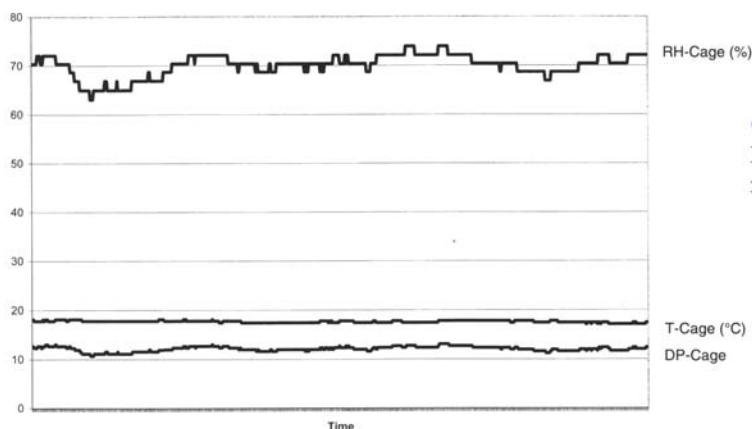
The main storage environment has not been manipulated because the environmental needs of the ceramic and stone objects contained there are quite close to ambient parameters, and all treated objects have been desalinated.

To evaluate the effectiveness for the control and continuity of the environment, both the main and metals storage areas are monitored with digital data loggers which operate continuously. Also, the accuracy of the loggers is assessed by regular spot readings with an electronic hygrometer that can be self-calibrated. The data is downloaded, analyzed, displayed graphically, and digitally stored.

In addition to RH and T levels, the dew point (DP), or the temperature at which condensation will

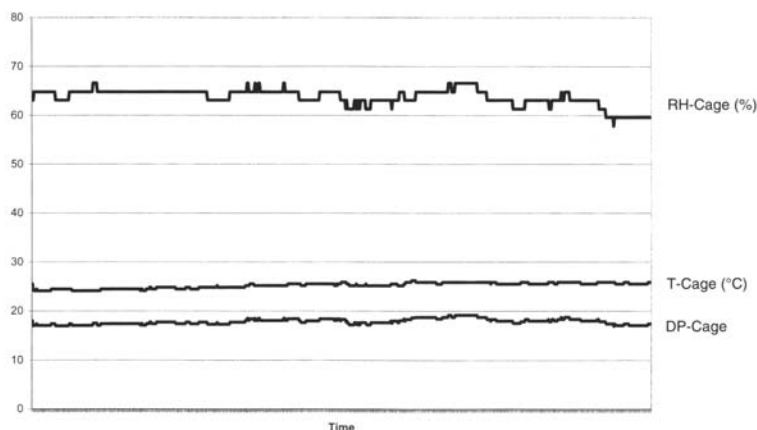
occur, is calculated and plotted below. The DP in the metals storage room (as calculated from the RH and T measurements) has a safety difference of about  $20^\circ\text{C}$  from the ambient temperatures in the coldest to the hottest periods of the year. In the main storage room (Graphs 1 and 2), the difference is smaller, only  $5^\circ\text{C}$ . In both cases, condensation is prevented.

The environmental data has shown that the levels of RH and T in all storage areas are successfully being kept within the tolerance range of the stored objects. The management of the environment has been possible due to the early planning and proper arrangement of the storage spaces, but it should be noted that no system will operate indefinitely without maintenance. Regular inspection and calibration of the equipment, combined with analysis and comparative study of the environmental data, is necessary to assure the effectiveness of the environmental policy and the prevention of further decay. □



**Graph 1**  
Environmental parameters in  
main storage, winter months

**Graph 2**  
Environmental parameters in  
main storage, summer months





## Regionalism, Pottery, and Mochlos in LM IIIA1

*R. Angus K. Smith*

Recent work at Mochlos contributes to our understanding of Minoan regionalism. At Mochlos, regional ceramic differences are evident in the early reoccupation pottery, which dates to LM IIIA1. These differences are particularly evident with respect to some of the shapes of drinking vessels; these shapes represent some of the most common vessels of the Minoan ceramic repertoire, and thus should not be considered rare or restricted prestige items. The fact that their distributions show major regional differences demonstrates concomitant cultural differences among these regions.

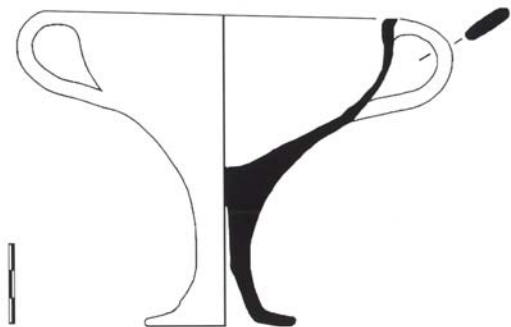
The specific shapes in question are the deep cup, the kylix, and the pulled-rim bowl. The deep cup is a well-known Late Minoan III shape, which Popham has called “the standard Late Minoan cup” (1997:381). It is noticeably rare in Late Minoan III eastern Crete, however. Only a few examples have been published from Pseira (Betancourt et al. 1997: fig. 5, no. 69), Palaikastro (MacGillivray et al. 1987:142, fig. 3), and Petras (Tsipopoulou 1997:231–2, fig. 36). There also exist a very few examples at Mochlos: one of these, from the settlement pottery, may date as early as LM II, and represents a central Cretan import to Mochlos (Fig. 1).

The kylix is another shape that is characteristically rare in eastern Crete (Fig. 2). This is particularly true at Palaikastro. At Petras, however, Tsipopoulou reports that undecorated examples are “rather common” (1997:231). At Mochlos their presence is also rather common, although much less so than in central and west Cretan sites. While the Mochlos cemetery produced only three complete examples, the settlement produced numerous examples, several of which fall into Hallager’s “plain large goblet” and “decorated large goblet” class. These examples are significant to the early reoccupation of Mochlos because this class seems to die out after Late Minoan IIIA1 (Hallager 1997:25–26).

The pulled-rim bowl is primarily an east Cretan shape, and it is therefore a less-well-known shape than either the deep cup or the kylix. A flat underside, ogival sides, everted rim, and spout pulled out from the rim distinguish the pulled-rim bowl shape. Two bosses are often set at roughly right angles to the spout. Decoration of the pulled-rim bowl is normally a dipped rim band, often allowed to drip down the sides. An alternative form of decoration is a dipped rim band with circular dipped blobs on the exterior. Solidly painted examples also exist, as do rare pattern-painted examples. Among the pattern-painted examples is one from a Mochlos tomb (Fig. 3). Although sloppy, its



**Figure 1** A central Cretan deep cup found at Mochlos



**Figure 2** The LM IIIA kylix shown here developed from the Ephyrean Goblet, which appears in Crete in LM II.



**Figure 3** A pulled-rim bowl from Mochlos

decoration is comparable to Late Minoan II–III A1 decoration from Knossos, and, together with an LM III A1 jug from the same tomb, it should be dated to the early reoccupation of Mochlos.

These three shapes illustrate both the early reoccupation at Mochlos and the regionalism that existed in Crete during the early Late Minoan III A period. Both the kylix and deep cup are common shapes in central and western Crete during this period, and both have been well defined in terms of chronology. Of these, however, only the kylix is found with any frequency at Mochlos. Farther to the east, at Palaikastro, neither shape is found with great frequency. The pulled-rim bowl, on the other hand, is present in large quantities at Mochlos, Petras, and Palaikastro but almost entirely absent outside of eastern Crete. The fact that these drinking vessels are particularly common shapes, and not economically prestigious items, also argues for their significance as indicators of regional cultural difference. □

### Bibliography

- Betancourt, P. P., et al. (1997) "Provincial LM III at Pseira, Crete," in E. Hallager and B. P. Hallager (eds.) *Late Minoan III Pottery: Chronology and Terminology* (Athens: Monographs of the Danish Institute at Athens 1): 57–76.
- Hallager, B. P. (1997) "Terminology—the Late Minoan goblet, kylix and footed cup," in E. Hallager and B. P. Hallager (eds.) *Late Minoan III Pottery: Chronology and Terminology* (Athens: Monographs of the Danish Institute at Athens 1): 15–47.
- MacGillivray, J. A., et al. (1987) "Excavations at Palaikastro, 1986," *BSA* 82: 135–154.
- Popham, M. R. (1997) "The final destruction of the Palace at Knossos: seals, sealings and pottery: a reconsideration," in J. Driessen and A. Farnoux (eds.) *La Crète Mycénienne* (Paris/Athens: École Française D'Athènes, BCH Suppl. 30): 375–385.
- Tsipopoulou, M. (1997) "Late Minoan III reoccupation in the area of the palatial building at Petras, Siteia," in E. Hallager and B. P. Hallager (eds.) *Late Minoan III Pottery: Chronology and Terminology* (Athens: Monographs of The Danish Institute at Athens 1): 209–252.



Angus Smith presenting his paper at the "Crete 2000" conference.



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