Livari Skiadi

A Minoan Cemetery in Southeast Crete

I. Excavation and Finds



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I. Excavation and Finds

by

Yiannis Papadatos and Chrysa Sofianou

with contributions by

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Introduction and Acknowledgments

This is the first of a two-volume final report on the excavation of the Minoan cemetery and associated finds at Livari Skiadi, near Goudouras, at the southeastern end of Crete. The cemetery was unearthed during a rescue excavation performed by the 24th Ephorate of Prehistoric and Classical Antiquities of the Hellenic Ministry of Culture, under the direction of Chrysa Sofianou, who was at that time responsible for the antiquities of the Siteia prefecture, and with the participation of Yiannis Papadatos, together with a small group of archaeology students from the Department of History and Archaeology of the National and Kapodistrian University of Athens. The excavation lasted three consecutive summers, from 2008 until 2010, and it revealed a tholos tomb and burial rock shelter used in the Prepalatial period, a house tomb dated to the Neopalatial period, and deposits of funerary material in open areas surrounding these tombs.

The study and analysis of the material followed immediately, allowing the full publication of the remains and the associated finds to be completed within five years of the completion of the excavation, while a second volume on the organic materials (e.g., human remains, ecofacts) and the final conclusions is in preparation. The quick advance of the excavation, study, and final publication is the result of generous funding provided by several institutions, and the hard work of a large number of colleagues, students, and friends, to whom we owe much.

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List of Abbreviations

a	angular
B	miscellaneous finds catalog number
cm	centimeter(s)
CW	coarse ware
dia.	diameter
dims.	dimensions
DBW	Dark Burnished ware
DGBW	Dark Gray Burnished ware
DOLW	Dark-on-Light Painted ware (Prepalatial)
DOL	Dark-on-Light Painted Lustrous ware (Neopalatial)
EBA	Early Bronze Age
EC	Early Cycladic
EM	Early Minoan
FGW	Fine Gray ware
FN	Final Neolithic
h.	height
ha.	hectare(s)
J	jewelry catalog number
km	kilometer(s)
L.	length
LIV	petrographic sample
LM	Late Minoan
LOD	Light-on-Dark Painted ware
m	meter(s)
M	metal artifact catalog number
max.	maximum
MM	Middle Minoan
MW	Monochrome ware
No.	number
NV	no vitrification
OBBW	Orange-Buff Burnished ware
P	pottery catalog number
PPL	plane-polarized light
pXRF	portable X-ray fluorescence spectroscopy
PW	plain ware
r	rounded
RBBW	Red-Brown Burnished ware
RBW	Red Burnished ware
R/BSW	Red/Black Slipped ware
RSBW	Red Slipped and Burnished ware
S	seal catalog number
sa	subangular
SEM	scanning electron microscopy
sr	subrounded
Str.	stratum

TCFs	textural concentration features	w.	width
th.	thickness	WODW	White-on-Dark Painted ware
Tr.	trench	wr	well rounded
V	stone vase catalog number	WW	Wiped ware
VW	Vasiliki Ware	XP	cross-polarized light



PART I

Site, Excavation, and Architecture



1

The Site

by

Chrysa Sofianou

1.1. Topography

Livari (Λιβάρι) is a small coastal plain on the southern coast, at the southeastern corner of Crete (Figs. 1–3; Pl. 1A). It lies 5.7 km east of Goudouras and 3.6 km southeast of Hagia Triada, which are the closest inhabited modern settlements. The closest large centers of Minoan habitation are Zakros, ca. 14 km directly northeast, and Diaskari and Makrygialos, ca. 17 km directly west, but smaller sites have been identified at Xerokambos and Hagia Irini, a few kilometers to the northeast. The plain is also opposite the islet of Kouphonisi, ancient Lefki, which is situated only 3.8 miles offshore. The area is accessible on foot and by car via a dirt road that ascends toward the sea from the west, following a small ravine; this was probably the main access route in the past, connecting Livari with the main road that joined Ziros and Hagia Triada with Goudouras.

The plain is oriented west–east (Fig. 3), looking south toward the Libyan sea, and it covers an area of about 5 ha (280 m long and 180 m wide). It is enclosed by six low, steep hills: Cheromylia (Χερομύλια), Kastrokephalaki (Καστροκεφαλάκι), and Katharades (Καθαράδες) to the west; Strouphomata (Στρουφώματα) and Sopatakia (Σωπατάκια) to the north; and Chlios (Χλιός) to the east (Pl. 1B). The plain is cut by several streams that are dry for most of the year. The largest streams are Alogaras (Αλογαράς) to the west and Ankastaras (Αγκασταράς) to the east. Both have created relatively deep gorges that flood during heavy rains. The area has a constant water supply, even during the dry summer months, from a small spring at the foothills of Strouphomata next to the Ankastaras stream.

The plain is relatively flat, descending smoothly to the sea. Aeolian and sea erosion has exposed large areas of the natural bedrock, namely a Miocene conglomerate consisting of limestone, dolomite, and chert (IGME 1959). Limited soil deposits of the Holocene include a small alluvial deposit with sand at the mouth of the Alogaras gorge and an extended colluvial deposit south of the Ankastaras gorge consisting of talus and slope fan debris.

The climate is very dry, with limited annual rainfall. The hills that seem to protect the area from north winds actually strengthen them and, as a result, the area is rather windy.

Apart from three small, recently grown olive groves, the area is not cultivated. Until a few decades ago, the plain was exploited by a couple of families from the settlement of Hagia Triada, mainly for cereal cultivation, as indicated by the presence of several threshing floors. There are a few old deserted stone-built houses and huts owned by inhabitants of Hagia Triada that are used for seasonal occupation (μετόχια), a few animal pens, a small fisherman's house (χιόνα), and three recently built houses used during the summer months. It seems clear that in recent times the area was never the focus of intense, continuous habitation.

The cemetery is located at Skiadi (Σκιάδι), about 50 m from the seashore, near the pointed edge of a small rocky promontory of triangular shape, protruding ca. 150 m into the sea (Fig. 3; Pls. 2A, 2B). The promontory is at the mouth of the Alogaras gorge, at the southern edge of the Livari plain. Due to aeolian and sea erosion, the soil deposits are very thin, and the rough natural bedrock is exposed almost everywhere. In the middle of the promontory the bedrock rises abruptly, creating an elliptical hump ca. 3 m high and 20 x 10 m in extent. Three interconnected irregular chambers were formed inside this hump, which were used for burials and seasonal sheltering over the centuries.

1.2. History of Research

Being in a remote area, far from the major centers of Minoan archaeology, it is not surprising that Livari did not become the focus of archaeological attention until very recently. Fritz Schachermeyr (1938, 479) was the first to report the presence of eroded sherds that could be dated to the Minoan period. Paul Faure visited the area in 1958 because of his interest in the Alogaras cave, located high on the steep western cliffs above the gorge. The cave was closed by a well-built Venetian wall, probably dating to the 17th century A.D., and, despite the later disturbance, Faure reports the existence of Middle Minoan (MM) III sherds from inside the cave (Faure 1958, 515 n. 3). Both Schachermeyr's and Faure's reports were reproduced by Teresa Wroncka in her gazetteer of archaeological sites in the Siteia area (1959, 533), without providing any additional information.

A more systematic surface survey of the area was carried out intermittently by Norbert Schlager between 1987 and 2008, with intervals (Schlager et al. 2001; Schlager 2011). Schlager's team has identified, recorded, and documented a large number of sites and structures dated from the Neolithic to the modern era. The prehistoric sites identified by Schlager include: (a) the Early Minoan (EM) tholos cemetery at Skiadi; (b) a Final Neolithic (FN) settlement on top of the steep hill of Katharades, 650 m north of the cemetery; (c) a FN–EM II settlement on the southern and eastern slopes of Kastrokephalaki, 350 m north of the cemetery; and (d) a MM–Late Minoan (LM) settlement on the southern slopes of Cheromylia, 200 m west of the cemetery.

After 2004, the construction of a large power station at nearby Atherinolakkos changed the area completely. The old roads from Goudouras and Ziros were improved and laid with asphalt, and the area ceased to be as isolated as before. Ideas for the development and exploitation of the area emerged, along with real estate companies interested to invest. The usual anxiety arose among the locals that the possible presence of antiquities might prevent the development of the area. In 2007 the owner of the land, Georgios Kalogerakis, made unauthorized constructions in the area of the cemetery: he blocked the entrance of the largest rock shelter with a built wall, laid a cement floor inside, and constructed minor earth works in the area adjacent to the tholos tomb. Finally, in 2008 some locals informed us about the visits of "tourists" with what seemed to be metal detectors, and in the summer of the same year a few pits were observed by the personnel of the 24th Ephoreia in the area of Skiadi, indicating possible looting efforts.

It was clear that the cemetery was going to be the target of illicit excavations in the immediate future, and the 24th Ephoreia therefore carried out immediate rescue excavations to prevent looting. The excavations were directed by Chrysa Sofianou, archaeologist of the ephoreia responsible for the Siteia prefecture, with the collaboration of Yiannis Papadatos, lecturer of Prehistoric

Archaeology in the Department of History and Archaeology at the University of Athens.

The excavations revealed (Fig. 4): (1) a circular tholos tomb of the Mesara type and a burial rock shelter used during the Prepalatial period (EM I–III), excavated in 2008 and 2009, respectively; (2) a house tomb of the Neopalatial period (LM IA), excavated in 2009; and (3) deposits in the intervening open areas, excavated in 2009 and 2010.