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# THE WESTERN CHORA AND NECROPOLIS OF PTOLEMAÏS 

Thomas Maria Weber-Karyotakis • Frederik Berger


#### Abstract

This report is a brief summary of an archaeological survey conducted in November and December 2009 by a team of the University of Mainz, Germany, on the western countryside between the ancient cities of Taucheira (Tocra) and Ptolemaïs (Tolmeita), Cyrenaica (modern al-Marj governorate, Libya). The project was a joint venture accorded with the Libyan Department of Antiquities, the German Archaeological Institute Berlin and the University of Warsaw, Poland. The Mainzteam consisted of Professor Dr. Thomas M. Weber-Karyotakis and Dr. Frederik Berger, both staff members of the Institute of Classical Archaeology at the Johannes GutenbergUniversity, Mainz.

It was the aim of the Mainz team to explore the coastal strip between Taucheira and Ptolemaïs by documenting all man-made immovable structures. The long term goal was the planning of an intensive surface survey with minor selected trial excavation in order to reveal the hinterlands (Greek: chorai) of both cities in their historical, political, economic and socio-cultural conditions from early Hellenistic to early Islamic times. The result was a data base with 525 entries of find spots, each one furnished with a description, photos and GPS data. Most of the recorded spots concerned the ancient cemeteries extending to the west of the ramparts with some 400 remnants of funerals.

The most significant finds from the ancient coastal road, the Roman via maritima, are those preserved in various sectors at a distance of ca. 4 Roman miles east from the city walls of Taucheira or ca. 23 miles west of Ptolemaïs. A pair of two inscribed milestones with their sockets in situ marks the trace of this over-regional street connecting ancient Hesperides (modern Benghazi) with Cyrene. Apart from this, the recorded points witness a number of villages, hamlets and farmsteads, mansions, toll stations, surveillance posts, field boundaries, wells and channels of agricultural purpose, forts and "blockhouses" in the intermediate zone between the shore and the foothills of the Djebel Akhdhar mountain range, as well as quarries and cemeteries.


The complete documentation of burial structures in the western necropolis of Ptolemaïs allows a re-evaluation of the tomb morphology at Ptolemaïs and of the development of this important necropolis. It was possible to document five main types of funeral monuments known also from other places in Cyrenaica, including free standing tower tombs, rock-cut chamber tombs, rectangular built tombs, cist graves and sarcophagi. Ob-
servations on the distribution and orientation of these monuments add new knowledge about the street system accessing the city through the necropolis from the west. The survey was planned as a preliminary approach towards preparing an international and multi-institutional project investigating the ancient area outside of the city walls. Therefore, recommendations for future work in the chora and the necropolis are added to each section.

## 1. The Countryside between Ptolemaïs and Taucheira

In the frame of the 2009 campaign at Ptolemaïs (Tolmeita), an over-regional survey was carried out in order to determine the natures, the infrastructures, and the logistic conditions of the hinterlands of the two neighboring ancient cities Taucheira (Tocra) and Ptolemaïs. This investigation merged into a detailed documentation of the ancient cemeteries lined along the traffic arteries in the extramural territory of the latter city. According to previous agreement with our Polish colleagues of Warsaw University, the present survey was strictly limited to the extramural area west of Ptolemaïs, ranging from the Tolmeita gate at Tocra to the so-called Taucheira gate at Ptolemaïs. A corresponding investigation of the city's eastern territory was planned by our Polish cooperation partners.

The geomorphic condition between Tolmeita and Tocra may clearly be divided into three sectors (Fig. 1), running more or less parallel to the coastal line: A) The littoral strip consists of a narrow line of the sandy shore developing dunes towards the south. These dunes are bordered by an irregular shield of limestone, deeply fissured by Aeolian erosion caused by the salty sea winds. On the south, this cliff abuts a broad strip of arable land with red fertile soils. B) Southbound, a terrain terraçe of irregular width, raising about 6 to 15 meters above sector A , surmounts the agriculture zone beyond the dunes. This strip of land has arable soils as well, but it is intersected by


Fig. 1. Mapping of the find-spots along the ancient coastal road mentioned in the text.
The geomorphic differentiation into three sections is indicated by the contour lines on $20 \mathrm{~m}, 40 \mathrm{~m}$ and 80 m derived from SRTM-Data with a resolution of 1 arc-second.
steep gorges accumulating bulks of sediments and pebbles. In geological terms, this terrace provides more rocky stretches than sector $A$. It reaches toward south sector $C$ ), the foothills of the Djebel Akhdhar. Its slopes are separated from each other by intersecting valleys of the wadis. These are not perennial but irrigated by sudden floods during strong winter rain falls. The mountainous zone is of rocky nature allowing only pastoral use on meadows grown over by wild pistachio bushes and other shrubs. All three sectors reach a maximum width of about four kilometers.

The chora survey of 2009 was confined to sector A with exception of the forts in sector B (see below). The coastal strip has been explored by the present author accompanied by Dr. Frederik Berger of Mainz University by a walk of about 45 km during five days. The result was a catalogue of 114 find spots (abbreviated "FS") which were photographed, briefly described and measured with grs-data. These reported sites may be classified into the following categories.

> 1.1. The ancient coastal road (via maritima)

According to C. H. Kraeling, ${ }^{1}$ a coastal road connected Taucheira with Ptolemaïs. One road continued from Ptolemaïs along the coast while a second road bifurcated here running uphill towards the inner Cyrenaica. ${ }^{2}$ Until the 2009 campaign, only one milestone of the via maritima was known: It was found just west of Ptolemaïs and assigned to the years of the Tetrarchy (late $3^{\text {rd }}$ century A.D.) as a monument referring to a repair of the road by Diocletian. ${ }^{3}$

Physical remains of this important ancient coastal road were identified at a distance of some 5 kms east of Taucheira (Fig. 2). The trace can be followed from the Tolmeita gate at Tocra along the southern border of the rocky spur which separates the dunes from the arable land. In terms of construction, it blueprints other roads of the Roman Empire: Slightly elevated on a sort of dam, fitted by layers of splintered stones and dumb, the street

[^0][^1]was once flanked on both sides by the fossae. An accumulation of stones resembling a banquette reinforces the southern border of the alignment. Measuring an average width of ca. 6 m , the trace was subdivided by a middle strip of pointed stones into two lanes, each measuring about three meters in width, enough for an allowance of ancient carriages of about $2,5 \mathrm{~m}$ in width. The pavement consisting of irregularly broken, medium-sized limestone quarried in the vicinity guaranteed an easy travelling both on carriage as on horseback as well as by foot even in rainy seasons when the normal earth tracks rapidly were transformed into impassable swampy mud. At FS12 another unexpected discovery supplements our knowledge about the via maritima: A socket of a milestone still stands in situ, and the inscribed broken column shaft has fallen beside it (Fig. 3). ${ }^{4}$ The Latin inscription is hardly legible and the deciphering will be a matter of further epigraphic analysis. This document is of high importance for the history of the road and should be discussed in comparison to the above mentioned milestone preserved in the Tolmeita Archaeological Museum today.

The map of F. W. Beechey dating to $1822^{5}$ records the via maritima approaching Ptolemaïs north of the western cemetery quarries. This trace is comprehensive by the general axis of the street running closely along the coast, but as well by the orientation of the tombs. Apart from the still paved trunks at Tocra and Tolmeita, this ancient road must be considered as widely destroyed. The disappearance of this important traffic line may be explained by historical, physical, and technical factors: At first, the historical lack of permanent maintenance caused damages and interruptions. The negligence of caretaking was a consequence of the decline of a centralized political power and urban authorities responsible for public work. This resulted in a progressive erosion due to wind and sudden waters, and a partly coverage by dunes. The main factor for the destruction of the ancient road was the technical development in modern agriculture: Tractor supported deep ploughing allows the extraction of even solidly founded stones, and bulldozing
for the reinforcement of field borders against the sand dunes leads to a thorough dislocation of ancient building material from its original spots.

## 1. 2. Villages, hamlets and farmsteads

Only few remains of villages, hamlets and farmsteads have been reported during the 2009 survey. The coastal line was thus only scarcely settled in antiquity as this is the case in present times. Larger settlements (e.g. FS33-34, Fig. 1) are all located in the vicinity of the sandy shore. A number of well dressed ashlars lined in an orthogonal layout, point to the existence of an agglomeration of dwellings. One of these is furnished with a semicircular curved wall oriented to the east, most likely the apse of a smaller village chapel for the Christian cult. The site FS41 occupies a prominent hill in the 'Abu Trabah area and houses today a modernly constructed maqam of a Muslim saint. High-quality ashlar masonry of orthogonal plan at the foothill implies that the Muslim sanctuary followed an older predecessor of considerable importance. This main structure is surrounded by Muslim tombs and traces of ancient dwellings.

Two other structures of similar character are Gasr Mahlouf (FS49, Fig. 1) and Gasr Sirah (FS61, Fig. 1). Monumental as well are the foundations of a building, constructed in ashlars of headers-and-binders technique around an Italian ruin (FS69, Fig. 1). Several dwellings are linked with agricultural production such as presses and mills (FS55. FS94, Fig. 1). These are embedded in many cases with rock-cut recesses, courtyards and chambers chiseled out of older quarries. It is impossible to determine the chronology and the use of these structures by surface finds only. Pottery sherds, randomly collected by the authors during the 2009 survey, date in their majority to the Later Roman Imperial and to the Byzantine periods. Several of these sites could be explored by clearance, systematic pottery assemblages, and sounding, in order to retrieve more detailed information on their functions and history.

[^2][^3]

Fig. 2.


Fig. 3.

### 1.3. Surveillance posts, mansions, and toll stations

An important question concerns the boundaries of the urban territories of Taucheira and Ptolemaïs. In analogy to other communities in Northern Africa and the Middle East, it may be assumed that the lands surrounding these poleis were a matter of the urban sovereignty. In the case of Ptolemaïs it has been evidenced by written sources, that these fertile lands belonged to the property of the royal court of the Egyptian Lagid dynasty during the Hellenistic period. ${ }^{6}$

Due to the lack of border stones, the boundaries of the urban chorai are rather difficult to locate. Possible limitations given by physical features of the landscape such as deeply cut wadis or rocky cliffs remain a matter of speculation. On the other hand, two sites were singled out during the survey that might be linked with a system of surveillance in the form of check-points. A building, orthogonal in plan, adjacent to the ancient via maritima at FS14-19 (Fig. 1) might have been a sort of a mansio where the animals had been given rest, water, and fodder.

Immediately east of it , the road climbs a sort of bridge or barrier. Such an interpretation may only be supported by future clearance and soundings. Another possible checkpoint has been still in use in recent times: The modern tower of FS78 (Fig. 1) still today dominates the panorama as a landmark. A closer glance showed that the modern tower occupies the foundations of an ancient predecessor which monitored a passageway in the size of the road, chiseled in the virgin rock just south of it. Large storage jars lowered into the rock support the assumption of merchandise activities at that point. Also in this case, the proof for an identification as a toll post station can only be provided by more detailed studies of the site in the future.

### 1.4. Field Boundaries

The cadastral plan of the modern field boundaries most likely reflects the Roman land surveying of the agrimensores. This does not apply to the actual square extensions, but rather more to the orientations of the fields. Even
though slight shifts are possible, the longitudinal layout follows north-southern, the latitudinal east-western directions. It is interesting to state, that most of the buildings attested in sector A follow the same grid system in their planning.

### 1.5. Wells and channels

The largest group in number (some 42 FS ) are wells which are still in use in recent times. They attest that natural watering during the rainy winter seasons had to be supplemented by artificial irrigation during the hot, dry summer months. The traditional system of hydraulic water drawing has today been abandoned due to the introduction of motor pumps. These wells are irregular arranged in three graded rows just behind the rocky protection shield against the dunes. They consist of a deep, rectangular shaft, always located at the north of the installation, measuring normally three to five meters at their sides and piercing through the rock at a depth of about three meters in order to reach the table of the non-salty ground water. The shaft walls consist sometimes still of high quality ashlar masonry, indicating a Roman or even Hellenistic origin. In many cases, the construction has been altered in later times, clearly discernible by different masonry techniques. Traditionally, the water was drawn in a basket fixed on a rope, driven over two wooden pulley beams and balanced by a weight. The water was then poured into a smaller elevated sink basin and channeled from there into a larger open cistern. For further distribution on the fields the water was guided via underground qanatir, the covers of which are still discernible deviating from the open cistern in various directions. A closer examination of this irrigation system in the future is desirable in order to clear the question in how far these qanatir had been connected to each other.

## 1. 6. Rocky outcrops

Outcrops are limited to the rocky spur between the sandy shore and the arable land. They have mostly been quarried for building material, especially in close proximity of the cities, where a great number of quarries of considerable size have been observed. They found secondary use (see below) as com-

[^4]pounds of rock-cut chamber tombs. Smaller outcrops in the central parts of the coastal cho$r a$ preserve frequently installations for the industrial exploitation of agricultural goods such as mills and presses.

### 1.7. Rural Cemeteries

There are major Muslim cemeteries in the coastal area of the chora at the sites of villages and around the hill of the saint (FS41, Fig. 1). According to oral information given by farmers and shepherds of this area, the Arab resettlement of this area goes back to the early $19^{\text {th }}$ century, and the cemeteries had been in use until the Italian colonization. Few burials attested in sector A might go back to the Middle Ages and to antiquity. In their majority, they consist of rock-cut rectangular shafts. Chamber tombs are extremely rare (Fig. 5).

## 1. 8. Forts and "blockhouses" in sector B

It was one of the aims of the present survey to identify a group of buildings documented by the Oriental Institute of the University of Chicago during the 1950 's and published by C. H. Kraeling in 1962. ${ }^{7}$ Accordingly, they are located "along the old track leading down the coastal plain from Ptolemaïs to Taucheira". Kraeling calls seven of the overall eleven structures "forts or blockhouses" while the remaining four are to be more properly identified as farms.

Kraeling's Forts 1, 3A and $4,{ }^{8}$ the latter today called by the local inhabitants in Arabic Gasr Mahlouf (FS49, Fig. 1), are located on the seaside. Fort 3 A is the site of the modern tower (FS41, Fig. 1), hypothetically interpreted as a check point above. All other Forts are to be found in sector $B$ on both sides of the modern asphalt road. The distances given by Kraeling are not in direct air line, but only approximately, probably measured in the 1950 's during the car drive including side tracks. Fort $2^{9}$ raises to a considerable height in its northern and southern elevations south of the asphalt road at a distance of 12 km from Tolmeita, and it is called nowadays Gasr al-Sheikh in the local dialect (FS524, Fig. 1). It is surrounded by an extent Muslim cemetery and foundation traces
of dwellings. The figures of Forts 4 and 5 must have been confused in the publication of the American scholars. Fort $5^{10}$ is Gasr (Khirbet) Sigba (FS523, FIG. 1), measuring 24 meters in its east-western extension, while the smaller Fort 4 must be the Gasr Mahlouf. Finally, the well preserved Fort $6^{11}$ with a strong enclosure wall is located in front of the military camp at a distance of $6,5 \mathrm{~km}$ from Tocra. Obviously these fortified buildings had the duty to protect a traffic line running close by. The same might be true for the large "byzantine citadel" (FS377378, Fig. 1) which nestles on the foothills of the Djebel Akhdar to the southwestern outskirts of the Barca-gate immediately beyond the Wadi Khambish.

### 1.9. Recommendations for future work in the chora

It is evident that the survey presented in this paper in the area west of Ptolemaïs was only an initial approach to understand one of the most interesting cultural landscapes of Libya in its historical dimensions. The monuments described open a new chapter in the history of the region since they report on conditions and situations that written sources do not reach. Further prospections and soundings, planned for spring 2011 had to be postponed due to the political situation in the country. The following list expresses the recommendations of the authors for future work in the chora of Ptolemaïs.

1) Extensive survey of the sectors $B$ and $C$ of the Ptolemaïs chora. All monuments visible on the surface should be recorded by GPs data, description and photographs.
2) Clearance (including systematic surface pottery assemblage) and probe soundings at the via maritima and the two milestones. The aim is to document the technical structure of the road and to determine the chronology by a sondage at an undisturbed spot.
3) Clearance (including systematic surface pottery assemblage), surveying and probe soundings at the site of the mansio (FS14), the street barrier ( $\mathrm{FS}_{15}$ ) and the adjacent village ( $\mathrm{FS} 16-19$ ), as well as at the site of further village to the east (FS33) including the

[^5]chapel ( $\mathrm{FS}_{34}$ ) and finally at the presumed toll post station ( $\mathrm{FS}_{7} 8$ ). All above ground structures should be documented in a topographical map by tachymetric surveying and added to the geodaetic net. The aim is to determine the nature and the chronology of these stations at the via maritima and its relation to these sea side villages.
4) Intensive studies on the wells and qanatir including soil drill probes for an archaeobotanological analysis. It would be futile to study all wells in the same intensity, but a characteristic selection should be chosen in accordance with specialists. These studies should be assisted by geoarchaeological approaches in order to map the ancient hydrographic system of the region.
5) Intensified research on the "byzantine citadel" to the southwest of wadi Khambish including the forts published by C. H. Kraeling. The aim is to determine the function of these fortified places in the late antique defensive network.
6) Further investigation on the extramural graveyards and their contexts in order to achieve data on the social stratification of the urban population, their religious habits and their cultural assessments within the ancient northern African society. Only a rather thorough and careful documentation of the preserved monuments may mark a starting point for a wider overregional comparative study with other sites like Taucheira (Tocra) and Apollonia (Soussa).

Especially the three latter recommendations would require a close cooperation between international partners taking into account the size of the area and the variety of disciplines (archaeology, history, epigraphy, archaeometry, geoarchaeology) which must be involved in order to approach the complexity of the situation in the hinterland of Ptolemaiis. The authors express their sincere hope that a joint venture of Libyan and foreign scientists will be able to continue research in the near future, documenting and preserving this important heritage.

[^6]
## 2. The western necropolis of Ptolemaïs

### 2.1. Topography of the western necropolis

As already stated by the Oriental Institute of the Chigaco Expedition to Ptolemaïs under the directorship of C. H. Kraeling, a substantial feature of the Cyrenaican coastal cities is the profound use of quarries for burials. The question, whether the rock-cut premises originated primarily from quarrying activities or whether they were originally planned as burial compounds, is not easily to be answered. Some observations point to a primary use as necropoleis and only a subsequent, if not contemporary, opening for quarrying, while other tombs were certainly only cut into the rock after the extraction of building material. In the rocky spur along the coastal strip A west of the city, several major quarries were reported. The first and possibly oldest quarry is located within the perimeter of the later city wall. It went out of use at the latest, when the Roman amphitheater was emplaced in its eastern end, while quarrying was probably resumed here during later times ("City quarry" on Fig. 4). ${ }^{12}$ Only one rock with cut chambers in this quarry (FS462) might have served as tomb, but is probably of very late date. One kilometer to the west, at the borders of the modern city, a series of quarries are cut deeply into the rocky outcrop, extending ca. 1.7 kilometers to the west. More than 200 structures, including rock-cut tombs and free standing funeral buildings, have been documented in this area during the 2009 survey ("Western quarries" on Fig. 4). By far the largest quarry ("Main quarry" on Fig. 4), in which the well-known mausoleum (see below) still stands up to a considerable height, extends over more than 600 meters parallel to the coast line. Along the ancient road to Taucheira (Tocra) 13 more quarries have been recorded, supplying building stones to farmsteads, villages and outposts in that area. Five of these quarries (FS37. FS50. FS76. FS80. FS115, Fig. 5) have also been used for burials in rockcut chamber tombs. ${ }^{13}$ served from the top.


Fig. 4. Distribution of documented burial structures and presumed extension of the western necropolis.

In addition a number of randomly distributed single shaft and cist tombs have been documented on the rocky outcrops along the coast. The area outside the rocky spur offered only facilities for entirely constructed burial buildings and free standing coffins, of which the largest number can be seen today in the area adjacent to the western city wall. Most notable is a small eminence to the south of the western quarries, on which several large foundation blocks describe smaller quadrangular or rectangular structures (Fig. 4). ${ }^{14}$

During the 2009 preliminary survey of the western necropolis of Ptolemais, the authors of this report recorded some 400 tomb structures in the western extramural area of the city. The area used for burials focuses mainly on the area between the Quarry gate and the so-called Taucheira gate extending at least three kilometers westwards (the possible prospection zone is delimited to the west by a military compound). This observation is consistent with the
plan drawn by Beechey in the early $19^{\text {th }}$ century. He records "mutilated tombs" in that same area, ${ }^{15}$ which is now largely overbuilt by the modern village of Tolmeita. During the time of the author's stay at Tolmeita, a sewage digging program along the streets in the northern quarters of the modern village was carried out by a Brazilian Company. Due to the indefatigable vigilance of Mr. Sa’ad Shareef, numerous burial contexts had been recorded, thus confirming the uninterrupted extension of the western necropolis from the city walls to the quarries and beyond. It is tempting to assume that this area was bordered in antiquity to the north and to the south by two roads leading out of town. As already pointed out by A. Bazama and J. Reynolds, ${ }^{16}$ in reconsideration of thoughts of the late Professor Goodchild, the main street connecting Ptolemaïs to Taucheira went through a gate in prolongation of the via monumentale. This gate has been missed by the expedition of the Oriental Institute of Chicago
eral account on early travellers and their research on Ptolemaïs, cf. Reкowska 2012 (pp. 28-32 regarding the necropolis).
${ }^{16}$ Bazama-Reynolds 1978-79, 255-256.


Fig. 5. Mapping of rock-cut chamber tombs along the coastal road from Taucheira to Ptolemais.
and has unfortunately never been published. It is however reasonable to postulate, at least during Roman times, a street entering the city on the via monumentale (whether through a monumental gate or not would be a matter of further investigation). This is also confirmed by satellite imagery and the distribution of findspots in that area. In addition a concentration of architectural decoration elements and inscriptions, which may be related to funerary structures have been reported in this area (see below). A second street left the city some 200 meters further north through the Quarry gate connecting the quarries northbound. As witnessed by the free-standing mausoleum and several large formations with chamber tombs along the northern line of the necropolis facing to the sea side, this street was also of major importance, maybe during Hellenistic times.

In all likelihood these two streets converged somewhere beyond the quarries going on to Tocra. The Porta Taucheira actually led in direction of Barca (Al-Merdj). To the south of the street in prolongation of the Porta Taucheira only a few scattered rock-cut chamber tombs could be observed along the foothills of the Djebel Akhdar.

## 2. 2. Preliminary Typology of Funeral Architecture at Ptolemaïs

Previous studies of the western necropolis of Ptolemaïs focused mainly on the inscriptions ${ }^{17}$ and some outstanding monuments like the mausoleum (or tower tomb) ${ }^{18}$ and the tomb of the Kartilioi. ${ }^{19}$ No systematic description of the morphology of the tombs of Ptolemaïs has been undertaken yet. ${ }^{20}$ The 2009 survey was

[^7]tions of researchers from King's College London, University of Bologna, University of Macerata and the Centre de recherche sur la Libye Antique, Paris. As the inscriptions and their archaeological context at Ptolemaïs will have to be discussed within the frame of inscriptions of Cyrenaica, the authors refrain from further discussion until the forthcoming corpora are made available.
${ }^{18}$ FS195, see below.
19 FS314. Kraeling 1962, 111-113.
${ }^{20}$ Kraeling 1962, 109-110 describes briefly the spectrum of burial structures encountered at Ptolemaïs. The recently published observations on the necropoleis by the Polish mission add some information, mainly on the sarcophagi, cf.
planned as a first approach towards documenting the locations and the variety of burial structures in the vicinity of the ancient city. Based on these preliminary results further investigation would have been focused on some characteristic tombs. At the meantime the data quality would have been improved by documenting the dimensions and preparing in-scale drawings. While these works had to be postponed, some observations shall nevertheless be made on the spectrum of tombs in the necropolis of Ptolemaïs.

It is possible to distinguish five general types of burial architecture: built tower and temple tombs, rock-cut chamber tombs, smaller rectangular built tombs, cist graves as well as free standing sarcophagi. This is consistent with the expected spectrum of tombs encountered in Cyrenaica. ${ }^{21}$ During the first campaign it was not possible to address any chronological questions. Especially for chamber tombs a continuous use may be expected involving changes in the ground plan or the additional cutting of niches. Caution has also to be advised when trying to derive a social stratigraphy from tomb morphology alone. While the outstanding built tombs and mausolea certainly imply the commission of wealthy citizens, the reverse argument must not be true. At least during the early history of Cyrenaica up to the Hellenistic period, cist graves with a particular rich furniture are documented, thus pointing to burials of wealthy persons in simple graves. ${ }^{22}$ The inscriptions only may offer an important asset towards a better understanding of burial sequences as well as ethnical and social stratification. However, the above mentioned sewage construction project offered a glimpse at burial customs of lower

TAhIR 2012. The survey of 2009 supports Kraeling's preliminary categorization and may add accurate positioning data through GPs measurements, which allows some reflections on the topography of the necropoleis. The exact coordinates are available upon request from the authors.
${ }^{21}$ Dent 1985, 328-331.
22 Kraeling 1962, 109; Nasgowitz 1980, 32.
${ }^{23}$ G. Dennis recorded also in the western necropolis «sepulchres covered with flanged tiles, resting against each other, so as to form a penthouse over the corpse», cf. ReкоwSka 2012, 31. These structures could not be observed in 2009.
${ }^{24}$ FS195. cf. Caputo 1954, 43-48; Kraeling 1962, 112-113 fig. 39; Stucchi 1987, 284-294. 358-364 figs. 70-82. 190-198; Re-KOwska-Ruszkowska 2007, 75-88; Rekowska 2012, 29.
${ }^{25}$ Paolo Della Cella was the first one to suggest an attribution to Ptolemy VIII Physcon, a hypothesis supported by
social classes. The graves consist of simple ditches according to a sort of vernacular architecture, sometimes covered by undressed stone slabs or tiles. ${ }^{23}$ In some cases humble finds of pottery could be associated to inhumation burials.

### 2.2.1. Free standing tower and temple tombs

The first and most impressive group in appearance are large built tombs raising upon the virgin rock or on constructed terraces. These buildings sometimes intend to represent sophisticated temple-shaped monuments of Grecian blend, as observable by scattered architectural decorations (see below). The most impressive specimen of this type is a tower tomb, called Gasr al-Phira'oun in the local dialect, a landmark that none of the early travelers to Ptolemaïs failed to describe, has previously been studied and restored by Italian archaeologists. ${ }^{24}$

The actual impression with the high conjectured portal on its southern elevation is misleading, because the main facade with three false doors faces northwards where the via maritima runs through the necropolis. A Hellenistic date of this tower tomb has commonly been accepted, based on stylistic grounds. While a connection with the person of Ptolemy VIII Euergetes II has variously been suggested, any attempt to identify the original owner has to remain hypothetical for the lack of epigraphic evidence. ${ }^{25}$ In immediate vicinity of the Gasr al-Phira'oun are five cubical rocks located, ${ }^{26}$ one of which certainly served as foundation for a funerary superstructure (FS169, Fig. 6). ${ }^{27}$ C. H. Kraeling suggested al-
C. Kraeling. J. Reynolds rightfully contested the arguments on which this attribution was based. Kraeling 1962, 113; Bazama - Reynolds 1978-79, 259-260; Laronde 1987, 443444; Rekowska-Ruszkowska 2007, 79.
${ }^{26}$ Stucchi 1987, 272-273 designates a total of seven nuclei di tomba. The concordance to our numbers is as follows (Nucleo n. $1=$ FS196; n. $2=$ FS195; n. $3=$ FS167; n. $4=$ FS163; n. $5=$ FS168; n. $6=$ FS170; n. $7=$ FS169). However, due to its uneven shape, its inclined surface and its location FS170 (n. 6) should be ruled out for the time being from the series of free standing funerary monuments. It seems likely that it only became detached due to ongoing quarrying around the chamber tomb.
${ }^{27}$ Stucchi 1987, 331-332 reconstructs a circular body in top of a square pedestal. The circular shape could not be confirmed by the authors. Also the fragments of a doric frieze, mentioned by S. Stucchi, could not be located in 2009.


Fig. 6. Location of find-spots in the western necropolis mentioned in this article.
ready that the quarrying was only intensified after the construction of the tower tomb. Thus these cubical rock foundations would only be the result of the extraction of stone around them rather than prominent choices for tomb buildings. ${ }^{28}$ S. Stucchi points out that the southern face of the rock is treated in a different manner. Therefore he reconstructed a levelled access to the northern side, whereas the quarry was already at its present depth towards the back part of the monument. ${ }^{29}$ To these observations may be added that at FS167 (Fig. 6) a loculus is to be seen at an unual height and cut later by quarrying activity. On the contrary FS163 (Fig. 6) presents an elaborated facade with incised false ashlars on its northern side, indicating that the present ground level was reached, when the tomb was built. A similar situation can be seen at FS196 (Fig. 6), with a recess cut into the rock on the northern side, while remains of walls to the south imply an incorporation of the rock into built architecture at some point. It appears that
the area was subsequently, if not simultaneously, used as site for burials, as a quarry and finally again for rock-cut tombs. A better understanding of the chronology of the tombs might in future also enlighten further the history of stone exploitation at Ptolemaïs.

Somewhat smaller but once certainly impressive landmarks were circular tombs, of which S. Stucchi documented one in his fundamental publication on funerary architecture in Cyrenaica. ${ }^{30} \mathrm{~A}$ tomb of similar type may be added at FS254, where a circular stone foundation is still discernible on the surface today (Fig. 7). In addition several architectural elements were documented on this spot, which indicate the same decoration of Doric order implied by the findings from Stucchi's tomba circolare. The presence of further monumental tomb buildings is indicated by several findings of architectural elements and large foundation courses in the necropolis, most notably on the above mentioned elevation close to the western edge of the modern village (Fig. 4. FS 342 -


Fig. 7. Circular tomb FS254 and two fragments of its architectural decoration.

349, Fig. 6) and in close proximity to the north (FS319. FS323, Fig. 6). Most common are Doric friezes with metopes and triglyphs (FS254. $F_{320}$. FS321. FS 323 . FS349. FS 401 . FS404. FS464, Fig. 6), while an unfortunately badly mutilated sima with lion's head waterspout (FS286, Fig. 8) attests that also more elaborated solutions were sought. More built tombs will have to be expected in the area between the quarries and the shore, where one Doric frieze with decorated metopes as well as other elements from entablatures were found (FS209. FS210. FS286). Close to the western end of the necropolis Corinthian pillar capitals of ca. 90 cm width lie in the field (FS147, Fig. 9).

However, neither these capitals nor a larger complex of foundation courses and architectural elements further east (FS202) have to be attributed necessarily to funerary buildings. In three cases column fragments have been reported in the context of rock-cut tombs (FSi79. FS199. FS300). Whether they were displaced or
whether they formed part of the tomb architecture would be a matter of further investigation. The area close to the city wall also comprised a significant amount of architectural elements, concentrating along the prolongation of the via monumentale. The density of burials in this area is also confirmed by numerous sarcophagi and smaller constructed tombs.

## 2. 2. 2. Rock-cut Chamber Tombs

By far the most frequent ${ }^{31}$ encountered funerary monuments at Ptolemaïs are chamber tombs cut into the soft rock. The largest number of these made obviously use of the steep rock faces, which were made readily available by quarrying. For some cases along the northern side of the quarries (FS129-134. FS199-201. FS214. FS217-218. FS249-253, FIG. 6) it is more difficult to determine, whether such distinct forecourt areas result from random quarrying

[^8]rock-cut tombs on funerary monuments might have been considerably different in antiquity.


Fig. 8. Lion's head waterspout FS286.
or whether their layout was carefully planned from the outset. There is a clear predominance for the orientation of the entrance to the north. Only in the easternmost quarries chambers have been cut in all available walls. As to be expected the number of tombs fades out from east to west. West of the "main" quarry, no tombs are located directly in the quarries but enter the rock from the northern edge only.

The preservation of rock-cut tombs is throughout the necropolis very bad. All chambers have been opened, most of the entrances are severely damaged. ${ }^{32}$ The chambers are used as barns and stables, usually filled up to a considerable height with debris and modern garbage. ${ }^{33}$ A large number was thus not accessible at all. For a first approach towards a typology it seems appropriate to distinguish between tombs with resp. without a forecourt. These two groups may be differentiated further into loculi-tombs and chamber-tombs. In addition a few specimen provided with a narrow dromos leading down to the rock-cut tomb shall be considered as a variant of the tombs with forecourt. ${ }^{34}$ Three of the latter type are

[^9]

FIg. 9. Corinthian pillar capital FS147.
located at a wider distance in the western chora (FS81-83), one to the west of the modern military camp ( FS 121 ) and two at the western end of the necropolis (FS122. FS123). The majority of rock-cut tombs at Ptolemaïs has an axial sequence of at least two rooms, the first one serving as an antechamber giving access to up to four lateral annexes. Some tombs consist of just one rectangular to square single chamber hewn into the rock, in most cases badly weathered and not always distinguishable from natural caves. It is noteworthy that the small group of loculi-tombs is mainly located along the northern edge of the necropolis (FS122. 131. 164. 217. 200. 221. 223. 250., Fig. 6). ${ }^{35}$

While the chamber systems at Ptolemaïs bear some similarities - on a smaller scale with the 'Kenissieh'-coplex at Cyrene and to some extend to the late republican tomb $\mathrm{N}_{17},{ }^{36}$ the type of single chamber tombs seems to be

[^10]missing at Cyrene. ${ }^{37}$ Similar plans can be found at Tocra and Hadrianopolis, where they are dated to the $2^{\text {nd }}$ century $\mathrm{AD} .{ }^{38} \mathrm{~A}$ common feature in the majority of the documented tombs at Ptolemaïs are mostly square niches cut into the inside walls. They served as ossuary or cinerary niches, sometimes closed by vertical stone slabs, or they held busts of the deceased and funerary offerings.

Striking, at first, is the lack of architectural decoration of the facades, whereas incised false ashlars in an isodomic arrangement are frequently observed (FS160. FS163. FS172. FS176. FS181. FS185. FS228. FS246. FS290. FS314. FS315, Fig. 6). This kind of illusive masonry, which ultimately goes back to drafted masonry in Classical Greece, becomes widely spread during Hellenistic times, as shown by the entrance corridor (dromos) of the Macedonian tomb at Pydna or in the thalamos of Lyson and Kallikles at Vergina. The same element becomes a Leitmotiv of the Pompeian First Style. The necropolis of Cyrene bears also several examples for this kind of wall decoration. ${ }^{39}$ Two examples preserve the evidence of door frames cut in relief into the rock face (FS123. FS352, Fig. 6). Another decorative element widely used are finely chiseled false doors (FS214. FS236. FS238. FS249. FS283. FS314. FS365, FIG. 6). Few examples imply that the possibility of architecture facing the rock should not be ruled altogether. An in situ fragment of a door frame (FS289, Fig. 6) proves the existence of architectural elements cladding the rock. Furthermore a neatly cut recess over the whole facade in top of the door openings (FS160. FS161, Fig. 6) suggests the former presence of an entablature in a different material. ${ }^{40}$ Not least, a fluted column shaft found in one of the above mentioned forecourts (FS199, Fig. 6) may have once belonged to an architectural framing applied to the facade.

The most telling remains of ancient burial customs are evidently the inscriptions. ${ }^{41}$ Shallow niches on the facades for the insertion of inscribed stone slabs, often furnished with gabled tops, are common and make one regret the

[^11]once rich epigraphic documentation, which is lost today. Sometimes inscriptions have been carved directly onto the background of these niches, maybe in phases of secondary use.

If a tentative chronology of the rock-cut tombs in the western necropolis of Ptolemaïs shall be suggested, it appears that the earliest examples with large forecourts and loculi shafts may be found along the northern edge of the quarries. Convincingly they might be related to the main Hellenistic road connecting Ptolemaïs with the cities further west. Probably the eastern quarries were used for burials as well at the same time. With the expansion of the city and the requirement of building material during Roman times the "main quarry" grew in size and was eventually used for rock-cut tombs. If the assumption is right that the western quarries are youngest, the custom of cutting rock-cut tombs became apparently less common during the High and Late Empire. At the least, the absence of tombs in this quarries has to be noted, whereas some high quality forecourt-tombs border the street next to these quarries.

### 2.2.3. Smaller rectangular built tombs

In the area close to the city walls 212 structures have been documented, which may be related to small independent construction units. 53 of these show traces of use of opus caementitium, some of them in connection with fragments of sarcophagi (a minimum of 40 sarcophagi are attested by fragments of cases and lids in immediate vicinity of these structural remains). While some of these structures may be remains of isodomic-built tombs known from different places in Cyrenaica, ${ }^{42}$ the strong presence of opus caementitium is striking. As a preliminary working hypothesis these surface finds are linked to the sepulchral type of "funeral houses", which becomes the predominant form of funerary constructions during the $1^{\text {st }}$ century AD. These houses are not only widely built in central Italy but also documented abundantly in Asia Minor. ${ }^{43}$ They can be

[^12]built in ashlar masonry, but are more commonly constructed out of splitted stones and casted with ancient Roman concrete (opus caementitium). According to surface finds, this type is constrained on the area along the prolongation of the via monumentale. While a part of the area due south could not be included to the survey, lying outside of the protected zone and being subjected to modern agricultural use, the absence of structures along the wall in southern direction is striking. It appears that these relatively small buildings formed coherent units, partly sharing the long walls with each other and are actually concentrated on a distinct area. In addition podia for sarcophagi might well be expected to be represented by some of these structural remains. Further investigation, including a tachometric survey and soundings, is needed, in order to enlighten the situation in this area.

## 2. 2. 4. Cist graves

As already stated by C. H. Kraeling, burials in cist graves had been common during centuries, peaking maybe in the Hellenistic period. ${ }^{44}$ In most cases, these cists had been cut into the virgin rock and were covered with three or four flat stones. In the western necropolis they are variously attested upon the borders of the quarries forming groups of three or more, many times oriented in eastwestern direction (FS240. FS247. FS284. FS302. $\mathrm{FS}_{305}$. FS309. FS 327. FS 328 . FS368, Fig. 6). Two more groups of cist graves are located along the coastal road in direction to Tocra (FS5, one km east of Tocra and FS96, twelve km west of Tolmeita). Sometimes cist graves are associated with chamber and temple tombs, lowered into the floor, as demonstrated by the tomb of the Kartilioi. ${ }^{45}$ Due to the rubble fillings in most of the graves, they were not documented during the survey. As isolated installations, these shafts can only be dated when the context of the inhumation is preserved, thus they are of little interest for further investigations.

[^13]
## 2. 2. 5. Sarcophagi

Stone sarcophagi had been widely used either as isolated funeral monuments or associated with constructed house shaped tombs. When the Beechey brothers visited Ptolemaïs most of the sarcophagi had already been opened. Since, decay has continued ${ }^{46}$ and only some of the more important pieces are now preserved in the small museum. ${ }^{47}$ All but a few exceptions (FS307. FS309. FS360. FS371, Fig. 6) of the documented sarcophagi (cases, lids and fragments) lie scattered in the area next to the city wall. ${ }^{48}$ The majority consists of simple stone caskets covered by lid in form of a pitched roof. While little can be said conclusively from the fragments documented, the sarcophagi were certainly partly free standing monuments or deposited in the above mentioned funeral houses.

## 2. 2.6. Funeral Sculpture

Copious niches give a hint on a once rich sculptural decoration inside of the tombs and on their façades in the Roman period. Unfortunately these free standing sculptures are largely lost today. During the 2009 survey two badly weathered reliefs with figural busts were documented ( $\mathrm{FS}_{174} .260$.), last witnesses of this popular sculptural decoration in Cyrenaica. ${ }^{49}$ Worth mentioning are two sculptures in the round of lions (FS207, Fig. 10).

They were documented in 2009 approximately 100 meters north of the complex with forecourt (FS214) reused in a course of set blocks, forming a small precinct apparently out of use by the time. It is unlikely that they were dislocated over a large distance for this purpose, thus they probably stem from a nearby structure. Both sculptures had their heads cut off, in order to adjust them to the size of a building block. Made of local limestone the two crouching lions show traces of good workmanship and might date back to Hellenistic times, while a much later date cannot be ex-

[^14]

Fig. 10. FS207. Two lion sculptures from a funeral monument.
cluded. As lions are popular in funerary contexts throughout antiquity, it is extremely difficult to narrow down the date without a closer examination. However, despite the poor preservation state it is possible do determine that one side was worked less carefully. As these sides are opposed to each other in the two statues, they arguably formed once an antithetic pair implemented in the façade to either sides of the door or on top of a free standing tomb.

### 2.4. Recommendations for future work in the necropolis

The 2009 season opened a new perspective for research in the cemeteries of one of the most important Greco-Roman cities of the Cyrenaica. In order to make the monuments available for further study, a profound documentation is inevitable. The lack of plans and sections deserves intensive cooperation of architects and archaeologists. In some instances clearance and excavations should be taken into consideration. The coherence and structure of the cemetery might be better understood after a geophysical prospection supported by kite aerial photography. In addition 3D- photogrammetry, supported by selective laserscans, may offer a quick and cheap solution to document the ground-plans of some of the rock-cut chamber tombs. In the author's opinion priority should be given to the following structures:

1) New documentation of the tower tomb of Gasral-Phira'oun (FS195) with plans and sections in order to enable a comparative study with the Taucheira gate.
2) Clearance and excavation of the round structure ( FS 254 ) which is probably a cylindrical mausoleum. This type of tomb is rarely attested in eastern Libya but might be compared circular tombs known from the necropolis of Cyrene.
3) Clearance and excavation of the square foundation structure ( $\mathrm{FS}_{34} 39$ ) which is preserved in four layers of masonry. This ruin represents probably the type of a representative mausoleum.
4) Clearance and excavation of the houseshaped tombs with opus caementitium masonry ( FS 476 ) close the western city wall. Only further investigations in the field may provide a better classification, enabling a comparison with free built tombs in Cyrenaica and in the central Italian mainland.
5) Clearance and excavation of the rock-cut chamber tomb with its quadrangular courtyard (FS121). This funeral building is of great interest because it occupies isolated the top of a flat hill. The location probably points to a special social status of the owners.

Illustration credits: Figs. 1, 5: Map created by Frederik Berger based on Srtm-data courtesy of the u.s. Geological Survey; Figs. 4, 6: Map created by Frederik Berger based on Google Earth Image © 2015 CNES / Astrium; Figs. 2, 3, 7, 8, 9, 10: Photos Thomas M. Weber-Karyotakis.

## Bibliography

Bazama-Reynolds 1978-79: A. Bazama, J. M. Reynolds, Some new Inscriptions from the cemeteries of ancient Ptolemais, «Libya Antiqua», 15, 197879, 255-261.

Berns 1996: Chr. Berns, Sēmata: Untersuchungen zu den Grab- und Memorialbauten des späten Hellenismus und der frühen Kaiserzeit in Kleinasien (1996), available online: urn:nbn:de:hbz:38-10255 (31.07.15).

Bogacki 2009: M Bogacki, Topographical survey in the area of two Christian buildings outside the city walls of Ptolemais (Cyrenaica, Libyia), «Światowit», 8, 2009, 45-50.
Caputo 1954: G. Caputo, La protezione dei monumenti di Tolemaide negli anni 1935-1942, «QuadALibya», 3, 1954, 33-66
Dent 1985: J. Dent, Burial Practices in Cyrenaica, in Cyrenaica in Antiquity, eds. G. Barker, J. Lloyd, J. Reynolds, Oxford, 1985 («bar International Series», 236).
Goodchild 1950: R. G. Goodchild, Roman Milestones in Cyrenaica, «BSR», 18, 1950, 83-91.
Goodchild 1968: R. G. Goodchild, Roman Roads in Libya and their Milestones, in: Libya in History, Historical Conference 16-23 march 1968, Beirut, n.d., 155-171.
Kraeling 1962: C. Kraeling, Ptolemais, City of the Libyan Pentapolis. Oriental Institute Publications, Vol. 90, Chicago, 1962.
Laronde 1981: A. Laronde, Variations du niveau de la mer sur les côtes de Cyrénaïque à l'époque historique, «DossAParis», 50, 1981, 60-65.
Laronde 1987: A. Laronde, Cyrène et la Libye hellénistique. Libykai historiai de l'époque républicaine au principat d'Auguste, Paris, 1987.
Laronde 1988: A. Laronde, La Cyrénaïque romaine, des origines à la fin des Sévères (96 av. J.-C. 235 ap. J.-C.), in ANRW II, 10.1, Berlin, 1988, 10061064.

Mohamed-Reynolds 2004: F. A. Mohamed, J. M. Reynolds, A new Cyrenaican milestone, in L'Africa Romana. Atti del xv convegno di studio Tozeur, 11-15 dicembre 2002, eds. M. Khanoussi, P. Ruggeri, C. Vismara, Rom, 2004, 1297-1301.
Nasgowitz 1980: D. Nasgowitz, Ptolemais Cyrenaica, Chicago, 1980.

Oliverio 1932: G. Oliverio, La stele di Tolemeo Neòteros, re di Cirene, Bergamo, 1932 («Documenti antichi dell'Africa italiana», 1. 1).
Oliverio 1936: G. Oliverio, Il decreto di Anastasio I su l'ordinamento politico-militare della Cirenaica, Bergamo, 1936 («Documenti antichi dell’Africa italiana», 2. 2).
Purcaro Pagano 1976: V. Purcaro Pagano, Le rotte antiche tra la Grecia e la Cirenaica e gli itinerari marittimi e terrestri lungo le coste cirenaiche e della Grande Sirta, «Quaderni di archeologia della Libya», 8, 1976, 285-352.
Rekowska 2012: M. Rekowska, Ptolemais in early European research and topography of the city in travellers' accounts, in Ptolemais in Cyrenaica. Studies in memory of Tomasz Mikocki, ed. J. Zelazowski, Warsaw, 2012, 1-34.
Rekowska-Ruszkowska 2007: M. RekowskaRuszoowska, The Mausoleum at Ptolemais in Traveler's accounts, «ArcheologiaWarz», 58, 2007, 75-88.
Reynolds 1971: J. M. Reynolds, New boundary stones from the public land of the Roman people in Cyrenaica, «Libya Antiqua», 8, 1971, 47-49.
Reynolds 1990: J. M. Reynolds, Some inscriptions of Roman Ptolemais, Giornata lincea sull'Archeologia Cirenaica, Roma 3. novembre 1987, Rome, 1990, 65-74.
Reynolds 2000: J. M. Reynolds, A boundary stone found near Benghasi, in 'E $\pi \iota \gamma \rho \alpha \varphi \alpha$ í. Miscellanea epigrafica in onore di Lidio Gasperini, ed. G. Paci, Tivoli, 2000, 833-839.
Rosenbaum 1960: E. Rosenbaum, A Catalogue of Cyrenaican Portrait Sculpture, London, 1960.
Stucchi 1976: S. Stucchi, Architettura cirenaica, Roma, 1976.
Stucchi 1987: S. Stucchi, L'architettura funeraria suburbana cirenaica, «QuadALibya», 12, 1987, 249377.

Tahir 2012: Faraj A. K. Omran Tahir, The Ancient sarcophagus from the basilica in Wadi Omran and the necropoleis of Ptolemais, in Ptolemais in Cyrenaica. Studies in memory of Tomasz Mikocki, ed. J. Zelazowski, Warsaw, 2012, 101-111.

# COMPOSTO IN CARATTERE SERRA DANTE DALLA 

FABRIZIO SERRA EDITORE, PISA • ROMA.
STAMPATO E RILEGATO NELLA
TIPOGRAFIA DI AGNANO, AGNANO PISANO (PISA).

Dicembre 2016
(CZ 2•FG 21)



[^0]:    ${ }^{3}$ The milestone has been found west of Ptolemaïs, between the Hellenistic Mausoleum and the Wadi Khambish $=$ seg 9, 413. cf. Goodchild 1950, 86 no. A.

[^1]:    ${ }^{1}$ Kraeling 1962, 36.
    ${ }^{2}$ On a synopsis of ancient itineraries cf. Purcaro PagaNo 1976.

[^2]:    recommended. As far known, the milestones found in 2009 near Taucheira have never been published before.
    ${ }^{5}$ The map has been reprinted by Kraeling 1962, 40, fig. 4.

[^3]:    ${ }^{4}$ This find was shown to the Director of Antiquities of the Cyrenaica, Mr. Ibrahim Tawahini, and to Professor Ahmad Bouseian on November $12^{\text {th }} \mathbf{2 0 0 9}$, and a future transport to the Museums of Tomleita or Tocra was urgently

[^4]:    ${ }^{6}$ Laronde 1988, 1007-1008. The last Lagid king, Ptolemaios Apion, died in 96 BC.

[^5]:    7 Kraeling 1962, 105-107.
    ${ }^{8}$ Kraeling 1962, 106, figs. 34, 36 not fig. 35 !
    ${ }^{9}$ Kraeling 1962, 106, fig. 33.

[^6]:    ${ }^{12}$ Cf. Kraeling 1962, 108.
    ${ }^{13}$ The fact should be noted that the largest of these quarries (designated the $4^{\text {th }}$ quarry by Kraeling 1962, 108) with an extension of ca. 100 by 300 meters does not show any immediate signs of funeral usage. Even though it was

[^7]:    17 The necropolis at Ptolemaïs is relatively rich in inscriptions, almost exclusively written in Greek. During the campaign of 2009, a complete corpus of some 60 inscriptions has been assembled by the authors. The quality of the inscriptions is very heterogeneous, ranging from crude graffiti cut in the unpolished rock to properly set letters in a tabula ansa$t a-$ or naiskos-frame. The first systematic compilation of the inscription has been established by G. Oliverio between 1932 and 1938. Since, a number of articles have been published, mainly by J. Reynolds (see Bibliography for a more conclusive account). Forthcoming is the online edition of all Greek and Roman inscriptions from Cyrenaica within the scope of the project "Inscriptions of Libya (InsLib)" under the direc-

[^8]:    ${ }^{31}$ During the 2009 survey 149 rock-cut tombs were localized in the western necropolis alone. However, as most of the built structures are not readily visible, the percentage of

[^9]:    32 During his expedition on behalf of the authorities of the British Museum, George Dennis travelled through Cyrenaica in 1864-1868. He systematically opened the tombs he encountered in the eastern and western necropolis in search for valuable objects. However, he considered disappointing his finds of plain pottery, poor-quality jewelry, broken amphorae, glass unguent vases and lamps.
    ${ }_{33}$ The rock-cut chamber tombs were already used in

[^10]:    Late Antiquity as stables or dwellings for the poor, cf. StucCHI 1976, 501, $511 . \quad 34$ Cf. Dent 1985, 331.
    ${ }^{35}$ Only three more tombs belong to this group: FS233 in the "main quarry" and $\mathrm{FS}_{314}$, the tomb of the Kartilioi (cf. Kraeling 1962, 111-112; Stucchi 1976, 111-112). The loculus visible in the rock cube mentioned above ( FS 167 ) was presumably cut already before the quarry was exploited.
    ${ }^{36}$ Thorn 2005, 344-345, 349, 355, 361, fig. 393.

[^11]:    37 Thorn 2005, 464.
    ${ }^{38}$ Thorn 2005, 463-464.
    ${ }^{39}$ E.g. N10, N55, N228, N 258 cf. Thorn 2005
    ${ }^{40}$ In addition regular cut recesses in the rock may point to some sort of construction applied to the facade at FS179. 324. 325.357.

[^12]:    ${ }^{41}$ Cf. above footnote no. 17.
    ${ }^{42}$ Dent 1985, 328-331, fig 28.1 no. 4; Thorn 2005, 397-410, fig. 239-246. ${ }^{43}$ Berns 1996, 146-148.

[^13]:    44 Kraeling 1962, 109; Dent 1985, 328.
    ${ }^{45}$ Kraeling 1962, 113.
    ${ }^{46}$ G. Dennis, who travelled Cyrenaica some 40 years after the Beechey brothers also opened sarcophagi in search for objects, cf. above footnote no. 33
    ${ }^{47}$ Cf. Tahir 2012, 103-104, 106-111 with further references.

[^14]:    48 In total 59 numbers were recorded in the designated area, including sometimes several pieces.
    ${ }^{49}$ On funerary busts from Cyrenaica, cf. Rosenbaum 1960, 13-28.

