

THE PERIPHERY OF LEPCIS MAGNA
SUBURBAN TOPOGRAPHY AND LAND USE OF A ROMAN CITY

VOL. I - SYNTHESIS

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ABSTRACT

THE PERIPHERY OF LEPCIS MAGNA SUBURBAN TOPOGRAPHY AND LAND USE OF A ROMAN CITY

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This PhD thesis is a study of the periurban space of the North African ancient city of Lepcis Magna (Tripolitania, Libya). More than 350 sites and significant finds are for the first time collected and analyzed in order to consider several aspects of suburban activities (infrastructural, social, religious, productive). The selected timeframe spans from the Punic period (sixth-fifth centuries BC) through the Roman provincial era including Late Antique and Byzantine phases (fourth to sixth centuries AD).

The data related to the sites comes from recent unpublished surveys in which I took part (2007-2013) in addition to the information gained from archives and Superintendency reports. All the data are included in a site gazetteer (Volume II) that also comprises some appendices and tables. The discussion in Volume I (Synthesis) comprises the analysis related to multiple aspects of the ancient suburban landscape of Lepcis: the road network, religious structures, military installations, hydrological structures, *villae*, farms, entertainment structures, workshops, warehouses, caravanserais, docks, quarries, and funerary structures.

Among the key achievements of the thesis are: a reappraisal of the roads around Lepcis and the identification of a block of centuriated land to the south-east of the city; a proper classification of ancient hypogean tombs and *mausolea*; a quantitative assessment of rural production based on ancient presses; the first comprehensive study of ancient stone quarrying and water supply arrangements; the changing distribution of all of these activities over time and according to distance and its relationship with the city.

The analysis of this data aims to highlight the economic, political and social aspects of the periphery of Lepcis Magna and demonstrates the development of the city itself through the centuries. Moreover, this thesis aims to better understand the phenomenon of Roman suburban spaces more generally and contributes to the knowledge of these significant ancient landscapes.

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CHAPTER 1

QUESTIONS AND RESEARCH METHODOLOGIES

1.1. AIMS OF THE RESEARCH

The extension and magnificence of the monumental centre of the ancient city of Lepcis Magna, one of the most important harbours of ancient North Africa, are already well known through numerous excavations and studies of many of its buildings. The fundamental importance of this city, especially during the Roman imperial period, should equally have been reflected in its extra-urban landscape.

Lepcis Magna's periphery is characterized by several archaeological evidence types, up to now inadequately analyzed and never put in a general context to facilitate a complete and a general point of view. The main aim of the present PhD research is the analysis of all those processes that led to the formation of a unique, complex and multifunctional anthropized landscape, through the study of single types of structures (residential, funeral, productive, infrastructural, religious, defensive and related to entertainment). The research attempts to offer a cross-section through all the functional aspects and social levels that characterized the Lepcitanian periphery.

Unlike the considerable archaeological interest in its monumental centre over the last century, whose public buildings were and still are object of different researches, the periphery of Lepcis has never been the subject of an overall and diachronic study. By focusing on the data produced by recent research projects and on topographic studies, the present PhD research aims to centre the attention on two key questions:

- How did the periurban area of this city develop across time?
- What were the distinctive features of an area that likely served as hinge between the urban space and the rich Tripolitanian agricultural hinterland?

These two important questions subtend a series of minor issues related to each topic and site categories that will be analyzed separately in every chapter of the thesis and could point out important aspects of Lepcitanian economic life and society.

A further aspect of the thesis is to consider the phenomenon of Roman suburban spaces more generally and to reflect on the contribution of the new data from Lepcis Magna to those wider debates. One of the main aims of this thesis is indeed to offer the reader a significant case study of a peripheral area that can be compared with other cities both in regional scale (North

Africa) and beyond. A further purpose of analyzing the Lepcitanian sites is to enrich our knowledge about the nature and development of suburban landscapes and to take into account the dynamics of different land use of these areas over the centuries.

The analysis of these archaeological data makes it possible to relate the peripheral landscape of Lepcis Magna with both the characteristics and development of the city itself, and the external events that involved the history of the region, in a diachronic and topographic manner. Furthermore, as often happens in provincial areas, this research engages with aspects and methods of Romanization (thus updating the debate on this topic) and, eventually, the persistence or survival of autochthonous peculiarities.

1.2. SETTING THE GEOGRAPHICAL AND CHRONOLOGICAL LIMITS

The geographical frame of this research is the area around the ancient city of Lepcis Magna and the modern urban centre of Khoms (figs 1.1-1.2). The investigation presents archaeological evidence from the Punic phase until the Byzantine period.

The main aim is to analyse the development and peculiarities of the landscape immediately outside the ancient city of Lepcis through 13 centuries (sixth century BC - seventh century AD). Although the physical boundaries appear to be intangible, the geographical limits have been selected by considering two main factors. The primary one is conditioned by the areas covered

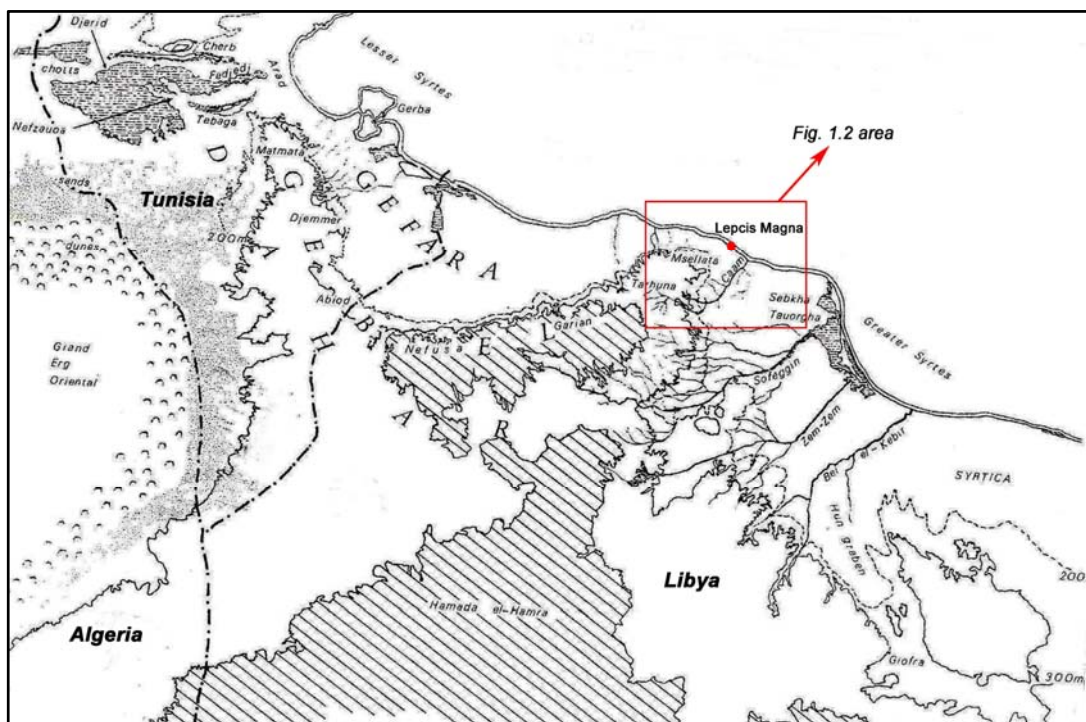


Fig. 1.1. Physical map of Tripolitania with highlighted the territory around Lepcis Magna (fig. 1.2) (after MATTINGLY 1995, fig. 1:1).

by recent surveys undertaken in the last 20 years by the Roma Tre University survey team in the Leptitanian territory (see par. 1.3). The second aspect has a theoretical nature: the present analysis includes all the archaeological evidence (structures, traces of settlements or traces related to land exploitations or alterations) that were in some way connected to the city.¹ Considering and merging these two aspects the total area analyzed measures c.140 km² and, from the city core, the furthest points to the northwest and west are c.11-10 km distant, c.8-7 km to south and southeast and 4 km to the east.

However, since the aim of the research is the analysis of a portion of land close and therefore connected to an important ancient city, it is fundamental to define both conceptually and linguistically the terms used by the ancient and modern literature to indicate such spaces (for a recent detailed account see MANDICH 2015, 81-83). Often texts use interchangeably the terms *suburbium* (and suburban), periphery (and peripheral), periurban and hinterland probably sometimes in an inaccurate way since some differences occurred among them (for recent analysis related to research on ancient periurban landscapes see MÉNARD, PLANA-MALLART 2015; LEMAIRE 2015).

A first point to stress is the improper use of the term "*suburbium*" often assigned to any

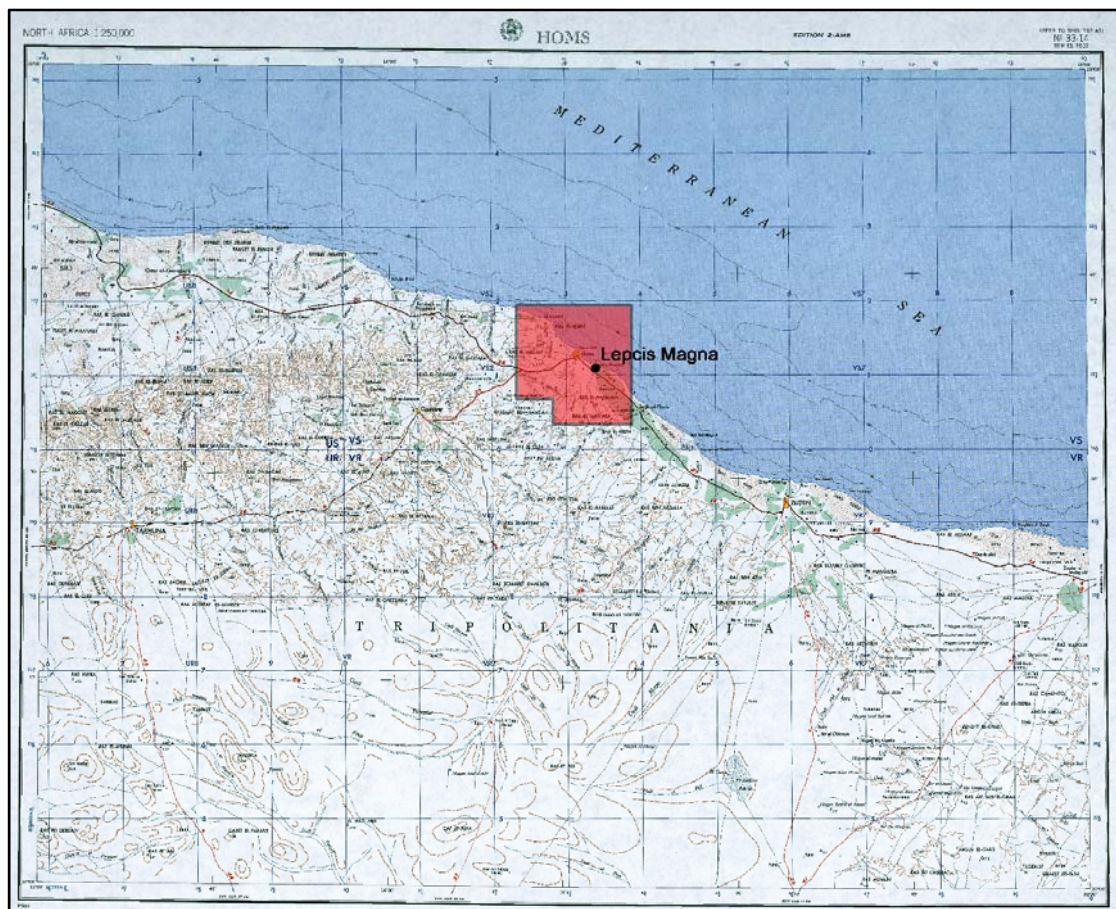


Fig. 1.2. The area investigated highlighted in red (background image: USACE 1953).

¹ The present research includes the nearest evidence from Leptis Magna of the Wadi Caam aqueduct (Aq5) - closely connected to the city - but not its starting point, located c.20 km to the southeast.

ancient city's external landscape. According to different scholars who have analyzed ancient sources, it should be used not to indicate a specific territory but rather a "state of mind" (CHAMPLIN 1982, 97; PANCIERA 1999, 12; *LTURS* I, 1-5). The term "suburbanus" must be then understood not as a specific physical portion of land, but has to be referred to all the places provided with *vicinitas*, *salubritas* and *amoenitas* that allowed *otium* to the Roman élite. These places (essentially *villae*) could therefore be located within or outside any kind of city boundaries, but still linked with it and with its public life. Moreover, the expression "suburbium" has to be attributed to the places mentioned above exclusively "around" Rome and should not be used for other towns (GOODMAN 2007, 2-3). Finally, the term has been adopted since modern times to indicate specific areas - in Europe and in America - located outside the city cores (GOODMAN 2007, 3) and, actually, is commonly used to designate the edge of large towns or cities both ancient and modern.

The terms "periurban" and "periphery" are both used in modern times to indicate the edge, the surroundings or the outskirt of a city/urbanized area and are universally used by contemporary literature also for ancient cities. The modern German expression "hinterland" has a different meaning. Contrary to the above terms, it implies generally a wider area beyond the urban centre and is commonly used to designate all the districts that are economically involved with a specific city market or a port (for its use in relation to ancient economies, see GOODMAN 2013).

In this research I will use indistinctly all the terms mentioned above. However, in order to establish the geographical limits of the study, it seems suitable to follow the simple definition given by Goodman (2007, 1): "A city's periphery can be taken to mean any occupation on the fringes of a city which is neither fully urban nor fully rural in character". Similar to this basic interpretation is the equally valid definition given by Fernández Vega (1994, 143) who considered a periurban area "a space of transition between the country and the city which unites characteristics of both but which is difficult to ascribe to one or the other". Ultimately, the main reason to set a topographic and geographic frame in this research was in order to comprehend the features stated by the two scholars including also the two landscapes strictly connected with the periphery: the urbanized area (the city itself) and the fully rural countryside that has been registered further out.

The time span considered in the research is set in part by the archaeological data available. The most ancient suburban sites registered are Punic tombs dated to the sixth century BC, that is pretty close to the first structural evidence found within the city: the remains of a large building dated to the seventh century BC (see par. 2.1.1). The present investigation ends at the seventh century AD, that is the end of the short Byzantine domination in Lepcis Magna and the consequent occupation of its remains and of its surrounding lands by the Arab tribes.

1.3. THE DATA COLLECTION: PREPARING THE SITE GAZETTEER

The data collection and the organisation of the information gained constitutes a basic and important step to develop properly an annotated list of the sites (the site gazetteer - vol. II). In this research "site" means a *locus* of past human activity, from the small single evidence to a large multi period settlement (see BEN LAZREG, MATTINGLY, STONE 2011, 58-59). The effort made to collect information turned out to be fundamental since, till now, the Lepcis Magna peripheral landscape has never been studied in depth (for previous studies see par. 2.3). Apart from some scattered finds and various important structures (some *mausolea*, a few *villae*, the amphitheatre and the circus) the majority of the sites included in the site gazetteer are indeed unpublished or scarcely known. The documentation used to compile the site gazetteer is essentially of three types: reports of archaeological field surveys, records of the local Department of Antiquities and historical documentation.

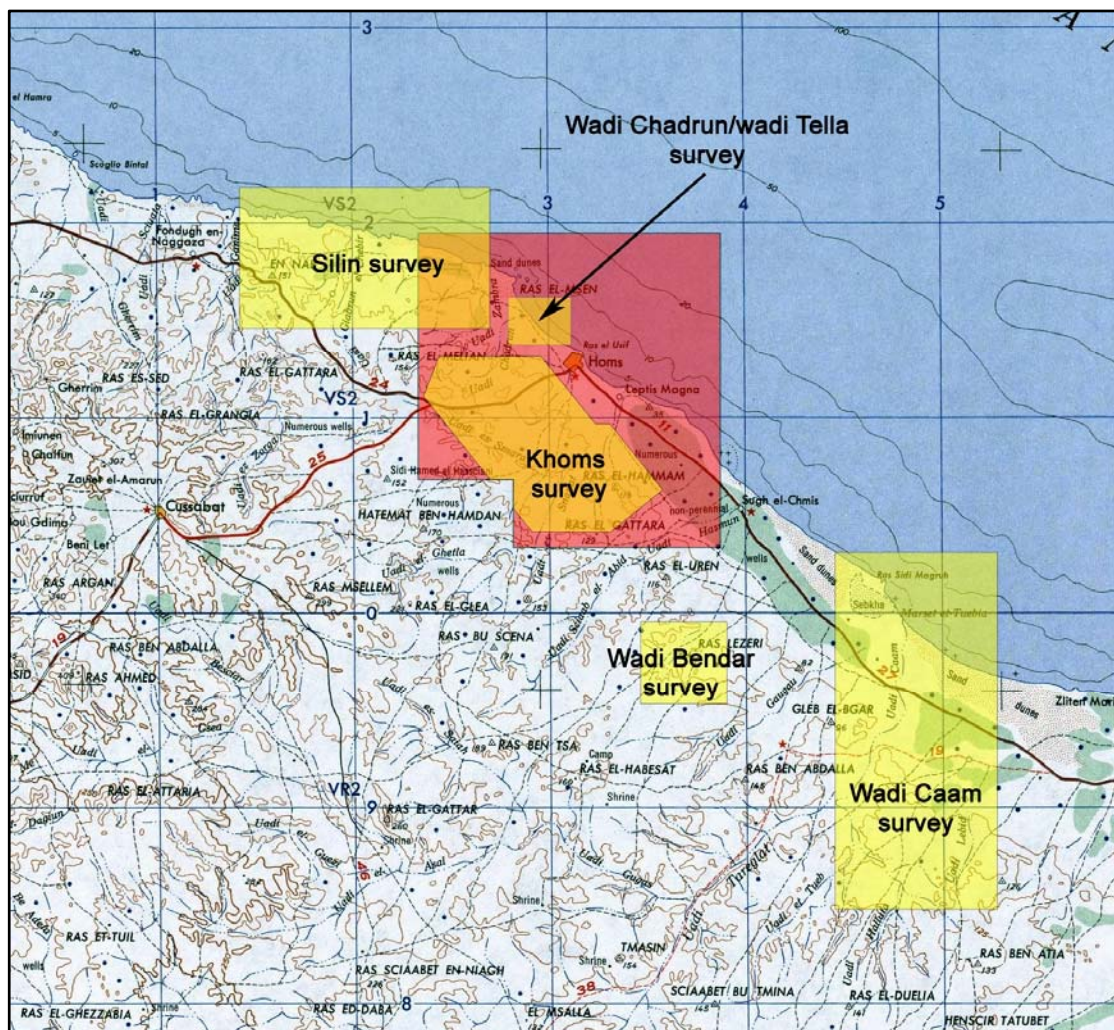


Fig. 1.3. The area investigated (red polygon) and the Roma Tre University surveys (background image: USACE 1953 - detail).

The first type of documentation comes from previous surveys. Over the last 20 years the Roma Tre University Archaeological Mission has undertaken several investigations in different parts of the Lepcitanian territory (fig. 1.3). Beside the surveys realized along the Wadi Bender (FONTANA, MUNZI, RICCI 1996) and Wadi Caam/Taraglat (in 1999-2000 - unpublished), the Khoms survey covers the territory between Ras el-Mergheb and Ras el-Hammam (in 2007, 2009, 2013). The 168 sites surveyed within this territory have previously only been published in general overviews of the landscape and its exploitation from the Punic phase until the Italo-Turkish war (MUNZI *et al.* 2010; 2011; 2013; 2014; 2016). Besides Khoms survey, part of the Silin territory was surveyed in 1997-1998. This area, a coastal zone located in the west hinterland of Lepcis Magna, yielded a basic gazetteer of its 63 sites (MUNZI *et al.* 2004). Between Khoms and the Silin region the areas along the Wadi Chadrun and Wadi Tella were also partially investigated (in 1999, 2000, 2003). The 23 sites registered in this district are, to date, still unpublished.

Both the Khoms and the Wadi Chadrun/Wadi Tella surveys have been included in this research, along with data from the east part of the Silin region. Since 2007 I took part in the Khoms survey and I also had the chance to access the data both of the Silin area survey and the Wadi Chadrun/Wadi Tella survey. A total of 188 sites from these surveys are integrated in this research and the majority of them were provided with detailed descriptions and dating (almost always inferable from the pottery findings).

The second type of documentation comes from the activities of the Lepcis Magna Department of Antiquities (LMDoA) staff. These documents, actually held in the LMDoA Archive, comprise written reports, drawings and photographs realized from the 1960s onwards. The majority of these records concerns emergency excavations around Lepcis nearly always related to hypogeal tombs, though other sites such the at-Thalia villa (VI1) and the so called "Villa dello Sparto" (VI6) are included.² Together with the written documentation, in recent years the Roma Tre University Mission was able to catalogue thousands of unpublished items belonging to the grave goods of the numerous *hypogea* that have been excavated in the last 50 years by the LMDoA. The partial analysis of this huge amount of finds, currently stored in the LMDoA warehouse, has been fundamental because it allowed us to date the majority of the *hypogea* around the city.³

The last type of documents used to compile the site gazetteer comprises historical documentation, most of it unpublished, collected in several archives. Essentially these comprise photographs, aerial-photographs and maps realized mostly in the first half of the last century, between the beginning of the Italian occupation of Tripolitania and the British Military Administration period.

² Both the photographs and drawings have been scanned and the written reports have been translated from Arabic into Italian.

³ I took part in this project from 2006 until 2009 and have had access to the data acquired. For a brief presentation of the project see MUSSO *et al.* 2010, 58-64.

In chronological order the first documents available are the photographs taken in the outskirts of Lepcis by the *Missione Mineralogica Italiana* led by Ignazio Sanfilippo in 1911 and still preserved in the photographic archive of the *Società Geografica Italiana* (SGI).

With the outbreak of the Italo-Turkish war in 1911, the Italian occupation of Khoms and the subsequent clashes with the rebels that occurred in that district, demanded a significant presence of soldiers and a meaningful effort to control the landscape behind the shore (see par. 2.3). In this delicate context, the personnel of the cartographic sector of the army, together with the pioneering use of aeroplanes, produced aerial-photos and maps of the area now preserved at the *Istituto Geografico Militare* archive (IGM) and in the archive of the *Ufficio Storico dell'Aeronautica Militare* (USAM). Related to the same initial colonial period, are also several documents acquired by me from antique markets. Personal private photographs were indeed common in that period and, often, they were printed as postcards to send to the motherland. In the rich archaeological landscape of Lepcis Magna, the ancient ruins offered indeed an appreciated backdrop, providing us with angle-shots of sites otherwise unknown or little-known. A remarkable discovery from the antique market is represented also by unpublished maps produced by Palmiro Storti, a soldier-topographer of the Brigata Murge who in 1919 created detailed Indian ink drawings of the area investigated in this research (see par. 2.3 and figs 1.5, 2.22-2.23).

Related to the following colonial period is the photographic documentation produced by different superintendants of archaeology or by various personnel. Primarily this documentation was held in the main DoA archive of the region, that is in Tripoli castle. After the Italian colonial period, Ward-Perkins and Di Vita transferred part of the Tripoli archival material to Italy, the former putting material into the photographic archive of the *British School at Rome* (BSR) and Di Vita into the archive of the *Centro di documentazione e ricerca sull'archeologia dell'Africa Settentrionale* at the University of Macerata (CAS). At the British School are also housed numerous photos and sketches realized by Ward-Perkins together with Goodchild and different WWII RAF aerial photographs of the Lepcitanian suburban area. These were used by the two scholars for their archaeological researches. Part of the papers of Ward-Perkins (however, mainly related to the Severan buildings of the city core of Lepcis) and other 1940s aerial-photographs are also held at the archive of the *Society for Libyan Studies* (SLS) held at the University of Leicester (LEITCH, NIKOLAUS 2015).

The total number of the historical documents acquired from archives and from the antique markets is 199 (150 photographs, 30 aerial-photos, 3 drawings and 16 maps).

Merging all the data from the three types of documents mentioned above, plus the information gathered from literature, it has been possible to identify and locate 352 ancient sites including structures, potsherd scatters and isolated finds. This large quantity of data

represented the starting point for my site gazetteer and the linked GIS I created to display and to analyse the data.

1.4. ORGANIZING THE DATA: COMPILING THE SITE GAZETTEER

The quantity and the variety of the sites identified necessitated their organization through a methodological framework that underpins the detailed site gazetteer presented in volume II of this thesis. In the gazetteer the sites are divided into seven sections according to their main function. To help the reader and the display on the maps, every single function is distinguished by an abbreviation composed of two letters, followed by a number that identifies the individual site. For an explanation of the organization of the site gazetteer see volume II, 1-2.

1.5. THE REALIZATION OF A GIS BASE MAP AND GENERAL STRUCTURE OF THE THESIS

The multifunctional archaeological landscape, together with the variegated environment in which the sites are set, necessitates the creation of an accurate and detailed map in order to display all the information. Moreover, the need to collate and overlay several cartographies, aerial photographs and satellite images, together with the need to utilise tools of spatial analysis, made it essential for me to create an editable map using a GIS programme.⁴

The issues that have arisen in creating a proper GIS map were twofold; on the one hand the lack of an exhaustive modern cartography of the area to use as a base and on the other the major recent transformations that have visibly impacted the Lepcitanian landscape in the latest maps available. Since the ideal aim of any GIS archaeological base map is to create a detailed cartography as close as possible to the ancient landscape (that is before the recent land exploitation and intense overbuilding), it was decided to create a new map merging the data from a set of existing cartographies.

The new map (fig. 1.4) was indeed generated using the accurate 1:25,000 scale unpublished cartography made by Palmiro Storti in 1919 (fig. 1.5) with its detailed 10 m contour lines amalgamated with the modern 1:50,000 scale maps realized in 1979 by a Polish team (fig. 1.6) and the earlier 1:50,000 scale maps made by the US Army (USACE 1962a-b). The cartography realized by Storti has a double advantage: it is the only existing 1:25,000 scale map available that comprises almost all the area of the present investigation and it was also drawn before modern disturbances affected and modified the landscape. This latter detail is not irrelevant since, for

⁴ The programmes that have been used are ArcMap 10.3.2 and ArcScene 10.3.2 (for 3D models).

instance, large portions of land have been heavily eroded by quarrying activities (e.g. the Ras el-Manubia hill has been completely erased by the el-Mergheb cement factory), the expansion of the city of Khoms and the construction - with its subsequent enlargements - of the modern harbour of Khoms (Ras el-Msenn promontory) has massively affected the original topography. However, since the Storti's map was made without geodetic points, it has had to be corrected by merging it with the more modern American and Polish cartographies. The georeferencing process used on Storti's map has indeed shown discrepancies with satellite images and with recent maps and thus, where the inaccuracies were more substantial, its precious topographic details were vectorized and then transferred in the US and Polish documents used as a "temporary" base maps.

The historical and geographical background of the area is presented in chapter 2. The bulk of the first volume of the thesis is then structured in four main chapters according to the types of sites that have been analyzed. Chapter 3 deals with the sites related to (urban) infrastructures and other suburban public buildings. Under urban infrastructures I include roads, water supply, flood protection measures and town defences. The following chapter relates to the evidence of the funerary landscapes, establishing a new typology for funerary monuments (especially hypogean tombs and *mausolea*) and establishing the location of the main cemetery zones and isolated monuments. Chapter 5 then turns to economic activities, with a main focus on rural settlement in close proximity to the city (especially that related to olive oil production), but also a consideration of the exploitation of stone sources, possible urban manufactures and special facilities relating to caravan trade and overseas exports. Chapter 6 focuses on one distinctive class of suburban/rural dwellings, the luxury villas. Though these can also often be linked with evidence of the productive economy, they merit separate treatment in relation to their significance as a form of social display. In chapter 7, an overall summary of the evidence is offered combining all the data gathered for a diachronic analysis of the changing suburbs and hinterland of Lepcis, with a secondary analysis also reflecting on change with distance from the city and in different ecological divisions of the hinterland.

In addition to the site gazetteer, volume II of this thesis also presents a series of tables of data and other analyses that support the arguments presented in the main text (see volume II, 1-2 for details).

From this research, a new understanding emerges not merely of the suburban zone of Lepcis Magna, with significant implications for our understanding of the city's history, but also with wider relevance to the debate about the peri-urban landscapes of other ancient cities in North Africa and beyond.

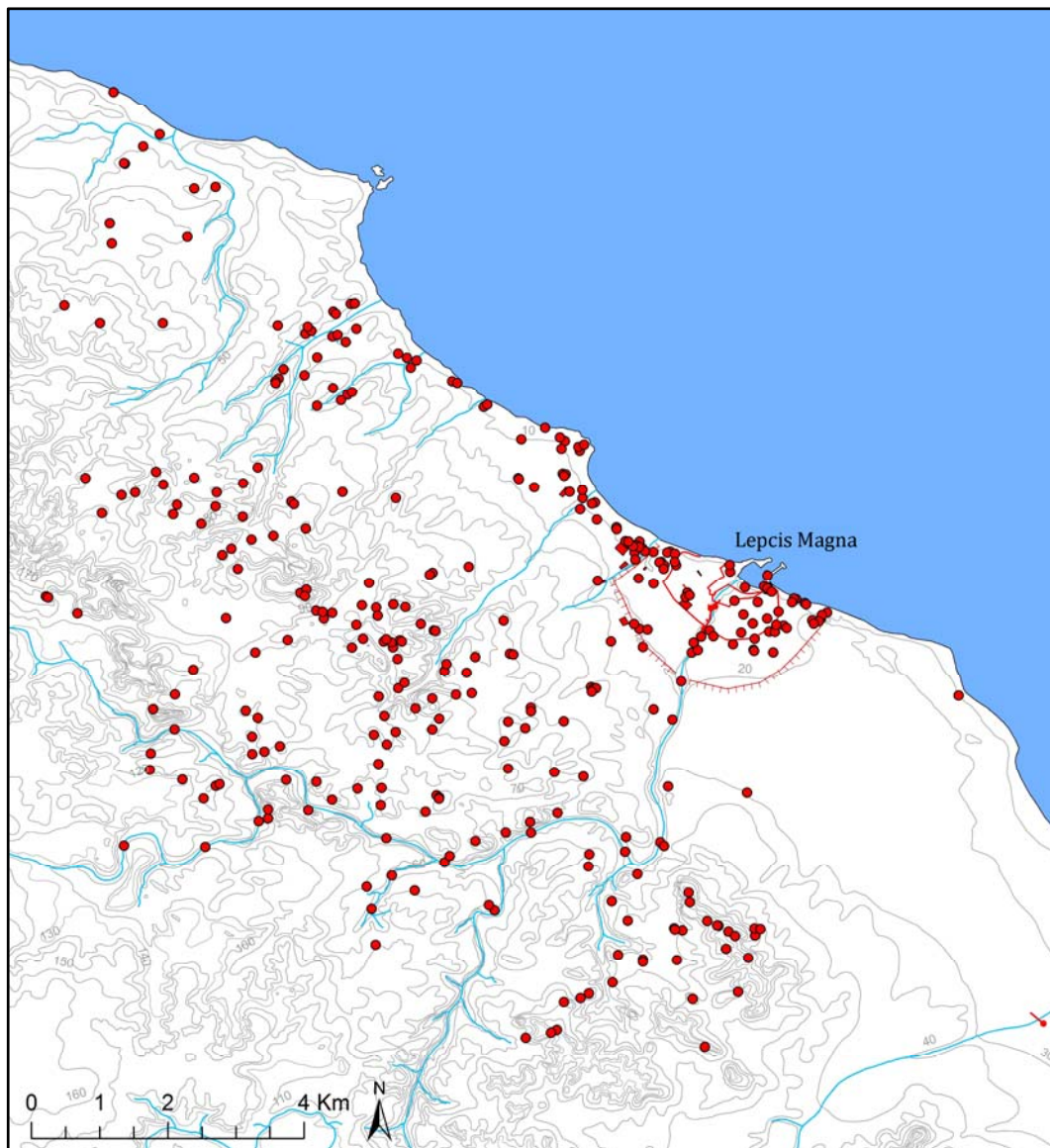


Fig. 1.4. The base map realized using ArcGIS with the sites displayed.

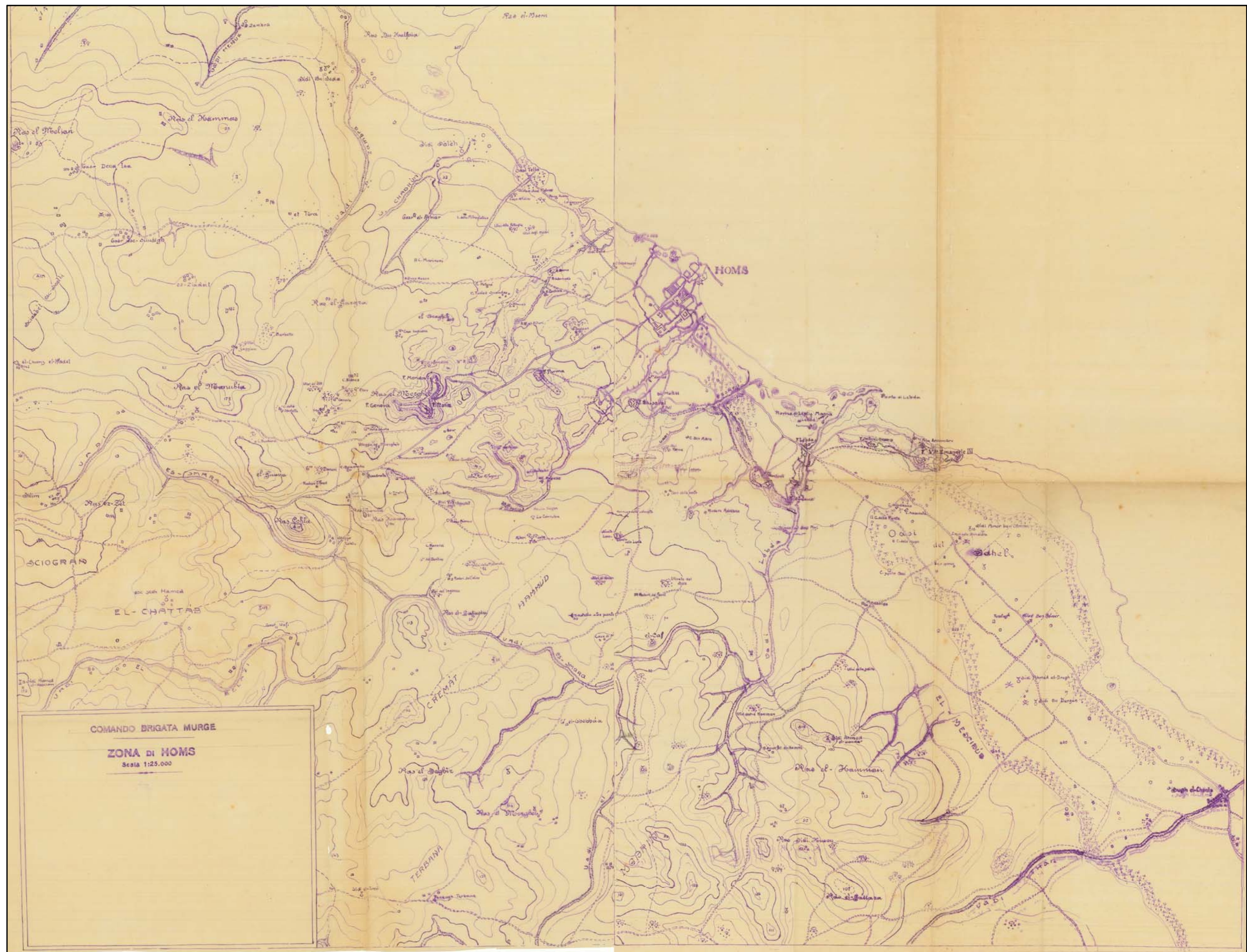


Fig. 1.5. Comando Brigata Murge, Zona di Homs. Scala 1:25.000 (Bgt. Murge 1919c).

CHAPTER 2

LEPCIS MAGNA: THE HISTORICAL AND GEOGRAPHICAL BACKGROUND

2.1. THE URBAN FABRIC AND BOUNDARIES FROM THE PUNIC PHASE TO THE ARAB CONQUEST

2.1.1. THE URBAN DEVELOPMENT

Trying to outline the sequence of the ancient urban development at Lepcis Magna is problematic especially for its earliest and latest phases. This lack of data is due to the fact that the most important structures that have been excavated in the key zones of the city were those related to the Imperial Roman period, leaving the Phoenician and Punic stratigraphies that lie below them largely unexplored, while the process of excavation in the colonial era often removed the Late Antique phases without any documentation (MUNZI 2001, 39-41).

According to the classical sources Lepcis was founded by settlers from the Phoenician city of Tyre (Sall. *Iug.* 19, 78; Plin. *HN* 5.76; Sil. *Pun.* 3.256). The archaeological evidence of this first settlement dates to the seventh century BC. The location where Lepcis Magna developed was recognized by its first settlers as one of the rare suitable anchorages between the Gulf of Sidra and the modern Tunisian coast (fig. 2.1). Indeed after the difficult experience of navigating the gulf this stretch of Tripolitanian coast represented the first safe docking for the "southern route"

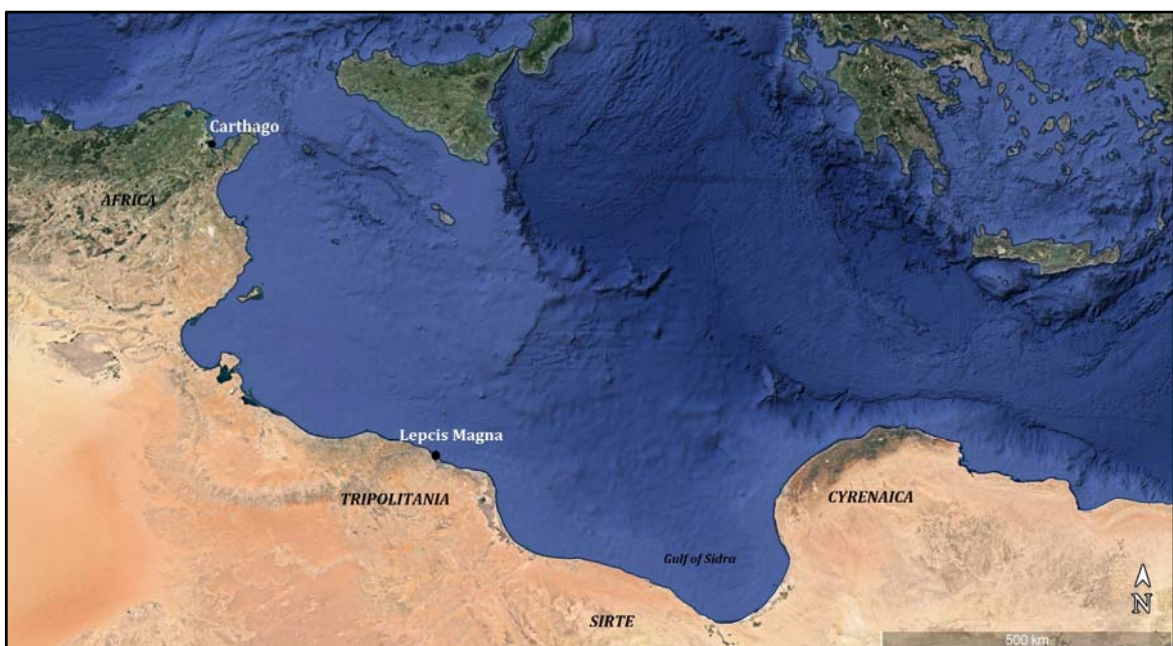


Fig. 2.1. Lepcis Magna and the North African coast (background image: Google Earth).

to the western regions (MOSCATI 1988). Furthermore the site was at the mouth of a wadi that provided a water supply and, as stated by Herodotus (IV, 183), the inland region - flat or partially hilly - was rich and fertile. All these factors will have prompted Phoenician travellers and merchants to establish a permanent outpost (ROMANELLI 1925a, 67; MATTINGLY 1995, 117; a good recent synthesis in MASTURZO 2013, 185-186).

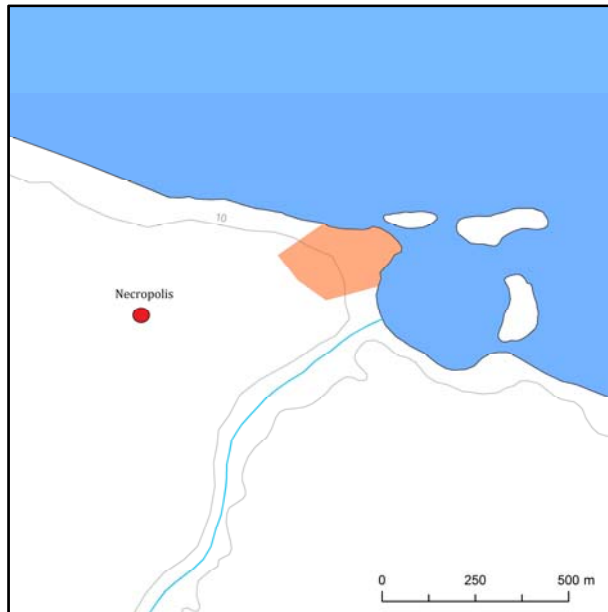


Fig. 2.2. Probable Phoenician urban fabric extension.

The new *emporium* was then established in the northern part of the Wadi Lebda estuary, exactly on the headland formed between the coastline and the western bank of the watercourse (fig. 2.2). Unfortunately our knowledge about these first centuries is limited to few archaeological traces and the extension of this phase can be only hypothesized (JONES 1989, 95).

The investigations made by the University of Pennsylvania during the 1960s and carried on more recently by the team of the University of Messina in the area of the *Forum Vetus* (fig. 2.3, no. 1), have also

confirmed the presence of a large public building dated to the seventh century BC by the presence of Early Corinthian or Late Protocorinthian-Transitional *skyphos* handles and fragments of a Phoenician *kernos* (HOWARD CARTER 1965; DE MIRO 2002; DE MIRO, POLITO 2005, 121-127).

During the excavation of the *scaenae frons* of the Roman theatre (c.500 m. to the west from the shore; fig. 2.3, no. 2) several hypogean tombs were found and, thanks to the grave goods, it was possible to date the *necropolis* between the end of the sixth century (imitation of Late Corinthian *kotylai* and *kylikes*) and the fourth-third century BC (DE MIRO, FIORENTINI 1977; DE MIRO 2002). It is reasonable therefore to consider the area of the Roman theatre as a peripheral zone of the Phoenician/Punic city, with the so-called *Regio VI* (where the later *Forum Vetus* was built) as the core of the early settlement. An irregular road probably connected the core to the peripheral *necropolis* and continued southwards until it connected with the southeast-northwest road system of the region, whose origins are however unknown. This north-south road can be identified with the later so called "Via Trionfale" or *cardo maximus*: the main axis of the Roman era city.

It is hard to establish the limits of this first settlement but, according to the data discussed above and considering the southern limit of this town somewhere between the *Forum Vetus* and

the Roman theatre area, it is possible to hypothesize a size of 3.5 - 4 ha. (WARD-PERKINS 1982, 30; MASTURZO 2013, 201).

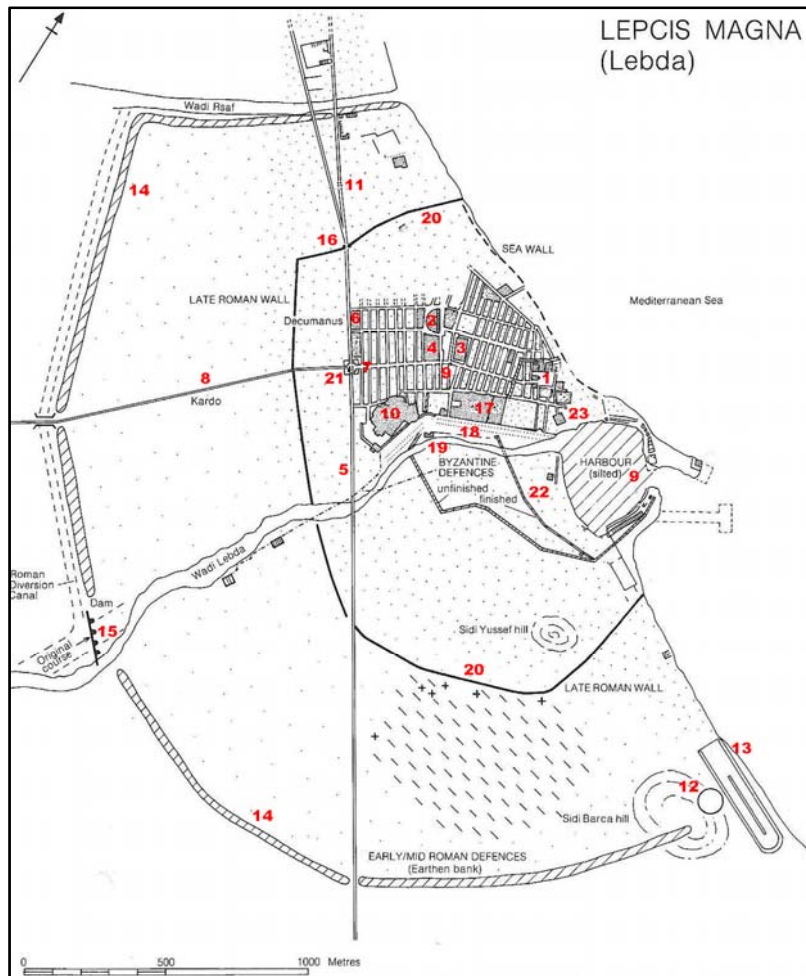


Fig. 2.3. Lepcis Magna, overall view (after MATTINGLY 1995, fig. 6:1).

Examination of the further urban expansion is even more problematic because both topographical research and archaeological documentation are not particularly clear. In the middle of the first century BC the urbanized area of Lepcis may have reached the area occupied subsequently by the *Macellum* (fig. 2.3, no. 3) or by the theatre (fig. 2.3, no. 2), more than 300 m in a NE-SW direction from the *Forum Vetus* area (fig. 2.4). How and when this extension happened is not clearly comprehensible: Di Vita, suggested that the regular

Hippodamean pattern of the blocks of this new area should be dated between the end of the second century and the beginning of the first century BC, while Ward-Perkins preferred an

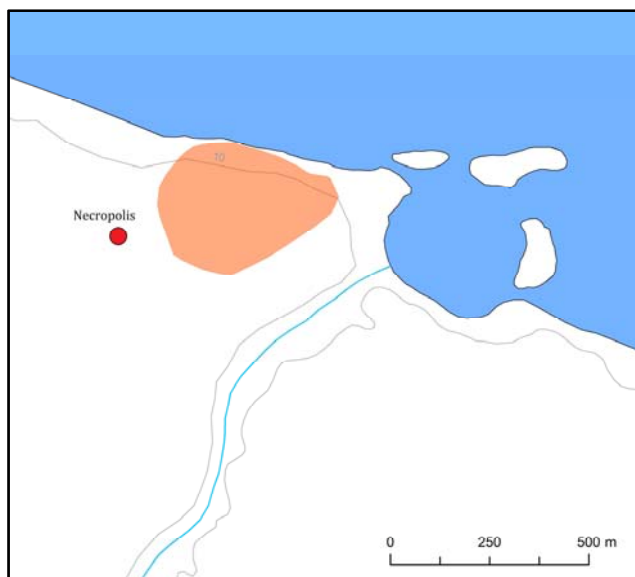


Fig. 2.4. Probable Punic city extension enclosed by wall circuit according to De Miro (2005).

Augustan plan (for their debate: WARD-PERKINS 1982, 44-49; in general: WARD-PERKINS 1982, 29-35; DI VITA 1975b, 170-171; 1982, 553, 555; 1983a, 365; 1994, 159-161). Recently Masturzo (2013, 203) has proposed back-dating the construction of this new gridded district to the third century BC, basing his reasoning on the new growth that seems to characterize the territory of Lepcis Magna at this time.

Whenever this new planned area between the *Forum Vetus* and the *Macellum*

was built, its blocks are characterized by their different size and orientation from those located near the old forum. The recent excavation made beneath the *Basilica Vetus* (fig. 2.3, no. 1) by the University of Messina uncovered traces of an enceinte wall (Wa1) dated from the fifth to the second century BC (DE MIRO, POLITO 2005, 125). During this second phase, the city increased its size considerably, reaching c.15 ha., and the suburban area is likely to have begun, in the southern sector, not far from the site of the theatre (fig. 2.3, no. 2), where the most recent burial evidence (Nc5) dates to the third century BC. It is important to consider whether this substantial urban development needs to be correlated with a new positive political situation, with Lepcis more independent from Carthage after the battle of Zama (202 BC).

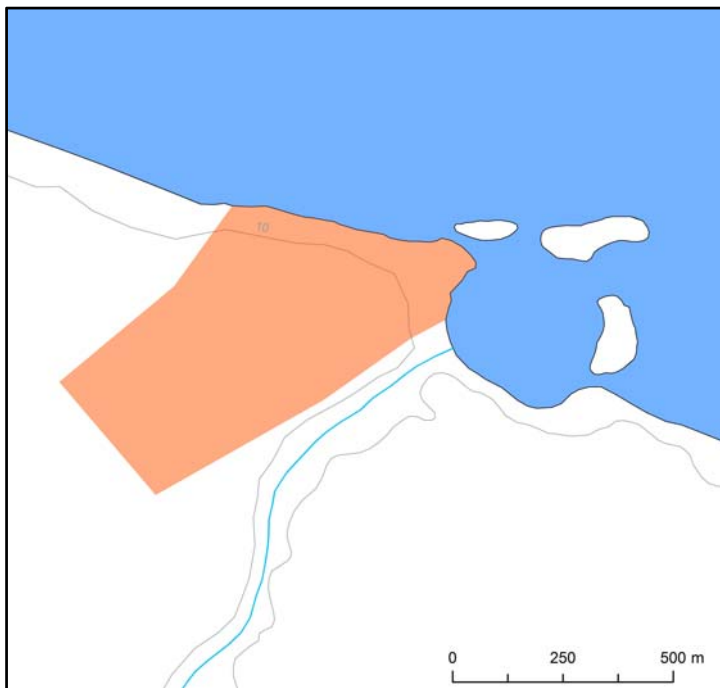


Fig. 2.5. The Augustan/Julio-Claudian urban fabric extension.

The next steps of the urban expansion date to the reign of Augustus and Tiberius (fig. 2.5), when Lepcis changed status from *civitas foederata* to *civitas libera*, coining money independently and operating still under Punic magistracies and local priesthoods. New gridded areas were built on the southwest edge of the city, aligned with the main west-east road (fig. 2.3, no. 5) that led to *Oea* (to the west) and toward the Great Syrtes (to the east), and then with a different orientation from those of

the previous periods. This consistent urban growth matches well with the number and the quality of new public constructions, that follow the same different orientation, built in this period by local worthies in the south sector of the city. In 8 BC the rectangular market was built (fig. 2.3, no. 3), in AD 1-2 the theatre was inaugurated (fig. 2.3, no. 2) and in AD 11-12 a portico with a *Chalcidicum* was erected (fig. 2.3, no. 4). Also the three temples and the basilica in the area of the *Forum Vetus* (fig. 2.3, no. 1) were restored or built in these decades (synthesis in MASTURZO 2003, 707-734; MUSSO 2008a, 168-191; QUINN 2010).

Even for this phase different dates have been proposed to explain the general expansion of Lepcis Magna. Di Vita and Ward-Perkins asserted that the area between the *Macellum* (fig. 2.3, no. 3) and the main road to the south (fig. 2.3, no. 5) was occupied by new regular blocks in the Augustan period (WARD-PERKINS 1982, 29-35; DI VITA 1994, 159-161). According to the hypothesis of Musso (2008a, 167) and partially of Masturzo (2013, 204-205), during the Augustan period the Punic city was topographically reorganized and partially enlarged towards

the southwest. For these two scholars, the largest expansion for this phase was instead planned during the late Augustan period or during the Julio-Claudian dynasty, particularly under the Tiberian kingdom, when a city wall seems to have been built a few metres north of the main southeast-northwest road.

The archaeological evidence related to this city wall (fig. 2.3, no. 6) is not clear enough to define its complete route. Nevertheless the position of the *Porta Augusta Salutaris* (fig. 2.3, no. 7) to the east and on the same axis as the new stretch of the wall recently discovered, could confirm the position of the city border already suggested by Goodchild and Ward-Perkins (1953, 69-70; MASTURZO 2013, 204-205). Near the gate was also found the milestone (Ms5a) of *Lucius Aelius Lamia* (AD 16-17) that marked the *caput viae* of the 44 miles road into the interior (fig. 2.3, no. 8).

The principal northeast-southwest axis or *cardo* was also re-paved during AD 35-36 and new arches (known as the Tiberian arches; fig. 2.3, no. 9) were built to commemorate this restoration not far from the theatre (*IRT* 330) and from the *Macellum* (*IRT* 331). The importance of this street that connected the political and religious core of the city to the main coastal road was always strong. In my opinion, this justifies the survival of differently-orientated sectors across centuries, rather than the road being reconfigured. From the archaic phase, this route was indeed not straight due to the morphology and to different altimetry on its sides (WARD-PERKINS 1982, 32; MUSSO 2008a, 167). Planning regular gridded areas and rectifying such an important and natural path meant levelling a large area of land and such a large scale operation would have been expensive and wasteful in terms of manpower, especially for the Punic/Hellenistic phase. The section of the road belonging to the early imperial expansion was instead aligned to the coastal road (fig. 2.3, no. 5) and its different orientation from the previous phase was hidden by the construction of one of the Tiberian arches.

A further suggestion about the development of the city comes from what seems to be a source of the mid first century AD: the *Stadiasmus maris magni* (Stad. 93 in *GGM*, 427-515; for its date UGGERI 1996, 277-281, 285). The anonymous geographer describes a view of Lepcis from the sea coming from Alexandria in a period prior to the building of the Severan harbour (fig. 2.3, no. 9) and the main buildings erected from the beginning of the second century AD, such as the Hadrianic Baths (fig. 2.3, no. 10). The city is described as being hidden from the sailors by little islands and that it was revealed only when approaching them. The "little islands" are likely to be those visible before the Severan harbour was built over them (DI VITA 1974, 232). The few words used by the author could be however a good hint to support the hypothesis that the urban area was not visible from the east. This may suggest that the western bank of the Wadi Lebda was not yet closely built up and that sandy hills here blocked the view of the east part of the city as well as protecting it from flooding. Indeed the area close to the wadi would have been unsafe due to periodic flooding and only once it was protected by walls, probably during the Neronian

period, was it possible to make it attractive and viable (DI VITA 1996, 186; 1997, 311; TANTILLO, BIGI 2010, 156).

There is no evidence related to the western edge of the city for the first decades of the Empire. The only data are those given by two burials (Nc6) - one of them dated to the first century AD - discovered under the foundation of the arch of Marcus Aurelius (fig. 2.3, no. 11; *ergo* along the existing coast road). These simple inhumations, even if far from the new gridded area of the first century AD are, for this phase, the closest archaeological evidence of a peripheral landscape.

From the mid first to early third century AD the city grew considerably in extent and in population (fig. 2.6). It is clear that this flourishing period was matched by a series of improvements that reflected both the city's development and its rise in status. During the reign of Vespasian Lepcis became a *municipium* (AD 74-77) and under Trajan a *colonia* (AD 109). Finally, the highest status for a provincial city, the *ius italicum*, was conferred to the city (AD 203) by Septimius Severus, who was born there.



Fig. 2.6. The urban fabric extension during the Severan period.

The expansion of Lepcis Magna would appear unfeasible if its new economic role and connection with Rome is not considered. In the eastern suburban area two important clearly Roman entertainment structures were built between the first and second century AD: the amphitheatre under Nero (fig. 2.3, no. 12), and the monumental circus by the mid second century AD (fig. 2.3, no. 13). Moreover, it was in this propitious economic context that the construction of a new harbour at the mouth of Wadi Lebda, again Neronian, has to be seen. The

new port was protected by substructures (walls made by limestone blocks) along the wadi borders to avert damage caused by periodic floods (DI VITA 1997, 311).

These protection measures accompanied with other structures in the *suburbium*, such as the so called "Monticelli" *agger* (fig. 2.3, no. 14) and the main dam along the wadi to the south (fig. 2.3, no. 15), enabled the city to expand towards the east on both banks of the Wadi Lebda, while towards the west the urbanized area in this phase may have reached the Marcus Aurelius arch or Antoninus Pius arch (fig. 2.3, no. 16; MUSSO 1995, 336). Considering these new urbanized areas the city reached its maximum extension of c.80-90 ha. in this period.

In terms of urban development, after the great building phase under Septimius Severus with the construction of the new Severan Forum and basilica (fig. 2.3, no. 17), the new harbour (fig. 2.3, no. 9), the colonnaded street (fig. 2.3, no. 18) and a large *nymphaeum* (fig. 2.3, no. 19) Lepcis Magna had a period of stasis in terms of building activity and the previous flourishing period came to an end. For instance the dam (fig. 2.3, no. 15) started to suffer for lack of maintenance by the second half of the third century AD and because of this, the harbour begun to silt probably from the end of the same century (PUCCI *et al.* 2011, 180-181, 183). In this new framework the construction of a new defensive wall system (fig. 2.3, no. 20) during the first half of the fourth century AD will have meant a great economic and building effort for Lepcis Magna. This Late Roman infrastructure enclosed an area of c.130 ha. (fig. 2.7) including to the west the Antoninus



Fig. 2.7. The Late Antique urban fabric and the fourth century AD wall.

Pius arch (that became the gate to *Oea*), continuing c.200 m south of the Septimius Severus arch (fig. 2.3, no. 21) and passing through the *necropolis* area in the eastern side of the city. The dating for this city wall is uncertain (TANTILLO, BIGI 2010, 166-167) but, for sure, it was already completed in 363-364 when the Austuriani plundered the territory of Lepcis and avoided the city described as "*civitatem muro et populo validam*" (Amm. Marc. XXVIII, 6. 4).

The urban texture of Lepcis Magna was probably very different when during the Byzantine period a new city wall was built between 534 and 544 (fig. 2.3, no. 22). From the mid-fourth century AD the city suffered different economic crises and also natural disasters like the AD 365 earthquake. Many public buildings collapsed or were abandoned while the population decreased drastically. The lack of maintenance led to change functions of some buildings: from the second half of the fifth century to the Byzantine period, the Augustan theatre, for instance, lost its original role and different buildings, probably residential, were built inside the structure (CAPUTO 1987, 123-138, tav. II; MUNZI, FELICI, SCHIRRU 2003, 549-551, 554-555). The Justinianic attempt to preserve the newly conquered African cities necessitated at Lepcis Magna the construction of a smaller wall circuit (fig. 2.3, no. 22) that enclosed an area of c.22 ha. (fig. 2.8). The new wall was created to protect mainly the political, religious and economic core of the city: respectively the *Forum Severianum* (fig. 2.3, no. 17), the churches, and the by now partially silted harbour.

Archaeological and historical evidence for the last Byzantine decades and the early Arab period for Lepcis Magna are limited and unclear. The core of this small centre probably lay between the harbour and the area of the *Forum Vetus* where numerous constructions were built re-using Roman *spolia*. Like the theatre in the fifth century, during the Arab occupation old



Fig. 2.8. The area enclosed within the Byzantine wall.

public spaces such as the *Macellum* (fig. 2.3, no. 3) and the *Chalcidicum* (fig. 2.3, no. 4) were re-used, maybe for residential or productive purposes. Outside the boundaries of the Roman city the amphitheatre (fig. 2.3, no. 12) was probably fortified or inhabited. However, the presence of an olive mill and millstones for cereals in the area of the harbour and of a kiln in the area of the Flavian temple (fig. 2.3, no. 23) shown a landscape and an economy completely changed (LEONE 2007, 195-196).

2.1.2. THE EXTERNAL BORDER

The attempt to define the external borders of the city's territory across different periods is even more problematic than the endeavour to establish its urban boundaries. As for the urban development, the scarceness of archaeological evidence for the first centuries, forces us to focus our hypothesis mainly on ancient authors.

For the Phoenician phase Herodotus is an useful source to understand the relationship between Lepcis Magna and its territory, particularly when the author describes the failed attempt of the Spartan *Dorieus* was to establish a new colony on the estuary of *Cinyps*, the actual Wadi Caam, 18 km to the east of the city (Hdt. IV, 159, 175, 198; V, 42; see also GANCI 1995). The idea of *Dorieus* to found a new colony engaged not only in trade like the Phoenician merchants, but also linked to a strong exploitation of the rich territory. The alliance between the local population of the *Maces* and the Phoenician settlers of the *emporium* of Lepcis to defeat the Greek outpost could indicate that in that period, the Phoenicians and the Libyan people who lived inland, such the *Maces*, made common cause to counteract the Greek presence. If this hypothesis is right, it is plausible to suppose that the territory of Lepcis towards the interior during the seventh - fifth centuries was controlled by people of the ethnic group of the *Maces* (MUNZI, CIFANI 2002, 1904-1905; MASTURZO 2013, 195). However, according to Strabo, the control of the coast by the Lepcitanians was more decisive than that of the inland region: he mentioned the construction, in the *Cinyps* area, of different infrastructures such bridges and walls, maybe to protect a coastal route to the east (Strabo, XVII, 3, 18).

As we shall see, recent surveys around Lepcis show territorial expansion and agricultural development from the late third century BC (MUNZI *et al.* 2004-2005, 440-442; 2010, 725-726). These new archaeological data suggest a greater control of the inland territory by the Lepcitanians.

For the Roman Imperial phase the epigraphic sources help to define the boundaries of the territory of Lepcis Magna (fig. 2.9). Concerning the south-western border, the previously mentioned Tiberian inscription of the proconsul *L. Aelius Lamia* near the south gate of the city indicates the construction of the road *ab oppido in mediterraneum* for 44 *milia passum* (Ms5a). The probable southwest terminus of this road was the ancient *mansio* of Mesphe (Medina Doga), where the territory of Lepcis seems also to have ended (GOODCHILD 1951, 48-51; DI VITA-EVRARD



Fig. 2.9. The Tripolitanian region in the Roman Imperial period (TALBERT 2000, pl. 35 - detail).

1979, 76-77, 90; MATTINGLY 1995, 66). Moreover, the finding of two boundary markers dated to the reign of Vespasian confirms more or less the border between *Oea* (Tripoli) and Lepcis. One of these boundary stones was found along the right bank of the Wadi Msabha near Gasr el-Masaud, the second one closer to the coast near Gasr Garabulli along the same wadi, named there Wadi el-Msid (DI VITA-EVRARD 1979, 77-79; MASTURZO 2013, 195, 198). Less defined are the southern and eastern boundaries where the area controlled by Lepcis was apparently more flexible across the centuries (MATTINGLY 1988a, 36-37; 1989). The *municipium* of *Thubactis* (MATTINGLY 1995, 132-133) to the east, probably located near the modern city of Misurata Marina, was the Lepcis' neighbour towards the Gulf of Sidra.

From these epigraphic evidence, it is possible to hypothesize for Lepcis Magna, at least for the first and second century AD, a territorial extension that reached about 55 km to the west and 65 km to the south. The distance between Lepcis and *Thubactis* might suggest a similar border, in terms of extension, to the east (fig. 2.10). Compared to other African cities and especially those of the Byzacena where the density of the cities was higher, Lepcis Magna may have administered an immense territory, estimated at a total of c.3,000-4,000 km² (SEARS 2011, 44).

Concerning the fourth and fifth century a different agricultural and economic system of the territory, based on the birth of fortified farms called *centenaria* or *turres* (MATTINGLY 1995, 102-106; MUNZI, SCHIRRU, TANTILLO 2014), certainly influenced the capacity of Lepcis to control and administer its original and wide territory. The *Austuriani* raids in the second half of the fourth century affected the territory of Lepcis (Amm. Marc. 28, 6) but, according to the archaeological data of different surveys, the largest contraction occurred during the Vandal and Byzantine period (MUNZI *et al.* 2014, 216-220).

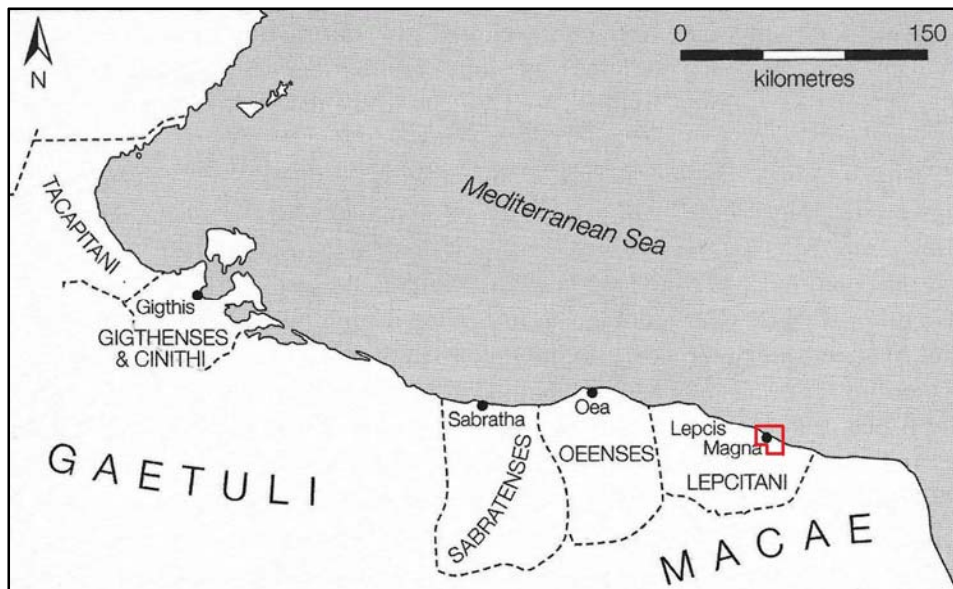


Fig. 2.10. The territory of Lepcis Magna; the red polygon is the area analyzed (after SEARS 2011, fig. 2.4).

2.2. THE ENVIRONMENT

2.2.1. GEOLOGY, MORPHOLOGY AND CLIMATE

The Tripolitanian region is divided in three main sectors (see fig. 1.1): the coastal plain (Gefara) that from the gulf of Bou Ghara reaches Khoms to the east, a mountainous escarpment arch (Gebel) beyond it and finally the Saharan plateau (called *Dahar*) to the south.

The territory of Khoms and Lepcis Magna is located close to the limit of the Gebel, where it meets the narrow coastal plain. Both the Gebel and the Gefara are characterized by a sequence of Jurassic and Cretaceous strata (limestones, dolomites, marls and clays). The erosion of the Gebel



Fig. 2.11. The soil map of the area investigated (background image: SEUSSR 1980 - detail).

in the Miocene and Pliocene caused over the Gefara a subsequent set of strata (mainly marls, limestones and sandstones) that features the most recent deposit of the coastal plain. More recent Quaternary erosion and subsequent deposition has been concentrated in wadi beds which, from the Gebel, runs toward the Mediterranean (MATTINGLY 1995, 5-6; MC 1913, I, 4-5; VITA-FINZI 1969, 7-12).

The soil map compiled by the Soviet company "Selkhozpromexport" (fig. 2.11) shows how most of the area investigated is

characterized by "Reddish brown arid differentiated soils/crust soil" (orange and light orange

areas in the map) that is the result of the Gebel deposits. The remains of the ancient Jurassic and Cretaceous strata exposed, defined on the map as "Reddish brown lithosols" (light green on the map) are instead the appendages of the Gebel towards the sea.

The morphological changes that have occurred from the geological eras until historical times have given the periphery of Lepcis Magna to have a peculiar landscape characterized by the main geographical features of the Gefara and partially by the ones of the Gebel (fig. 2.12).

The Ras el-Hammam and Ras el-Mergheb, located respectively c.5 km south and west of Lepcis Magna, constitute the closest hills towards the seashore; behind them the terrain level raises and it is characterized by hills interspersed by wadi valleys. The maximum height of the



Fig. 2.12. Digital Elevation Model of the area investigated (contour interval = 10 m).

area was registered for Ras el-Manubia (185 m), a hill west of Ras el-Mergheb, now almost completely destroyed by modern quarries. The natural erosion of this hilly landscape caused in many sectors the natural exposition of the bedrock and, often, rocky steep slopes. However, the majority of the inland landscape is composed by a slightly undulating surface. The coastal strip generally does not exceed 2-2.5 km in width, except for the es-Sahel area (southeast of Lepcis) where it reaches c.4 km (fig. 2.13). The wadis run sinuously from the Gebel to the seashore even if most of them in this area originate from the closest hills located at a short distance from the sea. Apart from the Wadi Lebda and Wadi Hasnun, the other watercourses start c.2-6 km from their mouth. The hydrographic basin of the Wadi Lebda is the largest of the area and it is characterized by the confluence of several wadis including the Wadi es-Smara and Wadi el-Belaazi, the only two watercourses with a west-east orientation. The contemporary action of erosion and deposition of material caused by the irregular flow of water and soil led to the formation of different shapes of wadi valleys. The main cause of these differentiations is due to the capacity of floods to erode the different lower crust/bedrock: some of the wadi beds appear indeed wide and with slight slopes while others are deeper and steeper, occasionally similar to small gorges.

The coastline is characterized mostly by sandy beaches while among the three promontories - the mouth of Wadi Lebda (where Lepcis Magna was built), Ras el-Usif (the modern city of Khoms) and Ras el-Msenn (Khoms harbour) - and in some sectors northwest of Wadi Zambra the sandstones and limestones are directly in contact with the sea.



Fig. 2.13. The area S and SE of Lepcis Magna with the flat es-Sahel area and the Ras el-Hammam hills in the background, 1919 (A. Zocchi personal archive).

An important characteristic of the region's climate is the rainfall. The area around Lepcis Magna and Khoms actually constitutes one of the rainiest zone of Tripolitania with an annual average of c.300 mm, enough for dry cultivation of cereals, olives and other crops (MATTINGLY 1995, 7-8). However, the rainfall distribution through the year is irregular and is concentrated in the period between October and March. This annual imbalance together with the erratic distribution from year to year often cause both drought and severe flooding, especially in the areas close to the wadis where the majority of the rainfall flows. According to several scholars and geomorphological researches, it seems that modern climate and the annual rainfall rate are

similar to the ancient ones (VITA-FINZI 1969, 38-41; SHAW 1981; MATTINGLY 1995, 13-14; BARKER *et al.* 1996, I, 293-297).

Modern and ancient natural vegetation is defined essentially by types of Mediterranean maquis and steppe. Most of the landscape when not exploited or cultivated, is characterized by sandy bushes, tamarisks, shrubs, halfah grass and esparto, while fig trees, acacia, date palms are the main timber trees that spontaneously grow in this coastal area.

2.2.2. RECENT LANDSCAPE CONSUMPTION AND ARCHAEOLOGICAL VISIBILITY ISSUES

When the Archduke of Austria, Ludwig Salvator, visited the area around Khoms and Lepcis Magna in 1873, he described a landscape characterized essentially by ancient ruins with few modern villages. At that date, the city of Khoms was just established and it constituted a village formed by 40-50 clay brick houses and, according to the nobleman, inhabited by about 700 people (LOTHRINGEN 1874, 164). The report made by Ludwig Salvator is clearly confirmed by the maps of the second half of the nineteenth century: the one compiled by K. Müller (fig. 2.14) and a sketch showing the area around Khoms (fig. 2.15).

When the Italian troops occupied the area in 1911 the situation was pretty similar: a landscape characterized by little gardens and few scattered houses, especially west of Khoms and in the es-Sahel area. Khoms was then provided with several government and military installations, while in the Mergheb area such and in the outskirts of Lepcis several redoubts and forts were built frequently causing severe damages to ancient structures. Afterwards, during the Fascist period the importance of the city of Khoms grew and several infrastructures were built in its fringe and along the new Balbia road. Moreover, a new agricultural settlement "Concessione Valdagno" was established south of the es-Sahel oasis during the 1930s. Apart from these construction projects, significant but limited in a spatial extent, the hinterland of Lepcis Magna did not suffer a severe overbuilding until the 1960s.

After WWII and especially in the last forty years the population of Khoms has grown exponentially reaching today an estimated population of c.200,000 people (in the 1972 census it was inhabited by only c.20,000 people and in 1984 by c.40,000 people)¹. This has meant an intense overbuilding of many areas around Khoms and Leptis, especially the ones close to the seashore, causing also severe lacks of untouched - or partially affected - countryside (MUNZI, ZOCCHI 2017). The result of this recent extraordinary land consumption is the scarce or null visibility - in archaeological terms - of wide sectors of the area that has been investigated (fig. 2.16).

The area around the first settlement of Khoms has been intensely overbuilt, erasing hectares of virgin soil and, actually, its eastern neighbourhoods now almost reach the city walls

¹ *Encyclopaedia Britannica*: <https://www.britannica.com/place/Al-Khums>.

of Lepcis. Moreover, both the motorway from Suk el-Khamis to Khoms and the highway Misurata - Tripoli have spawned in the last decades the spread of new houses and also the birth of several industrial and commercial buildings along their paths and this was particularly serious in the area located a few hundred metres south of the site of Lepcis. In addition to these infrastructures, the unfinished railroad that was intended to link the modern Khoms harbour with Misurata has cut through a wide portion of ancient landscape.

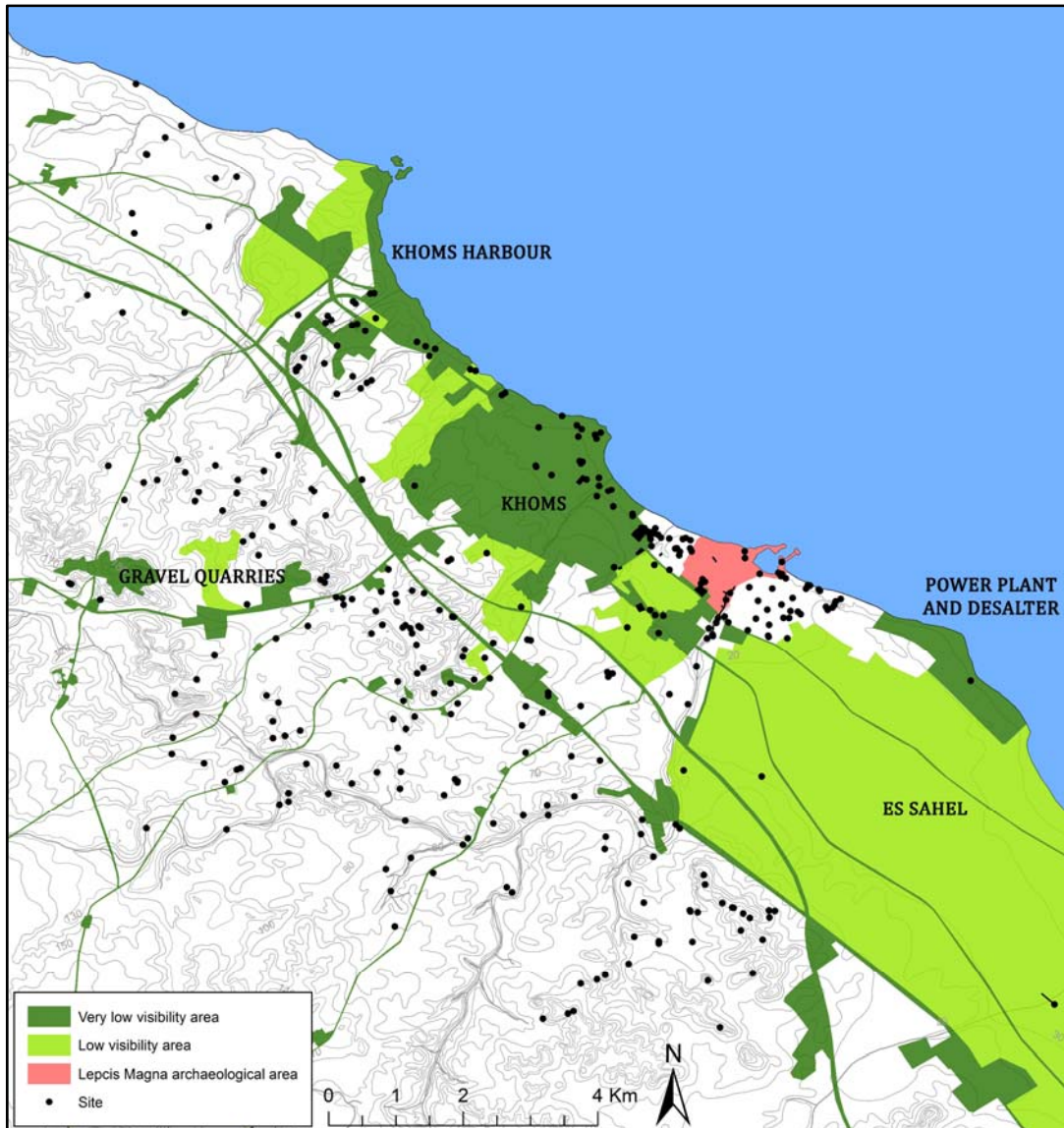


Fig. 2.16. The archaeological visibility map.

Although survey activities were undertaken shortly before the construction of the new Khoms harbour (see par. 1.3), a large area close to it was subsequently impacted by the construction of infrastructures and facilities. On the east side of Lepcis also the building of a desalter and a power plant has caused the loss of a wide sector of the coast during the 1970s. Another cause of a low archaeological visibility is the activity of the el-Mergheb cement factory. From 1969, when it opened, wide portions of land around Ras el-Mergheb have been taken over

by gravel and sand quarries, destroying the original soil and cutting away entire hills, like Ras el-Manubia (MUNZI, ZOCCHI 2017, 56, 61).

Finally the area south and southeast of Lepcis Magna, known as the es-Sahel oasis has been systematically overbuilt with private properties and condos. This sector, even if it is not as built up as the new Khoms neighbourhoods, is mostly defined by small and contiguous fenced gardens or cultivated areas that hinder the whole visibility.

The majority of the sites recorded in this research are therefore concentrated in the area close to Lepcis Magna where the modern interferences have only marginally touched the landscape and where the archaeological researches have been more common and also where the local DoA activity has been more intense. The other sector where the concentration of sites is higher is the area beyond the modern infrastructures of Khoms such as the railroad, the Misurata - Tripoli highway and the harbour. However, this inland territory is now suffering from an uncontrolled and spontaneous building activity characterized by quarries and new constructions.

2.3. THE ANCIENT LANDSCAPE FROM THE ARAB MEDIEVAL TRAVELLERS TO RECENT RESEARCH

The description of the events that followed the occupation of Tripolitania by the Arab troops led by Oqbah ibn Nafi in the mid-seventh century are not particularly exhaustive nor often very clear (cfr. CIRELLI 2001 for a detailed account of the written Arab sources).

The first reports with information related to the territory of Lepcis Magna are the ones written by el-Bekri in 1068 (DE SLANE 1858, 437; DI VITA 1983b, 65) and by Idrîsî in the twelfth century (BRESC, NEF 1999, 208). According to Idrîsî, Lepcis Magna was a flourishing city when the Arabs arrived in its territory. He also mentioned that the Berbers of the Hawara tribe settled in two castles while another large and populated fort was located close to the sea at Lebda. Although it is difficult to establish which period Idrîsî is referring to, it is reasonable to hypothesize that the two castles are the remains of the *gsur* visible at Ras el-Hammam (Gs12) and Ras el-Mergheb (Gs13) while the large and populated one could be a specific structure or an area within the ancient city or the fortified amphitheatre (En4) (CIRELLI 2001, 435-436; MUNZI *et al.* 2016, 95).

Archaeological evidence has proved that a stable settlement was still present in the area close to the ancient harbour of Lepcis around the tenth century (DOLCIOTTI 2007). According to these data and to the written sources it is then plausible to believe that the complete abandonment of the city occurred between the thirteenth and sixteenth century.

The antiquities of the suburban area of Lepcis are mentioned again only from the seventeenth century onwards. A first brief description was made by el Aiachi in 1662 (MOTYLINSKI 1900, 14). The Arab traveller was the first one who mentioned the Wadi Caam aqueduct (Aq5) whose "remarkable traces" were still visible from the river to the city. A few years later, in 1670, the ruins of Lepcis Magna were visited by the French surgeon Giraud de Seyne during his imprisonment in Tripoli (CUMONT 1925; DI VITA 1983b, 67; ROMANELLI 1925a, 56). His manuscript account is significant: beside the mention of the Wadi Caam aqueduct (Aq5) and the wall circuit (Wa3), he clearly cited the numerous *mausolea* with the funeral chambers and the ancient limestone quarries of Ras el-Hammam (Qr15-Qr16).

Between the end of the seventeenth and the beginning of the eighteenth century two other noblemen visited Lepcis Magna: the French Consul of Tripoli Lemaire and Durand. Lemaire was in the ancient city several times from 1683 to 1693 and again from 1708 to 1709. In his manuscript Lemaire reports the suburban circus (En3) for the first time (OMONT 1902, II, 1046). More detailed is the text written by Durand (1694). Durand's account gives us a sense of which of the suburban ancient structures were considered the most remarkable. He is also the first travellers who mentioned the presence of the amphitheatre (En4) and described in detail the circus (En3). He addressed a few words to a structure that can be recognized as the main Wadi Lebda dam (Dm1). He mentioned then three aqueducts and several "tours" that should be interpreted as *mausolea*. The scarce details contained for these funeral structures are however precious: "(...) sont très élevées, les unes quarrées, les autres en pointes" (DURAND 1694, 213). Furthermore, it seems that Durand was the first to describe the ruins near Cape Hermaion, and even if he did not mention it, his words suggest this location: "A une lieuë [lieue ancienne, c.3.2 km] au Ponant [from Lepcis Magna] le long de la Mer, les marques d'un tres gros Village bordé de murailles, restes de Forts et de Citernes" (DURAND 1694, 213-214).

In June 1806 the French Chancellor Delaporte visited Lepcis Magna together with the American Consul in Tripoli Ridgely. His *Memoire sur le ruines de Leptis Magna* was published 30 years later (DELAPORTE 1836) and even if it was mainly devoted to transcribe inscriptions, it constitutes the first account for several ancient buildings of the hinterland. Beside a detailed description of the circus (En3), he mentioned the aqueduct (Aq1) and the cisterns (Ci1-Ci2) along the Wadi Lebda, the amphitheatre (En4) and the "needle" mausoleum between Lepcis and *Liggata* (Ma29) of which he drew also a sketch.

After the Napoleonic Wars, between 1816 and 1822, four British gentlemen visited Lepcis Magna: Smyth, Lyon and the Beechey brothers. Captain Smyth was in charge of an operation to collect marbles from Lepcis Magna that the Tripoli Pasha Yusuf Caramanli offered in 1816 to the Prince Regent George IV. He was in Lepcis until November 1817 and, in order to gather ancient material, he undertook several excavations within the city with the aid of a hundred workers (SMYTH 1854, 473-497). His activities were partially published by the Beechey brothers (1828)

who were able to see his manuscript diary but, unfortunately, they could not publish the city plan he drew. However, from his account, we have the first indication of a "suburban" excavation made probably somewhere between the city and the circus (BEECHEY, BEECHEY 1828, 76). Smyth mentioned also the aqueduct (Aq1) and the cisterns along the Wadi Lebda (Ci1-Ci2) and, to the east, the circus (En3), the amphitheatre (En4) and baths close to them. His account is also the first to notice the earthen *agger* west of the Wadi Lebda (Ag1) whose function, in his opinion, was strictly to protect the city from the "winter rains" (BEECHEY, BEECHEY 1828, 78).

A Genoese doctor Della Cella was in Lepcis in 1817 in the entourage of the Pasha Yusuf Caramanli. His report is not very detailed and apart from a brief citation of the eastern aqueduct (Aq5), he mentioned a castle that could be identified with the ruins located on the hilltop of Ras el-Mergheb (Gs13): "A Ponente i monti di Meselata si ergono scoscesi sopra Lebda, e hanno il loro ciglio coronato dalle rovine di antico castello" (DELLA CELLA 1819, 39).

The accounts related to the ruins of Lepcis Magna became more detailed and numerous from the mid-nineteenth century. The first description in chronological order is the one written by Barth who visited Lepcis in 1845 and 1850. He left us some interesting details related to the two castles west and south of the city (BARTH 1849, 305, 316; 1857, 85-87): Ras el-Mergheb (Gs13) with the mausoleum at its foot (Ma4) and Ras el-Hammam (Gs12).

The first maps related to Lepcis Magna were edited in 1855 by Müller who described the coast of Libya following the *Itinerarium* of the ancient author of the *Stadiasmus Maris Magni*. His maps related to the suburban landscape and the territory of Lepcis Magna are precious because on them are depicted structures and topographic details never mentioned before. In the main map titled *Libyae ora maritima* (MÜLLER 1855, tav. XXI) the main toponyms around Lepcis such as Ras el-Mergheb (Gs13) and Ras el-Hammam (Gs12) are indicated; beside these two places is also cited the site of "Hammut" that is the ruins actually known as gasr Hammud (Gs19), one of the most visible ancient buildings southwest of the city (fig. 2.14). More exhaustive is the detail of the area close to Lepcis contained in the same plate in which are included *mausolea* (Ma1, Ma3, Ma29), barrows, tombs (Tb9), walls (Wa3-Wa4) an aqueduct traced from Cape Hermaion to Lepcis (Aq4?), the main Lebda dam (Dm1), the earthen *agger* (Ag1) and the connected bridge (Ti1) as well as the circus (En3) and the amphitheatre (En4).

Another significant document is the account written by the Archduke of Austria Ludwig Salvator in 1873 during his journey along the African coast. His report of the ancient city is detailed, as is his description related to the city of Khoms. The ancient remains visible within the modern city such as *mausolea* (Ma24-Ma25) and other structures were followed by the description of ancient finds stored in its Ottoman buildings (LOTHRINGEN 1874, 165-169). Beside the brief words referring to the Wadi Lebda dam (Dm1) and cisterns (Ci1-Ci2), the Austrian nobleman provides also the first descriptions of different *mausolea* located in the suburban

areas: Gasr Shaddad (Ma15), Gasr Gelda (Ma2) and the mausoleum (Ma29) between Khoms and Lepcis (LOTHRINGEN 1874, 169-171, 178-179).

Other scholars from various countries visited the Tripolitanian coast in those years: Rohlfs (1869), Rae (1877, 37, 40-41) and, between 1880 and 1881, Camperio and Freund (*Pionieri Italiani in Libia* 1912, 180-182, 218-222). New purely antiquarian studies related to Lepcis Magna were made between the end of the nineteenth and the beginning of the twentieth century. In chronological order the first scholar who was in Leptis in these years is the French orientalist Clermont-Ganneau (March 1895). Some new data were reported in his account such finds or inscriptions found near different *mausolea* (Ma1-Ma5). Moreover, he explained with some fundamental details the ruins at the Ras el-Mergheb (Gs13) noticing also the rock-cut inscription (Re2) dedicated to the goddess *Caelestis* (CLERMONT-GANNEAU 1903, 340-345).

In 1896 Cowper visited Lepcis Magna and his description of the city was accompanied by a report of a survey undertook in its environs. The quantity and the importance of the ancient remains around Lepcis is clearly underlined by the author (COWPER 1897, 198-199) who also recorded the presence of *gsur*, funeral structures and, for the first time, ancient farms (however not recognised as such). Since they were never described before, Cowper decided to illustrate six *mausolea* that can be identified as those of Gasr Ben Nasser (Ma1), Gasr Gelda (Ma2), Gasr Shaddad (Ma15), Gasr Banat (Ma6), Gasr Dueirat (Ma3) and a mausoleum (Ma4) at the foot of Ras el-Mergheb (COWPER 1897, 213-216). Further information and some measurements were also given for the ancient structures visible on the hilltop of Ras el-Mergheb (Gs13), while some consideration were devoted to the ancient earthen *agger* (Ag1) enclosing the city (COWPER 1897, 200, 211-213).

Between 1901 and 1904 de Mathuisieulx travelled several times along Tripolitania and his account related to Lepcis Magna was accompanied with sketches, photographs and with a city map (MÉHIER DE MATHUISIEULX 1903). In his report, mainly focused on the city core, he did not forget to cite the ruins of the circus (En3), the amphitheatre (En4), the water supply structures along the Wadi Lebda (Ci1-Ci2, Dm1, Aq1), the mausoleum of Gasr Shaddad (Ma15) and the city walls (Wa3-Wa4). Like Cowper and Clermont-Ganneau, he was also interested to the ruins of Ras el-Mergheb (Gs13) and to the structures (Fa1, Ma4) located at its foot (MÉHIER DE MATHUISIEULX 1906, 76-78).

A series of studies, expeditions and publications that have involved many aspects of the Tripolitanian landscape were conducted in the years that preceded and followed the Italian occupation of the Libyan coasts in 1911. In this period Italian Ministries organized different expeditions whose intention were devoted mainly to the agricultural, geological and economic value and potential of the area. However, these accounts (MC 1913; MAIC 1913; *Missione Franchetti* 1914) often included in depth analysis of Lepcitanian territory or even archaeological details otherwise hardly known. Particularly interesting for the archaeological aspects

documented was also the *Missione Mineralogica Italiana* undertaken by Ignazio Sanfilippo and Ascanio Michele Sforza in Tripolitania (SANFILIPPO 1913).

Even if the principal aim was not archaeological, the activities of the *Regio Esercito* during the Italo-Turkish conflict and in the following years (1911-1919) unavoidably involved the rich historical landscape of Lepcis. To properly defend the coastal site of Khoms a fortified line was built that ran almost continuously from the area of the amphitheatre (En4) to Khoms and to Ras el-Mergheb passing through the earthen *agger* (Ag1) south of Lepcis. Several redoubts and forts were built along this fortified line and often close or even on the ancient sites. Damage and destruction was widespread and the reuse of ancient building material a common practice. On the other hand, the need to arrange an accurate cartography of the area, meant that the *Istituto Geografico Militare* (IGM) prepared different maps that constitute still today a precious and extremely accurate source for archaeological interests. The first map, *Dintorni di Homs*, was realized in 1913 right after the construction of the strongholds and redoubts (fig. 2.17). In particular the two topographers Grupelli and Giua after the request of the newborn *Ufficio Archeologico di Tripoli*, mapped the area of Lepcis Magna in 1914 at the scale of 1:10,000 (fig. 2.18). A year later a meticulous map of Lepcis was also produced by Grupelli and Alessandrini at the scale of 1:2,000 (fig. 2.19). The two plans included all the remains and traces of ancient structures visible at that time, as well as terrain anomalies and modern wells and religious buildings. Other maps were realized in 1918 mainly for military purposes: a general provisional map of the area of Khoms (fig. 2.20) and a detail of the area of Ras el-Hammam (fig. 2.21). The unpublished maps that I recently acquired from antiquities market (see par. 1.3), were of an exclusively military nature. They were made in 1919 by the soldier Palmiro Storti of the Murge Brigade (Alpini Corps). In these documents - five maps of the area of Lepcis and Khoms at the scale of 1:25,000 (figs 1.5, 2.22) plus a detailed plan of Khoms at the scale of 1:5,000 (fig. 2.23) - were included for the first time several ancient structures (mainly *gsur* and *mausolea*) and the main toponyms of the area.

Although considerable damage occurred to the suburban remains of Lepcis in those years, the Italian military occupation was in general interested in the ancient finds. Statues, tombs, inscriptions and structures were accidentally found by soldiers during military activities and sometimes the Superintendent Aurigemma reported them in some of his written works (1914; 1915; 1925a-b; 1929; 1930a; see also ROMANELLI 1925a, 62-63). It is no coincidence that the most detailed archaeological account of Lepcis Magna and its environs realized in these years was written thanks to the interests of a soldier, the lieutenant Stroppa (1912).

After WWI and the subsequent reconquest of Tripolitania by the Italian troops, the archaeological interest towards the antiquities of Lepcis resulted in extensive excavations of the city core such the Severan Forum and the Hadrianic Baths. However, the will to draw a profile of the city by Romanelli, the new Superintendent, led him to comprehend and analyze the main

ancient structures of the surroundings. His monograph *Leptis Magna* (1925a) presented for the first time a detailed overview of the ruins describing almost every ancient building even if not yet excavated or just partially explored.

Between the work of Romanelli and WWII Renato Bartoccini wrote a first report regarding part of the Byzantine wall (BARTOCCINI 1925b) and he dug part of a villa (VI5) between Khoms and Lepcis (BARTOCCINI 1927b). Unfortunately, he spent only a few words regarding his exploration of the sections of the Wadi Caam aqueduct (Aq5) (BARTOCCINI 1927a, 99-100). Giacomo Caputo's research on the suburban areas made during the 1930s was restricted in scope; however, beside the exploration of part of two *villae* east (VI2) and west (VI59) of Lepcis (CAPUTO 1933; 1935a), he supervised the excavation of different Punic tombs (Nc5) located under the Augustan theatre, recording in this way the city boundary to the south from the fifth century BC (DE MIRO, FIORENTINI 1977).

After WWII the examination of the peripheral areas of Lepcis by Ward-Perkins and Goodchild was devoted mainly to the city walls of the city (GOODCHILD, WARD-PERKINS 1953) and to the eastern suburban area. However, their surveys around the city included the main sites and were often encompassed accurate photographic documentation, now held at the Archive of the British School at Rome. The analysis of the ancient remains around Lepcis was possible also thanks to the precious aid of the 1940s aerial photographs (figs 2.24-2.27). Observing this documentation, the two scholars were able to identify the complete route of the earthen *agger* (Ag1) and hypothesize the existence of an ancient land partition east of the city (fig. 2.28). West of the city a new necropolis (Nc1), unfortunately unpublished, was excavated in these years due to the construction of the "British Officer Club" barracks (VERGARA CAFFARELLI 1953; 1954) and, in the same suburban sector, a detailed study of the so called Hunting Baths (En1) was undertaken by Ward-Perkins together with Jocelyn Toynbee (1949).

The following decades were not very propitious for the ancient landscape of the close suburbium and hinterland of Lepcis Magna. On the one hand the uncontrolled development of the city of Khoms caused the loss of wide portions of uncharted areas, on the other the predominance of research and excavations within the ancient city has unavoidably diverted analysis away from its suburban and periurban territory. The unique relevant exception, beside papers related to the amphitheatre (CHIGHINE, MADARO, MAHGIUB 1976-1977) and to the circus (HUMPHREY, SEAR, VICKERS 1972-1973), is the study realized in the 1960s by Claudio Vita-Finzi (1969) that merged the geology and the pedology of the Wadi Lebda basin with the ancient landuse and structures built along its course.

The activities of the Lepcis Magna Department of Antiquities (LMDoA) from the 1960s onwards was mainly related to emergency excavations due to the construction of new buildings. Lavish *villae* (VI1, VI6, VI33) and numerous *hypogea* were indeed excavated by the local DoA

even if the majority of these sites are, unfortunately, still unpublished and the only documentation available is held in its archive.

From the mid-1990s the Archaeological Mission of the University of Roma Tre undertook several project related to the Lepcitanian territory and suburbium. The excavation of an area located close to Wadi er-Rsaf - c.700 m northwest from Lepcis - (MUSSO 1997) highlighted a multifunctional landscape developed around the ancient coastal road and characterized by a villa (Vl3), warehouses (Ti3), a caravanserai (Ti4), *necropoleis* (Nc7, Nc8) and *mausolea* (Ma21, Ma22). The same Mission undertook several surveys in the rural hinterland (MUNZI *et al.* 2010; 2014; 2016). Contemporary to the Roma Tre researches, the French Archaeological Mission (MICHEL 2011-2012, 114-117) was involved in the excavation of a portion of the east *suburbium* including the so called Eastern Baths (En2) while scholars from the University of Macerata investigated the amphitheatre and the circus (RIZZO *et al.* 2011-2012, 61-69) and a team lead by Prof. Ziegert (University of Hamburg) dug the so called villa of Wadi Lebda (Vl47) and partially published it (MERRONY 2005; WENDOWSKI, ZIEGERT 2005).

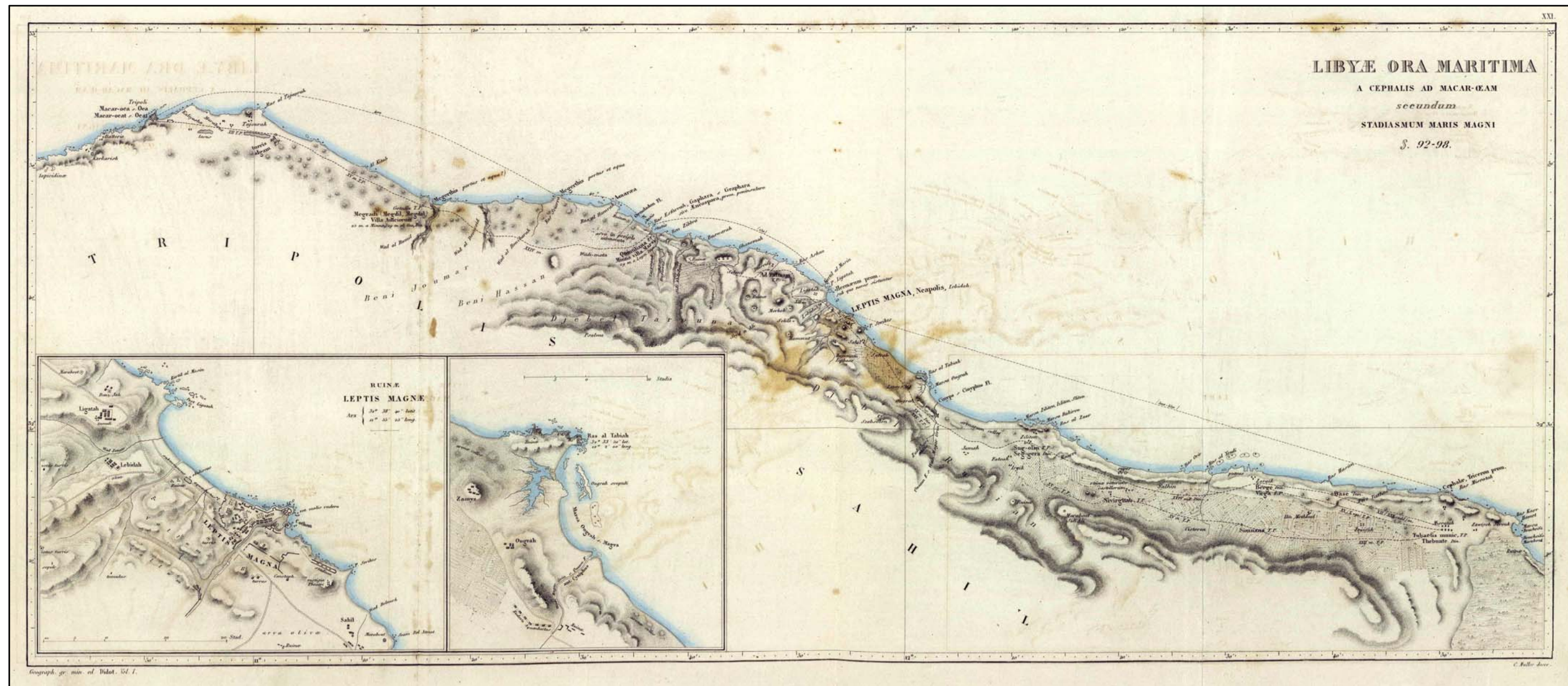
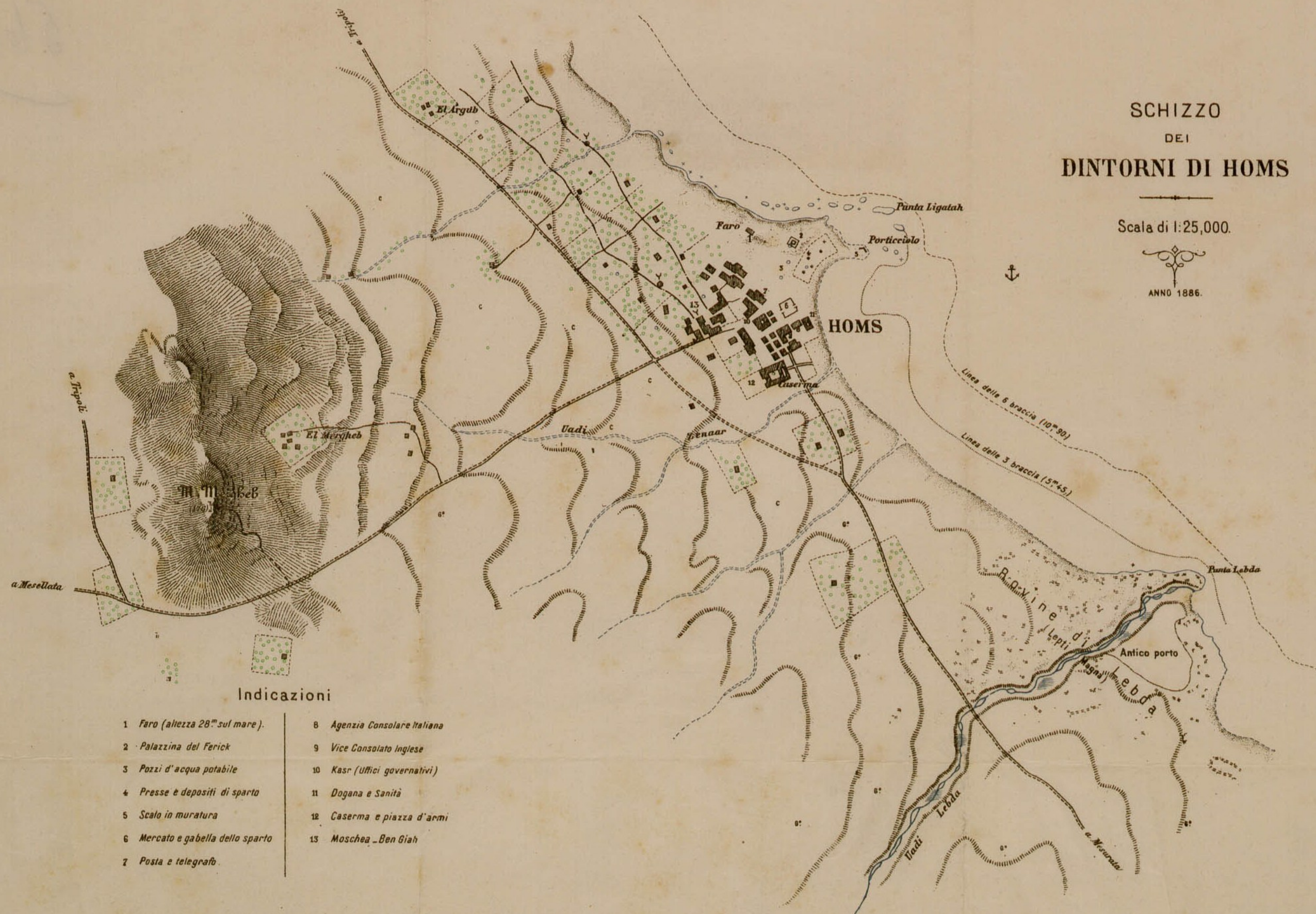


Fig. 2.14. Map of part of the Tripolitania region with the detail (bottom left) of the Lepcis Magna suburban area (MÜLLER 1855, tab. XXI).

SCHIZZO
DEI
DINTORNI DI HOMS

Scala di 1:25,000.



Indicazioni

- | | |
|--|------------------------------|
| 1 Faro (altezza 28 ^m sul mare). | 8 Agenzia Consolare Italiana |
| 2 Palazzina del Ferick | 9 Vice Consolato Inglese |
| 3 Pozzi d'acqua potabile | 10 Kasr (uffici governativi) |
| 4 Presse e depositi di sparto | 11 Dogana e Sanità |
| 5 Scalo in muratura | 12 Caserma e piazza d'armi |
| 6 Mercato e gabella dello sparto | 13 Moschea - Ben Giah |
| 7 Posta e telegrafo. | |

Fig. 2.15. Schizzo dei dintorni di Homs. Scala di 1:25.000 (IGM 1886).

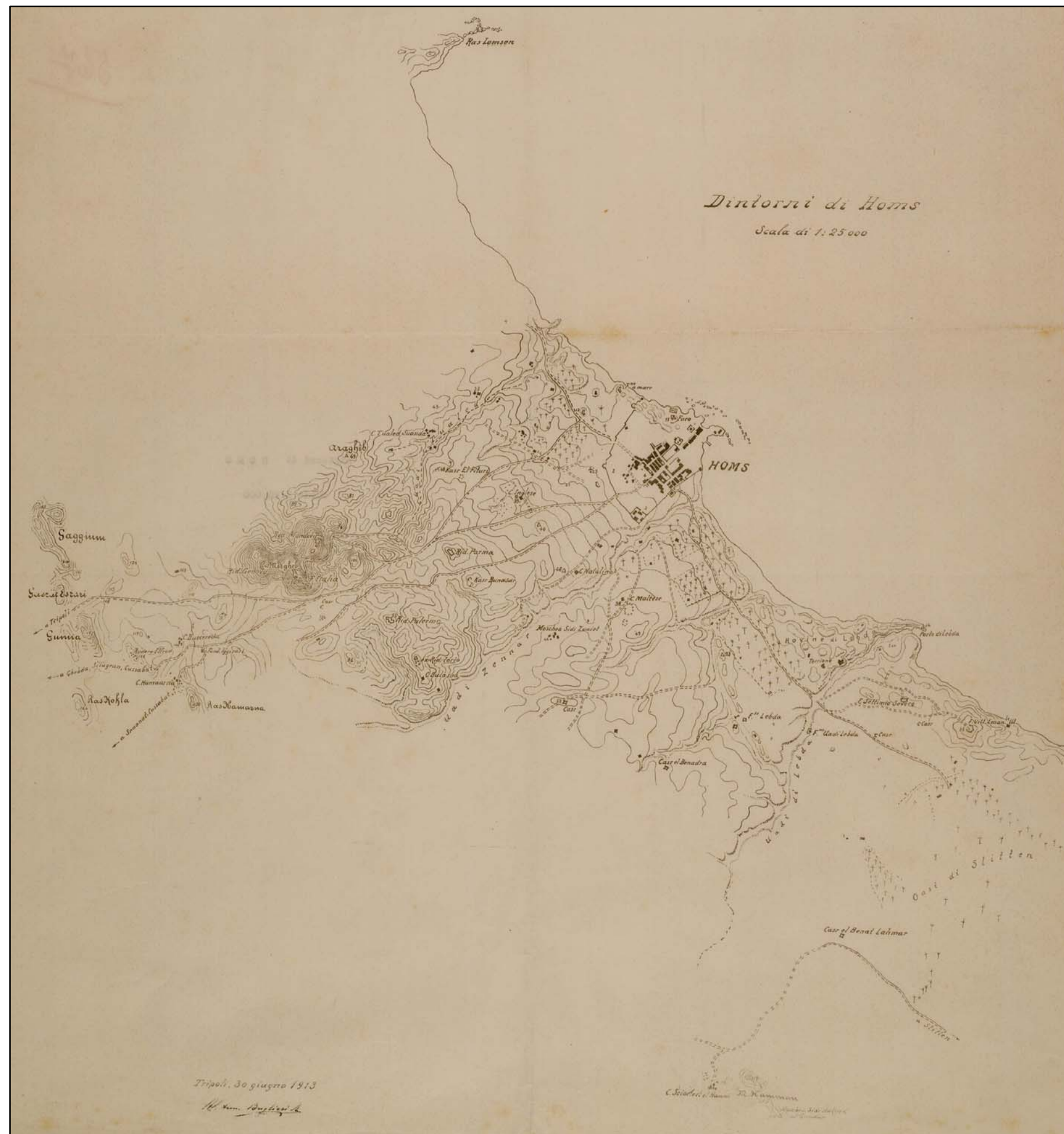


Fig. 2.17. Istituto Geografico Militare, *Dintorni di Homs*. Scala di 1:25.000 (IGM 1913b).



Fig.2.18. Istituto Geografico Militare, *Rilievo numerico di Lebda (Leptis Magna) eseguito dai topografi Grupelli e Giua. Scala 1:10.000 (IGM 1914).*

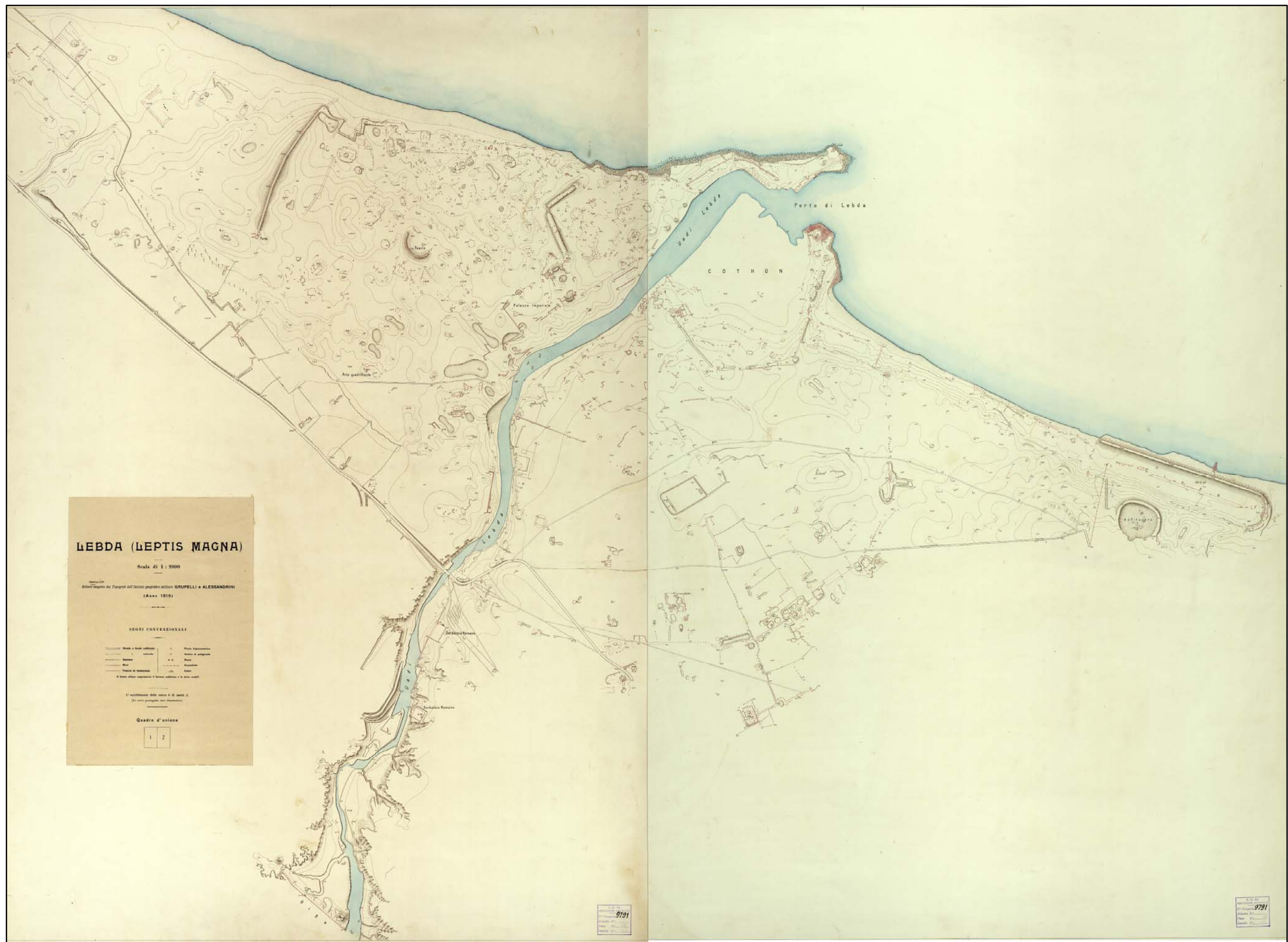


Fig. 2.19. Istituto Geografico Militare, *Lebda (Leptis Magna)*. Scala di 1:2.000. Rilievo eseguito dai Topografi dell'Istituto Geografico Militare Grupelli e Alessandrini (IGM 1915a).

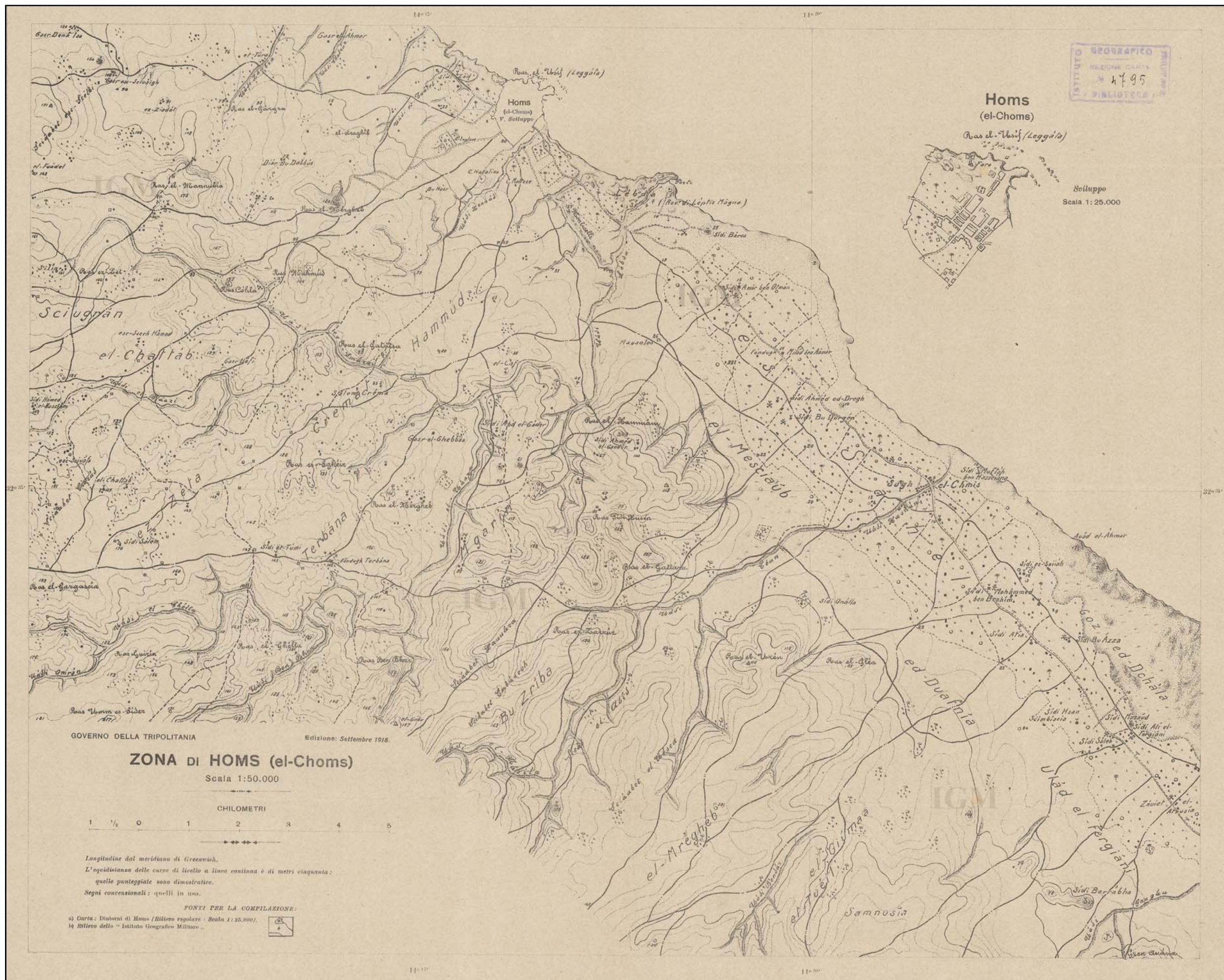


Fig. 2.20. Istituto Geografico Militare, Zona di Homs (el Choms). Scala 1:50.000 (IGM 1918a).

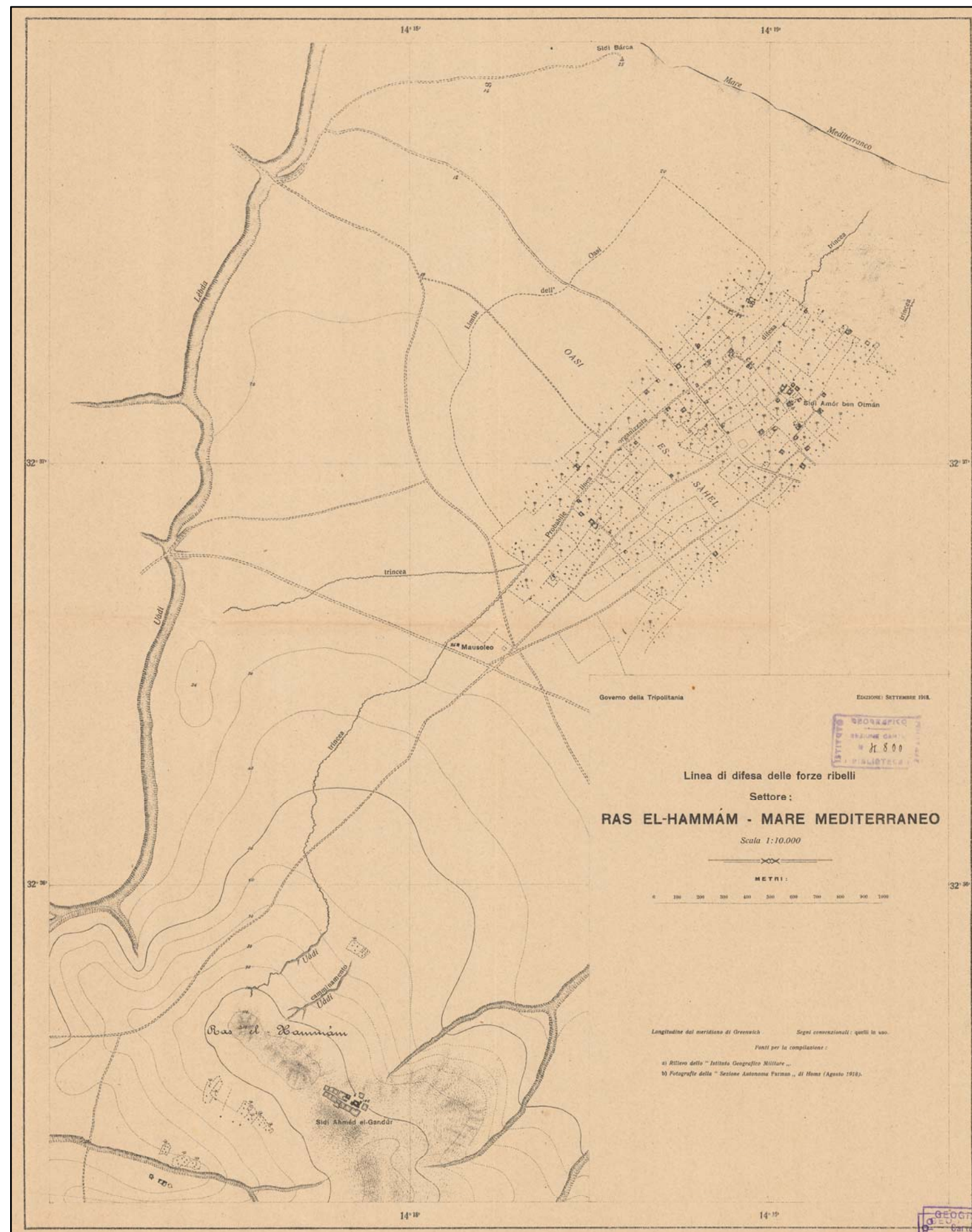


Fig. 2.21. Istituto Geografico Militare, *Linea di difesa delle forze ribelli. Settore: Ras el-Hammam - Mare Mediterraneo. Scala 1:10.000* (IGM 1918b).

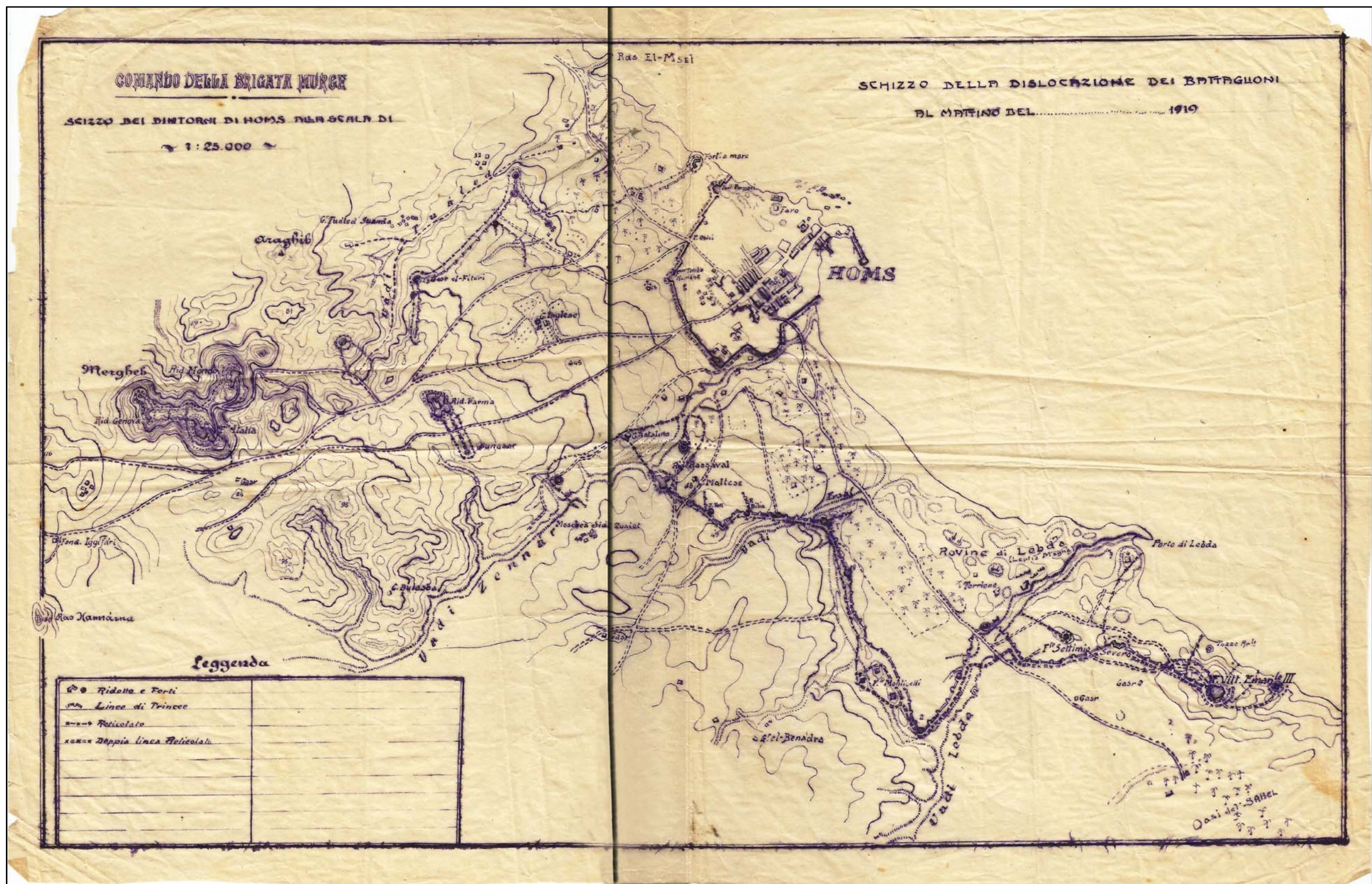


Fig. 2.22. Comando Brigata Murge. Schizzo dei dintorni di Homs alla scala di 1:25.000 (Bgt. Murge 1919a).

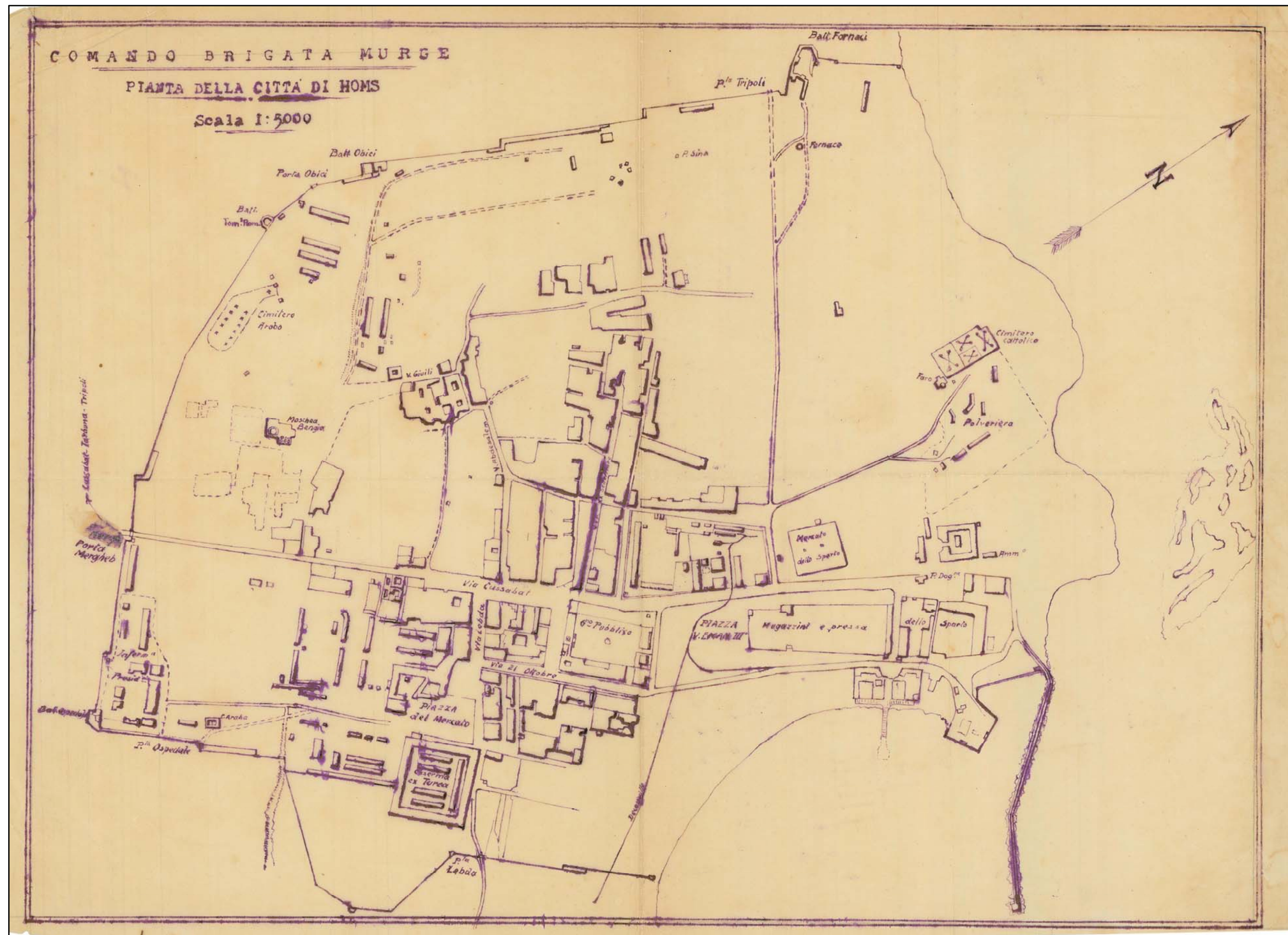


Fig. 2.23. Comando Brigata Murge, *Pianta della città di Homs*. Scala 1:5.000 (Bgt. Murge 1919f).

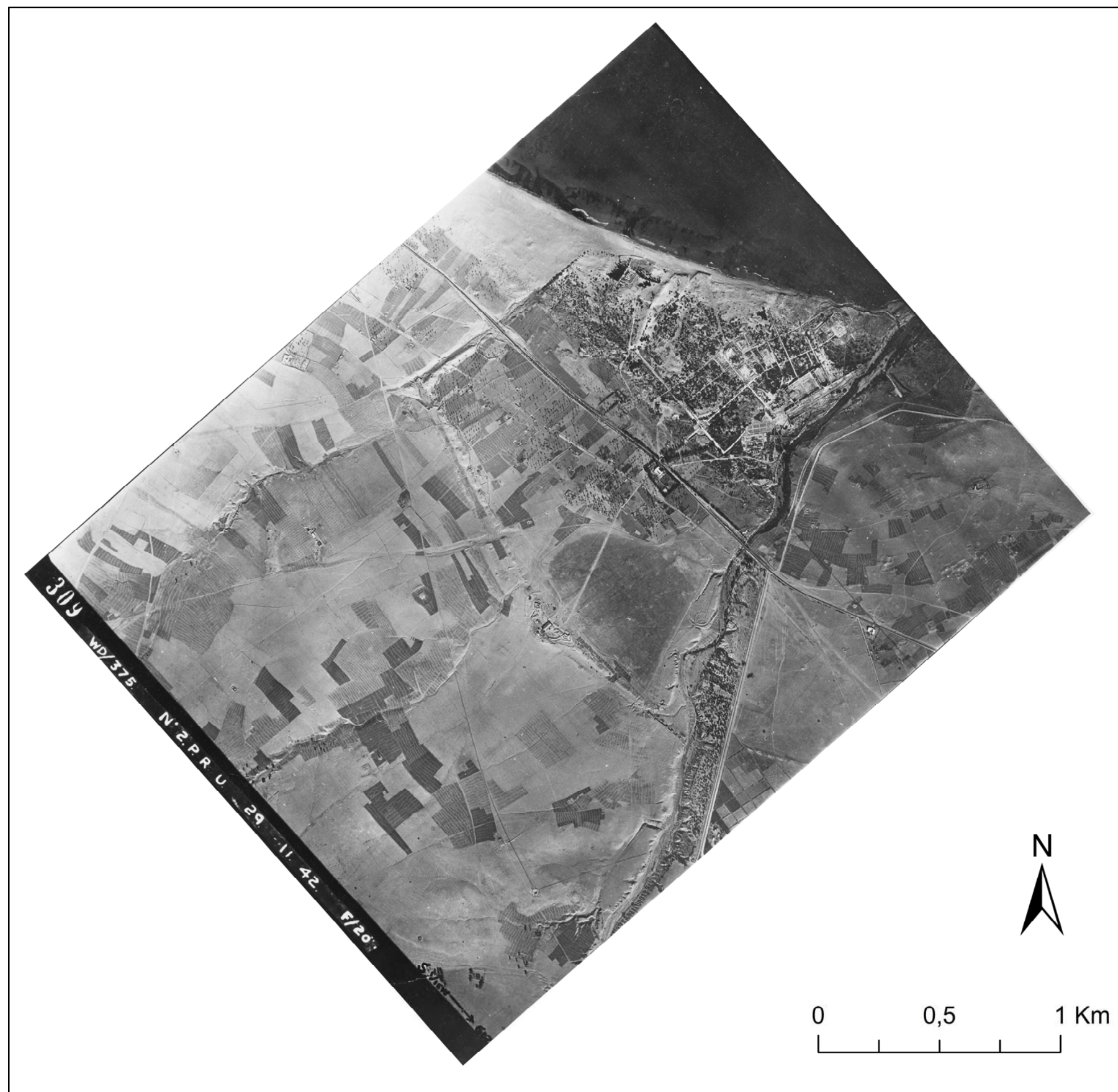


Fig. 2.24. The Lepcis Magna suburbium in a RAF air photograph took in November 1942 (ASLS, *Lepcis Magna* 94144).

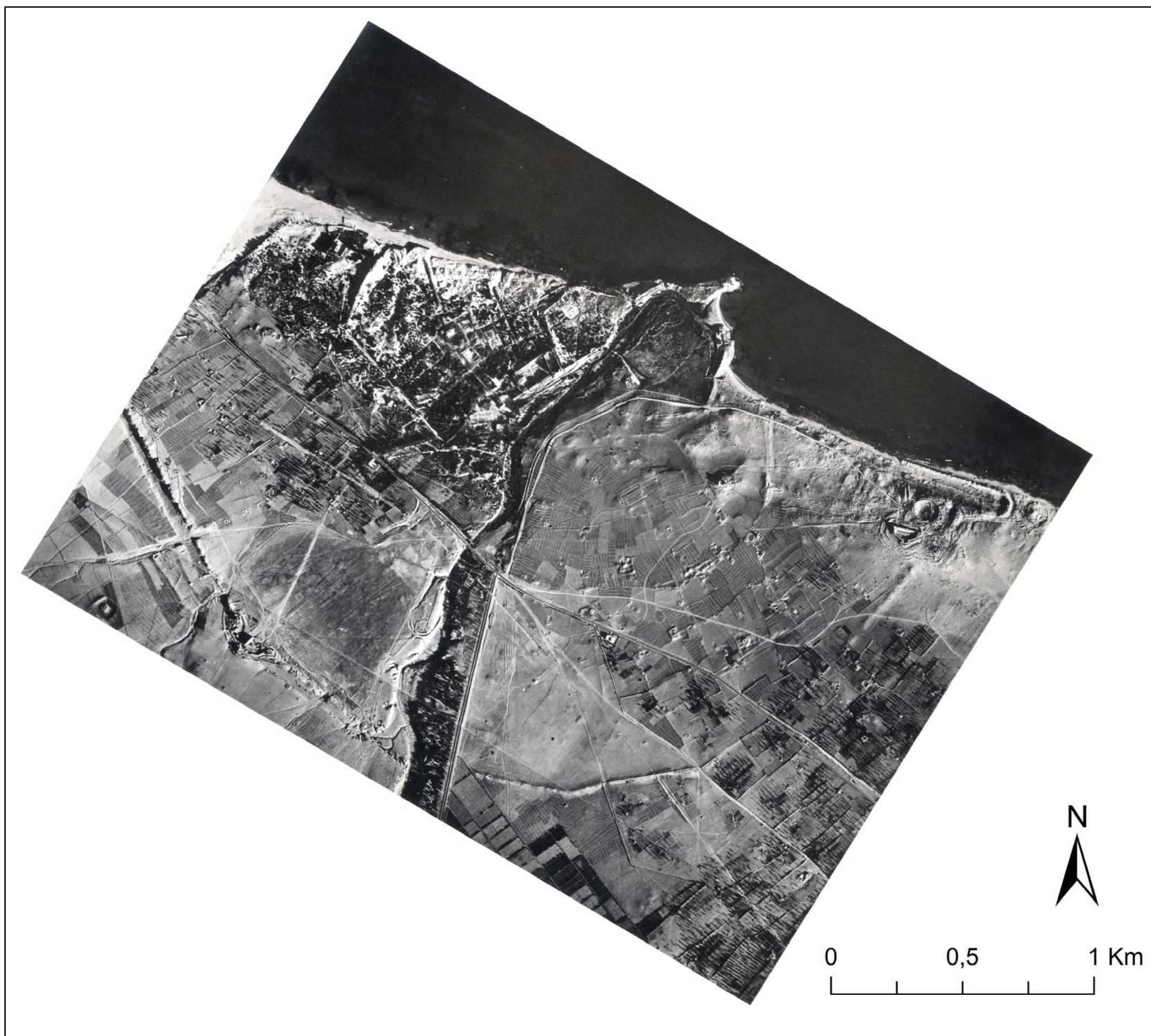


Fig. 2.25. The Lepcis Magna suburbium in a RAF air photograph took between 1942 and 1943 (BSR, WP G11-62).

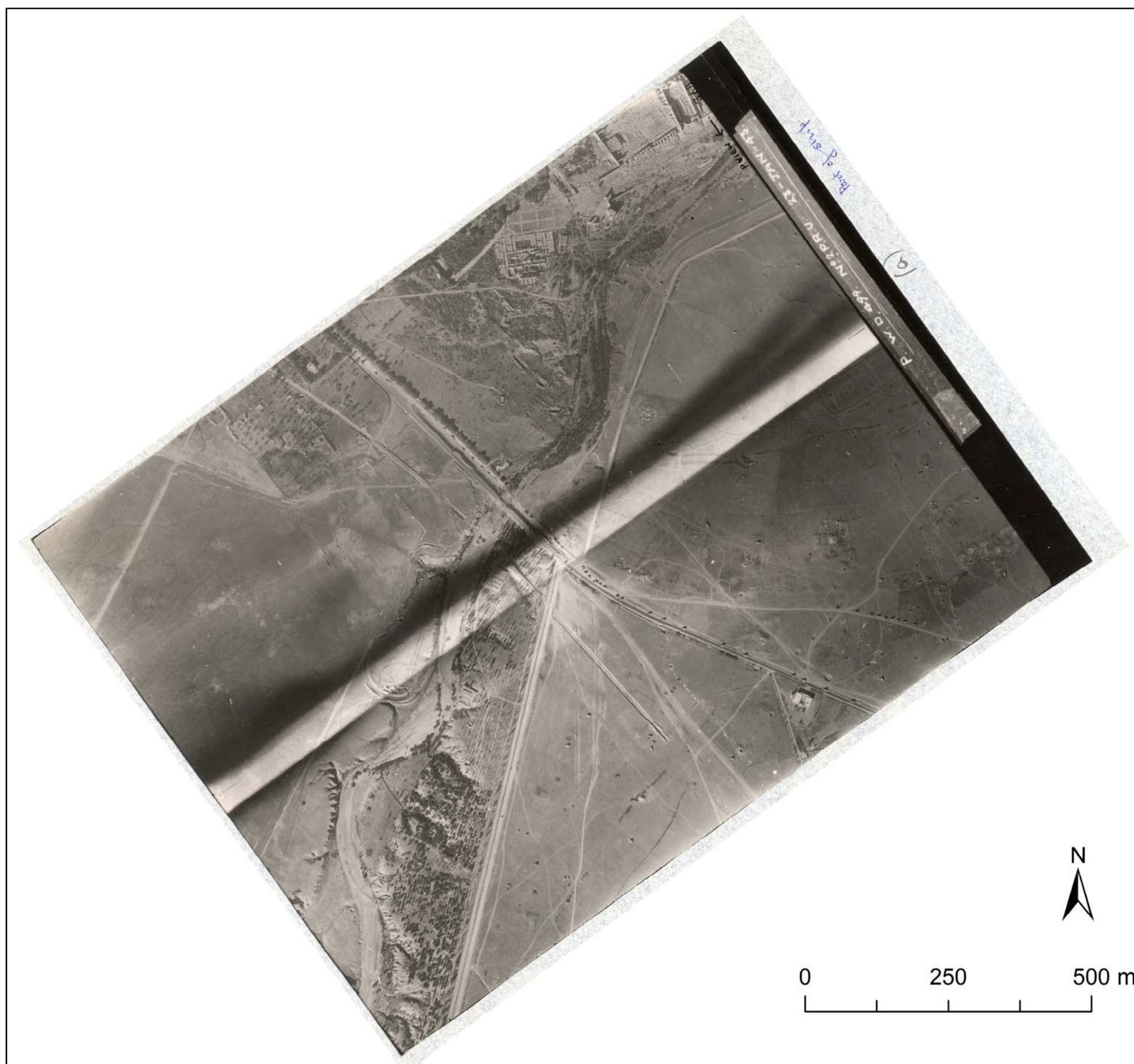


Fig. 2.26. Part of the SE suburbium of Lepcis Magna in a RAF air photograph dated January 1943 (BSR, WP G11-61a).

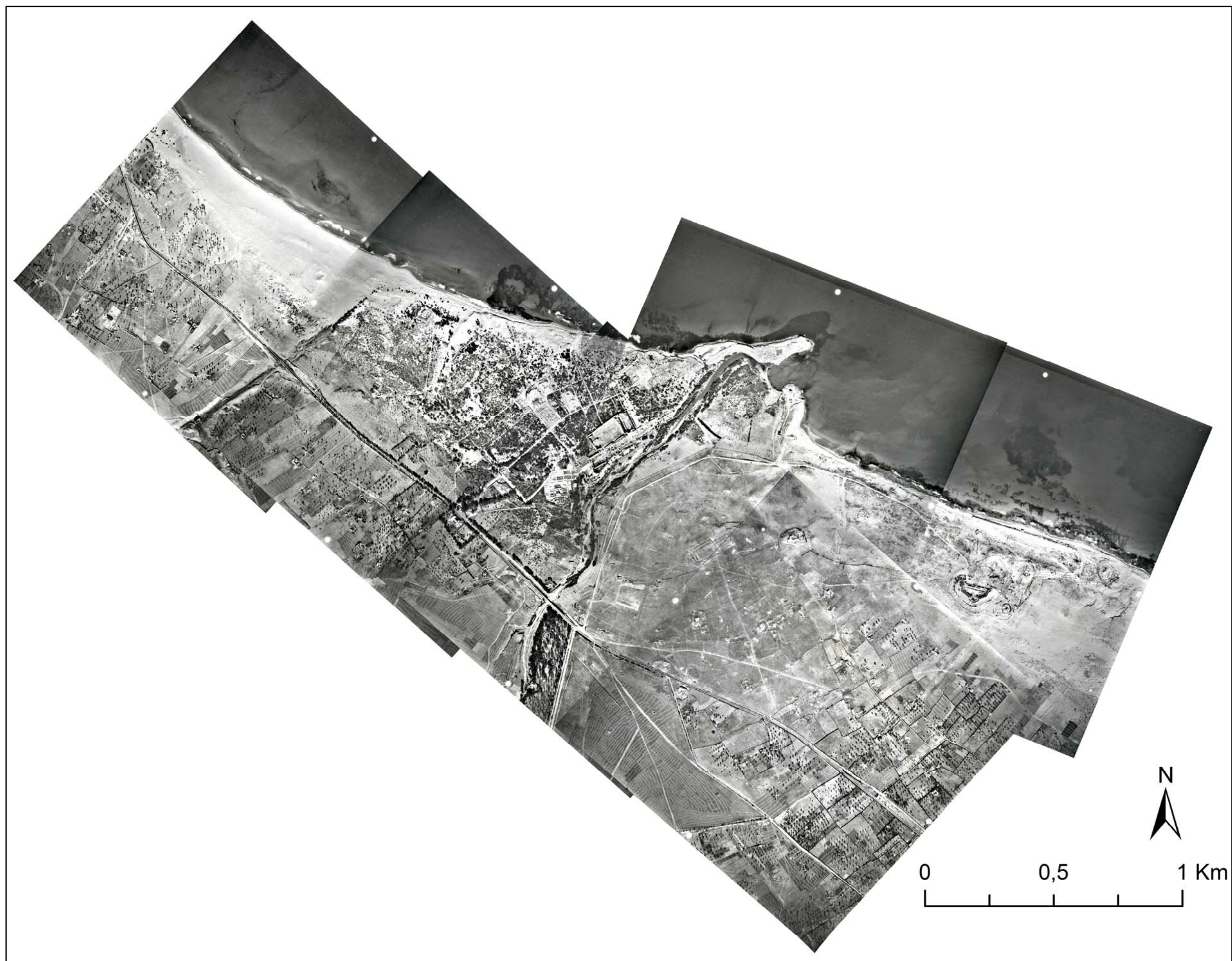


Fig. 2.27. The Lepcis Magna suburbium in a RAF air photograph took in 1949 (ASLS, *Lepcis Magna* 24993-25005).

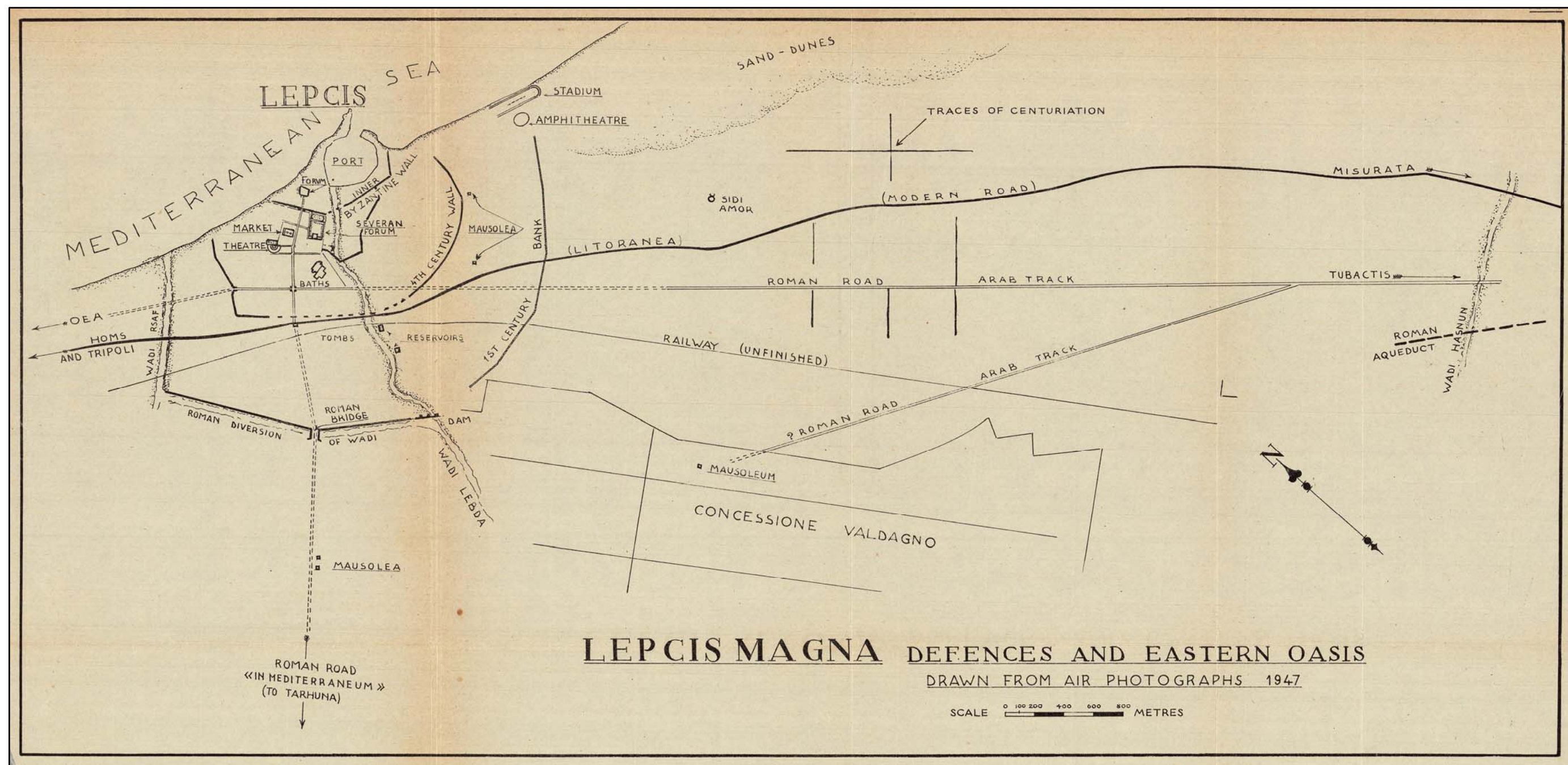


Fig. 2.28. *Lepcis Magna. Defences and Eastern Oasis* (GOODCHILD 1949b, plan 2).

CHAPTER 3

SUBURBAN INFRASTRUCTURES: ROADS WATER SUPPLY, FLOOD CONTROL, DEFENCES, RELIGIOUS AND ENTERTAINMENT COMPLEXES

In this chapter are analyzed several structures and sites related mainly to infrastructures and public buildings. The Lepcitanian peripheral main roads and other minor routes together with the analysis related to milestones constitute the first section (par. 3.1 and Vol. II, App. IV). The structures related to the city water supply (cisterns and aqueducts) and to the widian regimentation form the second section (par. 3.2). Other sections are related to religious structures (par. 3.3), to wall enceintes and military structures (par. 3.4) and finally to public entertainment buildings (par. 3.5).

3.1. MOVING OUTSIDE THE CITY: THE ROAD SYSTEM. A SHORT SUMMARY

The analysis of the historical documentation, of the archival data gathered and the results of recent surveys have allowed me to examine in depth the ancient Lepcitanian transport network and to update its *status quaestionis*, essentially based on research made by British scholars between the late 1940s and the 1950s. These updates covered both the main routes and other minor roads and have allowed me to detect also new tracks and to define, with a better accuracy, the already known infrastructures (fig. 3.1) essentially the coastal road and the *via in mediterraneum*. The data related to the road system collected and analyzed for this PhD thesis have been recently published (ZOCCHI 2018) and reproduced in this thesis as an appendix (Vol. II, App. IV). The new data and the main characteristics of the Lepcitanian peripheral road network can thus summarized briefly here:

I have been able to redefine the route of the coastal road northwest of Lepcis using the positioning of the milestones (Ms1-Ms4, Ms7-Ms8) within the GIS platform. As a result of determining with accuracy the find spot of the first milestone (Ms2), set up a short distance from the eastern border of Khoms, I have been able to conclude, for the second/third century AD, that the western limit of the urban area of Lepcis Magna (the *caput viae*) lay at the Marcus Aurelius arch (Nc6) (ZOCCHI 2018, 53-57; Vol. II, App. IV.2.1).



Fig. 3.1. The road system in the periphery of Lepcis Magna with the milestones found (Ms1-Ms9) and the numbering of miles according to the routes hypothesized.

A new reading of the east sector of the coastal road (*via publica*) with a connected diagonal road has permitted me to identify that a wide portion of the eastern suburbium was organized with a cadastral land partition based on the Roman *actus* (module of 12x12) in which both the coastal road and other minor routes played a fundamental role (fig. 3.2). This cadastral partition is also possibly confirmed by the position of the Gasr Banat mausoleum (Ma6), located at the corner of one of these 12x12 modules, by the position of the eastern sector of the earthen *agger* (Ag1) and finally by the position of some Arab structures (marabouts and a fonduq), that were built along previous ancient paths. A new land organization and definition of the inner southeast suburb (and probably until the Wadi Caam area) may have been linked with the granting for Lepcis Magna of a new civic status under Trajan, when the *municipium* became a colony and with

the construction of the Wadi Caam aqueduct (see par. 3.2.1) that crossed the hypothesized new cadastral area (ZOCCHI 2018, 57-63; Vol. II, App. IV.2.2).

The recent and unpublished discovery of a milestone base (Ms9) together with other archival and survey data allowed me also to define a new route that ran from Lepcis Magna and headed southwards, linking the coast to the rich Orfella region and, probably, to the farther *limes*. Beside the milestone base, the presence of *mausolea*, quarries, *villae* and other rural structures near this hypothesized "southern route" suggests its existence (ZOCCHI 2018, 66-68; Vol. II, App. IV.2.5).

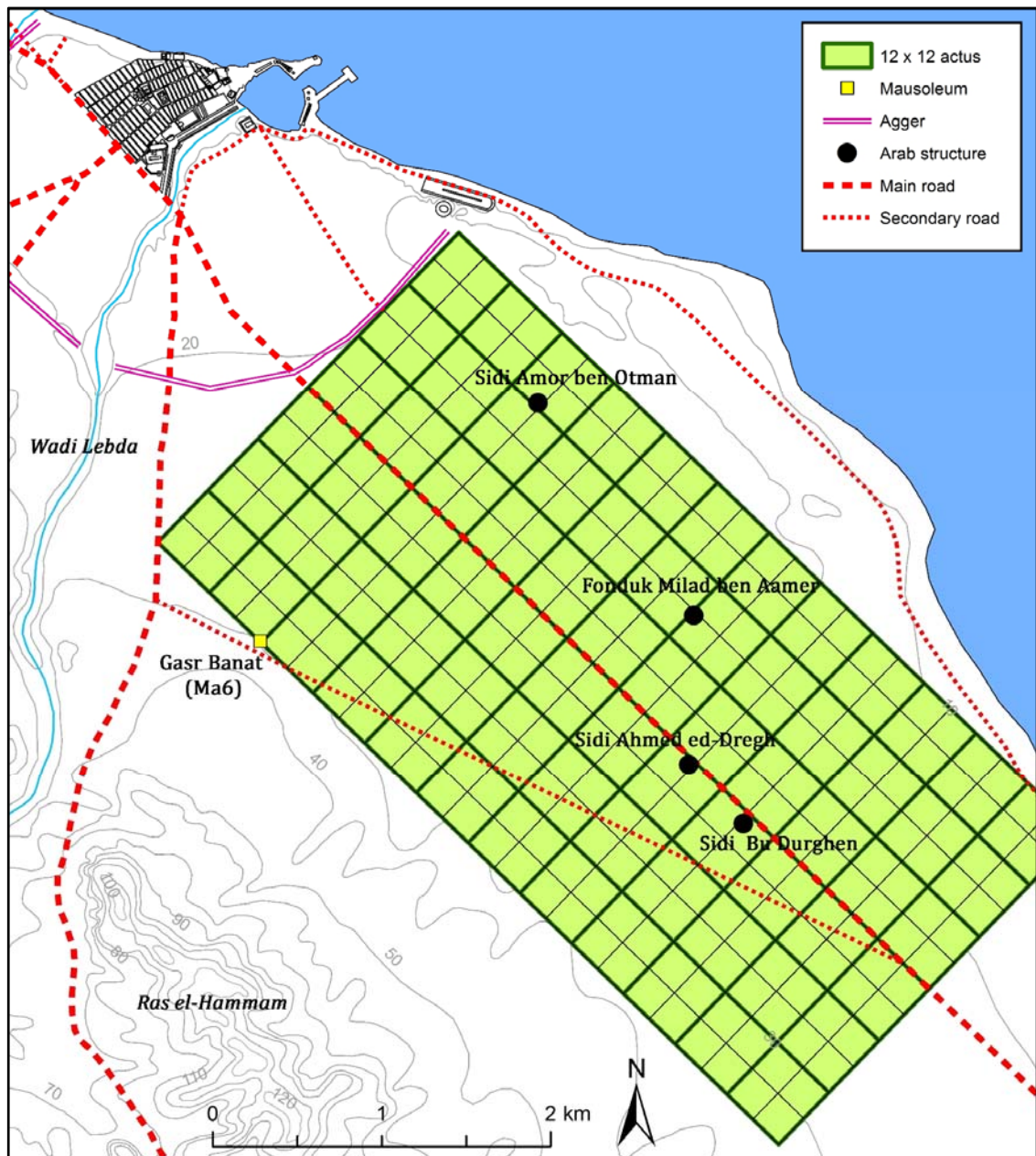


Fig. 3.2. The hypothesized land partition with the ancient and Islamic structures associated.

Thanks to significant traces visible on the historical maps, air photos and satellite imagery and the presence of several ancient sites located nearby, it was possible to detect and define another important route that from Lepcis ran toward the hill of Ras el-Mergheb and, from there,

westwards. The road probably rejoined the coastal route at the *statio* named *ad Palmam*, located between the twelfth and thirteenth mile, as suggested by the *Tabula Peutingeriana* itinerary. This route was probably also used when the main coastal road was impracticable due to the wadi floodings and to sand dunes (ZOCCHI 2018, 63-66; Vol. II, App. IV.2.3).

Both the east and west inner suburban roads have been analyzed and redefined thanks to the analysis of scarce traces on the terrain and thanks to a new analysis, often unpublished, of the archaeological remains related to funerary structures or to infrastructure strictly related especially to different routes and to the movements of goods (ZOCCHI 2018, 68-74; Vol. II, App. IV.3.3-4).

Finally, one of the most significant elements related to this new topographical analysis of the Lepcitanian road network is that it constitutes a fundamental starting point to examine the main aspects of the ancient landscape in terms of population, economy and land exploitation.

3.2. WATER SUPPLY AND WIDIAN REGIMENTATION

One of the main requirement and concerns for the well-being of the people of Lepcis was an easy and appropriate exploitation of rainwater and ground water sources. However, the relative scarcity of rainfall (c.300 mm per year), the high frequency of drought periods together with the sub-optimal soil features made the proper preservation of water both for domestic and agricultural uses problematic. Moreover, the imbalance and unpredictable rainfall distribution during the year (concentrated in the short rainy season) often caused severe flooding in which water, if not controlled and regimented, was more a danger than an advantage for agricultural activities. Despite these difficulties, the ancient exploitation of water sources across North Africa in general is commonly recognized to have been well adapted to the environmental conditions (see in general SHAW 1984). Especially during the Roman period, wide portions of land brought into cultivation of crops and olive groves and cities and settlements grew in population together with their water needs. Considering the city and its peripheral landscape, the whole area take into account encompassed tens of thousands of people plus as many animals together with crops that depended on a proper amount of water to grow. However, if the high population density was to some extent a consequence of water availability, the quantity of drinkable (and no drinkable) water necessary to sustain the Lepcitanian inhabitants had to be significant and take account of frequent unfavourable seasons.

The main water sources used in the Lepcitanian peripheral area and by the people who lived within the city were surface water and underground water. The former includes lakes and streams, while the underground water comprises essentially aquifers where water is collected through wells. In the event that an aquifer emerges from the ground (usually along hill slopes or

gorges) it forms a spring and water from the source was collected usually in reservoirs to avoid waste (in general see HODGE 1992, 67-92). In addition, water was also stored in cisterns directly when it rained through channels and barrages.

There were two separate water systems that can be detected within the area analyzed: the water supply devoted to the city needs characterized mainly by reservoirs and aqueducts and the water used for agricultural activities and served essentially by wells and small/medium size cisterns. Beside these two systems a further set of infrastructures were linked with water regimentation caused by intense and short rainfall. Earthen and *opus caementicium* dams along the wadis and the diversion ditch with the related *agger* around Lepcis were built basically to protect crops, infrastructure and the city from flooding and, when and where possible, the water collected from these unpredictable events was capitalized and used for agriculture. The first two systems were not completely separated and it is highly likely that, depending on the needs of the moment and according to the water quality, part of the water devoted to the city was used to irrigate fields and vice versa. Especially during the Roman period, water usage was regulated by law and private uses of public water was subject to taxation and to precise rules (SHAW 1982; WILSON 1999).

3.2.1. THE CITY WATER SUPPLY

The data related to the water infrastructures linked to Lepcis have made little progress since the scanty researches carried out by Romanelli (1925a, 137-149; 1925b; 1970, 221-224) and Bartoccini (1927a, 98-101). The lack of detailed surveys or excavations prevent us

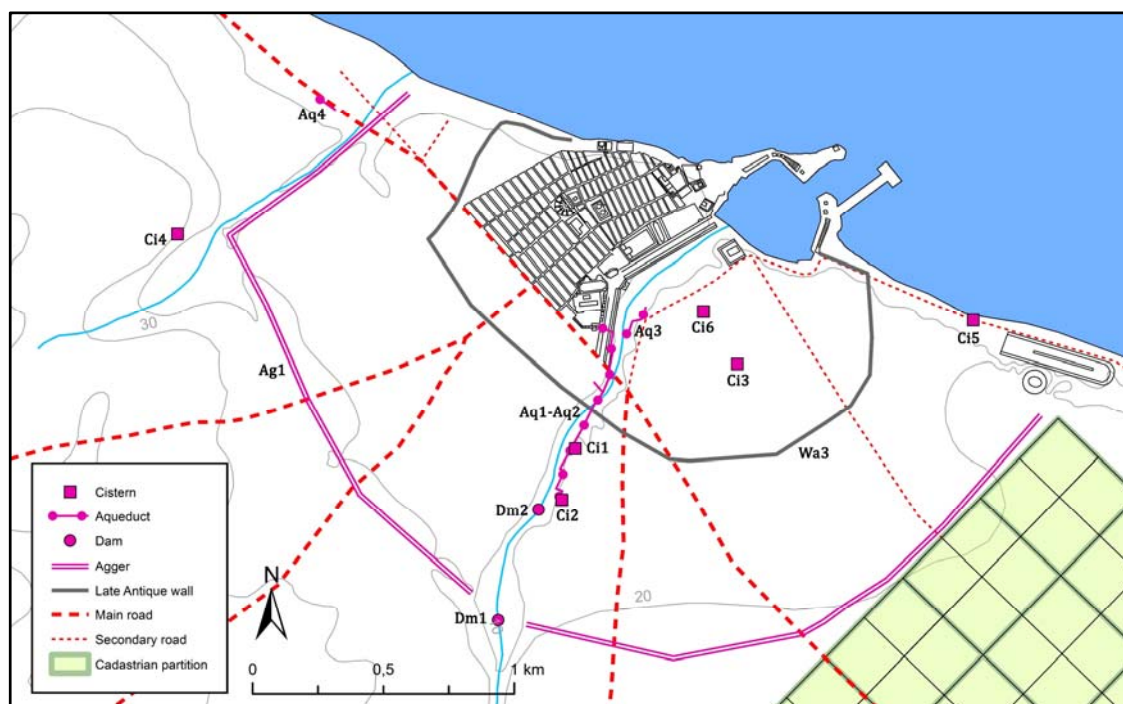


Fig. 3.3. The main structures linked with water supply and widian regimentation in the inner suburbium of Lepcis Magna.

establishing accurate chronologies and fully understanding the functioning of some structures/devices (recent synthesis in PAULIN 2015, 152-154). However, a new reading of some historical accounts together with archival documentation allows me to identify some elements that may help to better understand the city's water supply through the centuries.

It is well known that Lepcis was supplied with water from the Wadi Caam aqueduct (Aq5)

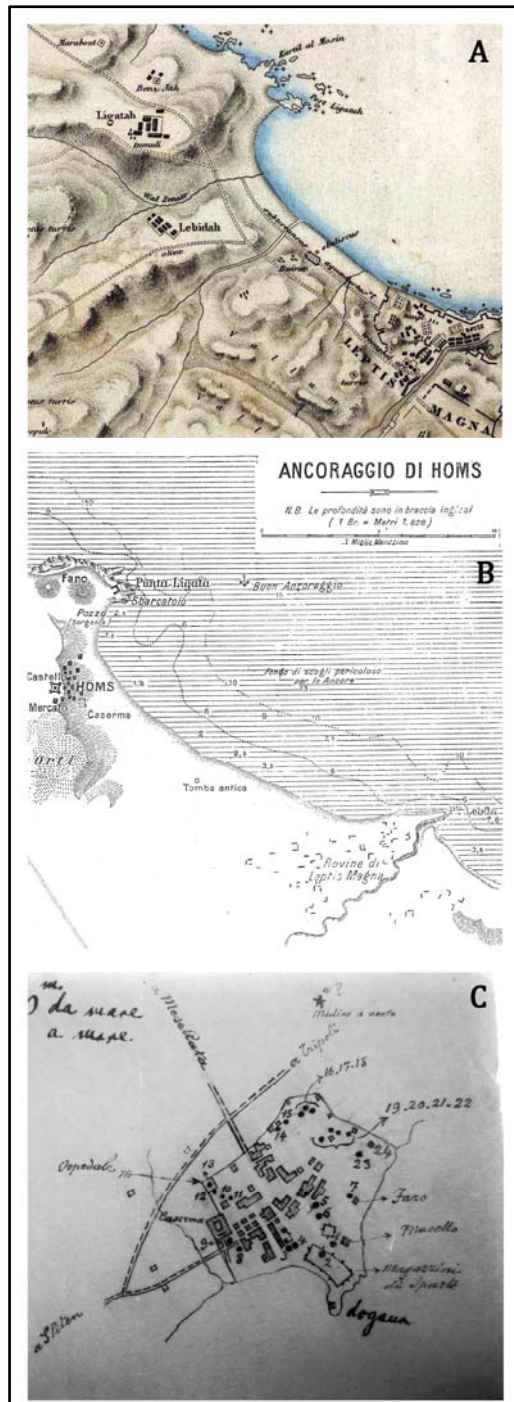


Fig. 3.4A: The area between Lepcis Magna and Cape Hermaion edited by Karl Müller (1855, tav. XXI, detail) with the Sidi Ben Djà marabout "Ben Jah" north of "Ligatah". B: The spring/well "Pozzo - sorgente" west of the Khoms lighthouse (IGM 1911, detail). C: The Italian military sketch of Khoms made in 1911 in which are numbered the wells/springs (AUSSME, L-8, b. 142, fasc. 2, detail).

from the second century AD. However, the route of this underground conduit, c.19 km long, is not well defined and its location is uncertain especially in the peripheral area of the city. Beside the water coming from Wadi Caam, other Roman infrastructure linked with the city water supply include two cisterns located along the Wadi Lebda (fig. 3.3, Ci1-Ci2) with their short aqueducts (fig. 3.3, Aq1-Aq2). In these two cases, the ultimate water source that filled the two reservoirs is not clear. A further question is to determine how and from where the city was provided with water before the first/second century AD, when the structures just mentioned were built.

According to an Italian military report made in November 1911 (AUSSME, L-8, b. 142, fasc. 2) and the analysis made by the *Commissione per lo studio agrologico della Tripolitania* in 1913 (MC 1913, I, 79) the best spots to find a good quality of freshwater were located in the north part of Khoms (Cape Hermaion) and in the inner suburban area of the ancient city, especially close to the Wadi Lebda where some springs were visible above all along its banks and bed. Alongside the Wadi Caam aqueduct, it would be logical that the main ancient infrastructure related to the Lepcis water supply was somehow linked with these two locations.

There is a set of data that has never been taken into account by previous scholars that could link the area of Cape Hermaion to the exploitation of fresh water. According to Ludwig Salvator (LOTHRINGEN 1874, 168), the city of Khoms was at his time

provided with a local spring of fresh and drinkable water that was also used by the Pasha through its regular transportation to Tripoli via barges. The spring was located between the Sidi Ben Djà marabout and the sea, thus, as indicated by the Müller's map, in the north west sector of Homs (fig. 3.4A, "*Ben Jah*"). A spring is also indicated in the contemporary map titled "*Ancoraggio di Homs*" (published within IGM 1911; see also GHISLERI 1912, 71) between the lighthouse and the sea (fig. 3.4B, "*Pozzo - Sorgente*"). This location seems confirmed by Camperio who visited Khoms in 1880 (*Pionieri Italiani in Libia* 1912, 218) and above all by an unpublished Italian military report and sketch made in 1911 (AUSSME, L-8, b. 142, fasc. 2) in which are indicated at least three springs/wells of fresh water within the modern city (fig. 3.4C, nrr 1-2, 24). However, without any doubts, it is highly probable that the aquifer in the Cape Hermaion area was superficial since ancient times and it formed one or more springs along the slopes of the low hills located at short distance from the headland (for the exploitation of springs in ancient times see TÖLLE-KASTENBEIN 1993, 24-32). Archaeological evidence that could link these springs to Lepcis comes from an ancient underground conduit that was detected by Captain Smyth at the beginning of the nineteenth century between Cape Hermaion and Lepcis and indicated in the Müller map as "*subterraneus aqueductus*" (fig. 3.4A). It is probable that the conduit seen by Smyth is the one recently excavated by Roma Tre University near Wadi er-Rsaf (fig. 3.3, Aq4) and dated to the first century AD. According to the data available from this recent excavation, this *opus caementicium* aqueduct was c.1 m wide (c.2 m considering its side walls), flanked by the coastal *via publica* and provided with inspection wells every 13-15 m. Moreover, at the end of the seventeenth century Durand (1694, 214) mentioned the presence of cisterns in the area of Ligatah/Khoms. Even if the French traveller did not provide an accurate position for these structures, it is probable that they were fed in ancient times with the fresh water coming from the above mentioned springs.

Other springs that have been registered close to Lepcis were the ones located along the Wadi Lebda, a stream characterized by a perennial flow until a few decades ago (MC 1913, I, 63; ROMANELLI 1925, 71). Other small springs were detected near the mouth of the Wadi Zennad (MC 1913, I, 64) but, since they were located close to the seashore, it is not possible to establish if in this case the aquifer was contaminated with seawater. However, the good quality of the Wadi Lebda water was mentioned during the nineteenth century by Barth (1849, 306), Rae (1877, 41) and Freund (*Pionieri Italiani in Libia* 1912, 181). Moreover, during the first years of the Italian colonial period, there was a plan to build a well along the wadi bed close to Lepcis and, through a pump and an aqueduct, bring the water to Khoms. This project - not realized - would confirm both the good quality of the water and the shallowness of the aquifer, found c.2.5 m below the wadi bed, at short distance north from the main dam Dm1 (in general see AUSSME, L-8, b. 142, fasc. 1; MC, 1913, I, 63; SIMONETTI 1914, 77; VALLERO 1914, 25). However, two "Northon type" wells were built by the Italian troops in 1919 along the west bank of the Wadi Lebda at short

distance south from the Hadrianic Baths to provide the "Uadi Lebda" redoubt with fresh water and thus confirming once again the presence of a shallow aquifer in the area (AUSSME, L-8, b. 142, fasc. 2).

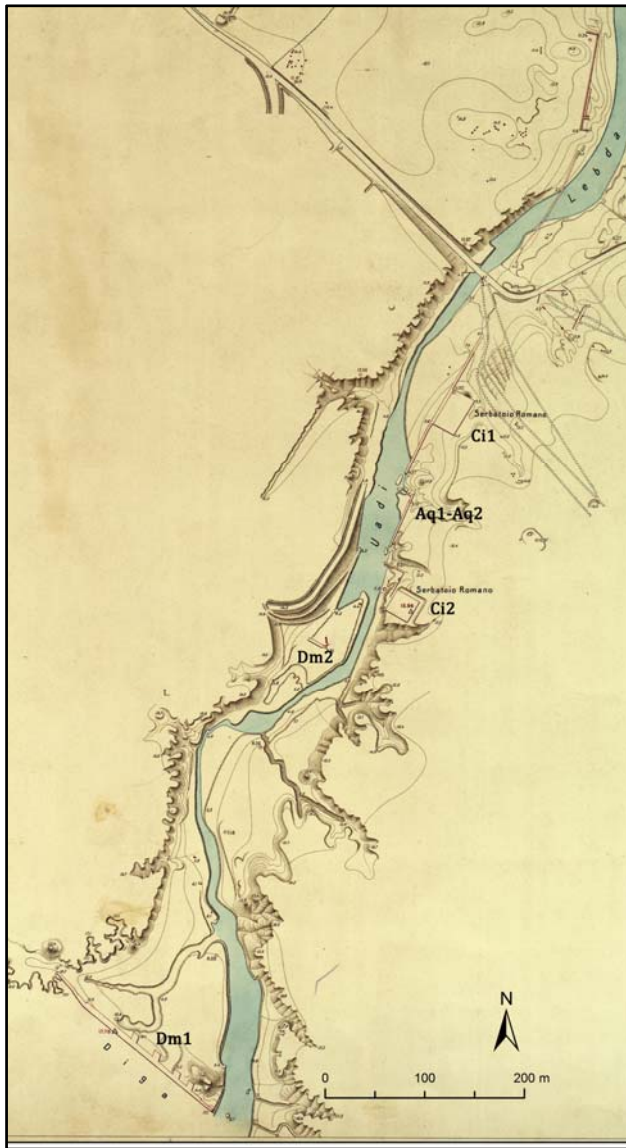


Fig. 3.5. Dams, aqueducts and cisterns located in the inner suburbium south of Leptis Magna (IGM 1915a, detail).

The two Roman cisterns (figs 3.3 and 3.5, Ci1-Ci2) built on the east bank of the Wadi Lebda and measuring 42.25x26 m (Ci1) and 22.40x26 m (Ci2), may have collected and protected the water of two different springs. This consideration, already hypothesized by Romanelli (1925b, 224) and surprisingly not considered by Di Vita (1997, 311), seems to be supported by a series of elements that unfortunately only further excavations could confirm. First, it is possible to exclude the possibility that the two cisterns, located on the east bank of the wadi, were devoted to store the water stemmed by the Wadi Lebda dam (figs 3.3 and 3.5, Dm1) located c.500 m to the south. This is essentially due to a twofold reason: there is no evidence of a channel to carry water from behind the dam to the cisterns and, even if we accepted this latter link, the reservoirs would have been built probably closer to the dam and above all along the

west bank of the wadi so as to avoid the need for the stored water to be brought

across the wadi to supply the city. Finally, the water coming from the flooding embanked by the main dam were most likely useless for the city needs due to its muddiness (VITA-FINZI 1961, 16). The reservoirs are also too large (2,000 m³ of water for Ci1 and c.1,000/1,500 m³ of water for Ci2) to have been filled simply by localised rainfall catchment. Again, if both the cisterns were planned to serve the city's needs they would have been built in this case close to the city avoiding an 'anomalous' and unsafe spot such as the wadi banks.

The last hypothesis, which cannot be excluded *a priori*, is that the north cistern (Ci1) was supplied with the water coming from the Wadi Caam through the subterranean aqueduct (BARTOCCINI 1926, 48; 1929a, 73; see below). However, the lack of an intake conduit along the

eastern side of the cistern together with the absence of any archaeological evidence of a contemporary aqueduct carrying the water to the city make this hypothesis dubious. Moreover, the flow rate of the Wadi Caam aqueduct supposed by B. Crova (1967, 117) - c.4,000 m³ in one hour - would have filled the reservoir quite quickly (more or less half an hour). Considering these figures and the high quantity of water carried by the conduit, the volume of this cistern seems to be too small even if it only acted simply as a decantation basin as suggested by B. Crova (1967, 117). The idea that this cistern (Ci1) acted such as the one and only *caput aquae* of the Wadi Caam aqueduct is thus problematic.

Ultimately, even if a proper excavation would allow us to determine a chronology and the accurate functioning of these two cisterns, their construction above springs is, in my opinion, the most feasible hypothesis, at least for the southern cistern (Ci2). The northern cistern (Ci1) is more problematic since it seems to have been abandoned and - apparently - it was isolated (there is no evidence of associated aqueducts). Moreover, Bartoccini (1929, 73) was sure it was fed by the underground aqueduct coming from Wadi Caam, but he did not provide any archaeological evidence to support his hypothesis. Considering the Italian military accounts already mentioned, it is also probable that a further spring was located in the wadi bed between the main dam (figs 3.3 and 3.5, Dm1) and the other barrier located c.430 m northward (figs 3.3 and 3.5, Dm2). This latter dam, whose remains are actually not visible, may have had the function of blocking the spring waters and channelling them into the southern reservoir (Ci2) while the main dam (Dm1) had the further function to protect the spring from the muddy waters coming from the Wadi Lebda basin such as been registered for the main dam at Wadi Caam (TÖLLE-KASTENBEIN 1993, 143; SMITH 1971, 37).

According to the data available, the starting point of the two Wadi Lebda aqueducts (figs 3.3 and 3.5, Aq1-Aq2) was the south cistern (Ci2). From there, once past the north cistern (Ci1) - without being connected - and having crossed the Wadi Lebda, the two conduit reached the Hadrianic Baths area, most likely the cistern complexes south of it. The two aqueducts were built after the two cisterns since they abutted rather than joined with the external walls of the two reservoirs. Moreover, they crossed the wadi with a full solid masonry with no arches suggesting that the wadi was already diverted and the main dam (Dm1) built. These two different chronological phases would suggest that the two cisterns were probably planned without output aqueducts and probably built just to store spring-waters or, in the case of the northern cistern (Ci1), the water coming from Wadi Caam. In this phase, most likely between the first century AD and the first half of the second, the water of the two reservoirs was brought to the city using other devices or perhaps using a previous conduit actually no longer visible. During or after the second century AD, when the wadi bed was dry and there was no danger of flooding, an aqueduct (Aq1) was built to bring the water of the south cistern (Ci2) to the city while the north cistern (Ci1) seems to be already isolated or abandoned. This aqueduct was subsequently

flanked by another one (Aq2), whose masonry would suggest a less accurate construction and maybe a different use since it collected the water from the bottom of the south cistern (Ci2) carrying thus a less pure water.

The main source of fresh water for Lepcis was provided by the Wadi Caam, a perennial river located c.19 km east of the city. The water was in this case brought to Lepcis through a subterranean aqueduct built most likely during the Trajanic/Hadrianic period. Unfortunately, the remains of this conduit have been only partially detected and analyzed and its final sector such as its *caput/capita aquae* at Lepcis is/are still unknown. However, the importance of this infrastructure for the development and sustenance of the city's population especially during the mid-Imperial phase had to be fundamental. The seventeenth-century Arab traveller Ayyâshî reported an ancient tradition about the Wadi Caam aqueduct (reported in MOTYLINSKI 1900, 79 and ROMANELLI 1925a, 41-42). According to his account, the local population living in the area thought that in ancient times the water of the Wadi Caam was drinkable (at his time it was already brackish) and that the ancient city of Lepcis was abandoned as soon as the water of the perennial stream became salty.

The most detailed descriptions of the remains of the aqueduct are the analysis made by Bice Crova (1967) in the area of Wadi Caam and the scanty but precious data provided by Renato Bartoccini (1927a, 99-100; 1929, 72-74), apparently the only scholar who was able to detect part of the conduit in the area close to Lepcis. According to their researches, the underground aqueduct was built in *opus caementicium* internally coated with a good quality of hydraulic



Fig. 3.6. A sector of the Lepcis aqueduct with the inspection shafts/wells (*spiramina*) close to the Wadi Caam. The erosion has heavily modified the landscape leaving uncovered the wells and part of the conduit, 1946-1947 (J. B. Ward-Perkins; BSR WP G4 73a).

plaster; it was c.1 m wide (including its side walls: c.2.5 m) and 1.9 m high (including its barrel vault: c.2.4 m). The conduit was equipped more or less every 80 m with quadrangular wells (*spiramina*) provided with footholds and joined to the conduit through a circular opening made at the top of the vault (fig. 3.6).

After leaving the Wadi Caam area, where the first hundreds of meters of aqueduct are still visible, the path of the conduit is not longer traceable until it crosses Wadi Hasnun (c.7.5 km south-east from Lepcis), where it was reported by Bartoccini (1926, 47; 1927a, fig. 33) and then by Vita-Finzi (1961, 16; 1978, 35). Luckily, the map realized by Richard Goodchild in the late forties (fig. 2.28) indicates the position and the direction of the short sector of the aqueduct visible at Wadi Hasnun (fig. 3.7, Aq5). The underground structure could have crossed the east periphery of Lepcis following the ancient cadastral partition detected between the earthen *agger* (Ag1) and Wadi Hasnun (see fig. 3.2 and ZOCCHI 2018, 57-63). A further suggestion of the path followed by the underground aqueduct comes from the accounts written by travellers and explorers who crossed the area between Lepcis and Wadi Caam from the medieval period onwards (see par. 2.3).

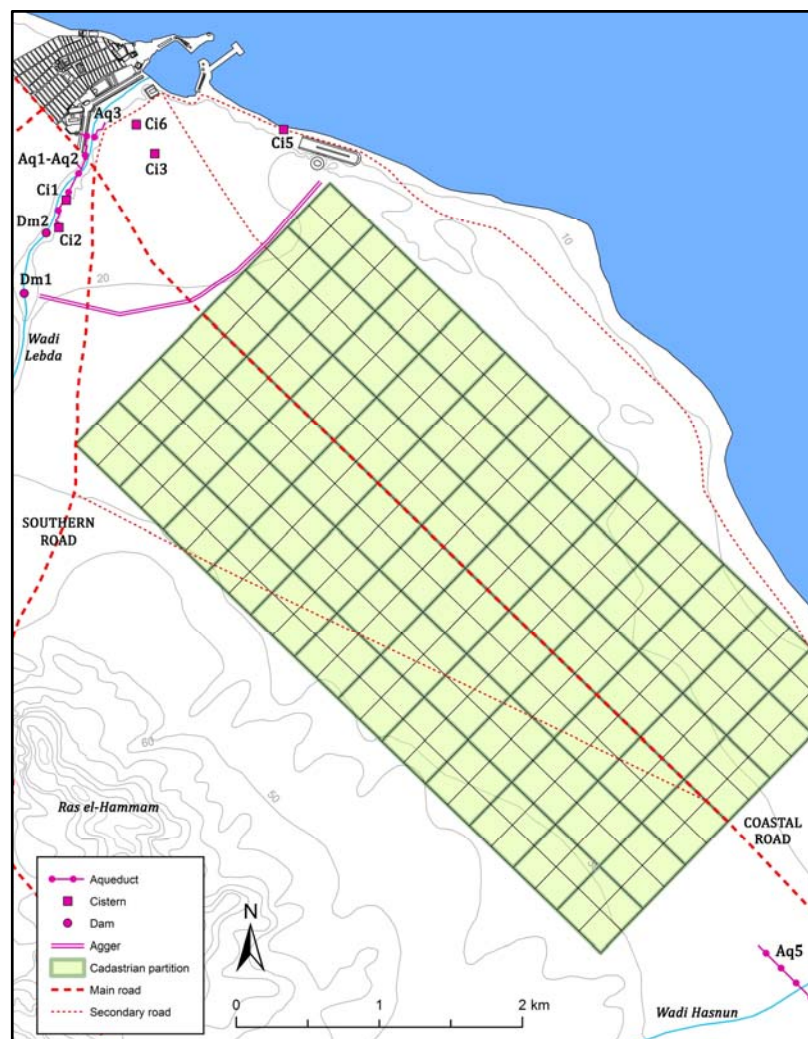


Fig. 3.7. The aqueduct coming from Wadi Caam (Aq5) and the area between Wadi Hasnun and Lepcis Magna.

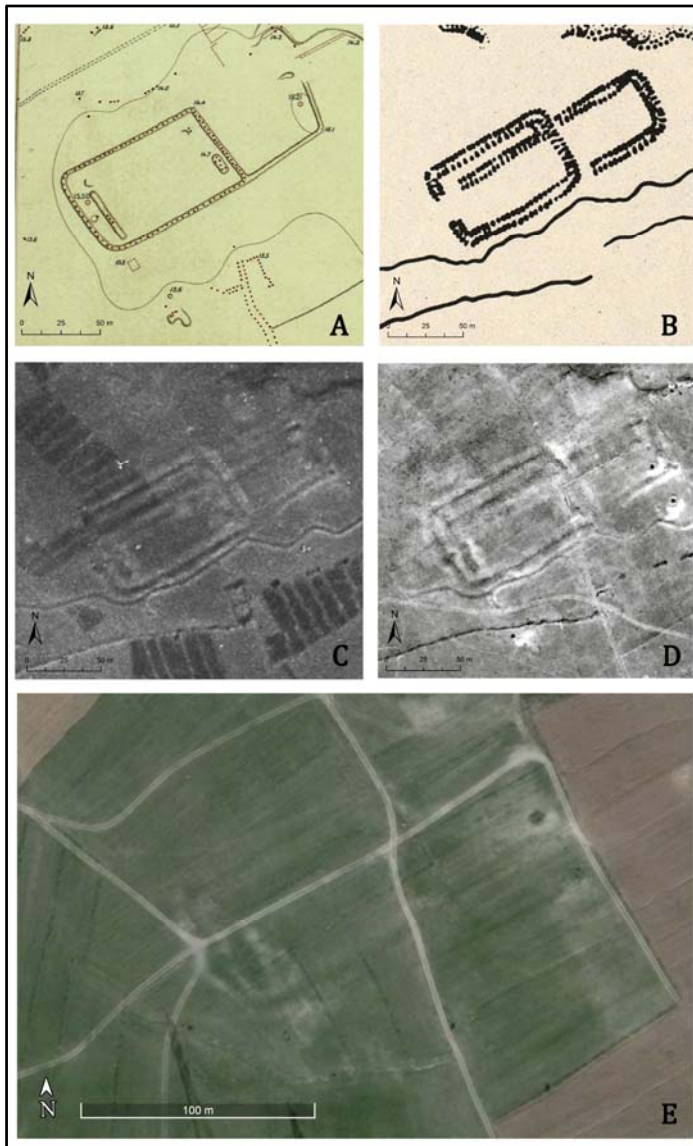


Fig. 3.8. The traces of the cistern (Ci3) in the inner east suburbium. A: IGM 1915a (detail). B: USAMS 1943b (detail). C: ASLS, Lepcis Magna 94144 (detail) - dated 1942. D: ASLS, Lepcis Magna 24998 (detail) - dated 1949. E: Satellite image (Google Earth - Digital Globe 2015).

Although the underground conduit was not visible, numerous aligned ancient wells/inspection shafts were noted from their observation point that had to be - most likely - the coastal route. It is thus probable considering that the remains of these wells were visible at a short distance and probably parallel to the main caravan road that in many sectors had to retrace the ancient *via publica* (for the path of the modern coastal route between Lepcis and Wadi Caam see fig. 2.20). Bartoccini (1929, 73), believed the conduit ended at the north cistern (Ci1) along the Wadi Lebda. This hypothesis was strengthened by the analysis made by Bice Crova (1967, 113-117) who was able to calculate the gradient of the aqueduct and thus the elevation of its end point. According to her

computations, the gradient was 0.74 m each kilometre and thus, taking into account the total length of 18/19 km

(Crova wrongly considered this distance as equal to 25 km), the difference in level between the starting and ending points of the aqueduct was c.13.5 m (18.67 m for the incorrect distance of 25 km). Considering the elevation of the intake conduit at Wadi Caam (16.94 m) and calculating a constant slope, the conduit would have reached Lepcis at c.3.5 m above the sea level. The foundations of the north cistern (Ci1) along the Wadi Lebda were set 2.25 m below the wadi bed, thus absolutely aligned with the gradient designed for the underground aqueduct.

However, an alternative *caput aquae* can be suggested. In the inner east suburbium, halfway between the Wadi Lebda and the Late Antique walls there are traces of an ancient structure (fig. 3.3, Ci3) that could be related to the city water supply and, in particular, with the Wadi Caam aqueduct. These traces, visible in many historical maps and also both in aerial photographs and in satellite imagines (fig. 3.8A-E), clearly indicates the existence of two

adjacent underground structures whose total surface occupied an area of c.60x150 m (200x500 *pedes*). Both these traces are aligned with the ancient coastal road and of the other route located to the north such as other funerary enclosures and structures detected nearby (ZOCCHI 2018, 57-63, 68-69). Although it is not possible to establish with certainty the category to which this structure belongs, thanks to a set of considerations it is however possible to associate these underground buildings with a large ancient cistern complex (see in general: HODGE 1992, 273-303, TÖLLE-KASTENBEIN 1993, 147-156; WILSON 2001, 84-92; 2008a, 304-305). First, according to their alignments just mentioned and thanks to traces of perimeter walls defined by limestone ashlar blocks (figs 3.8A, 2.18) it is possible to exclude that they were built in a post-antique phase. The detailed map of Lepcis realized in 1915 (fig. 3.8A) indicates that these traces formed a small mound raising the terrain level by c.2 m and thus suggesting the presence of rubble/collapsed walls both underneath and inside it. This increase of the ground level due to rubble/collapsed walls would exclude, in my opinion, that these archaeological remains belong to funerary enclosures, generally defined by a few rows of limestone ashlar blocks. Moreover, the consistency of the traces clearly visible in different seasons (with and without spontaneous vegetation), indicates the presence of significant perimeter walls that most likely goes several meters beneath the actual ground level.

There are two more significant considerations that support the identification of these traces as the remains of a large reservoir. The first element is that an alignment of four wells probably belonging to the Wadi Caam aqueduct are indicated between the Monticelli *agger* (Ag1) and the cistern both in the 1914 and 1915 IGM maps (figs 2.18-2.19). The second element involves the fourth century city walls (fig. 3.3, Wa3). The convex path followed by this enceinte in the eastern suburbium would not be logical (considering the economic effort and the time required to built it) if there was nothing fundamental to defend and protect. The only kind of suburban structures that could have been comprised within the city walls - and thus justified such a significant expensive enlargement - were generally those buildings related to the survival of the city during sieges and certainly a large water reservoir was among those. If we consider valid this hypothesis, the Wadi Caam aqueduct (and the cistern) was thus still in operation in the middle of the fourth century, when the city walls was built.

The positioning of this large reservoir between the city (to the west), the suburban coastal area (to the north) and the circus and amphitheatre (to the north-east) could have been designed for the contemporary supply of different districts: in these case the reservoir would have acted as a proper *castellum divisorium* in which the water could be addressed - through different openings and conduits - in specific areas (see HODGE 1992, 279-291).

Even if it is based essentially on a few traces, data and on empirical computations it is possible to calculate a rough capacity of this water reservoir. If we consider the ancient ground level in this area equal to 12/13 m (fig. 3.8A) and that the Wadi Caam aqueduct would have

entered its water into this large cistern complex c.3.5 m above the sea level, it is possible to hypothesize a total height of the structure at least equal to 13/14 m, enough to allow a water depth of 2/3 m below the inlet and a maximum capacity between 18,000 m³ and 25,000 m³. According to the aqueduct flow rate calculated by B. Crova (4,575 m³ per hour), this could be filled in 4/6 hours. The Lepcitanian structure size seems to be in line with other *capita aquae* and reservoirs related to the main North African Roman cities. Beside the extraordinary case of La Malga at Carthage (up to 50,000 m³), the cisterns of Hippone and Cirta (c.25,000 m³), the reservoir of Bordj el-Djedid at Carthage (c.20,000 m³) and the two complexes of Aïn el-Hammam and Aïn Mizeb at Thugga (together c.15,000 m³) have indeed similar capacities (ROMANELLI 1970, 220-221; TÖLLE-KASTENBEIN 1993, 154-155; WILSON 1998). However, the majority of the North African reservoirs related other towns and medium size cities fell in the range of 3,500 and 13,500 m³ (WILSON 2008a, 305).

Wherever the Wadi Caam aqueduct ended (the large reservoir complex in the eastern suburbium and/or the north cistern along the Wadi Lebda), its water had to be lifted in order to be easily distributed through the city (for water-lifting devices see OLESON 1984; WILSON 2008b, 350-355). According to an inscription found in the wall of the south cistern of the Hadrianic Baths (IRT 357; OLESON 1984, 36-36), this effort was accomplished by *Q. Servilius Candidus* in AD 119-120, thus in connection with the construction of the aqueduct and thus to the cisterns linked to it (the reservoirs of the Hadrianic Baths, Ci3 and probably Ci1).

Bringing together all the information, it is possible to outline a probable diachronic evolution of the Lepcitanian water supply from the Punic phase to the Late Antique period. It is possible to imagine that the first water sources that were exploited were those within or close to the city (wells or rain water collected in cisterns: see the case of the Roman *domus* near the theatre: WALDA *et al.* 1997, 45). It cannot be excluded that springs with freshwater existed also in the area occupied by the subsequent urban expansion (similarly to the Cape Hermaion district) and probably abandoned afterwards due to its exploitation or even because it became non-potable/usable due to salt-water contamination. Most likely during the Hellenistic phase, when the city population grew, there was probably a need for new water sources. Even if we lack any archaeological evidence, the springs located at Cape Hermaion and the shallow aquifer along the Wadi Lebda may have been exploited systematically during this phase. The first century AD conduit found at Wadi er-Rsaf (fig. 3.9, Aq4) that probably linked the Cape Hermaion water sources to the city, may have been replaced a more ancient one. At Carthage, beside wells and cigar-shape cisterns built within the city, suburban springs close to the shoreline were also exploited and protected during the Punic phase (WILSON 1998, 65-68).

It is probable that during the early Roman period and in connection with a new significant building phase of the city, Lepcis was provided with new reservoirs. Wells and springs may dry up if the groundwater table drops too much especially after a drought season. Beside the

aqueduct coming from Cape Hermaion (fig. 3.9), new structures may have been built close to the city and the widian. Unfortunately the lack of accurate chronologies related to the two cisterns along the Wadi Lebda (fig. 3.3, Ci1-Ci2), prevent us establishing if these structures were built during this phase and to determine what kind of water they collected. At the beginning of the

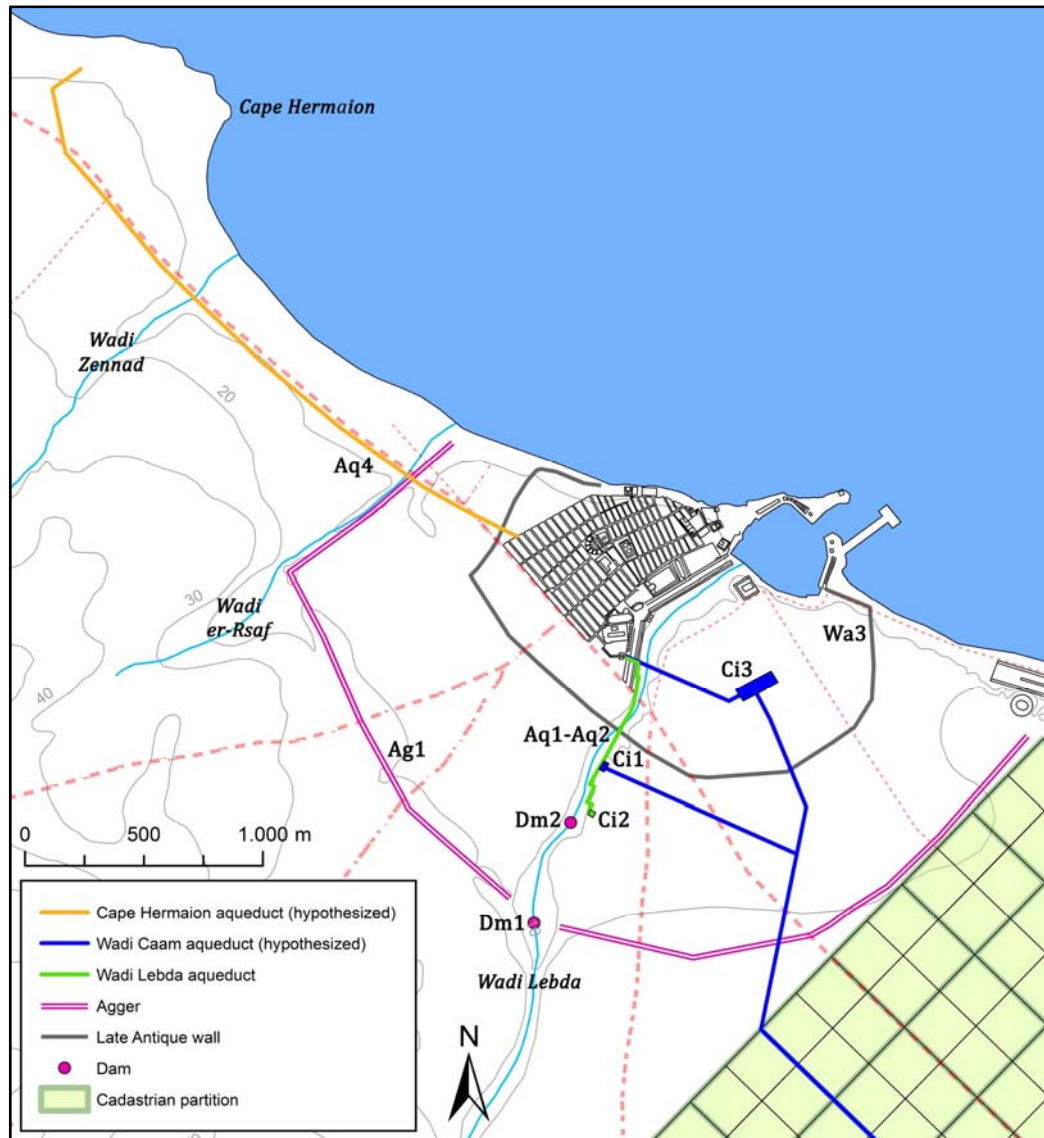


Fig. 3.9. The infrastructures of the Lepcitanian water supply with the hypothesized routes of the Cape Hermaion and Wadi Caam aqueducts.

second century, most likely between the granting of honorary colonial status (AD 109-110) and the first years of the Hadrian' reign (AD 119-120), the aqueduct from Wadi Caam was built. This chronological range (AD 110-120), in my opinion, seems to be the most certain considering two elements related to the beginning and the completion of this infrastructure. The beginning of the conduit's construction is based essentially taking into account the data coming from the ancient cadastral partition detected in the area where the aqueduct passed through and that was planned most likely after the granting of the colonial status (see ZOCCHI 2018, 57-63; Vol. II, App. IV.2.2). For the completion date, it is almost certain that the inscription dated between AD 119-120 found within a cistern linked with the Hadrianic Baths (*IRT* 357) and mentioning "the

seeking and raising of water" by *Q. Servilius Candidus* had to be placed when the aqueduct from Wadi Caam reached the city. Moreover, the time span of ten years seems feasible with the construction activities needed to build an underground conduit 20 km long. Despite the lack of traces related to its passage in the inner suburban area, the aqueduct may have reached the west bank area of the Wadi Lebda through a significant underground reservoir (fig. 3.9, Ci3) while another branch may have reached a further cistern located along the Wadi Lebda (fig. 3.9, Ci1). The construction date of the Wadi Lebda aqueducts (fig. 3.9, Aq1-Aq2) cannot be determined with accuracy, however they were built after the Hadrianic reign when the wadi bed was dry and thus its crossing considered safe.

The Lepcitanian water supply system was still functioning during the fourth century AD. This consideration seems confirmed by some elements: the inclusion of the large reservoir linked with the Wadi Caam aqueduct within the Late Antique walls (fig. 3.9, Wa3), the fourth century inscription (*IRT* 769; TANTILLO, BIGI 2010, n. 76) mentioning damages caused by a flooding (*flumini impetu*) and the subsequent restoration of an aqueduct and, finally, the works

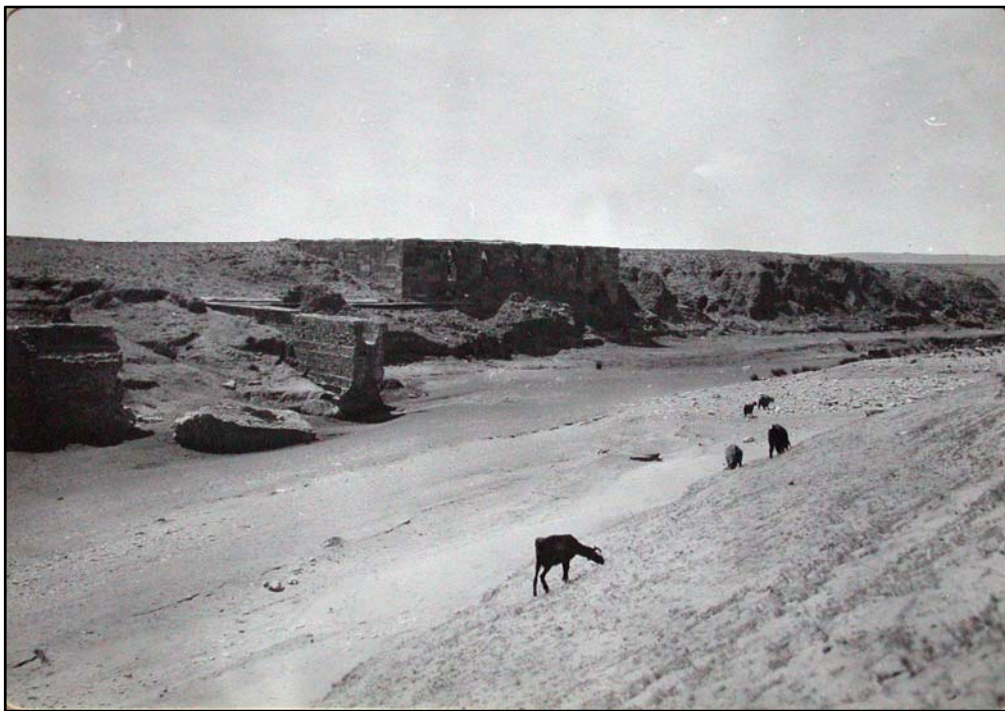


Fig. 3.10. The south cistern (Ci2) and the two aqueducts (Aq1-Aq2), partially collapsed, located along the Wadi Lebda, 1911-1912 (SGI, Fondo storico 216-3-53).

occurred in the Hadrianic Baths between AD 355-361 (*IRT* 580, 653; TANTILLO, BIGI 2010, n. 75) that would prove the water supply system was still in use. The recent analysis made by Roma Tre University has proved that the main dam on the Wadi Lebda (fig. 3.9, Dm1) partially collapsed most likely between the end of the fourth and the beginning of the fifth century AD (PUCCI *et al.* 2011, 183; TANTILLO, BIGI 2010, 158) and probably shortly after this period the aqueducts along the Wadi Lebda (both the ones coming from the south and the one -

hypothesized - coming from the large cistern Ci3) were damaged by the uncontrolled flooding and thus dismissed (fig. 3.10).

3.2.2. THE PERIPHERY: WATER COLLECTION AND ITS STORAGE AND WIDIAN REGIMENTATION

The remarkable archaeological evidence related to a mixed agricultural landscape together with the spread of villas and farms in the area (see pars 5.2 and 6.1) suggests, as a fundamental and inalienable prerequisite, a practical collection and a careful use of rainfall and water coming from aquifers. Despite the peripheral area of Lepcis Magna being located in one of the most rainy

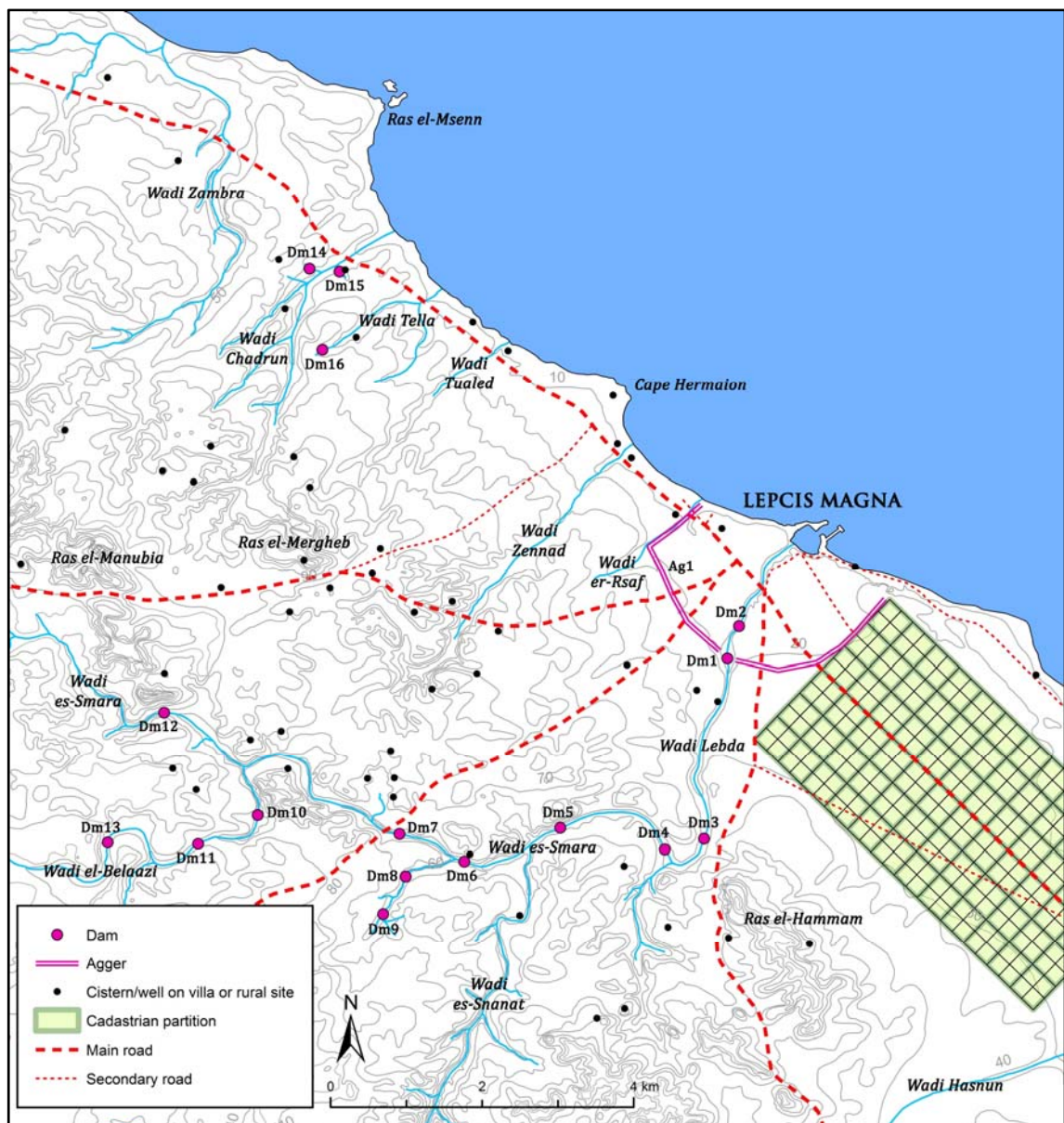


Fig. 3.11. Cisterns/wells and structures related to the widian regimentation in the Lepcitanian periphery.

regions of Tripolitania (more or less 300 mm of water per year; see par. 5.2.1), periods of drought were common and thus a proper water storage was the key to prevent bad crops and famines. Moreover, since the annual rainfall was concentrated almost always in a few violent and short thunderstorms, the damage caused by the eroded soil that flowed in the valley

bottoms (wadi beds) constituted a serious danger both for crops located along the wadis and to the structures that may have been built especially close to these valleys, including Lepcis.

In order to counter the scarcity of rain, the data from surveys have revealed the presence of wells and cisterns at 55 rural sites and villas (fig. 3.11). However, since most of the cisterns were built underground and the wells, once abandoned, were filled with soil, their identification within the site is not always easy and thus the overall number registered is underestimated. Both wells and cisterns must have been used since the spread of the sedentary cultivation; however, a strong rise must have occurred between the third/second century BC, when the rural sites increased consistently reaching a peak during the Roman Imperial phase (see par. 5.2.4). Wells were usually built wherever a shallow aquifer was detected while cisterns collected large amounts of rainwater, being fed by catchment channels along hill slopes (ROMANELLI 1970, 260; HODGE 1992, 51-58; WILSON 2008a, 285-287). In addition, large farms and villas benefited from their courtyard/s whose *compluvia* surely filled underground cisterns for domestic uses. Due to the lack of data, it is not possible to establish a proper typology of the Lepcitanian Roman rural water reservoirs; however, thanks to the scanty information available, it seems that the most common were the carafe-shape type, the Punic cigar type and the barrel vaulted type (fig. 3.12; in general see WILSON 2008a, 287-290).

A great effort was devoted to control the unstable hydro-geological features of the soil and, in particular, the wadian regimentation. The protection of crops along the wadi beds through



Fig. 3.12. The barrel vaulted cistern related to a Roman villa (VI48) north of the Wadi es-Smara (photo: A. Zocchi, 2007).

earthen and masonry barrages located at the wadi bottoms and slopes seems to be a common concern that involved many Tripolitanian river basins both in Gebel area and in the pre-desert region since the pre-Roman period (VITA-FINZI 1961; 1969, 7-44; BELLWOOD, 1966-1967; GILBERTSON *et al.* 1984; MATTINGLY 1995, 148-150; BARKER *et al.* 1996, I, 191-225). It is important to note that many of these structures, or at least the small/medium size ones, were seriously damaged or disappeared as soon as these structures were not maintained anymore due to the unstable geo-morphology of the area. Obviously, earthen barrages were the first infrastructures that disappeared, while those constructions built in *opus caementicium* may have collapsed due to flooding pressure, erosion or may have been buried beneath several deposition layers.

As well as the main Tripolitanian wadian, the Wadi Lebda basin was dotted by numerous diversion and soil retention dams. A dedicated record of these structures was made during the 1960s by Vita-Finzi (1969, 7-44), who analyzed the functioning and the main characteristic of these infrastructures. Unfortunately, many of the ancient structures he surveyed along the Wadi Lebda and along the Wadi es-Smara are not visible anymore. Beside the 3 dams located along the ending sector of the Wadi Lebda (fig. 3.11, Dm1-Dm3), Vita-Finzi surveyed 10 further structures along its tributaries: 7 on the Wadi es-Smara (fig. 3.11, Dm4-Dm9, Dm12) and 3 on the Wadi el-Belaazi (fig. 3.11, Dm10-Dm11, Dm13). Another 14 barrages were also surveyed more inland of the area taken into account, confirming that the whole Wadi Lebda basin was provided and protected with dams (VITA-FINZI 1969, fig. 5b). It is highly probable that many other earthen or masonry structures existed along the wadi course including its slope to prevent erosion coming from the banks. Further dams have been recently detected along other minor basins: three on the Wadi Chadrun (fig. 3.11, Dm14-Dm15) and Wadi Tella (fig. 3.11, Dm16), while other barrages probably existed, even if no identified, along the Wadi Zennad and Wadi Zambra.

Beside slowing down the flow of water floods, these devices allowed a quantity of water to be channelled and stored. The remains of the structures registered - due to their construction technique - suggest a Roman date (most like mid-Imperial phase); however, similar protective devices, probably earthen walls, were used since the wadian were cultivated.

In the inner suburbium the flooding caused by the unpredictable heavy rains had to involved Lepcis itself. The damages caused to the structures (and also crops) located in the last sector of the Wadi Lebda bed is indeed confirmed by the already cited fourth century inscription in which due to the "*flumini impetu*" an aqueduct was damaged (IRT 769; see par. 3.2.1). Erosion caused along the wadi banks by these extraordinary events must have inhibited the construction of significant and public structures close to the west bank of the wadi in the early phases of the city. Excavation made by Bartoccini beneath the Columned street have revealed walls most likely related to an early embankment of the wadi (BARTOCCINI 1958, 10; 1961, 118-119). According to the Italian scholar and also to Di Vita (1995, 166; 1997, 311; 1998, 124), these structures were

Neronian, probably built when to the new port facilities and warehouses were arranged close to the mouth of the wadi (see in general TANTILLO, BIGI 2010, 155-156; see also par. 5.5.2). To definitively protect from flooding both the city and the harbour from silting, a significant dam - 220 long, 6-7 m thick and provided with five buttresses - (figs 3.3, 3.5, 3.9, 3.11, Dm1; 3.13) was built along the Wadi Lebda, c.1.5 km south from its mouth. According to recent C14 analysis, this long barrage was built between the end of the first century AD and the Hadrianic Reign (TANTILLO, BIGI 2010, 156; PUCCI *et al.* 2011)., The most plausible chronology is Hadrianic - as already suggested by Di Vita (1996, 186; 1997, 311) - or even the Trajanic reign, in connection with the cadastral partition east of the city and the construction of the Wadi Caam aqueduct mentioned above. Moreover, the construction of this dam would have involved the building of further significant infrastructure that seems also linked with the new agrarian parcelling: the so called Monticelli earthen bank (figs 3.3, 3.6, 3.11, Ag1. See also WWII RAF aerial photo: fig. 2.25). This long earthen *agger*, at least 5 m high and provided with an external ditch, enclosed an area of c.420 hectares, really too large to be considered as a defensive enceinte as suggested by Ward-Perkins and Goodchild (1953, 45-47) or recently by Masturzo (1996, 62-65). The main task of this structure was to divert the water collected in the external basin formed thanks to the Wadi Lebda dam (Dm1) both to the west and thus in the Wadi er-Rsaf and to the east, towards the intensive rural partition detected. Moreover, the space - equal to 30 m - between the *agger* and the western parcel of land identified would be suitable to host the external ditch and possibly a path/road (see par. 3.1 and Vol. II, App. IV.2.2).



Fig. 3.13. The south side of the main Wadi Lebda dam (Dm1) with the trapezoidal buttresses (photo: F. Baroni, 2013).

Considering all the data it seems probable that after the granting of colony status (AD 109-110) Lepcis was involved in a new building activity that involved the city water supply, baths, infrastructure related to the widian regimentation and rural activities. These intense efforts included the construction of the aqueduct from Wadi Caam and the contemporary and the related cadastral partition, both completed most likely within AD 120. Moreover, the new significant water adduction to the city allowed the construction of the Hadrianic Baths (inaugurated between AD 136-138) whose erection was possible, due to its location close to the west bank of the wadi, only possible once the Wadi Lebda main dam/earthen *agger* system was in operation, thus between AD 110-130.

As confirmed by the recent Roma Tre analysis (PUCCI *et al.* 2011), the Wadi Lebda main dam started to suffer for lack of maintenance during the third century AD when some alluvium started bypassing the dam and damaging the stability of the structure. Between AD 350-430 the dam shoulder collapsed because the water started to erode the sediments at its base and under excavated it. The Wadi Lebda main dam thus became useless during the fourth/fifth century causing also the collapse of the earthen *agger*. The Severan harbour, designed when the Wadi Lebda dam was in operation, started to silt with the wadi flooding and this process seems to have been already completed between the sixth and the seventh century AD.

3.3. THE RELIGIOUS EVIDENCE

There are scarce data linked to the religious sphere in the peripheral areas of Lepcis (fig. 3.14). Beside the shrines located within the circus (En3) and the amphitheatre (En4), structural remains of further sacred buildings in the suburbium can only be hypothesized. Evidence related to the pre-Roman phases is totally lacking.

Like most Punic cities, it is highly probable that Lepcis had its own *tophet* whose location is however unidentified (see also par. 4.5.4). Evidence of *tophets* in Tripolitania are documented both in the coastal centres and in inland areas: Sabratha, Oea-Gheran, Tarhuna and Msallata (DE MIRO 2005, 127). If a *tophet* existed at Lepcis, it probably was located in a suburban area and most likely it was subsequently erased or incorporated in a sacred space within the city. According to other examples in North Africa, these Punic religious areas were devoted essentially to *Ba'al Hammon* and *Tinnit*, respectively the Roman deities of *Saturnus* and *Caelestis* (BRECCIAROLI TABORELLI 1992; LANCELOTTI 2010; D'ANDREA 2014; 2018). The Lepcitanian evidence related to these two deities is scarce. The only attestation of *Saturnus* at Lepcis is a fragment of a statue head - preserved in the Lepcis' Museum warehouse (FLORIANI SQUARCIAPINO 1996). Unfortunately, its findspot is unknown but both the size and the quality of the sculpture

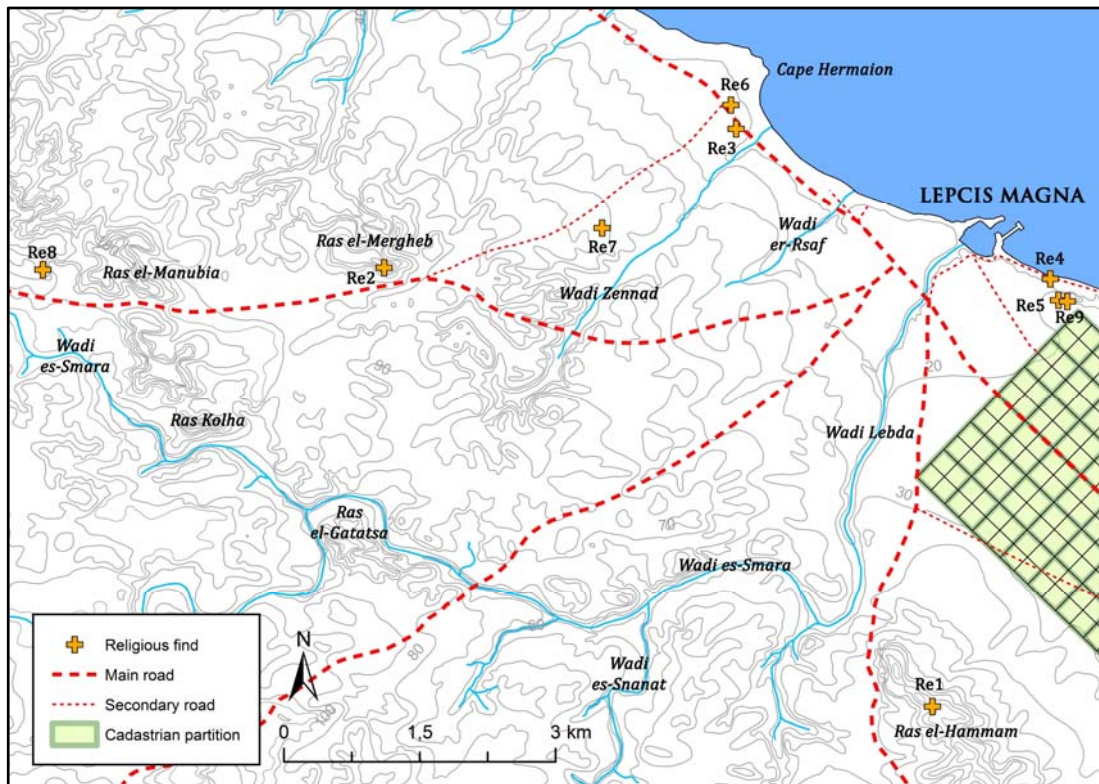


Fig. 3.14. The religious evidence of the peripheral area of Lepcis Magna.

would suggest it was placed in a temple, perhaps a tripartite building like the still unidentified structure located at one corner of the Old Forum or, above all, the large sacred structure facing the sea and known as 'Oriental sanctuary' (north of the 'Unfinished Baths').

The identification of the Lepcitanian *tophet* or of a sacred area where *Ba'al Hammon/Saturnus* was worshipped in this north-west suburban area between the sea and the city (considering the Archaic-Hellenistic phase) is at best suggestive. However, the suburban areas close to the seashore at Lepcis seems to have been preferred since ancient phases for religious/funerary purposes and above all during the Punic period, as suggested by further findings (Tb17, Fu24, Fu28; see par. 4.7). It is useful to recall a limestone block with a Neo-Punic inscription found reused within the 'Unfinished Baths' (IPT 32; LEVI DELLA VIDA 1963, 464-468). The text, dated to the mid-first century AD, mentions the restoration or works on a temple (thus probably already existing when the inscription was carved) set on an island, most likely one of those located at short distance from the Wadi Lebda mouth before the Severan harbour was built.

Evidence related to the goddess *Caelestis* come from the rock-cut inscription "*Celestis sanctissima propitia [te hab]eamus*" found by Clermont-Ganneau on a flank of the Ras el-Mergheb hill (fig. 3.14, Re2). However, is not possible to establish a relationship between this latter place and a *tophet* or even if in this case the Roman goddess *Caelestis* must be associated to *Tanit* since also *Astarte* has been suggested (FLORIANI SQUARCIAPINO 1967, 84-85). This latter hypothesis is due to the finding of a further inscription at the same site (fig. 3.14, Re2) mentioning the

construction of a cistern with a dedication to *Venus*, frequently associated with *Caelestis* (fig. 3.15). Considering that one of the common hypostasis of *Astarte* is *Venus*, the hypothesized sacred hill of Ras el-Mergheb could be referred to *Astarte* rather than *Tanit*. The position and the vicinity of this site to the city would suggest that a sacred structure/space was built more likely on its top at least since the Punic period.



Fig. 3.15. Italian soldiers at Ras el-Mergheb shortly after the discovery of the inscription with the dedication to *Venus* by *L. Tettius Eutyichius* (Re2), 1912 (MERCATALI 1913, II, 576).

Beside the inscriptions and religious spaces mentioned above, further evidence would suggest the existence of other peripheral sacred structures during the Roman Imperial period. According to some historical accounts (*Pionieri Italiani in Libia* 1912, 218; MERCATALI 1913, I, 457), the area of Cape Hermaion, and in particular beneath the Pashà Castle (fig. 2.15), was occupied by an ancient temple. This oral tradition is not proven by any structural remains but some finds collected in public buildings of the city or found within Khoms could indicate the existence of ancient religious structures or private *aediculae* with dedication to deities. In different periods were indeed reported two inscriptions related to *Mercurius* and *Minerva*, two texts mentioning *Venus* and a dedication to *Asclepius* (fig. 3.14, Re3, Re6).

A further area with some religious evidence is the area around the circus and the amphitheatre. According to Cowper (1897, 210-211) and Méhier De Mathuisieulx (1903, 266), the sector of the road between the so called Villa del Nilo (VI2) and the circus (En3) was flanked by remarkable structures, no longer visible, such as small temples and a large amount of collapsed columns. Moreover, at a short distance from the seashore and from the circus' *carceres*, Romanelli reported three bases of statues mentioning *Venus* and *Iuno* (the third one was not legible) set by representative of the *gens Cassia* (fig. 3.14, Re4). However, it is not possible to determine if these bases were originally placed within the circus or were set along the road or even if they had to be referred to the nearby religious structures mentioned by the previous travellers. In addition to these three findings, a further inscription and two statues have been found in the area around the amphitheatre. If on the one hand the famous statue of *Artemis Ephesia* found in 1912 by Italian soldiers and the other statue of the same goddess (both dated to AD 100-150) could be related with the *summa cavea*' shrine of the amphitheatre (fig.

3.14, Re9), more intriguing is the Neo-Punic inscription related to the god *El*, associated probably to *Neptune* (fig. 3.14, Re5). This inscribed limestone block (dated from the first to the second century AD) was found somewhere between the circus and the amphitheatre and was dedicated by *Candidus* who, according to the same text, built a *porticus* and an *exedra* in which most likely the stone was inserted. The information related to its findspot are unfortunately inaccurate and it is not possible to establish where this structure was located.

Despite the scarcity of data available, both the area of Cape Hermaion and the district around the circus/amphitheatre were surely high frequented and served by roads during the early and mid-Roman Imperial phase. It is not surprising to consider these two zones as attractive from a visibility perspective, temples or shrines may have acted as additional aggregation points where *ex-voto* and dedications to deities by the local elite could be easily noted. Moreover, it is possible to hypothesize that the road between the harbour and the circus/amphitheatre (Zocchi 2018, 71-73) constituted the itinerary followed by the processions during festivals and *ludi/pompae circensis*, starting from the 'Old forum' and passing in front of the temple of Jupiter Dolichenus (for these aspects see LAURENCE, ESMONDE CLEARY, SEARS 2011, 282-284; FISHWICK 2004, 268-273).

Finally, three trilingual inscribed blocks (fig. 3.14, Re1) belonging to the same structure were found reused in the Late Antique gasr of Ras el-Hammam (Gs12). The inscription mentions the existence of a shrine/sacred space dedicated to the Imperial cult (*Caesaris delubrum*) by *Caecilius Diodorus*. Once again the information are too scarce (the proposed chronology ranges from the first to the second century AD) and it is not possible to establish where this structure was located (though likely somewhere near or beneath the Late Antique gasr). It seems unlikely

the stones were transported here from a collapsed urban building.

Evidence of Christian structures is even more scarce. Romanelli (1925a, 36) mentions the oral tradition related to the existence of two old Christian churches in the area of Khoms (one located on the west bank of Wadi Zennad and another in the south outskirts of the city), but he did not provide any further detail or chronology and most likely they have been dismantled over time. Beside some undated graffito with Christian monograms found within the amphitheatre (TANTILLO, BIGI 2010, 160), the only archaeological evidence related to the



Fig. 3.16. The limestone bracket decorated with a *crux patens* found within the site of a gasr (Gs5), west of Ras el-Manubia (photo: A. Zocchi, 2013).

Christian religion is a limestone bracket decorated with a *crux patens* (figs 3.14, Re8 and 3.16) recently found within the site of a gasr (Gs5), located on a hill-top west of Ras el-Manubia.

It is hard to establish if this latter Late Antique building was provided with a small church or if the rural/military structure was just decorated/built reusing materials from other nearby structures. However, it is interesting to note that similar topographic features - hilltop, proximity to a road and association with a *gsur* - characterized the Early-Christian complex of Breviglieri (c.50 km SW of Lepcis; see DE ANGELIS D'OSSAT, FARIOLI 1975, 33-36).

3.4. SECURITY AND DEFENCE OF THE TERRITORY

3.4.1. CITY WALLS

The security of Lepcis was granted from the Punic age to the sixth century AD by different defensive enceintes. Most of the archaeological evidence relates to the Late Antique and Byzantine phases while the perimeter - and even the existence - of both the Punic and the early/mid-Imperial Roman walls are more problematic due to the short sectors identified.

The recent excavations made by the Archaeological Mission of the University of Messina in the 'Old Forum' area brought to light two different walls that have been interpreted as urban defences (fig. 3.17A, Wa1). The short sectors of these structures, belonging to two different phases, were located at short

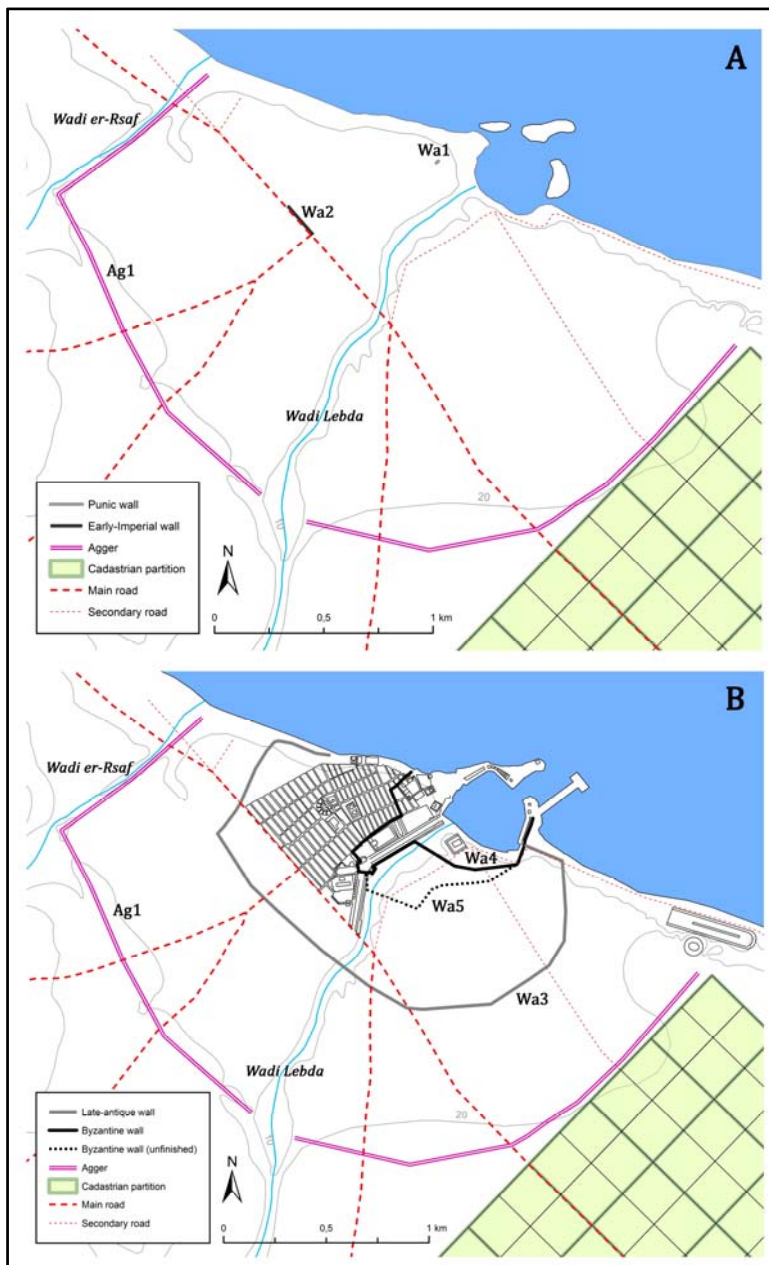


Fig. 3.17. The Lepcitanian city walls. A: (from the Punic phase to the mid-Imperial period). B: (from the Late antiquity to the Byzantine period).

distance from the east wall of the *Basilica Vetus*. The first-phase wall, built with mudbricks, 1.30 m thick and set directly on the sandy shore, was in use until the fourth-third century BC while the second wall, functioning until the second century BC, was built above the previous one, following the same orientation and characterized by the same thickness. This latter structure preserved a different building technique characterized by two faces of dressed limestone with an *emplecton* of mudbricks between them. According to De Miro (2005, 126), the enceinte was in use since the fall of Carthage when the forum' square overlapped the Punic structures. The path of this Punic wall is not determinable; however, funerary evidence to the north (Tb17), to the east (Fu29) and to the south-west (the theatre' necropolis, Nc5) would suggest that this enceinte encompassed an area of c.10 ha. (fig. 4.45). Despite the scarcity of data, it is interesting to note chronological and structural similarities with other centres controlled by Carthage during the fifth century BC: Carthage itself, Kerkuane and, in particular, several examples in Sicily (DE VINCENZO 2013, 131-143).

The passage from Tacitus "[*Lepcitanī*] *intra moenia trepidabant*" (*Hist.* IV, 50) would suggest that Lepcis was provided with a wall at the time of Garamantian raid in AD 69. This evidence prompted both Goodchild and Ward-Perkins to consider the earthen *agger* and the related ditch (Ag1) as a defensive structure ((GOODCHILD 1949b, 38; GOODCHILD, WARD-PERKINS 1953, 47; same opinion DI VITA 1994, 159; MASTURZO 1996, 62-64; 2013, 205). However, this hypothesis was already discarded by Romanelli (1952), and recent analysis has further demonstrated that this large earthen wall was built, most likely during the first decades of the second century AD, essentially linked to flood defence and agricultural purposes rather than defensive reasons (see par. 3.2.2). Indeed, this wide enceinte - c.5.5 km long and encompassing an area of c.425 ha. - was much too large to have been properly furnished with defensive equipment or with an adequate garrison. Moreover, it was never considered a city boundary since funerary structures continued to be built inside its perimeter and, finally, the two first century AD milestones found at short distance from the Severan arch (Ms5) would suggest that the city ended at that point rather than along the perimeter of the earthen *agger*.

The defensive structure mentioned by Tacitus could be identified with the structural remains of a wall recently detected by the University of Catania (TOMASELLO 2011, 155-157; 2015, 17) both beneath the *porticus* of the so called 'Tempio sul Decumano Massimo' and within the 'Insula 16' adjacent to the temple (fig. 3.17B, Wa2). The two trenches brought to light a mudbrick wall dated to the beginning of the first century AD and whose orientation would also coincide with the position of the *Porta Augusta Salutaris* (IRT 308), the south city gate built in the Tiberian period and located a short distance from the Severan arch (DI VITA 1994, 161; BULLO 2002, 179). Due to the lack of any further archaeological evidence related to this enceinte it is not possible to establish its overall perimeter; however, according to the main public structures

built in those decades that were surely included, is possible to estimate an area equal to c.32/35 ha. (fig. 2.5).

The perimeter of the two subsequent wall enceintes realized during the fourth and the sixth centuries were defined above all by Goodchild and Ward-Perkins (1953) and, for the late-antique wall, a new reading of some epigraphic texts (TANTILLO, BIGI 2010, 164-167) together with some topographic elements allow us new considerations.

The passage of Ammianus Marcellinus ("*civitatem muro et populo validam*: XXVIII, 6. 4) would suggest that Lepcis was provided with a defensive enceinte at the time of the Austuriani raid (AD 363-364). Despite the lack of an accurate chronology related to its construction, five inscriptions (IRT 470, 562-563, 565, 569) mentioning an enceinte and its restoration suggest that it was built most likely between the Tetrarchic phase and the mid-fourth century AD (see in general TANTILLO, BIGI 2010, 166-167). This wall, partially visible in several sectors, is characterized by two faces of reused limestone blocks with rubble core (fig. 3.17B, Wa3) and included an area of c.130 ha. (is overall length is c.3 km). In the western sector this wall incorporated the arch of Antoninus Pius that became the west gate of the city (for this aspect see in general JACOBS 2009). Significant structures such as warehouses, caravanserais (fig. 5.39, Ti3-T5) and the Hunting Baths (fig. 5.39, En1) were not included in this enceinte probably because partially abandoned or damaged. The contemporary abandonment of the Wasi er-Rsaf villa (VI3, see par. 6.1), the construction of a semicircular wall facing the gate to prevent siltation and the



Fig. 3.18. The seawall belonging to the Late antique wall enceinte (Wa3) in the east suburbium, 1910-1911 (SGI, Fondo storico 216-3-58).

wide reuse of architectural elements coming from near-by *mausolea*, would suggest that this area was abandoned or however no longer frequented as it was during the early/mid-Imperial periods (TANTILLO, BIGI 2010, 166). The south side of the enceinte is not preserved but its line was recognized in some sectors by Goodchild and Ward-Perkins (1953, 52-53) through mounds raising the terrain level. The east side of the wall reached the east Severan mole with a wide arch and by a seawall (fig. 3.18) that partially overlapped previous residential structures (MASTURZO 1996, 65). Also in this case, several limestone and architectural decoration from *mausolea* and other funerary structures were reused, collecting probably also the material collapsed in the AD 309-310 earthquake. In this context, the case of Gasr Shaddad (Ma15) is however quite singular. This structure is the only outstanding mausoleum located externally at short distance from the perimeter of the wall and, since it is not linked with it, its presence and height could constitute a danger for the defence of the entire sector.

According to the data available, the large area enclosed within the Late Antique wall east of Wadi Lebda included mainly funerary evidence and, beside some built up districts along the road between the *decumanus maximus*/coastal road and the circus (ZOCCHI 2018, 71-73), no other type of structures have been registered. Hence, it is hard to explain the reason for the wide curve followed by this infrastructures considering also the lack of any significant morphological features. The only element that could be taken into account is the presence of the large underground cistern that has been detected c.350 m to the west limit of the wall (fig. 3.3, Ci3; see par. 3.2.1). Linked with the Wadi Caam aqueduct, this cistern may have justified the enlargement of the wall enceinte toward the east.

After the Vandal phase (AD 442-534), one of the first building projects of the Justinian period was to provide the Tripolitanian cities with new enceintes. Procopius (*Aed.* VI, 4, 2-3) furnished important detail of these new Lepcitanian defences (fig. 3.17B, Wa4) and his account is confirmed by the archaeological evidence: "*Our Emperor built up the circuit-wall of this city from the foundations, not however on as large a scale as it was formerly, but much smaller, in order that the city might not again be weak because of its very size, and liable to capture by the enemy, and also be exposed to the sand. At present, indeed, he has left the buried portion of the city just as it was, covered by the sand heaped up in mounds, but the rest of the city he has surrounded with a very strongly built wall*" (translation by H. B. Dewing, 1940). Like other North African cities, the new wall enclosed indeed a small portion of the city (c.38 ha.) including the *cothon* of the Severan harbour (partially silted at that time) and cutting and reusing previous complexes such as the area of the 'Old Forum' and the Severan Forum, while four *basilicae* were built *ex-novo* or readapted using previous structures (see in general LEONE 2007, 185-198; PRINGLE 1981). According to Goodchild and Ward-Perkins (1953, 62-66), the plan of the Byzantine defences was originally larger and it would have included also a portion of the east bank of the Wadi Lebda (fig. 3.17, Wa5); the reasons for the abandonment of this project are unknown, but it

is possible to consider that construction issues occurred. However, it is probable that portion of the urban fabric outside the new enceinte was still partially inhabited; moreover, as suggested by Anna Leone (2007, 198) the fact that external structures such as the theatre, the *Chalchidicum* and the amphitheatre were fortified would suggest that the Byzantine wall was not seen as a physical limit but just as an instrument of protection.

3.4.2. FORTLETS, OUTPOSTS AND WATCHTOWERS

Two main military installations characterized the inner peripheral area of Lepcis Magna in Roman time. Both were located on hilltops, one at Ras el-Mergheb (fig. 3.19, Gs13) and the other at Ras el-Hammam (fig. 3.19, Gs12). The two hills constituted the best spots in terms of control and defensibility since their peaks are the highest of the whole area.

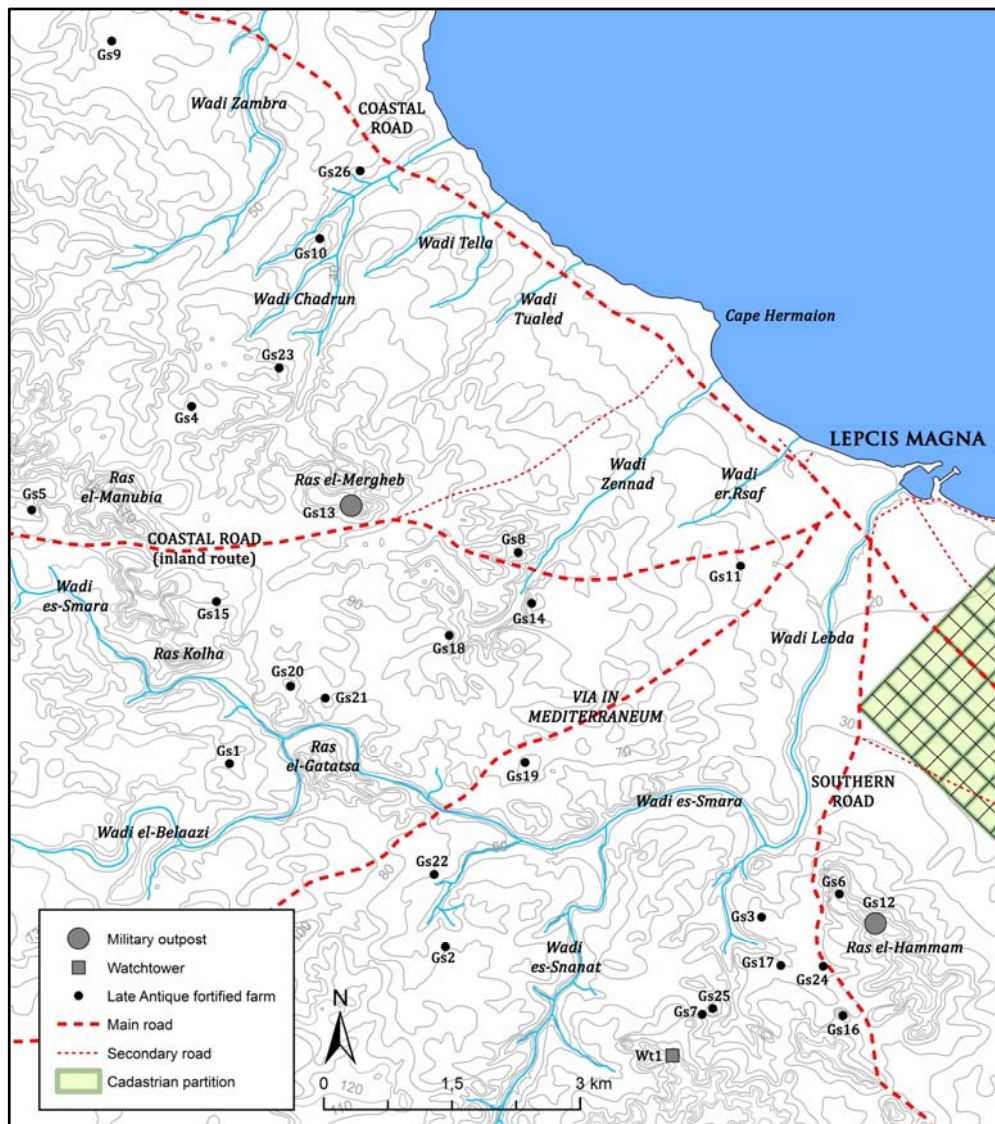


Fig. 3.19. The defensive landscape of the Lepcitanian periphery.

The structures belonging to the Ras el-Mergheb hill are mostly no longer visible since an Italian fort and then a radar station was built on the same site (fig. 3.20A). However, a few photographic documents together with the brief account and plan made by Mehiér de

Mathuisieulx (1906, 76-77) allow us to determine partially its aspect and define a general plan (see MUNZI *et al.* 2016, 74-75). According to these data, the site was characterized by two different elements, a walled enclosure (22.5x14.6 m) provided with an arched entrance to the south and an internal quadrangular building (7.9x8.5 m; figs 3.15, 3.20). The good quality of the masonry of both structures suggests an early/mid-Imperial chronology; however, the inner building was probably restored in a Late Antique/Byzantine period since several sectors shows



Fig. 3.20. A: Roman military outpost/watchtower (Gs13) at Ras el-Mergheb, c.1910 (Oxford, HEIR Database, AD 44013). B: The Late Antique *gasr* (Gs12) at Ras el-Hammam, 2013 (photo: A. Zocchi). C: The Roman watchtower (Wt1), 2013 (photo: A. Zocchi).

a less regular/accurate use of ashlar.

The military fortlet built at Ras el-Hammam seems characterized by two different phases: a walled enclosure (c.43x35 m) with its arched entrance on the north side belongs to the earlier phase while the quadrangular structure (17.4x18 m), provided with angular towers, an arched entrance and a porch, was built later in the north-east part of the enclosure and reusing part of its masonry (fig. 3.20B; see in general MUNZI *et al.* 2016, 96-98). It is not easy to date these two elements; however, it is highly probable that the external perimeter was built in an early/mid Imperial phase (such as the enclosure of Ras el-Mergheb) while the inner structure in a Late-Antique/early Medieval period.

Despite the lack of a detailed plan, the shape and the size (c.0.15 ha.) of the external enclosure of Gasr el-Hammam can be compared with some fortlets/road stations located along the Tripolitanian *limes* and within the pre-desert region such as the cases of Ksar Rhilane, El Medina Ragda dated between the first and the third century AD (MATTINGLY 1995, 98-102). The

small area covered by the enclosure of Ras el-Mergheb (ca.0.03-0.04 ha.) would suggest an outpost characterized most likely by a fortified watchtower rather than a proper fortlet. Similar structural examples were detected in the inner Tripolitanian landscape where, however, it is often hard to recognize them as military or civilian creations (MATTINGLY 1995, 102-106). It is thus reasonable to think that the structure located at the top of Ras el-Hammam could host a garrison of 50 men (probably including a stable) and the one at Ras el-Mergheb about half.

A further Roman watchtower could be related to the defensive system of the area. This structure (fig. 3.20C), made essentially in limestone ashlar blocks and with traces of *opus africanum* walls, was built on a hilltop halfway between the Wadi es-Snanat and the hypothesized route of the southern road (fig. 3.19, Wt1). Pottery fragments collected on the site indicate a chronological range between the first century BC and the second century AD. Although it is not possible to establish the exact size and the internal arrangement of this structure, both its shape and position would suggest a military function.

As a whole, in the early/mid-Imperial Roman period, the defensive Lepcitanian landscape was characterized by the control of the main roads approaching the city. The three structures built on hilltops (Gs12-Gs13, Wt1), plus probably other structures not preserved or dismantled, granted the proper control of the east sector of the coastal road (Gs12), the southern road (Gs12 and Wt1), the inland route of the coastal road (Gs). During Late Antiquity the two main fortlets/outposts of the area were restored/enlarged and flanked probably by other structures provided with soldiers (for example Gs19 along the *via in mediterraneum* and Gs5 at Ras el-Manubia) and by several fortified farms built most likely by civilians (see par. 5.2.2 and fig. 5.14).

3.5. ENTERTAINMENT BUILDINGS AND PUBLIC BATHS

According to epigraphic evidence, Lepcis Magna was provided with an amphitheatre from the mid-first century AD and, at least from the mid-second century, with a circus (DI VITA-EVRARD 1965). Both these buildings constitute for each category one of the best preserved examples in the whole Roman North Africa and, in the case of the circus, one of the largest structures known.

The amphitheatre (fig. 3.21, En4) was built on a hill (known with the name of Hammangi or Sidi Barku) a short distance from the sea and c.800 m east from the Severan harbour. This site was chosen probably because this hill was already used as a quarry (fig. 5.1, Qr1; see par. 5.1.1) so it was possible to use the limestone carved on the site and take advantage from the hollow created by its exploitation. The same hypothesis involves the circus (fig. 3.21, En3) since its south long side was built leaning on (and exploiting) the north side of the same hill. The circus was thus built between the amphitheatre and the seashore and since the two structures were linked together with tunnels and corridors it is also possible that they were designed together during

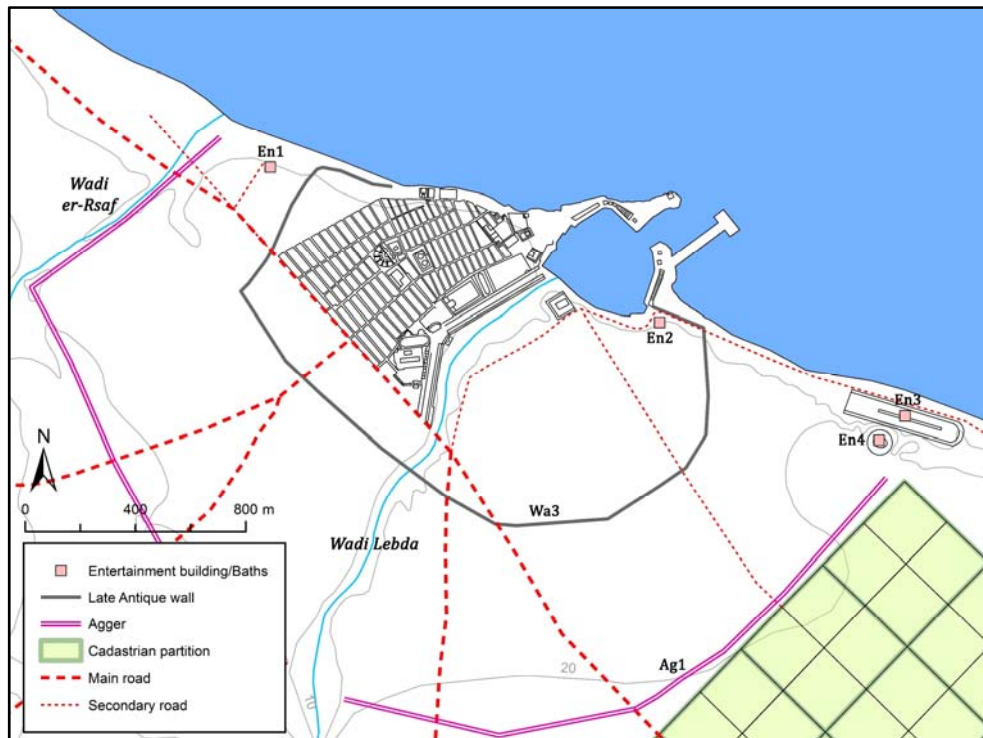


Fig. 3.21. The entertainment structures and bath-buildings of the peripheral landscape of Leptis Magna.

the mid first century AD (the inscription from the circus in this case would suggest just restoration works rather than its construction). The capacity of the two entertainment structures can be easily calculated: c.12,000 seats for the amphitheatre and c.20,000 for the circus. It is highly probable that the two structures were used until the late fourth/fifth century AD, when a small outpost and/or some dwellings were built inside the amphitheatre (in general see TANTILLO, BIGI 2010, 160). The amphitheatre/circus system constituted a pole of attraction for the area: *mausolea*, tombs, road network, shops and private religious dedications were surely involved by their presence and by the movement of people during festivals, races and games.

Two other buildings can be included in this section: the baths located both in the western (fig. 3.21, En1) and in the eastern (fig. 3.21, En2) suburbs. Both the structures were built between the end of the second century AD. According to the excavation data, the "Eastern Baths" were already abandoned at the end of the same century while the western complex, known as the Hunting Baths, was in use until the fourth century AD. The size of both these baths would suggest that they were used exclusively by a restricted group of person that formed an association (*sodalitates*), whether religious, civic or professional (MUSSO, BIANCHI 2012, 36).

3.6. SUMMARY OF THE CHAPTER

The chapter deals with all those Lepcitanian peripheral structures that involved and affected in some way the entire society of the city and its surroundings. Beside the analysis of the ancient road network - particularly significant to better understand the movement of people

and goods approaching or leaving the city - other infrastructures are here taken in consideration. Despite the lack of clear archaeological evidence, the scanty traces of religious activities and/or buildings are analyzed from the Punic period until the first centuries of the Christian era. Other paragraphs are related to the city water supply (aqueducts, cisterns, reservoirs, wells) and to the wadis water regimentation (dams, ditches and earthen mound known as the *Monticelli aggere*). Military structures such as wall enceintes, fortlets, watchtowers and fortified farms have been included in specific sections. Finally a paragraph is devoted to the entertainment structures located outside the city such as the circus and the amphitheatre as well as the peripheral bath complexes (the so called Eastern Baths and Hunting Baths)

CHAPTER 4

DEATH AND BURIAL: THE FUNERARY EVIDENCE

4.1. THE FUNERARY LANDSCAPE AS A WHOLE: AN OVERVIEW OF THE LEPKITANIAN SITUATION

Although Lepcis Magna is one of the most important and studied cities in the Roman North Africa, it seems paradoxical that our knowledge of its funerary landscape is, up to now, limited to brief generic accounts and only based on a little number of descriptions regarding the most important monuments.

However, in the first reports made by European travellers significant attention was devoted to the funerary monuments (see par. 2.3). Even if the information collected in these accounts was generic and superficial, they demonstrate that these sites probably constituted the most evident landmarks of the ancient Lepkitanian peripheral landscape then visible (17th - 19th centuries). Ashlar block structures, with their masonry enclosures, subterranean funerary chambers and above all scattered inscriptions and *semata*, were recorded unfortunately without detailed descriptions or comments. Brief overviews of the main structures were subsequently made by Italian scholars such as Aurigemma, Bartoccini and Romanelli in the first decades of the colonial period. Apart from a concise account made by Cowper (1897), Aurigemma (1915; 1930a) and Bartoccini (1922; 1926; 1927a) were the first ones who mentioned the main *mausolea* and described new discoveries of tombs and funerary inscriptions in the early twentieth century. Romanelli (1925a) tried to give a more detailed account in relation of the burial customs of the ancient Lepkitanian society. His pioneering analysis of the funerary landscape was however limited by the topographic and archaeological data available at his time.

Also in the Italian colonial period, the excavation of a Punic necropolis made by Caputo under the stage of the theatre (DE MIRO, FIORENTINI 1977) was an important discovery. However, apart from some isolated articles related to hypogean tombs found in the close suburban areas, an analytic overview that comprises all the funerary sites is still missing. The discoveries made in the last twenty years by Roma Tre University following the excavation of the necropolis of Wadi er-Rsaf (MUSSO *et al.* 1996, 153-155, 161-163, 166-168; 1997, 262-265, 276-286; 1998, 194-206) and the Khoms survey (MUNZI *et al.* 2010, 737-741; 2016, 84-93) constitute a good starting point for a overall analysis of some aspects of the funerary landscape of the city. Within the Roma Tre University team, Fontana (1996; 2001) analyzed some features related to the

burial evidence of Lepcis especially during the Roman period. Nonetheless, what is still missing is a general diachronic overview that considers the burials alongside the development of the city and the wider peripheral landscape from the Punic period to the Late Antique phases. In this framework unpublished data such as those coming from the surveys of the suburban zones, the analysis of hundreds of grave goods from numerous hypogean tombs could play a fundamental role in helping us to understand the practices and features related to the funerary customs of the city (a brief account in MUSSO *et al.* 2010, 58-62).

The attempt to produce an exhaustive overview of the Lepcitanian burial practices and their related archaeological evidence must take into account a large spectrum of data due to the fact that the social strata involved in this analysis range from the poorest class to the wealthiest local elite. This means that we have to consider several typologies of sepulchres and funerary rites from different cultural traditions - primary Libyan, Punic and Roman. The Lepcitanian archaeological evidence encompasses simple earthen burials to the monumental and expensive *mausolea* passing through various intermediate solutions.

At this point it is worth noting that this analysis is inevitably conditioned mostly by the preservation of the archaeological evidence: the remains of the monumental funerary structures (mainly *hypogea* and *mausolea*) constitute a disproportionate part of the sample compared, for instance, to the mere earthen burials, which were certainly more numerous but unfortunately are less frequently recorded and are topographically more difficult to locate. This is an important aspect already pointed up for Lepcis by Fontana (2001, 165) and well summarized by Ferchiou (1995, 136) for the North African landscape in general: "(...) les mausolées, les *columbaria* et les hypogées ne constituent guère que la partie émergée de l'iceberg: l'immense majorité des nécropoles est faite de tombes individuelles plus ou moins modestes et, en pleine époque romaine, des régions entières de la province n'ont pas jugé bon de recourir à l'écriture pour perpétuer le souvenir des défunts par une épitaphe".

4.2. THE HYPOGEAN TOMBS IN THE PUNIC AND ROMAN PERIODS

One of the most significant structures attested in the suburban areas of the ancient Tripolitanian cities is the hypogean tomb. This is not surprising since the tradition to bury within subterranean chambers strongly characterizes all those areas under the influence of a Punic tradition; funerary *hypogea* are indeed well known in the Punic cities of Sicily, Sardinia, the Iberian peninsula and Africa (MOSCATI 1980, 61-65, 123-124, 166-170, 215-218). However, an unusual aspect to consider in relation to the main Tripolitanian contexts, contrary to what is attested in other cities of North Africa, is that the use of hypogean tombs in Tripolitania seems to

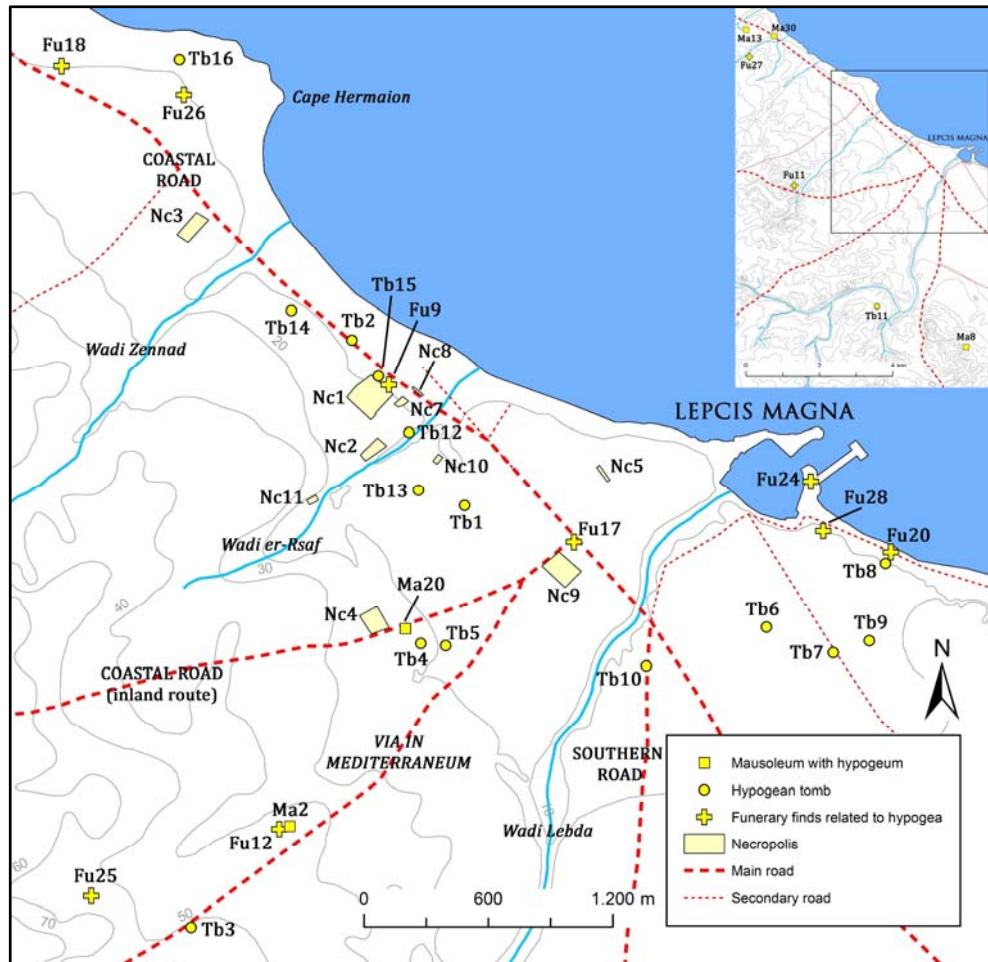


Fig. 4.1. The *hypogea* of the inner suburbium of Lepcis Magna and (top right) of the peripheral area.

have continued well beyond the Punic period (FONTANA 2001, 163). Beside Lepcis Magna, these structures have been discovered and dated until the Imperial Roman phase at *Sabratha* (DI VITA 1975c; 1984a; BRECCIAROLI TABORELLI 1975; DI VITA, GARBINI, MABRUK 1978-1979; BESSI 2004), *Oea* (ROMANELLI 1922; BARTOCCINI 1926, 21-30; AURIGEMMA 1958; DI VITA 1978), *Gightis* (FEUILLE 1939; DRINE 1992-1993) and *Meninx* (DRINE, FENTRESS, HOLOD 2009, 104), while their usage seems to be abandoned at the end of the Hellenistic period in all those other territories outside Tripolitania that were under the Punic sphere. Carthage itself seems to relinquish the habits of subterranean tombs during the second century BC (BENICHOUS-SAFAR 1982, 326, 373-374) and, except some cases such as *Hadrumentum* (FOUCHER 1964, 109-200), *Iol Caesarea* (LEVEAU 1977) and *Tipasa* (LANCIEL 1970, 183-192; BOUCHENAKI 1975, 171) where *hypogea* have been registered also in the subsequent periods, the use of *monosome subdialis* burials became the common funerary solution for most of the population of the African Roman provinces.

According to the data available, the use of the *hypogea* at Lepcis Magna covered a time span of ten centuries (from the sixth century BC to the fourth century AD). The number of these structures reaches 74 units concentrated above all in the inner suburbs (fig. 4.1). *Hypogea* were either isolated (Tb), located with other tombs forming a necropolis (Nc), or were associated with a standing mausoleum (Ma). However, the accidental discovery of many of the isolated

hypogean tombs does not always allow us to determine their original context and, for this reason, we should note that they could be part of wider *necropoleis* or were combined with an above ground structure, now missing. Moreover, the scarce quantity of detailed drawings, excavation reports and photographs available together with their often low quality allow an analysis that is, in most cases, hardly exhaustive.

The tombs can be divided in two main chronological groups: 11 *hypogea* belong to the Punic phase (15%) and 63 to the Roman phase (85%). The majority of these tombs are datable thanks to the grave goods and more rarely thanks to some structural features. However, in many cases a single hypogeum (Punic or Roman) could be used for several generations, often covering more than a century and hosting dozens of burials (FONTANA 2001, 163). The identification of the first depositions with their grave goods within the same tomb is extremely important because it allows us to determine an accurate chronology for the structure. Through this method, it is possible to determine the first phase - and most likely the dating of their construction - of 60 *hypogea* (fig. 4.2).

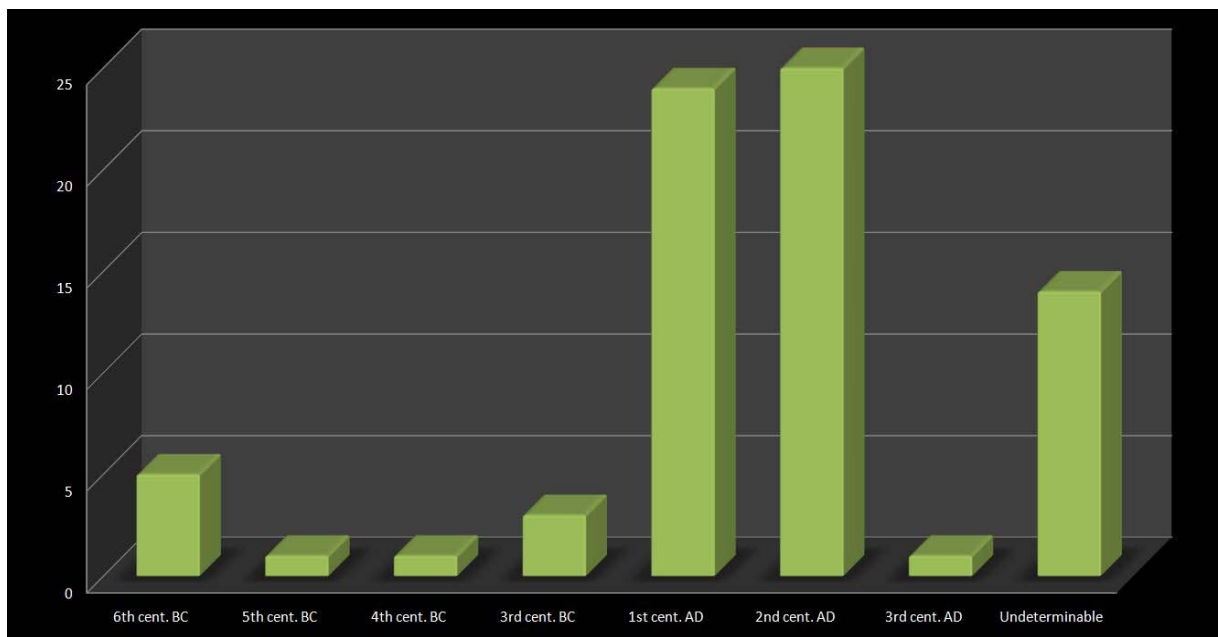


Fig. 4.2. Number of the Lepcitanian *hypogea* according to their first phase of use (and most likely their construction).

4.2.1. THE PUNIC HYPOGEA: ARCHITECTURAL FEATURES, FUNERARY RITES AND GRAVE GOODS

The data coming from the oldest Lepcitanian tombs constitute hitherto one of the most important witnesses of the Punic phase of the city. Beside a single "stone slab tomb" (Tb17) dated to the second half of the sixth century BC found beneath the Old Forum, the main bulk of the Punic funerary evidence relates to the necropolis found by Caputo between 1938 and 1940 below the stage of the first-century AD theatre (fig. 4.1, Nc5). The area investigated brought to light eight different *hypogea* whose use can be dated from the second half of the sixth century to the second century BC. The portion of the necropolis explored shows the existence of two

separate clusters of tombs: one beneath the NW part of the theatre stage and the other, characterized by the largest structures, beneath the SE sector of the stage.

Our knowledge of the Punic funerary evidence of Lepcis Magna has unfortunately barely moved on from the publication of the theatre's necropolis (1977). However, two additional unpublished *hypogea* have been discovered in recent times: the first one is a third-second century BC tomb (with a final phase dated to the first century AD) excavated in 1976 between Khoms and Wadi Zennad (fig. 4.1, Nc3a) and whose grave goods have been recently rediscovered within the LMDoA warehouse. The other *hypogeum*, almost certainly of the Hellenistic period, has been detected during a recent survey in the area of the old lighthouse of Khoms (fig. 4.1, Tb16).

Although the entrance it is not completely visible for every one of these ten structures, it seems likely that all the Punic *hypogea* recorded at Lepcis belong to the shaft type tomb. This architectural feature, that gives the name to the whole funerary structure, constitutes, with regional variants, a trademark element of the majority of the Punic subterranean tombs (ROMANELLI 1970, 265-266; BEN YOUNES 2007, 36-38). At Lepcis the shafts have different shapes as well as several devices to overcome the steep difference in level: a "vertical shaft" with a quadrangular/circular plan (Nc3a), a "staircase shaft" with steps that take up the whole width of the shaft (Nc5c) and a "narrow staircase shaft" with steps that occupy partially the width of the shaft (Nc5d-e). When neither the staircase nor footholds were present, access to the funerary chamber/s was solved using ropes or ladders. Despite the archaeological evidence being limited to a few examples, it seems that the depth of the shaft was not considerable at Lepcis. These structural features can be noticed also in the majority of the contemporary cemeteries of the Sahel area and in those of the Lesser Syrtis while at Carthage, for instance, the depth of the shafts is usually more substantial and the descent was then facilitated by footholds (BENICHOUSAFAR 1982, 91-94; FANTAR 1995, 59; BEN YOUNES 1995, 77-78; 2007, 37).

The internal structure of the Lepcitanian Punic *hypogea* shows different shapes and sizes. Unfortunately, the scarce quantity of the structures that have been investigated does not allow a satisfactory classification. However, it is possible to highlight some significant aspects: the variety of shapes for the rooms (from circular to elliptical and from rectangular to quadrangular which do not exceed 6 sq. m with a maximum height of 2.20 m), flat or slightly domed ceilings, the absence of painted decorations and, finally, the absence of any architectural elements dug directly in the chambers such as niches, banquettes or funeral beds.

In accordance to their general planimetry, it is possible to attempt a rough distinction of the best preserved *hypogea* (fig. 4.3). The simplest tomb is the one essentially formed by a shaft and a single funerary chamber (Nc3a). More complex are those tombs with a shaft that lead to a vestibule from which could be located, in different and asymmetrical position, one (Nc5i), two (Nc5c, probably also Nc5d) or three funerary chambers (Nc5e) often sealed by stones, slabs or

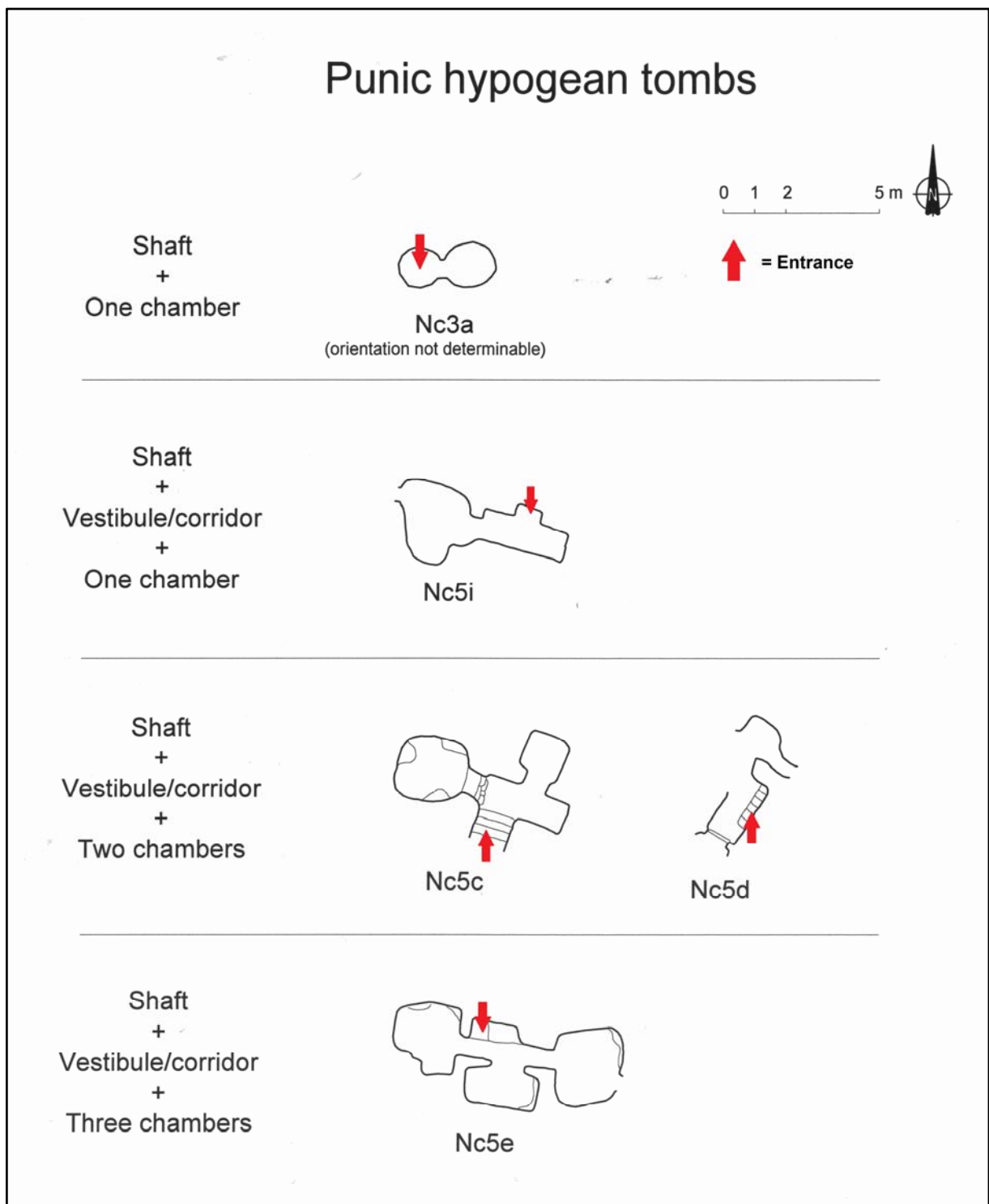


Fig. 4.3. Subdivision of the Lepcitanian Punic *hypogea* according to their structural features.

upside down *amphorae* cemented with clay. Since it is not possible to identify common rules, it is worthy to consider that there were certainly intermediate cases and, most likely, the shapes and size of the *hypogea* were also dictated both by the nature of the bedrock and by the space available within the necropolis.

Compared to the data available for the Sahel area (mainly *Leptiminus*, *Thapsus*, Mahdia) where the presence of more than one funerary chamber for a *hypogeum* seems extremely rare (BEN YOUNES 1995, 76), the examples from Lepcis Magna could be taken to suggest that larger

and articulated structures were more frequent there. However, also in this case we should bear in mind that the Lepcitanian evidence is too limited and the area of the Punic necropolis investigated beneath the theatre (Nc5) constituted only a "wealthy" sector within a wide cemetery. The single elliptic funerary chamber (fig. 4.3, Nc3a) found in the necropolis between Wadi Zennad and Khoms seems instead pretty similar to some contemporary tombs that have been found in the suburban area of *Oea*, such as the *necropoleis* of Bāb ben Ghascir and of *ex via Manzini* (DI VITA 1965, 131-132; 1966, 77-78).

Unfortunately there are no preserved elements related to the exterior of the tombs. Nevertheless, it is reasonable to hypothesize the presence of distinctive *épiséματα* located close to the entrance of the shafts: *stelae*, altars, cippi or small structures that are documented in Carthage and, to some extent, in the main Punic *necropoleis* of North Africa, Sicily and Sardinia (BENICHO-SAFAR 1982, 71-81, see also BARTOCCINI 1926, 23-24; BISI 1968).

The funerary rites attested for the first phase (sixth - fifth century BC) of the necropolis beneath the theatre include both cremation and inhumation. An amphora-ossuary placed on a beaten surface (*tin*) at the bottom of a pit within an *hypogeum* (Nc5b) would confirm the cremation rite while an inhumed skeleton has been found in a different hypogeum (Nc5g) dated to the fifth century BC. In the same cemetery the only rite attested for the Hellenistic period (third - second century BC) is inhumation and, according to the archaeological evidence found, the bodies were placed directly on the earthen floor or inside wooden coffins (DE MIRO, FIORENTINI 1977, 63). The archaeological data from other Tripolitanian Hellenistic burials would confirm and enforce the Lepcitanian tendency: significant examples are in this sense the *necropoleis* of *Mellita* (BISI 1969-1970; 1971a, 18), *Sabratha* (BARTOCCINI 1949), *Gightis* (FEUILLE 1939), *Oea* (DI VITA 1965, 131-132; 1966, 77-78).

The use of small funerary chambers for long periods would require the practice of exhuming older depositions to make space for additional burials. This practice seems to have been common as is attested, for instance, at the necropolis of *Sulcis*, in Sardinia (BARTOLONI 1987, 45) or in a contemporary hypogeum at *Mellita* (east of *Sabratha*) where a significant exhumation and re-arrangement of depositions was realized to allow the burial of two bodies with their funerary beds (BISI 1969-1970, 192-195; 1971a, 18).

Concerning the grave goods it is possible to summarize that the pottery related to the Classical period (end of the sixth and fifth century BC) found in the necropolis of the theatre (Nc5) reveals essentially the presence of Late-Corinthian and Italic-Corinthian pottery imitated also by local productions; Attic black-glazed pottery is also attested together with Punic oil lamps (DE MIRO, FIORENTINI 1977, 70). The Hellenistic funerary equipments found in the same cemetery (second half of the fourth century and first half of the third century BC) show the presence of imported black-glazed pottery from South Italy (especially Campania) and a few examples from *Latium* ("Atelier des petites estampilles") and *Etruria* (MICHETTI 2007, 327-328).



Fig. 4.4. Black glazed over-painted pottery from South Italy found within the Hellenistic tomb (Nc3a) east of Lepcis Magna.

Well attested are the achromatic local productions often inspired by the contemporary types of the imported black-glazed pottery (DE MIRO, FIORENTINI 1977, 70-71).

For the Hellenistic phase, the unpublished hypogeum found in the eastern outskirts of Khoms (Nc3a), confirms the general trends shown by the necropolis of the theatre. Indeed, also in this case, the majority of the imported items - essentially black-glazed pottery - comes from South Italy, especially Campania and Sicily (fig. 4.4) while most of the local productions (fish-dishes, cups,

bowls) seems to imitate the imported pottery. A direct link with the Italian peninsula and Sicily is highlighted also for the transport vessels found (Graeco-Italic and Ramon Torres type 7.2.1.1 *amphorae*).

4.2.2. THE ROMAN HYPOGEA: ARCHITECTURAL FEATURES AND DECORATIONS

The majority of the Lepcitanian funerary *hypogea* date back to the Early and Mid-Imperial periods (see fig. 4.2). These structures are mostly grouped in *necropoleis* (fig. 4.1, Nc1-Nc2, Nc3b, Nc4, Nc7, Nc9-Nc11) or have been found isolated (fig 4.1, Tb1-Tb15), while only five of them have been found in association with standing *mausolea* (fig. 4.1, Ma2, Ma8, Ma13, Ma20, Ma30).

Beside some extraordinary examples found in the suburbium that have been recently published, most of the Roman Lepcitanian *hypogea* are still little known. Even if the archival documentation (written report, drawings and photographs) held in the local DoA is not always exhaustive, it has been possible for me to reconstruct the general development of the structures and, above all, their funerary equipments. The most substantial loss is probably the lack of overview drawings or sketches related to the single groups of tombs (Nc1-Nc3, Nc4, Nc9, Nc11): a proper topographic analysis of the main *necropoleis* is indeed problematic or even unachievable.

What was originally visible from outside these underground structures is mostly unknown; however, according to some scattered finds and to comparisons with other *necropoleis* in Tripolitania, it is possible to consider some common features. The first thing to take into account is that a significant number of *hypogea* were built within delimited areas often defined by an enclosure or, where they were not grouped or concentrated, probably just by surface markers

(σήμα/*sema* or *signaculum*). The need to define a funerary space is certainly related to establishing borders of sacred spaces and, of course, to delimit properties of different families or groups, such as *collegia*. The archaeological evidence related to the exterior of a Lepcitanian hypogean tomb (fig. 4.1, Tb5), unfortunately not preserved but seen by Pietro Romanelli (1925a, 160-161), shows clearly some external key aspects of these structures. The tomb was located in the south-west suburb and its entrance was sealed by two stone slabs. It was delimited outside by a stone rectangular enclosure (3.80 x 15 m) that traced exactly the area of the underground structure (see fig. 4.7, Tb5; see in general VON HESBERG 2005b). The tomb's entrance was located centrally within the enclosure and, at short distance from the underground access, a squared base (side of 0.92 m), probably to house an altar or a *sema*, was recorded by Romanelli. Other Lepcitanian *hypogea* were included, most likely together with other funerary structures, within enclosures (fig. 4.1, Tb 6, Nc8a, Ma2, probably also Tb4. For funerary enclosures see par. 4.4.1) while the presence of altars connected to hypogean tombs or *cupae* is documented in other cases (fig. 4.1, Nc1b, Nc7f, Nc7g, Nc8b, Nc8c, Nc11a, Tb15, probably Ma20). Scattered funerary inscriptions carved on moulded bases that may be part of altars and that could be associated to underground structures have been found particularly in the eastern suburb of Lepcis (*IRT* 673, 679-681, 689, 752, probably also *IRT* 675).



Fig. 4.5. The sarcophagus placed above the architrave of the *hypogeum* Tb9 (ROMANELLI 1925a, fig. 89).

Another significant case is the exterior of a *hypogeum* found close to the Vittorio Emanuele III Italian fort (fig. 4.1, Tb9). In this case a sarcophagus was placed above the architrave of the *dromos* that led to the funerary chamber (fig. 4.5). The gable roof with angular *acroteria* gave to the sarcophagus the additional function of a *signaculum*. Probably the same situation characterized the entrance to the *hypogeum* connected to the mausoleum of Gasr Gelda (fig. 4.1, Ma2). In this case a moulded base (2.06x0.9 m) was found still *in situ* and acted as the

architrave of the underground tomb. The flat upper surface of the base indicates that it surely hosted above it an altar or a *sema*.

Other *signacula* associated with *hypogea* or simple tombs have been found during the Roma Tre excavation at the necropolis of Wadi er-Rsaf (fig. 4.1, Nc7a, Nc7c, Nc7d). In these cases stepped structures or a limestone block with a circular depression were used to host the shaft of a column or other decorations. The use of limestone or marble columns with funerary inscription that referred to the *hypogea* or to a single tomb, is not uncommon and it is witnessed in other cases recorded both in the suburban area and in the periphery of Lepcis Magna (fig. 4.42, Fu10-Fu11; see also *IRT* 747).

The vertical element constituted probably the most important feature of a *signaculum*. The conic *cippus* set on a three stepped base found outside a tomb at Abu Kemmash (the ancient



Fig. 4.6. The *signaculum* of a tomb at Abu Kemmash (MERIGHI 1940, II, fig. 20).

Pisida, west of Sabratha) is probably one of the most significant examples in this sense and represent doubtless an intermediate solution in term of size and architectural features (fig. 4.6). A large spectrum of structures were used as *signaculum*: from the small and single elements mentioned above (column shafts, *sarcophagi*) to more composite evidence like the inscribed pillar with probably a pyramidal covering found in western suburb (fig. 4.42, Fu9). Finally, the most complex stage of *signacula* were certain types of *mausolea*. Some of these monumental structures with no internal chamber/s recorded around Lepcis Magna - the Wadi el-Fani mausoleum (fig. 4.1, Ma13), the "obelisk" mausoleum in the area of Wadi er-Rsaf (fig. 4.18, Ma29), and probably also Gasr Gelda (fig. 4.18, Ma2) and other *mausolea* (fig. 4.18, Ma20; fig. 4.19, Ma8, Ma30) -

would represent indeed the final and most expensive stage of *semata*.

Lastly, for some semi-hypogeal tombs (Nc8a, Nc10, Tb15), the extrados of the barrel vault *dromos* could constitute the only part visible of the structure; in these cases what was visible from outside was only a semi-cylindrical shape, similar to a *cupa* tomb (CIFANI *et al.* 2008, 2290-2291).

It is possible to divide a substantial number (20) of Roman *hypogea* into four different types according to their plans (fig. 4.7). The first group, the simplest one, is composed of an entrance (vertical shaft or *dromos*) and by a single room. The second group is formed by the entrance (vertical shaft) and by two rooms and, eventually, a corridor or vestibule between the funerary chambers. The third type is characterized by three chambers separated or preceded by a common space (corridor or vestibule). The last group is more articulated because is essentially composed by corridors and, eventually, a central room that give to the structure a stellar/radial shape, often symmetric. The *hypogea* belonging to these four groups are characterized by two types of entrance: 1) a vertical shaft (sometimes provided with footholds) or 2) a *dromos* that, through steps or thanks to an inclined floor, led to the funerary chamber/s. There are also some cases (Tb5, Nc7i, Nc8a) where the two types of access were combined (a vertical shaft that lead to a staircase or viceversa as attested also at *Sabratha*: BESSI 2004, 1752-1753).

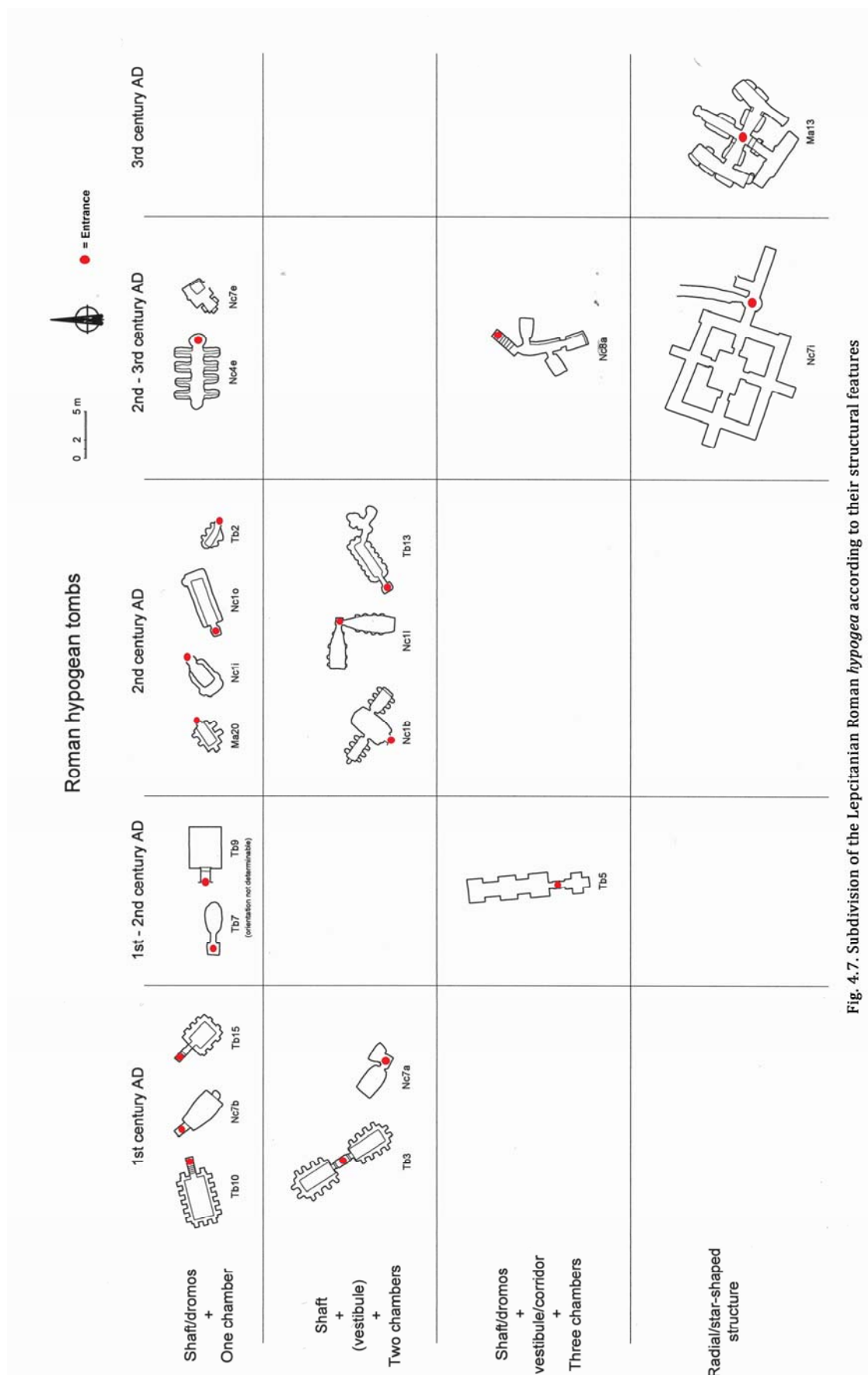


Fig. 4.7. Subdivision of the Lepcitanian Roman *hypogaea* according to their structural features

Considering also the data available from the excavation reports, it is possible to determine a more accurate numbering of the funerary chambers that form a single *hypogeum* (35 Roman tombs of a total of 63). The majority of the *hypogaea* had a single room (67%), while about a

quarter (24%) had two chambers and only a small number (9%) had three or more rooms. The data show also that the largest rooms can exceed 20 m² (fig. 4.7, Tb9) while the smallest do not reach 2 m² (fig. 4.7, Nc7a, Tb13). In *Sabrattha*, except for the tomb of the "defunto eroizzato", all the Roman tombs known are composed of a single room (BESSI 2004, 1753).

The number of the funerary chambers of a single hypogeum at Lepcis could then vary from one to three (fig. 4.7). However, it cannot be excluded that there were larger structures like the tomb found within the necropolis of Tazuit in the southwest suburbium (fig. 4.1, Nc4). In this case, it seems that a single hypogeum (Nc4d) was characterized by five small funerary chambers plus a bigger one provided with 48 niches; unfortunately, neither drawings or photographs are preserved of the structure and only a few architectural details are recorded. The rooms are mainly quadrangular/rectangular in some cases with rounded corners. Some chambers are trapezoidal (fig. 4.7, Nc7b) or resemble a bottle (fig. 4.7, Nc7a, Nc1l). In one case (fig. 4.7, Tb7) the plan is characterized by a small ellipse with a low segmental arch ceiling (0.90 m): this particular shape, known as "tomba a forno (tomb with a oven shape)" was also documented, for the Roman phase, in other *necropoleis* in Tripolitania such as the ones found within "Forte della Vite" cemetery at *Oea* (AURIGEMMA 1958, 65-66). Apart from this case, the majority of the ceilings were characterized by a barrel or, in some other examples (fig. 4.7, Nc1l; see also Nc1a, Nc1h) by an ogival vault.

The underground tombs were sealed using limestone slabs or blocks. In the case of a vertical shaft the stones were set horizontally (fig. 4.8A; Ma13, Nc3b, Nc4c, Nc7a, Nc7b, Tb7, Tb10, Tb11, Tb16) while for the *dromos* false limestone doors were generally used (single or double leaf: Ma2, Ma8, Nc10, Tb4, Tb9) often provided with a "door lock" (fig. 4.8B) or, alternatively, with dry stone masonry (Tb2). The tombs with a shaft access and then formed by two funerary chambers separated by a common space (vestibule) could be provided with both of the seals: horizontal limestone slabs/blocks for the shaft and then false limestone doors for the

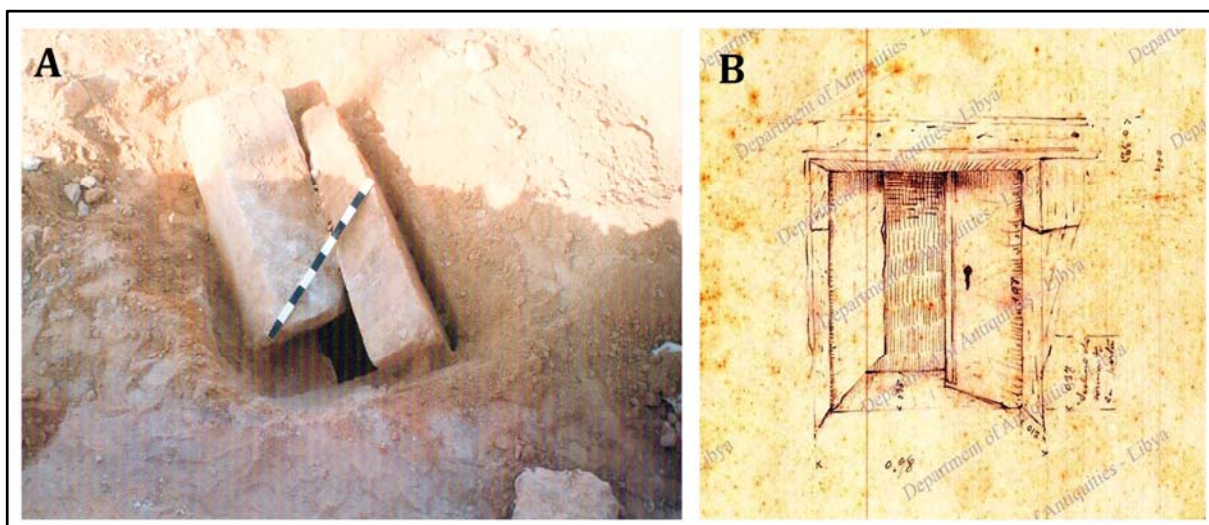


Fig. 4.8A: a typical shaft entrance sealing (Tb10; LMDoA). Fig. 4.8B: a limestone door with a door lock (Tb4; TDoA).

inner funerary chambers (Tb3, probably also Nc1b).

When the tomb comprised two chambers these were sometimes built face-to-face on opposite sides of the shaft and may have equal shapes (fig. 4.7, Tb3) like some *hypogea* of the "Forte della Vite" necropolis at *Oea* (AURIGEMMA 1958). The structures with two chambers could also be built with an "L" shape, like one tomb found in the western Lepcitanian suburbium where the rooms were located on two contiguous sides of the vertical shaft (fig. 4.7, Nc11). This peculiar shape, with variation, has been documented also for the tomb "del defunto eroizzato" at Sabratha (DI VITA, GARBINI, MABRUK 1978-1979). In another tomb of the western suburbium (fig. 4.7, Nc1b) the two chambers were separated by a large common space, probably used for funerary rites (DI VITA-EVRARD, FONTANA, MUNZI 1997, 133) as is attested also by the late hypogeum "of Adam and Eve" at Gargaresh, near *Oea* (DI VITA 1978). In other cases the second chambers were probably built due to the lack of space in the original chamber: the shape of the *hypogeum* do not reveal a unitary scheme (fig. 4.7, Tb 7; see also Tb4).

Hypogea provided with three chambers may have different shapes: in one tomb at Wadi er-Rsaf (fig. 4.7, Nc8a) the small rooms were set asymmetrically along the corridor while in a hypogeum located in the south-west suburbium the three chambers were built in sequence along the same axis (fig. 4.7, Tb5).



Fig. 4.9. The barrel vault funerary chamber of a tomb (Tb10) in the southern suburbium with decorated niches and banquette (LMDoA).

The majority of the tombs preserve some architectural elements that help to indicate the funerary rites used. Niches, *loculi* and banquettes are the three built elements directly dug in the bedrock that may tell us if inhumation or cremation were used, at least in the first phase of the tomb (FONTANA 1996, 82). The use of niches, not utilized in the Hellenistic phase, started at the beginning of the Roman Imperial period (first half of the first century AD) that is when the



Fig. 4.10. The funerary chamber of a tomb (Nc4g) of the necropolis of Tazuit, south-west suburbium (LMDoA).

cremation rite became more common. Niches held cinerary urns, were generally 0.50 - 0.80 m deep and had a barrel vault or a half-dome intrados (fig. 4.9). From the mid-second century AD, *loculi* were built to host inhumations and cremations (and thus niches) were less used and were gradually abandoned. *Loculi* could be excavated parallel to the wall of the chamber/corridor (fig. 4.7, Ma13) or even perpendicular to it (fig. 4.7, Nc4e; see also Tb4) and their length and depth may vary according to the space available (from 1.80 to 3 m). Banquettes were also a common features in many Lepcitanian Roman *hypogea* and often they were associated with niches. However, their presence is not exclusive to a single rite because they could be used both to host cinerary urns or inhumed burials (figs 4.9-4.10).

According to the structural elements mentioned above, is possible to notice that all the first century AD Lepcitanian *hypogea* were provided with niches (fig. 4.7). In some cases (Nc7a, Nc7b) - when niches have been not found - the urns (both coffin-shape urns or amphorae) were placed directly on the ground while, for other tombs (Tb5, Tb9), their presence is probable but not sure, since the funerary chambers have been found partially filled by soil. From the mid-second century onwards, the majority of the *hypogea* preserve banquettes or *loculi* that clearly indicates the presence of inhumations (fig. 4.7). Sometimes, when none of these structural elements have been found within the tomb, the inhumed were placed in *sarcophagi* or in earthen pits.

To make better use of the space according to the change of funerary rites, the general shape of the underground tombs seems to change during the second century AD. From distinctive quadrangular/rectangular chambers used for cremations (cinerary urns place all around the chambers and even on several stages of niches, like *colombaria*) to *hypogea* essentially formed by stretched rooms or corridors where *loculi* or small chambers were opened on their sides to accommodate inhumed burials. Significant examples in this sense are the radial/star shaped structures (fig. 4.7, Nc7i, Ma13) where several corridors hosted (or should have hosted for Nc7i) *loculi*.

Many of the Lepcitanian tombs were not painted or provided with any coating and the surface of the bedrock was the only element visible within the structure (fig. 4.10). However, in some *hypogea* (Nc10, Nc7e, Nc8a, Tb3, Tb4, Tb9, Tb10, Tb15) there is evidence of a light-grey/whitish plaster (mainly formed by sand and lime) used to cover walls and ceilings of the structures. Contrary to what has been found both in Sabratha (DI VITA 1984a; BESSI 2004) and in the *necropoleis* around *Oea* (DI VITA 1978; 1983a), there are not cycles of figurative paintings preserved at Lepcis Magna. The only case, documented only by a brief report preserved at the local DoA, are the figures, horses and a *Victoria* painted inside the large second/third century tomb in the western suburbium (fig. 4.7, Nc7i). The red and green traces of painting found above the niches in the funerary chamber of the semi-hypogeal tomb at Wadi er-Rsaf (Tb15) actually constitute the only scarce evidence of painting in addition to the one mentioned above.



Fig. 4.11. Stucco decorations within a funerary chamber of the Gelda's tomb (Tb3; DI VITA-EVRARD *et al.* 1996, pl. 34a).

Stucco decorations are attested more frequently within the Lepcitanian tombs. In the unpublished *hypogeum* found south of Lepcis in 1999 (fig. 4.1, Tb10) the cornices and the small smooth pilasters with Tuscan capitals of the niches and also the impost and the intrados of the barrel vault were decorated in stucco with painted (red bands) elements (fig. 4.9). In the so called Gelda's tomb (fig. 4.1, Tb3) the stucco decorations were more elaborate: niches, framed by a moulded stucco ornament, were provided with fluted pilasters with Corinthian-type capitals; each niche was then crowned by an arch or by a little triangular or by a "pagoda style" pediment often decorated by a central rosette or palmette (fig. 4.11). This elaborate scheme with false architecture elements, seems to recall the Alexandrine sphere, where the stucco decoration is well attested (DI VITA-EVRARD *et al.* 1996, 88). Stucco elements characterized also an hypogeum seen by Romanelli in the south-west suburbium (fig. 1, Tb5): he recorded a large rosette

decoration with four acanthus leaves in the central position of the barrel vault and, at the four corners of the same ceiling, a single stucco leaf.

4.2.3. THE ROMAN *HYPOGEA*: GRAVE GOODS

The analysis of the Lepcitanian funerary equipments, which is currently being done by the Archaeological Mission of Roma Tre University (MUSO *et al.* 2010, 58-62), - even if partial - provides however an overview of some economic and ritual dynamics beside the use and

SITE	LIMESTONE/ MARBLE URNS	AMPHORAE	COARSE WARES	FINE WARES	LAMPS	GLASS	METALS	CARVED BONES	COINS	OTHER	TOTAL
Nc01a	10	8	12	2	1		2	1	5		41
Nc01b	8	4	28	4	4	3	13		6		70
Nc01c			24					3			27
Nc01d		1	2	1	2	1	8		1		16
Nc01e		3	7	2	1		8				21
Nc01f	18										18
Nc01g	1										1
Nc01h	8	10	8		4	6	28		11		75
Nc01i	5	6	20	5	6	3		5	8		58
Nc01j		1	4		2	3	13	1			24
Nc01k	9				1				7		17
Nc01l	11	7	21		1	6	3	2	17		68
Nc01o	3		9	1	3	1	5		4		26
Nc02a		4	21		8	1					34
Nc02b			1	3	8						12
Nc03a		2	25		7		14		5		53
Nc03b	59	76	133	28	18	15	59	7	53	1	449
Nc04b		1	20	11	12						44
Nc04c	8	10	47	4	22	3	3	2	2		101
Nc04d	5	1	7		1	2	1		1		18
Nc04e		2	11	1	6		3			1	27
Nc04f	3		14		15	3			10	3	48
Nc04g		2	6		2						10
Nc07a	11	6	18	13	9	2		3	7		69
Nc07b	29	31	51	27	9	35	2	7		5	196
Nc07e	1	1		2		4	6		7		21
Nc08a						1	5	1	1	1	9
Nc08c			3	2	1				2		8
Nc11a	4	3	12		7	1	12	2	9		50
Tb01	72	2	79	19	13	18	13	7	92		315
Tb02	1	4	11	5	2	2	1		1		27
Tb03	11	18	25	17	2	32	18	3	18	3	147
Tb04	7	3	12								22
Tb06	4	3	3	2	6						18
Tb07	4	7	9		1						21
Tb08	4	2							1		7
Tb10	20	17	7		2	3	1				50
Tb12		3	1		4	1	6	1	8		24
Tb13	31	14	6	4	11	11	7				84
Tb14	19	14	8	5	18	4	6		17		91
Tb15	8	16	16		2	20	17	3	9	1	92
Ma13				1	1				4	1	11
Ma20	22	9	26		4		4			1	66
TOTAL	396	291	707	159	216	181	262	48	309	17	2,586

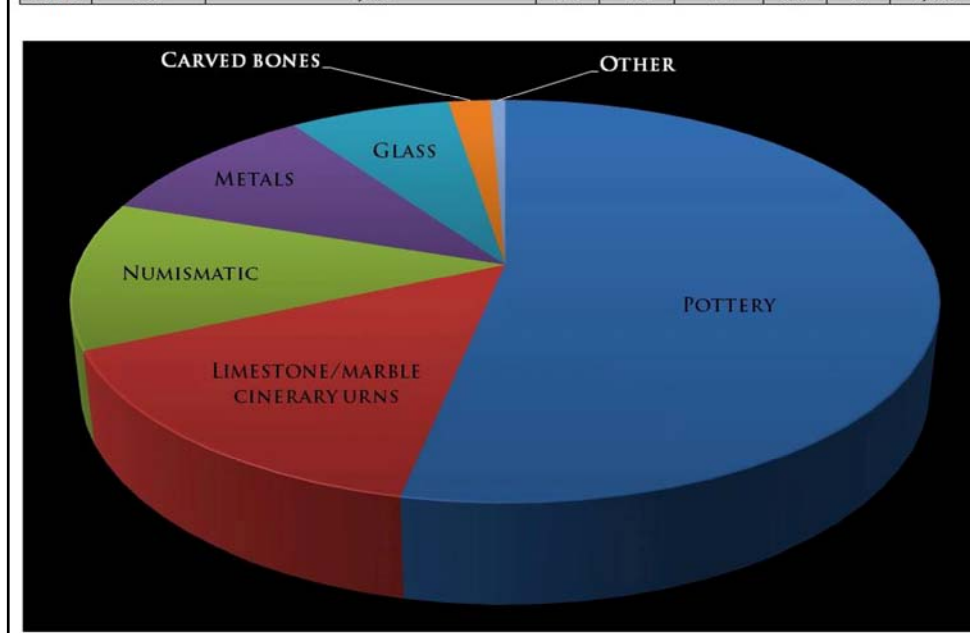


Fig. 4.12. Subdivision and quantities of different classes of objects found in the Lepcitanian Roman *hypogaea*.

production of several class of objects. The total of these objects (entire or partially complete) reaches 2,580 units. Considering the 63 funerary underground structures detected and explored up today, this amount constitutes certainly an underestimate of the original quantity. This is due especially to the quantity of material looted and stolen over centuries and also to the lack of detailed excavation reports and registers that often do not match with the objects of the funerary equipments actually preserved in the local DoA warehouses.

The finds related to the Roman grave goods can be divided according to their different class (fig. 4.12). Out of a total of 2,586 objects more than the half are pottery (53%, 1,373 items), the limestone/marble urns constitute 15% (396 vessels) followed by the numismatic finds (12%, 309 coins), metals (10%, 262 items) and glass (7%, 181 vessels). Carved bone (48 items) and other miscellaneous finds (17 objects) do not exceed 3%. The Lepcitanian Roman grave goods are analyzed in detail within the Volume II (App. V).

4.3. THE MINOR BURIALS: *CUPAE*, OTHER MASONRY STRUCTURES AND EARTHEN PITS

The intensive excavation carried out by the Roma Tre University at Wadi er-Rsaf, c.1 km north-west from Lepcis Magna, showed the presence of a dense necropolis (fig. 4.1, Nc7-Nc8) divided by the passage of the ancient coastal road (see par. 3.1). Beside *mausolea* and *hypogea*, both the areas investigated revealed the existence of other minor graves such as *cupae* (half-barrel shaped grave markers), some other masonry tombs and earthen pits. The proximity of the necropolis to both the city and the coastal *via publica* certainly made the area attractive for funerary purposes and, as often happens in the inner suburban cemeteries, the spaces available were deeply occupied and stratified over time.

At least 10 *cupae* have been detected within three funerary enclosures brought to light in the necropolis north of the main road (Nc8c), 2 more *cupae* were instead identified in the cemetery area to the south (Nc7g). Their construction ranges from the beginning of the second century to the fourth century AD. Although not all the *cupae* at Wadi er-Rsaf have been preserved to the same degree we can highlight two common structural features (fig. 4.13). First, they all have the same shape that is basically a rectangular parallelepiped c.20-30 cm high with a central semi-cylindrical mass on it. Second, they were all built with rubble and masonry and then coated with a thick layer of plaster and *cocciopesto*. Two of them still preserved both their original inscribed *tabella* (both on one of the shorter sides), and the terracotta conduits used for *refrigerium*. Traces of red colour have been found on the plaster of one *cupa* (Nc7g): it is likely that this kind of tomb coverings were originally decorated with paintings, as has been documented in other African contexts (in general see: STIRLING 2007, 117). The largest one of

these structures (c.2.5x3 m), found within an enclosure of the north area (fig. 4.13), is the only one that preserves the barrel vault characterized by large stones while the interior was filled reusing painted plaster. Next to four of these structures and almost always lined up axially with the long side, have been also found quadrangular altars/offering tables built using the same materials and with burnt surfaces. These structures, clearly used for funerary dining (see par. 4.5), are similar to the ones found in several North African *necropoleis* such as *Hadrumetum* (FOUCHER 1964, 198), *Pupput* (BEN ABED, GRIESHEIMER 2001, 581, 583, 585) and *Leptiminus* (BEN LAZREG, MATTINGLY 1992, 315-316).



Fig. 4.13. Two *cupae* and a connected altar of the Nc7 necropolis at Wadi er-Rsaf (photo: D. Baldoni, 1997).

Cupae or *cupulae* were a common type of burial markers (*semata*) in North Africa where they seem to spread from the second century onwards well beyond the Late Antique phase, as attested by the Christian necropolis at Aïn Zara, west of *Oea* (AURIGEMMA 1932). However, the origin and the development of this tomb/*signaculum* is not completely clear even if it is certain that African Roman provinces (both the coastal and the inland regions) constituted one of the most important area of irradiation (see in particular BACCHIELLI 1986; BARATTA 2006; STIRLING 2007). The masonry *cupae* found at Lepcis Magna do not differ from the majority of the ones registered within the *necropoleis* of African cities both for their aspect and for their position (clustered around *mausolea* and within walled funerary enclosures). Among the most important comparisons are the examples of *Pupput*, *Leptiminus*, *Tipasa* and *Iol Caesarea* (see in general STIRLING 2007, 116-117, 130-131).

In addition to the masonry ones, three monolithic *cupae* were also found at Lepcis. Unfortunately, two of them were found not in their original location and for the third unpublished one, no information is available concerning its discovery. The first one (fig. 4.14A) comes from the east suburbium and it is essentially a limestone rectangular short block with

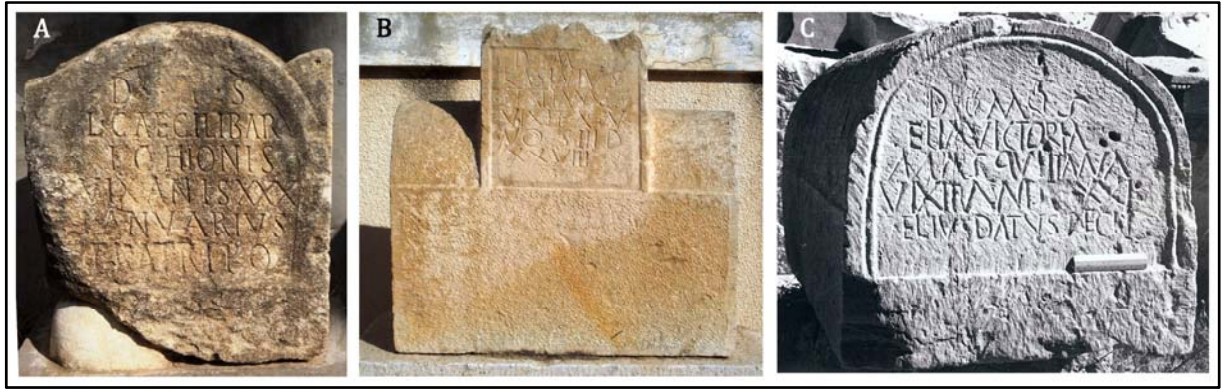


Fig. 4.14. The Lepcitanian monolithic *cupae*: A - IRT 672 (photo: A. Zocchi, 2009). B - Unpublished, located at the LMDoA courtyard (photo: A. Zocchi, 2009). C - IRT 695 (photo: J. B. Ward-Perkins; BSR, 47.XII.27).

straight sides and a curving top adorned with *acroteria*; the inscription (IRT 672), carved on a round headed panel, allows us to date the *cupa* to the second/third century AD. The unpublished tomb marker (fig. 4.14B), now preserved in the Lepcis Magna DoA courtyard, has the same semi-cylindrical shape although it is much longer and it is provided on one of its side with a carved central prominent inscribed *tabula*. In this case the inscription dates the *cupa* to the second/third century AD. The latter monolithic *cupula* (fig. 4.14C) was found reused in the Late Antique/Medieval structures close to the Severan Arch (fig. 4.1, Fu 17). According to J. M. Reynolds and J. B. Ward-Perkins this find actually would be a limestone half column shaft (0.51x0.47x1.05 m) reused horizontally and inscribed within a moulded border on one end (IRT 695). However, both the similarity with a monolithic *cupa* found at the western necropolis of *Tipasa* (LANCEL 1970, 179, figs 28-29) and the fact that the standard measurements of many of these type of *cupulae* (see STIRLING 2007, 113) coincides with the one recorded in this latter Lepcis example, would suggest its funerary use from the beginning (second/third century AD).

Beside the *cupae* of the Wadi er-Rsaf necropolis, other type of masonry funerary markers has been discovered that, like the *cupulae*, acted as protection and, at the same time, as *sema* for graves, in these case cremations. The five structures detected were formed essentially by a quadrangular plan (from c.1.8x2 m to c.0.7x0.7 m) with, in some cases, a further smaller tier. All these structures, located within a funerary enclosure in the north area of the Wadi er-Rsaf necropolis (Nc8c) and dated to the second century AD, were built using mortared cobble/rubble covered with plaster and set on a cobbled foundation. Three of them - aligned with and leaning against the enclosure wall - were characterized by a pseudo-cubic or a truncated pyramidal shape provided at the top with a hole that, through a terracotta conduit, allows the libation liquid to reach the cinerary urn (figs. 4.15-4.16). The urns were small *amphorae* or jars placed inside the structure and often accompanied by pottery basins filled with cereal seeds. Another masonry structure, similar to the previous ones, had probably a parallelepiped flat shape and was provided by a small inscribed marble slab on one side. More quadrangular constructions contained the remains of the deceased within *amphorae* or rarely placed without any vessels at

the bottom of the pit and, in one case, within a marble shaped vase urn. The variety of these masonry tomb markers used for single incineration can be compared to structures detected within some African *necropoleis* such as *Pupput* (BEN ABED, GRIESHEIMER 2004, 137-141) *Leptiminus* (BEN LAZREG, MATTINGLY 1992, 315), *Tipasa* (BOUCHENAKI 1975, 168-169) and, above all, to different examples from the "Isola Sacra" cemetery at *Portus* (BALDASSARRE *et al.* 1985, 288-290, 301-302, figs 21-22, 31; ANGELUCCI *et al.* 1990, 62-65).



Fig. 4.15. Two of the three masonry funerary markers containing cremations found at the necropolis of Wadi er-Rsaf (Nc8c; photo: D. Baldoni, 1997).

The simplest and most common Roman burial was doubtless the earthen pit, both for incineration and inhumation. However, in some cases these surface burials were protected by *cupae* or by other small masonry structures and the title given to these ensembles (pit plus structure) bears the name of its cover or *sema* pushing into the background the direct link of the burial with the soil or, more correctly, the two different chronological phases that characterized them. The following examples take into account therefore only those earthen burials that were not covered with a masonry or monolithic structure but eventually marked only by a single element such as *stelae* or small *semata* located close to them.

Significant examples in regard of the disposition of these simple earthen burials comes once again from the Wadi er-Rsaf excavation, that constitute the only Lepcitanian Roman necropolis that has been excavated intensely. For instance, in the south area of the necropolis (Nc7) more than ten incinerations (all dated to the second half of the first century AD), were found within small *amphorae* or coarse ware vessels arranged around a limestone *sema* (Nc7c). In the same area have been also found another five subsequent (first half of the second century AD) cremations within *amphorae* (Nc7d) that in three cases were also provided with vessels containing the remains of the *ustrina*. These graves were also grouped close to another

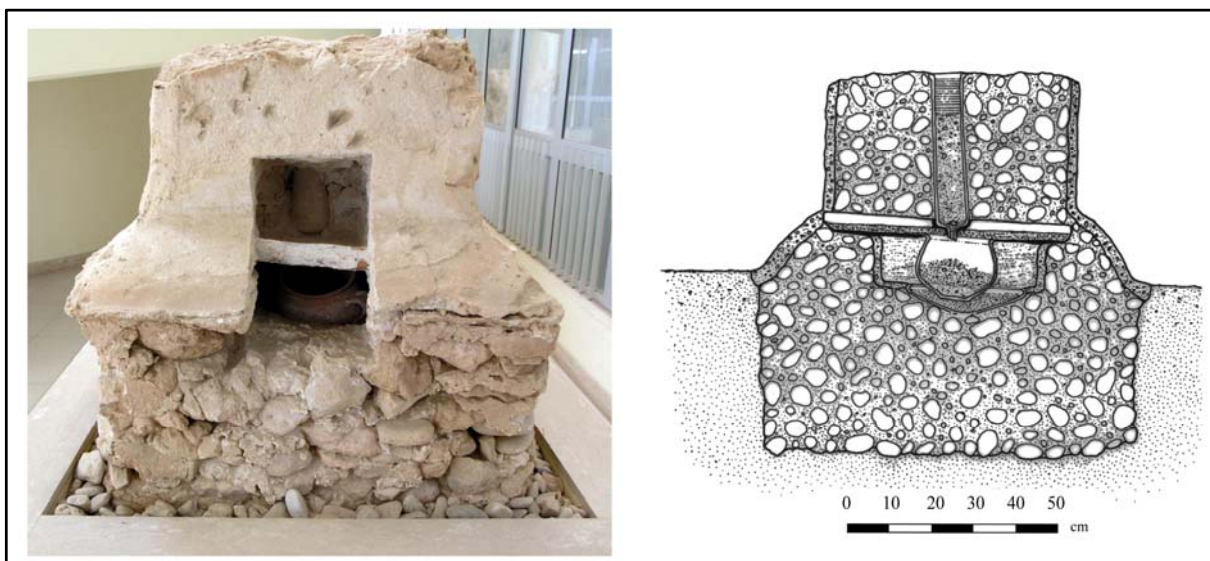


Fig. 4.16. The masonry structure built to protect and mark an incineration at Wadi er-Rsaf (Nc8c). To the left: the tomb transferred at the Lepcis Magna Museum (photo: D. Baldoni, 2006); to the right: cross-section of the same tomb (drawing: R. Cestari, 2001).

limestone *signaculum* and, generally, they suggest a higher social status compared to the previous ones. In the north area (Nc8) all the earthen burials found seem to have been connected with *cupae*, except for two inhumed burials that were found laid down on a broken large amphora at the height of the hipbone.

Two inhumations were also found beneath the Marcus Aurelius arch and their earthen pits were both dated to the first half of the first century AD (fig. 4.40, Nc6). Except for a single *unguentarium*, no further funerary equipments were found. It is most likely that the area was occupied from the end of the Republic and the first century AD by numerous different burials, erased subsequently by the city expansion toward west.

A single earthen burial has also been found at short distance west from the Wadi Lebda, close to the ancient *decumanus* of the city, where - it seems - was located a necropolis from the first century AD (fig. 4.1, Nc9). Although no details were recorded about this single deposition (Nc9h), it is significant to notice that a *stela* was connected to the single burial. This inscribed triangular-headed marker, dated to the second/third century AD, would indeed constitute for Lepcis the only finding of this type found *in situ* (fig. 4.17). Widely documented in many *necropoleis*, *stelae* were a common element for many



Fig. 4.17. The inscribed *stela* found in the south east suburbium, close to the coastal *via publica* (Nc9h; photo: A. Zocchi, 2009).

simple earthen depositions and the examples found at Lepcis include different shapes and come from different time-periods (in general see D'ANDREA 2015, figs 3-4). Beside the *stelae* whose secondary findspots have been recorded (Fu12, Fu18, Fu20, Fu24) we can recall also *IRT* 584, 699, 743, 749, 980 plus another one (not inscribed and adorned with a crescent moon) actually displayed outside the Lepcis Magna old museum.

4.4. THE ROMAN MAUSOLEA

In scholars' eyes, one of the most important feature of an ancient Roman suburban landscape were doubtless *mausolea*. The reason for their preservation, and thus their remembrance through time, was that they were entirely built using durable materials such as limestone. On the other hand, their significant volume and height often made them proper landmarks. The Lepcitanian landscape certainly influenced these two factors: both the presence of numerous quarries that provided different qualities of limestone (see par. 5.1) and the natural geomorphology of the peripheral area, characterized by wide and open views, helped their visibility and their memory. The suburban description made by the French surgeon Giraud de Seyne in 1670 (see par. 2.3) is indicative in this sense; he indeed mentioned as the only element visible "(...) *quelques tours carrées, fort hautes et en en bon estat, avec plusieurs grottes*" (ROMANELLI 1925a, 56) a clear reference to *mausolea* with their funeral chambers. More or less the same words were used by Durand a few years later: looking inland from the ancient city he noticed: "(...) *bâtisses, figures de tours enquarré (...) et qui sont tres-élevées, les unes quarrées, les autres en pointes*" (DURAND 1694, 213). Moreover, it is not surprising to notice that the majority of the structural evidence outlined in the nineteenth and subsequent colonial maps of the area are related to these *monumenta*, in most of the cases called by the Arab name of "gasr".

4.4.1. TOPOGRAPHIC ANALYSIS

Thirty-six Roman *mausolea* plus several scattered architectural elements or inscribed limestone blocks referred to this type of structures often reused in subsequent buildings are known from the area analysed. This number comprises both structural remains and material derived from historical evidence. Nineteen of these *monumenta* have been found within a three km radius from the city centre (fig. 4.18) while the other seventeen were detected in the outermost area (fig. 4.19). Their position within the landscape and their connection with other nearby sites or infrastructures allow me some significant considerations concerning the choice made by the family units on where erect these expensive structures. There are many factors that influenced this choice. Beside the deceased/s personal wishes that escape our knowledge,

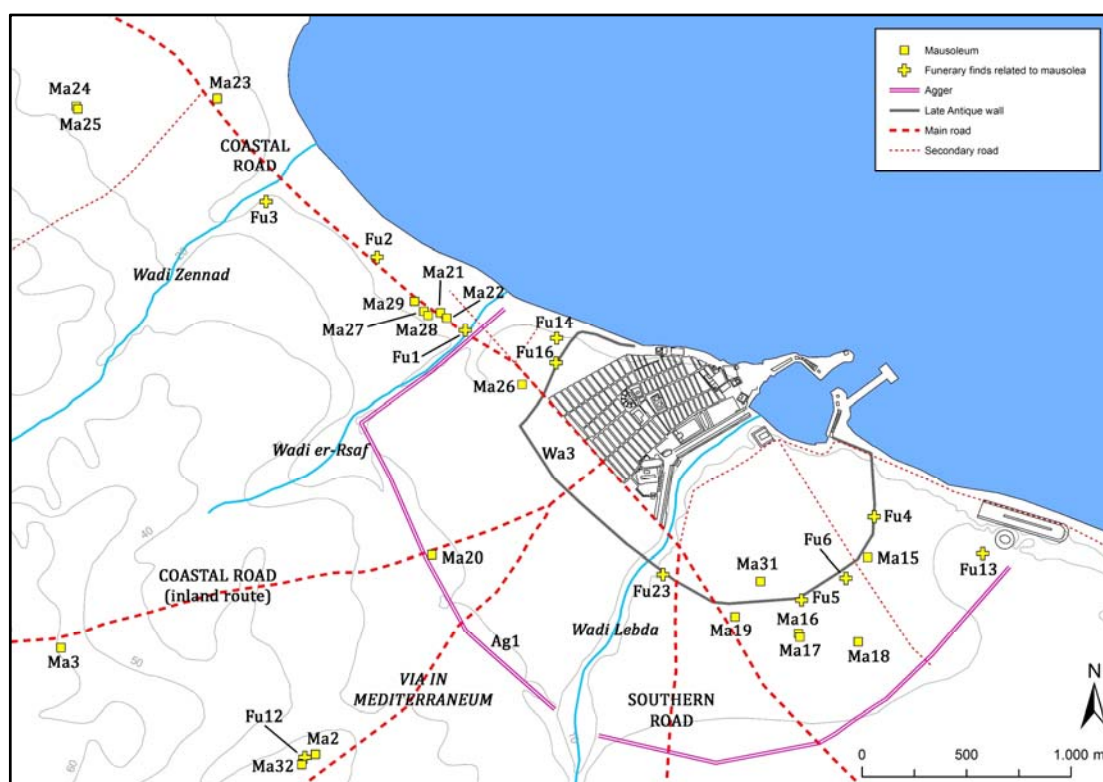


Fig. 4.18. Roman *mausolea* and related finds in the inner suburbium.

visibility and certainly financial means doubtless played a leading role. On the contrary, it is hard to establish if the place selected influenced the type of mausoleum to be erected or vice-versa (see below). However, keeping in mind all these circumstances it is possible to determine some key aspects related to the Lepcitanian funerary landscape.

Roman *mausolea* were structures built by the local elite class that was in various ways involved with the civic or economic life of the city. Both the desire to show to the community the role and power of these families and the ambition to erect solid structures that could withstand for generations make visibility an inalienable value for the majority of these Lepcitanian *monumenta*. Moreover, the fact that many tombs *semata* are in reality considered proper *mausolea* (fig. 4.18, Ma20, Ma29; fig. 4.19, Ma13, Ma30) suggests that the main aim of these funerary structures, provided with a considerable height and distinctive shapes, was to be seen from afar. Beside the size and architectural features of the structure, the topographic elements that surely influence the visibility factors were: a favourable geographic position, the nearness to the main road network and the positioning within busy areas. Apart from three cases (fig. 4.19, Ma7, Ma23, Ma24) whose location is not apparently associated with one of these aspects, the remaining 33 *mausolea* were linked with at least one of the three topographic visibility factors mentioned above (fig. 4.20).

Out of a total of 36 *mausolea*, 26 (72%) were built close to the main road system (see also par. 3.1 and Vol. II, App. IV). This significant percentage is even higher if we consider that some of these structures located far from the main routes are actually close or faced toward wadi

valleys whose dry beds most likely acted as minor paths not detected on the ground (fig. 4.19, Ma11-Ma12, Ma14, Ma35-Ma36).

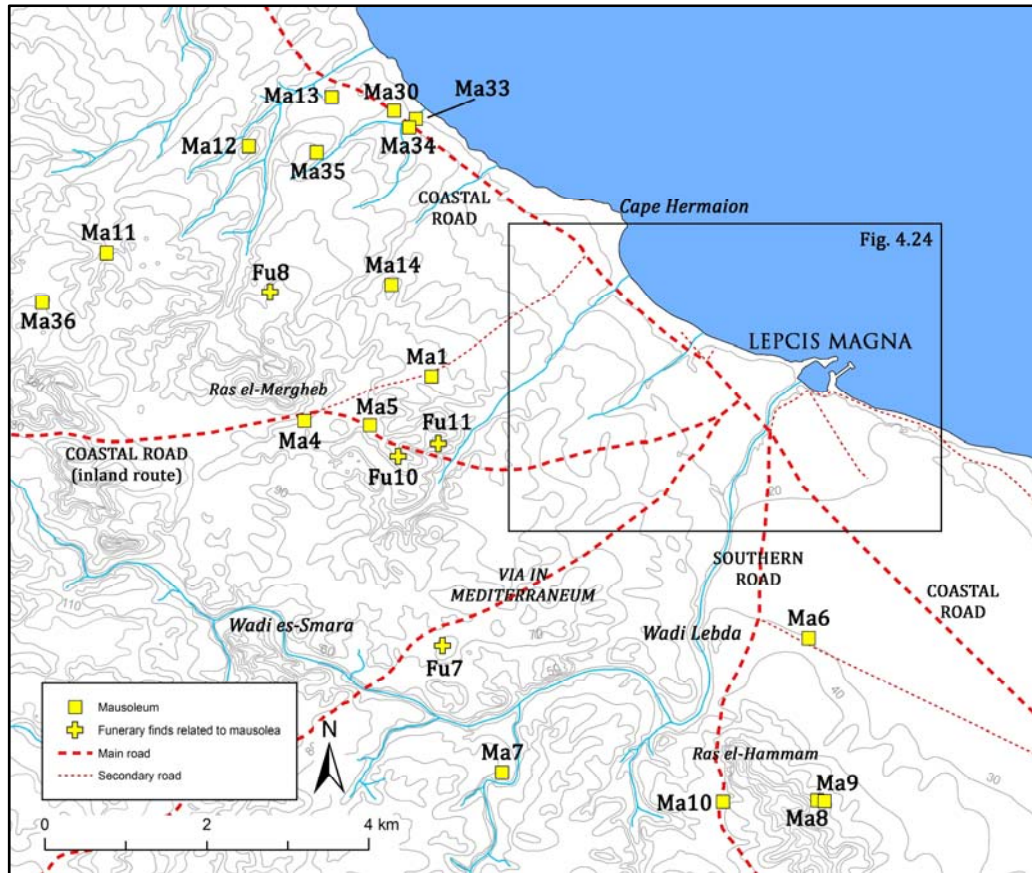


Fig. 4.19. Roman *mausolea* and related finds in the peripheral area.

The essential role of roads associated to funerary structures - from single burials and small *semata* to massive *mausolea* - is well known and it is attested in several ancient sources and inscriptions (VON HESBERG 1994, 22-23; SARTORI 1997, 43-47; ZACCARIA 1997). As efficiently summarized recently by Denis Francisci (2017, 50-51) roads became indeed a privileged place for burials since they constituted the topographic element that satisfied three different needs: juridical because tombs had to be separated and excluded from inhabited places (*hominem mortuum in urbe ne sepelito neve urito*: Cic. Leg. 2, 58); ritual because burials had to be accessible to allow relatives and friends to celebrate the deceased during the funerary rites (see par. 4.5); ideological since tombs had to be located in busy spots that should grant an adequate self-representation (*lege nunc viator*: CIL IV, 4078).

The main Lepcitanian roads such as the coastal *via publica* (both the inland route and the route closer to the shoreline) and the *via in mediterraneum* acted as perfect stages to display the ancestral memory. The sections of these routes close to the city were often densely occupied by funeral structures arranged as real sepulchral roads (*gräberstraßen*). In these stretches the pedestrian and wheeled traffic were surely more intense also due to the presence of other kinds of structures such as shops, *villae*, *thermae*, warehouses, caravanserais and other funerary

MAUSOLEUM	FAVOURABLE GEOGRAPHIC POSITION	MAIN ROAD PROXIMITY	WHITIN BUSY AREA
Ma1			
Ma2			
Ma3			
Ma4			
Ma5			
Ma6			
Ma7			
Ma8			
Ma9			
Ma10			
Ma11			
Ma12			
Ma13			
Ma14			
Ma15			
Ma16			
Ma17			
Ma18			
Ma19			
Ma20			
Ma21			
Ma22			
Ma23			
Ma24			
Ma25			
Ma26			
Ma27			
Ma28			
Ma29			
Ma30			
Ma31			
Ma32			
Ma33			
Ma34			
Ma35			
Ma36			

Fig. 4.20. Topographic visibility-factors of the Roman Lepcitanian *mausolea*.

monuments. A fundamental and significant role in this sense was played by the presence of the circus and the amphitheatre that surely influenced and increased the use of roads that passed through the funerary area east of the city (for this aspect see VON HESBERG 1994, 14). It is interesting indeed to notice that both the Gasr Shaddad mausoleum (fig. 4.18, Ma15) and one of the two Gasr er-Riyâhî *mausolea* (fig. 4.18, Ma17) had their facades with *aediculae* looking toward the two entertainment buildings

rather than Lepcis city core or the main east-west routes.

If one is trying to establish a ranking of the most attractive spots in term of visibility the first place surely goes to the *mausolea* that are characterized both by the proximity of a main road and by their position within a high-traffic area (fig. 4.20), essentially the inner suburban areas close to the main *viae publicae*. Of a total of 26 *mausolea* built close to the roads 16 were located within these desirable and obviously expensive areas; the remaining 10 funerary structures benefited certainly by the nearness of a main route but they were located in places where the variety of the anthropized landscape was less intense and thus less frequented. Finally, talking about *mausolea* visibility and road network, it is noteworthy to consider also the role of maritime traffic since the routes that lead to Lepcis by sea can be treated in the same way of ordinary overland paths. Some of the highest *mausolea* located along the coastal *via publica* and close to the Lepcis harbour could easily be seen from a boat approaching to Lepcis or to the landings around *Cape Hermaion*. The cases of the obelisk-type mausoleum at Wadi er-Rsaf (fig. 4.18, Ma29) and another mausoleum (fig. 4.19, Ma30) - probably of the same type - located at short distance from the seashore and from the mouth of Wadi Tella, are suggestive examples in this regard. The importance of the visibility of *mausolea* from the sea has been considered for other coastal cities such as *Caieta* (modern Gaeta, c.100 south-east of Rome) where the large

funerary monument of *L. Munatius Plancus* was located on the top of "Monte Orlando" overlooking the sea (FELLMANN 1957; GRIESBACH 2005, 114-115; PEARCE 2011, 138).

According to the three visibility factors mentioned above, the only funerary structure that seems to include them all is the mausoleum located along the Monticelli *agger*, in the south-west suburbium (fig. 4.18, Ma20). Even if the structure is no longer visible, unpublished photographs of the beginning of the Italian colonial period show that it was built along the flank/or at the top of the earthen bank, thus taking advantage of a predominant position (fig. 4.21). Moreover, the structure - probably an obelisk-type mausoleum - was located at a short distance from the inland route of the coastal road (see ZOCCHI 2018, 63-65) and surely in a high-traffic area.



Fig. 4.21. The mausoleum (Ma20) along the Monticelli earthen bank (Foto Alemanni, 1913; CAS 18-45a).

A significant aspect that must be taken into account is also the relationship between *monumenta* and *villae*. The desire to relate the house of the living to the *domus aeterna* is well attested during Roman times both by epigraphic documents and by classical sources (LATTIMORE 1942, 165-167; BODEL 1997, 21-24). The relationships between rural/periurban estates and *mausolea* have been recently pointed out for Roman northern provinces such

as *Gallia* and *Germania* (see ROYMANS, HABERMEHL 2011, 96-97 with further bibliography); however, analogous situation can be found in Italy and in almost every province of the Roman Empire especially between the first and the third century AD (VON HESBERG 1994, 57, 66; VERZÁRBASS 1995; 1998). In *Africa Proconsularis* the relationship between *mausolea* and *praedia/fundi* is well attested by numerous examples and this is also proudly inscribed on the mausoleum of the Flavi near *Cillium* (CIL VIII, 212-213). What can be noted in these regions is that landowners generally preferred to build their funerary structure in their property even if this was located close to a town and thus close to main roads and probably to an organized necropolis (for this aspect see BENTIVOGLI 2004; 2015, 2144-2145; MOORE 2007, 89). Compared to the other rural and periurban examples of *Africa Proconsularis*, the case of Lepcis Magna allows us a more in-depth analysis and in some cases allows also to establish a direct link between *mausolea*, the structures of *villae* and roads. However, it is important to keep in mind that the Lepcitanian area analyzed constitutes certainly a particular setting in which both the economic and political position of the city during the spread of the "Mausoleums culture" (first-third century AD) and the richness of its wealthy class played a fundamental role that may have affected different choices and that have given life to a unique case.

Out of a total of 23 *mausolea* located in an area beyond 2 km from the Severan Arch and thus were the majority of the *villae* have been found, 13 were strictly related to luxury dwellings, where the distance between the two structures is around or inferior 100 m (fig. 4.22, Ma1-Ma5, Ma8-Ma13, Ma30, Ma32). Since it is not possible to determine the extension of single *praedia/fundi* it is worthwhile considering that some of the remaining 10 *mausolea* that

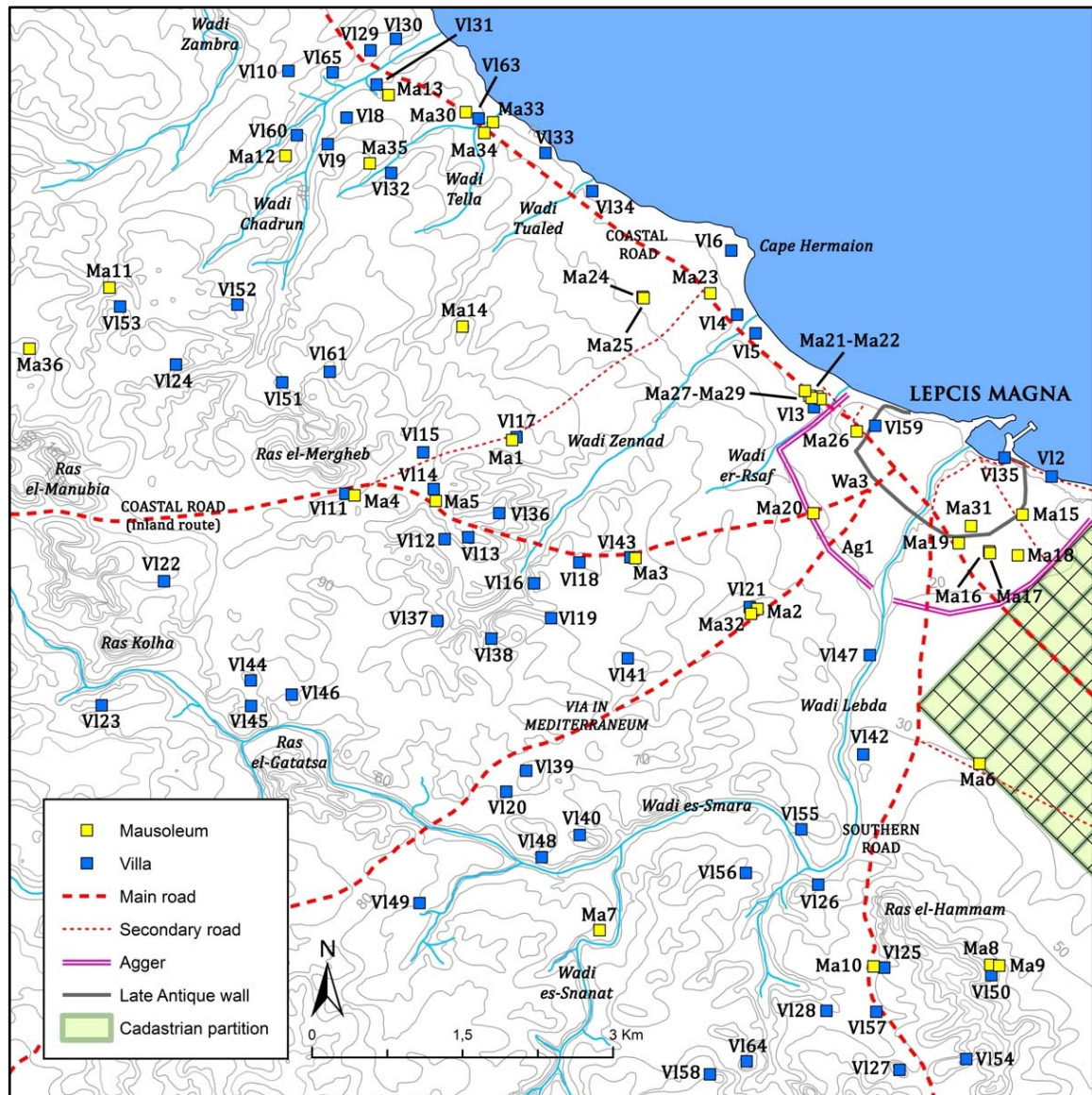


Fig. 4.22. The Lepcitanian Roman *mausolea* and the main associated structures.

apparently are not connected to any structure, were actually included in estates in which the *villae* were located further away. Of these 13 examples, 9 are located also close to the main road network (fig. 4.22, Ma1-Ma5, Ma10, Ma13, Ma30, Ma32); in these cases is then possible to establish the relationship between roads with *mausolea* and most likely the associated *villae*. The result is that all these *mausolea* occupied a predominant position and they were always built between the road and the structures of the villa or, at most, with the same alignment but never in a subordinate position (similar situation has been recently outlined in several cases in the territory of *Augusta Treverorum, Gallia Belgica*: KRIER, HENRICH 2011, 216). This means that

when a road was close to a villa the associated mausoleum was always built to be clearly seen from the route in terms of nearness. Beside this important visibility factor, there is probably a further reason of a legal nature that may help to explain why the majority of the peripheral *mausolea* associated to *villae* were built at short distance from roads. Within private properties the *loci sepulturae* - once a body was buried/cremated and a funerary rite was officiated - were indeed considered *res religiosa* and thus subjected to a series of constraints including its unmarketability (*extra commercium*). This means that the *monumentum* could not be sold or donated and the land where it has been built lost completely its value; in light of this it is plausible to believe that the landowners preferred to assign the *res religiosa* to a portion of land that could be easily excluded from a hypothetical sale of their property (FABBRINI 1968; 556-558; FRANCISCI 2017, 37-38, 58; LAZZARINI 2005). The marginal areas and the portions of land close to the *praedium/fundus* boundaries such as roads, respond perfectly to this requirement. Moreover, the existence of funerary enclosures around a few *mausolea* associated to *villae* (fig. 4.22, Ma2, Ma5, Ma13, Ma32) could also suggest the will to ensure and to establish with accuracy the limit of the terrain considered, from a legal point of view, religious.

The other four *mausolea* that were associated with *villae* but apparently with no roads (fig. 4.22, Ma8-Ma9, Ma11-Ma12) have some significant characteristics. The two *mausolea* (Ma8-Ma9) related to the large villa at Ras el-Hammam (VI50) were built on the flank of the hill (below the villa) taking advantage both of its slope and of a surrounding landscape that favoured their visibility from afar, such as the coastal *via publica* and the diagonal road. Both the two *mausolea* located along the Wadi Chadrun (Ma11-Ma12) were instead located in prominent positions on hills facing the wadi valley that, as mentioned above, was probably used as a minor route. In this sense these two latter funerary structures could be added to the nine linked with both *villae* and roads.

It is obvious to consider that the owners of these *villae* (often lavishly decorated) with associated *mausolea* were directly involved with the political and economic life of Lepcis Magna. It may therefore seem a strange choice to build the funerary structures within their own private rural properties rather than in the organized and frequented *necropoleis* located in the inner suburban areas, where surely the visibility factors and the chances of self-representation played a greater role (see above). This apparent anomaly could be explained taking into account and merging three different factors. First, and most importantly, the possibility of having an intimate and "sacred" funerary space (*fanum*) within the *villae* or *horti* may have played an important role. For landowners, knowing they had a *monumentum memoriae* (in any form) within their property constituted surely an emotional satisfaction for them and their family and certainly this would ease the commemoration of the death and the observance of the periodical funerary rites (BODEL 1997, 22). From this perspective, appear significant the examples of Cicero and the construction of the tomb for his daughter *Tullia* (*Att.* 12. 18-19, 22; VERZÁR-BASS 1998, 401-404;

ENGLERT 2017, 47-51) and also the arrangement of the large *cepothapium* of *Annia Regilla* made by *Herodes Atticus* in his property outside Rome (IG XIV 1389a-b; GREGORI 1987-1988).

A further factor that should be considered relates to economic value: it is plausible to hypothesize a high cost of the *loci sepulturae* in the inner suburban frequented areas. This may have favoured the decision to built *mausolea* within the already owned peripheral estates, allowing in this way, beside to save money, to dispose probably a greater amount of space.

The last factor is the social value of *mausolea* and their relationship with the significant role covered by the suburban luxury dwellings. Considering the nearness to the city core of the Lepcitanian *villae* take into account, it is plausible to believe that the majority of the social relationships and business of their owners happened within the *pars publica* of the *villae*. In this frame, stone *monumenta* connected to these *villae*, apparently always clearly visible from whoever accessed the *praedium*, constituted on the one hand a clear family landmark and, on the other hand, a stage - through inscriptions and statues - where the ancestors could have been displayed similar to the way that *imagines maiorum* were placed in the *atria* of the *domus* (for similar aspects related to the Rome suburbium see CHIOFFI 2005, 127). Moreover, for at least nine cases mentioned above, the nearness of thoroughfares to these funerary structures (often characterized by a considerable height) and *villae* allows the traveller to notice and recognize the owner of the structures as well as the *fundus/praedium* he was going through. This latter aspect seems to be an indispensable factor not only for the inner suburban busy areas but also for the *monumenta* built close to peri-urban and rural *villae*. Once again the witness of Cicero is significant (*Att.* 12. 18, 37): his twofold primary needs (and concerns) in deciding where to buy an *hortus* or *villa* outside of the inner suburban *necropoleis* in Rome in which built the tomb of his daughter *Tullia* was that the funerary structure had to be seen and the site had to be frequented.

Beside the *mausolea* located within the funerary areas in the inner suburb and those strictly connected to peripheral *villae*, there is another significant topographic aspect related to funerary structures that has to be taken into account: their function as land demarcators or boundary markers, in other words as *termini*. According to ancient sources and above all to the *Corpus agrimensorum Romanum*, this function was not uncommon within the rural landscape and also along jurisdictional borders. These written witnesses are confirmed by the numerous funerary evidence built to border city limits, *praedia*, *centuriatio* found both in the Italian peninsula and in many Roman provinces (general account in FRANCISCI 2017, 59-64 with further bibliography). This practice is also attested from the pre-Roman period in the Tripolitanian/Syrtic region and, at this regard, it is noteworthy to mention two examples. The first case is related to the historical-mythical accounts written by Sallust (*Iug.* 79, 10-11), Strabo (III, 5, 6) and Pomponius Mela (I, 28, 33) concerning the burial place of the Phileni brothers that, according to the historical tradition, was set in the position where they were able to establish the border between

the territories of *Carthago* and that of the Greek city of Cyrene. The other example is closer to Lepcis Magna and it involves the massive mausoleum of Gasr Doga that probably acted as a border marker between the Lepcitanian territory and *Oea* (DI VITA-EVRARD 1979; BIGI *et al.* 2009, 25-27).

The only example detected related to a *monumentum* built to mark a specific border in the Lepcitanian area analyzed is the mausoleum of Gasr Banat (figs 3.2, Ma6; 4.22, Ma6). This massive funerary structure (see par. 4.4.2) was indeed erected within the cadastral land partition identified in the area south-east of Lepcis and precisely at the corner of the third 12 *actus* module from the coastal *via publica*, the road that acted as *decumanus maximus* of this land partition. Beside its primary funerary role, this three storey tower-type mausoleum had the further function of *terminus* within an area of fields that have been *divisi et adsignati* probably at the beginning of the second century AD (see Vol. II, App. IV.2.2 and ZOCCHI 2018, 57-63). The main rules and features that linked *monumenta* to a rural organized landscape are mainly collected in the text *De Sepulchris* in which is also stated that funerary structures could be located according to the disposition of *cardi* and *decumani* to "guard" the borders of *centuriae*: "*quod kardinibus et decumanis esse constitutum monstratur (...) ordinem in utrosque custodit*" or even within the fields to preserve and indicate the divisions in *iugera*: "*haec iugerationis modum servandi causa sunt ita*" (LACHMANN 1848; 271-272; CAMPBELL 2000, 220; FRANCISCI 2017, 62-63).



Fig. 4.23. The funerary enclosure pilaster displayed outside the old Museum of Lepcis Magna (photo: A. Zocchi, 2013).

Unfortunately, no epigraphic evidence related to the Gasr Banat mausoleum is preserved: it would certainly have facilitated our understanding of who (and when) was buried in this *monumentum* and, at the same time, who (and when) was the owner of this particular portion of land.

The funerary enclosure is a structure that unites several *monumenta* of the Lepcitanian periphery and, most likely, it had to characterize the



Fig. 4.24. Stone false vase-shape urn (left) and stone pine cones (middle and right) probably belonging to funerary enclosures displayed outside the old Museum of Lepcis Magna (photos: A. Zocchi, 2013).

topographic setting of all the *mausolea* detected. Setting the limits of a funerary area was indeed a mandatory process since it meant to assign to that portion of land a religious value and divide, for instance, an *ager publicus* from an *ager privatus*. This operation, realized under the approval of a *pontifex*, resulted in setting *cippi* (*termini*) at the corners of a quadrangular space: "*sepulchrum est (...) locus in quo mortuus sepultus est, quod antiqui bustum appellabant; hisque cippis aut aliqua alia re mortui causa designatus est, intra quo fines sepultura est facta*" (Festus, *Gloss. Lat.*, s.v. *sepulchrum*; in general see LAZZARINI 2005). Concerning the Roman period, the development of elaborated funerary enclosures spread from the Early Imperial phase; however, even if many of these areas were characterized by continuous walls, they could be also marked just by angular *cippi* accompanied by *macerae* and hedges (CAMPBELL 2000; VON HESBERG 1994, 83-89; 2005b). This could explain why several of the Lepcitanian *mausolea* - especially those located in rural areas - actually do not preserve any archaeological traces of these boundaries.

However, elaborate and monumental funerary enclosures had to delimit the main funerary structures (not only *mausolea*) especially in the inner suburban areas of Lepcis Magna. The example of the enclosure described by Romanelli (1925a, 163) for Gasr er-Riyâhî in the eastern suburbium is emblematic (fig. 4.18, Ma16-Ma17). These two funerary structures were indeed encircled by a high stone base on which were set pilasters with recessions to hold a stone balustrade between them and, according to Romanelli, these pilasters were also crowned by arches. A similar support - whose provenance is unfortunately unknown - is now displayed outside the old Lepcis Museum but, in this case, the upper part is characterized by a pinecone set on a laurel crown (fig. 4.23). It must not be excluded that other scattered finds such as false vase-shape urns and pine cones found in the suburban areas were set on pilasters or *cippi* belonging to these enclosures (fig. 4.24; see also the inscribed false vase-shape urn IRT 735). A further pilaster/*cippus* from the eastern suburbium is instead characterized by a double inscription and decorated on its sides by a high relief of a cinerary urn and, on the opposite side, a eight-spoked



Fig. 4.25. The inscribed *cippus*/pilaster (IRT 980) related to a funerary enclosure displayed outside the Museum of Lepcis Magna (photo: A. Zocchi, 2013).

wheel (fig. 4.25; IRT 980). Its pertinence to a funerary enclosure is suggested by the working-lines visible on one of its sides made probably to indicate the direction of the property. In this case it is interesting to notice that the double inscriptions mentioned the two dedicators, *Claudius Stiddis* (or *Stiddin*) and *Claudius Ladas* who both underline the construction of the "*monimentum*" for them and their heirs; a sort of announcement before entering to the proper *locus sepulturae*.

Thanks to some traces still visible on the ground and thanks to some Italian colonial maps and British aerial photographs it is possible to detect on the ground and approximately measure thirteen enclosures related to *mausolea* or to other funerary structures (fig. 4.26). The majority of these traces are related to those structures that have been built close to the main roads, probably to better define the border between the *ager publicus* and private properties. This is the case of the two *mausolea* built along the *via in mediterraneum* (fig. 4.27, Ma2, Ma32), of three enclosures detected in the Wadi er-Rsaf area next to the coastal *via publica* (fig. 4.1, Nc8a; fig. 4.18, Ma21-Ma22) and most likely for the ones built in the eastern

suburbium where, even if not identified, an articulated road network should have existed (fig. 4.28). Considering the walls that have been detected in the east suburbium, it is noteworthy to notice that their alignments follow both the coastal *via publica* and the minor road that linked the city harbour to the east periphery (ZOCCHI 2018, 57-63, 71-73; Vol. II, App. IV.2.2). The only exception is the enclosure of a mausoleum that has been found within the Late Antique wall enceinte (fig. 4.26, Ma31); however, it seems to be the only one dated between the first century

AD and the beginning of the subsequent one, that is before the hypothesized re-definition of the coastal road and the associated land partition to the east.

SITE	SURFACE IN M	SURFACE IN PEDES	AREA IN M ²	AREA IN PEDES ²
Tb6	150 x 75	500 x 250	11.250	125.000
Ma19	80 x 75	270 x 250	6.000	67.500
Ma31	60 x 53	200 x 180	3.180	36.000
Ma32	75 x 42	250 x 140	3.150	35.000
Ma2	60 x 50	200 x 170	3.000	34.000
Ma18	65 x 42	220 x 100	2.730	22.000
Ma16-17	42 x 30	140 x 100	1.260	14.000
Nc8	10,5 x 9,6	35 x 32	100	1.120
Ma21	9,6 x 9,6	32 x 32	92	1.024
Ma22	12 x 6	40 x 20	72	800
Tb5	15 x 3,8	50 x 13	57	650
Ma5	?	?	?	?
Ma15	?	?	?	?

Fig. 4.26. Measurements and areas of the Lepcitanian funerary enclosures.

According to the Italian map of Lepcis Magna realized in 1915 and to the air-photographs realized during the forties (figs 2.19, 2.24-2.27), the largest enclosure is the one located in the central area of the east suburbium, where are the remains of a hypogean tomb with probably an associated *monumentum* (fig. 4.28, Tb6). The area measures c.150x75 m that correspond to c.500x250 Roman feet. Since the surface seems to be excessive compared to one single *sepulchrum/monumentum* it is very likely that this area was divided into several lots. Excluding this latter enclosure, the largest is the one related to the mausoleum whose scanty traces are still

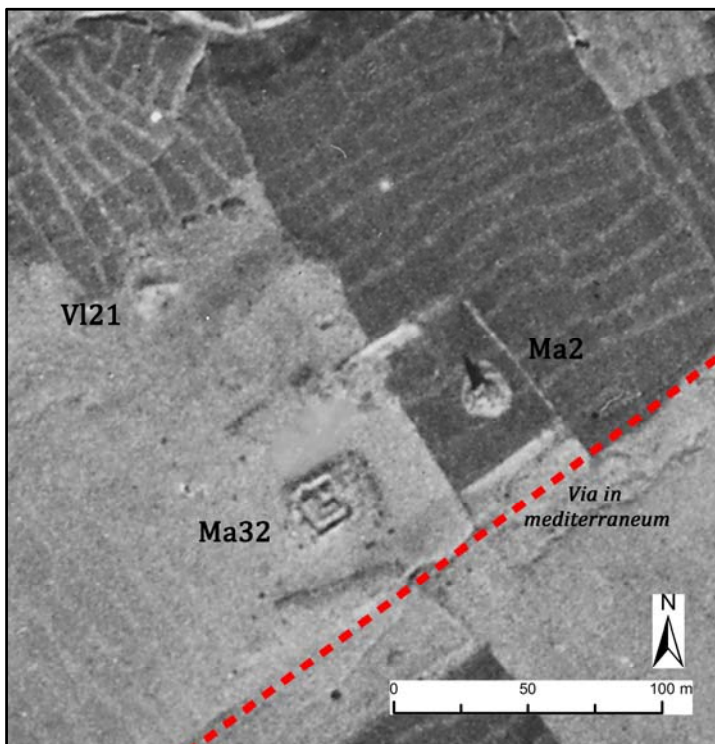


Fig. 4.27. The two *mausolea* (Ma2, Ma32) and their enclosures along the *via in mediterraneum* (Background image: ASLS, Lepcis Magna 94144 - detail).

visible at short distance from the modern Suk el-Khamis/Khoms motorway (fig. 4.28, Ma19). The area measured is c.6,000 m² (c.80x75 m = 270x250 Roman feet) and it seems that a single mausoleum was built inside it (hypothesis suggested by the presence of a single mound of rubble with structures *in situ*). The following enclosures in terms of size are the ones located along the *via in mediterraneum* (fig. 4.27, Ma2, Ma32) and the one already cited in the inner east suburbium (fig. 4.28, Ma31). The area covered by two of these properties (Ma31-Ma32) is

c.3,180/3,150 m² (around 35,500 square *pedes*) that could correspond to two and half square *actus* (~3,162 m²). It is also interesting to notice that among these three latter cases, the mausoleum of Gasr Gelda (fig. 4.27, Ma2) occupies a non-central area of the enclosure: it is thus probable that other monumental structures were built within the same area, as suggested by the presence of other finds (fig. 4.18, Fu12). The last two large enclosures are located in the eastern suburbium; the first one encircles the *monumentum* known as Gasr Sidi Bu Hadi (fig. 4.28, Ma18) and the other contains the two *mausolea* known as Gasr er-Riyâhî (fig. 4.28, Ma16-Ma17). The funerary enclosures of this latter site, according to Romanelli (1925a, 163) and confirmed by subsequent RAF aerial photographs (figs 2.24-2.27), indicate an area of c.42x30 m (1,260 m²), that correspond most likely to 140x100 Roman feet, measurements that delimit an area equal to a square *actus* (~1,265 m²). Walled enclosures must also exist for the mausoleum of Gasr Shaddad (fig. 4.28, Ma15) and for another funerary structure located along the road to Ras el-Mergheb (fig. 4.19, Ma5); unfortunately, the archaeological remains actually preserved are not enough to determine the size and measurements of these areas.

The other funerary enclosures detected are related to *monumenta* that have been built mainly along organized and dense *necropoleis* located along roads (fig. 4.1, Nc8, Tb5; fig. 4.18, Ma21-Ma22) and this could explain the reason of their small sizes (see fig. 4.26) compared to the others located in a more rural landscape or in a wider funerary area such as the east suburbium. Concerning the north *necropolis* of Wadi er-Rsaf (Nc8), two enclosures (related to the mausoleum Ma21 and the hypogeum Nc8a) facing the coastal *via publica* preserve the same length *in fronte* (9.6 m = 32 *pedes*) while a third property (fig. 4.28, Ma22) - measuring 20 *pedes* -

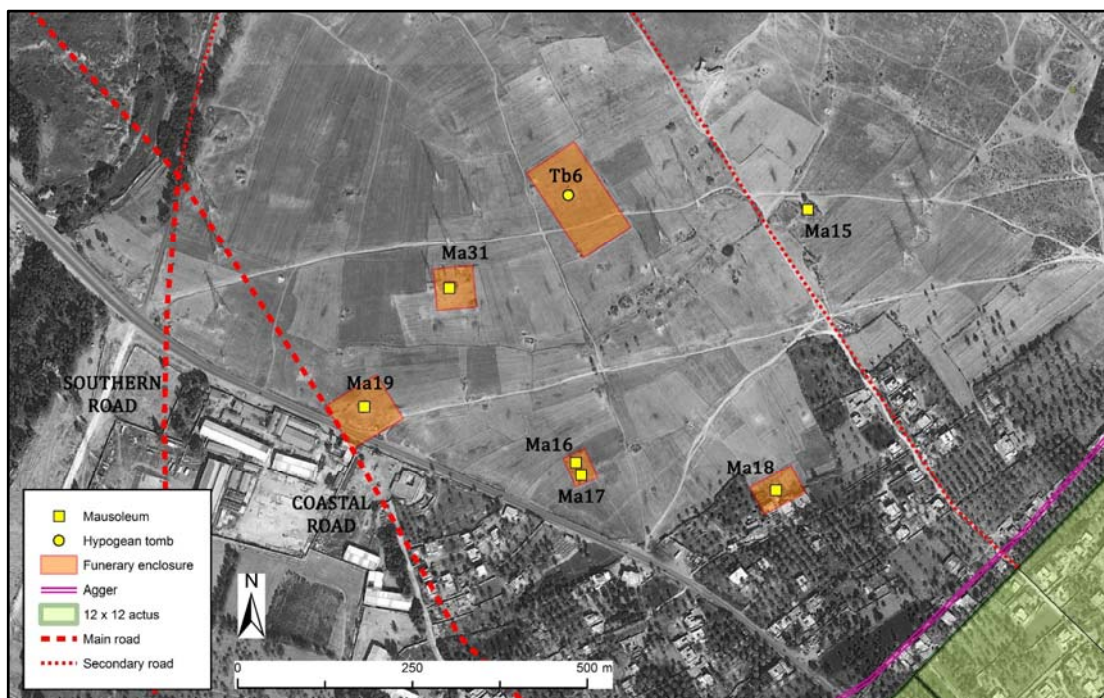


Fig. 4.28. The funerary enclosures detected in the east Lepcitanian suburb (Background image: Google Earth, 2013).

occupies the space between them (for enclosures size within dense *necropoleis* see GREGORI 2005, 90-91). Taking into account these data and also the quantity of other *mausolea* and funerary structures built in the vicinity (see figs 4.1 and 4.18) it is possible to believe that the whole area along this stretch of the coastal road was parcelled and intensely occupied to form a proper sepulchral road, as also documented in many other *necropoleis* of North Africa such as *Ammaedara*, *Thaenae*, *Lambaesis*, *Timgad*, *Iol Caesarea* and *Tipasa* (for a detailed bibliography see BENTIVOGLI 2004, 424).

4.4.2. TYPOLOGICAL AND ARCHITECTURAL ANALYSIS

According to the acquired documentation it has been possible to assign a structural typology to 16 *mausolea* (45% of the total). Among these, 7 structures belong to the "tower type", 6 to the "aedicula above podium" type and 3 to the "house-tomb" type. Moreover, on the basis of the examples for which there is more information it has been possible to hypothesize their original aspect and then compare different *mausolea* typologies (figs 4.29-4.30).

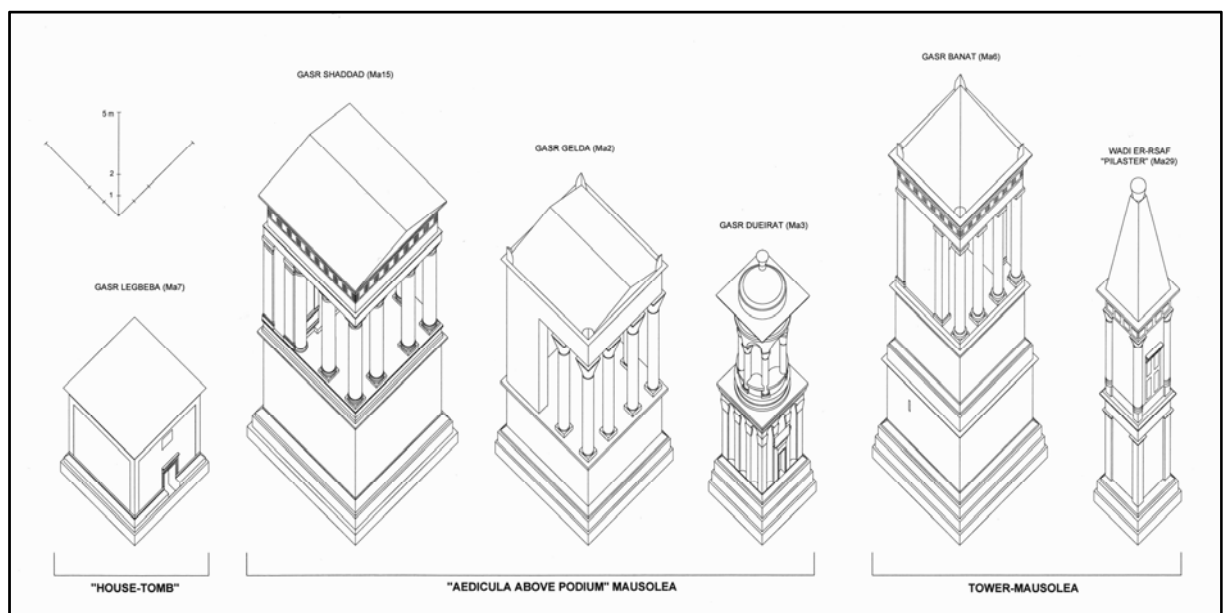


Fig. 4.29. Reconstructive axonometries and typologies of the main Leptician *mausolea* preserved (drawing: A. Zocchi).

A limited but homogeneous group is characterized by the "house-tomb" type, known also with the German term "Grabhäus". Within the area analyzed, there are three *mausolea* of this type, two of which actually no more visible but originally located in the south-west outskirts of Khoms (fig. 4.18, Ma24-Ma25) and the third one (fig. 4.19, Ma7), recently published (MATOUG 1997), located c.5 km south of Leptis within a bend of the Wadi es-Snanat. Even though only photographic documents are available for the two structures at Khoms, it is possible to establish that all the three *mausolea* had the same architectural characteristics and that they were of similar scale. They were essentially formed by a single quadrangular room externally defined by smooth *opus quadratum* walls and with a total height that does not exceed 4 m. The walls were

framed by a protruding band that run also horizontally just beneath the cornice; the access door had moulded jambs and architrave. In the case of the mausoleum of Gasr Legbeba (Ma7) there is also an un-inscribed (but probably originally painted) *tabula* above the entrance architrave.

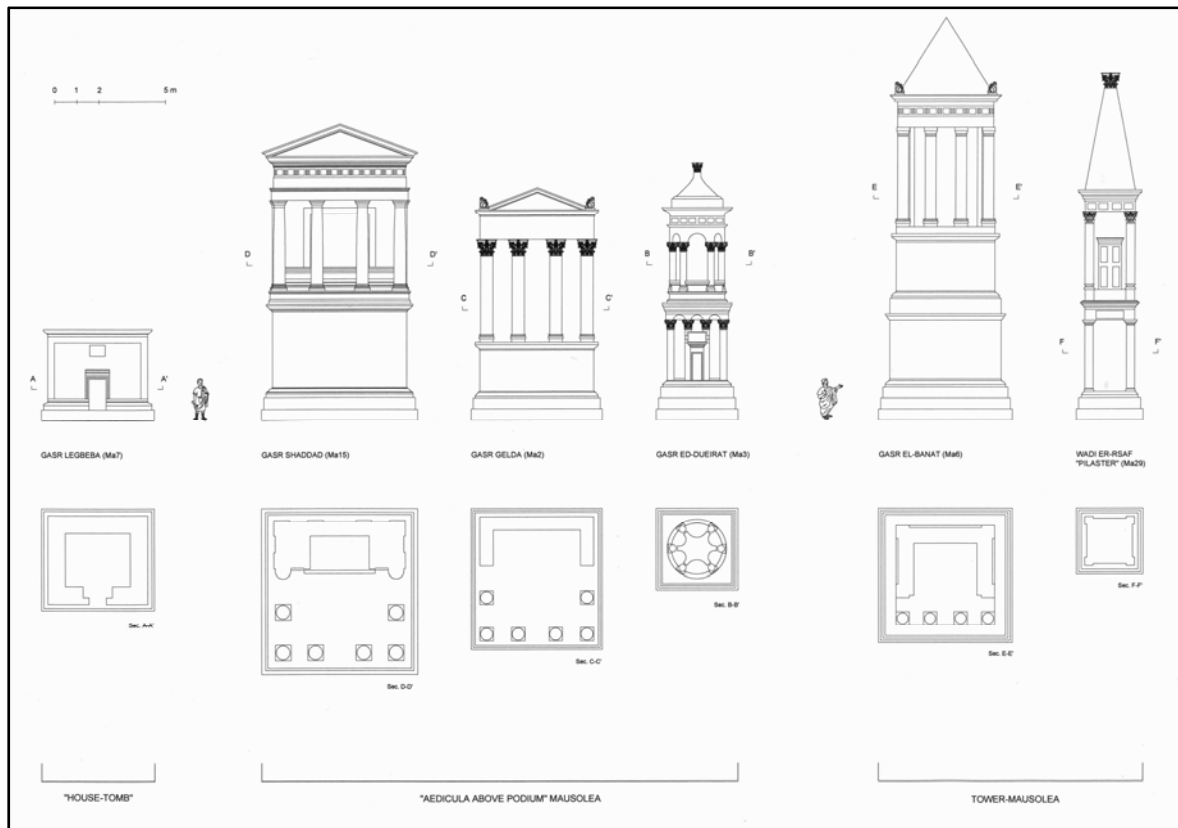


Fig. 4.30. Reconstructive perspectuses and plans of the main Lepcitanian *mausolea* preserved (drawing: A. Zocchi).

There are no elements to establish if decorations were placed above the cornice and above the flat covering, however the presence of *acroteria* or *cymatia* cannot be excluded. This type of tomb, which is common at Rome and Ostia but with different structural features such as the use of bricks, larger dimensions and the presence of a tympanum, seems not to be documented with these characteristics elsewhere in North Africa (for *Portus*, the Vatican *necropoleis* and the tombs under the basilica of San Sebastian on the Appian way see: CALZA 1940; KAMMERER-GROTHAUS 1978; VON HESBERG 1987; BALDASSARRE *et al.* 1996). Externally, strong similarities can be detected with several "house-tombs" with flat roofs (known also with the name of *bomos*) at *Hierapolis* in Phrygia and dated from the end of the first century AD to the third century (RONCHETTA 2015, 52-57; EQUINI SCHNEIDER 1972, 113-117). The major similarities with the Phrygian examples are the material used, dimensions and the presence of the same mouldings and the same protruding bands on the walls. The only external element that differs from the Lepcitanian examples is the presence, in the Asiatic structures, of stone *sarcophagi* set above the flat roofs. The same structural type of the "house-tombs" has been used in a different context in Lepcis Magna, that is for the so called *Genius Coloniae sacellum* located in the *quadriporticus* behind the theatre (CAPUTO 1987, 66, 112-113, tavv. 62, 118-119).

It is also important to notice that these three Grabhäuser are the only *mausolea* of the Lepcitanian suburban area that are not associated with any element that promoted their visibility such as the nearness of primary roads, favourable topographic location and position within a busy area (see fig. 4.20). Their low height, their cubic volume and the absence of any external decorative or statuary apparatus make this type of construction evidently a *monumentum* with limited expectations of self-representation, while its aim was probably addressed mainly to enhance the sacred and intimate aspects of the family towards the deceased and the funerary rites.

The other *mausolea* typologies within the area analyzed belong to two main groups that can be conventionally defined as "tower-*mausolea*" and "*aedicula* above *podium mausolea*" (figs 4.29-4.30). Trying to establish the correct definition of these two typologies and, above all, their genesis and diffusion is not always easy. Basically this is due to the fact that in ancient times we should consider that probably there was not a will - or a need - to choose one "type" of funerary structure rather than another, but instead, tombs needed to fulfil, through architectural expedients, the desires of the customers. This approach has led to the formation and diffusion, already active in the middle-Imperial period, of a formal language that merged with the local features the architectural and decorative elements coming from models of different geographic areas and diverse historical contexts. This produced a standardization, adoption and revision of different architectural movements according to the wishes of the client and the needs dictated by the particular historical period.

However, it seems well established that the spread of the "tower-*mausolea*" type in North Africa had its origin in the near East and was mediated mainly by Alexandria and finally widely adopted in Punic areas (mainly: DI VITA 1968; STUCCHI 1987a, 249-315; COARELLI, THÉBERT 1988; FANTAR 2006, 24-25; CLAUSS 2006, 160). The heterogeneous group of the structures characterized by *aedicula/ae* above a high *podium*, whose genesis must relate anyway to the tower-*mausolea* type, had a different evolution in which a Hellenistic and Roman mediation must surely be attributed (VON HESBERG 1994, 158-161). However, not everyone agrees about terminology: both Jocelyn Toynbee and Pietro Romanelli did not differentiate between the two types merging them as "tower-tombs" (TOYNBEE 1993, 136-145; ROMANELLI 1970, 269-274; recently also CLAUSS 2006) while von Hesberg and Gros define the two types as "*aediculae* monuments with superimposed storeys" (VON HESBERG 1994, 144-185; GROS 2001, 412-422). The first two scholars prefer to underline the vertical element while the other two the self-representation of the customers. Further considerations can be made on the basis of the recent article of Jennifer Moore (2007). Moore divides the majority of the Roman *mausolea* of *Africa Proconsularis* into two types: the "tower-*mausolea*" and the "temple-*mausolea*" including in the first type all those that presented "solid facades, a square or near square floor plan, and a pyramidal roof" while within the second type all the funerary structures whose two storeys

recall respectively the *podium* and the *cella* of a temple preceded by columns (MOORE 2007, 76; same subdivision in BENTIVOGLI 2015, 2146). According to Moore's analysis, within the "temple-mausolea" type would be included the tetrastyle mausoleum of Ammaedara, a very similar tomb to the two Lepcitanian structures of Gasr Shaddad (figs 4.29-4.30, Ma15) and Gasr Gelda (figs 4.29-4.31, Ma2). However, all three of these structures show two substantial discrepancies in order to be associated with temple structures: the absence of a separation between *cella* and

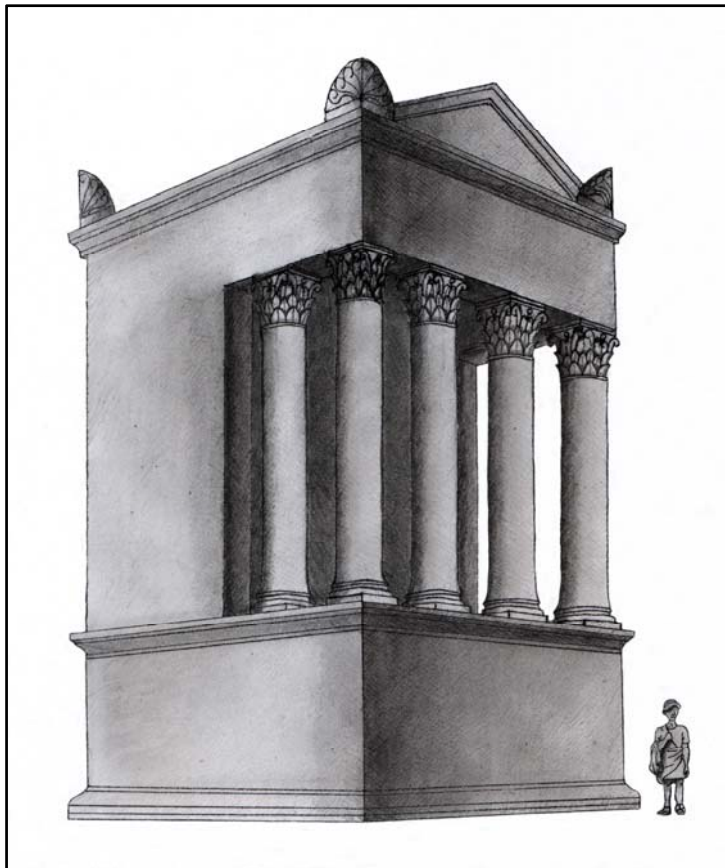


Fig. 4.31. Hypothetical reconstruction of the Gasr Gelda mausoleum (Ma2) (drawing: A. Zocchi).

pronaos and the lack of direct access to the first storey/ pronaos-cella. In the light of this, it seems more appropriate to assign the "temple-mausolea" typology only those funerary structures that clearly preserve the two features just mentioned. The "real" temple-mausolea, strictly speaking, would be then the other Gasr el-Banât mausoleum in the Tripolitanian pre-desert region and the tombs "North A" and "North B" at Ghirza (BAUER 1935, p. 76 fig. 23; BARKER *et al.* 1996, II, p. 263 Nf38; BROGAN, SMITH 1984, 121-149) and the structures known as Magdoudèche,

Gasr Ouchninet, Gasr Abid e Gasr Hamouda located along the *Cillium-*

Thelepte road (GADRAT 1910, 54-56, figs 1, 8-9; FERCHIOU 1995, 128; 2001, 7, 11-13, figs 6-8). Pierre Gros (2001, 444-452) considers these "tombeaux-temples" as a separate architectural type.

In order to subdivide the Lepcitanian *mausolea* into macro-categories, it is therefore possible to hypothesize for the structures of Gasr Shaddad (Ma15), Gasr Gelda (Ma2) and Gasr ed-Dueirat (Ma3) the self-representation of the deceased/s as the primary aspect (that is the *aedicula*), while for Gasr el-Banât (Ma6) and for the "obelisk-mausoleum" of Wadi er-Rsaf (Ma29) the vertical element. On the basis of these two dominating features it has been preferred to distinguish the Lepcitanian *mausolea* in two groups even if, as previously mentioned, the two typologies have a common origin and they could show shared features: on the one hand the high base of the "aedicula above podium" type would bring them closer to the "tower-structures" (this is particularly evident for Gasr Shaddad), on the other hand the possible presence of statues on

the upper storey of the "tower-*mausolea*" would bring them closer to the "*aedicula*-structures" (for instance Gasr el-Banât).

At Lepcis Magna, two of the "*aedicula* above *podium*" *mausolea* are characterized by a prostyle-tetrastyle facade: Gasr Shaddad and Gasr Gelda (figs 4.29-4.31, Ma2, Ma15). One of the two funerary structures of Gasr er-Riyâhî (Ma16) could be considered similar to these two examples; however, in this case, the structural elements preserved and visible in archival documentation are scarce and it is not possible to determine if the facade was distyle *in antis* or prostyle. The main differences between Gasr Gelda and Gasr Shaddad are the volume of the *podium*, much higher for Gasr Shaddad also because in this case it partially hosted the funerary chamber. Both for Gasr Shaddad and for Gasr Gelda statues were set in a rearward position and this movement to the inner spaces of the structure seems to have been a common phenomenon of the mid-Imperial period, especially in the provincial areas (VON HESBERG 1994, 170). In these two Lepcitanian examples it is therefore plausible to believe that, together with the desire of the



Fig. 4.32. The mausoleum of Gasr ed-Dueirat (Ma3), recently reconstructed in the garden of the Lepcis Magna Museum (photo: A. Zocchi, 2013).

self-representation of the deceased/s expressed through statues, there was also a desire to assign to the *locus sepulturae* a sacred and magnificent aspect expressed by the choice of a temple facade and, at the same time, by the monumentality of the tetrastyle type. The same structural typology of Gasr Shaddad and Gasr Gelda is attested elsewhere in *Africa Proconsularis*, first among all the already cited *mausolea* of *Ammaedara* (Haïdra) and also the *monumentum* of *C. Marius Romanus* near Sidi Amara, east of *Mactaris* (SALADIN 1887, 187-189, figg. 326-329; BARATTE, DUVAL 1974, 23-25, fig. 6; POINSSOT 1884, pp. 89-90, tav. II; LADJIMI-SEBAÏ 1987, p. 420, pl. X-XI). In other western regions, the closest comparisons are the tomb of *Marcus Octavius* and *Vertia Philumina* from the necropolis of "Porta Nocera" at *Pompei* (D'AMBROSIO, DE CARO 1984), the "Reichsberg" tomb at *Augusta Treverorum* (FAUST 1998), the one of *Acceptius Venustus* at *Lugdunum* (ALLMER, DISSARD 1888) and a tomb at Chavéria in the French Jura (BARÇON, JOAN, LAURENT 2006), all dated between the first and second century AD.

The mausoleum of Gasr ed-Dueirat (fig. 4.32, see also figs 4.29-4.30, Ma3) belongs to the same "*aedicola* above *podium*" typology albeit an unusual variant. It can be dated to the beginning of the second century AD and its architecture is characterized by a squared *podium* on which was set a *tholos* with a conical covering. The monopteral structure, formed by a central pillar on which are six niches/*aediculae* framed by spiral columns, underlines the strong desire of self-representation of the family highlighted precisely by the statues of the six characters mentioned in the inscription (IRT 729) that were housed in the niches. This architectural model is rare in North Africa. It is more common in Italy where it is attested from the end of the first century BC, especially with the *tholos* without the central pillar (see for instance the *Istacidii* tomb at *Pompeii* or the examples of *Aquileia* and *Altino*: KOVACSOVICS 1983, 44-45, 48-51, 55-56, fig. 9; RAMBALDI 2002, 59-61, 63, figs 49, 51, 54). This model spread also in provincial areas, especially in Gallia: the cenotaph of the *Iulii* at *Glanum* (ROLLAND 1969; TOYNBEE 1993, 103; VON HESBERG 1994, 144, fig. 75), the funerary monument at Fourches-Vieilles near Orange (MIGNON, ZUGMEYER 2006, pp. 291-307), at Le Fugeret (CONGÈS 2006) and another one at Faverolles near Langres (FÉVRIER 2006). In North Africa, it seems there are only two other examples: the mausoleum at Bir el-Uaar, c.100 km south of Tripoli (ABDUSSAID 1998; BROGAN 1978; STUCCHI 1987a, 299-300) and the one of HENCHIR BEDJI at *Thacia*, in *Byzacena* (FERCHIOU 1995, 134; GUÉRIN 1862, II, 97; POINSSOT 1885, 174, tav. XVIIbis; SALADIN 1886-1893, II, 549, figg. 157-159). The first one, dated to the third century AD, is composed of three storeys and, according to its recent reconstruction, its massive volumes may have exceeded 20 m in height. The second presents a structure more similar to that of Gasr ed-Duierat: a *podium* with an internal funerary chamber, a drum on which was set the *tholos* formed by a *peristasis* of six Corinthian columns and a conical covering. The use of monopteral elements within funerary structures may however not be unique at Lepcis Magna: an element belonging to an imbricate conical covering has been found indeed scattered on the ground in the eastern suburbium of the city (fig. 4.18, Fu6).

Both the examples of funerary monuments with *tholos* recorded in the Italian peninsula and those recorded in North Africa seem to recall Hellenistic models. For Gasr ed-Dueirat this would be confirmed also by some architectural decoration details that show the prolonged use of Alexandrian elements in Punic tradition areas (PENSABENE 2011, 266-267. Also the already mentioned mausoleum of Bir el-Uaar in the Tripolitanian pre-desert would present some elements that could recall the structure of the *Pharos* lighthouse at Alexandria: STUCCHI 1987a, 300). Concerning the decorative programme of Gasr ed-Dueirat, the comparisons available seem, up to now, to exclude a common model. The lavish decoration of the Lepcitanian mausoleum would have allowed the observer to read the friezes and ornaments as in an astronomic calendar. On different levels is indeed depicted the flow of time, indicated by the angular decoration of the second storey through the allegoric figures of the Seasons and by the Zodiacal signs within the Doric frieze of the *tholos*. The cosmological-calendar composition with the

Zodiac associated with the Seasons is not attested in other architectural decorations while is instead witnessed in several mosaics (MUSSO 2008; GUNDEL 1992; GURY 1997). Concerning the funeral sphere, beside the reliefs on sarcophagi, a few comparisons can be found with the exclusive depiction of the Zodiacal signs: the Augustan tomb of *C. Iulius Felix* at Henchir Messaouer (Bou Arada, Tunisia), the *monumentum* of the *Secundinii* at Neumagen (Igel, near *Augusta Treverorum*) dated to the end of the second century AD, and in the contemporary tombs of *Petosiris* and *Petubastis* in the oasis of Dakhleh in Egypt (FERCHIOU 1987; GUNDEL 1992, 222, n. 51, 243, nn. 119-121). In this frame the mausoleum of Gasr ed-Duierat constitutes surely an *unicum* due to its decorative/allegoric scheme and for its particular architecture.

The proposed dating for almost all the Lepcitanian *mausolea* belonging to the heterogeneous "*aedicola* above *podium*" typology is interesting. The time span indicated for four of these five *mausolea* (Ma2-Ma3, Ma15-Ma16, Ma22) is between the end of the first and the first half of the second century AD, that is a period in which Lepcis Magna became a full Roman city (*municipium* in AD 74-77 and *colonia* in AD 109-100) and thus when the needs of the local political class better adapted - due to self-representation reasons mentioned above - to this funerary typology.

The "tower-*mausolea*" typology is also a heterogeneous group that includes a considerable number of variants (CLAUSS 2006, 163-172; STUCCHI 1987a, 249-315). Among the common features, it is noteworthy to mention both the presence of a high *podium* and a quadrangular plan (rarely circular or polygonal). These two aspects allow us to assign to this type the remains of some Lepcitanian *monumenta* that still preserve legible plans and that are characterized by a partially preserved *podium*. It has been possible to attribute to the "tower-*mausolea*" type seven structures (Ma1, Ma4, Ma6, Ma8, Ma20, Ma29-Ma30) of which unfortunately, only for two cases (figs. 4.29-4.30, Ma6, Ma29), it is possible to hypothesize the reconstruction of the upper storeys.

Without any doubt, the best preserved Lepcitanian "tower-mausoleum" is Gasr el-Banât (Ma6). Apart from its pyramidal covering and the Doric frieze of the upper storey both hypothesized in the reconstructions (fig. 4.33), the architectural elements of its three levels can be reconstructed with certainty. However, the choice to hypothesize the pyramidal covering is based on numerous comparisons with other tower-type funerary structures, first of all the mausoleum of *Cillium*/Kasserine, dated to the second century AD (*Les Flavii de Cillium* 1993), and the one of Mactaris (GUÉRIN 1862, I, 411-412, n. 9; ROMANELLI 1970, 273, tav. 201a-b; KOVAKSOVIC 1983, 110-111, fig. 24.2). Concerning the Doric frieze, its presence for Gasr el-Banât is based on the fleeting witness of Muhammad Ibn al-Tayyib al Maghribi who noticed - in the eighteenth century - the presence of girls' heads in the mausoleum and these can be best associated with metopal decorations.

Gasr el-Banât seems to have similarities with the already cited structure of the *Flavii* at *Cillium*, even if the proportions between the storeys, a different position of the niche and the

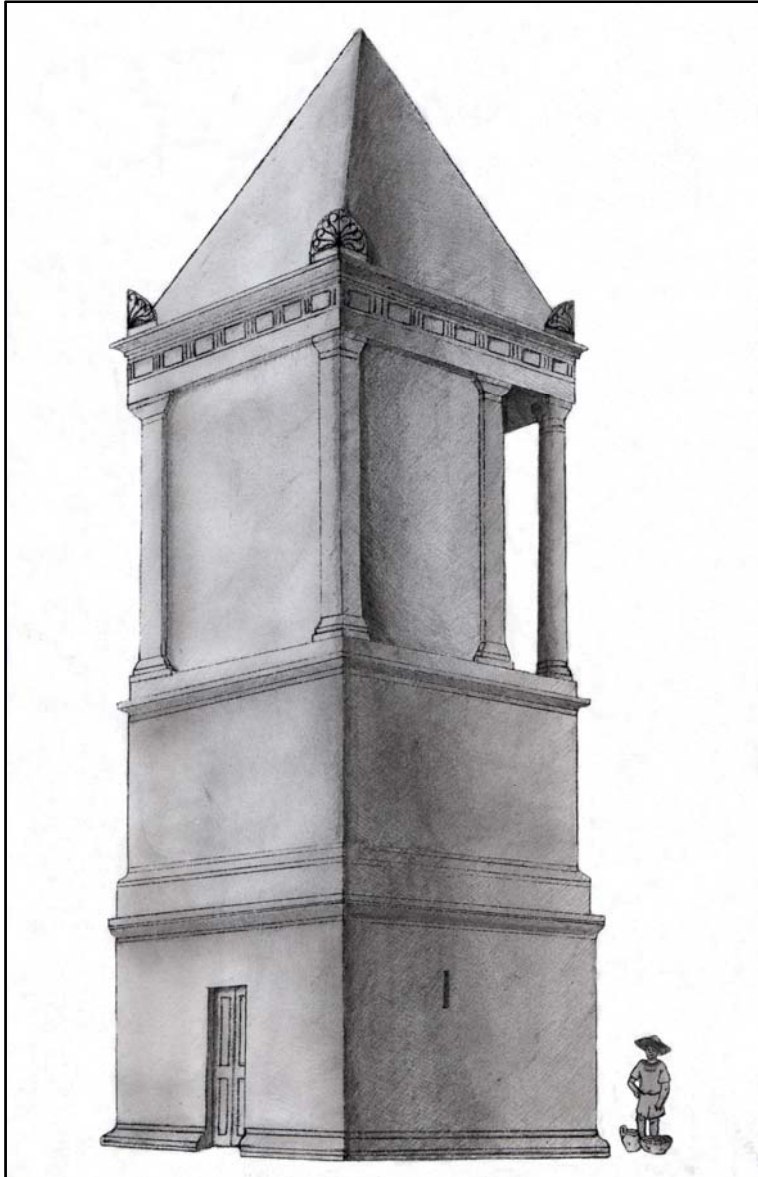


Fig. 4.33. Hypothetical reconstruction of the Gasr el-Banat mausoleum (Ma6)
(drawing: A. Zocchi).

facade are in this case dissimilar. Gasr el-Banât also shares with the Cillium example the general disposition of the architectural decoration: absent in both cases in the *podium* and included in the third storey with the *aedicula*. In the mausoleum of the *Flavii* however the intermediate storey was provided by fluted pilasters that would have had the function of introducing the *peristasis* of the upper level (GROS 2001, 419-421). As suggested by Sandro Stucchi, the Hellenistic tradition of a three storey model - that had its origin from Alexandria's lighthouse - may have influenced the choice of this particular type of funerary structure. According to Stucchi (1987a, 300-301), the Alexandrian model was probably subsequently mediated by the *Pentapolis* of Cyrenaica, in particular thanks to the

"*Mausoleo n. 2*" of Ptolemais.

The last structure of which it is possible to establish a typology is the "obelisk-type" mausoleum, located near the mouth of the Wadi er-Rsaf (figs 4.29, 4.36, Ma29). It is no longer visible but it can be reconstructed thanks to the nineteenth-century graphic documentation. The "obelisk-funerary structures" form a distinct sub-group among the "tower-*mausolea*" defined by a more narrow ratio between height and base. The majority of these structures, widely attested in Tripolitania, are indeed characterized by a base that rarely reached a side of 2.5 m, while the height easily exceeded 15 m (STUCCHI 1987a, 278-281; TOYNBEE 1993, 150-152; VON HESBERG 1994, 173). The genesis of these structures - real *signacula* - can be attributed to the eastern *nepes* subsequently transposed and adapted in the Punic regions. As suggested by Sergio Fontana (1997), it is possible that this model has spread in Tripolitania through the mediation of the coastal cities; the same model was then adopted also by the pre-desert local elites reaching

the internal sites such as Ghirza, whose "obelisk-mausoleum" is dated to the middle of the third century AD (BROGAN, SMITH 1983, 182-189: "*Tomb South A*"). The Lepcitanian example of Wadi er-Rsaf (Ma29) can be compared with the "South Mausoleum" located along the Wadi Nfed and that is dated to the second century AD (ABDUSSAID 1996, 76-78, pl. XXX; BARKER *et al.* 1996, II, 261, Nf31). The architectonic, volumetric and decorative similarities would attest in this case the derivation from the Lepcitanian model and also the existence of skilled workers coming from the coast (FONTANA 1997). The funerary structure of Wadi er-Rsaf was not a unique case at Lepcis Magna: beside the remains of other bases that can be attributed to this structural type (Ma20, Ma30), further metopal decorations similar to the ones of the "South Mausoleum" of Wadi Nfed have been recently detected reused in the warehouses of the east dock of the Lepcis Severan harbour while others were collected in the garden of the old Museum (FONTANA 1997, 151, tav. LXIVa-c).

4.5. THE ROMAN FUNERARY RITES

The majority of the archaeological items found associated with sepultures at Lepcis, as elsewhere, represent the material transposition of several funerary practices associated with the death and the burial of an individual. Although many aspects related to these funerary rites (known as a whole with the term *funum*) are destined to remain unknown, some of those practices have left material traces or are implied by their use or by the presence of items found within burials. Those allow us to improve our knowledge of this important and sacred process. Recently, on the basis of the funerary equipment found within a few Lepcitanian *hypogea*, some of these ancestral practices have been highlighted by Sergio Fontana (1996, 81-82; 2001, 169; DI VITA-EVRARD *et al.* 1996, 125-129).

Using the ancient sources and the archaeological remains it has been possible to identify two main funerary phases within the Roman funeral habits. The first phase comprises practices that characterize "the separation rites" (from death to the ignition of the pyre/deposition) and the second phase comprises the practices that constitute "the aggregation rites" (from the extinguishing of the pyre - in the case of cremations - to the funerary meals). According to Edmund Leach (1976, 77-79), between these two phases there is a stage called "*rite de marge*" or "marginal state" that is where the ritual practices are aimed at preventing the deceased from returning dangerously to life. In this period of time both the dead and the family are in an abnormal condition: outside of society and outside the time dimension (for funerary rituals see also: THOMAS 1975; MAURIN 1984; SCHEID 1984; LA FONTAINE 1985; REBAY-SALISBURY 2012, 19-21).

In this framework it is worth noticing that the underground funerary structures such as the *hypogea* built at Lepcis Magna until the mid-Imperial Roman period define ideologically the separation between the world of the living and that of the dead. The stepped, or shaft, entrances of these *hypogea* constitute, as for other Punic *necropoleis*, the abrupt physical link between these two worlds (BENICHO-SAFAR 1982, 187-205). At the same time, the sealing of the tomb entrances, beside preventing stealing and tampering, granted that these two realities were not in direct contact.

4.5.1. THE INHUMATION AND CREMATION RITES THROUGH THE CENTURIES

The most evident aspect in the funerary ritual practices is the one related to the treatment of the body. Inhumation and cremation within Lepcitanian *necropoleis* are often associated in the same site; however, it is possible to establish from the Late Archaic period to Late Antiquity a frame of reference according to the dominant rites of each period.

Both rites are attested at Lepcis in the Late Archaic and Classical phases (sixth to fifth centuries BC), while inhumation was the only ritual attested from the mid Hellenistic period (end of the second century BC). The data from the Roman Lepcitanian *hypogea* allow us to affirm that cremation was far and away the most used rituals in the first century AD. Unfortunately, the lack of significant funerary data from the second century BC (the most recent Hellenistic tomb found at Lepcis) to the second quarter of the first century AD - due essentially to the subsequent expansion of the city that probably engulfed the previous *necropoleis* - prevent us from fully understanding this transitional period. However, a tomb in the eastern suburb (Tb8) dated within the first half of the first century AD, seems to have hosted only cremations. Moreover, from the first phase of the south necropolis of Wadi er-Rsaf (Nc7c), dated to the second half of the first century AD, only one inhumed body and ten cremations placed within *amphorae* have been recorded. In the same area, close to these burials, the hypogean tomb (Nc7a) that have been used from the mid first century AD until the end of the subsequent one shows that all the burials related to the first century of its use (AD 50-150) were cremations. The only exception to this rite at Lepcis in the early-Imperial period seems to be the two inhumed bodies found next to the pylons of the Marcus Aurelius Arch (Nc6) and dated to the second quarter of the first century AD.

A shift to cremation from the end of the first century BC is attested in other Tripolitanian contexts such as *Sabratha* (BRECCIAROLI, TABORELLI 1975) and *Oea* (AURIGEMMA 1958). The cremation rite was however already documented in the Punic sphere in the Archaic period as attested by the Carthaginian *necropoleis* (BENICHO-SAFAR 1982, 204-216) and by the already mentioned burials at Lepcis (Nc5). In the Hellenistic phase this rite continued to be used at Carthage (third century BC: BENICHO-SAFAR 1982, 204-216) and also in the Numidian area, at least for the elites, as confirmed by the finds of the tomb detected beneath the el-Kroub

mausoleum (RAKOB 1983, 336) but also at Tiddis (FÉVRIER 1970) and, from the Augustan age, at *Iol Caesarea* (LEVEAU 1970). The spread of the cremation rite during the first century AD at Lepcis seems therefore to have its root in a North African tradition. Further evidence of this common custom may come also from the use at Lepcis from the early-Imperial Roman period, of both limestone coffin-shaped urns with superimposed lids and of painted *amphorae* to preserve the non-human remains of the pyre (fig. 4.34). Both these boxes/vessels were indeed very similar to the ones largely used with the same function since several centuries before at Carthage (FONTANA 2001, 169; BENICHOUS-SAFAR 1982, 241-242). Ultimately, the passage between the inhumation to the cremation rites at Lepcis seems to exclude a Roman contribution also considering the absence of Italic settlers/*veterani* in the city that could have favoured, for instance, the spread of the *bustum* rite according to the *disciplina castrensis*. Concerning cinerary urns, a Roman influence is attested only from the end of the first century AD, when the limestone, marble and alabaster vase shape urns were used at Lepcis imitating the urban productions.

The cremation rite seems to have been gradually replaced by the practice of inhumation especially after the mid-second century AD. Significant in this sense is the example of Gelda's



Fig. 4.34. Painted *amphorae* used to collect the remains of the *ustrinum* found in a tomb (Nc3b) located in the eastern outskirt of Khoms.

tomb (Tb3) built during the second half of the first century AD and used until the mid-second century. The hypogeum was provided with niches, clearly to host cinerary urns (fig. 4.11) and the only three inhumed bodies found were placed in lead sarcophagi arranged in the middle of one funerary chamber in the last phase of use of the tomb, dated probably to the Antonine age. Other important examples are the two *hypogea* of the southern necropolis of Wadi er-Rsaf: in one (Nc7a) the remains of six bodies have been found above the cinerary urns within the partial earthen filling of the funerary chamber. According to the funerary equipments associated with these inhumed bodies, it has been possible to date their deposition during the second half of the second century AD. A similar situation has been registered for the first phase of use (second half of the second century AD) of the other hypogeum (Nc7e) where one cremation and seven inhumations have been found. The coexistence of both rites has also been documented for two other contemporary tombs: one located close to the earthen agger of Monticelli (Tb4) and the other between Khoms and Lepcis (Tb2).

Ultimately, the archaeological evidence shows that at Lepcis the passage between the two rites was completed within the late Antonine period. *Hypogea* that were characterized exclusively by inhumations had been built indeed from the second half of the second century onwards, as attested by one tomb at Tazuit (Nc4e), by an hypogeum at Wadi er-Rsaf (Nc8a) with twenty-six inhumed bodies buried between the second and the third century AD and, finally, by the third century tomb associated with the mausoleum of Wadi el-Fani (Ma13). The passage to the inhumation rite in the mid-Imperial Roman period is however a common phenomenon attested in many North African contexts (FÉVRIER 1991) and also in Italy and throughout the Western Mediterranean (in general see TOYNBEE 1993, 24-27; DI VITA-EVRARD *et al.* 1996, 128).

4.5.2. THE FIRST PHASE: "THE SEPARATION RITES"

The funerary rite began with the re-composition of the cadaver: in this phase the body was washed, sprinkled with ointments and dressed. Then the corpse was usually laid on a funerary bed (*lectus funebris*) and subsequently exposed at home for some days and finally brought to the pyre (in the case of cremations). Throughout the cadaver was guarded by relatives who also looked after the proper conduct of the ritual practices (in general see TOYNBEE 1993, 29).

Analysis of the remains of the pyre collected in *amphorae (ustrina)* demonstrates some of the items that accompanied the deceased to the pyre and that were set around the corpse during the exposition period (some of these items should accompany also the inhumed bodies). Unsurprisingly small fragments of human bones and sometimes also teeth (DI VITA-EVRARD *et al.* 1996, 125) that probably were not collected by the *ustores* and, obviously, the presence of charcoal of the wood used for the *rogus* (among these flakes of pine cones used probably during the ignition phase) have frequently been found in this material. In some cases, the finding of charcoal may also be explained by the presence of funerary beds. This hypothesis is also

supported by the numerous iron nails that have been found inside several vessels and, in two high-class *hypogea* (Nc1a, Tb3), by fragments of carved bone plates used to cover the wooden structure of the funerary bed (DI VITA-EVRARD *et al.* 1996, 125-126). The use of carved bones in *klinai* is well attested in Italy (LETTA 1984, 97-111) while, up to now, it seems to be rarely documented in North Africa. In this regard it is significant to notice that other carved bones fragments belonging to beds' decoration have been found the Lepcis theatre excavation; recently, they have been identified with an Alexandrian production or with a local workshop in which were active Egyptian craftsmen (AIOSA 1997).

Amphorae used as *ustrina* often contained glass fragments or melted glass belonged to *unguentaria* and *ampullae* (often the "Ising 27" form). Small glass vessels, containing fragrant oils, were indeed placed around the deceased during the exposition phase, a practice witnessed by *Apuleius* (*Flor.*, XIX) and also by Virgil (*Aen.*, VI 219) and attested elsewhere in the Punic territories (FANTAR 1995, 65-66; BENICHO-SAFAR 1982, 273). Associated with this practice were also strigils that were probably used to clean and replace the essential oils during the exposition period (CIFANI *et al.* 2008, 2296; DI VITA-EVRARD *et al.* 1996, 120). Other items commonly found within the Lepctitanian *ustrina* are the lamps, used in this case for a twofold reason: to grant a constant lighting to the *feretrum* and to serve as an apotropaic tool (RUSHFORT 1915; CUMONT 1949, 49-55).

The finding of one or more coins inside the same *ustrinum* or within the cinerary urn would attest the custom at Lepcis of Charon's obol. The use of this *viaticum* was probably a common practice also in the previous Punic period, as is attested at Carthage from the third century BC (BENICHO-SAFAR 1982, 327). However, according to the data available, it seems that from the Domitianic age to the Antonine dynasty *quadrans* together with "anonymous *quadrans*", that are para-monetary copper tokens or *tesserae* probably linked to *frumentationes*, were used at Lepcis for this purpose (in general see MUNZI 1997).

An extraordinary find from Lepcis concern examples of are the finding of *cretulae* (lime seal imprints) within two different cremation deposits of an hypogeum located in the west Lepctitanian suburbium (Nc1a). A further three *cretulae*, unfortunately not legible, were found in another three tombs (Nci, Nc3b, Tb1). These *cretulae* - partially published (FIANDRA 2006) and, it seems, documented in Calabria (Locri Epizefiri and Crotona, see BARELLO 1996) - have been preserved thanks to their exposure to the high temperature of the pyre that overcooked the lime and hardened it. This event allow us to read on two of them (the ones from the tomb of the west suburbium: Nc1a) two different imprints: *MVC* and *LP AL* (fig. 4.35). The first one can surely be associated to the *clarissimus vir M(arcus) V(ibi)us C(rescens)* whose name is carved on an vase-shape alabaster cinerary urn (now missing but briefly cited in FONTANA 2001, 164) found in the same tomb. The second seal can probably be explained as *L(ucis) P(ompeius) Al(exius)* or *Al(exander)* and associated with the *Pompeia* family whose vase cinerary urns have been found



Fig. 4.35. Two *cretulae* found in a tomb (Nc1a) located in the western Lepcitanian suburb. On the left is the MVC seal and, on the right, the LP AL seal with a palm leaf decoration in the middle.

in the same hypogeum (see par. 4.6.2). In this latter case Enrica Fiandra (2006) has recently read *LF* instead of *LP* suggesting the initials of *laudatio funebris*. The back of the *cretulae* reveal that they were probably applied probably on leather elements and held by a rope knot. A possible hypothesis of the use of these items is for the

sealing of scrolls (*rotuli*) that constituted the symbol of the power connected to the civic or public magistracies held by these characters. What is important to bear in mind in this context is therefore the desire of the family to underline the honorific roles of the deceased through the exposition of scrolls (*rotuli*) during the funeral ceremony. Moreover, the will to show these scrolls in funerary contexts is attested also at the mausoleum of Gasr ed-Dueirat (Ma3): in this case a *capsa* (the container of the *rotuli*) is depicted above the entrance of the funerary chamber (FONTANA 2001, 163, fig. 14.4).

Once the body was cremated, the final sparks of the pyre were extinguished probably using flagons according to a Greek Archaic tradition (DI VITA-EVRARD *et al.* 1996, 127); however, their use with this function is unsure since they have been also found associated with inhumed burials. The extinguishing of the pyre constituted the last action of the separation rites and the beginning of a further phase.

4.5.3. THE SECOND PHASE: "THE AGGREGATION RITES"

Once the fire was extinguished, the relatives were in charge of collecting the burnt remains of the deceased paying attention to avoid to collect other remains. Despite this caution, several small fragments of charcoal, pottery, glass, nails have been found inside many Lepcitanian cinerary urns, and even inside the alabaster vase urn belonging to the senator *M. Vibius Crescens* (Nc1a) there were burnt flakes of pine cones and fragments of carved bones of the *kline*. In many cases the remains of human bones were crushed most likely to adapt them to the urn size. The *amphorae* containing the remains of the *ustrina* were filled probably using also excavation tools since some traces of soil were found inside several of them (DI VITA-EVRARD *et al.* 1996, 126). Once filled, these vessels were generally sealed with gypsum caps and, in some cases, decorated using white paintings (DI VITA 1968, 58-61; fig. 4.34). The majority of the *amphorae* found within *hypogaea* were used to transport wine and since they have been found also in Hellenistic tombs with inhumations it is plausible to think that their contents were consumed for funerary toasts and then the container reused to host the remains of the *ustrinum* in the case of cremations (BISI 1971a).

The first funerary meal (*Silicernium*) was celebrated immediately after the burial and was generally reserved to the close relatives. A further meal (*cena novemdialis*) was celebrated nine days after the deposition and could include a wider number of invited people; this commemoration was repeated every year during the *Parentalia*. In Punic areas the practice of funerary meals was widely diffused and is attested by several archaeological and epigraphic examples (FANTAR 1995, 66-68; BENICHO-SAFAR 1982, 278-288). At Lepcis the archaeological documentation of the *Silicernium* is based by the presence of open-shaped pottery containing animal bone remains. Residues of bird bones, fishes and egg shells have been found in different tombs (Nc1a, Tb3, Nc7a); however, it is likewise possible to consider these remains as an offering to the deceased rather than leftovers from funerary feasting. Nonetheless, the custom to celebrate the *Silicernium* and funerary meals in general seems to be attested at Lepcis by an example of *mensa* with a "U" shape recently found within the funerary area of the south necropolis of Wadi er-Rsaf and dated to the third century AD (Nc7h). Moreover, in the same area has been found an earthen pit filled with cooking and fine wares dated to the first half of the second century AD (Nc7d): this intentional burial could constitute a will of alienation of the material used during the funerary meals. Even if there is no further archaeological evidence, the large surfaces of the funerary enclosures detected in the suburban areas of Lepcis Magna (see fig. 4.26) could suggest the existence of devoted spaces within them used as *mensae* or *triclinia* and that were arranged close to the *monumenta*.

The importance of the custom of funerary meals in the region until the Late Antique period is attested by Sidret el-Balik (Sabratha) where four large *stibadia* that could host more than thirty diners were constructed in the fourth century AD (DI VITA 1975b, 183; 1984b).

4.5.4. THE INFANT BURIALS: THE "BIG" ABSENTEES?

Despite the partial analysis of the anthropological remains of the Lepctitanian *hypogea*, it is surprising to notice the scarcity of infant burials that have been found. According to the data available for the first/second century AD, at the Gelda's tomb (Tb3) of a total of 14 burials only one inhumed body of c.8-9 years old has been recorded. The same situation is registered for an hypogeum of the western necropolis (Nc1a) where, of a total of 11 deceased, has been found the remains of only one infant. The two early-Imperial burials found beneath the Marcus Aurelius pylons (Nc6) are related to a child and to a teenager; however, in this latter case, the information available are limited to a very small portion of the hypothetical necropolis that could have characterized this area. A more exhaustive set of data comes from the Wadi er-Rsaf *necropoleis* (Nc7-Nc8): of a total of 106 burials (cremations and inhumations) dated from the first to the fourth century AD only 16 (17%) are children (<10 years old) and this percentage drops drastically if we took into account only the first two centuries of the Roman Imperial period. Moreover, the almost total absence (2%) in the same *necropoleis* of deaths that occurred within

the first two years of age seems really strange (anthropological analysis in MUSSO *et al.* 1997, 291-294; 1998, 212-214). According to the epigraphic documentation, the only two cases of Roman children (whose age can be registered) are the unpublished inscription carved on a *tabula* of a *cupula* that mentions the infant *L. Asinius Statianus* who died at the age of three (see par. 4.3) and a fragment of marble panel mentioning an age of five. Unfortunately, both the findspots of the inscriptions are unknown.

This very low percentage related to the representativeness of child mortality at Lepcis Magna cannot be explained according to demographic patterns and such a low incidence constitutes an unreliable value in an ancient society, where the infant mortality could exceed 30% within the first year of age and ca. half of the children died before the age of ten (CARROLL 2018, 147-151; HASSAN 1981, 103-123). In the light of this, it is plausible to suppose a different destination for Lepcitanian premature or infant deaths; in the Punic areas this function has been often performed by devoted spaces known as *tophets* in which the religious and sacred aspects were associated with the intentional burial of infants (both sacrificed and those that died of natural causes: for debates see RIBICHINI 2000; SHAW 2016) and that, in some cases, their use lasted, in various forms, until the Roman period (D'ANDREA 2014). Even if the Lepcitanian anthropological and archaeological data related to its Archaic/Classic and Hellenistic *necropoleis* are very scarce, it is however reasonable to hypothesize the existence of a *tophet* on the basis of other North African - or Punic in general - comparisons in which children-burials have been found often associated with animal depositions (for Lepcis' *tophet* see also par. 3.3). During the Roman phases infants were often buried in separate funerary areas, while neonates that died within the first 40 days could perhaps have been buried in domestic contexts. The custom to use different burial spaces for children, common in many Roman provinces (RAWSON 2003, 342-343; GRAHAM, CARROLL 2014, 14-15), could be valid also for Lepcis and has been archeologically documented in two cases in North Africa: at *Thysdrus (Byzacena)* and at *Carthage*. In the first case c.100 of child burials, dated from the Augustan age to the beginning of the third century, have been discovered within an enclosed walled area (SLIM 1984; LASSÈRE 1987; NORMAN 2003, 40-42; D'ANDREA 2014, 113-114). In the second case, at the Yasmina district (south-west of Carthage), the University of Georgia brought to light a funerary area devoted to infant depositions dated from the fourth to the fifth century AD (NORMAN 2002; 2003).

4.6. BURIALS AND SOCIETY: THE EPIGRAPHIC EVIDENCE

The data collected in the *Inscription of Roman Tripolitania (IRT)* and *Iscrizioni puniche della Tripolitania (IPT)* plus some other texts published in the last fifty years and the numerous unpublished inscriptions coming from cinerary urns, allow me to analyze a total of 275 funerary

texts related to the Lepcitanian suburban areas (see Vol. II, App. I). This number is very small if compared to the ancient pagan epitaphs that have been registered in other African cities such as Carthage (ca. 1,000 texts: LASSÈRE 1973, 25), Dougga (720 texts: LASSÈRE 1973, 58) or Mactar (304 texts: M'CHAREK 1982, 16) that were, excluding Carthage, much smaller and less populated than Lepcis. However, this anomaly could be explained taking into account two factors: on the one hand the lack of intensive excavations and, on the other, the large use at Lepcis of the hypogean tombs until the first three century of the Imperial period. This latter factor would have limited indeed the number of singular burials marked with inscribed *stelae* or *cupae*.

A first broad classification related to the Lepcitanian funerary texts can be made according to the language used (fig. 4.36A): 156 inscriptions (57%) were written in Latin, 111 (40%) were

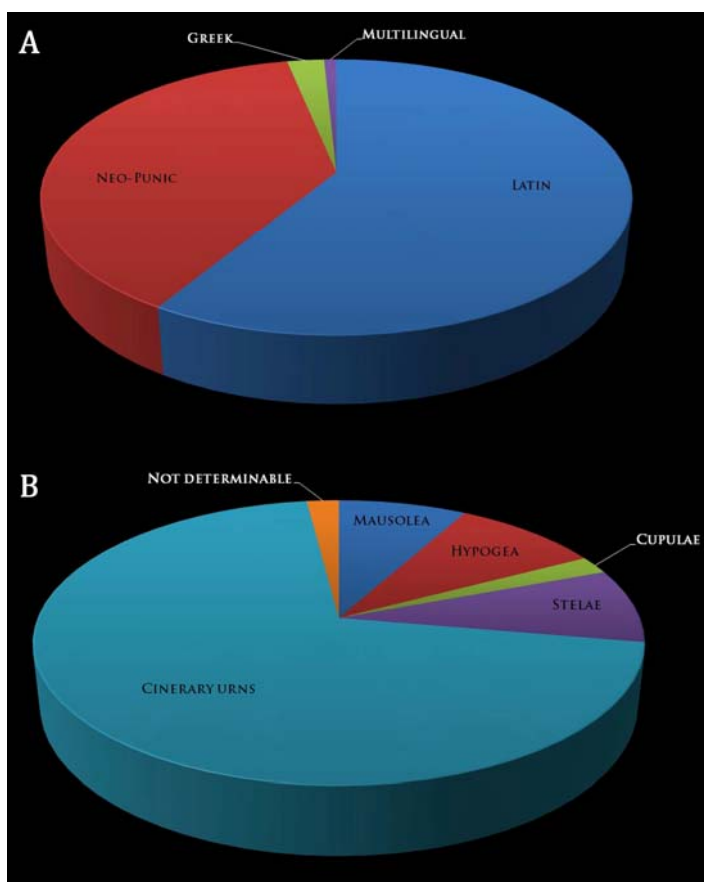


Fig. 4.36. A - Languages attested in the Lepcitanian funerary inscriptions. B - Different contexts of the same inscriptions.

written in Neo-Punic and a small group of six inscriptions (2%) were written in Greek. The multilingual texts (Latin, Greek and Neo-Punic) are only two, and probably belong to the same mausoleum.

The funerary texts can be divided also according to the different type of burial/*signaculum* they belonged to (fig. 4.36B). Of a total of 275 inscriptions registered, just over a quarter - 74 texts - were displayed externally while the majority - 201 inscriptions - were carved or painted on cinerary urns housed inside *hypogea*. For the epigraphic evidence that was meant to be visible externally, 20 different texts (8% of the total) were set on *mausolea*, 23 (9%) related to *hypogea*

(architraves, *semata*, altars or bases), five inscriptions (2%) to *cupulae* and, finally, 21 texts (9%) to single earthen burials (*stelae* or other supports).

4.6.1. THE PUBLIC DISPLAY: THE ABOVE GROUND INSCRIPTIONS

Although 20 inscriptions can be related to Lepcitanian *mausolea*, only two of these (IRT 729, 764 - App. I.3, I.5) can be referred with certainty to a specific structure, that of Gasr Dueirat (Ma3) and a mausoleum in the north necropolis of Wadi er-Rsaf (Ma22). Even if it is not certain, a few more inscriptions can possibly be associated with other specific *mausolea*: Gasr Gelda

(Ma2; *IRT* 745 - App. I.2), Gasr Ben Nasser (Ma1; *IRT* 738 - App. I.1) and another mausoleum in the eastern suburbium (Ma19; *IRT* 751 - App. I.4). The other fifteen inscriptions (App. I.6-20), thanks to their shapes and measurements, can be referred to monumental structures. All these texts can be dated between the first century AD and the third century.

Almost certainly to be associated with *mausolea* are the two trilingual united texts that can be dated to the first century AD (*IRT* 654-655 = *IPT* 13-12 - App. I.10-I.11). In these two different blocks are mentioned on one hand the deceased *Bencar/Bodelqart Mekrasi Clodius* - a doctor - and on the other *Byrycth* (daughter of *Balsilech*), the mother of *Clodius* recorded also in this text as a *medicus*. As suggested by Andrew Wilson (2012a, 302-303), these trilingual inscriptions, that reveal clearly indigenous names, may constitute a first attempt to assimilate Roman identities both for the use of Latin language and by the presence of a Latin name, in this case a *gentilicium* used as *cognomen*. The use of Greek may also have been intended to demonstrate a confidence with the Greek training due to the *Clodius*' profession, proudly remembered also by his mother (see ADAMS 2003, 216-217). In this frame it is also significant to take into account another funerary inscription found at the foot of the mausoleum of Gasr Ben Nasser (Ma1) in which is mentioned another *medicus*, whose name - *Telamon* - could indicate Greek or Oriental origins (*IRT* 738 - App. I.1). However, the will to indicate the medical profession, probably due to its relevant social aspect, together with substantial educational level reached, justify the use of three different languages in a period (the first century AD) when the two main idioms used at Lepcis (Latin and neo-Punic) seem to have coexisted also in public contexts (see for instance: *IRT* 318-319, 321-323, 338, 341).

Another important inscription dated to the second half of the first century AD is the one, partially preserved and written in Latin, that mentions the construction of a mausoleum, most likely Gasr Gelda (Ma2). The text shows that the monument was set by *Tapafius Diodorus Nizaz*, son of *Aris* (*IRT* 745 - App. I.2). The *Tapapii* family, whose name reveal a local origin, is well known at Lepcis and probably it constituted one of the most important family groups especially during the first century BC and the first century AD (TORELLI 1973, 401-402; AMADASI GUZZO 1983). The pseudo-*gentilicium* "ṬBḤPY" written using the form ending in *-ius* may constitute in this case a desire to use the Latin formula even if the general nomenclature would prove a non-Roman citizenship. The peregrine parentage suggests a date range comprised within the second half of the first century AD. There is a further funerary inscription, written in Latino-Punic and dated to the second-third century AD, that can be attributed to the same family (*IRT* 828 - App. I.25. See fig. 4.37). It is a limestone block in which is mentioned *Baricbal Tapapi* who dedicated the mausoleum to his parents *Viystila* and *Lilystim* (KERR 2010, 206-207). However, the features of the upper and lower sides of the block would exclude its use within a mausoleum: it seems that it was used most likely as an architrave of an hypogean tomb, as suggested also by its measurements (length: c.1.5 m, height c.30 cm). In this case, the recent translation by Robert



Fig. 4.37. The Latino-Punic inscription (IRT 828) of the *Tapapi* tomb found in the eastern suburbium (photo: A. Zocchi, 2009).

Kerr of the term MYNŞYFTH should be correct in "memorial" or "funerary monument" (see glossary in JONGELING, KERR 2005). Unfortunately, its findspot is not accurate and the description provided by Bartoccini (1926, 30) "ad oriente della città" would exclude its provenance from the same funerary area of Gasr Gelda and IRT 745. What is important to notice in this case is the exclusive use of Latino-Punic used - most likely - for the entrance of an hypogeum, a type of funerary construction dated within and no later than the beginning of the third century AD at Lepcis.

Among the first inscriptions known related to the Lepcitanian *mausolea* can be included other two neo-Punic texts carved on limestone blocks (IPT 10, 14 - App. I.18, I.20). Both the absence of a *gentilicium* and of a *Latin cognomen* would suggest in these cases a dating not later than the early second century AD. It is also possible to hypothesize a wider date-range since the omission of a full Latin name seems to be a practice used especially for the funerary inscriptions (DI VITA-EVRARD 1993, 299; FONTANA 2001, 165-169).

A further significant inscription is the one of the mausoleum of Gasr ed-Duierat (Ma3), dated most likely to the Trajanic age (IRT 729 - App. I.3). The text mentions the two dedicators *Caius Marius Pudens Boccius Zurgem* and his wife *Velia Longina Bibai* and their three sons *C. Marius Iovinus*, *C. Marius* and *Maria Victorina* plus a nephew named *Marsus* (son of *Victorina*). This is a significant example of a local wealthy family that clearly has incorporated a Latin naming system and, at the same time, partially preserved typical indigenous names. All the six characters mentioned in the inscription are indeed characterized by Latin *cognomina* but only in the first generation nomenclature are included the indigenous names (*Boccius Zurgem* and *Bibai*) however, after the canonical male *tria nomina* and female *duo nomina*. In this case, the use of the *gentilicium Marius* could derivate from the *Proconsul Africae Marius Priscus* (AD 98-99) or, less likely, from the more ancient proconsulship of *Caius Marius* (109-105 BC). Other cases, related mainly to second/third century *mausolea*, suggest the habit to include after the Latin nomenclature the Libyan-Berber name sometimes even in substitution of the Latin *cognomen* (IRT 676, 677, 692 - App. I.8, I.12-I.13).

The family names (*gentes*) indicated in the *mausolea* inscriptions reveal the acquisition of the Roman citizenship between the first century BC and the end of the subsequent one. Among these, the role of *Proconsules provinciae Africae* appear to be notable for the *gentes Calpurnia* (IRT 676-677- App. I.12-I.13), *Domitia* (IRT 692 - App. I.8), *Vibia* (IRT 729 - App. I.3) and for the



Fig. 4.38. The inscription (IRT 677) related to a mausoleum or a *signaculum* (photo: A. Zocchi, 2009).

already mentioned *Maria* (in general see BIRLEY 1988, 7-9). In other cases, due to the lack of a known Proconsul, it is possible to take into account *nomina* of senators who served in Africa. For the *gens Eppia* (AE 1997, 1585- App. I.6) is feasible to consider the role of *M. Eppius*, *legatus* of *Q. Metellus Scipio* during the African War in 47-46 BC (Cic. *Fam.* VIII.8, 5-6; *Att.* VIII.11, B), for the *Cosconii* (IRT 688 - App. I.14) the presence at Lepcis of *Cosconia Gallitta*, a close kinswoman of *P. Cornelius Lentulus Scipio*, *legatus legionis* in Africa during the revolt of *Tacfarinas* (KAJAVA 1995; BIRLEY 1988, 10) and finally, for the *gens Tettia* (IRT 746 - App. I.17), *L. Tettius Julianus*, *legatus legionis* of the *legio III Augusta* in AD 81 (BIRLEY 1988, 8).

In two further epigraphic documents there are clear references to the funerary structures in which the inscriptions were inserted; unfortunately, in both cases, the inscriptions were found not connected with the *monumentum* mentioned. The first text reports the construction and restoration of a structure made in "*opera signina*" by *P. Lucretius Rogatianus* and his son for a total expense of 80,000 *sestertii* (IRT 721 - App. I.15). It is noteworthy noticing that this amount constitutes, according to our knowledge, the highest sum spent on a funerary monument in Africa (DUNCAN-JONES 1982, 79, 99 n. 213). The fact that the inscription specifies the use of *opus signinum* could underline on the one hand probably the articulated and massive volume of the structure and on the other the strength of the technique used (in this case *opus signinum* should be considered as *opus caementicium*: see BRACONI 2008). The second inscription (IRT 677 - App.

I.13. See fig. 4.38) deals essentially with terminology, since it clearly indicates the difference between mausoleum (*monumentum*) and the hypogeum (*sepulchrum*): a dichotomy often archaeologically registered at Lepcis (Ma2, Ma8, Ma13, Ma20, Ma30). However, it is not possible to establish where this block was inserted and it cannot be excluded that it belonged to a monumental *signaculum* rather than a proper mausoleum. A significant comparison for this structure is the double inscription of a *sema* recently found at Wadi er-Rsaf (CIFANI 2006 - App. I.26)

Another category related to the above ground funerary inscriptions is the one designed to indicate or to remember deceaseds/ancestors buried in *hypogea*. This type of text was essentially written on altars, bases, *cippi* or proper *semata* and they constitute ca. 9% (23 examples) of the Lepcitanian funerary inscriptions. All these structures were strictly connected with the hypogeum and, in the case of inscribed altars and bases, their further function was to offer a proper place to celebrate sacrifices during the funerary ceremonies or, for the bases, to display the statue of the deceased. However, both these kinds of structures seems to be derived from Italic models (GSELL 1901, II, 47) and at Carthage they appeared between the Flavian age and the mid second century AD (LASSÈRE 1973, 54). This chronological range seems confirmed by the Lepcitanian examples also because the majority of these inscriptions contain the dedication to the *Dii Manes*, thus datable - in principle - from the beginning of the second century (for this aspect see LASSÈRE 1973, 123-124). Almost always the dedications contained in these texts are limited to a single person, probably the first deceased person that was buried within the tomb; however, the invocation to the *Manes* had to be extended also to the further burials as attested at *Lambaesis* (LASSÈRE 1973, 61) and Mactar (M'CHAREK 1982, 85).

As with *mausolea*, also in this case is possible to establish the dedicatee of these altars, bases and *semata* and, eventually to some extent, the families of the associated *hypogea*. Among the numerous *gentes* recorded, it is worth noticing the famous *Silia Plautia Hateriana* family (AE 1997, 1586, IRT 635 - App. I.27, I.31), whose dedicators included a senatorial member (AE 1997, 1586). Other important Lepcitanian families attested include the *Fulvii*, *Pompeii* and *Caecillii* (App. I.26, I.29, I.31, I.39; see TORELLI 1973; CORBIER 1982, 721-726). Except for two Greek texts (IRT 690, 763 - App. I.34, I.37), all the other Lepcitanian inscriptions belonging to these categories were written in Latin (see App. I.21, I.26-I.33, I.35-I.36, I.38-I.46).

An interesting example useful to explain the use of different idioms for the Lepcitanian *hypogea* comes from a tomb found at Azdu near Zliten, ca. 25 km east from Lepcis (BARTOCCINI 1927b, 232-236). The limestone altar, located a short distance from the tomb, was characterized by a Latin inscription (IRT 852) that mentions the deceased *Q. Licinius Rufus* and the dedicator, his son *Q. Licinio Piso*. Contemporary, but on a wall within the associated hypogeum a Latino-Punic graffito revealed the same dedicator *Licinio Piso* who, in this case, remembered also other relatives (JONGELING, KERR 2005, 78-79). The two idioms were used in this case for the same

context but displayed for two different audiences: the Latino-Punic for the close relatives inside the tomb and Latin for the community outside the structure. A similar remark can be made for Lepcis taking into account the already cited Latino-Punic inscribed architrave coming from the Tapapi's hypogeum (*IRT* 828 - App. I.25). This latter inscription was probably displayed in a more intimate place of the tomb (at the end of a *dromos* or inside a *vestibulum*/shaft entrance) while an altar, a base or a *sema*, most of which were written in Latin according to the data available, was most likely arranged outside.

The other 31 inscriptions (App. I.22-I.24, I.47-I.74) were written on *stelae*, on *cupae* or within marble/limestone slabs/reliefs that were placed most likely on unknown structures. To these categories should belong all those burials that were related to the lowest *strata* of society including slaves or freedmen (*IRT* 657, 719, 749, 656, 733; MUSSO *et al.* 1997, tav. 139 - App. I.48, I.53, I.56, I.62, I.69-I.70).

Among the 13 *stelae*, 3 were written in neo-Punic (*IPT* 15-16; KERR 2010, 207-208 - App. I.57-I.58, I.64) and two of them, found in the port area (App. I.57-I.58), can be dated to the mid first century AD according to their shape and texts. Both these inscriptions reveal the name of the deceased composed by a Latin *cognomen* (*Hattilius* and *Peregrinus*) followed by a Libyan name (*Baaliathon* and *Abdsaphon*). All the other *stelae*, *cupae* or reliefs written in Latin or, more rarely in Greek, can be dated from the mid second century AD onwards.

4.6.2. THE INTIMATE REMEMBRANCE: THE CINERARY URN INSCRIPTIONS

Of a total of 201 inscriptions written on funerary urns, 111 (55%) have been published and, of these, only 45 can be identified with specific *hypogea* (Tb2 = App. I.250; Tb3 = App. I.145-I.154; Tb8 = App. I.135-I.139; Nc1b = App. I.155-I.158; Nc7a = App. I.251-I.258; Nc7b = App. I.259-I.275). Almost all of the remaining 66 published cinerary urns have been found in the eastern area of the ancient harbour (Fu24) or elsewhere reused within the city core. To these inscriptions it is possible to add a further 90 unpublished texts coming from *hypogea* recorded in the last fifty years by the Department of Antiquities. Even if many of these texts have not been properly analyzed yet, it is however feasible to at least determine the language used and, in several cases, the name of the deceased.

Before starting to discuss the main topics related to this epigraphic documentation it is appropriate to consider two issues. The first one is related to the amount of inscribed urns actually found at Lepcis: the 176 texts may seem indeed too few if we consider the total of 396 limestone/marble urns that have been found. In this case, it is however worth bearing in mind that the number of the inscribed vessels could be higher since several texts were just painted and thus the traces of colour on the stone may have disappeared over time. Another matter that should be considered is to establish the beginning of the habit of writing on cinerary urns at Lepcis. According to the data available and considering the custom of the incineration rite from

the end of the first century BC and the beginning of the subsequent one (see par. 4.5.1), it is possible to consider for the same chronological range the contemporary habit to write on cinerary urns. This dating would be confirmed by the four Neo-Punic inscribed urns found in a tomb in the eastern suburb (Tb8; App. I.135-I.139) whose grave goods can be dated to the first half of the first century AD. At the same time, the numerous anepigraphic urns brought to light both in two tombs (Tb1, Nc3b) whose first phase of use can be referred to the first century AD, would suggest also the practice of leaving the urns without any written indication.

Some significant remarks can be made considering the use of Neo-Punic and Latin in different periods inside the *hypogea*. Except for two inscriptions, all the 34 published texts related to cinerary urns found in the area of the Lepcis harbour were written in Neo-Punic. According to their shapes - limestone coffin-shaped urns with superimposed lids - they can be dated to the end of the first century AD (see Vol. II, App. V). Moreover, the contemporary phase of an hypogean tomb at Wafi er-Rsaf (Nc7a) would prove again the exclusive use of the Neo-Punic (App. I.251-I.258). A subsequent intermediate step comes from the published urns related to the Gelda's tomb (Tb3), dated from the Flavian period to the first half of the second century AD. In this case the texts show the use of Neo-Punic for the urn of "PWBLY PL'WY PRQL YT" (*P. Flavius Procul Iaton*) who probably received the Roman citizenship during the Flavian era and, more likely, during the proconsulship in Africa of *Vespasianus* (AD 62-63) and the use of Latin for the other subsequent burials (DI VITA-EVRARD *et al.* 1996, 106-107). The other two published tombs (Nc1b, Tb2), dated to the second century AD, confirm the exclusive later use of Latin.

The passage from Neo-Punic to Latin seems confirmed by the new data coming from unpublished *hypogea*. The most representative tomb related to a phase ranged from the first century AD and the first half of the second is an hypogeum found in the south-west suburbium (Tb1). Of a total of 72 urns, 46 were inscribed (App. I.171-I.216), of which 31 in Neo-Punic and 15 in Latin. Another tomb with a similar date-range shows the coexistence of the two languages or, eventually, the passage from Neo-Punic to Latin (Nc3b - App. I.218-I.232). Other tombs from the necropolis west of Wadi er-Rsaf dated to the full second century AD demonstrate instead the exclusive use of Latin (Nc1l = App. I.238-I.242C; Nc1i = App. I.235-I.237; Nc1o = App. I.233-234).

Thanks to the presence of *duo nomina* or *tria nomina* it is possible to record a few Roman *gentes* buried in these funerary urns: beside the already cited gens *Flavia* (Tb3), are attested also the *Flaminia* (Tb3), *Pompeia* (Nc1a, Tb1), *Marcia* (Nc1a), *Laurentia* (Nc1b), *Claudia* (Nc1b), *Vibia* (Nc1a, Nc1h), *Iulia* (Nc3b, Nc1l), *Aquila*, *Septimia*, *Aemilia* and *Maria* (from unknown *hypogea*). Significant is the presence of the *clarissimus vir* *M. Vibius Crescens* (Nc1a = App. I.159): the characters, whose existence was unknown up to now and to whom some inscribed *cretulae* must be associated (see par. 4.5), can be added to the list of the Lepcitanian senators recorded by Mario Torelli (1973).

4.7. THE FUNERARY LANDSCAPE FROM THE PUNIC PHASE TO LATE ANTIQUITY

The data set collected allows me to trace a diachronic evolution of the Lepcitanian funerary landscape from the Punic phase to the Late antiquity. However, due to the scanty data, it is problematic to determine an exhaustive overview for the first period (seventh - third century BC) while the majority of the funerary evidence preserved dates back to the Roman Imperial phase. It is clear that the Roman - but also Hellenistic - urban expansion played a fundamental role in erasing the inner suburban funerary evidence related to the first phases of the city.

The most ancient witnesses of burials at Lepcis date back to the sixth-fourth centuries BC (fig. 4.39): the first phase of some hypogean tombs of the necropolis found beneath the theatre's stage (Nc5b-c, Nc5e, Nc5g, Nc5i), a single burial found in the north area of the *Forum Vetus*

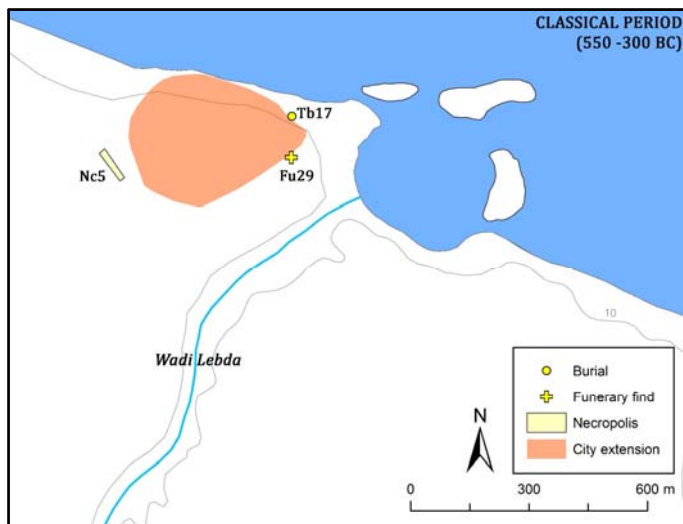


Fig. 4.39. The Lepcitanian funerary landscape in the Classical period (550-400 BC).

(Tb16 - dated to the second half of the sixth century BC) and, finally, the remains of a grave goods found at short distance east from the *Basilica Vetus* (Fu29 - dated to the fourth century BC). According to these scarce evidence, it is reasonable to think that the core of the city, at that time more than a little village but nonetheless a permanent and probably walled settlement (Wa1), was surrounded by *necropoleis* both toward south/south-west and probably

also between the city and the sea, in a narrow strip that is essentially an area adjacent to the beach. In this frame it is worth mentioning that the use of seashore spaces (cliffs or beaches) as funerary areas is not uncommon among Punic coastal cities such as several contemporary centres have revealed: Kerkouane in Tunisia (BARTOLONI 1973), *Mothia* and Birgi in Sicily (DE VINCENZO 2013, 361-363) and Nora and *Tharros* in Sardinia (BARTOLONI, TRONCHETTI 1981, 17-28; ACQUARO 1980, 173-176).

A more compendious set of information is available for the Hellenistic phase (from mid fourth century BC to first century BC). In this case two different sepulchral districts can be identified: the first one is close to the city and the second could be recognized in the area of *Cape Hermaion*, west of Lepcis (fig. 4.40). Regarding the inner suburb of Lepcis, beside the last documented phase of the theatre's necropolis (some of the *hypogea* are dated until the third/second century BC: Nc5a-f, Nc5h-i), it seems that the total of the funerary evidence referred to this period comes from the coastal eastern suburban area (Fu24, Fu28).

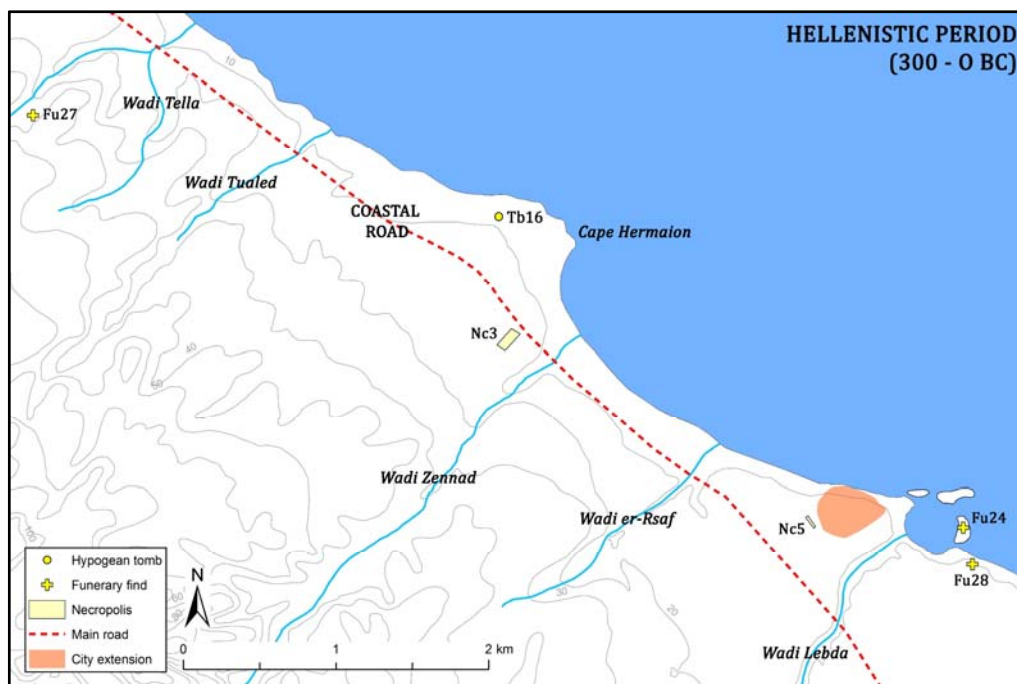


Fig. 4.40. The Lepcitanian funerary landscape in the Hellenistic period (300-1 BC).

Unfortunately there are no structural remains preserved but only scattered and not very detailed historical accounts, however - it would seem - referred to the same area. On the one hand the finds discovered during the excavation of the east mole of the Severan harbour (Fu24) could in part date back to the first century BC (neo-Punic *stelae*). On the other hand, the short report made by Romanelli (1925a, 157) referred to burials characterized by pottery *ollae* used as cinerary urns a short distance from the harbour (Fu28), would suggest the use of this area as a necropolis in the late Hellenistic period. The account of Captain Smyth may be of some help: during 1817 he made some excavations most likely in the east suburban area between the city and the circus and, among the numerous grave goods he brought to light, he noticed "Carthaginians medallions" (BEECHEY, BEECHEY 1828, 76).

Even if it is not possible to determine if a necropolis was located on the small inshore island/s existing before the Severan harbour was built, it is possible to establish with reasonable certainty that the area close to and east of the Wadi Lebda mouth was surely used as funerary at least since the late Hellenistic period. This possibility would be supported both by the nearness of this hypothesized area to the city and by the presumable existence of a path that crossed or flanked it and led towards the hill of *Sidi Barku*, where a quarry (Qr1) has been recorded in a previous period to the construction of the amphitheatre (En4).

West of Lepcis, in the area of *Cape Hermaion*, there is further funerary evidence related to the Hellenistic phase. A rich tomb in the eastern area of Khoms (Nc3a) and the scanty structural remains of an hypogaeum with the Tanit symbol (Tb16) could date to this period. It is significant to consider that the area of *Cape Hermaion*, close to the hypothetical coastal road, seems to have been used during this phase as a harbour (Ti2) and a small settlement (DI VITA 1974, 239-249;

1975a, 12; JONES 1989a, 95). These installations would therefore have necessitated the creation of sepulchral areas probably separated from those of Lepcis. Finally, close to the same coastal road and further west, have been found several Hellenistic *unguentaria* (Fu27) belonging to a tomb connected most likely to a nearby Roman villa (VI32) whose first phase can be dated to the third century BC (when probably it was just a farm).

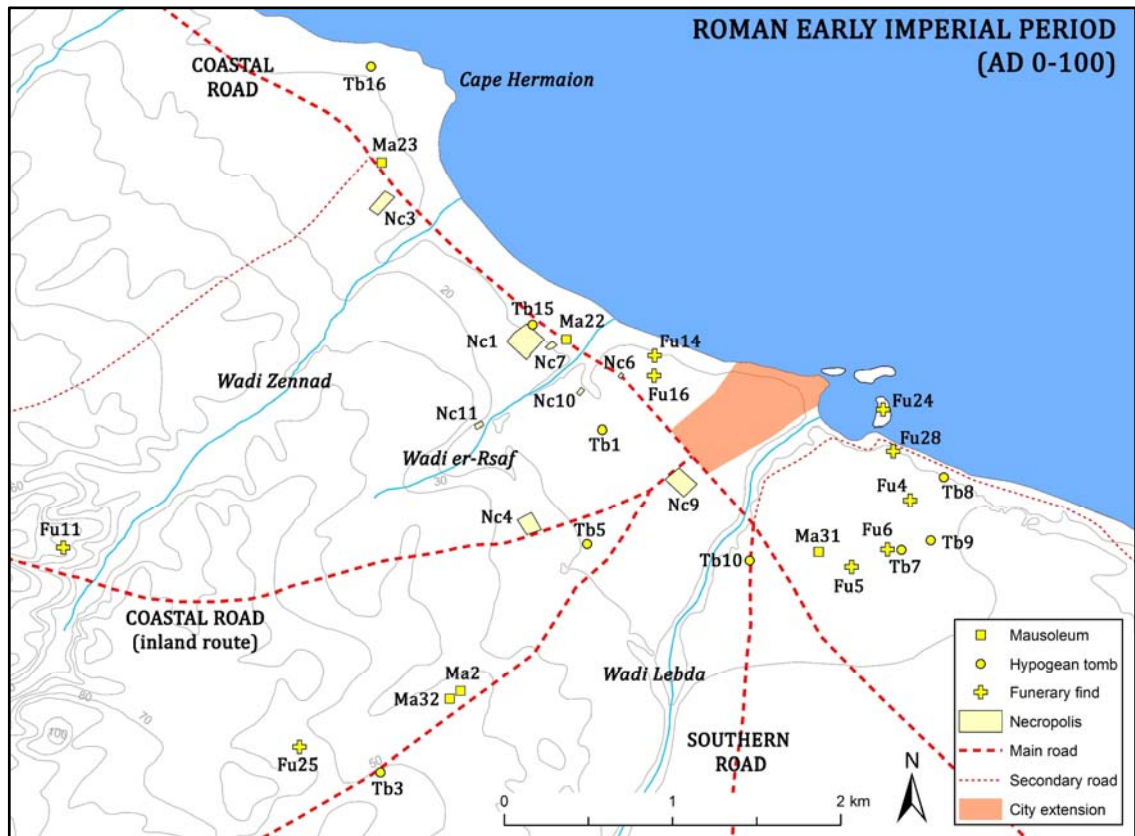


Fig. 4.41. The Lepcitanian funerary landscape in the early-Imperial Roman period (AD 1-100).

During the early-Imperial Roman period (first century AD) the funerary evidence became more numerous (fig. 4.41). The old theatre's necropolis (Nc5) ceased its function, being overtaken by the Augustan, or probably previous, urban expansion. Simultaneously, new *necropoleis* appeared suddenly south (Nc9) and probably west (Nc6) from the new enlarged city limits, while the eastern sepulchral area already cited for the Hellenistic phase (Fu24, Fu28) seems to have continued its life, according both to the numerous coffin-shaped urns found (Fu24) and from an hypogean tomb discovered at short distance from the sea (Tb8). Moreover, new funerary areas (Nc1, Nc4, Nc7) or isolated hypogean tombs (Tb3, Tb5, Tb10, Tb15) appeared in more distant places along the main roads that were built or, more likely, redefined during the early-Imperial Roman period, such as the *via in mediterraneum* (see par. 3.1). Roads from this period became, more than the previous phases, the perfect stages along which to build family collective burials such as *hypogea*.

The first century AD phase at Lepcis it is also characterized by the first witnesses of another important single or family burial: monumental *mausolea*. However, it is possible that the

existence of these monumental structures at Lepcis also in the previous two/three centuries just as the famous 'Mausoleo B' and 'Mausoleo A' at Sabratha or the large mausoleum at Djerba have proved for other sites in the region (DI VITA 1976; DRINE, FENTRESS, HOLOD 2009, 107-128). Along with epigraphic evidence that attests their presence from the first century AD (see par. 4.6.1), different *mausolea* have been discovered along the main peripheral roads: Gasr Gelda (Ma2) along the *via in mediterraneum*, a mausoleum along the coastal road at Wadi er-Rsaf (Ma22) and probably other monumental structures that can be referred to these decades (Ma23, Ma31-Ma32). It is possible to consider also the existence of early-Imperial *mausolea* close to the city and near the east bank of the Wadi Lebda: both the construction of the Late Antique (Wa3) and Byzantine wall (Wa4-Wa5) in this case may have erased traces of their presence. However, the combination of *hypogea*, *mausolea* and other simpler burials along the inner suburban road segments led to the formation of proper sepulchral roads that would be further developed during the subsequent two centuries.

The funerary evidence in the mid-Imperial Roman phase (second - third century AD) constitutes, among the several centuries considered, the most represented period and gives us a clear picture of a significant Roman funerary landscape (fig. 4.42). In the inner suburban area the *necropoleis* attested during the first century AD (Nc1, Nc4, Nc7, Nc9) continued to develop and expand often using the same *hypogea* or with new structures. Other *necropoleis* arose close to the city core (Nc10) or along the bank of Wadi er-Rsaf (Nc2, Nc8, Nc11). Moreover, the presence of numerous scattered tombs and the finding of funerary altars/*signacula* or inscribed blocks in the west (Tb2, Tb12, Tb14-Tb15, Fu14, Fu16), south (Tb1, Tb4-Tb5, Tb10, Tb13, Fu17, Fu23) and east suburbium (Tb6-Tb7, Tb9, Fu13, Fu15, Fu19-Fu20) would indicate the wide use of the suburban areas as mainly devoted to burial practices. During the second century the urban fabric expanded and the closer necropolis (or anyway a small funerary area) found under the foundation of the Marcus Aurelius Arch (Nc6) was obliterated. Simultaneously, the eastern coastal necropolis (Fu24, and partially Fu28) was erased by new structures and, above all, by the Severan harbour.

Other *mausolea* were built especially during the second century AD in the inner suburb. Some of these were located along the west sector of the coastal *via publica* (Ma21-Ma22, Ma26-Ma29) within and adjacent to the already cited *necropoleis*. Other structures probably were built along the two main roads to the south such as the 'Monticelli' mausoleum (Ma20): the poor data available for this area due to the construction of Italian military installations and of an air field make the issue problematic. Several *mausolea* were certainly erected in the newly organized area to the east (Ma15-Ma19, Ma31). This wide portion of land, comprises between the city, the *Sidi Barku* hill to the east and the coastal road to the south, must have developed above all thanks to and after the construction of the two main entertainment structures of the city: the

amphitheatre (En4) during the Neronian reign and the circus (En3) in the mid second century AD (in this latter case it is possible that a racecourse already existed).

In the most peripheral areas *mausolea* seem to have had a significant role in these two centuries. Together with suburban *villae* monumental funerary structures were often built within the rural properties also to highlight the deep and close relationship between land and families (Ma1, Ma3-Ma12, Ma14, Ma35-Ma36). Beside the proper rural areas other districts were characterized by the presence of *mausolea* (and probably small *necropoleis*): the coastal

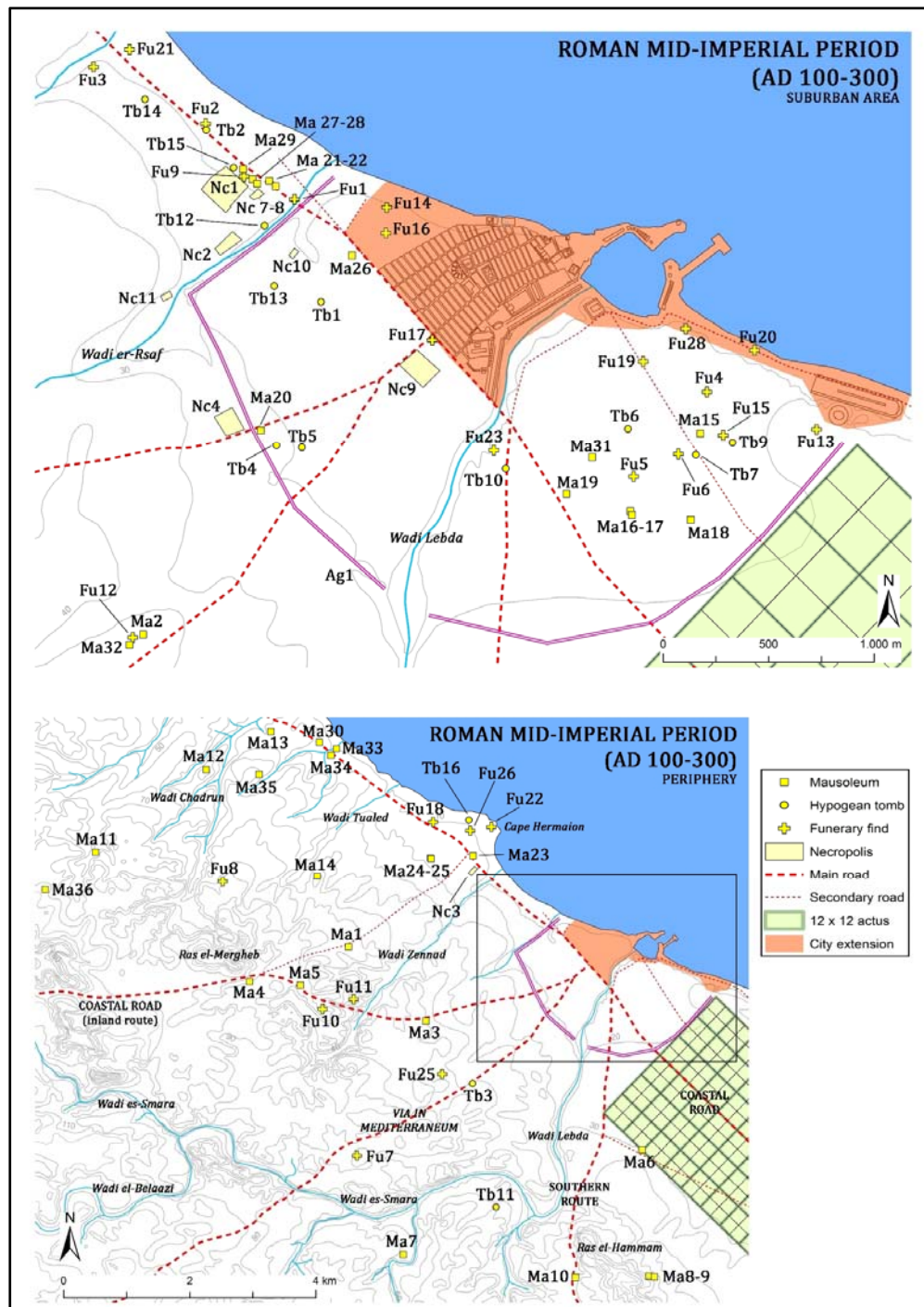


Fig. 4.42. The Lepcitanian funerary landscape in the mid-Imperial Roman period (AD 100-300).

zones due to the presence of the coastal road and of *villae marittimae* (Ma13, Ma30, Ma33-Ma34) and in the area of *Cape Hermaion* (Ma23-Ma25, Fu18, Fu22, Fu26).

At the beginning of the third century AD the construction of *hypogea* ended; their use however, continued well beyond often engulfing burials that belonged to previous generations (Nc8a, Ma13). Between the fourth and the sixth century AD a considerable number of suburban *mausolea* were dismantled since their ashlar blocks or columns were reused to build defensive walls (Wa3-Wa5). The majority of burials at that time were characterized by simple earthen pits probably located in the close suburban areas or within the city especially nearby or inside churches, as suggested by several other cities in North Africa (see LEONE 2007, 198-208).

4.8. SUMMARY OF THE CHAPTER

The chapter deals with the funerary customs of the ancient Lepcitanian society. The different types of burial structures together with the funerary rites are here analyzed from the Punic phase until the Late Antique period. The passages from the local burial custom to the Roman one as well as their coexistence have been analyzed taking into account architectural features, decorative elements, funerary rites and epigraphic evidence. Influences with other cultural traditions (Egyptian, Roman and Punic) are considered especially thanks to decorative elements and architectural models of the structures. One of the main goal of this chapter is the analysis of the interaction of the deceased and of its family with the Lepcitanian community often expressed through the remains of the funerary equipments, epigraphic formularies and languages and architectural/decorative elements. Finally, the 35 *mausolea* and the 74 hypogeal funerary chambers are also analyzed considering their position within the landscape showing the habits and the chosen places where to build a single burial or the family *monumentum*. Beside the organized necropoleis located in the inner suburban areas and especially along the main roads, the analysis of the Lepcitanian peripheral landscape shows that the majority of the *mausolea* were built in connection with both the road network and above all with an associated lavish dwelling.

CHAPTER 5

ECONOMIC ACTIVITIES: RAW MATERIALS, PROCESSING, MANUFACTURING AND TRADE

In this chapter are analyzed the sites related to the economic sphere of the peripheral area of Lepcis. A first section (par. 5.1) is related to the quarrying activities. The main section (par. 5.2) deal with the agricultural productions and processes while a third section is related to the activities linked with the products of the sea (par. 5.3). Further parts (par. 5.4) are related to other processed products (glass, lime, pottery, textiles) and, finally, the last section is related to the storage infrastructures (par. 5.5).

5.1. PROVIDING THE BUILDING MATERIAL: THE SANDSTONE/LIMESTONE QUARRIES

The primary sources exploited to build the main structures of Lepcis Magna and its surroundings were sandstone and limestone. Their use is documented indeed since the earliest phases of the city that have been archaeologically documented (DE MIRO, POLITO 2005, 23). Like other main cities in ancient North Africa and Tripolitania, the majority of public and private ancient structures at Lepcis from the early Punic phase onwards used building techniques that exclusively or widely required stone such as the *opus quadratum* and *opus africanum* techniques (for their use and genesis in North Africa see CAMPOREALE 2016). Moreover, the geological formation of the Lepcis area is particularly favourable for their use because it includes both limestone formed during the Cretaceous and above all the Miocene eras and, close to the coastline, the softer sandstone formed during the Quaternary era (in general see DESIO *et al.* 1963; SALEM, SPRENG 1981).

Apart from a brief overview of the ancient quarries made by the *Commissione per lo studio agrologico della Tripolitania* at the beginning of the Italian colonial period (MC 1913, I, 61-64), the different qualities of stone used in ancient times at Lepcis were analyzed for the first time by Chiesa (1949). He identified eight types of stones according to their lithological features, age and provenance and was also able to recognize two different quarry districts. The best known one was located at Ras el-Hammam and another one between Ras el-Mergheb and the undefined area of Wadi Lebda/Wadi Zennad. Recently the Roma Tre University surveys have highlighted the role of the limestone quarries and defined at least three main districts plus other minor

quarries (MUNZI *et al.* 2016, 76-84; see also BRUNO, BIANCHI 2015). The lack of a thorough study that combines the evidence of different type of stones used in ancient structures with the samples extracted from the different quarries prevents us in many cases from establishing which quarries were used to build the main Lepcitanian monuments.

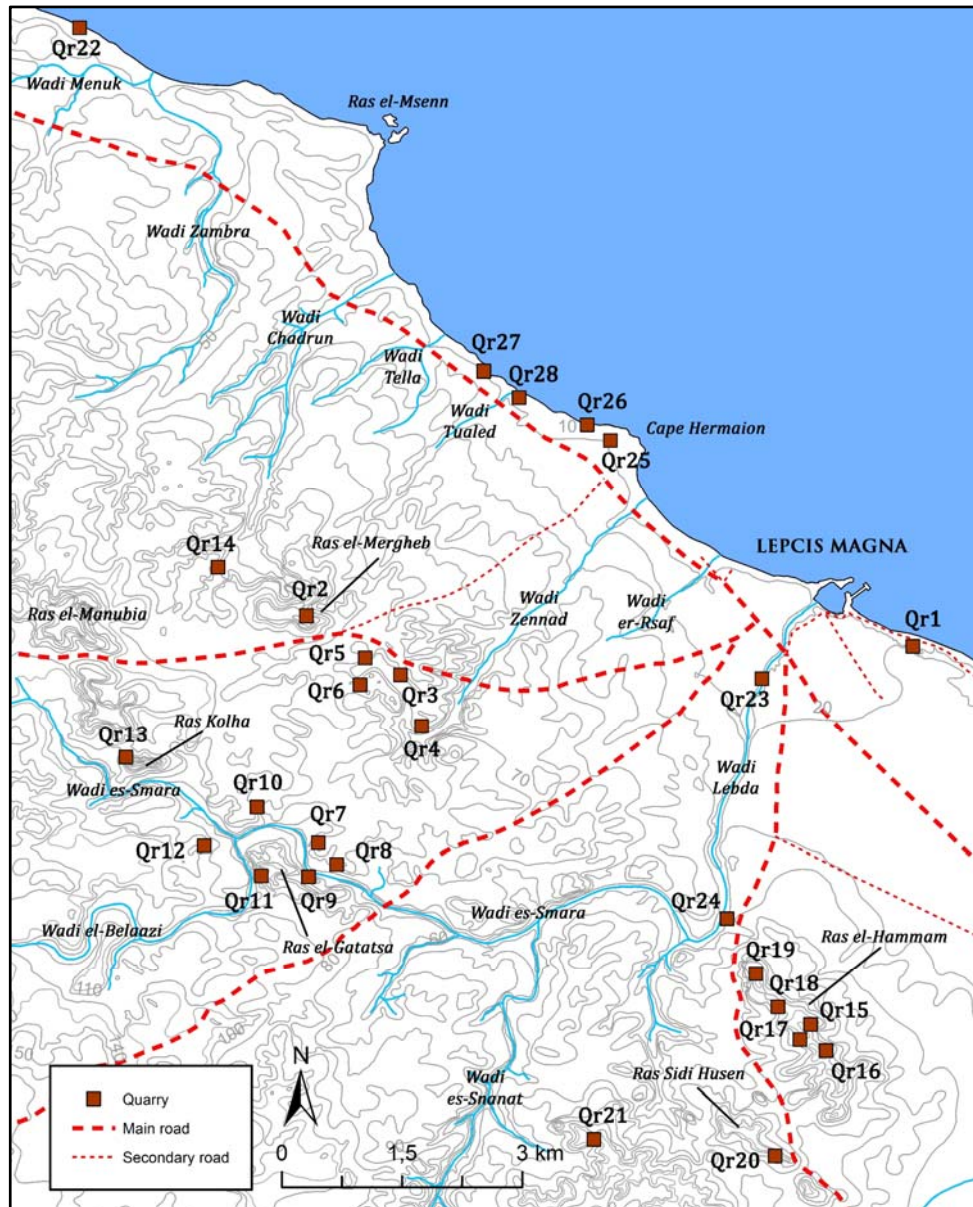


Fig. 5.1. The sandstone/limestone quarries detected in the Lepcitanian periphery.

I have now identified 28 different sites related to quarrying activities (fig. 5.1). Six of these quarries (Qr1, Qr22, Qr25-Qr28) were located along the coast or very close from it and provided essentially sandstone; the other 22 sites were located inland and were characterized by limestone, basically an harder rock compared to the ones extracted along the coast. The majority of these latter quarries were located along the wadi valleys. Erosion along the wadi beds over time left the bedrock exposed and visible along the hills that faced the small valleys. In addition, the hills of Ras el-Mergheb and Ras el-Hammam were widely exploited for stone extraction at least since the early Roman period (Qr2, Qr15-Qr19).

5.1.1. SPATIAL ANALYSIS AND HISTORICAL BACKGROUND: QUARRY DISTRICTS AND ISOLATED QUARRIES

The distribution and the number of the quarries located in the Lepcitanian periphery show, on the one hand, the importance of this raw material for the development of the city and its surroundings and, on the other hand, the different choices and ways of exploiting the stone through time. Doubtless, both the quality of the material and the nearness of the supply areas were the two main factors that favoured the formation of some extraction areas rather than others.

The case of the stone quarries detected around Lepcis Magna would confirm a trend recently highlighted by Russell in his analysis of Roman stone quarrying. Taking into account c. 800 sites related to ancient quarrying activity, he has pointed out the close topographical relationship between quarries and urbanization in many Roman western or eastern provinces and that most ancient cities relied on stone quarried no more than 20-30 km away or a day's walk (RUSSELL 2013, 65-77). Even though the outermost territories of Lepcis (outside the area analyzed) have not been surveyed in depth and no large quarry districts have been identified, it seems that the stone used to build the main buildings and the structures of the city and its periphery came from the quarries detected in the area taken into account (figs 5.1-5.2) and, precisely, within 7-8 km from the city core.

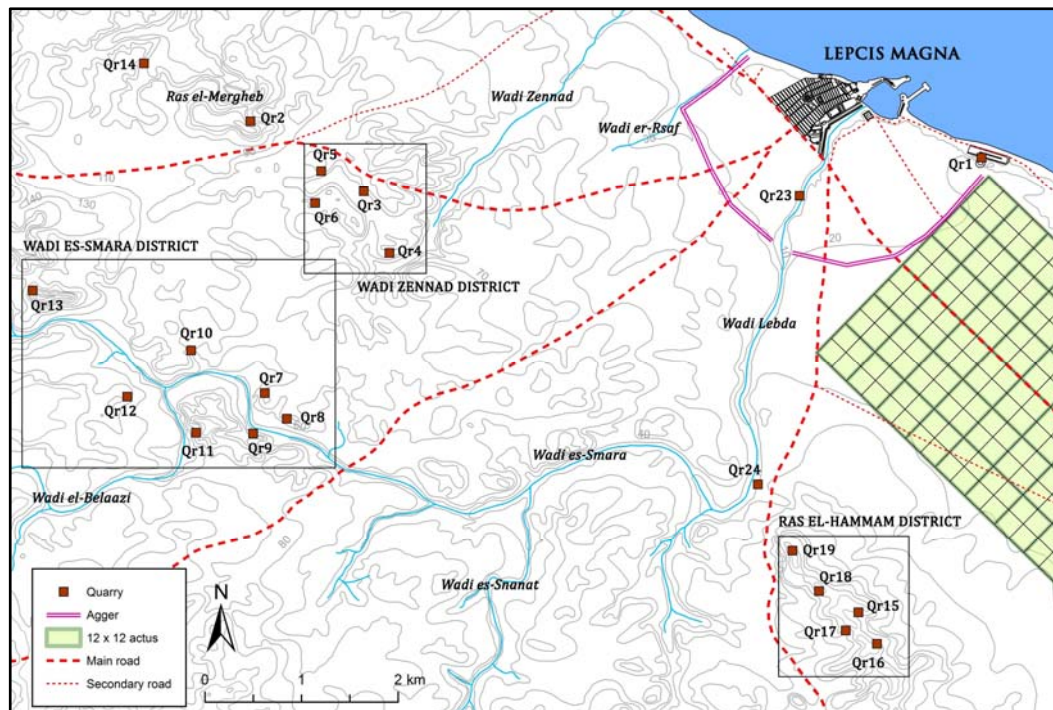


Fig. 5.2. The main limestone quarry districts located in the periphery of Lepcis Magna.

The closest quarries to the city were the ones located along the slope of the Wadi Lebda (Qr23) and the one/s on the Hammangi hill/Sidi Barku (Qr1) where the amphitheatre (En4) and the circus (En3) were subsequently built using the quarry faces. Even though the stratigraphic and petrographic analysis have not yet been done, both these quarries were probably exploited

during the first phases of the city, especially during the Hellenistic phase when marked urban growth has been registered (MASTURZO 2013). Even closer quarries, no longer visible, may have characterized the landscape around Lepcis in this early period: the outcrops of bedrock along the Wadi Lebda close to the harbour and small hills close to the city may have been furnished with sandstone/limestone of different qualities. For example, the Archaic/Hellenistic necropolis of the theatre (Nc5) was set on a small hill and thus it must not be excluded that there was exploitation there of bedrock before the late Hellenistic/Roman city expansion. Similarly, the use of different qualities of sandstone extracted close to the city is attested at *Carthage* since the early Punic phase both for public and private buildings (MEZZOLANI 2008, 8).

However, the use of a range of different qualities of stone is attested at Lepcis since the pre-Roman phases. According to Di Vita (1974, 239, 249), the mooring blocks of the Hellenistic dock discovered at Cape Hermaion (Ti2), c.3 km north-west from Lepcis, were built using the most ancient type of gray limestone from Ras el-Hammam. Even if there is no certainty of the provenance of these limestone blocks from this hill (they could have been quarried from the closer site of Ras el-Mergheb or from the Wadi Zennad district, very similar to the Ras el-Hammam travertine-like stones: BRUNO, BIANCHI 2015, 40), it is interesting to note the need to use a harder stone exclusively for this important purpose instead of using sandstone that could be quarried a few hundred meters away from the construction site (for instance Qr25-Qr26). The use and the need for different quality of stones for different purposes seems to be a common practice also documented at Carthage during the Hellenistic period where, for instance, angular orthostats, jams and thresholds were of limestone while other softer stones were used for the inner part of walls (MEZZOLANI 2008, 16-17).

Beside some particular cases where quality and hardness of stone are an essential, it is appropriate to assume that during the first phases of the city the building material used was quarried as close as possible to the construction sites. Even if it is not possible to date with accuracy the coastal sandstone quarry sites survived along the coast (Qr1, Qr22, Qr25-Qr28), their exploitation must have occurred at least since the early Hellenistic phase. Moreover, the bedrock segments that were visible and exposed along the shore especially in the area near Cape Hermaion and Ras el-Msenn had to be largely exploited: the number of ancient quarry faces visible today should indeed constitute a small portion of this exploitation. Both the modern expansion of Khoms (Cape Hermaion) and of the construction of the new Khoms harbour (Ras el-Msenn) had surely erased the traces of many other small quarry faces (see fig. 2.16). Finally, the use of sandstone extracted along the coast seems to be a common practice also during the Roman Imperial phase to build luxury dwellings along the coast (*villae maritimae*). Examples in the area include two neighbouring sites (Qr27 for VI33 and Qr28 for VI34) and some sites further west (MUSSO *et al.* 2013-2014, 36; MUNZI *et al.* 2004, 52, site 28; LEITCH, SCHÖRLE 2012,

151) among which was the so-called Villa dell'Odeon Marittimo (SALZA PRINA RICOTTI 1970-1971, 141-143).

The recent surveys carried out by Roma Tre University have shown the existence of three different quarry districts located inland plus some isolated quarries (fig. 5.2) that have been exploited above all during the early and mid-Roman Imperial phase (MUNZI *et al.* 2016, 76-84). As already mentioned above, the exploitation of some of these limestone quarry faces (most likely the ones located in the Ras el-Hammam and Wadi Zennad/Ras el-Mergheb areas) could have started in a previous period. The main quarry districts can be distinguished according to their position and their petrographic features: the Ras el-Hammam district, located c.5 km south from the city, the Wadi Zennad district (including the Ras el-Mergheb quarry), located c.5 km west and, finally, the innermost district of Wadi es-Smara, c.7-8 km south-west from the city core.

The Ras el-Hammam quarry district constituted probably the most important supply source for limestone during the first two centuries AD (BIANCHI 2005, 190; WARD PERKINS 1993, 90). The quarry faces of this district were located on the upper part of the hill, both the north-east (Qr15-Qr16 and part of Qr19) and the south-west sides (Qr17-Qr18 and part of Qr19) of the ridge (fig. 5.3). The stratigraphic sequence of these quarries comprises, at least for the main quarry faces



Fig. 5.3. The Ras el-Hammam quarry district (Background image: Google Earth).

Qr15 and Qr16, yellowish and greyish limestone similar to travertine with different degrees of firmness (CHIESA 1949, 26). The main features and sizes of these quarries have been recently published by the University of Roma Tre team (MUNZI *et al.* 2016, 80-82; MUSSO *et al.* 2013-2014, 36). These latter surveys also detected new quarries in addition to the already well-known ones located along the north side of the hill (Qr15-Qr16). The new data allow

us to identify extraction areas along the south-west (Qr17-Qr18) and west (Qr19) flanks of the hill, always in its upper part where the erosion had left the bedrock exposed. Moreover, the finding of massive regular ashlar blocks abandoned at the foot of the quarry face Qr17 suggests that also the south side of the hill was exploited to obtain building material for monumental constructions, most likely referred to the city needs. However on the whole, the quarries that furnished the largest amount of stone were

doubtless the ones located along the north flank of Ras el-Hammam (Qr15-Qr16) with quarry faces more than 600 m long (actually visible) and with a maximum height of 10 m.

Another important quarry district that has been recently detected is the one located between the Wadi Zennad and Ras el-Mergheb (fig. 5.2). The quarry/ies located on the hilltop and along the flank of Ras el-Mergheb (Qr2) are actually no longer visible but were documented in the early twentieth century accounts. They may constitute the northern appendix of the same district (fig. 5.2). Cesare Chiesa (1949, 26) was the last scholar who was able to see part of this quarry and he stated that the petrographic features of the stone extracted there were similar to the grey travertine-like limestone of the Ras el-Hammam district.

According to the data available then, the limestone coming from the quarries of the Wadi Zennad district (Qr3-Qr6) was probably very similar to the ones exploited at Ras el-Mergheb (Qr2) and at Ras el-Hammam (BRUNO, BIANCHI 2015, 40; CHIESA 1949, 26). The recent surveys



Fig. 5.4. The Wadi Zennad quarry district
(Background image: Google Earth).

shows that at least one of these quarry faces located on the west slope of the Wadi Zennad (Qr4), due to its considerable size, more than 200 m long and 8 m high (fig. 5.4), was exploited systematically and most likely its limestone used for the city's needs, like the ones of Ras el-Hammam (in general see Munzi *et al.* 2016, 78-79). This fact, if confirmed by a more rigorous geological analysis, could downgrade the role of the quarries of Ras el-Hammam, considered, up to now, as exclusive in supplying the building material for Lepcis in the early/mid-Roman Imperial period. Both the proximity of

this quarry to the city (c.5 km) and to the Ras el-Mergheb/Lepcis Magna road (Vol. II, App. IV.2.3) could further enforce this hypothesis. The other smaller quarry faces detected in the same district (Qr3, Qr5-Qr6) along the Wadi Seccum valley, a branch of Wadi Zennad, may have used both for the local needs or flanked the largest one just mentioned above (Qr4).

The third district is located along the Wadi es-Smara (fig. 5.5), the main branch of the Wadi Lebda (BRUNO, BIANCHI 2015; MUNZI *et al.* 2016, 79-82). As suggested by Matthias Bruno and Fulvia Bianchi (2015, 35) this district (incorrectly named by them as "Wadi Gadatza") supplied stones for the construction and for the architectural elements of the Severan complex.

Apparently, the extensive building programme planned by the Emperor Septimius Severus for

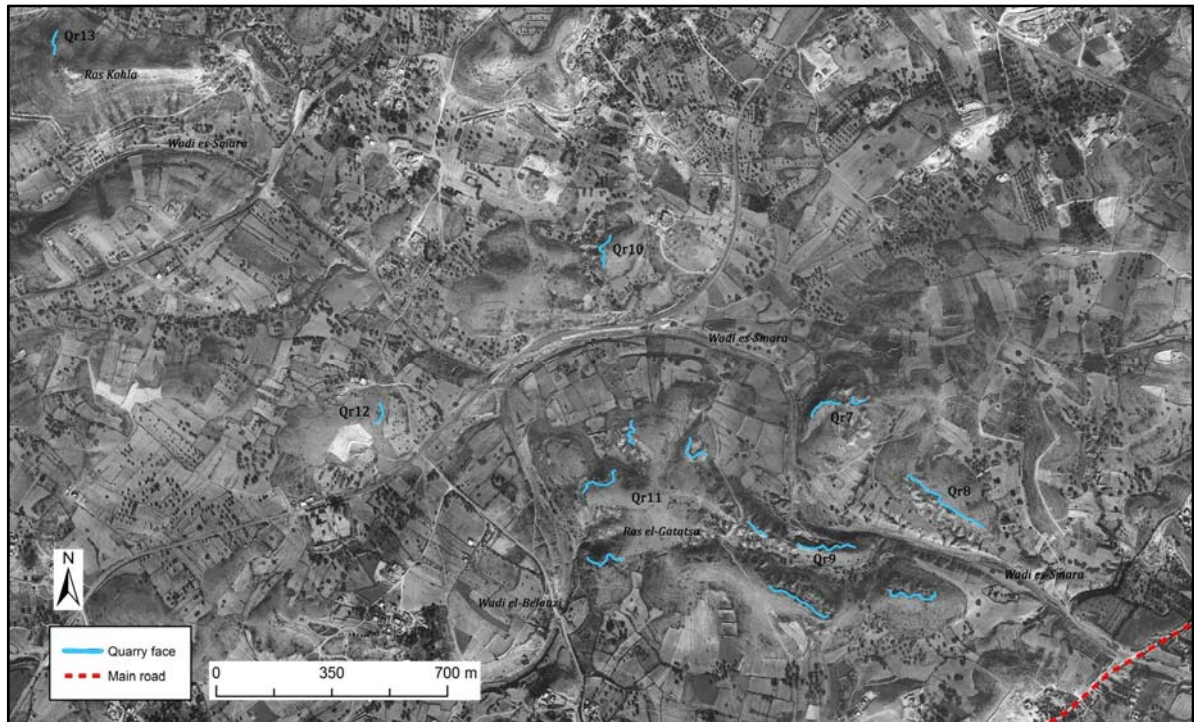


Fig. 5.5. The Wadi es-Smara quarry district (Background image: Google Earth).

Lepcis could not be satisfied by the Ras el-Hammam and Wadi Zennad quarries. The Wadi es-Smara quarry district (fig. 5.5) is characterized by several quarry faces, the main ones of which were located at the Ras el-Gatatsa hill (Qr9, Qr11) and others facing the same hill, on the opposite side of the Wadi es-Smara valley (Qr7-Qr8). After the quarry districts of Wadi Zennad and Ras el-Hammam, Wadi es-Smara constituted the closest hills district to the city that could be exploited to obtain a good quality limestone. Moreover, the presence of the *via in mediterraneum* at short distance to the east would have facilitated haulage to the city.

Beside these three quarry districts, other isolated quarry faces have been found during the Roma Tre University survey (MUNZI *et al.* 2016, 83-84). These quarries (fig. 5.1, Qr20-Qr21, Qr14) along with some others already mentioned along the coast, were probably used for local needs (*villae suburbanae* and farms) rather than the city requirements.

It seems that after the challenging Severan building programme at Lepcis, the stone quarrying activity suffered a sudden slowdown. The lack of significant urban construction plans during the third-fourth centuries AD must have caused the closure and abandonment of several quarry faces, at least for those created and organized to supply limestone for public monumental buildings. It is also noteworthy to remember that the fourth-century city walls (Wa3) were built by mainly reusing limestone ashlar blocks - and even decorative elements - from previous buildings: a clear indication of a changed quarry landscape, at that time evidently characterized exclusively by small local quarries. Moreover, damages and structural collapses caused by the

two significant fourth century earthquakes (AD 309-310 and AD 365), could have made available a considerable quantity of limestone blocks, avoiding to quarry new ones.

5.1.2. WORKING PROCESSES AND HAULAGE

Both the shape of the quarry and the traces of working tools detected on the bedrock help in some cases to understand better how these sites were organized and how the different processing phases worked. The largest quarry faces were the ones exploited for the city needs (Qr15-Qr17 for Ras el-Hammam district, Qr4 for the Wadi Zennad area and Qr8-Qr9, Qr11 for Wadi es-Smara district). In all these quarries, limestone was extracted mainly vertically (for example Qr15-Qr16) or through wide steps (Qr4). As it seems to have been done at the main quarry at Ras el-Hammam (Qr15), it should not be excluded that sometimes the bedrock was exploited underground probably to take advantage of a better quality limestone layer. The size of these quarries and the traces that show that large ashlar blocks were extracted indicate highly organized production that must have included dozens of workers and slaves at peak phases of activity. Unfortunately, due to the lack of any epigraphic evidence, it is not possible to establish the ownership and administration of these quarries. The role of official procurators or private contractors that had the task of ensuring the supply of the proper material to the construction yards can be hypothesized for the main building project of the city (for these aspects see RUSSELL 2013, 38-61). Even less information is available for the organization and administration of the quarries during the Punic phase: the unique witness seems to be an inscription from the island of Gozo related to a public building and mentioning an "inspector/supervisor of the quarries" (AMADASI GUZZO 1967, Malta 6, 23-25; MEZZOLANI 2008, 13). The other medium/small size quarries exploited the outcrops of the bedrock superficially thanks mainly to small steps along the ridges or even horizontally on the hilltops.

In many of the quarry faces detected within the Lepcitanian periphery, the traces of tool marks such as iron/wooden wedges, picks and chisels allow us to determine the different stages of the working processes that were used to separate the blocks from the quarry faces (fig. 5.6; in



Fig. 5.6. Traces of tool marks (pick and wedges) detected on the bedrock of Qr21 (photos: A. Zocchi, 2013).

general see ADAMS 1988, 23-41; FANT 2008, 122-124). Furthermore, the largest quarries still contain debris piles at the foot of the vertical facades. Sometimes these mounds have covered part of the quarry faces, in other cases they have been shifted at short distance from the extraction areas, allowing both the further working processes and the haulage of the blocks to the main routes or to the valley bottom.



Fig. 5.7. A limestone column shaft abandoned at the foot of the quarry face Qr3 (photo: A. Zocchi, 2007).

Once extracted, the blocks, column shafts or other architectonic elements were probably rough-hewn in place and prepared for haulage. A small column shaft found at the foot of a quarry face (Qr3) in the Wadi Zennad district had been roughed out prior to being abandoned and the signs of the chisel are clearly visible on the whole surface (fig. 5.7). Particularly significant is the stockpile of over a hundred parallelepipedal blocks arranged in

parallel lines on a flat plateau at short distance from the eastern quarries of Ras el-Gatatsa hill (Qr11), in the Wadi es-Smara district while another stockpile has been detected close to Qr9. These deposits clearly show two significant aspects: on the one hand the considerable amount of material that have been processed at the same time, on the other they reveal the need to have access to a proper area for semi-finishing the blocks and from which to arrange their transportation to the city building sites. The stockpiles found close to this latter quarries (Qr9 and Qr11) are meaningful since similar devoted spaces could be hypothesized for other sites such as the main quarries at Ras el-Hammam and Wadi Zennad districts where similar quantities of stone could be processed at the same time.

The transport of the stones to the yard constituted one of the most onerous elements of the building process (for these aspects see RUSSELL 2013, 95-105; FANT 2008, 124-125). Generally, the choice of where to exploit a particular bedrock rather than another was dictated by the quality of the stone, though another important consideration concerned the possibility of carrying easily (or with the least effort possible) the material to the final destination. Indeed, it is possible assume that the construction of numerous peripheral *villae*, farms and other structures that used the *opus africanum* technique (characterized by a limited use of limestone/sandstone ashlar blocks), obtained supplies from very near-by quarries created just for this limited use. A different situation characterized the large quarry faces largely exploited for the city needs and for the monumental buildings. In these cases, mainly the Qr4 (Wadi Zennad district), the Qr15-

17 (Ras el-Hammam) and the quarries Qr7-Qr9, Qr11 (Wadi es-Smara district), the haulage to the city could be organized in a different way due to the several types and sizes of the material that had to be carried and also because of the amount of manpower and equipment that would have been available. Since all these quarries faces were located on the upper flanks of hills, a first phase of this transport comprises the movement of the blocks from the bottom of the quarry face - or from a stockpile located nearby - to the valley. The further step would be to move stones onto a proper road and finally reach the building sites within the city (see figs 5.1-5.2).

In the case of the main quarries of Wadi es-Smara district, a slipway (*via di lizza*), c. 4 m wide, was detected at a short distance west from the main quarry Qr9 (BRUNO, BIANCHI 2015, 37). In the absence of other paths, it is possible to consider this slipway the route that granted the link between the quarry faces and the Wadi es-Smara valley bottom. From there the blocks were moved along the wadi bed eastwards most likely until the *via in mediterraneum* and, then, straight to the city. The finds of c. 30 parallelepipedal blocks scattered on the Wadi es-Smara bed between Qr9 and the *via in mediterraneum* would enforce this hypothesis (MUNZI *et al.* 2016, 78; BRUNO, BIANCHI 2015, 40). There is no surviving trace of any slipway related to the large quarry face Qr4 at the Wadi Zennad district. However, also in this case the haulage must have been organized via a slipway to the valley bottom (Wadi Zennad) until reaching the inland route of the coastal road or even continuing northwards until the coastal *via publica*, traversing as much as possible the flat surface of the wadi valley. Finally, scarce traces can be detected for the slipways used for the Ras el-Hammam quarry district; in this case, according to the actual terrain orography, a slipway could have existed at short distance west of the main quarry Qr15. In any case, the limestone extracted from the north side of the hill could have easily reached both the southern road located to the east or the coastal *via publica* to the north. The quarry faces located on the southern flank of the same hill (mainly Qr17) will have been served exclusively by the southern road.

Even if it is not possible to determine how the limestone/sandstone blocks were hauled to the city, it can be hypothesized that mules (or donkeys), camels or oxen were used. At *Mons Claudianus* and *Mons Porphyrites* in the Eastern Egyptian desert, both papyrological evidence and faunal remains have shown the exclusive use of the first two animals while oxen have not been mentioned/found, due - most likely - to their greater needs of water and fodder to reach the Nile through a very dry land (MAXFIELD 2001, 157-165; ADAMS 2001). In the case of the Lepcitanian quarries the use wagons driven by oxen (the most frequently attested animal for heavy haulage in the ancient world) must not be excluded because of a different landscape (rich in water sources and wells and provided with well maintained public roads at least during the early and mid-Imperial period) and, above all, for the short distances involved.

5.2. THE PRODUCTS OF THE SOIL: AGRICULTURAL ACTIVITIES AND ANIMAL BREEDING

5.2.1. CLIMATE, ANCIENT SOURCES, ICONOGRAPHIC EVIDENCE AND HISTORICAL CONSIDERATIONS

Beside some archaeological evidence that help in defining specific agricultural productions, most of our knowledge of the productive processes related to a regional landscape comes from indirect sources such as climate, literature, mosaics and artistic representations and also taking into account historical aspects and geo-morphological features. If on the one hand the ancient cultivation of specific plants is proved by the archaeological remains of some elements related to their manufacturing process, such as stone mills, querns and presses, on the other hand there is a series of cultivated products and livestock that, by their nature, do not necessitate a complex or articulated process to be consumed and thus they have not left any material traces on the sites. In these latter cases, that may constitute a large spectrum of agricultural/animal products, the support of other evidence mentioned above is fundamental, especially where there is also a lack of paleobotanical and faunal analysis.

Some consideration related to climate and geomorphology must be taken into account. The periphery of Lepcis Magna is characterized by a peculiar landscape because it is located precisely at the junction of the Gefara to the west and the Gebel to the south. The area considered comprises a portion of the coastal plain, particularly wide to the south-east and a hilly landscape to the south and to the west, broken up by numerous valleys with seasonal streams (see fig. 2.12 and par. 2.2.1). Generally, the Tripolitanian coastal plains are characterized by a reddish/brown sandy soil particularly suitable for plowing compared to the background hilly landscape where the erosion caused the loss of a proper *humus* on the hilltops and slopes while it is concentrated mainly along the wadi beds. Modern rainfall figures, which are thought to be very similar to the ancient ones (BARKER *et al.* 1996, I, 293-297), show that the area around Lepcis received more or less 300 mm of water per year. This amount of water, sufficient for several tree crops such as olive, was not suitable for large-scale commercial cereal production (requiring 400 mm per year or more) even if it was theoretically enough for dry cultivation of grain and barley (MATTINGLY 1986, 47; 1995, 7-9). Quantity of water is not the only factor that allowed a proper grown of products: a significant aspect that has to be taken into account is also the regularity of the precipitation through the year. Considering the Tripolitanian annual rainfall, including the coastal zones, most of the rain is registered during the autumn season and drought periods are common. Another unpredictable factor is that the soil can become hardened after a particular dry season, making it rainproof and then requiring a constant work and careful water management (see par. 3.2).

Beside these environmental aspects, it is worth considering also the evidence from ancient sources. The first witness that could be related to a landscape close to Lepcis, is given by Herodotus in the fifth century BC. In describing the area, it is important to consider that the

Greek historian cited *Hecataeus* of Miletus who wrote a century before, when Lepcis was little more than a village. Herodotus account is focused mainly on the Wadi Caam area, the perennial river that flows 18 km east from the city and that was known in ancient times with the name of *Cinyps* (MUNZI, CIFANI 2002, 1904; 2003, 87). The area of the Wadi Caam is described as "*the fairest spot of all Libya*" (Hdt. V, 42) adding also that "(...) *there is in no part of Libya any great excellence for which it should be compared to Asia or Europe, except in the region which is called by the same name as its river, Cinyps. But this region is a match for the most fertile farmland in the world, nor is it at all like to the rest of Libya. For the soil is black and well-watered by springs, and has no fear of drought, nor is it harmed by drinking excessive showers (there is rain in this part of Libya). Its yield of grain is of the same measure as in the land of Babylon. The land inhabited by the Euhesperitae is also good; it yields at the most a hundredfold; but the land of the Cinyps region yields three hundredfold*" (Hdt. IV, 198, translation by A. D. Godley, 1920). Since the area of the *Cinyps* described by the ancient historian is close to and geo-morphologically comparable to the south-east section of the Lepcitanian territory, it is likely that both had a similar pattern of landuse, characterized since the Punic phase by arable crops.

There are other generic accounts that may help to understand what kind of crops characterized the Tripolitania and Lepcitanian landscape. An important hint comes from the Caesar's oft-cited annual fine of 3 million pounds of olive oil imposed to the city of Lepcis (Luc. IX. 948-949; *Bell. Afr.* 97. 3). This passage clearly shows the Lepcitanian high production of olive oil before the Romans took direct control of the Tripolitanian region. The area of the Tarhuna plateau has revealed extensive evidence of olive oil presses for the Roman period (OATES 1953; MATTINGLY 1986, 49; 1995, 140-141). Despite this latter consideration, the role of olive groves especially on the hilly landscape of the south and west areas around Lepcis had to be fundamental during Roman times, as attested by the elements of olive presses found within the rural sites (see par. 5.2.3).

Further evidence comes from the account of *Apuleius* (*Apol.* 97. 7; 18.4). His second century AD text offers a clear picture of the wealthy rural estates of *Oea*, thus located in a coastal area that had to be similar to the one that characterizes the peripheral areas of Lepcis. Wheat, barley, vines and olive were the most common cash crops reported in the area while sheeps, goats, horses and cattle were included for stock-raising. However, other productions must be considered such as legumes, pulses and other tree crops (figs, pomegranates, almonds, dates, peaches, nectarines, plums, apples, jujubes, pears, pistachios, carobs) as more generally attested by Strabo and Pliny (MATTINGLY 1986, 56; 1995, 3).

Two passages of the *Historiae* of *Ammianus Marcellinus* are particularly suggestive since they clearly referred to the suburban area of Lepcis. Ammianus, describing the raids on the Tripolitanian coast between 364 and 367, tell us that the tribes of Austuriani "*fearing to come near Lepcis, a city strong in its walls and population, they encamped for three days in the fertile*

districts near the city" and, referring to the same suburban areas, they "*carried off the booty which they had previously left behind, besides cutting down the trees and vines*" (Amm. Marc. XXVIII 6. 4, 13, translation by Rolfe, 1939).

A further set of data referred to the Roman Tripolitanian rural activities comes from some architectural reliefs related to some *mausolea* located in the pre-desert areas and to a number of mosaic representations found within a lavish *villae* of the ancient town of *Sugolin/Seggera*. A considerable amount of relief sculptures related to cereal crops (plowing and harvesting scenes) and constituted a figurative cycle of several *mausolea* from the Gebel areas and from Ghirza, suggesting the main activities of the deceased or, even better, of the local wealthy family/clan (ROMANELLI 1930, 61-65; NIKOLAUS 2016, 208-211). The importance of the cereal crop activities in these areas such as Ghirza had to be significant and should constitute one of the primary sources of livelihood practiced mainly along the wadi beds. The inclusion of rural scenes in funeral structures is attested also at Lepcis, on the Gasr Dueirat mausoleum (Ma3; see par. 4.4.2 and figs 4.18, 4.32) in which the personifications of the four Seasons are carved at the corners of the second storey. Except for Spring, the other three allegoric personifications are preserved: Summer is characterized by a male figure harvesting, Autumn is a female figure engaged in the ploughing activity and finally Winter is a personage carrying fruits. The allegoric scheme of the mausoleum showing the annual flow of time must be read also according to the rural activities practiced in the family's estate on which the *monumentum* was erected. In this case, the close peripheral area surrounding Gasr Duierat - a corrugated plain between Wadi Zennad and Wadi Lebda (see fig. 4.18) - may have thus included cereal cultivation and fruit orchards.

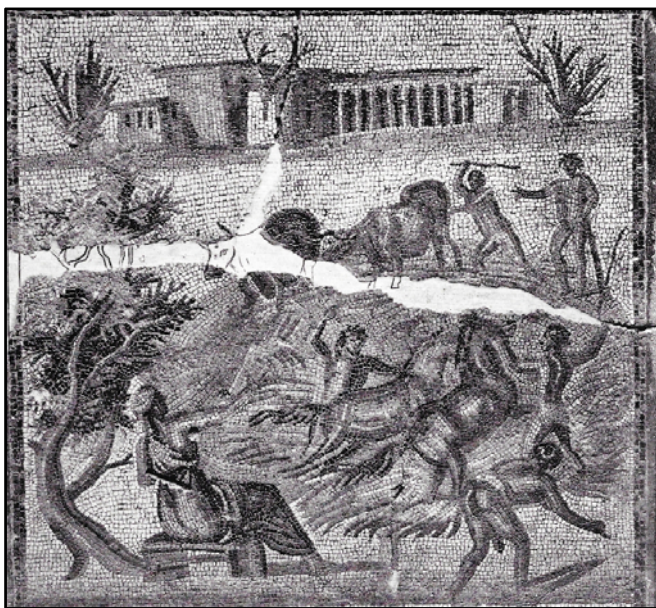


Fig. 5.8. Dar Buc Ammera (Zliten), mosaic with harvesting scene (AURIGEMMA 1960, tav. 124).

Another form of evidence that could be taken into account in considering the ancient Lepcitanian agricultural landscape are the mosaic decorations found within a lavish villa at Dar Buc Ammaera near Zliten (ancient town of *Sugolin/Seggera*), located in the coastal plain strip c.20 km south-east from Lepcis. Three scenes probably belonging to a wider composition show farming activities such as harvesting (fig. 5.8), ploughing and hoeing the fields and pastures. These representations, probably dated to the Severan period, are inserted

in a rural landscape in which different structures such as farms and more monumental buildings - probably *villae* - were included (AURIGEMMA 1926, 85-95; 1960, 55-60; ROMANELLI 1930, 65-75;

PARRISH 1985). Even if the craftsmen who worked along the coastal cities might have used a standardized repertoire for these rural/bucolic scenes, it must not be excluded that they were inspired by the local landscape, in this case (the coastal area) strictly similar to the Lepcis one.

A further set of information that may help to better understand some aspects of the Lepcitanian rural landscape in ancient times comes from modern accounts. Without a doubt, crisis and growth periods may have changed both the natural landscape and the built environment through the centuries but, in the case of coastal Tripolitania, it must not be excluded that general agricultural trends have been preserved. From the Arab conquest onwards, Tripolitania played almost always a peripheral role in the broader market economy and, moreover, it was rarely touched by technological or social developments (see in general ROSSI 1968). Both these factors may have inhibited improvement in its rural landscape and eventually changed the type of crops cultivated. It is also worth considering that during the hardest times of crisis and demographic decline (especially from the mid fifth century AD to the beginning of the Aghlabid period; see MUNZI *et al.* 2016, 72, 110), crops and orchards may have been abandoned thus leaving room for uncultivated and dry areas or spaces used for sheep/goats pasture. However, apart from rare and limited interventions, it seems that the greater transformation registered in the area occurred only during the Italian colonial period when for economic, demographic and propaganda reasons the environment suffered significant improvements.

Some information is provided by two modern Arab sources. The first one by el Aiachi, who crossed the Sahel area between Lepcis (*Lebda*) and Wadi Caam in 1662 and described the land close to the sea "où se trouvant de nombreux palmiers et oliviers ainsi que des jardins arrosés par des sanias" (translation by MOTYLINSKY 1900, 15). The second one is included in the account written between the end of the seventeenth and the beginning of the eighteenth century by Abd es-Slam el Alem. The Arab pilgrim visited the area around *Liggata* (close to where Khoms was subsequently built) and, even if he did not specifically describe its agricultural crops, he named the district (between the sea and the Msellata) with the term *el-Gaba*, literally the Arab term for wood and precisely olive grove (CÈSARO 1933, 43).

Subsequent descriptions were provided by European travellers. In his coastal travel from Tripoli to Egypt in 1817, Della Cella (1819, 29-30, 35, 38-39) mentioned large crops of date palm and olives but also oranges and grapevines and Captain Lyon (1820, 337), in the same period, reported "*the country inland (from Lepcis) being highly and most luxuriantly cultivated, presents a pleasing aspect*".

A more detailed picture of the Lepcitanian agricultural landscape is offered by the Italian scholars in the aftermath of the military occupation (1911). According to their accounts, the irrigated market gardens (*sanìa*, plur. *suani*) were common especially within the coastal areas of the Gefara and in the Sahel of Khoms (south-east of Lepcis) while they were rare in the Gebel

except for some wadi valleys. These irrigated fields were characterized mainly by: date palms, olive groves, pomegranates, apricot, citrus, almond, fig, mulberry trees in addition to alfalfa fields, vegetables crops, millet, barley and wheat (fig. 5.9). The dry or floodwater farming system was the most common agricultural method used in the valleys of the Gebel. These latter gardens (*ginan*, plur. *ginanat*) were mainly characterized by olive groves but also by vines and almond, fig, carob and fruit trees (MUNZI *et al.* 2014, 234; MC 1913, I, 161, 186-202, II, 98-108; MAIC 1913, 220-252; *Missione Franchetti* 1914, 252-261; VALLERO 1914, 20-23; COLETTI 1923, 142-153; BERTARELLI 1929, 230-231).

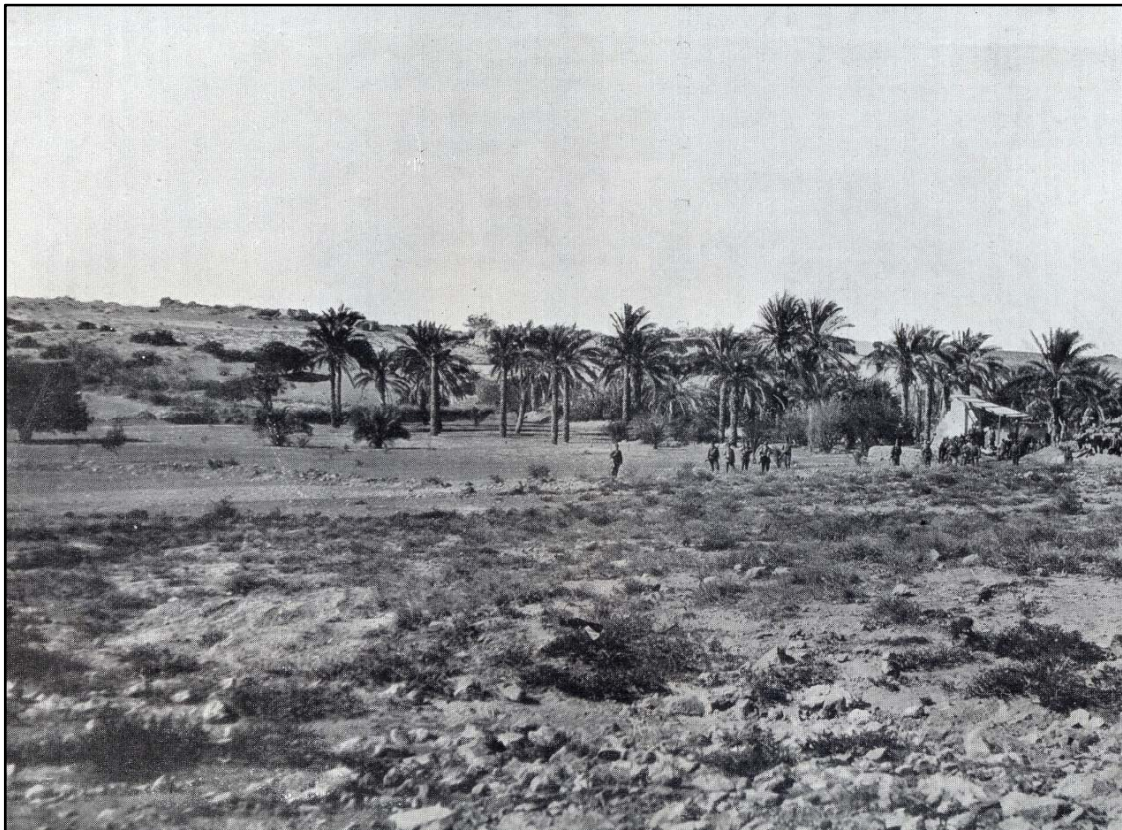


Fig. 5.9. An irrigated garden market near Khoms, 1912-1913 (MAIC 1914, fig. 79).

Before taking into account the archaeological traces related to the ancient agricultural landscape (see below), it is worth considering the overall implication of the data presented above. The information, sources and historical accounts collected clearly show that the ancient Lepcitanian landscape described in ancient time was very similar in terms of type (not in quantity) of crops and livestock with the situation registered during the late Ottoman period (the landscape shown by the first Italian scholars at the beginning of the twentieth century). This is significant because on the one hand it may confirm the veracity of the ancient authors and on the other hand it may suggest similar methods of cultivation/animal breeding. Another important consideration is that, considering both ancient and modern witnesses, the Lepcitanian rural landscape was characterized by a variegated and rich environment in which, according to

different morphological districts (the coastal plain strip and the hilly landscape behind), a large spectrum of crops/livestock can be considered especially during the Roman period.

5.2.2. THE ARCHAEOLOGICAL EVIDENCE: *VILLAE*, FARMS AND FORTIFIED FARMS/*GSUR*

The structures that can be related to the ancient rural landscape come mainly from the recent surveys (MUSSO *et al.* 2013-2014, 30-33; MUNZI *et al.* 2016, 70-76).

The data collected comprise 112 sites (fig. 5.10) that can be divided in *villae* with a *pars rustica* (30 sites = 27%), farms and other rural structures (61 sites = 54%) and potsherd scatters (21 sites = 19%). It has been considered appropriate to include in this section all the *villae* (VI) with both the remains of lavish structural decorations such as mosaics, marble slabs and painted

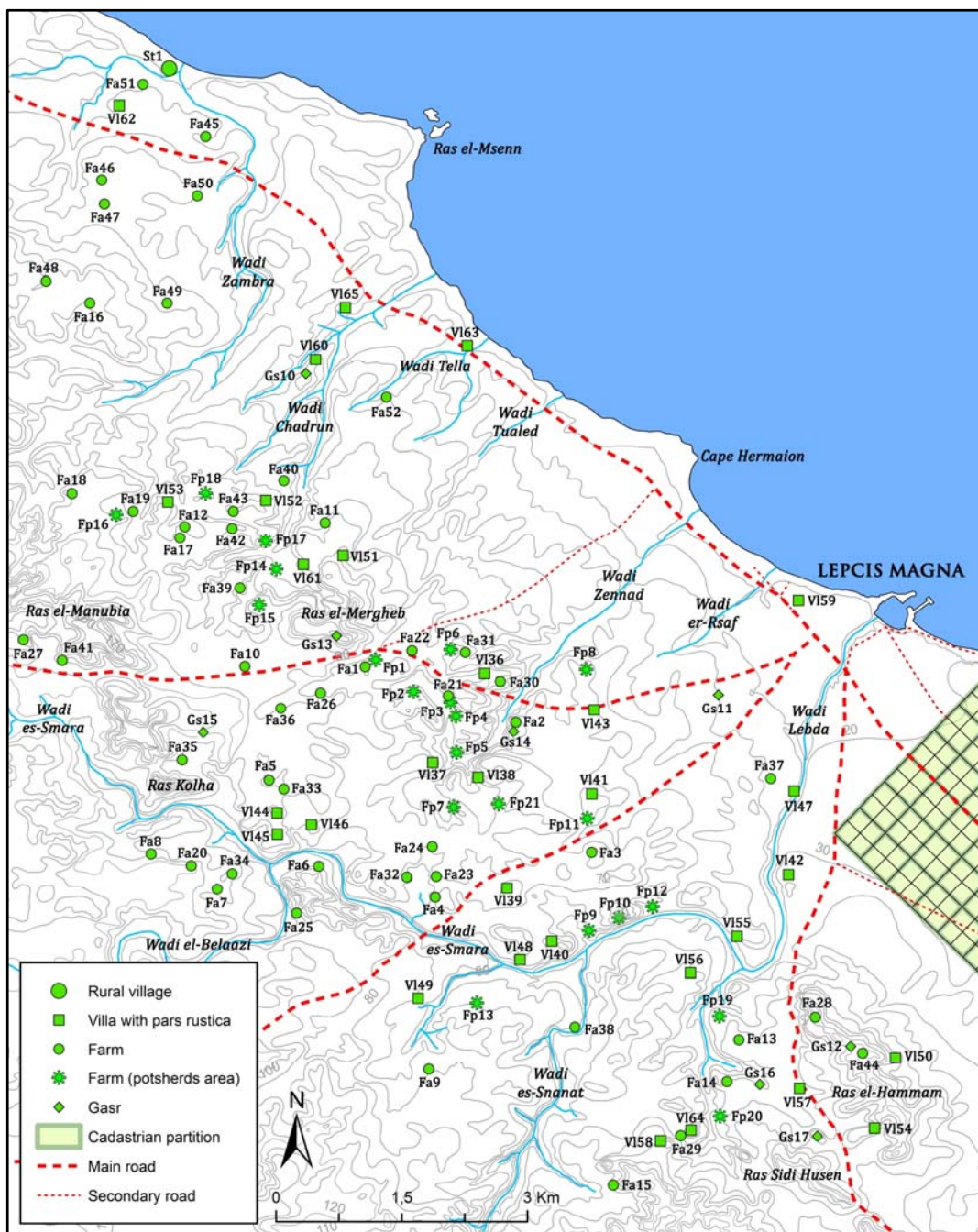


Fig. 5.10. The sites related to agricultural, animal breeding and storage activities in the Lepcitanian periphery.

plaster together with the remains of agricultural production facilities such as olive oil/vine presses and/or mills. The term farm (Fa) covers the structural remains of rural facilities that lack the luxury elements of villas but can be related to agricultural and pastoralism/breeding activities thanks to their position and features. Many of the potsherd scatters related to rural structures (Fp), indicated on the ground by a considerable amount of unshaped building stones probably belonging to simple structures. We can assume that many of these sites originally constituted annexes to farms or even isolated shelters for workers or animals. Some other potsherd scatters have been detected close to water sources (for instance wells) and thus may relate to specific activities associated to their use. Finally, fortified farms (Gs) were built in new spots or on the sites of previous *villae* and farms that had been dismantled/fortified during the Late Antique phase. These structures, known also with the generic term *gsur* (sing. = *gasr*) and commonly attested in many regions of Late Antique North Africa, can be strictly related to the agricultural/storage activities of the countryside (for their description and bibliography see below).

While the majority of the Roman *villae* (VI) recognized in the area have not revealed any traces of agricultural production facilities, on the other hand this may be due to visibility factors. Moreover, stone elements related to pressing or grinding processes that often characterized productive sectors at these sites may have been subsequently moved and reused in other structures such as the fortified farms. As a result, the number of sites provided with certain agricultural production facilities may be underestimated.

The 112 sites are distributed mainly in the area behind the strip of the coastal plain and precisely between 2 and 3 km from the shoreline (fig. 5.10). The reason of this distribution can be explained considering above all modern disturbance factors: the coastal strip both north-west and south-east of Lepcis Magna is indeed the portion of the whole area considered that has been most affected by the development of both the modern city of Khoms and by the new city harbour (see par. 2.2.2 and fig. 2.16). Another factor can be also take into account and it is precisely related to the different ancient land use of the closer suburban areas of Lepcis. In these districts, the existence of fields probably cultivated with wheat, barley, millet or market gardens that could be maintained and worked by people who lived directly in the city, may have played an important role and reduced the number of farms and agricultural facilities related to the manufacturing processes. Cereals, market gardens, fruit orchards if located within a 2/3 km buffer zone from Lepcis Magna could be reached easily from workers who lived in the city or within its close-by outskirts.

Apart from a few sites that are located at a short distance from the coast (fig. 5.10, VI59, VI63, St1, Fa51) and some others in the plain areas between the shoreline and the first behind hills (VI42, VI47, Fa37, Gs11), the majority of the rural structures (and potsherd scatters) are located on plateau, hilltops or slopes of the hills that characterize the landscape between the

second/third km from Lepcis until the farthestmost areas taken into consideration. In particular the sites are grouped along the sides of the main wadis (es-Smara, Zennad, Tella, Chadrun, Zambra) but not along the dry wadi beds. These latter spots were avoided for *villae* - and well-built structures in general - mainly because of the possibility of flooding during the short rainy season and also because the wadi valleys, being less exposed to the winds, were not so much ventilated (Cato *Agr.* I.3; Varro *Rust.* I.12; Columella *Rust.* I.4,10; WHITE 1970a, 416-418). However, it is worth considering that just because of periodical flooding, small ancient shelters/structures built along these valleys may have disappeared through the centuries leaving no traces of their existence. A similar distribution characterized the majority of the Romano-Libyan settlements registered along the wadis of the ULVS survey (BARKER *et al.* 1996, I, 182-190).

The chronological range of these structures is based mainly on the pottery fragments (essentially *amphorae* and fine wares) found within the sites plus numismatic and architectural evidence that may confirm the diagnostic elements of the pottery shreds. However, chronological time spans are often wide covering several centuries - from the Punic phase to the Late Antique period - while the structural remains found within site areas most likely related to the last phases of their existence. This issue inevitably leads to a better knowledge of the rural structures of the Roman and Late Roman periods while the Hellenistic phase is almost always defined by pottery fragments found within the sites that were occupied also in subsequent periods.

Unfortunately, archaeological investigations of rural sites around Lepcis Magna remain few in number and, up to now, the emergency excavations undertaken by the LMDoA (for instance Fa30/Gs8) have been not yet published in detail. A proper analysis related to the structural features of the rural sites of the Lepcitanian hinterland is thus problematic and must be based mainly on what is actually visible at ground-level (information have been summarized in Vol. II, App. II-III).

A first set of data come from the size and the planimetric features of all the different rural structures (*villae rusticae*, *gsur* and other small buildings) still recognizable on the ground (fig. 5.11). Beside a large site located at short distance from the coast and from the mouth of Wadi Zambra (St1) that, according to the built area covered (c.2.5 ha.) must be related to a settlement/small village rather than a single property, I was able to calculate approximate surface areas for 38 sites (42%) on a total of 91 rural structures detected in the area. Among these, four *villae* with a *pars rustica* (VI37, VI50, VI53, VI57) constitute the largest structures with a built area comprised between c.3,600 m² (VI53) and c.2,000 m² (VI37, VI57). The largest one (VI53) occupied the entire surface of an hilltop on the east side of Wadi Chadrun valley while the second one (VI50 = 3,200 m²) was built taking advantage of a wide terrace of the north-east slopes of Ras el-Hamman hill. The other two large *villae* were built taking advantage

of hill tops and part of its slopes: in the inner area of Wadi Zennad (VI37 = c.2,000 m²) and south-east from the Ras el-Hammam hill (VI57 = c.2,000 m²). The two largest rural *villae* (VI50,

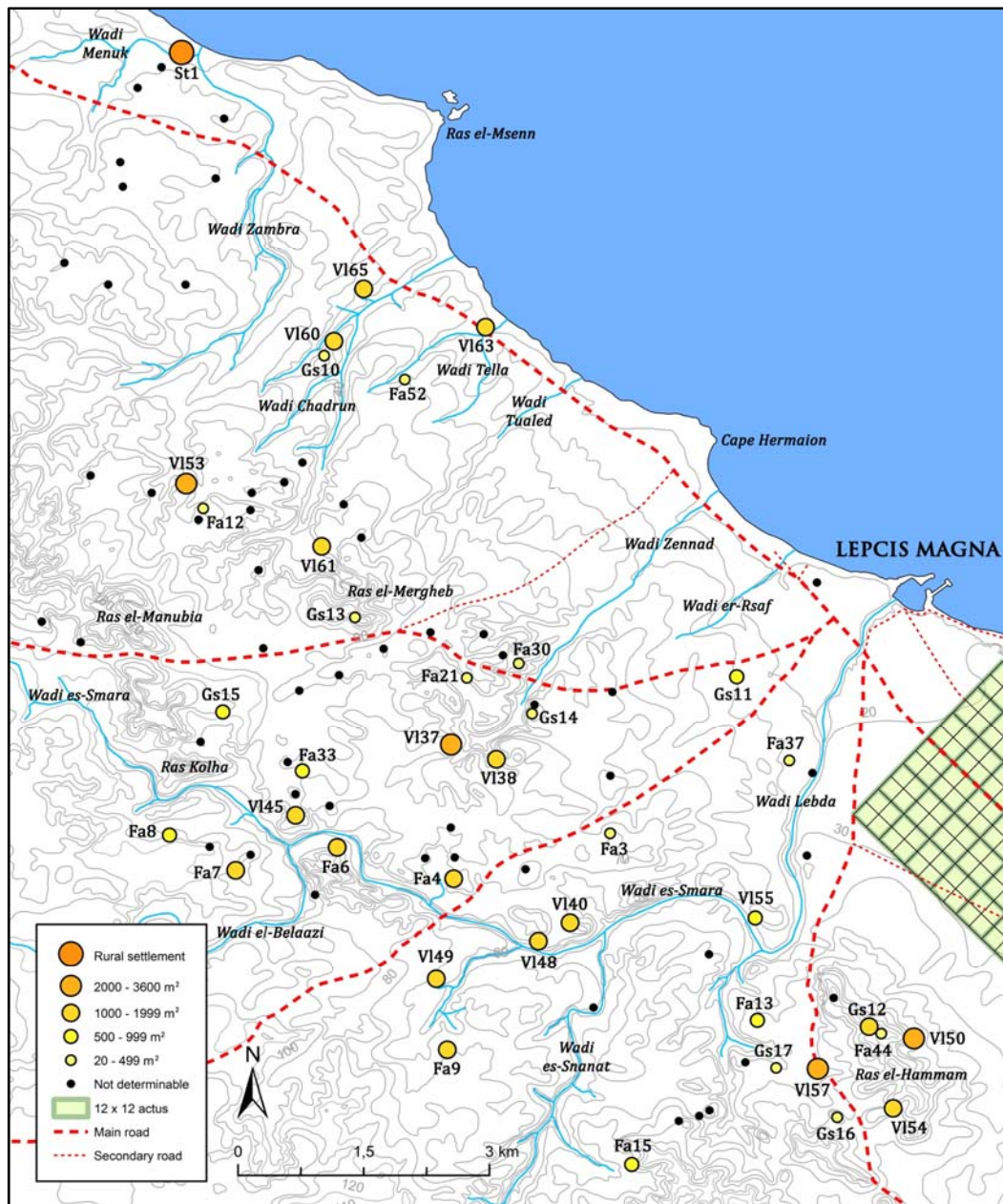


Fig. 5.11. Size (in square meters) of the built areas related to *villae* with a *pars rustica* (VI), other rural buildings (Fa) and fortified farms (Gs).

VI53) were closely connected with *mausolea* (see fig. 4.22, VI53 with Ma11 and VI50 with Ma8-Ma9): a clear further evidence of the importance and wealth of these properties. Another 15 structures (10 *villae*, four other rural buildings and the *gasr* of Ras el-Hammam) preserve built areas comprised between 1,000 and 1,999 m². The majority of these "second rank" buildings were located along the main wadis (es-Smara, Tella and Chadrun). Smaller structures (between 500 and 999 m²) include the smallest rural villa that it has been possible to measure the built area (VI55 = 800 m²) and four other structures related to farms (Fa8, Fa13, Fa15, Fa33) plus two

gsur (Gs11, Gs15). Finally, the smallest structures detected (between 20 and 499 m²) were the ones characterized mainly by long rectangular buildings or small squared structures including some *gsur* (Fa3, Fa12, Fa21, Fa30, Fa37, Fa44, Fa52, Gs10, Gs13-Gs14, Gs16-Gs17). The same size ranges registered in the Lepcitanian hinterland (between 3,600 m² and c.50 m²) characterized the Roman *villae* and other rural structures detected in the territory of *Iol Caesarea* (LEVEAU 1984, 400-404). Despite its distinctive regional environment and the different economic background, Cherchell and its territory shares with Lepcis a similar position: a coastal well developed city with a littoral plain and a hilly background. Compared to the size data available for Lepcis Magna, the data provided by Leveau for the Mauretanian city show similar percentages especially for "the medium-size structures" (between 500 and 2,000 m²). The sizes of unfortified farms and *villae* from several Tripolitanian areas has been recently analyzed by Sheldrick (2016, I, 113-121) who registered a maximum size of 6,000 m² for the central coastal region (Silin and Wadi Bendar areas) and 5,084 m² for the Tarhuna plateau and, for both areas, a median size (50 buildings) of c.1,700 m². However in her catalogue, Sheldrick did not include sizes lower than 64 m² (8x8 m) and she could not comprise other unpublished Lepcitanian suburban *villae* apparently not related to rural activities that exceed her maximum size of 6,000 m² (see par 6.2).

Despite the lack of data, it is possible to notice some structural features that seems to be common for several Lepcitanian rural buildings. The first aspect is related to the use of the *opus africanum* building technique that, it seems, was widely adopted since the early phases of the Punic era (CAMPOREALE 2016) and it is well attested at Lepcis for Roman *villae* (VI) and for the majority of contemporary rural facilities registered in the area (except for the fortified farms that have been built using the *opus quadratum* technique). The traces of these walls are often detectable by the remains of the limestone vertical orthostats still *in situ* or scattered on the ground but also thanks to the numerous unshaped stone elements spread within the sites originally belonging to the mortar-packed sectors between the limestone orthostats. For other small and simple structures the absence of the *opus africanum* orthostats is significant: in these cases (Fa17, Fa20, Fa22-Fa24, Fa26, Fa32, Fa39, Fa42-Fa43, Fa45-Fa47, Fa52) the limited size of the buildings and their specific designated use may have suggested the use of dry-stone walls. Four *villae* (VI38, VI51, VI53-VI54) preserved also part of the *basis villae* characterized by one or two rows of limestone ashlar blocks. The use of the *opus quadratum* technique is also attested in some cases (VI38, VI50, VI55, Fa12) in other sections of the structure probably to give greater support for upper floors or towers.

Except for the structures with a narrow and oblong shapes, the majority of the rural structures detected have a quadrangular plan and they seem to be characterized by a central courtyard with porticoes and rooms along all or part of its sides. This feature has been archaeologically detected in several cases (VI40, VI42, VI45, VI47, VI50, VI52, VI54, VI63, Fa8)

thanks to the traces of wide empty spaces in the central sector of the buildings and/or by the presence of limestone column drums or column bases/capitals that would suggest the existence of colonnaded porticoes (fig. 5.12). Several different spaces may overlooked the courtyard/s: pressing rooms, large and/or oblong rooms such as granary, stores or stables and also, in the cases of *villae*, decorated rooms belonging to the *pars urbana* including thermal areas (VI47, VI50, VI59-VI61; see par. 6.2. For general rules and layout see: Vitr. *De arch.* VI.1).



Fig. 5.12. The main courtyard of the *villa* with a *pars rustica* VI50 (Ras el-Hammam); in the background part of a corner in limestone ashlar blocks, 1946 (J. B. Ward-Perkins; BSR, WP G23-52).

A fundamental element of the construction of the main rural buildings was the water supply facilities. The recommendation of Columella (*Rust.* I.5,2) concerning the construction of underground cisterns for farming activities is here, more than ever, essential due to the scarcity of rain water. In the Lepcitanian area the presence of underground or covered cisterns was indispensable for drinking and irrigation purposes: on a total of 91 rural sites 30 were provided with underground or covered cisterns. Both the underground cisterns and surface reservoirs were generally barrel vaulted and coated with hydraulic coating; underground tanks were usually provided with wells. In some cases subterranean structures were built separate from the main buildings and preferably along slopes of the hills. This latter feature is due to the fact that cisterns have to collect as much water as possible from the soil through external openings/wells and hillsides constitute a natural funnel.

Considering the archaeological remains and the structural traces detected on the ground, it is possible to establish some common features that may have characterized the largest buildings detected in the peripheral area of Lepcis (*villae* and the largest farms). The most frequent

aspects are: the presence of *opus africanum* walls with - in some cases - sections built in *opus quadratum* in support of higher structures, the identification of a large courtyards surrounded often by porches and rooms and, finally, underground or covered barrel vaulted cisterns. Even if these aspects may seem scarce to determine their original aspect, a significant aid is provided by

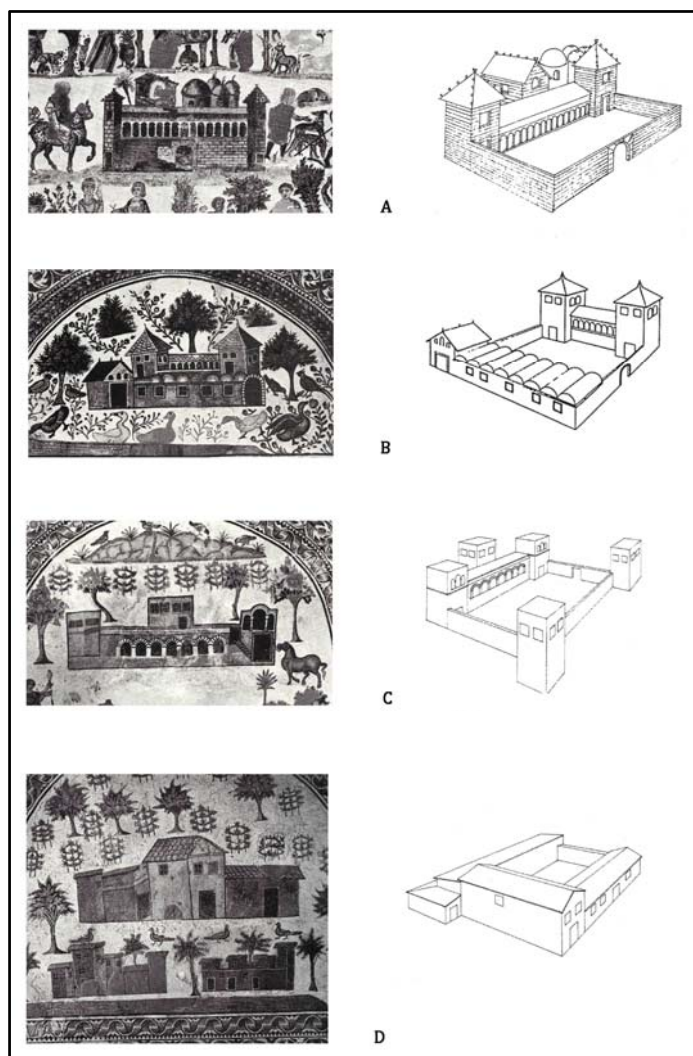


Fig. 5.13. On the left: mosaic decoration with *villae* (ROMANELLI 1970, tavv. 184-186) from *Carthage* (A) and *Thabraca* (B-D). On the right: axonometric reconstruction of the same structures (from SARNOWSKI 1978, taff. 18-20 and DUVAL 1986, abb. 4).

some mosaic decorations. Three mosaics from *Thabraca* and one from *Carthage* in particular clearly show their main structural features (fig. 5.13; see ROMANELLI 1970, 256-258; GROS 2001, 339; RIND 2009, 35-47; DUVAL 1986; SARNOWSKI 1978; WILSON 2018, 273-276). Axonometric reconstructions of the same rural *villae* provide further clues to identify large courtyards, corner towers, porticoes, barrel vaulted cisterns, thermal areas and external arched doorways (registered in VI61). It is significant to notice that all these latter structural features have been detected in the Lepcitanian large rural buildings.

Beside the largest rural Roman structures, a considerable amount of contemporary minor and not decorated buildings can be also connected to agricultural and

husbandry activities. In these cases, plans and size may vary on the basis of the different function of the buildings (granary, warehouses, stables, press rooms, small farmsteads and cattle-sheds). The link and the relationships of these smaller structures with *villae* and with other similar buildings is certainly a factor that must be taken into account (see par. 5.2.4). As suggested by Columella (*Rust.* I.6,21), a series of activities had to be carried out *extra villam* including orchards and kitchen gardens, bake houses and mills but other structures afferent to tenants or slaves could be also considered (WHITE 1970a, 431-433).

During the Late Antique period, and especially when the Roman military presence along the *limes Tripolitanus* became more unstable (second half of the third century AD), a series of fortified buildings spread within the Tripolitanian region, from the pre-desert to the Gebel areas

touching also the coastal zones (MATTINGLY 1995, 202-209; BARKER *et al.* 1996, 164-170, 326). These structures, commonly known with the Arab term *gasr* (derived from the Latin term *castrum*) were, to a different extent, common in many areas of the North African landscape from *Mauretania* to *Byzacena* and touching also part of the Fazzan (a recent geographical synthesis in MATTINGLY, STERRY, LEITCH 2013). The function of these structures is not always clear but, considering the Lepcitanian case, their appearance and diffusion can be related to a different economic, agricultural and military situation. According to M. Munzi, *gsur* constituted the Tripolitanian version of the Roman Eastern and Byzantine *pyrgoi*, that are rural buildings with a twofold function (residential and defensive). In particular a residence (house and warehouse) equipped to face low intensity dangers such as the nomadic raids (TANTILLO, BIGI 2010, 57). When available, the Latin names for these *gsur* recall military structures such as *centenaria* and *turres* (IRT 876) but also the Punic equivalent *nasiba* (IRT 983). However, the term *centenarium*

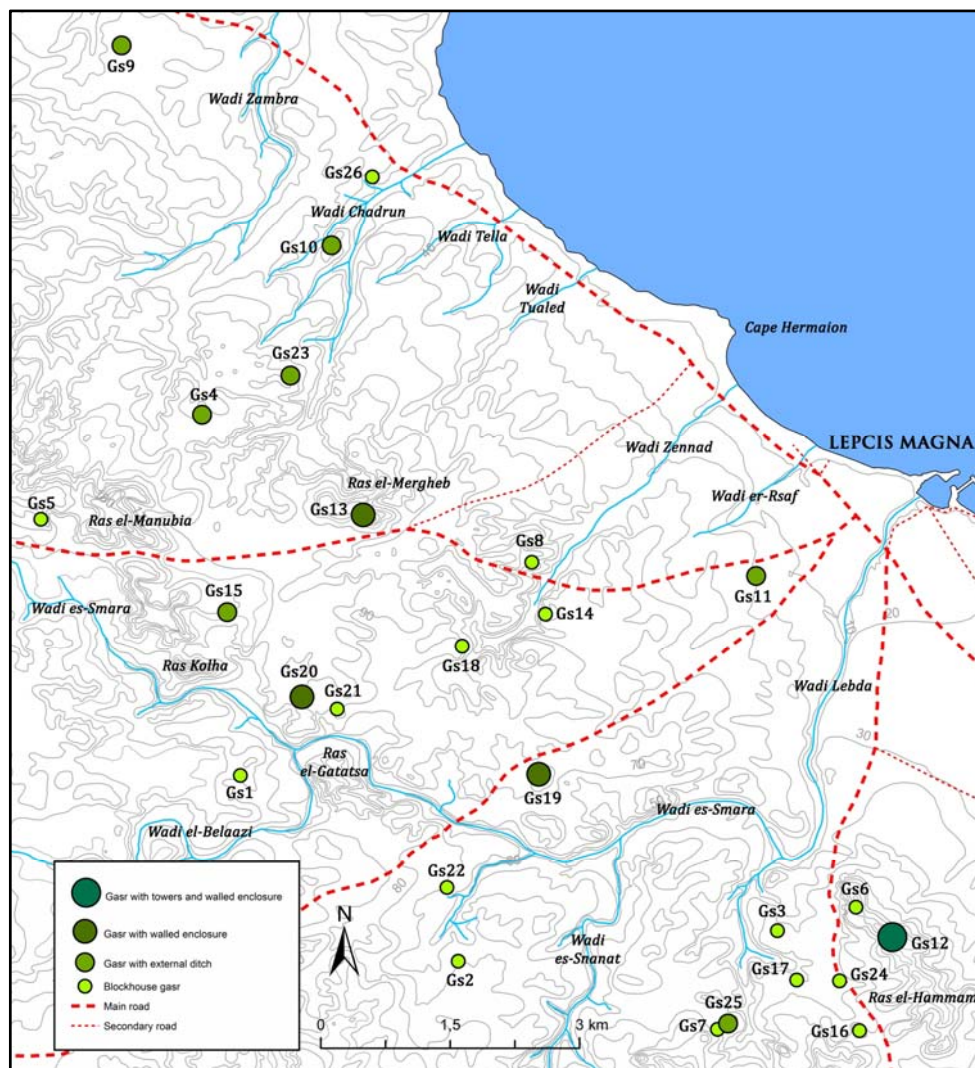


Fig. 5.14. Types and localization of fortified farms/*gsur* (Gs) in the Lepcitanian periphery.

rather than the commander of one hundred men, has to be read most likely with the term *centenum*, a kind of cereal and synonymous of *horreum* (ADAMS 2007, 550-554, 565, 571-572;

MUNZI, SCHIRRU, TANTILLO 2014, 52-55). If we accept this interpretation, the role of these fortified structures as granaries assumes a significant value, linking many of them with the Late Antique rural landscape. In other cases the military features (topographic position and plan) seem to have a stronger role and the control of the territory had to be their primary aim (see par. 3.4).

The chronology of these structures has been related to with the military reorganization and partial abandonment of the *limes* during the third century AD. On the other hand the closest surveys to Lepcis (Wadi Caam/Taraglat and Silin areas) have shown that the diffusion of these fortified farms in the coastal districts occurred mainly during the fourth century AD (TANTILLO, BIGI 2010, 60-61). In the Lepcitanian area the majority of the *gsur* documented were built on previous open farms/*villae* sites making problematic their building dates. However, according also to the close surveys mentioned above, it is possible to hypothesize a chronological range for their construction between the end of the third century and the end of the fourth century, while their abandonment seems to have mostly occurred by the end of the sixth century.

Twenty-six fortified farms/*gsur* have been detected in the Lepcitanian peripheral area (fig. 5.14 and Vol. II, App. III; general and brief account in MUSSO *et al.* 2013-2014, 32-33). The architectural features of these buildings may vary according to size and defensive equipments and, thanks to a recent typological subdivision (MATTINGLY, STERRY, LEITCH 2013), it is possible to divide them into four different types: 15 blockhouse (or tower-like) *gsur* (Gs1-Gs3, Gs5-Gs8, Gs14, Gs16-Gs18, Gs21-Gs22, Gs26), seven *gsur* with embanked and ditched enclosures (Gs4, Gs9-Gs11, Gs15, Gs23, Gs25), three *gsur* with walled enclosures (Gs19, Gs20, Gs13) and, finally, the *Ras el-Hammam gasr* equipped with projecting towers, gates and a walled enclosure (Gs12).

According to the distribution of the rural sites (fig. 5.10), it seems that the majority of these fortified farms were built in the most suitable previous agricultural areas and, at the same time, almost always on hilltops and close to the main road network (fig. 5.14). These simple topographic considerations are however sufficient to enforce the hypothesis of their twofold function (military and rural), at least for the Lepcitanian periphery (for military aspects see par. 3.4). All the *gsur* detected were built reusing limestone ashlar blocks most likely from the previous *villae* or open-farms located in the same spots or a few dozen of meters away. The limestone orthostasts and eventually the *opus quadratum* sections of these previous structures were indeed reused to build these smaller quadrangular fortified stone buildings that have an average size of 15x15 m (see Vol. II, App. III). Some *gsur* were built entirely in ashlar blocks - as clearly suggested for Ras el-Hammam (Gs12), Ras el-Mergheb (Gs13), Gasr Hammud (Gs19) and Gasr Uafi (Gs1; see fig. 5.15) - or by using the *opus quadratum* technique for the lower part and smaller unshaped limestone stones for the upper sections - as largely attested in the Wadi Taraglat survey and in the pre-desert areas (BARKER *et al.* 1996, I, 121-133; MUNZI *et al.* 2014, 220). Beside the parallelepiped stone blocks, other lithic elements were reused from rural dwellings and farms, for instance uprights (*arbores*) belonged to olive oil/wine presses or



Fig. 5.15. The limestone ashlar block walls of Gasr Wafi (Gs1). Two orthostats of a *torcular* have been reused as jambs of the main doorway (photo: A. Zocchi, 2007).

thresholds bring reused for jambs due to their long shapes (fig. 5.15) while other elements have been also reused within the walls (press-beds, counterweights, inscriptions, column bases and shafts and millstones). Despite the scanty data available related to their internal partition, it is possible to believe that the choice to build these fortified structures on the site of previous *villae* or farms was dictated, in the cases of different ownerships, by the existence of already built underground cistern/s.

Most of the *gsur* found in the Lepcitanian hinterland were characterized by a single quadrangular structure (blockhouse or tower-like type). Other structures have left also traces of a further external line of defence/delimitation characterized by a ditch and a related embankment or by a walled enclosure. If on the one hand the presence of these further structural features have to be linked mainly with defensive purposes and probably stables for horses, on the other hand the will to ensure a devoted space for breeding stock that could be protected in dangerous situations should not be underestimated.

5.2.3. OLIVE OIL, WINE AND CEREALS PRODUCTIONS: *TORCULARIA* AND MILLSTONES

The archaeological data related to Lepcitanian agricultural production processes include mainly the transformation of grapes into wine, olives into oil and cereals into different flours. These three agricultural products were the most important staple foods in the classical diet and they formed what is commonly called the "Mediterranean Triad" (ISAGER, SKYDSGAARD 1992, 19-40) Archaeologically, what we mainly see of these processes are presses and millstones/querns.

Despite their large-scale reuse for different purposes, the record of a considerable amount of these devices in the peripheral areas of Lepcis, especially during the recent unpublished surveys, help us to better understand the ways, the places and the quantities of these productions especially for the Roman Imperial period.

In the Tripolitanian area, wine and olive oil were produced using lever and counterweight press types (fig. 5.16). In the case of olive oil, olives were first crushed by stone mills and then the pulp was inserted in a series of flattish and circular baskets that were piled on the top of the other upon a press-bed, with downward pressure exerted by a long wooden press-beam. The beam's hub was anchored in the building wall and, in particular, in between two stone orthostats

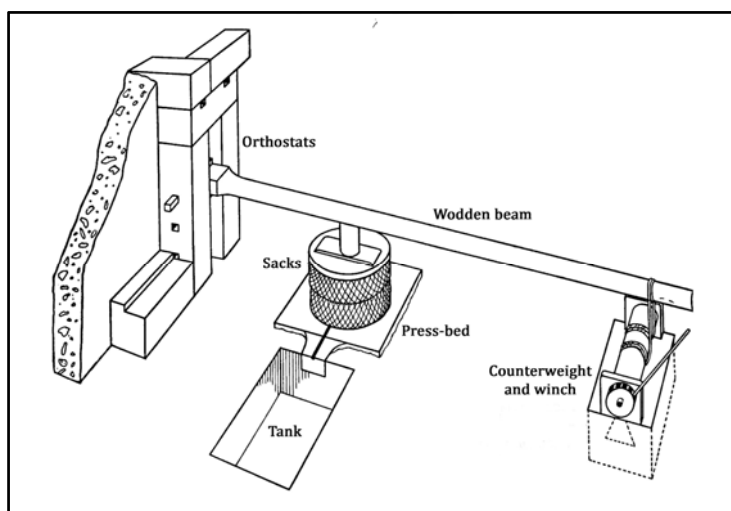


Fig. 5.16. Schematic drawing of an olive oil/wine Roman press (after OATES 1953, fig. 3).

while a large stone counterweight was employed to draw down (through ropes and a winch/windlass) the free end of the beam to allow the pressure on the pulp stack placed in the middle. Finally, the liquid expressed flowed into specific vats/tanks. The pressing of grapes was similar to olives and employed the same type of presses, while the "crushing" phase was obtained essentially by

treading the fruits in specific vats or prepared floors (for general description of the processes see CURTIS 2008, 373, 379-384; HOBSON 2015, 64). The grinding phase of cereals (wheat, barley, emmer and millet) after the parching and pounding stages, was assured by lava querns or rotary mills and then, after proper sieving, the flour (with different raw levels) could be stored and eventually used for kneading (CURTIS 2008, 370, 373-379; WILSON, SCHÖRLE 2009).

Of a total of 113 different parts related to Roman olive oil/wine presses (*torcularia*) that have been found in the Lepcitanian hinterland, 47 (42%) were uprights (*arbores*) between which the wooden beam was inserted, 43 (38%) were limestone counterweights, 13 (11%) were press-beds (*arae*) and finally 11 (9%) were limestone bases in which the vertical uprights were inserted (fig. 5.17). In addition to these elements a series of limestone tanks and *opus signinum* vats have been also noted at various sites; however, although their function may have related to the presses, the lack of a proper topographic analysis of the sites prevents the establishment of a direct connection between these structures and the *torcularia*. The high percentage of limestone uprights and counterweights (the two elements reach 80% of the recorded press elements) can be explained for two different reasons. In the case of the vertical uprights, that often exceeded two and half meters in height their volume and shape favoured

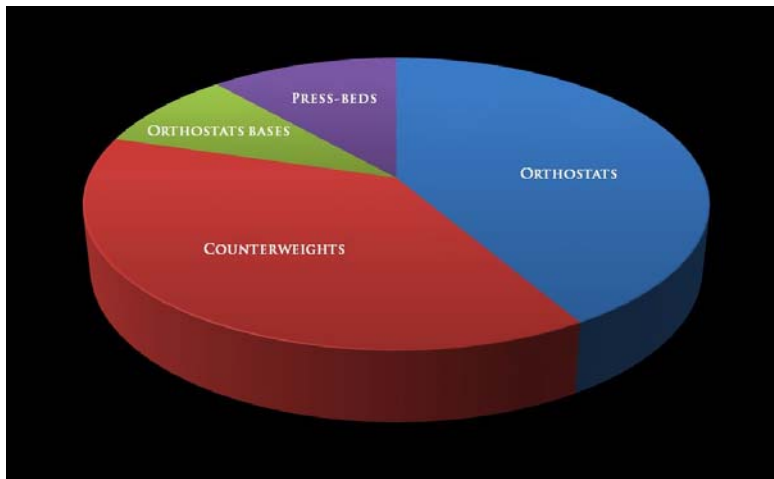


Fig. 5.17. Pie-chart with subdivision of Roman press elements found in the Lepcitanian peripheral area.

their reuse as structural elements, such as lintels or jams in subsequent structures, especially the fortified farms (more than one third of these Late Antique structures have reused at least one press upright: see Vol. II, App. III). In the case of counterweights their massive volume and weight probably prevented their reuse

in subsequent *opus quadratum* structures (they exceeded in height and width the average ashlar blocks) and, at the same time, allowed their preservation *in situ*.

The first element used to crush olives and obtain the pulp to squeeze were millstones (see in general WHITE 1975, 226-229). According to Columella (*Rust.* XII.52, 6-7) there were four different squeezing methods: the oil-mill (*mola olearia*), the revolving mill (*trapetum*), the "clog and vat" (*solea et canalis*) and the "little bruising device" (*tudicula*). In the Lepcitanian area have been found the remains of 12 millstones belonging to the first two types (fig. 5.18). At eight sites

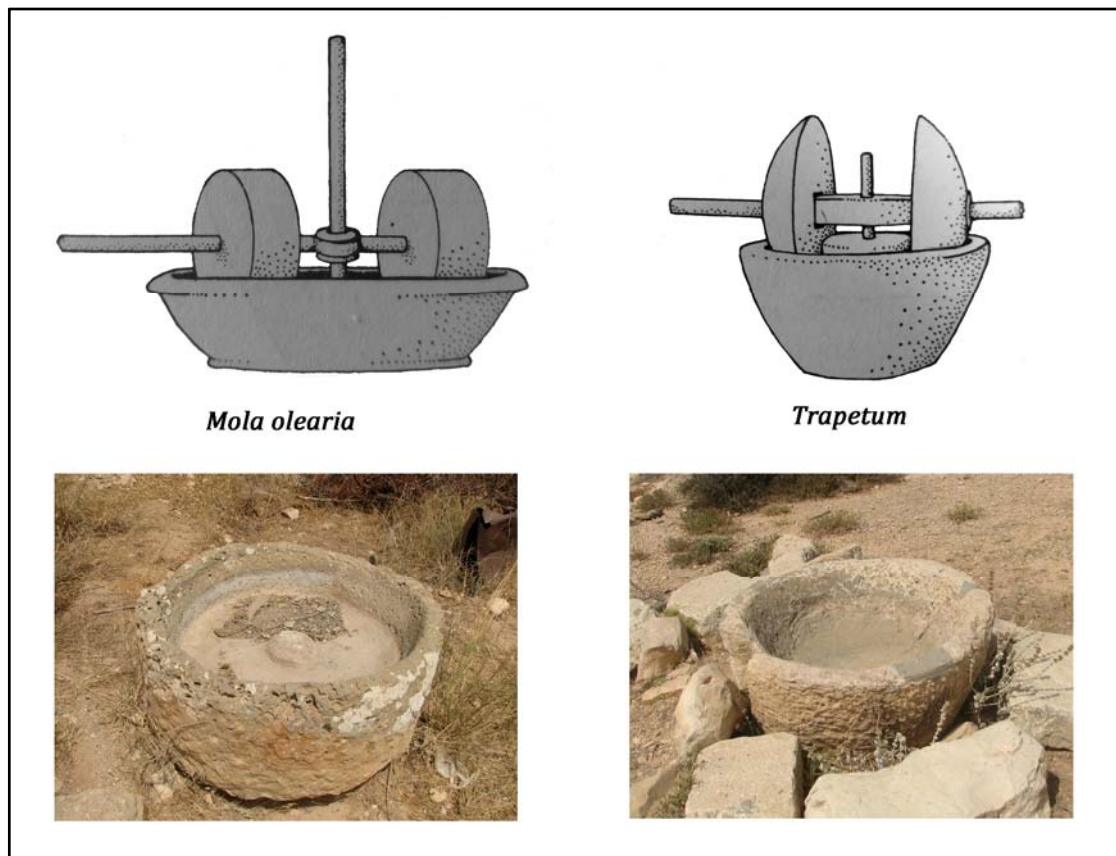


Fig. 5.18. Reconstruction drawings of a *mola olearia* and a *trapetum* (from WHITE 1975, figg. 56, 58) and two examples of *mortarium* found in the Lepcitanian periphery (bottom left *mola olearia* from site Fa6; bottom right *trapetum* from site VI46 (Photos: A. Zocchi, 2013).



Fig. 5.19. Different type of orthostats (from left: Fa6, Fa8, Fa18, VI50) found in the Lepcitanian hinterland (photos: A. Zocchi, 2007 and 2013).

(Fa4, Fa13, Fa19, VI37, VI46-VI48, VI59) I have documented part or the entire *mortarium* of the *trapetum* while in four cases (Fa6, Fa13, VI58 and one close to Fa28) I have registered the remains of *molae oleariae*: two *mortaria* and two *orbes*. Even if the Lepcitanian examples are limited to twelve, the *trapetum* type seems more widespread compared to the *mola olearia*. A similar different diffusion has been recently noticed also for the coastal areas of Tunisia (Gulf of Gabes and above all the south area of Cape Bon peninsula) and, as suggested by Hobson (2015, 68-70), this typological similarity within the coastal regions could be explained by a closer interconnection.

Probably the most visible elements of the olive oil/wine presses were the uprights used to hold the wooden lever. These limestone elements (*arbores*) were erected in pairs on a limestone base characterized by low recesses to house them. All the 11 pier bases found in the Lepcitanian area belong to the "type 1" recently outlined in the region of Gebel Semmama (SEHILI 2009, 208). In accordance to the data available from Tunisia and the Tarhuna area (HOBSON 2015, 67), the Lepcitanian piers were characterized by a wide range of different combinations of holes, slots and grooves that allowed the repositioning the wooden beam lever (fig. 5.19).

Even if it is not possible to determine the typologies of every counterweight found in the Lepcis hinterland due to their position (many of them have been found upside down or were partially buried), it is significant to notice that most of the elements registered were

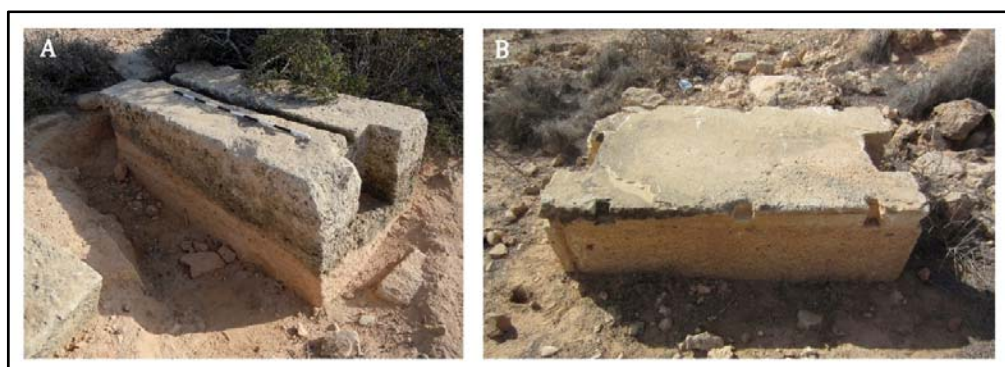


Fig. 5.20. The two types of counterweights documented in the Lepcitanian hinterland: A - from site Fa15; B - from site VI58 (photos: A. Zocchi, 2013).

characterized by a longitudinal groove and by windlass/winch ensured by lateral dovetail notches cut into the stones (fig. 5.20A. See also: SEHILI 2009, 165, type A; MATTINGLY, HITCHNER 1993, type 1a; HOBSON 2015, 65-66). In only one case (fig. 5.20B) an outside counterweight lacked the longitudinal groove and preserves small quadrangular recessions on the long sides of the upper surface (similar to SEHILI 2009, 165-166, type D; MATTINGLY, HITCHNER 1993, type 2a). The majority of the types provided with windlass/winch have been registered also in other North African areas such as in the High Steppe region and in the Gulf of Gabes area (SEHILI 2009, 169) confirming, thus, a general interregional trend.



Fig. 5.21. The different types of press-beds: A - from site VI53; B - from site Fa15; C - from site Fa18; D - from site VI45 (photo: A. Zocchi, 2007, 2013).

Press-beds were limestone slabs on which the liquid (olive oil or mash) expressed from the piled baskets was collected and diverted through a single run-off groove to one or more decantation vats. Twelve of the total of 13 limestone press-beds found in the Lepcitanian periphery can be divided into five different types. Four of these can be assigned to the types outlined by Sehili (2009,

150-161) and recently updated by Hobson (2015, 66-67). The fifth

type, apparently not registered elsewhere, can be added to the prior typologies. The most representative type (Fa4, VI50 x 2, VI51, VI53 x 2, VI58) is defined by a square press-bed with a circular run-off groove (fig. 5.21A) while the other three types, each one characterized by a single example, belong to the square press-beds with a square run-off channel type (Fa15; fig. 5.21B), to a circular press-bed with a circular run-off groove type (Fa18; fig. 5.21C) and to a square press-bed with two circular run-off grooves of different sizes type (VI45; fig. 5.21D). The new press-bed type (found within site VI46 and mentioned in MUSSO *et al.* 2013-2014, 32) is characterized by a square shape with a circular run-off groove and with notches to house a squared removable element (fig. 5.22). These latter carved features are significant because on the one hand may suggest the inclusion of a squared wooden box (*regula*) used to squeeze grapes contemporary to the use of the same press-bed for olive oil and, on the other hand, may indicate a change of use in different periods. However, it is important to notice that the use of *regulae* to squeeze grapes is attested by ancient sources (*Dig.* 19.2; Plin. *HN*, XV, 5 see also DRACHMANN 1932, 150) and has been recently reconsidered (AHMED 2010, 204-209) for all the

press-beds with squared run-off groves (one of these has been also found inside the Lebda Cement Factory located at short distance south-west from the area taken into account).

The only archaeological elements that have been preserved for cereal mills in the Lepcis area are *molae* and hand-querns. In only one case (VI40) part of the *catillus* of a Pompeian donkey mill (*mola asinaria*) has been recorded. The most numerous were the findings related to rotary hand-mills. All these devices, including the *catillus* of the *mola asinaria*, were made using black basalt volcanic stones that can be associated with "Group 3" of the petrographic analysis outlined by P. S. Peacock (1980, 47-48). According to his study, the black basalt millstone elements found at Carthage and also at *Thuburbo Maius*, *Thugga*, *Utica*, Bu'Ngem and *Sabratha* were imported from Sicily (Etna region) or from Sardinia (Monte Ferru massif).



Fig. 5.22. Press-bed from site VI46 with notches to house a quadrangular wooden box (*regula*) (photo: A. Zocchi, 2007).

Recent analysis undertaken on two mortars and one *catillus* from the Lepcis *forum* and along the "Colonnaded street" reveal that their provenance may have been the Lipari and Pantelleria islands or the upper Tiber valley - or even western Anatolia (ANTONELLI, LAZZARINI, LUNI 2005). Despite we lack proper petrographic analysis the same overseas sources seem likely for the peripheral Lepcitanian examples rather than other

closer extraction areas such as the Gebel es-Soda basaltic district (c.200 km South of Bu'Ngem) or the Garian plateau whose land transport would have been much more expensive.

5.2.4. THE LEPCITANIAN AGRICULTURAL LANDSCAPE FROM THE PUNIC PHASE TO THE LATE ANTIQUITY

The archaeological data from the recent surveys together with the analysis of the diagnostic elements collected on the ground, allow me to outline a diachronic evolution of the rural landscape related to the Lepcitanian hinterland from the fourth century BC until the sixth century AD. The archaeological documentation related to the pre-Roman agricultural sites is based essentially on the diagnostic finds and mainly on pottery fragments and the less common numismatic evidence. The lack of structural remains belonging to the Punic and Numidian phases make difficult both a proper topographic reading of the sites and hinders any analysis of what was cultivated/bred in the surrounding areas. Moreover, the majority of the Punic and

Hellenistic rural sites were also occupied during the subsequent Roman phases, a circumstance that most of the time erased the traces of possible previous structural installations. Ultimately, the best preserved phases, in terms of visibility and preservation, are the ones related to the Roman Imperial to Late Antique phase.

The first witnesses of the Lepcitanian rural sites or settlements are dated between the end of the Classical period and the beginning of the Hellenistic age (fourth-third century BC). Thirteen sites (potsherds areas), located above all on the sides of the main valley bisected by seasonal rivers such as the widian Lebda, es-Smara, Zennad, Tella, Zambra, Chadrun, belong to this period (fig. 5.23). Among these sites, the position of a coastal site (St1), as recently pointed

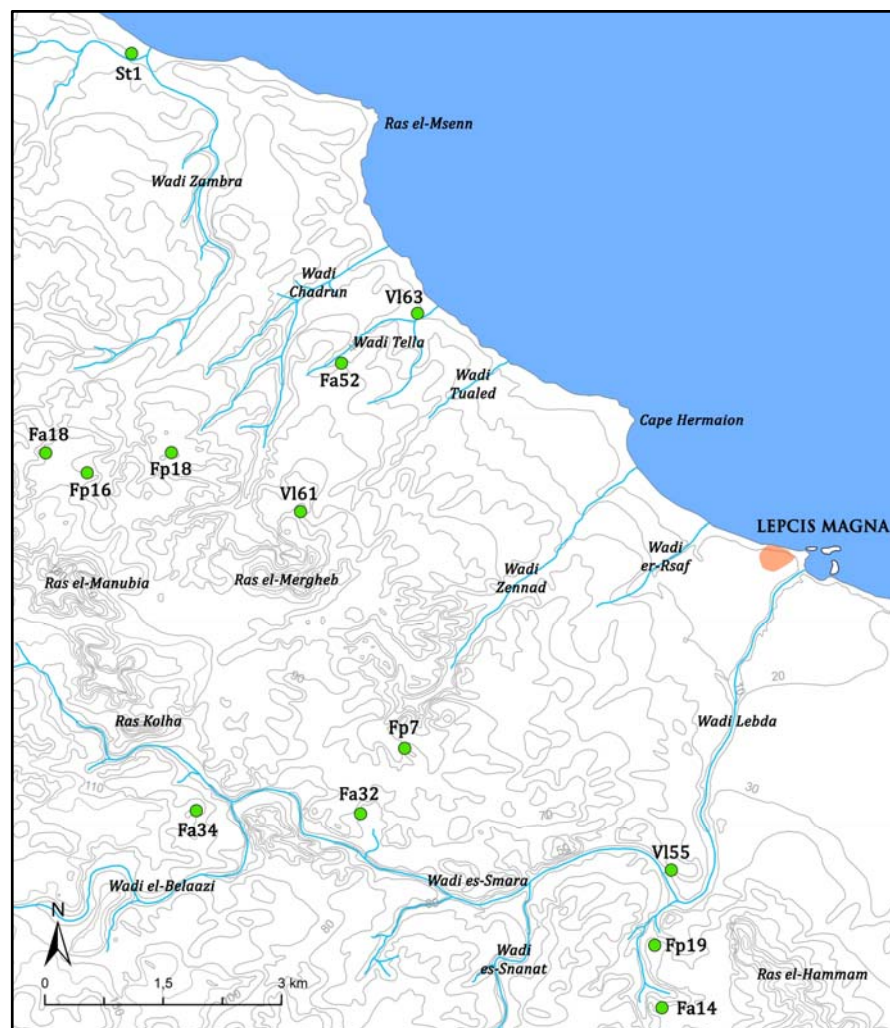


Fig. 5.23. The Lepcitanian rural landscape in the fourth and third centuries BC.

out (MUNZI *et al.* 2004, 19; 2004-2005, 440-441), has a double value: near the mouth of a rich river basin (widian Zambra and Menuk) and close to a sheltered bay that suggests a rural coastal settlement supporting the commercial network of Lepcis Magna. The dating material from this site, like the others found more inland, is characterized exclusively by imported pottery (*amphorae* and some fine wares) and Punic coins. This aspect, together with the lack of any local ceramic production detected, biases and prevents our knowledge in determining the farming activities practiced in these areas in these two centuries. However, since the total of the

imported transport vessels found belong to wine *amphorae* (hole-mouthed Punic *amphorae* and Greco-Italic *amphorae*; see MUNZI *et al.* 2016, 108), it is plausible to consider that grape cultivation was not so widespread and thus wine was imported from outside. Even if the evidence is very scarce and based on weak hypothesis, the data from later periods (second/first century BC) suggest that the most grown crops were cereals and olives and these products were also common during the fourth and third century BC. Finally, according to the already cited passage from Herodotus (IV, 198; see par. 5.2.1), the coastal strip around the Wadi Caam (east of Lepcis) was one of the most fertile soil of Libya and it would seem nonsensical to consider the plain sector located south-east of the city not widely exploited during this phase.

Another factor must be taken into account and it is the one related to the scarcity of sites detected for this period. The low number of sites might be due to low visibility factors, but it is

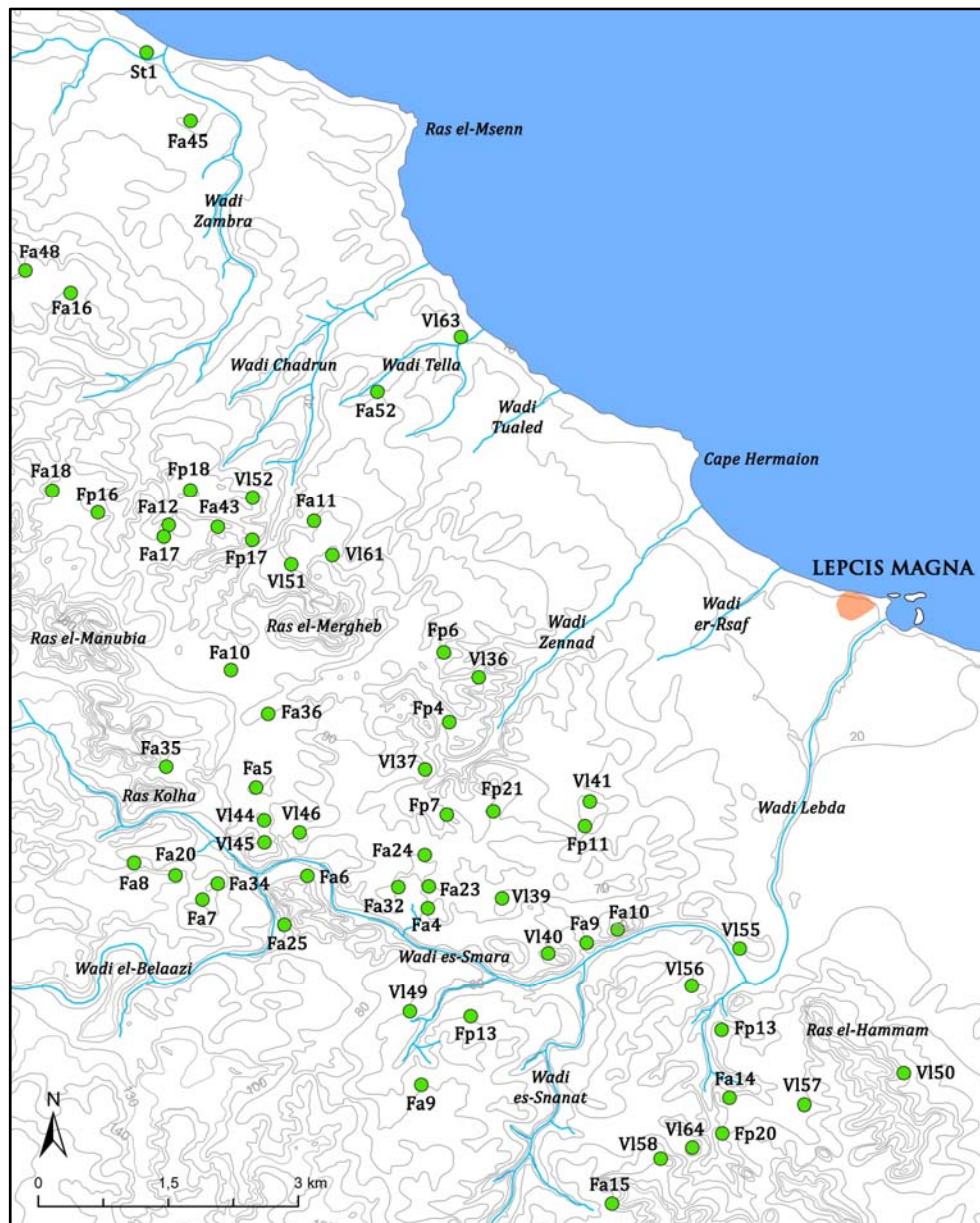


Fig. 5.24. The Lepcitanian rural landscape in the second century BC.

important to consider that we may be looking at both the low demographic index of the period and that farmsteads (thus sites) were not the only way in which rural areas were inhabited and worked. Numerous cases within ancient Mediterranean areas have shown that people were primarily resident in nucleated settlements and commuted to the fields on a daily basis (such studies have been also confirmed by ethnography). The existence of these sparse villages does not exclude the existence of simple structures to keep working tools or house the workers overnight during the busy harvest times (HORDEN, PURCELL 2000, 93; MIENTJES 2002) or, in the case of the Lepcitanian area, to provide also shelters for shepherds and flocks of sheep and goat.

The number of second century BC rural sites shows a significant boost compared to the previous phase (fig. 5.24). The sites detected for this period are characterized essentially by potsherds whose chronology can be assured by black-glazed pottery (Campana A and also local productions), Eastern Sigillata A, particular types of transport vessels (hole-mouthed Punic *amphorae*, Dressel 1 and Greco-Italic wine *amphorae* and, seldom, Rhodian wine *amphorae*) and numismatic evidence (in general see MUNZI *et al.* 2016, 108). The number of rural sites rises from 13 detected for the fourth - third centuries BC to 59, thus recording an increase equal to 353%. This extraordinary growth could largely be explained by the different political/economic situation after the battle of Zama in 202 BC. After the Roman victory, Lepcitanian territory passed from the Carthaginian domain to Numidian control leaving to the Tripolitanian *Emporia* a greater commercial and fiscal freedom supported by the *pax numidica* with the Romans. This favourable situation allowed Lepcis to increase or establish commercial routes especially with the Italian peninsula and Sicily (TANTILLO, BIGI 2010, 48-49; MUNZI *et al.* 2016, 70). At the same time we have also found the first evidence of Tripolitanian exports - and thus a generic surplus probably of olive oil and cereals (the export of this latter group of products can be only hypothesized since it did not travel in pottery vessels) - in the central Mediterranean (PASQUAL BERLANGA, RIBERA COLOMBA 2002). Moreover, the fact that Lepcis paid a daily tribute of a talent to *Carthage* at the end of the third century BC may constitute an indirect proof of a vibrant economy also for the subsequent century. Finally, the urban expansion and the demographic growth registered in the same period (see par. 2.1.1 and MASTURZO 2013, 203) must have played a significant and primary role in the formation of a sedentary rural landscape in the areas around the city that were characterized most likely and above all by farmsteads linked to olive groves, cereal cultivation and animal breeding.

The same positive trend seems to be confirmed also in the subsequent period (fig. 5.25): the new rural sites registered for the first century BC are 19, with a rising from 59 to 78 sites (an increase of 32%). As already documented in the mid Hellenistic phase, the topographic distribution of farm structures seems to be homogeneous on the whole hilly area behind Lepcis and less densely spread along the coastal strip.

The reason for this discrepancy, as already mentioned before (see par. 5.2.2), can be explained above all by modern disturbance factors such as the development of the city of Khoms and the construction of the city's new harbour, but also considering for the coastal areas around Lepcis, the existence of wheat, barley, millet crops or market gardens that could be worked directly from the main coastal settlements. According to Massimiliano Munzi (TANTILLO, BIGI

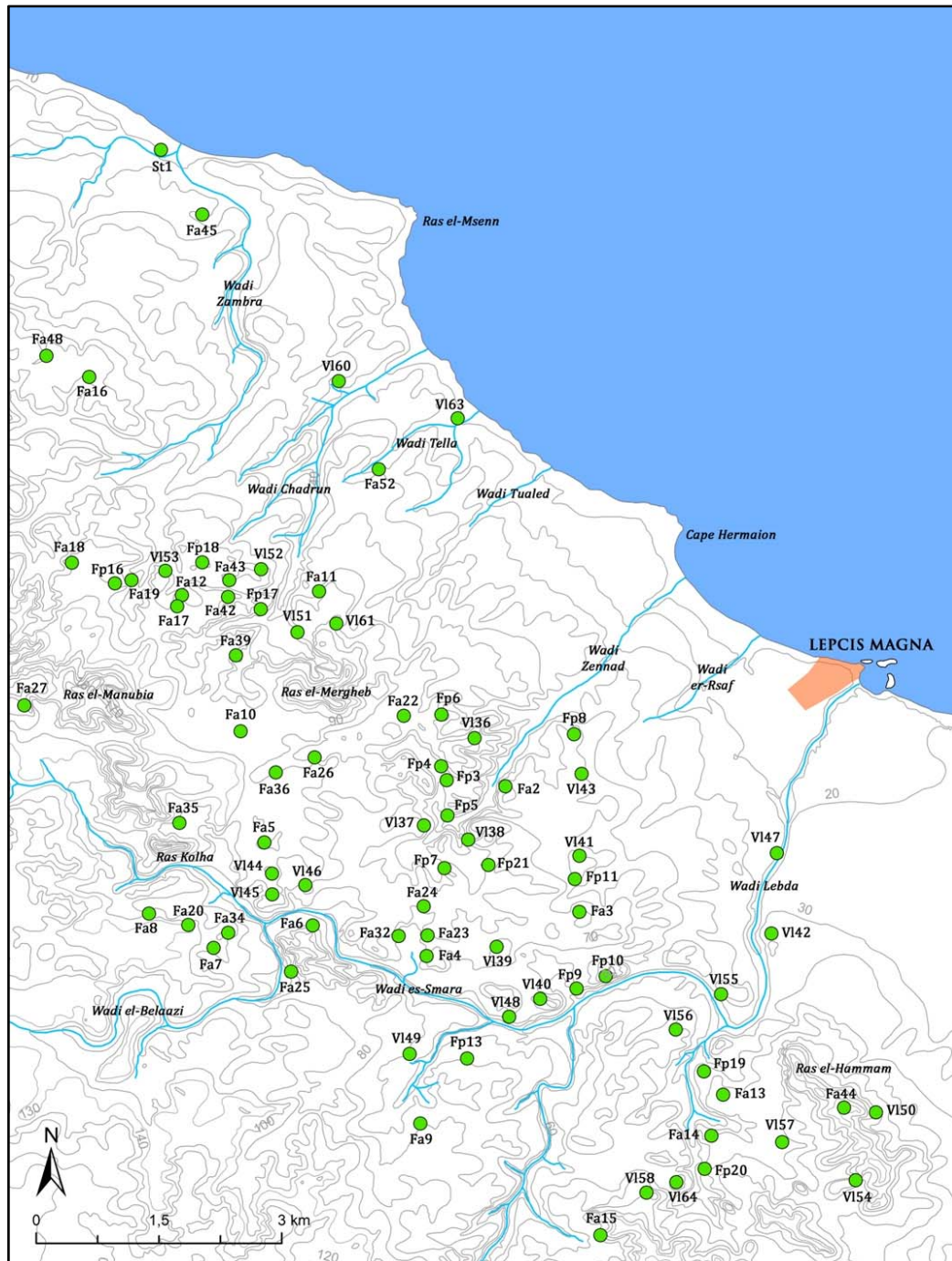


Fig. 5.25. The Lepcitanian rural landscape in the first century BC.

2016, 49), the *Macae* living in the first century BC Lepcitanian suburban areas can be referred to the first group of people mentioned by Diodorus Siculus (III, 49. 1-3): a group of farmers that could exploit a very fertile land and that probably constituted part of the subsequent local elite-

class of the Roman city. Another ancient source that can help in defining the weight of the Lepcitanian agriculture in this period is the famous passage of the *Bellum Africum* (97. 3) mentioning Caesar's annual fine of 3 million pounds of olive oil imposed on the city, reveals a highly productive landscape that involved the whole territory of Lepcis and surely included its peripheral areas. Moreover, the construction or re-definition of the *via in mediterraneum* during the reign of Tiberius (AD 14-17) for military and also economic/commercial purposes (see par. 3.1 and ZOCCHI 2018, 65-66) surely boosted the rural potential both of the Gebel and of the

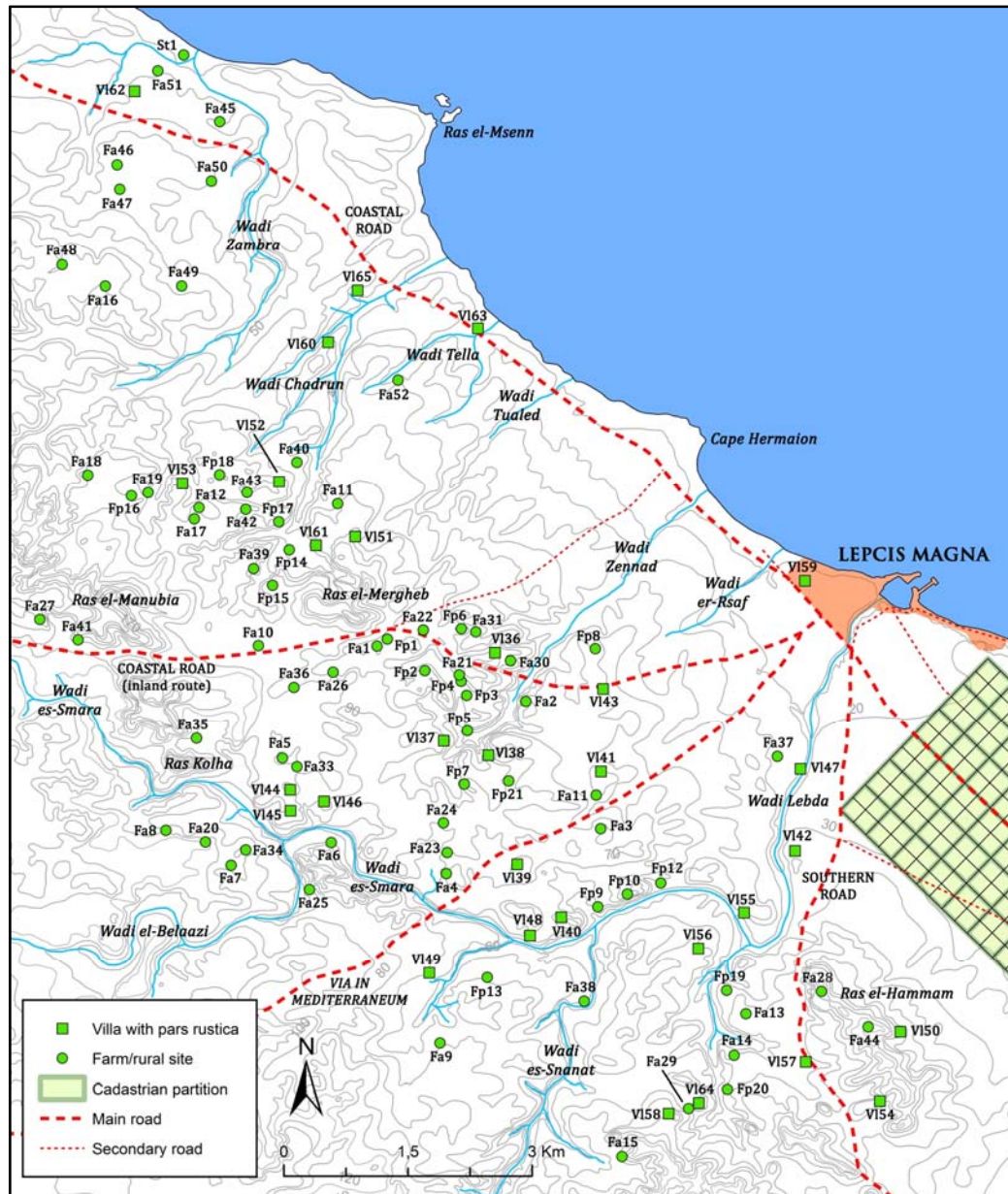


Fig. 5.26. The Lepcitanian rural landscape in the first-third century AD.

coastal inner zone such as the Lepcitanian peripheral area. This Roman intervention cannot fail to consider a previous situation in which the role of olive groves and probably other crops was surely significant and already standing at least during the end of the Hellenistic phase.

The period comprised between the first and the third century AD shows the highest number of rural settlements (fig. 5.26). This phase, corresponding to the Roman Imperial period,

constitutes the chronological era for which we have the most data available from the sites. The archaeological remains of different rural structures dated to this period can be identified and differentiated (simple farms to articulated *villae* with *partes rusticae*) thanks to a more consistent state of preservation of the sites; in addition, from this phase comes the majority of the stone elements related to the production of olive-oil, wine and cereals.

The number of sites rises from 78 to 103 therefore a further increase of 32% compared to the previous period. Of these sites, 30 can be related to *villae* with a *pars rustica* (VI36-65), 54 to other rural structures and the 19 remaining ones to potsherd scatters of less certain interpretation, but most likely linked to agricultural/animal breeding activities. It is also important to keep in mind that, according to the new reading of the plain area south-east of Lepcis, part of the coastal sector was reorganized and parcelled for agricultural purposes in this period (most likely during the beginning of the second century; see par. 3.1; Vol. II, App. IV.2.2) confirming a further rural development for this area, now emphasized by the construction of a capillary water regimentation system and thanks to the new aqueduct from the Wadi Caam (see par. 3.2.1). Both the nearness to a major city and the productivity of the areas taken into account could be easily compared to the landscape outlined by *Apuleius* when he describes the Oean properties of his rich wife *Pudentilla* (*Apol.* 97. 7). In his account, the African writer depicts a landscape dotted by properties and estates and the land owned by *Pudentilla* in itself had a least 400 workers (*vilici, equisones, upiliones*) a quantity that suggest a slave system run by bailiffs, rather than of tenant farmers (MATTINGLY 1986, 51-52; 1995, 143-144; TANTILLO, BIGI 2010, 51). However, the existence at Lepcis as well as for *Oea* of a rural landscape densely exploited and controlled during the Roman Imperial period has to take into account the presence of several structures often nucleated in separate properties and characterized by different types of buildings: from simple huts for herds and flocks to stores for tools and goods, from structures devoted to the rural productive processes to stables and simple farms for workers and slaves and, finally at the upper level, *villae* (often with a *pars rustica*) for the owners and/or for the bailiffs who had the task to administrate the property.

For a proper reading of the agricultural landscape described above, it is necessary to take into account the whole number of *villae* detected in the area. There are further 35 *villae* (VI1-VI35) that, even if they were not apparently strictly connected to rural processing and manufacturing activities, were indeed most likely involved with the surrounding land use and its exploitation (see par. 6.1). Out of a total of 73 sites related to rural activities dated to the Roman Imperial period (excluding *villae* with a *pars rustica*), 20 (27%) were located within a radius of 300 m from the 65 *villae*, 21 (29%) within a radius of 500 m and the 32 remaining ones (44%) located at a greater distance (fig. 5.27). Almost two thirds of the whole archaeological evidence connected to rural activities seem thus related and subordinated to *villae* including those equipped also with olive oil/wine processing facilities. However, even if the data may be

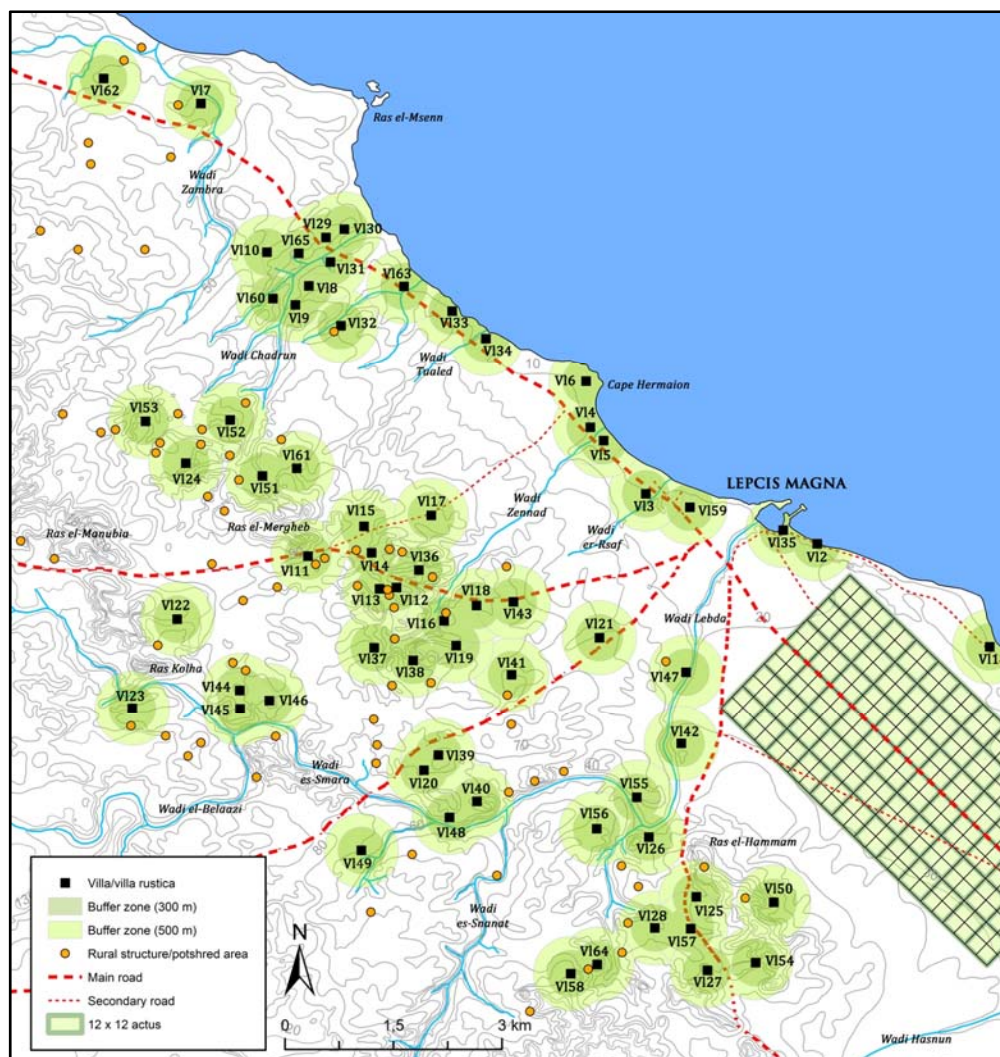


Fig. 5.27. Buffer zones of Roman *villae* and other rural structures (first - third century AD).

influenced by visibility factors, it is significant noticing that 12 of the total of 30 *villae* with a *pars rustica* have not revealed any trace of other rural structures within a radius of 500 m. In these latter cases it is possible to hypothesize that these *villae* were provided with all the required equipment to work, process and store the harvest without the need of further separate structures. Moreover, of these 12 *villae* (VI39, VI42, VI45, VI48-VI49, VI54-56, VI59-VI60, VI63, VI65), eight preserve a built area of more than 800 m² (see Vol. II - App. II; for the remaining ones the area is not quantifiable) that is a size large enough to host different equipments devoted to rural production. Several coastal *villae* that apparently do not preserve any rural equipment and are not associated with any rural sites in their buffer zones (fig. 5.27) are actually located in sectors where the modern disturbance behind the seashore is particularly intense (Khoms and its modern harbour; see par. 2.2.2). This modern and often uncontrolled overbuilding activity has probably erased many ancient rural sites located between the coast and the first inland hill slopes.

However, although the lack of any epigraphic or archaeological evidence prevents even an approximate reading of ancient rural Lepcitanian boundaries or properties, the distribution of

villae and rural sites clearly shows that the inland suburban landscape was densely dotted by several estates and properties or by larger estates each one characterized even by separate lavish structures.

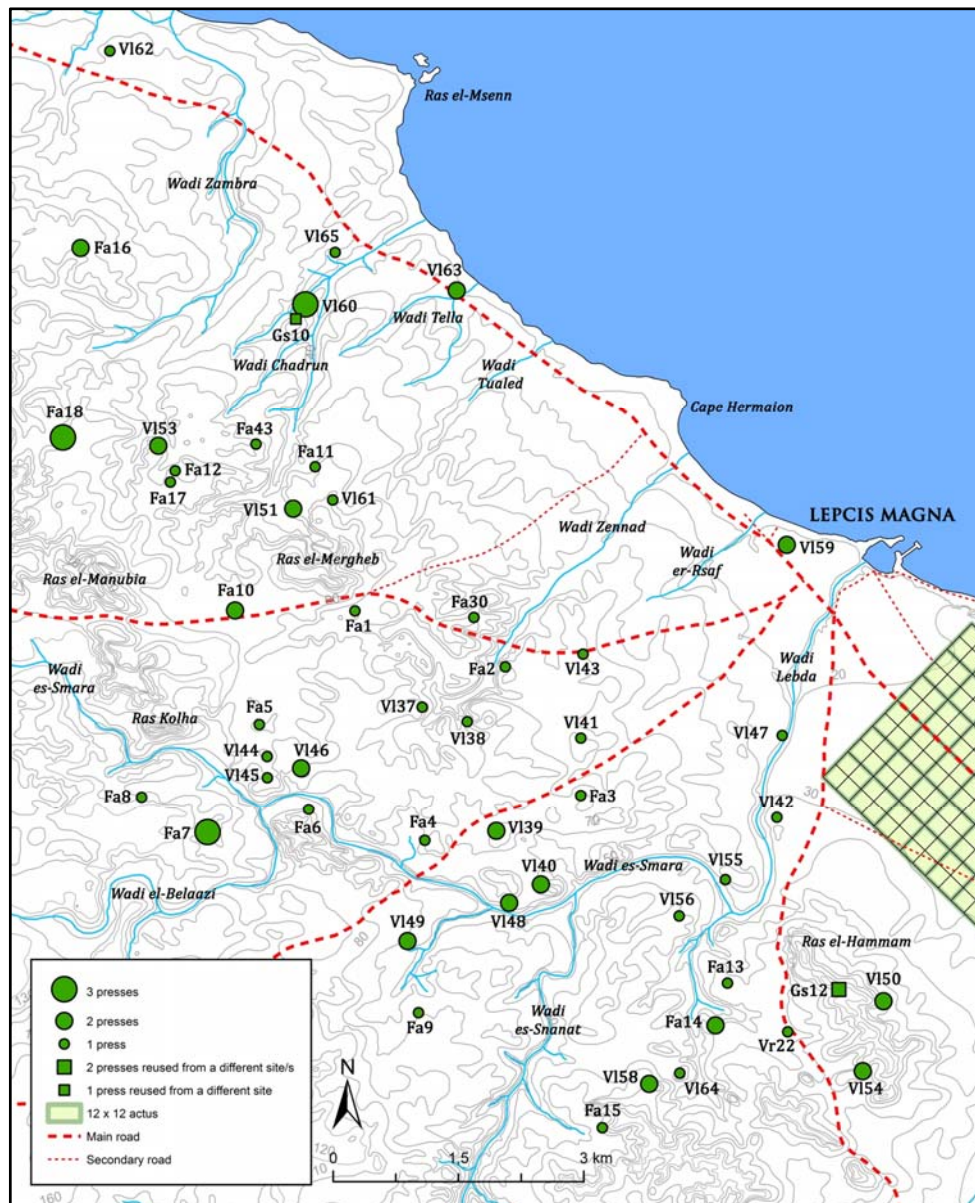


Fig. 5.28. Number and distribution of presses within the Lencitanian peripheral area.

Beside the topographic distribution of the rural sites, a new set of data comes from the quantity and the distribution of the main equipment for olive oil/wine production (*torcularia*) and cereals (mills). Within the analyzed area, 72 presses distributed in a rather homogeneous way especially in the inland areas (fig. 5.28) have been detected. The coastal strip has yielded less evidence of stone press elements, mainly for the reason mentioned above (modern disturbances) and also because part of the plain coastal strip and the close suburban areas were most likely cultivated by different crops rather than olive groves and grapevines. The minimum number of presses per site found in the Lencitanian peripheral area ranges from one to a maximum of three units, detected in only three cases (VI60, Fa7, Fa18). However, at two sites

other press elements were reused in close-by adjacent fortified farms bringing their total figure to four (two presses reused in Gs12 probably originally belonged to VI50 and one press found within Gs10 belonged to VI60). Nevertheless, it is important to keep in mind that the minimum number of presses does not imply a number of *torcularia* in contemporary use since in some cases a high number may simply relate to the greater longevity of a site (HOBSON 2015, 80).

On a total of 48 sites with traces of *torcularia*, 30 (63%) are characterized by only one press, 15 (31%) by two presses and, finally, 3 (6%) by three units. Contrary to what have been registered in other areas such as the Gebel Semmama in central Tunisia and Gebel Tarhuna in the eastern Tripolitanian region where large *huileries* (sites with more than 15 presses) have been found, the peripheral Lepcitanian landscape could be compared, in terms of minimum number of presses per site, to the grain-producing areas of north Tunisia and the coastal region of Kelibia (Cape Bon), where the majority of farms have only one or two *torcularia* (HOBSON 2015, 80 and fig. 3.15).

A further comparison can be made considering the number of presses per km². If we consider the whole area taken into account (c.130 km²) the result is 0.54 presses per square km (fig. 5.29). However, if we exclude Lepcis' urbanized area and the inner suburban districts occupied in the early and mid imperial period by *necropoleis* (and other structures) and also the plain parcelled area south-east of the city - where olive-oil and grapevines were probably largely absent - the square km that must be taken into consideration drops to c.100 and the number of presses per km² increases to 0.72. It is important to bear in mind that in order to save transport costs olives were generally crushed and squeezed close to the olive groves (oil from pressed olives weight to 20-25%) and thus olive presses were generally located close by the cultivated areas.

REGION/SURVEY	AREA	PRESS SITES	PRESSES	PRESSES PER KM ²
Tarhuna plateau	115 km ²	65	215	1.87
Thugga	198 km ²	95	207	1.07
LEPCIS MAGNA (min. area)	100 km ²	48	72	0.72
Kasserine	75 km ²	18	50	0.67
LEPCIS MAGNA (max. area)	130 km ²	48	72	0.54
Thullio/Oanellaba	1,338 km ²	/	c. 480	0.35
Segermes	150 km ²	32	40	0.27
Gebel Semmama	597 km ²	30	157	0.26
Tebourba	566 km ²	72	89	0.16
Kelibia	233 km ²	24	26	0.11
Wadi Sejnene	557 km ²	25	32	0.06
Gabès	375 km ²	6	6	0.02
Mahdia	423 km ²	3	3	0.01

Fig. 5.29. Quantities and distribution of olive-oil presses in different North African regions (after HOBSON 2015, tab. 3.4 and DE VOS 2013, tab. 6.1).

Compared to other North African regions data summarized recently by Matthew Hobson (2015, tab. 3.4) and partially by Mariette De Vos (2013, tab. 6.1), the press density values attested for Lepcis (0.54 or 0.72) are similar to the one registered for the Kasserine survey (0.67

presses for km²), definitely lower compared to the *Thugga* area (1.07) and much higher than the other coastal and inner regions of modern Tunisia and Algeria (values from 0.35 to 0.01 presses per km²). Compared to the Gebel Tarhuna, probably the most intensive olive-oil crop zone of the Lepcitanian territory recently analyzed by Muftah Ahmed (2010), the peripheral Lepcitanian landscape has less than half of number of presses per km² (the value registered by Ahmed is 1.87: 215 presses in c.115 km²). The value recorded for the Tarhuna plateau survey seems to be aligned also with the data from the small Wadi Bendar survey (c.12 km south of Lepcis) where on a total of 5 km² surveyed were detected at least 11 presses (FONTANA, MUNZI, RICCI 1996; HOBSON 2015, 96-97).

Even if the chronological time span considered in this phase comprises more or less three centuries and in some cases an overall overview may be misleading, the low quantity of presses per site and the reasonably high number of presses per square km (compared to other North African case studies mentioned above), allow me to make some observations. On the one hand, the low number of presses per site could indicate that the peripheral Lepcitanian landscape was fragmented into many small properties each one provided with one or often two presses. On the other hand, the number of presses per square km would suggest that the rural structures located in the inland periphery of Lepcis were primarily involved in olive-oil production, but most likely practiced a mixed farming régime in which other crops/orchards were cultivated.

According to the number and to the size of presses it is also feasible to estimate an olive-oil production capacity of the area. Even if it is not possible to establish the size and the efficiency of each *torcular* detected, the method used to calculate the oil production is the one hypothesized by Mattingly (1988b; 1993) and recently used for the olive oil production of the *Thugga* region (DE VOS 2013, 172-174). The maximum annual processing capacity of the 72 oil presses of the Lepcitanian hinterland, working twenty-four hours a day during the harvesting season with a 20% return oil/fruit may produce 764,640 litres per year considering ninety days of work or 509,760 litres per year considering sixty days. The figure is calculated taking into account the biennial cycle of the olive tree and that one press could press c.590 kg of olives (medium size *torcular*) and produce 118 litres of oil a day equal to a maximum of 10,620 litres considering a ninety days season or 7,080 litres for a two months period of squeezing. These figures are thus aligned with the 5,000-10,000 litres of oil per annum/*torcular* estimated by Mattingly (1988c; 1993, 490-493; see also HITCHNER 2002, 75-78) for the Kasserine area. The average yield of 637,200 litres of olive oil produced in the immediate vicinity of Lepcis (fig. 5.28) could sustain a population of 31,860 considering an average consumption of 20 litres *pro capite per annum* (PEÑA 1998, 139-142, 147-148; DE VOS 2007, 49).

Considering the hypothesis of an annual production of 10 million litres of olive oil for the whole Lepcitanian territory suggested by Mattingly (1988a, 38), the data of the area taken into account added to the ones analyzed by Ahmed (2010, 225-233) for the Tarhuna plateau suggest

that the idea of 10 million of litres is feasible. Indeed, if we calculate the average production of the Tarhuna plateau (1,630,000 litres for 115 km²) plus the average Lepcitanian peripheral production (637,200 litres for 100 km²), the total result is 2,267,000 litres for c.215 km², equal to the 22% of Mattingly's whole hypothesized production. Despite the small extension of the two areas (215 km² constitute only 6% of the whole assumed Lepcitanian territory of c. 3,000-4,000 km²) and the numerous variables that must be taken into account for a proper analysis (such as different productivity factors linked to climate, trees planting densities, soil and infrastructures), it is possible to estimate that for 10 million litres of olive oil hypothesized the space needed would be equal to c.800-1,000 km² of similar landscapes (more or less one/fourth of the whole Lepcitanian territory; see par. 2.1.2). However, it is important to keep in mind that not all the 215 km² considered in the two areas were fully cultivated with olive groves and the net area that must be calculated to provide the 10 million litres of olive oil had to be equivalent to an area of c.400-600 km² devoted entirely to olive trees (equal to one tenth/eighth of the whole Lepcitanian territory).

From the early imperial period and above all during the second century AD, both the favourable tax rates and the construction of new infrastructures related to the agricultural production (see par. 3.2.2), brought a series of benefits to the Lepcitanian rural landscape. This favourable period culminate during the Severan age thanks to the institution of the new *classis Africana Commodiana Herculea* and above all to the concession of the *ius italicum* that allowed - through new favourable tax rates and exemptions - an increase of the financial resources that have been reinvested on cultivation and further infrastructural development and, in consequence, on olive oil production (TANTILLO, BIGI 2010, 52-53). The direct Imperial intervention addressed to the olive oil purchase during the Severan age seems also confirmed by the existence of a "*procurator ad olea comparanda per regionem Tripolitanam*" attested in the catacombs of Praetextatus at Rome (MANACORDA 1976-1977, 543-555). This period of rural economic growth has been registered in other survey samples related to different Lepcitanian zones such as the Silin and the Wadi Caam/Taraglat areas (TANTILLO, BIGI 2010, 55-56, figs 2.18a-b). Although the Tripolitanian olive oil export is attested since the late Hellenistic phase, the pottery data of the olive oil *amphorae* coming from the *Emporia* addressed to Rome - Monte Testaccio and Ostia excavations - seems to have increased considerably only from the second century AD and remained stable until the fourth century AD. It is important to note that Tripolitanian wine *amphorae* such as the Schöne-Mau XXXV type are well attested in Rome and Ostia from the mid-first century AD to the Severan age, with later use also carried in Tripolitana II type amphora (BONIFAY 2004, 470, 474-475). However, the Tripolitanian - and Lepcitanian - surplus of olive oil was not only exported for the *annona*: numerous excavations revealed the same transport vessels in other cities of the Italian peninsula and in almost all the regions of the Empire (in general see TANTILLO, BIGI 2010, 54).

In the Lepcitanian peripheral area the *molae asinariae* and rotary hand querns for cereals can also be mainly dated to the same Roman Imperial period (fig. 5.30). All the devices found were manufactured from basalt stones that, despite a shortage of petrographic analysis, would

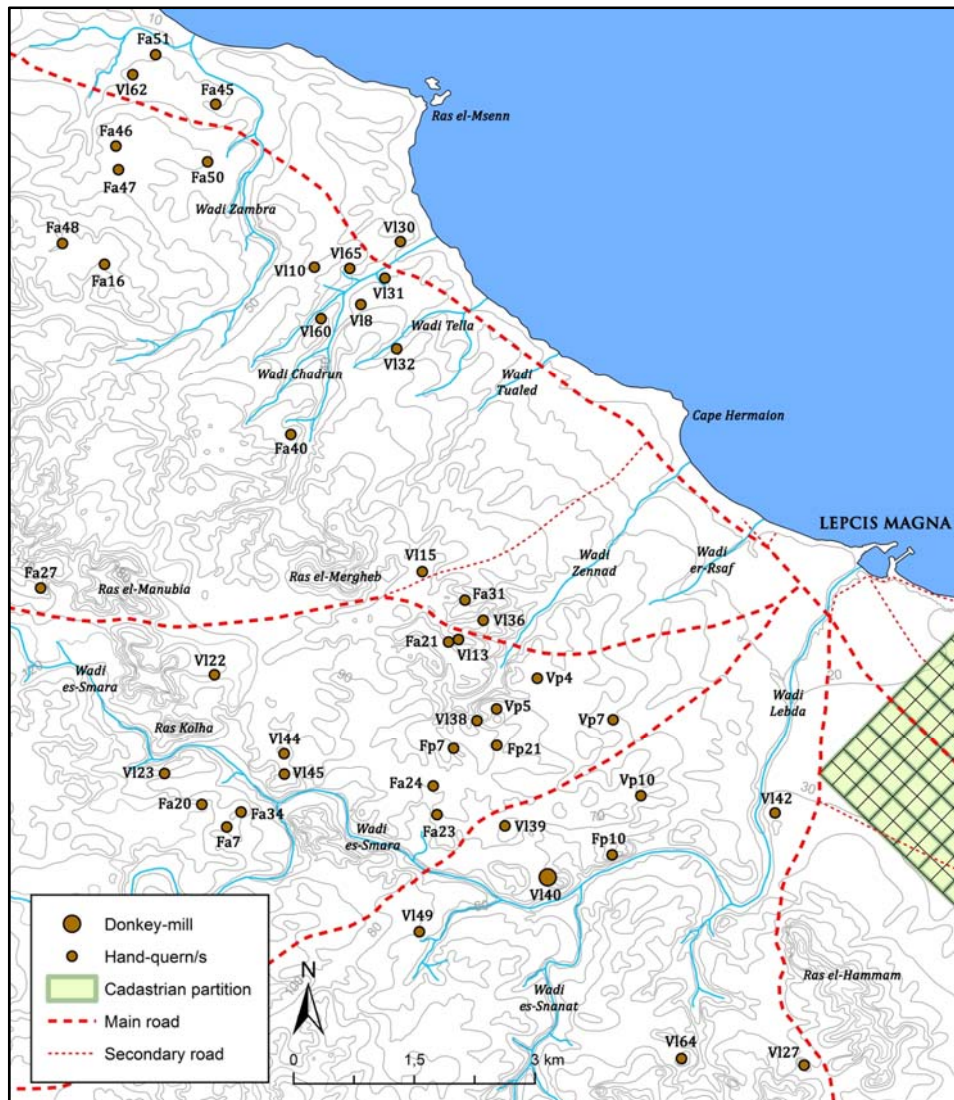


Fig. 5.30. Distribution of donkey mills and rotary hand querns within the Lepcitanian peripheral area.

suggest a provenance mainly from Sicily, Sardinia or from the Tiber valley (see par. 5.2.3). It is perhaps significant that only one *catillus* of a donkey mill have been found close to the Wadi es-Smara, while in the remaining 38 sites has been found one or more fragments of lava rotary hand-querns. The high percentage of fragmentary finds of lava querns and the absence of further donkey mills for cereals could be explained on the one hand by taking into account the high use and consumption of these imported devices that may have been used until they broke and on the other hand considering that cereals were usually exported with skin to avoid waste from moisture and insects. However, in the Lepcitanian hinterland rotary hand-querns are preserved in 37% of all the Roman Imperial rural sites; a very high percentage if compared to the 9% of the Tunisian sites (confirmed by the data from the Leptiminus rural periphery) or to the 7% of the Algerian rural sites (DE VOS, ATTOUI, ANDREOLI 2011, 132, 146-147, figs 29-30; DE VOS 2013, 174;

BEN LAZREG, MATTINGLY, STONE 2011, 485-493). Both the nearness of a significant harbour that revealed high commercial relationship with the Italian peninsula since the Hellenistic phase and the favourable rainfall and morphology (plain areas and wadi beds that allowed to cultivate cereal crops), had to play a significant role in importing basalt mills from Central Italy (Orvieto region), Sicily (Mount Etna, Lipari and Pantelleria) and Sardinia and thus their wide spread in the inner Lepcitanian rural landscape. A similar situation has been registered in *Byzacena* and the role of Carthage was in this sense primary; indeed in its harbour, ships, on their return journeys to Italy, traded millstones as ballast (WILLIAMS-THORPE 1988, 286; DE VOS 2013, 175).

Contrary to the olive oil and wine presses, the rotary hand querns and donkey mills found in the area analyzed were used most likely only for local and domestic consumption and, eventually, any surplus was exported in sacks. Out of a total of 39 sites that indicate cereals processing, 13 (33%) have been found in the same sites where also olive oil/wine *torcularia* have been detected. Considering this and matching also the general distribution of olive-oil/wine presses (fig. 5.28) with cereal mills (fig. 5.30) it is plausible to consider that wide areas exploited as olives groves were cultivated also with grain, barley or other cereals, as suggested by Cato (*Agr.* 35.2) and by Columella (*Rust.* V. 9,7) who emphasized intensive cultivation of olives (and vines) with grain as a necessary subsidiary to a self-supporting farm unit (for this aspect see WHITE 1970b, 288; DE VOS 2007, 45). Moreover, olive orchards require little work outside the major task of the winter harvest and a large part of the year is free for the production of other crops, which can be intercultivated between the rows of trees (MATTINGLY 1995, 140).

The subsequent period - comprised between the late third century AD and the fourth century - shows a conjuncture defined as a "declining stability" (MUNZI *et al.* 2016, 72). After the Severan dynasty, and especially from the second half of the third century AD, Lepcis started to suffer a general lack of maintenance of part of its infrastructures such as the dam built on the Wadi Lebda (Dm1) while the Severan harbour began to silt (PUCCI *et al.* 2011, 180-181, 183). The first slight contraction may have occurred already before the end of the third century and continued during the subsequent century. Beside two significant earthquakes (AD 309-310 and AD 365) that damaged or destroyed several Lepcitanian buildings, the instability of the *limes Tripolitanus* from the end of the third century played a fundamental role in determining this rural and economic change of course. The Austuriani raids mentioned by Ammianus Marcellinus and the construction of a large city walls are both signs and consequences of this political unstable situation already tangible during the second half of the fourth century. However, according to the quantitative finds related to import and export found in the Lepcitanian survey sample and also the presence of numerous rural sites, it seems that the crisis did not turn in a general collapse of the main agricultural and productive activities (TANTILLO, BIGI 2010, 56; MUNZI *et al.* 2016, 110). It is significant noticing that different economic and rural conditions

were perceived by Goodchild (1951, 50), Hayes (1981, 60) and Brogan (1976-1977, 126) for the Leptitanian interior areas such as the Tarhuna Gebel or even deeper inland toward Ghirza: in these areas it seems indeed that the fourth century was characterized by a prosperous rural landscape that, to some extent, continued also during the fifth century.

The fourth and fifth century constitute for the peripheral area of Lepcis a period of site contraction (fig. 5.31). The sites registered in this period, compared to the previous phase related to the first-third century AD, shows a reduction equal to 74% (the number of rural sites falls from 103 to 59). A further negative pulse probably occurred during the first half of the fifth century when the Vandal conquest reached the coastal cities of Tripolitania. Similar trends has

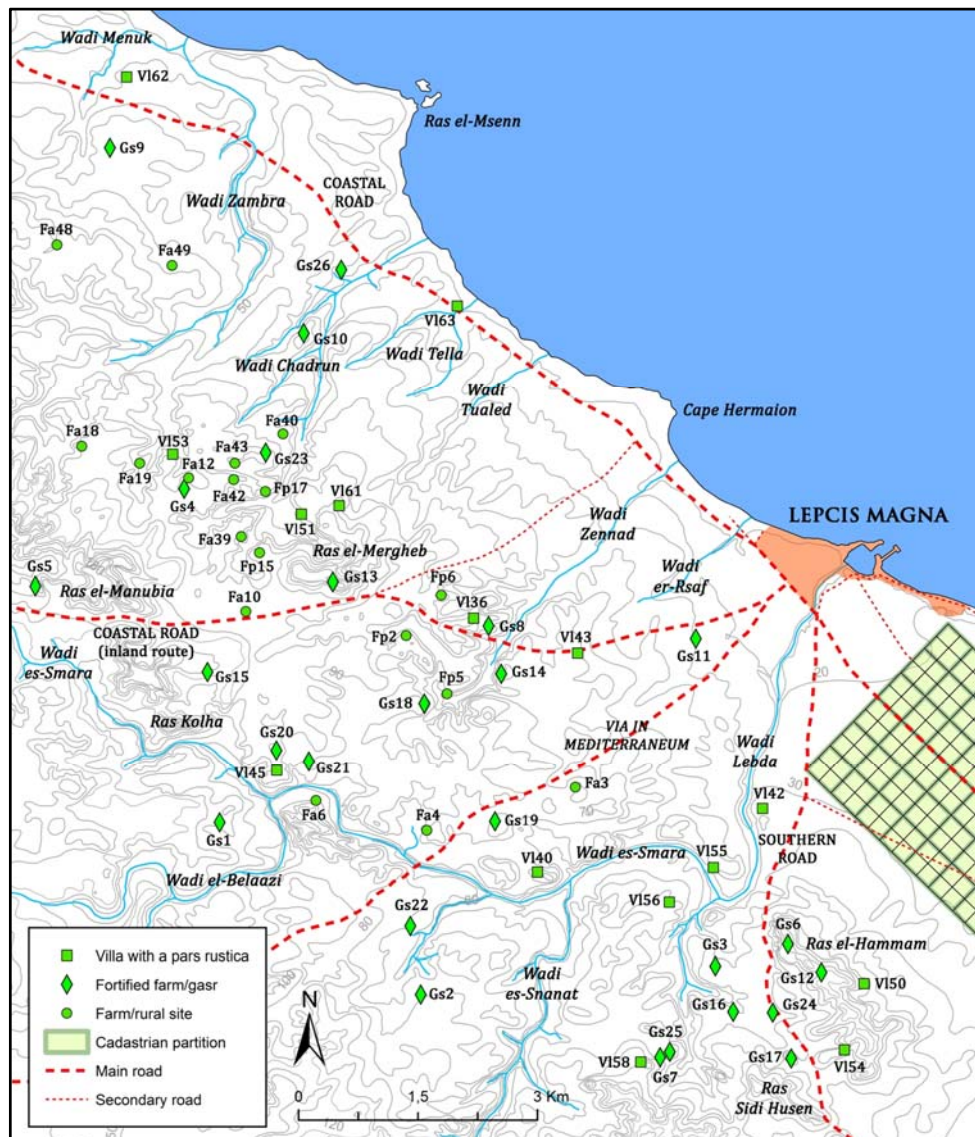


Fig. 5.31. The Leptitanian rural landscape in the fifth century AD.

been registered in the Djerba, *Leptiminus* and Kasserine surveys, where contraction in site numbers seems to be more pronounced during this period. Reduction is less noticeable at Carthage, *Thugga* and in the Segermes valley where the crisis was instead more palpable during the sixth century (MUNZI *et al.* 2014, 218-219; 2016, 110).

The distribution of the fifth-century rural sites in the Lepcis area reveals that, despite the significant numerical decrease, they continued to be homogeneously distributed along the main wadi valleys. Out of a total of 30 *villae* with a *pars rustica* registered in the Roman Imperial phase, 15 (50%) continued to be used during this period while further 13 *villae* (9 with rural productive facilities and 4 without) were transformed or readapted as fortified farms/*gsur* (Gs14-Gs26 = V116, V122, V127-V128, V137, V139, V144, V146, V149, V152, V157, V164-V165). The most significant shrinkage involved the other open structures: out of a total of the remaining 73 sites (farms and other rural structures/sites) registered in the previous phase, only 17 (23%) survived while further 9 have been fortified in the same period (Gs1-Gs9 = Fa7, Fa9, Fa13, Fa17, Fa27-Fa30, Fa46). Finally, four new fortified sites/*gsur* (Gs10-Gs13), probably connected to rural activities like goods and harvest storage, seem to have been built *ex-novo* during this period or even during the fourth century. On a total of 59 rural sites belonging to this period, 26 (44%) were fortified. This is comparable to the percentage registered in the same period for the Taraglat region, where c. one third of the open farms/*villae rusticae* were equipped with defensive devices (MUNZI *et al.* 2014, 217).

Contemporary to the contraction in rural settlement, olive oil and possibly wine production suffered a significant fall. This decrease, besides being suggested by the shrinkage to 74% of the previous rural sites, is also attested by the large scale of reuse of *torcular* stone elements. At least ten press devices (above all uprights) out of a total of 72 detected in the previous phase were indeed reused to build 9 of the 26 fortified sites. However, it is significant noticing that out of a total of the 32 fifth-century open farms/rural sites and *villae rusticae*, 21 (66%) preserved within the site *torcular* elements that may have been in operation during this phase. Even if it is not possible to establish with certainty if all the 31 presses standing on the fifth century surviving rural sites were actually in use, the continued use of presses would prove - to some extent - the existence of olive groves and vineyards.

Moreover, while half of the Roman *villae* with a *pars rustica* were still in use during the fifth century showing that to some extent the upper Lepcitanian upper class continued to live and exploit its peripheral landscape, on the other hand it is not possible to determine to what extent the lavish and decorated parts of the *villae rusticae* were actually used. Unfortunately, the lack of any excavations prevent us from establishing if the still active sections of these *villae* were exclusively those related to the *partes fructuariae* while the lavish and decorated parts were already abandoned (late chronologies of the sites are essentially based on pottery evidence found within the sites).

One of the most iconic structures related to the rural landscape of the Lepcitanian fourth century AD is the fortified farm/*gasr*. Even if it is not possible to establish the accurate chronology of their construction, it seems that at the beginning of the fifth century AD the majority of these buildings were standing and in operation (see par. 5.2.2). *Gsur* were essentially quadrangular

structures often provided with an external ditch or rarely - in the case of the Lepctitanian periphery - characterized by a walled enclosure (fig. 5.14). Their defensive function must be associated to a rural one since they were used most likely as granaries or generally to store goods. In the cases of Gasr el-Hammam (Gs12) and the structures located on the hilltop of Ras el-Mergheb (Gs13) and Ras el Manubia (Gs5) the military aspects seem to be predominant compared to the storage ones; however, their twofold function cannot be excluded *a priori*.

The distribution of the fifth-century fortified farms (see fig. 5.31) reveals that the majority of these structures were located close to presses that probably were still in use. However, even if

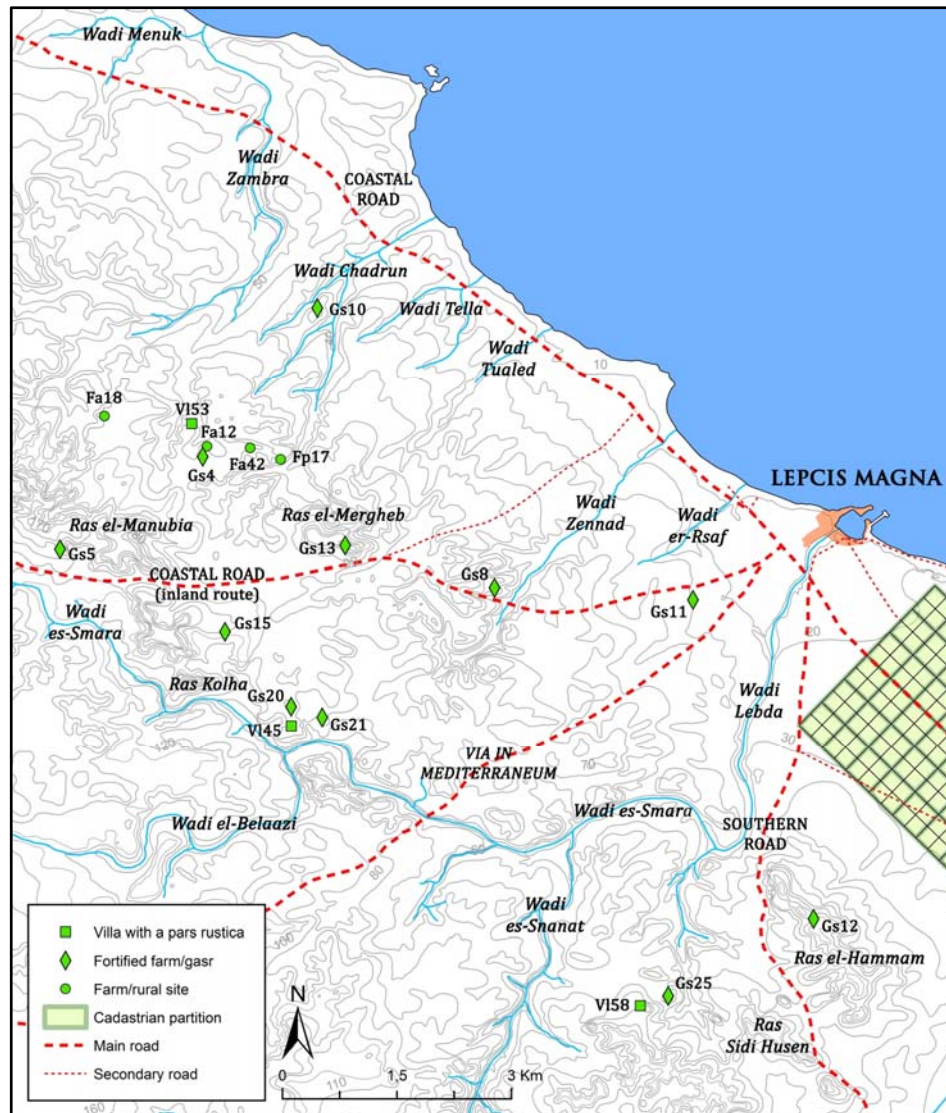


Fig. 5.32. The Lepcitanian rural landscape in the sixth century AD.

it is not possible to establish a direct and certain connection between fortified farms and in-operation *torcularia*, it is significant that most of these fortified granaries/structures were grouped close to wadi beds (where cereals production or generally cultivated areas were hardly abandoned) or at a short distance from the main roads (the most exposed areas that could be attacked by external raids).

The sites detected for the sixth century shows that the real collapse occurred between the second half of the fifth and the sixth centuries (fig. 5.32). Even if the evidence is exclusively pottery (mainly Tripolitanian RSW, Hayes types 8A and 8B) and numismatic findings and thus site numbers may be underestimated due to visibility factors, the contraction appears to be dramatic. Sites passes from 59 to 18 registering thus a drop of 70% (compared to the Roman mid-Imperial phase, the fall is equal to 82%). Sites were essentially reduced to fortified farms/*gsur* (11 sites) and only three *villae* with a *pars rustica* seem to survive during this phase (VI45, VI53, VI58) plus four open farms/rural sites grouped north-west of Ras el-Mergheb (Fa12, Fa18, Fa42, Fp17). According to the surviving archaeological remains, a maximum of only 9 olive-oil (and wine) presses can be associated with these sites and, if all of these devices were in use, the production further falls by c.70%. According to the site distribution, it is significant that also in this period *gsur* were located close to the few active open farms/*villae rusticae* and on the sides of the major roads ensuring in this way protection of the harvest (probably cereals and that reduced amount of olive oil/wine) and, at the same time, control of the main routes.

As a whole, archaeological evidence for the sixth century Lepcitanian peripheral landscape suggests that Procopius' (*Aed.* VI, 4, 6-9) evidence about Lepcis may not have been entirely exaggeration/literary licence: *"Now that I have reached this point in the narrative, I cannot pass over in silence the thing which happened in Leptis Magna in our time. When the Emperor Justinian had already taken over the imperial authority, but had not yet undertaken the Vandalic War, the barbarian Moors, those called Leuathae, overpowered the Vandals, who were then masters of Libya, and made Leptis Magna entirely empty of inhabitants. While they were tarrying for a time with their leaders on hilly ground not far from Leptis Magna, they suddenly saw a flame of fire in the middle of the city. Supposing that local enemies had got in there, they ran to the rescue with great speed. Finding no one there, they took the matter to the soothsayers, who, by an inkling of what has since happened, predicted that Leptis Magna would soon be inhabited again."* (translation by Dewing, 1940).

5.3. THE PRODUCTS OF THE SEA: FISH AND SHELLFISH

5.3.1. FISHING AND FISHERY PRODUCTS

Lepcis, like every ancient city located and developed on the coast, surely benefited from several products coming from the sea. Definitely, fishing activities presumably constituted a significant resource from the earliest Punic phases and, above all during the Roman Imperial period, it could have represented an important source of income. Despite the lack of any archaeological traces of both fishing and fishing manufacturing processes, indirect evidence allows us to establish that these activities were widely practiced at Lepcis and its periphery.

Mosaic decorations depicting rural life in the Lepcis suburban *villae* (see par. 5.2.1) also feature representations of fishing activities suggesting that this occupation played an important role for the area considered and that seafood constituted a significant part of the local population diet, especially for people who lived in the city and close to the coastal zone. Although these depictions come from a standardized repertoire, they may indicate also the will of the landowners to reflect and compare both a Nilotic and bucolic maritime landscape with the local abundance and variety of fish (fig. 5.33). Mosaics from the so called Villa del Nilo (VI2) and Villa di Orfeo (VI59) show several species of fish; at the same time, fishing activities are carried out through the use of nets (and trammel nets provided with cork elements at the edges), fishing poles and harpoons (GUIDI 1933, 26-30; 1935a, 114-117; AURIGEMMA 1960, 49, tav. 97). Fishing boats (essentially small crafts of a few metres length), may have recovered obviously within the city docks but perhaps more significantly from a range of minor anchorages as Cape Hermaion or Ras el-Msenn natural harbours or using also private piers or simply towed to the shores. Local sale of fresh fish could occur directly on the landing sites (docks and even along the coast) while the Lepcis *macellum* (fig. 2.3, no. 4) acted, from the Augustan age onwards, as the main fish shop within the city (the marble dolphin decorations used as stall stands may suggest fish for sale there).

Fish may be consumed fresh and thus used for the local market or it could be processed and sold locally or exported dried, smoked or - primarily - used to produce fish-sauce, commonly



Fig. 5.33. The so called "Mosaic of the Marina" found at the Villa del Nilo (VI2), now exposed in the Lepcis Magna Museum (photo: A. Zocchi, 2009).

known as *garum* (in general see MARZANO 2013, 89-98). Despite the lack of any archaeological remains related to fish farming and salt fish manufactories, evidence found further along the Tripolitanian coast together with a recent hypothesis that considers fish-sauce as a possible content of Tripolitana II amphora (BONIFAY 2004, 92, 470), suggest that this type of activity may have existed and been practiced also at Lepcis and in its peripheral coastal areas (WILSON 2002a).

In the case of large production of seafood to be exported, fish was usually bred in devoted open spaces (fish ponds or *piscinae*). Apparently, the only pool (c.14x9 m and c.2.5 m deep) devoted to fish farming close to the examined area is the one detected at the "Villa dell'Odeon Marittimo" in the Silin area (SALZA PRINA RICOTTI 1970-1971, 145-146). The evidence of fish-salting vats (*cetariae*) associated to other Roman *villae maritimae* are more numerous: at least four different sites were found west of Lepcis between Fonduk Nagaza and Fonduk al-Allus (LEITCH, SCHÖRLE 2012, 151; MUSSO *et al.* 2013-2014, 39). In these latter coastal sites have been also found many Tripolitana II amphora fragments - whose content could include also fish-sauce - and a group of kilns related to their production was registered in the same survey, in a site near Wadi Psis (CAPELLI, LEITCH 2011; SALZA PRINA RICOTTI 1972-1973, 77; for the relationship between *cetariae* and *amphorae* kilns see TRAKADAS 2005, 72-73). The presence of large fish products *amphorae* clearly indicates that they were exported and most likely destined for Lepcis Magna - in this case by sea, using small cabotage boats - where they could be sold and probably placed on the broader market.

The only archaeological remains that could be related to *cetariae* in the peripheral Lepcitanian area are the traces of vats located at a short distance from the structures of a Roman coastal villa at the mouth of Wadi Tualad (VI34). These small pools (whose areas cannot be measured due to their poor state of preservation) were partially carved out of the bedrock and it seems that they were coated with a layer of *cocciopesto* on the built (*opus caementicium*) sectors. However, a sandstone quarry with traces of working activities has been detected on the same site (Qr28) and thus the pertinence of these traces to fish-salting vats cannot be certain.

Fish-salting workshops have been found widely in Roman North Africa (especially in the coastal zones of modern Morocco and Tunisia) and they could be located within urban or non-urban contexts. If on the one hand the non-urban evidence seems attested for Lepcis at least for the western part of its territory, on the other hand the existence of urban fish-salting workshops for Lepcis can be hypothesized by considering the cases of *Leptiminus* and *Sabratha*. In this latter city, 18 fish-salting establishments dated after the Flavian period have been registered around the *forum* and the small spaces of these shops suggest that the product was suddenly send to the close *forum*/market or addressed to the harbour where it was stored and shipped (WILSON 1999b; 2002b, 241-248; 2007; MARZANO 2013, 98-99). Even if there is currently no archaeological evidence of fish-salting workshops within the Lepcis urban core, considering the

combination of the factors mentioned above it is highly likely that several of these small fish-salting workshops existed close to Lepcis' harbour or in the *macellum* area. Fish-sauce and dry fish may also have come directly to Lepcis from the numerous peripheral *villae* detected on the coast (fig. 6.1, VI1-VI2, VI4, VI6, VI15, VI35, VI30, VI33-VI34, VI63) whose marine resources were most likely exploited and capitalised and whose fish farming/processing facilities may have been erased by modern disturbances (see par. 2.2.2) and/or by coastal erosion.

5.3.2. MUREX TRUNCULUS AND THE DYEING PROCESS

Another marine resource that seems to have been exploited and processed at Lepcis was the sea snails of *murex* genus. This shellfish/clam was used to produce, since the Phoenician times in different areas of the Mediterranean, several qualities and nuance of textile dye thanks to the animal's secreted juice (MARZANO 2013, 143-156). Purple dyeing manufactories dated from the Hellenistic phase until late antiquity have been found in several North African cities such as *Meninx*, *Sabratha*, *Thamusida* and *Eusperides* and *Berenice* in Cyrenaica, while the presence of crushed murex has been noted also at Carthage, *Hippo Regius* and other Tunisian coastal sites (WILSON 2002b, 251-254; 2004, 160-163).

The existence at Lepcis of purple dye manufactories is suggested by the presence of a considerable quantity of crushed *Murex trunculus* shells found within the lime mortar of the Byzantine wall (Wa4) south and east of the Severan harbour (BLANC 1958). More recently, the presence of these crushed shells plus other less frequent fragments of *Murex brandaris* (used to produce violet nuances) have been found mostly in other Byzantine structures/restorations both inside (basilica and baptistery of the *Forum Vetus* and a fountain close to the Justinian gate) and outside (area of the *Chalcidicum* and of the Hadrianic Baths and within the structure of *Insula 16/Regio III*) the sixth-century walls (WILSON 2002b, 255; 2004, 162; LEONE 2007, 225-226; TRAPANI 2012, 217-222).

Due to its high value, the exploitation of sea snails at Lepcis probably began during the first centuries of the Phoenician and Punic periods. In this frame, the quality of North African - and Tripolitanian - purple dye was perceived already by several late Republican-early Imperial Roman writers such as Horace (*Carm.* II. 16), Pliny the Elder (*NH*, IX. 127), Tibullus (2, 3, 57) and finally, *Silius Italicus* (*Pun.* VIII. 437) who specified also the existence of a *Libycus murex* (TRAPANI 2012, 223-224). According to Wilson (2004, 162), both the structural mortar with crushed *murex trunculus* related to a distribution cistern near the *Chalcidicum* and other evidence related to large storage cisterns near the Hadrianic Baths cannot be dated later than the mid second century AD in the first case and to the Severan age in the latter case. Thus, the chronology proposed for the Lepcitanian dyeing manufactories fits, in chronological terms, also with the deposits of *murex trunculus* found at *Djerba* and *Sabratha* (first-second century AD).

Even if it is not easy to locate and date with more accuracy the exploitation of these molluscs at Lepcis, it is possible to consider that during the Byzantine phase the dyeing of textiles and the use of the crushed murex shells to build (churches and baptistery) or restore infrastructures seems to have been a common practice. This fact could indicate the will and the need to control the profitable purple textiles trade and the relative waste products by the central government during the sixth century. The purple dyeing process was already exclusively a state monopoly activity, interdicted to private traders at that time. In the fifth century the *Notitia Dignitatum* (Occ. 11, 69-70) already mentioned the existence of a "*Procurator bafii Girbitani, provinciae Tripolitanae*" probably based at *Djerba* and another "*Procurator bafiorum omnium per Africam*" suggesting the importance of controlling the purple trade (Dar.-Sag. 1877, 771; WILSON 2004, 160, TRAPANI 2012, 223, 227).

Dealing with the maritime resources analyzed above for the Lepcitanian landscape - fish and shellfish - with their related manufactured products (dye and fish-sauce), it is significant considering a passage from Strabo (XVII, 3, 18) who briefly describes the city of *Zouchis* located close to the homonym salted lake on the Tripolitanian coast between *Pisida* and *Gigthis*. Strabo, in this case, indicates that both fish-salting workshops and dyeing manufactories were located in the suburban areas of the city most likely along the foreshore. A similar distribution has been recently suggested for *Sabratha* and - indeed - Lepcis (WILSON 2004, 163; TRAPANI 2012, 225). Even if some of these productive processes have been found in other cities within the urban fabric, the bad smell, the provenance of the raw material from the sea, the need to use both marine water in the shellfish vats and salt for fish-sauces and finally the need of large devoted spaces to dump the waste products (shellfish) favoured building these types of installation close to the sea and outside the urban fabric.

5.4. OTHER PROCESSED PRODUCTS (GLASS, LIME, POTTERY, TEXTILES): SOME CONSIDERATIONS

Beside the main products coming directly from inland and from the sea, other raw materials had to be processed at Lepcis and within its suburban districts. Unfortunately, among these products the only fleeting archaeological evidence is related to glass and lime productions. For other working processes such as fulling and textile activities and those related to the production of pottery/transport vessels we can only hypothesize their importance, taking into consideration a series of elements despite the absence of direct archaeological evidence.

5.4.1. GLASS WORKSHOPS

Significant traces related to a glass-blowing and glass working site (fig. 5.34, Ws5) have been found in the western suburban area, in the excavations of the fifties and sixties at the foot

of the south-west pylons of the Marcus Aurelius arch (Ti6). At a depth of c.2 m lay a beaten artificial surface with a conspicuous quantity of vitreous paste and thick green glass fragments that revealed the existence of a glass working area, though its extension, was not possible to quantify. According to the stratigraphic relationships, the workshop was operative during the first half of the second century AD until the construction of the monumental arch (IOPPOLO 1969-

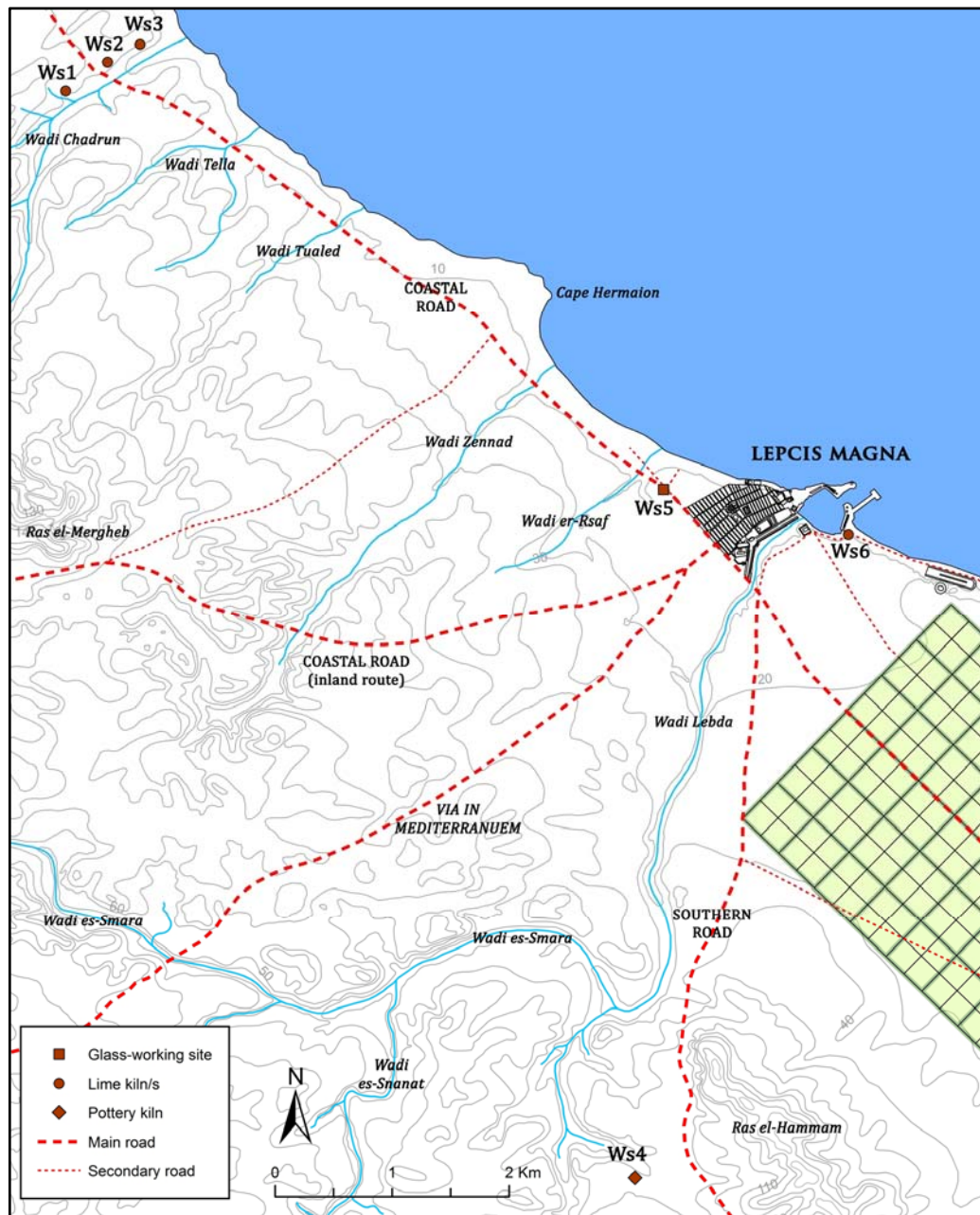


Fig. 5.34. Distribution of lime kilns, pottery (tiles) kilns and glass-working sites within the Lepcitanian peripheral area.

1970). The production and use of hand blown-glass had to be widely practiced at Lepcis: the numerous glass vessels found above all within the 63 Roman grave goods (181 items; see Vol. II App. V), as well as those found within Oea's *necropoleis* (CINGOLANI 2015), are a clear demonstration of their diffusion and a local/regional production.

Like the pottery site productions (see par. 5.4.3), also the glass workshops were usually built in the suburban/peripheral areas. Both the use of high temperature kilns and the large amount of combustible (wood or olive kernels) - and thus space - needed were indeed the two main factors linked with safety and practicality that prompted to choose a peripheral site rather than the dense built-up areas located within the city.

5.4.2. LIME KILNS

Beside the glass workshop, at least seven lime-kilns have been detected in the area analyzed (fig. 5.34, Ws1-Ws3, Ws6). Six of them are located along the western slope of the Wadi Chadrun while another one (Ws6), has been detected in the inner suburban area, within the Late Antique reuse of the Eastern Baths *tepidarium* (En2). The installation of lime kilns during Vandal, Byzantine and also early Islamic phases within urban and suburban districts was common in many North African cities (*Sabratha, Leptiminus, Bulla Regia, Uchi Maius, Henchir Rougga*; see in general LEONE 2003, 273-274). The kiln found in the Eastern Baths area could be linked to the need of burning marbles and stones from abandoned buildings - most likely to build the nearby sectors of the Late Antique or Byzantine defensive enceintes (Wa3-Wa4) - while the other six kilns grouped along the Wadi Chadrun may have had a different origin and purpose.

The *fornaces calcariam* located along the Wadi Chadrun (fig. 5.35) were detected during the 1999 survey undertook by the Roma Tre University, close to the sites of Roman *villae* (the kiln Ws1 with V165; kiln Ws2 with V129 and the four kilns Ws3 with V130). Although the wide chronological range of these latter lavish dwellings and the lack of any diagnostic element precisely related to the kilns, it seems plausible to date these kilns to the Roman mid-Imperial period, at the same time of the most flourishing phase of the associated *villae*. It is indeed very likely that those *fornaces* belonged to those estates and they constituted part of the villas activities and subsequently - when the lavish dwellings were abandoned - they were used to

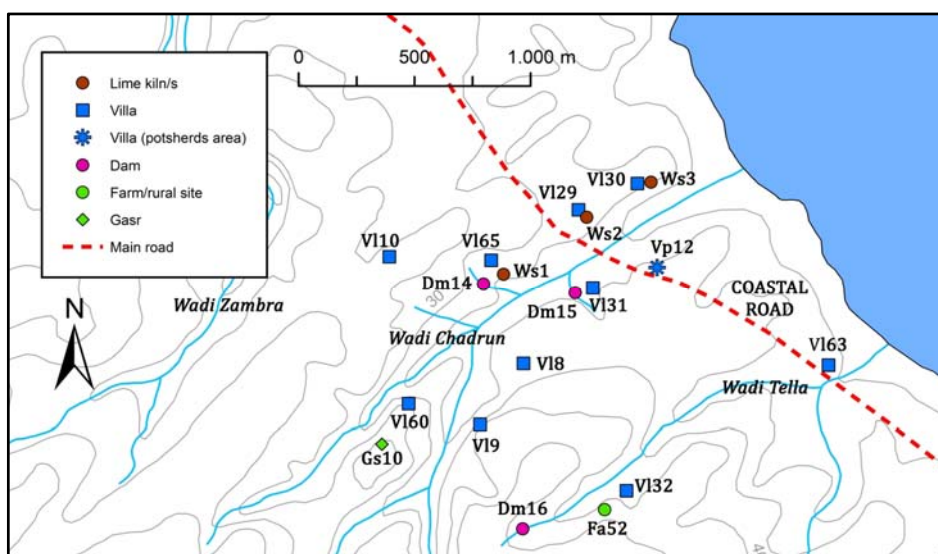


Fig. 5.35. Distribution of lime-kilns and other ancient sites along the Wadi Chadrun.

burn their stones and marbles (see par. 6.1). The Lepcitanian example would not be an *unicum*: a complex of three lime kilns has been found associated to a villa in Central Italy, between Capena and *Lucus Feroniae* (FONTANA 1995; MARZANO 2007, 181) representing probably a significant source of income. According to their shape and location, all the six kilns at Wadi Chadrun seem to follow the building indications recommended by Cato (*Agr.* I.38). The ancient writer suggests that lime-kilns may be located along a slope (the abrupt west bank of the wadi) and, in this case, they should be provided with a single stokehole and a barrel vaulted ceiling (it seems that both elements characterized the Lepcitanian examples). The presence of good quality stones that had to be easily collected nearby and the proximity of a major road (the coastal *via publica*) that may have facilitated the haulage of the material to the city or to other coastal sites could explain the concentration of six kilns along the final sector of the wadi. It is also important to keep in mind that, beside the use for building purposes (mortar and plaster), lime could be exploited also for leather tanning and to improve land fertility; moreover, Columella (*Rust.* V.9,17) mentions the use of lime-kiln ashes in the olive roots to make olives thrive (see in general DIX 1982).

5.4.3. POTTERY KILNS

Somewhat unexpectedly, the only ceramic production site detected in the area analyzed is a pottery kiln found during the recent Khoms survey between the Wadi Lebda and the east flank of Ras el-Hammam (fig. 5.34, Wa4). This kiln, whose presence is proved exclusively by a considerable amount of overcooked *bessales* found within the site, is located a short distance from the scanty structural remains of a Roman villa (VI28) whose pottery fragments can be dated from the first century AD to the fourth/fifth century AD. The absence of other pottery waste related to the kiln as well as any other types of bricks/tiles suggests that the kiln was used to produce building materials for domestic/local purposes.

The archaeological absence of any trace of pottery/*amphorae* kilns within the peripheral area of Lepcis Magna is anomalous. The strangeness is more evident if we take into account the finding of several pottery kilns detected both in the areas comprised in the coastal strip between *Oea* and Wadi Caam and in the inner Lepcitanian territory of Gebel Tarhuna (for Tripolitanian pottery production see FELICI, PENTIRICCI 2002; AHMED 2010, 248-284; CIOTOLA, MUNZI 2012, 1396-1419; HOBSON 2015, 119-123; BONIFAY, CAPELLI 2016, 548-552). Even if the data related to Tripolitanian are still meagre, the distribution of olive oil/wine *amphorae* kilns detected in the Gebel Tarhuna, Wadi Taraglat as well as those detected along the coast (most likely for *garum/salsamenta* manufacturing and Schöne-Mau XXXV amphora for wine), reveal that transport vessels were often produced on the same sites in which raw materials were processed. Like other areas of *Africa Proconsularis*, the economic role of Tripolitanian *villae* and large oileries was strictly connected in many cases and was dependant on the overseas market. The absence of any trace related to pottery (including *amphorae*) kilns in the peripheral area of

Lepcis Magna cannot be explained, in my opinion, just by considering survey luck and visibility factors, but it could take into account some other aspects that are difficult to identify through archaeological surveys.

Compared to the Gebel Tarhuna rural landscape, the suburban area of Lepcis Magna shows from the first to the third century AD a higher density of *villae* and farms provided with olive oil/wine presses and, at the same time, a lower quantity of *torcularia* per site (see par. 5.2.4 and fig. 5.26). This overview could suggest that suburban properties were more sub-divided compared to the Tarhuna's landscape and that they were generally provided with the pressing equipment needed for limited hectares of land. Due to the lack of any detailed archaeological or epigraphic evidence, it is not possible to determine who were the Lepcitanian suburban land owners. However, it is highly plausible that most of this land was in the hands of the local wealthy class. On the contrary, according to the stamps found, it seems that many *amphorae* (Tripolitana I, II and III types) processed in the Gebel Tarhuna oileries and farms (with 2 to 5 presses), related to Imperial properties, while others reveal Imperial kinship, senatorial status and Lepcitanian wealthy families (AHMED 2010, 271-285; MATTINGLY 1988a, 32; 1995, 141-142; MANACORDA 1976-1977; 1983; DI VITA-EVRARD 1985; HOBSON 2015, 122-123). Many of these stamps were also found at Monte Testaccio and other sites in Rome witnessing that they were mainly addressed for the *annona* and, at the same time, archaeological evidence has shown minimal or nil quantities to the local/coastal Lepcitanian market even considering the low percentage of *amphorae* stamped. It is interesting noticing that a AHRCF stamp of a Tripolitana III amphora produced at Wadi Guman (Gebel Tarhuna, see AHMED 2010, 256-257) was found just within a large warehouse (fig. 5.39, Ti3; see par. 5.5.2) partially excavated in the western Lepcitanian suburb whose goods were probably shipped to Rome (MUSSO *et al.* 1998, 210). Even if the data are scanty, it is therefore possible noticing that in most cases the olive oil of the Tarhuna Plateau (at least of the areas investigated) produced in Imperial/senatorial properties was processed and stored in large quantities into *amphorae* produced on the sites and addressed directly to the market of Rome.

Considering the dense property partition and thus the high cost of having a pottery kiln for each estate (with related raw material, fuel and labour force to produce *amphorae*), it is probable that the Lepcitanian olive oil produced at short distance from the city followed a different method of storage and transport. Together with *amphorae*, olive oil could be indeed stored in goatskins that, contrary to ceramics, do not leave archaeological traces. However, the use of these leather sacks for olive oil transport seems to be proved by other indirect sources such as the *ostraca* related to the sorting of state olive oil in the Carthage harbour (in these texts goatskin is abbreviated in *as*, probably for *ascopa*, the Latin form for ἄσκός) and also pottery reliefs and mosaic decorations (PEÑA 1998, 171, 212; MARLIÈRE, TORRES COSTA 2007, 85-98). Outside North Africa, goat-leather sacks are documented in the "Palmyrian Tariff Law" dated to

the second century AD in which are mentioned both donkeys and camels loaded with two or four goatskins of olive oil (LEVICK 2014, 95-97; SARTRE 2005, 243-244). Finally, the use of these vessels - that could contain c. 20 litres of olive-oil each - has been recently reconsidered for many North African regions taking into account on the one hand the high availability of goat flocks and on the other the lack of *amphorae* kilns, *dolia* and *cellae oleariae* within many rural sites detected in different suburban surveys (PANELLA, TCHERNIA 2002, 176; DE VOS 2000, 28; BRUN 1993, 532-533 and above all MARLIÈRE, TORRES COSTA 2007).

Considering the Lepcitanian peripheral area, the short distance that divided the olive-oil/wine presses from the city (a maximum of two/three hours of walking for the further presses detected in the area) most likely prompted the use - even daily during the harvest/pressing period - of packed animals such as donkeys, mules or camels equipped with leather sacks rather than loading them (or carriages) with large *amphorae* produced on the sites. Once arrived in the city - and/or within its inner *suburbium* - these small convoys may have downloaded their goods in storages and warehouses (see par 5.5) and, if not used for the local market, then transferred in other vessels, such as *amphorae* produced most likely in the Lepcitanian suburban districts and thus shipped overseas.

Despite the lack of any archaeological evidence, the existence of pottery kilns for *amphorae*, fine and coarse wares in the suburban area of Lepcis is high probable. A considerable amount of local pottery production (mainly coarse ware and small *amphorae*) found both in funerary contexts (see Vol. II, App. V) and at the Wadi er-Rsaf villa (fig. 6.1, VI3) suggest the existence of pottery kilns located in the peripheral districts. The analysis of an Antonine pottery context of the Wadi er-Rsaf villa has indeed revealed that 64% of the finds belongs to the same pottery kilns that, even if not detected, were probably located at a short distance from the city (CHRZANOVSKI *et al.* 1998; FELICI, PENTIRICCI 2002, 1890). According to other sites investigated along the coast of *Africa Proconsularis* (*Leptiminus* among these), the existence of suburban kilns could satisfy the local everyday pottery consumption and also the production of transport vessels addressed for overseas export.

Usually kilns were most likely located at a short distance from the city gates/urban fabric and also to the main roads that led to them. Like other types of *fornaces* (glass, lime, metal manufactories), pottery kilns were generally located at some distance from densely inhabited places both for fire security reasons and to avoid neighbouring dwellings being affected by smoke. The need of a considerable surface to house the different stages of the pottery production in the same area (storages, kilns, turning and drying spaces) plus the predilection of a well-connected spot to facilitate the supply of raw materials (clay, fuel and water) also played a role in choosing a peripheral site rather than a high density residential/commercial area. Among the numerous examples of suburban kilns within the Roman Mediterranean, those investigated during the nineties at *Leptiminus* have clearly shown on the one hand the organization of several

pottery productions (*amphorae*, coarseware and fineware), on the other hand how these different stages of the manufacture process were grouped in wide defined areas of the peripheral area (STONE, STIRLING, BEN LAZREG 1998; MATTINGLY *et al.* 2000, 75-76; BEN LAZREG, MATTINGLY, STIRLING 2001, 220-252; STIRLING *et al.* 2002).

Localising pottery kilns in the suburban area of Lepcis Magna is not possible on current evidence; however, it is possible to consider some factors that could favour the exclusion of some locations and, at the same time, suggest others. The most suitable spots had to comprise the presence of a well connected productive area, possibly close to warehouses and facing a main route that could also facilitate the direct sales of the goods produced. The supply of clay constituted the other main factor as clearly demonstrated by the case of *Leptiminus* (site 290) where a brown clay was collected adjacent to the *fornaces* (STIRLING *et al.* 2002, 858). Although no mineralogical analysis has been done, it is possible to consider that different qualities of this raw material could be collected mainly in the alluvial deposit of the Lepcitanian wadis, as suggested also by the kilns detected along the Wadi Caam/Taraglat (FELICI, PENTIRICCI 2002, fig. 1). By the end, the proximity to a main road as well as to a source of clay could represent the two hints that allow us to hypothesize the location of pottery kilns at Lepcis. Even if wide sectors of the suburban landscape could satisfy these two requirements, it is plausible to consider as the

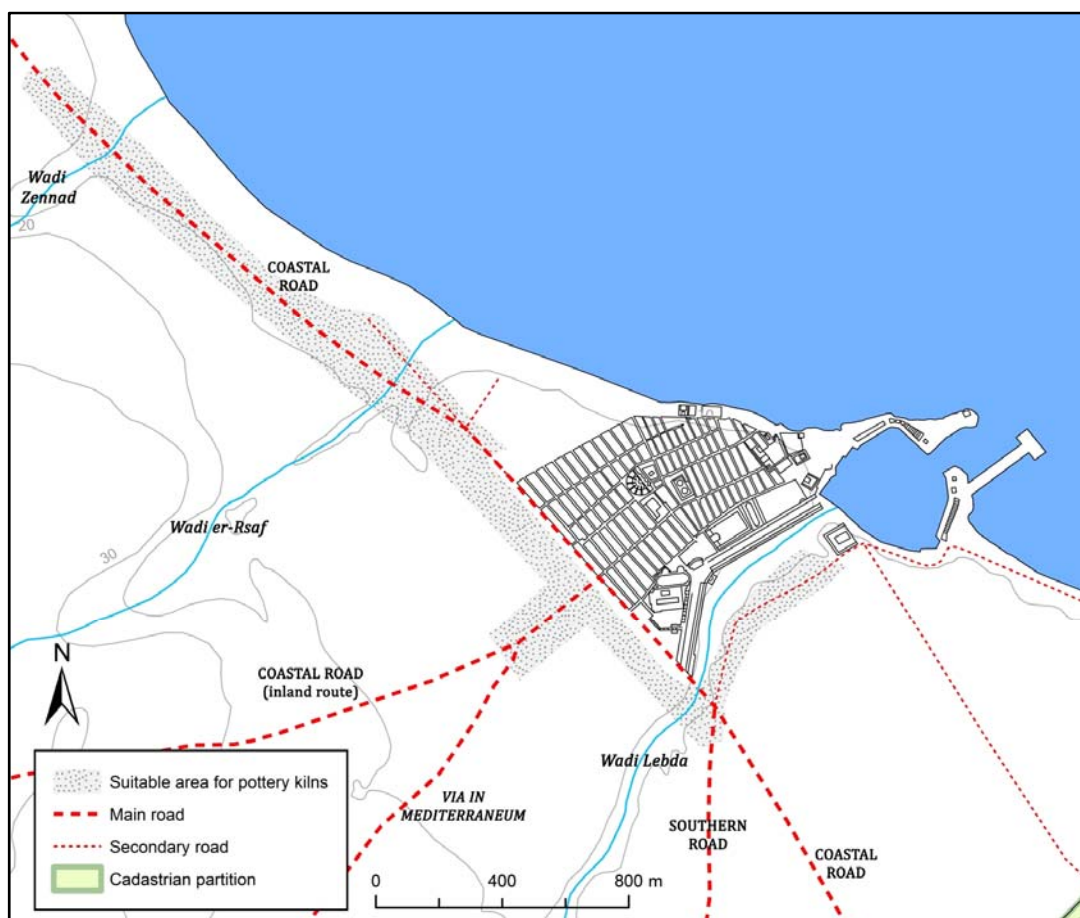


Fig. 5.36. The Lepcitanian suburban area that could be suitable for pottery kilns.

most attractive spots the western peripheral area close to the coastal road - and probably sand dunes - and between Wadi er-Rsaf and Wadi Zennad (possibly reaching Wadi Tualad) At the same time, it is possible to consider also the south area close to the *decumanus maximus* together with the east bank of the Wadi Lebda between the southern road and the Severan harbour (fig. 5.36). It should be noted that the part of the districts just mentioned are actually beneath sand dunes or are the most overbuilt zones (except for the east bank of Wadi Lebda whose area is however fenced). This latter aspect may have indeed prevented the findings of any surface traces of pottery manufacturing in the recent surveys (from the sixties/seventies onwards).

5.4.4. TEXTILE PRODUCTION: *FULLONICAE*

The raising of sheep and goats in the region since pre-Roman phases and the existence of local dyeing manufactures through the exploitation of *Murex trunculus/brandaris* (see par. 5.3.2) suggest that production and trade of textiles may have played a substantial part of the Lepcitanian economy despite the lack of archaeological evidence to support the hypothesis.

Together with the dyeing process, that constitute a second stage of textile production, fulling activities were realized in devoted spaces known with the Latin name of *fullonicae*. In a Roman fullery, wool was generally trampled in multiple tubs in a detergent solution to remove lanolin from the fibres, than the cloth was rinsed in different vats with alkaline solutions and then dried, carded, bleached and finally pressed (in general see USCATESCU 1994, 15-18). All these passages needed adequate space for processing and to let the cloths dry. Usually, these establishments were provided with a well for water and a series of circular masonry vats built on a cement floor with terracotta/sandstone tubs. The archaeological evidence and written sources related to North African textile production and *fullonicae* is significant and comprises several installations such as Timgad, *Tuburbo Maius*, Tiddis and probably *Leptiminus* (WILSON 2000; 2002b, 247-51; 2004, 155-157; STONE, STIRLING, BEN LAZREG 1998, 313-316; JOHANNESSEN 1954). In the case of small workshops *fullonicae* could be built inside the urban fabric, otherwise as suggested by the examples of Timgad and *Leptiminus*, the need of a large amount of space sometimes prompted choice of a suburban location.

5.5. STORAGE AND EXPORT: HOW AND WHERE? (DOCKS, WAREHOUSES, CARAVANSERAIS)

During the Roman Imperial period, Lepcis Magna was one of the most important trade centres and ports between Carthage and Alexandria. The favourable position within a rich and fertile region and its natural harbour allowed the city to grow and to become a magnet for the

regional and the trans-Saharan trade. Beside the agricultural, maritime and other manufactured goods described above that could be widely exported, Lepcis was also involved in the trade of other merchandise coming from the Garamantian lands and beyond that were mainly addressed to the broader market. According to the scanty data from ancient sources (Hdt. IV.181-185; see also LIVERANI 2000) and the more convincing analysis from the archaeological expeditions in the Fazzan area (MATTINGLY 1995, 155-157; 2011, 50; 2017; WILSON 2012b; 2017 with further bibliography), gemstones, wild and exotic animals, slaves, natron, cotton, gold and animal processed products (such as leather and ivory) flowed into the Roman markets through the Saharan routes and most likely through Lepcitanian wholesalers.

The area analyzed was thus involved on the one hand in the production/process of several products that could benefit from the close coastal hub and on the other hand by the passage of caravans coming from inland. In both cases the major peripheral routes (see par. 3.1) acted as the main axes by which goods passed through. Once unloaded of the goods, their safety and proper preservation before they joined the local market or were shipped overseas plus the custody of animals and people who took part in this process had to be a priority. To fulfil this task a series of structures was established in the peripheral area of the city: docks and moorings for the proper loading of the ships, warehouses to house the goods before they were shipped/traded and finally caravanserais to host caravans with drivers and pack animals.

5.5.1. DOCKS AND LANDINGS

Beyond any doubt, the Lepcis harbour absorbed through the centuries the need of the city's commercial activities and its enlargements and facilities, archaeologically documented especially for the Neronian and Severan phase, answered to a flourishing market. However, it is interesting to note that the major building works in the harbour area were concomitant to the growth of rural activities (par. 5.2.4 and figs 5.24-5.26) and above all to the significant increase of olive oil production in areas such as the Tarhuna plateau, linked to the city by the *via in mediterraneum*.

Lepcis' harbour may seem small especially when compared to other city's harbours like *Hadrumentum*, *Caesarea Maritima* and *Centumcellae* (WILSON, SCHÖRLE, RISE 2012, 382 and tab. 20.11). The total surface of the Severan basin measured by Bartoccini (1958, 12-13) covered indeed an area of c. 10 ha and a total wharf length of only c. 1,200 m. However, the wharf length should be reconsidered and it can be extended by a further c. 800 m taking into account the submerged piers recently detected in front of the lighthouse and in front of the eastern mole (LARONDE 1988, 344-349; BELTRAME 2012, 320-325). The one hundred ships capacity hypothesized for the Severan basin (WILSON, SCHÖRLE, RISE 2012, tab. 20.11) may then be raised by a few dozen and the total figure for the wharf length may have touched 2,000 m reaching the measurements of the Trajanic hexagonal basin of *Portus*. Moreover, the "new" protruding

Lepcitanian docks may have hosted medium/large size vessels such as the *annonae* ships due to the linear pattern and also considering the nearness of the aligned set of warehouses (at least for the east dock). Finally, further sectors of quays facing north, probably related to pre-Severan phases, have been recently detected between the western mole and the area of the *Forum vetus* (DE GRAAUW 2014). According to these numbers, it is possible to consider that, at least for the Severan period, the Lepcis harbour was capable to host and manage the contemporary arrival of several dozen ships to ensure the regional oil/grain supply addressed to Rome plus the goods coming from Trans-Saharan trade. The idea of other small "private" docks built on the site of suburban *villae maritimae* and used by large *annonae* ships (SALZA PRINA RICOTTI 1972-1973, 83-84) must, in my opinion, be discarded considering both the existence of a well-equipped city harbour nearby and the crew's need of large quantities of fresh water and supplies for the return journey, easily ensured by the city stocks (same opinion but without explanation in MUSSO *et al.* 2013-2014, 39-41). The only significant dock between *Oea* and the *Syrtis Maior* provided with significant infrastructures that may have hosted *annonae* ships seems to be the one located on the two sides of an headland near Gasr el-Chiar (halfway between Tripoli and Khoms), recently rediscovered by the DoA but already noticed by Bartoccini (1929b, I, 221-222, tavv. 24-25; MUSSO *et al.* 2013-2014, 41).

However, archaeological evidence of a landing place that could have supplemented the Lepcis harbour before the Severan age has been found in the area analyzed, just below Cape Hermaion. According to Di Vita, the remains of a North-West/South-East oriented quay (fig. 5.37,

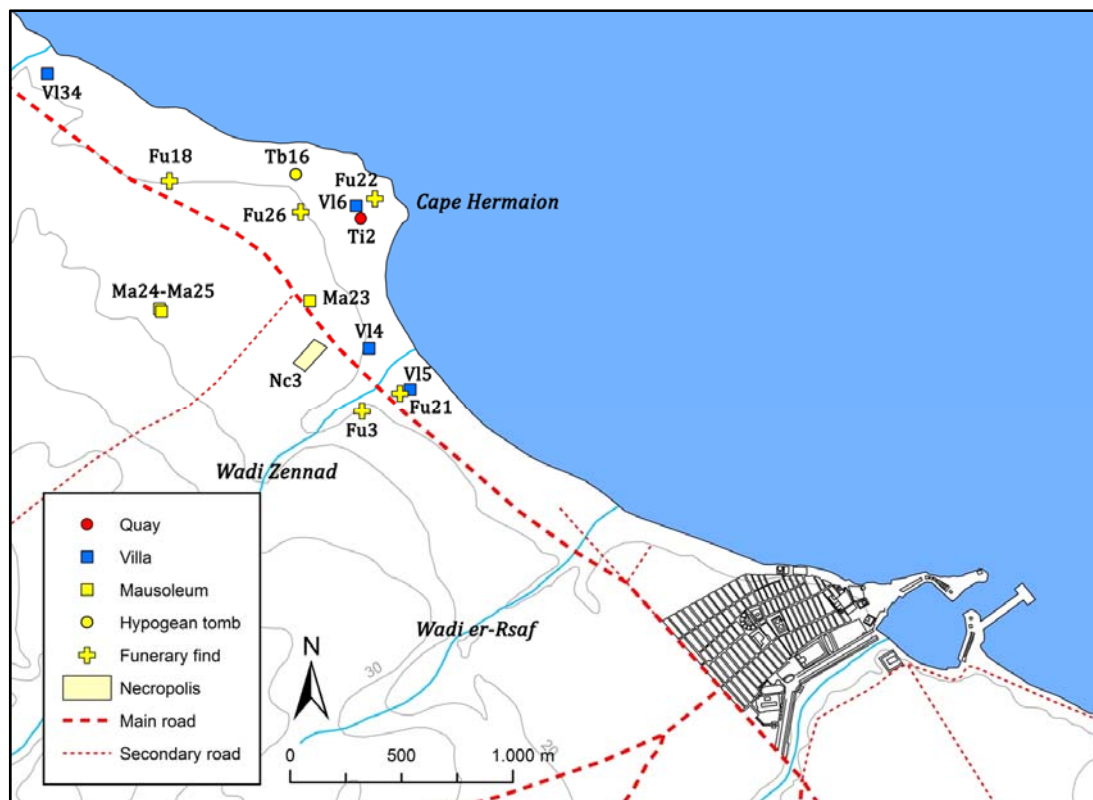


Fig. 5.37. The quay (Ti2) detected beneath the Roman villa (VI6) at Khoms and the neighbouring ancient structures/finds.

Ti2) detected in 1972 in two separate sectors beneath the remains of a large Roman villa (VI6), should have been built during the Hellenistic age and then abandoned during the first half of the second century AD (DI VITA 1974). The wide chronological range suggested by Di Vita can be now enforced by the presence of tombs dated from the Hellenistic age onwards (fig. 5.37, Nc3, Tb16, Fu22, Fu26) and located at short distance from the quay. The presence of funerary spaces may indicate indeed that the area was inhabited and frequented at least from the third century BC (Nc3a) and thus an ancient quay may have served a small outpost/village (see par. 4.7). Moreover, another topographic factor should be considered: if we extend toward the north-east the road that linked Cape Hermaion to Ras el-Mergheb (fig. 5.37) - the route retraced the old *via Cussbat* within the city of Khoms (see ZOCCHI 2018, 69-71) - it joints exactly and with a similar orientation the wharf detected by Di Vita.

A further element that has never been taken into account by scholars and that could be helpful in determining the role of the Cape Hermaion landing/s is the account published in 1874 by the Archduke of Austria Ludwig Salvator (LOTHRINGEN 1874, 167). Even if it hard to establish his accurate point of view, he described the landscape of the same area a century before the article published by Di Vita: *"Vom Meere trennt Homs eine Sandfläche, die, mit vielen Thonbruchstücken besäet und mit zahlreichen Scyllas versehen, mehr westwärts in zersetzte kleine Buckel übergeht. Die Künste bietet hier durch die links vortretenden Felsen und die sich davor ausdehnenden Riffe kleinen Künstenbarken einen geschützten Ankerplatz. Auf den Uferfelsen sieht man Quadernfundamente, die einen rechten Winkel bilden, und Mauertrümmer, gewiss Ueberreste eines antiken Landungsplatzes"*.¹

The ancient stone blocks of the mooring seen by Ludwig Salvator could not be the one described by Di Vita since these latter ones were below the Roman villa and thus were not visible in the nineteenth century. According to the Austrian scholar, the remains he was able to see were probably located close to the rocks and small coves between the headlands indicated as *Port Ligatah* and *Kartil al Mosin* in the map edited in 1855 by Karl Müller (fig. 5.38).

Bringing together all the information, it seems that different sectors around Cape Hermaion were provided with docks, taking advantage on the one hand of the natural cove to the south of the headland on the other of the rocks and natural bays to the west. However, it is hard to establish both an accurate chronology of these infrastructures and to what extent these landing/s supported Lepcis' harbour through the centuries of their use. The only secure information is that part of the infrastructure was abandoned before the mid second century AD, probably after the Neronian/Hadrianic phase of the Lepcis harbour system and thus when the

¹ "A sandy area with many pottery fragments scattered across it and numerous rocks, which turns into a low headland toward the west, separates the town of Khoms from the sea. Here the coast offers a sheltered place for mooring thanks to protruding rocks to the left and a reef and small coastal banks stretching in front of it. On the coastal rocks one can see stone block foundations forming a right angle and remnants of walls which are most likely the remains of an ancient landing place" (I am grateful to S. Scheffler for helping me with the translation).

city was able to increase its wharfage and/or protect its moorings from floods and silting especially after the construction of the Wadi Lebda dam (Dm1).

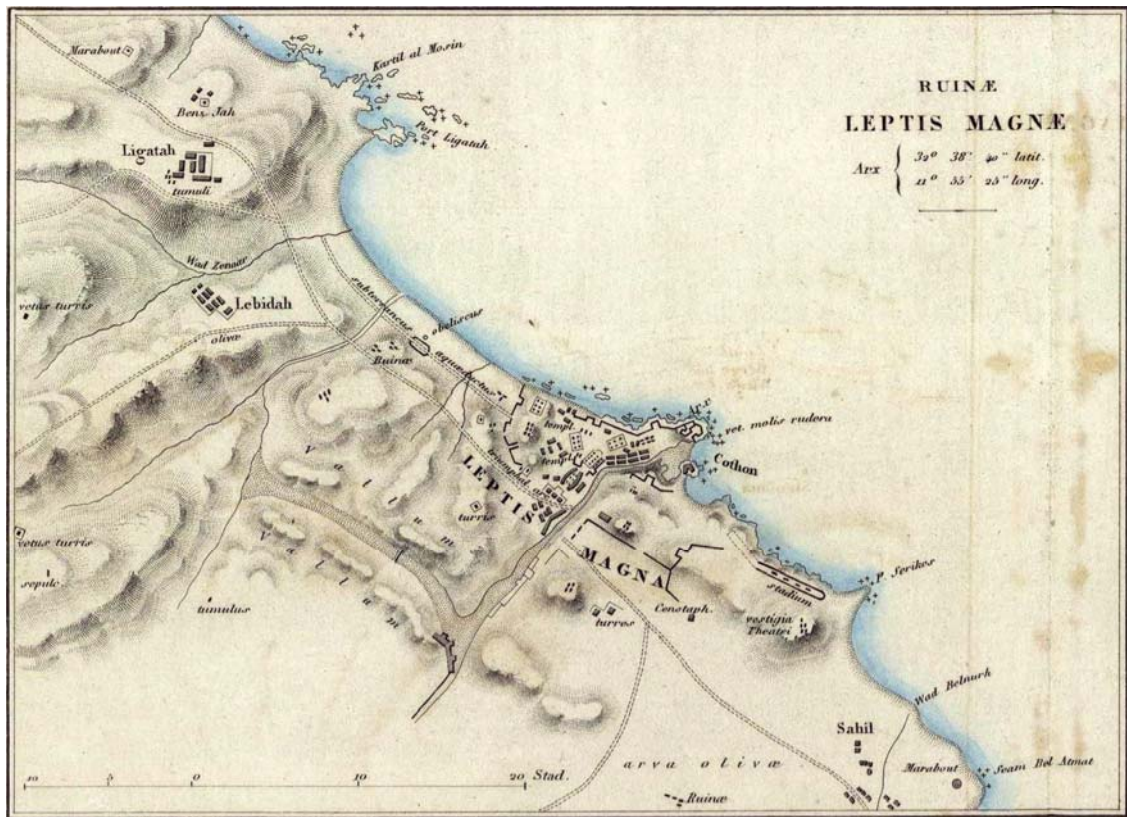


Fig. 5.38. The area between Leptis Magna and Cape Hermaion edited by Karl Müller (1855, tav. XXI, detail).

5.5.2. WAREHOUSES/CARAVANSERAI

The numerous and different merchandise that flowed into the city and that were not intended for the local market had to be arranged in appropriate storage spaces waiting to be loaded. The high influx of the same type of goods during a limited period of time often comprises between few weeks (November/December for olive-oil, September/October for wine and June/July for grain) would have necessitated a considerable amount of devoted space for their storage within the city. Some considerations can be done looking at the olive oil production. Significant storage areas have been noticed among large oileries/farms in the Gebel area (AHMED 2010, 96): in these cases oil was stored on the site and sent to Leptis - most likely through *amphorae* - in one single journey at the end of the harvest season. On the contrary, archaeological surveys undertaken in the Lepcitanian peripheral areas revealed almost the complete absence of *cellae olearie* within the rural sites as well as fragments of *dolia* among the associated potsherd areas. Although the lack of rural site excavations, these "surface anomalies" would suggest that most of the surplus of the peripheral olive oil processed was directly

dispatched to the city and its warehouses without the need of any large storage areas or *doliarium* on the productive sites.

It is worth considering that at least the products addressed to the *annona* were collected and stored at Lepcis in the same places to reduce management costs and facilitate their administration. However, when rural products arrived to the city either as small caravans from the peripheral areas or as larger caravans from the Gebel, the city's warehouses had to ensure the proper preservation of goods even for months. In this sense it is worth considering that overseas trade was hardly practicable- or however less frequent - due to the *mare clausum* from November to March, thus at the time and right after the olive/grape - harvest (see in general TAMMUZ 2005; MARZANO 2008, 259-260).

Still talking about olive oil, if we consider the 10 million litres hypothesized for the Lepcitanian annual production (see par. 5.2.4) and we exclude from this figure c.3 million litres for local consumption (c.20 litres *pro capite per annum* for 150,000 people taking into account Lepcis and its territory's probable population), the remaining 7 million litres - or a similar quantity - needed to be stored within *horrea* located in the city or in its suburban districts. To give a rough idea of the quantity of olive oil stockpiled annually, it is possible to calculate the volume required: 7,000 m³ is equal to 85,000 Tripolitana III type *amphorae* (capable of containing c.82 litres each) or about 4,500 medium size *dolia*. Even if we could reduce to one third these quantities, the amount would be still outstanding. In addition to olive oil, other products had to find a proper place waiting to be loaded or consumed and it was not just a matter of space: cereals needed devoted spaces to be stored in order to prevent from wasting and, for instance, wild animals and slaves necessitated further infrastructures for their sustenance/maintenance and for security reasons.

In the Severan phase, the closest warehouses to the boarding areas were the ones located along the western and eastern moles where a series of aligned rooms was built facing the internal basin (BARTOCCINI 1958; RICKMAN 1971, 132-136). It is most likely that before the construction of the Severan harbour warehouses were located along the west bank of the Wadi Lebda and eventually served the ships berthed on the mouth of the wadi and along the north side of the Lepcis headland (BARTOCCINI 1958, 10). Without any doubt, at least for the Severan phase, the warehouses located along the two moles and eventually other structures located nearby, were not sufficient and suitable for such quantities and all the variety of merchandise mentioned above and thus other larger storage areas must have existed outside the urban fabric.

A short distance from the Wadi er-Rsaf, in the western peripheral area, three large warehouses have been detected (fig. 5.39, Ti3-Ti5) plus another large Early Imperial structure located close to the Hunting Baths (En1). Despite the function of this latter construction not being clear, it seems plausible it belonged to an important public building - such as an *horreum* -

provided with a three opening gate facing the road to the east (WARD-PERKINS, TOYNBEE 1949, 153).

Only a small portion of one of these structures (Ti3) has been excavated and the structures' plans are identifiable mainly thanks to archival documentation or scanty surveys (fig. 5.40). Two of these buildings (Ti4-Ti5) reveal large courtyards surrounded by rectangular chambers while the other two structures - Ti3 and the other one close to the Hunting Baths (En1) - seems to be characterized by open spaces or, however, by the lack of rectangular chambers alignments.

The excavation of a limited sector of one of these warehouses (fig. 5.39, Ti3) has brought to light portions of its external wall (c.4.5 m high and 0.58 m thick) that was provided with internal buttresses and with a hard beaten surface in the interior. According to the data available, it seems that this building was not characterized by aligned rooms used as storage but by a strengthened walled enclosure (MUSSO *et al.* 1998, 210-212). The good quality of building techniques and the significant thickness of the walls detected in this structure enforces the hypothesis of its pertinence to a storage area; moreover, its structural strength is not in contradiction with this kind of building since it seems to be common among warehouses (similar requirements have been noticed in the majority of the public warehouses in Rome, *Portus* and

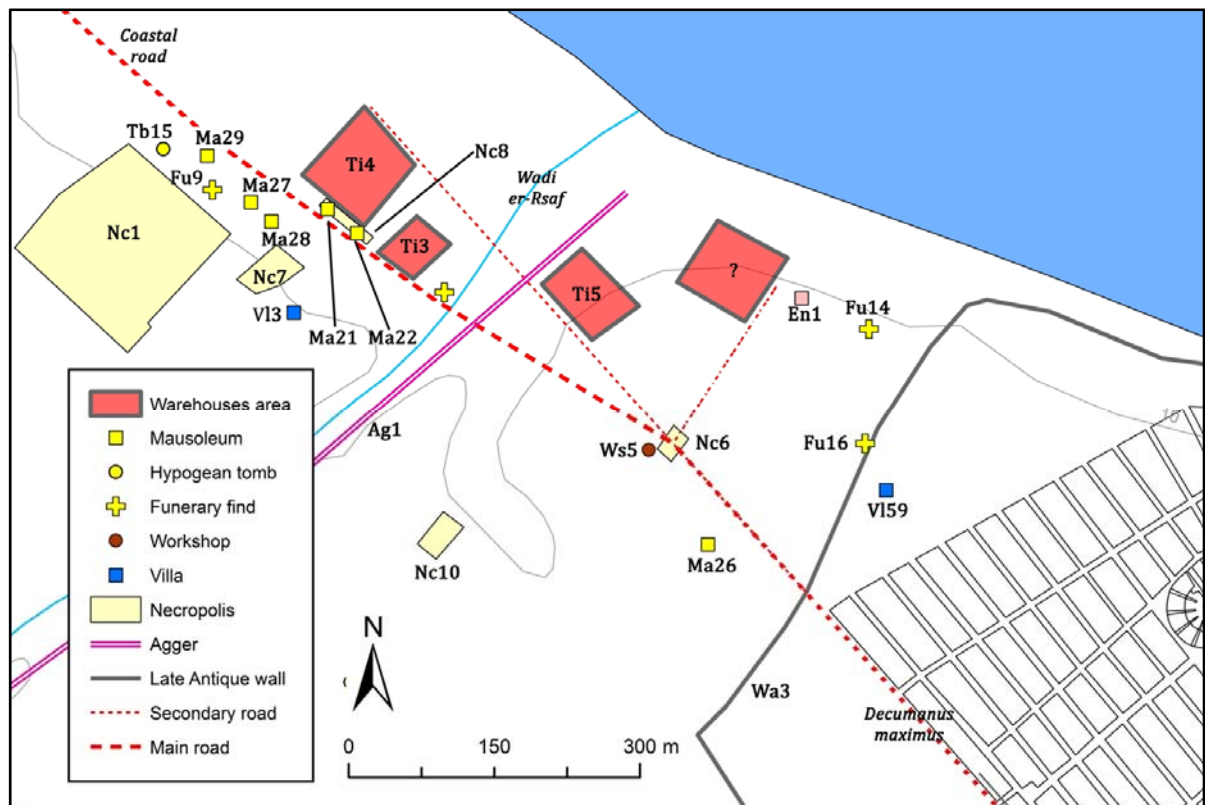


Fig. 5.39. The warehouses/caravanserais detected in the inner western Lepcitanian suburb.

Ostia; see RICKMAN 2002, 354). Open spaces or partially walled rooms may have involved different methods of storage including goods that necessitated less precautions compared to olive oil, cereals and wine. In the cases of building Ti3 and the one facing the Hunting Baths

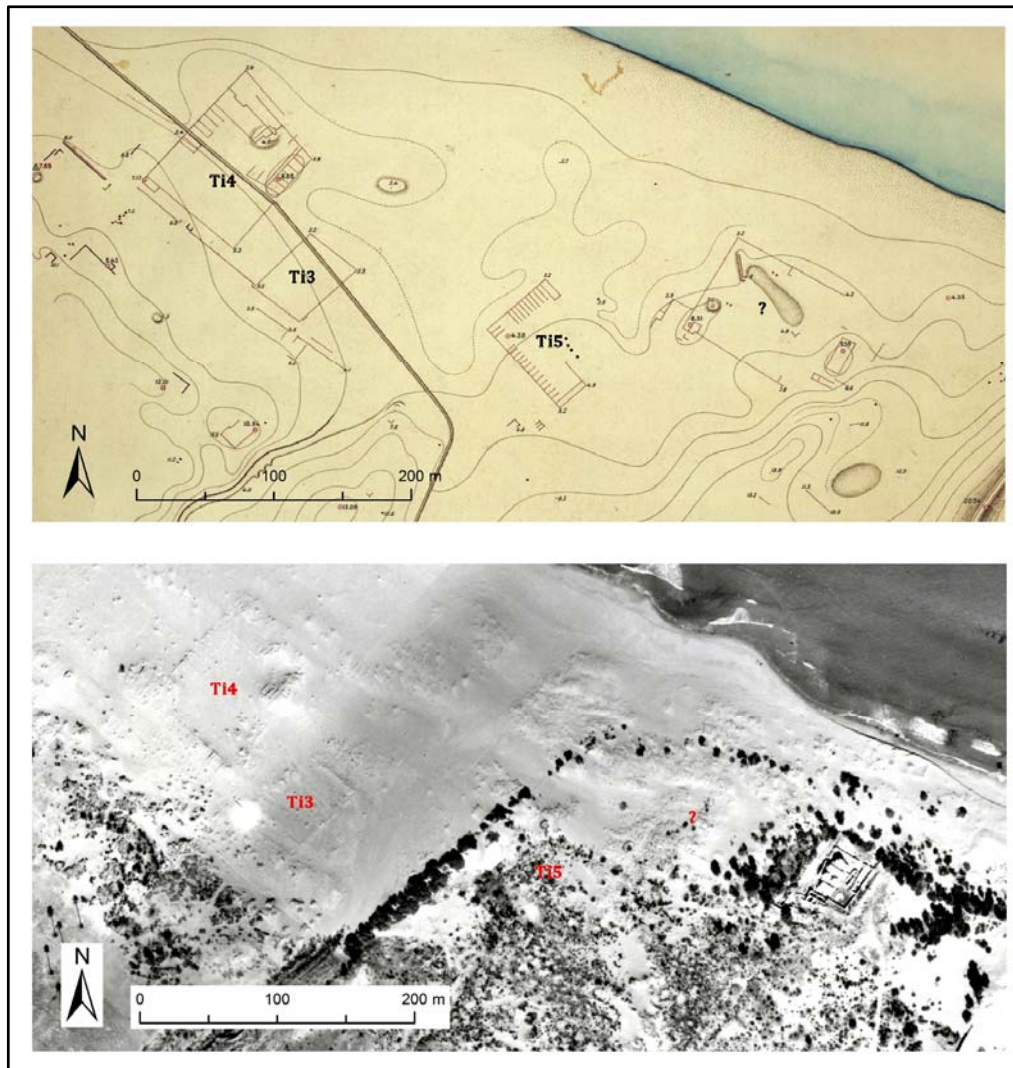


Fig. 5.40. The warehouses/caravanserais detected in the inner western Lepcitanian suburb. Above: the structures outlined in the Italian map (IGM 1915a, detail). Below: the same remains visible in the RAF 1949 air-photographs (ASLS, *Lepcis Magna* 24993-24994, detail).

(En1), it is reliable to consider that construction materials (such as bricks and wood) and other merchandise like pottery, livestock, cotton and even wild animal cages and slaves were stored. In this sense it is noteworthy to remember that in the case of wild and exotic animals, the choice of a suburban location was highly recommended and, despite the lack of archaeological evidence, ancient sources mention the existence of *vivaria* outside *Porta Praenestina* and *Porta Labicana* in Rome (*CIL* VI, 130; Procop. *Goth.* V.32.10-11, V.33.14-17; see MACKINNON 2006, 152. For the land/sea transport of live beasts see BERTRANDY 1987). The same applies to the slave market; even if it is not possible to determine where slaves were accommodated at Lepcis before the sale, it has been recently hypothesized that the *Chalcidicum* was their dedicated market building (BRACONI 2005; see in general HARPER 2011, 67-99).

In the case of the building provided with internal buttresses and with no internal rows of walled chambers (fig. 5.39, Ti3), it is possible to consider that it served also as a granary. This hypothesis is based mainly on the fact that its collapsed structures indicate that it was, at least,

4-5 m high and the internal buttresses detected may have supported a second floor where cereals could be stored. According to ancient sources, granaries should be indeed built using also mezzanine floors: Columella (*Rust.* I.6) mentioned "*pensiles horrea*" and Pliny the Elder (*HN*, XVIII, 302) suggest to protect wheat from wasting using structures with columns: "*alibi contra suspendunt granaria lignea columnis et perflari undique malunt, atque etiam a fundo*" (for these aspects see BOULINGUEZ, NAPOLI 2008, 719-721; HERMANSEN 1982, 228-238). In this case this large two floors warehouse may have been used for several purposes including stables, cages and open air storages/spaces at the ground level and granary at the first level as it would seem attested for other storage complexes in North Africa (SALIDO DOMÍNGUEZ, NEIRA JIMÉNEZ 2014, 209).

The other two buildings (fig. 5.39, Ti4-Ti5) recall the classical plan of *horrea* characterized by narrow rooms arranged on a central courtyard (in general see RICKMAN 1971, 148-160). According to the 1915 Italian map and to the 1949 RAF air-photographs, the narrow rooms of these two latter warehouses were characterized by similar shape and measures (c.5-6 m wide x 10-13 m long) very similar to the common ones registered at Rome and Ostia (RICKMAN 1971, 153). In the case of Ti4, the structure was also provided with a columned porticos (traces visible in the 1949 air photographs; see fig. 5.40).

The western structure (fig. 5.39, Ti4) preserves interesting aspects. It covers a wide area comprised between the funerary area of a necropolis (Nc8) to the south and the line of the *decumanus maximum* to the north. According to archival traces (fig. 5.40), its western side clearly shows the presence of a row of rectangular identical rooms that suggest a storage function while the north sector of the same walled block indicate other internal chambers characterized by different shapes and sizes that have been identified as a thermal area (MUSSO *et al.* 1996, 155-156, 165-166). Even if it is not possible to establish its function, the large internal area characterized by one or more courtyards and the existence of rest areas provided with water may suggest that it served as a caravanserai. Wide enclosed areas close to the city and adjacent to the main routes could fulfil this task as suggested by caravanserais identified as such by Mario Luni (1979) at Cyrene. It is possible to consider these Lepcitanian structures as the final destination of caravans where dozens - or even hundreds - of packed animals could unload their cargo within the wide open courtyards. These structures may have had thus a multifunctional purpose: on the one hand hosting and maintaining the caravans with their animals and *conductores*, on the other storing and keeping in safe places different goods.

Less evidence is related to the eastern suburban area. Even if, most of this peripheral sector was occupied by *necropoleis* and funerary enclosures especially along the routes from the city and the land partition detected on the east (see par. 4.7 and fig. 4.42), some structures can be identified tentatively as warehouses or caravanserais (fig. 5.41). The close proximity of this area with the east and south main road axis with the port district would suggest indeed the existence

of storage complexes. Despite the lack of any significant archaeological evidence, the west flank of the Wadi Lebda within the city was probably occupied before the construction of the Severan harbour and of the "Colonnaded street" by warehouses supporting the docks located in the

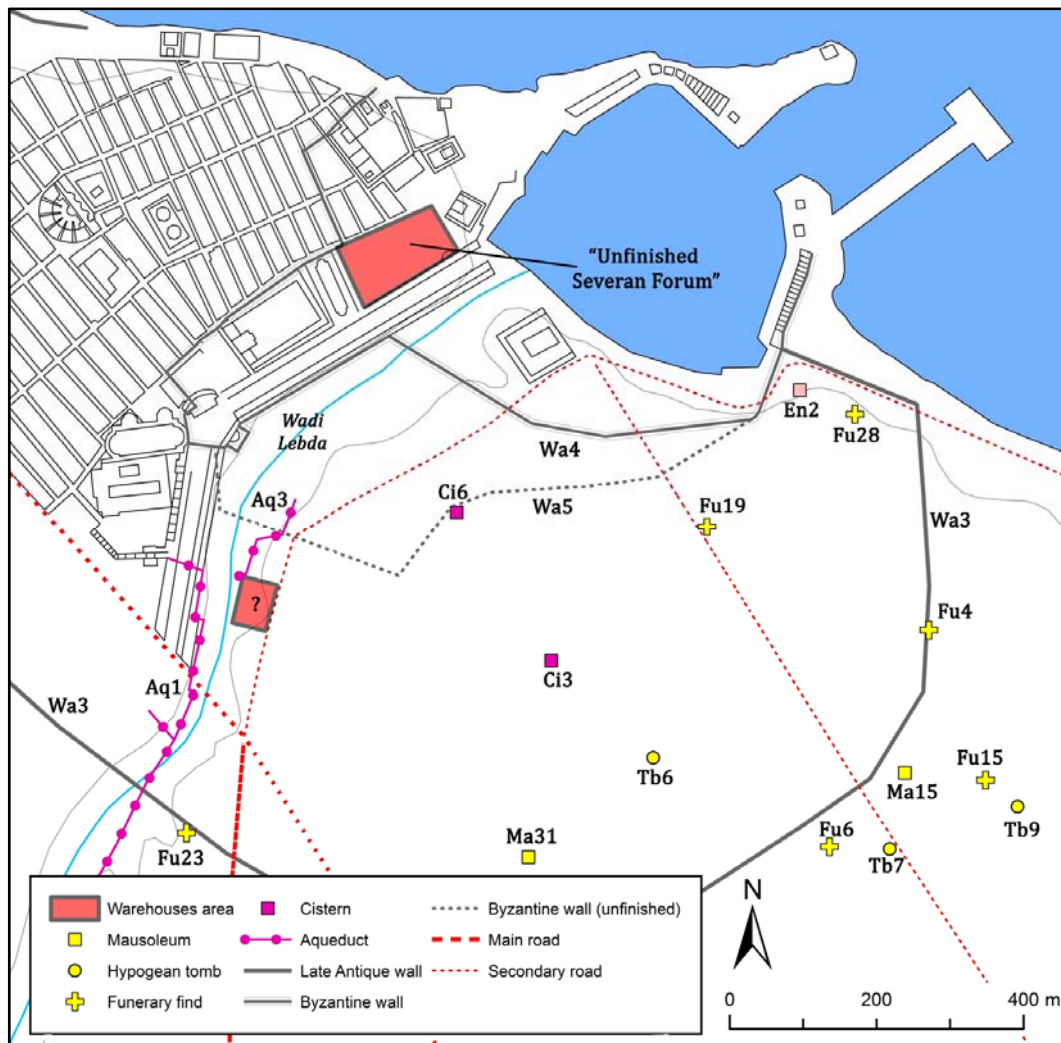


Fig. 5.41. The warehouses/caravanserais detected in the eastern suburbium of Lepcis.

western part of the wadi (BARTOCCINI 1958, 10, 14). The construction of the Severan complex could have erased previous structures with these replaced by the warehouses of the two Severan east and west moles and probably by the large walled empty area known as "the unfinished Severan forum". This latter huge area, provided by a large entrance gate and other minor doorways, has been identified by Stucchi (1987b, 71-72) as a caravanseraï also considering that its external walls were plastered and thus the whole structure must not be considered unfinished. Stucchi's hypothesis is, in my opinion, convincing considering that caravans in this way could unload their goods in a very close proximity to the harbour taking advantage of both the large "Colonnaded street" and water sources located especially along the Hadrianic Baths sector of its route.

Outside the urban fabric and in the eastern inner suburbium, other structures could be related to warehouses/caravanserais. Once again, both the 1915 Italian map of Lepcis and

several air photographs taken between the 1920s and the 1940s may be helpful (fig. 5.42). This documentation shows traces belonging to a large structure probably provided with porticoes

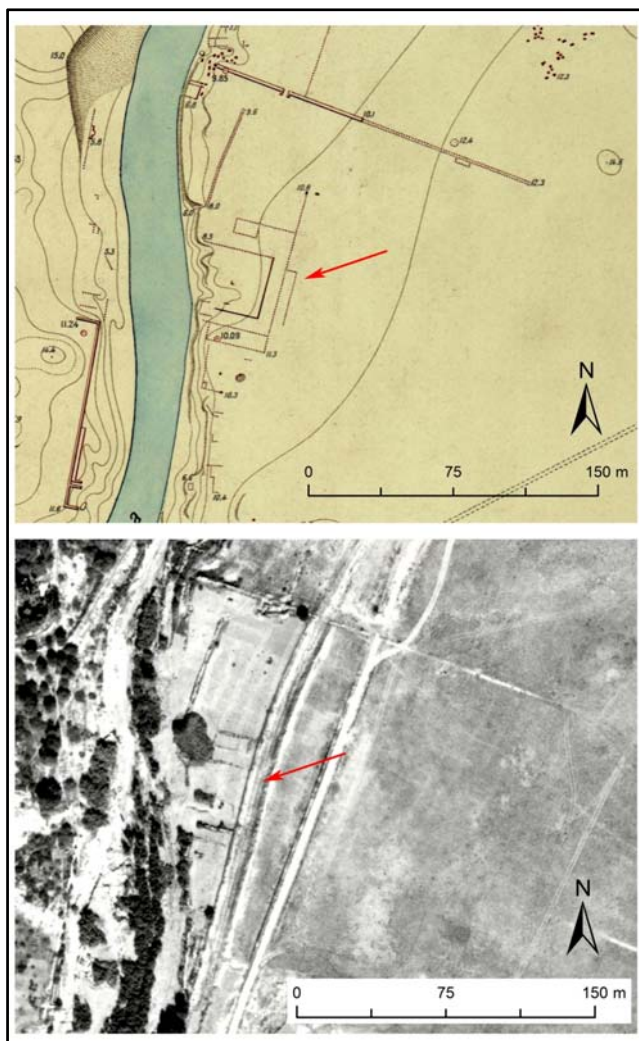


Fig. 5.42. The warehouse/caravanserai detected in the inner east Leptitanian suburb. Above: the structure outlined in the Italian map (IGM 1915a, detail). Below: the same remains visible in a RAF 1949 air-photograph (ASLS, *Lepcis Magna* 24997, detail).

and flanked to the north side - it would seem - by other less defined areas. Both their shape and position - along the route that led to the harbour and at short distance from cisterns and from the main routes - would enforce the hypothesis of a storage building associated to an enclosed space for packed animals. The existence of further storage structures north of the ones just mentioned and flanking the same west side of the road until the temple of Jupiter Dolichenus is also plausible; however, the construction of the Byzantine walls (Wa4-Wa5), as well as the modern Italian road, may have played a significant role in erasing their traces.

According to the data analyzed, it is possible to hypothesize for the Severan phase the whole storage system and the peripheral routes that caravans could have

been used to reach their final destination (fig. 5.43). The western warehouses /caravanserais could be easily reached

from the caravans coming from the west and from the Gebel area, using thus the *via in mediterraneum* and the inland route of the coastal road. Once close to the city, a junction may have linked these roads to the Wadi er-Rsaf area, allowing both the packed animals and above all carriages to pass through the Septimius Severus arch. The western warehouses/caravanserais most likely in use since the early Roman period or even before, could use a road passing at short distance from the foreshore to commute with the western quays.

The goods coming from the east and above all from the south could reach directly the harbour area or at least the warehouse/s located along the east bank of the Wadi Lebda. In the first case the "Colonnaded street" was the shortest and the most comfortable route to reach the docks or the wide space used as a caravanserai north of the Severan basilica. It is certainly possible considering the presence of other east-west minor tracks in the inner suburban areas

that allowed caravans to avoid the *decumanus maximus* and thus the passage through the Severan arch whose steps prevented the passage of wheeled transport. However, it is noteworthy to consider that this monumental tetrapylon was probably an issue just for wagons and not for pack animals that could easily pass around or cross it.

Before the Severan phase, the general scheme should not differ much: the wide open area (the "unfinished forum") close to the Severan harbour would probably have replaced other warehouses/spaces located along the west bank of the Wadi Lebda used to store/unload merchandises while the warehouses located within the two Severan moles could have replaced other storage areas facing the sea of the Neronian harbour.

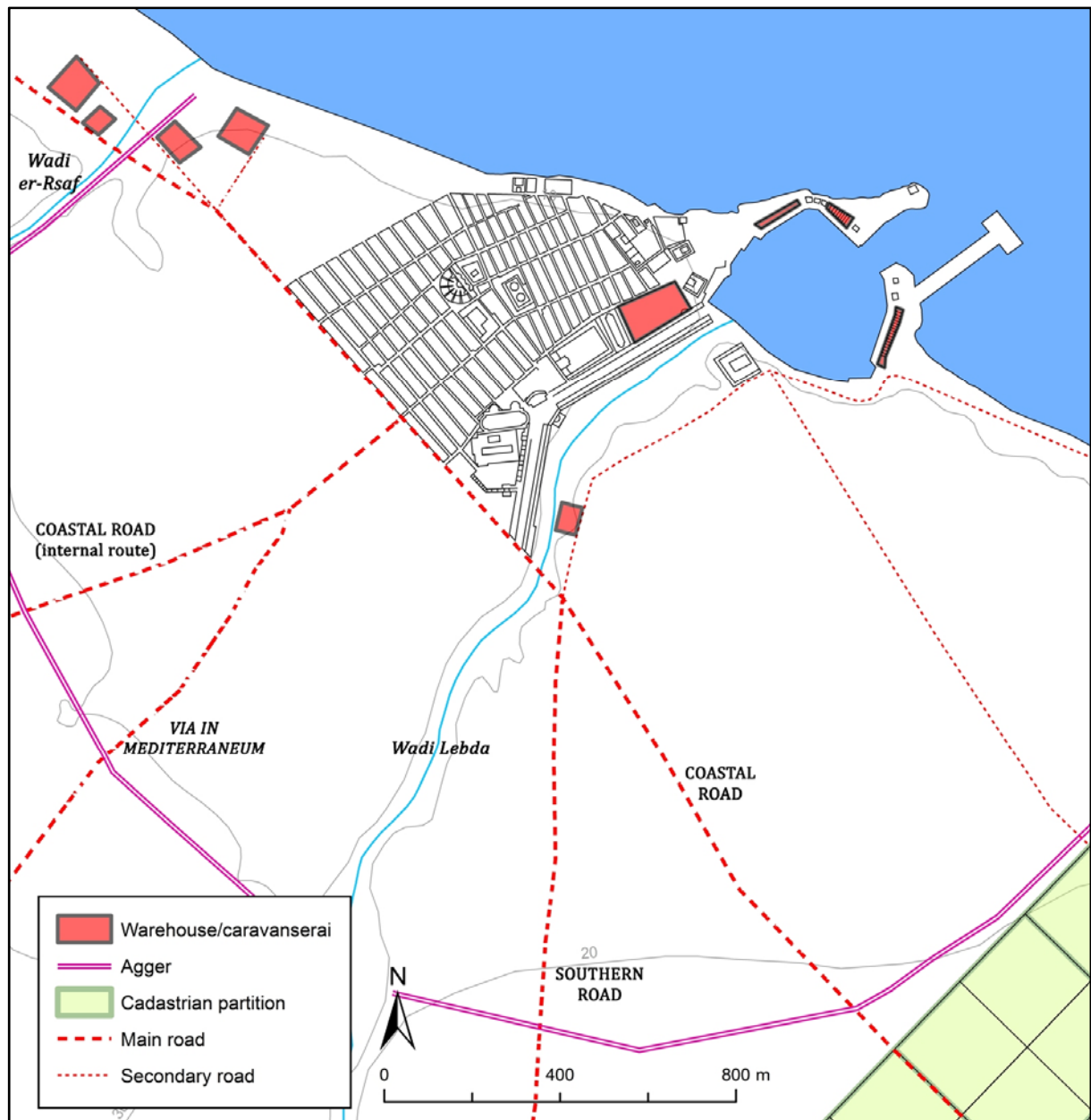


Fig. 5.43. The Lepcitanian warehouses/caravanserais located in the city and in its periphery in the Severan period.

5.6. SUMMARY OF THE CHAPTER

In this chapter have been included all the evidence related to the productive processes that involved raw materials exploited or processed within the area analyzed including also those structures related to the goods storage and shipping. The main raw materials considered are limestone (and sandstone), agricultural and livestock products, fishing and marine resources. According to the archaeological data available and also considering ancient sources, the main agricultural products cultivated and processed in the Lepcitanian periphery in ancient times (in particular during the Roman period) were olive oil, cereals and grapevine together with other fresh vegetables most likely cultivated for the city needs. The constant presence of olive oil (and wine) presses found within the rural sites allow me to establish that c.637,000 litres of olive oil were produced in one year in the area considered (c.100 km²) during the Roman Imperial phase, that is c.1/18 of the production of olive oil coming from the whole territory controlled by Lepcis. The role of the numerous Roman *villae* detected in the periphery played a significant role for the agricultural activities ensuring the profitability of the land. Together with the raw materials, different manufacturing activities have been considered in the suburban area of the city. Among these glass workshop, pottery and lime kilns, *fullonicae* and fish working manufactories must have played a primary function within the economy of the city and its suburban areas. Finally, the storage facilities (the final stage of all the products that could be exported) have been considered including the peripheral docks, caravanserais and warehouses.

CHAPTER 6

LUXURY DWELLINGS: *VILLAE MARITIMAE* AND *VILLAE RUSTICAE*

6.1. HISTORICAL AND TOPOGRAPHIC ANALYSIS

Especially during the first three centuries AD the coast and the inland areas that surround Lepcis Magna were dotted with lavish dwellings (known with the generic term of *villae suburbanae*) in which the upper class of the city lived or spent part of their life.

As noticed by Salza Prina Ricotti (1970-1971, 135-136), the plan of the mid-Imperial urban fabric of Lepcis is characterized by the absence of blocks that may include large and wide dwellings provided with large *atria* and *peristila*. The long and narrow blocks arranged *per strigas* - planned from the Hellenistic period onward (see par. 2.1.1) - indicate that most of the built-up area was occupied by stores, workshops and small/medium size houses to the detriment of large private properties inhabited by the local elite. This consideration does not mean that during the Principate the upper class lived permanently outside the city, but probably that the new economic possibilities and a life-style based on Roman habits prompted the richest Lepcitanian families to invest resources in their suburban properties where often pleasant spots (both along the coast and in the inland hilly landscape) were available. The rural peripheral areas, already widely exploited during the Hellenistic period (see par. 5.2.4 and figs 5.24-5.25), were thus impacted - from the late first century AD until the third century - by the building of new lavish structures or by the enlargements/restorations of already existing ones.

Although it is hard to establish to what extent the wealthy Lepcitanian class decided to live and use the suburban estates as a primary residence, it is clear that by the mid-Imperial Roman period many new dwellings dotted the first kilometres around the city. Some already existing villas were also restored/enlarged and beautified. Out of a total of 77 Lepcitanian Roman villa-sites, almost half (37, 48%) have revealed traces of habitation at least from the second century BC (similar patterns can be seen on Djerba: FENTRESS 2001; DRINE, FENTRESS, HOLOD 2009, 87-95).

My gazetteer includes 65 villas plus another 12 potsherd scatters (Vp), whose decorative elements collected on the ground (mosaic *tesserae*, marble and painted plaster fragments) link to this type of dwelling (fig. 6.1). Apart from a few lavish *villae* excavated during the Italian colonial period, the majority of these structures are unpublished and have only been detected during recent surveys (MUNZI *et al.* 2016, 73).

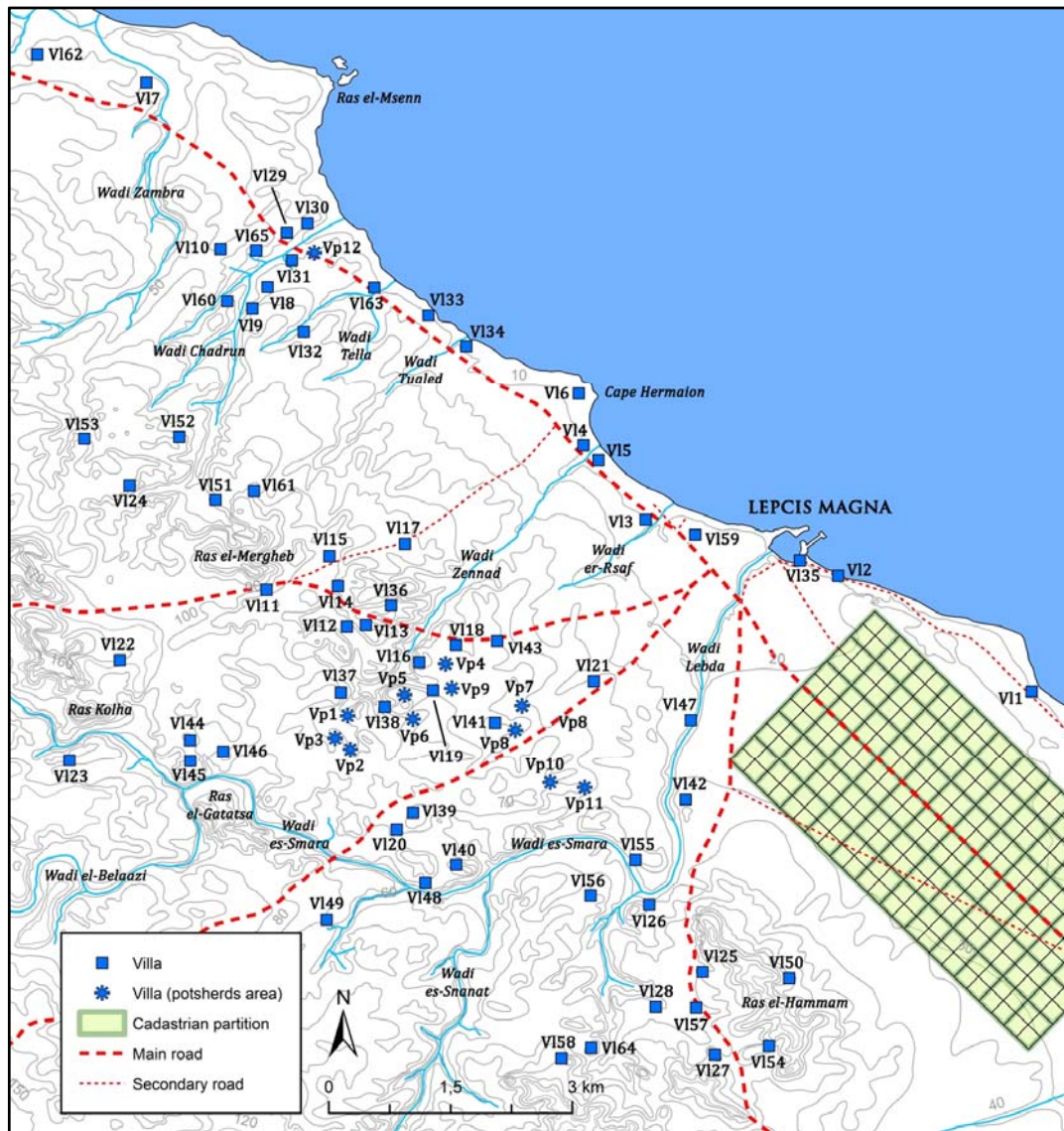


Fig. 6.1. The sites related to *villae* (VI) in the Lepcitanian periphery.

It is important to consider that many of the sites from the surveys have been identified as *villae* thanks to the traces of lavish decorations found on the ground together with the surviving structures that help to delineate general plans and thus recognize their function. However, due to the scarcity of the information collected (paucity of the lavish decorations and plans hardly legible), it is not always possible to determine to what extent the *pars urbana* was related to the *pars fructuaria*. It is also difficult to establish, for the *pars urbana*, if the decorated sectors were restricted only to specific and limited areas of the structures (bath areas, reception rooms, *cubicula*, etc). Nevertheless, the total figure of 77 sites is impressive considering the c.130 km² of the area analysed. Even if some close-by adjacent villa sites could be from the same property, the total cannot be substantially overestimated. On the contrary, the total figure is impacted by the fact that the area between Wadi er-Rsaf and Wadi Tualad has been recently overbuilt due to the Khoms city expansion. This has most probably erased the remains of several structures (see par. 2.2.2).

Compared to other North African suburban contexts, the 77 sites related to the Lepcitanian suburban villas constitutes an extraordinary figure with a density of circa one site every 2 km². In the similar geographic and morphological context of *Iol Caesarea*, within a total of c.240 km² surveyed 57 villas were recorded, equal to less than one site every 4 km² (LEVEAU 1984, 399-404, fig. 214). *Iol Caesarea* represents the highest North African case in terms of quantity of villa sites, followed by the case study of Djerba where, however, the majority of the Roman *villae* were detected in the south eastern part of the island. In other North African regions, the surveys carried out around the inland centres of *Thugga* and *Cillium* in Tunisia and in the area between *Thamusida* and *Volubilis* in Morocco have revealed scarce traces or even the absence of élite country residences (in general see WILSON 2018, 271-273).

Andrew Wilson (2018, 266) has questioned the existence of a "villa system" in Roman North Africa, but this would find certainly an affirmative answer if we just refer to the suburban area of Lepcis Magna. In order to evaluate this phenomenon, it is noteworthy that the density of the luxury dwellings detected within a radius of 7-8 km from Lepcis compares with the situation registered in the same period for the suburban districts of Rome or with the coastal zones of Campania. Even if the case of the Lepcis periphery seems to constitute an *unicum* in North Africa, the spread of several luxury estates along the Tripolitanian coast during the Roman Imperial period has been already noticed thanks to several *villae marittimae* identified between *Sabratha* and *Thubactis* (in general see SALZA PRINA RICOTTI 1970-1971; RIND 2009, 114-128; WILSON 2018, 285-297; MONTALI 2018).

The topographic position of most of these structures in the periphery of Lepcis Magna would suggest a subdivision between rural villas (*villae rusticae*) and coastal villas (*villae marittimae*). The former were located mainly inland and were strictly connected with the agricultural activities, while the second group was characterized by structures facing the sea or strictly connected to it (in general see MARZANO 2007, 13-101). However, as suggested by some examples in the Silin area, the connection of a *villa maritima* with its hinterland and thus with agricultural production must not be excluded (SALZA PRINA RICOTTI 1970-1971, 149-154, MUSSO 1997, 207-208). Among the 77 Lepcitanian villa-sites, the Wadi er-Rsaf villa (fig. 6.1, VI3) is probably one of the cases in which is not easy to determine between the two typologies mentioned above: though close to the shoreline and to the city, this villa was not directly linked to the sea and, apparently, not provided with any equipment related to rural activities or *pastio villatica*. Despite its *suburban* spot, the general plan of the Wadi er-Rsaf villa resemble a lavish urban *domus*. It was built within a high-density built area characterized by funerary structures, shops and warehouses.

However, it would appear hard - and to some extent useless - to define and categorize each villa considering just its topographic position or, where available, the amount/types of goods produced. Taking into account the Lepcitanian landscape and in particular the so called "Villa del

Nilo" (VI2) and the "Villa di Orfeo" (VI59), Goodman (2007, 73) would suggest the existence of an "hybrid" luxury dwelling type that bridged the gap between the proper suburban villa and elite *domus* of the urban core. Other examples located on the very fringes of the city can be added to the two structures cited by Goodman: the already mentioned villa at Wadi er-Rsaf (VI3) and another structure located on the east bank of the Wadi Lebda mouth (VI35). In this last case, even if the data available are very scarce, it is possible to consider this structure as a *villa maritima* located at the very edge of the densely built-up urban landscape. Similarly to this latter example, another three *villae* along the coast between the city and *Cape Hermaion* (VI4-VI6) could be included in this "hybrid" type; unfortunately, the lack of proper excavations as well as the scarce knowledge of the surrounding landscape do not allow us to ascribe these structures to an appropriate typology.

On a total of 77 sites, eight structures can be referred to *villae maritimae* (fig. 6.1, VI1-VI2, VI4-VI6, VI33-VI35) and the majority of the remaining sites to *villae rusticae*. Even if many of these latter sites do not preserve any direct archaeological evidence related to agricultural activities, their position and/or their close relationship with other rural structures indicate their pertinence to the country life (fig. 5.27). Again, there are some exceptions and, among these, probably the most evident example characterized the Wadi Chadrun area. Along its course, and in particular along its last 1.5 km, have been found nine sites related to *villae*, four on the east bank (fig. 6.1, VI8-VI9, VI31, Vp31) and five on the opposite side (fig. 6.1, VI10, VI29-VI30, VI60, VI65). Their density, and the fact that only two sites were provided with olive oil/wine presses (VI60, VI65) would suggest that these structures were mainly devoted to *otium* rather than *negotium*: despite being built within a rural area, the agricultural/productive activities seem to have been marginal in these cases.

Whatever the type or the definition of these *villae*, their role had to be significant within the regional economy. Both the merchandise produced in these sites and the spin-off related to their construction/maintenance have surely played an important part to the local wealth especially during the second-third century AD. Beside the main products of the soil and of the sea already analyzed (see pars 5.2-5.3), these structures were able to produce/breed other "minor" goods that could be consumed/used within the property and the surplus sold in the close city market. Fresh vegetables, honey, textiles, leather, horses, dormice, peacocks, ducks, thrushes and other animals and goods related to the *pastio villatica* can be indeed referred to the largest and more productive of these sites even if no archaeological traces have been found (in general see MARZANO 2007, 19-20, 88-89; 2008). At the same time, the commercial activities related to the marble trade widely used to beautify their *partes urbanae* and the specialized manpower employed to assemble mosaics, *opus sectile*, marble decorations or to paint sectors of these dwellings should not be underestimated and surely involved - directly or indirectly - part of the Lepcitanian community. Finally, the agricultural and other activities practiced at these sites

needed workers and specific personnel (seasonal or permanent, slaves or freedmen) thus contributing to the demographic growth of the area.

The Lepcitanian *villae* were generally built taking advantage of specific topographic features depending on whether they were built along the coast or inland. *Villae maritimae* were generally set on cliffs and often using the sandstone available on the site (see par. 5.1.1). In this case the distance between the structures and the sea was minimal (fig. 6.1, VI1-VI2, VI6, VI33-VI34). In other cases, where luxury dwellings were located close to sandy beach areas and above all close to the wadi mouths (fig. 6.1, VI4-VI5, VI59, VI63), the distance from the seashore was higher. The structures located inland followed other morphological features according to the exposition and water supply. As already mentioned (par. 5.2.2), hill-tops and their slopes were preferred rather than valley bottoms. Wadi slopes were usually chosen as an optimal spot: the already mentioned *villae* built along the Wadi Chadrun and the Wadi Lebda villa (VI47) are the most significant

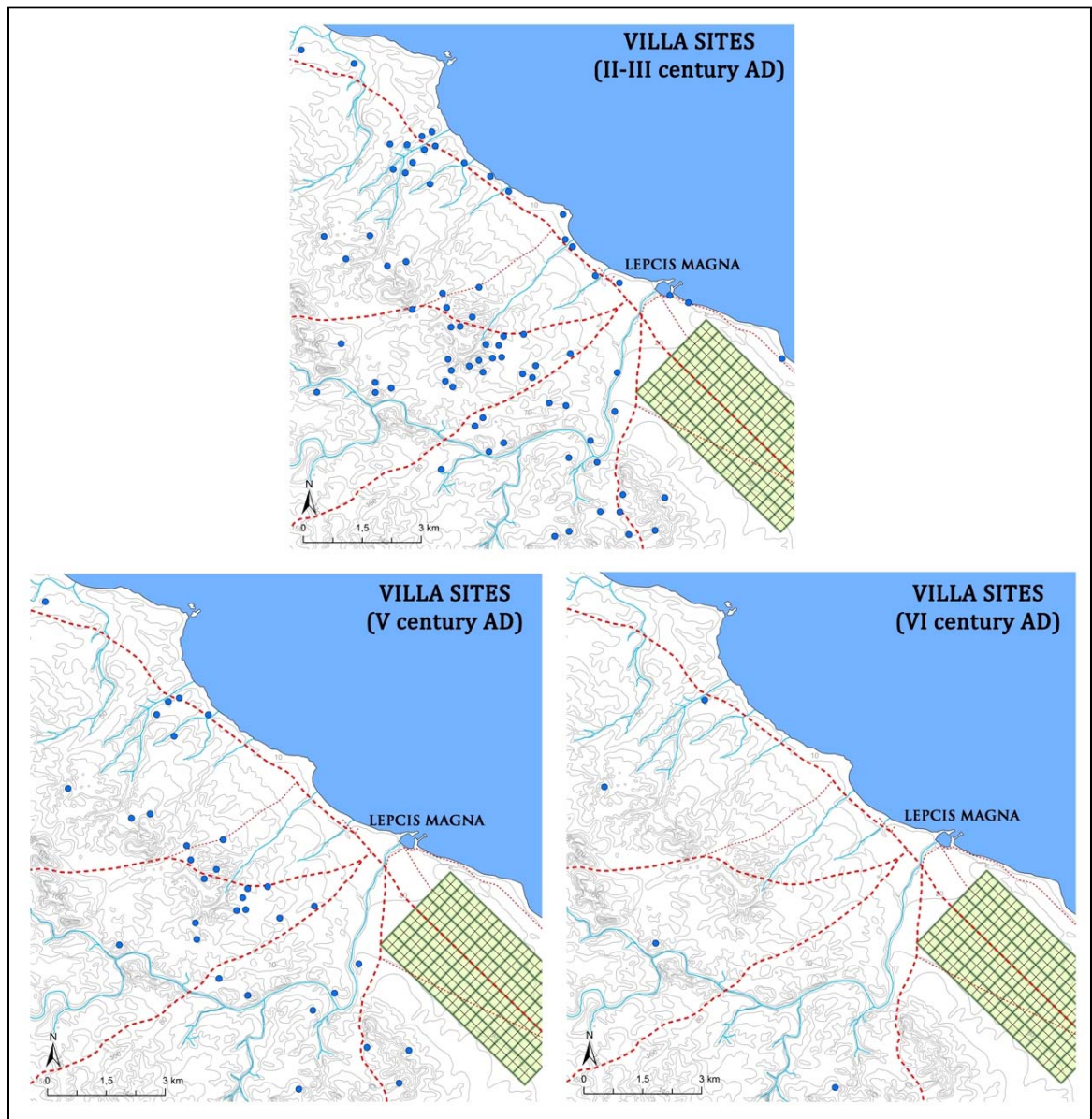


Fig. 6.2. Villa-sites from the Mid-Roman Imperial period to the sixth century AD.

examples in this sense.

In several cases (fig. 6.1, VI15, VI17-VI18, VI25, VI27, VI20-VI21, VI42-VI43, VI57) *villae* were built on flatter areas, usually close to the main road network. Their proximity to the transportation infrastructure was surely fundamental considering both the economic/commercial necessity for goods to reach the Lepcis market and also to allow the owners/workers to travel to the city daily (see in general MARZANO 2008, 156-161). In the case of the farthest structures, the time needed to reach the city would be c.2 hours by foot and c. one hour on horseback (the majority of the *villae* considered are however located in a radius of c.4-5 km from the city and thus these figures can be halved). However, all the *villae* found in the area analyzed benefited from the road system and, according to the data available, the distance of lavish structures from a main road does not exceed 2 km.

After the most flourishing period dated mainly between AD 100-300, a first significant contraction of the villa-sites occurred between the end of the third and above all during the fourth century AD. The pottery data from the sites clearly indicate that many *villae* detected in the area analyzed were already abandoned during the fifth century (fig. 6.2): from a total of 77 villa-sites, almost half (31 structures) seem to have been abandoned while a further 13 were transformed/readapted into fortified structures. In this context, raids and lootings made by Austuriani in the Lepcitanian suburban areas during the mid-fourth century (Amm. Marc. XXVIII 6. 4, 13) together with two significant earthquakes (AD 309-310 and AD 365) could be considered such as further causes in determining this crisis.

What is important to note is that the late-antique villa-contraction principally involved the coastal sites rather than the rural *villae* located inland where the agricultural system seems to be less affected by 'crisis' (see par. 5.2.4). It is true that there has been a lack of extensive excavations, but two of these coastal luxury dwellings (fig. 6.1, VI3, VI6) have revealed that they were completely abandoned during the first half of the fourth century and probably the lack of maintenance began during the third century, as the example of the villa at Wadi er-Rsaf (VI3) has demonstrated (MUSSO *et al.* 1998, 192-194; FELICI, MUNZI 2008; TANTILLO, BIGI 2010, 56). A similar situation characterizes the mid-Imperial villa at Khoms (VI6) where the abandonment *strata* can be dated around the end of the third century (MUNZI 1998). The general crisis of the Lepcitanian coastal sites during the third and fourth century is also supported by the last phases of life attested for other *villae maritimae* located between Sabratha and Lepcis (TANTILLO, BIGI 2010, 56; WILSON 2018, 298).

If on the one hand the coastal *villae* suffered a dramatic contraction, on the other hand the still vibrant rural economy of the interior areas ensured to maintain/use the properties and their equipment, probably in a reduced form or without significant lavish restorations or enlargements. Clearly, the first repercussions of this crisis were suffered by the proper *villae suburbanae*, which were the ones built mainly for the owners pleasure with little productive

activity. To the west of the area analyzed, the coastal *villae* seem to have been used for a longer period, probably because the landed properties connected to these structures were larger and thus their connection with the agricultural activities tighter. However, the villa-system around Lepcis definitely collapsed more or less one century later, between the fifth and the sixth century (fig. 6.2): out of the 33 *villae* that survived into the fourth/fifth century, only four continued to be used during the sixth. A substantial demographic decline and a severe unstable political/economic situation led to a general abandonment of surviving lavish structures located inland, probably already partially dismissed and not maintained (for agricultural aspects see par. 5.2.4).

6.2. STRUCTURAL FEATURES AND DECORATIONS

Beside the suburban villa at Wadi er-Rsaf (fig. 6.1, VI3), no other Lepcitanian villas have been fully excavated or have been published in detail. This lacunose documentation prevents us from having a satisfactory idea of the general plans and arrangements of most of these buildings. The partial plans available are limited to the coastal dwellings of the "Villa del Nilo" (VI2) and "Villa del cimitero israelitico" (VI5) plus the unpublished plan of the so called "Villa di at-Thalia" (VI1). All these *villae* were built close to the shoreline; in the case of at-Thalia a portico was facing the sea while in the "Villa del Nilo" the structures detected were built directly on the bedrock with the bath area set in a lower terrace a short distance from the low cliff (fig. 6.3). Such villas located with one or more sides facing the sea benefited from panoramic views through porticoes or with other scenographic devices to adapt the structures to the shoreline, as suggested by the examples from the Silin area (in general see DI VITA 1966, 27-28; ROMANELLI 1970, 252-255; SALZA PRINA RICOTTI 1970-1971, 81-82; MUSSO 1997, 206-208). To better understand the original aspect of these maritime villas it is useful to recall some Pompeian frescoes and, in particular, an *emblema* from the *tablinum* of the house of *M. Lucretius Fronto* in which are depicted several *villae* facing the sea provided with porched facades (CARANDINI 1989, 192-200).

The recent surveys have registered scarce structural traces of the inland luxury villas and, where visible, the surviving parts have shown the common use of the *opus africanum* technique. Within these sites - as well as the coastal *villae* - we can recognize some specific structural features, such as courtyards/peristyles, bath areas, cisterns and *opus quadratum* walls used most likely for the lower part of towers or for *basis villae* (see par. 5.2.2 and, in general, RIND 2009, 47-76). The Lepcitanian villas located within the rural areas seem to be similar to some other inland lavish dwellings in different regions of North Africa, generally characterized by a

massive body with a quadrangular shape and usually defined by a continuous walled enclosure and wide courtyard/s (MANSUELLI 1958, 37-38; see par. 5.2.2 and fig. 5.13).



Fig. 6.3. The so called "Villa del Nilo" (VI2) in the eastern inner suburbium of Leptis Magna, 1946-48 (BSR, WP G23 45a).

Out of a total of 65 structural remains related to *villae*, 37 could indicate their original built area (fig. 6.4 and Vol. II, App. II). The general lack of plans derived from extensive excavations prevent us determining the whole extension of many other of these suburban *villae*. The lavish mosaics and decorations, often found in fortuitous circumstances, have indeed drawn the attention of scholars often leaving the structural remains in the background: the so called *villae* "del Nilo" (fig. 6.1, VI2), "del cimitero israelitico" (fig. 6.1, VI5), "di Orfeo" (fig. 6.1, VI59) are the main examples related to the Italian colonial period to which must be added other significant structures detected more recently (fig. 6.1, VI1, VI4, VI6, VI47). However, considering the extent and the quality of the finds related to these structures it is possible to consider these *villae* as "first-rank" luxury dwellings.

Among the 37 *villae* whose extension is quantifiable, 7 had an area between 400 and 999 m², 17 between 1,000 and 1,999 m², 7 between 2,000 and 3,600 m² and, finally, 6 *villae* have revealed large built area comprised between 5,000 and 7,800 m². Four of these structures (fig. 6.1, VI37, VI50, VI53, VI57) have been already analyzed within the rural sites (par. 5.2.2) since they were equipped with *torcularia*: their size is comprised between 2,000 and 3,600 m². However, as was also the case at *Iol Caesarea* (LEVEAU 1984, 402), the majority of the Lepcitanian luxury structures seem to have built areas of between 1,000 and 2,000 m². This surface probably constitutes the average size of a lavish dwelling characterized by a small/medium bathhouse,

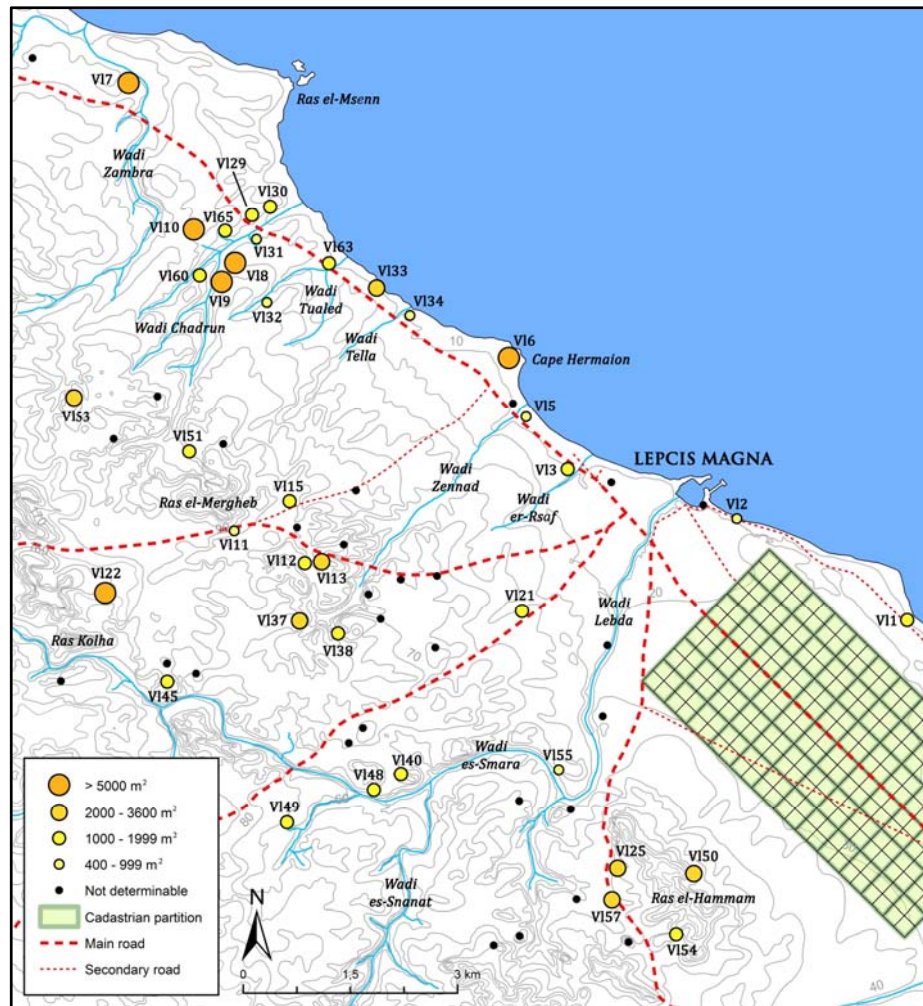


Fig. 6.4. Size (in square meters) of the built areas related to *villae* (VI) in the Lepcitanian periphery.

peristyle/s, courtyard/s, a *pars urbana* and most likely a *pars fructuaria* equipped with a pressing room.

The largest structures (more than 5,000 m²) recorded in the Lepcitanian periphery can be compared to the *villae* detected along the coast in the Silin area and, in some cases, the new unpublished sites reveal even bigger sizes. Di Vita, describing the so called unpublished "Villa dello Sparto" at Cape Hermaion (fig. 6.1, VI6), noticed that it was one of the biggest villas in the whole North Africa (DI VITA 1974, 234). In this case, the rooms brought to light covered c.5,000 m² and probably its overall surface was even bigger. Three other luxury complexes have revealed very large built surfaces and they were all placed along the sides of the Wadi Chadrun (fig. 6.1, VI8-VI10), at short distance from the coastal road and from the seashore. These three structures, whose built surfaces ranged between 5,000 and 7,800 m², were located close to other medium size *villae* (VI29-VI30, VI60, VI65). Despite the density and large scale of *villae* in this area few lavish architectural/decorative elements have been found on the sites. However, this anomaly could be explained considering the presence of six lime kilns found nearby that may have been reused to burn marble and other architectural elements robbed from the villa-sites (see par. 5.4.2 and fig. 5.35). Two other large lavish structures (6,400 m² and 7,200 m²) have

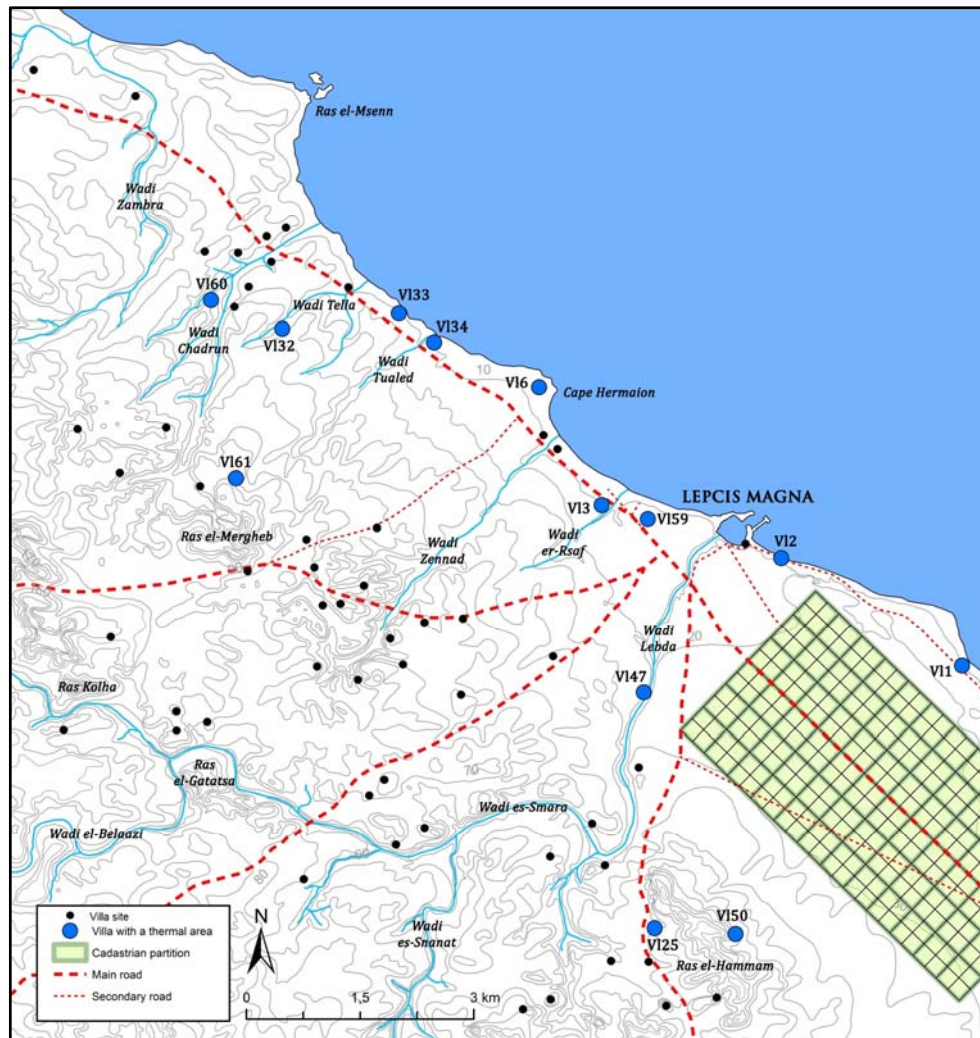


Fig. 6.5. Distribution of bath complexes related to the Lepcitanian villae.

been found: one along the west bank of the Wadi Zambra (fig. 6.1, V17) and the other on a small hill between Ras Kolha and Ras el-Mergheb (fig. 6.1, V122).

In the Lepcis periphery 13 bath complexes are registered associated to luxury dwellings (fig. 6.5). Considering the overall 65 structural remains of *villae*, this figure may seem exiguous since bathing was one of the main habits and fashion of the Roman life. The majority of these complexes are in the coastal *villae* where the lavish mosaic decorations found are mostly related to them. Bathing complexes were a less important component for the inland rural villas. Probably the reason of this discrepancy could be explained taking into account the different size of the bath complexes in the two different areas and thus relate their different distribution to visibility factors. The coastal sites seem to have larger *partes urbanae* than the inland villas, an element that would suggest a marked preference on the coastal belt for activities connected to *otium* and, particularly, bathing. In addition, it must not be excluded that owners of the inland villas might have had other properties in the inner suburbium or along the coast with larger bath complexes. The *villae* located inland were surely provided with bath complexes, but they were most likely smaller and intended for only a few users/guests compared to the

medium/large thermal areas found within the coastal dwellings (for bathing facilities found in the Djebel Tarhuna see AHMED 2010, 148-153). A more careful use of water (most of the reservoir was probably devoted to agricultural activities) together with a limited number of guests constituted the two main factors that could explain the small size of *balnea* in rural *villae*.

Depending on the financial resources, the *partes urbanae* of villas could be decorated with mosaic floors, wall paintings, stuccoes, marble facings and stone/marble architectural elements. Archaeological evidence related to all these lavish elements constitutes a clear testimony to the high level of handicraft available and the substantial economic means that the local elite could invest during the first three centuries AD. On a regional scale, the Tripolitanian coastal *villae* are probably the most lavish and decorated dwellings found in the whole of Roman North Africa. Beside the Lepcitanian sites, numerous other *villae* located both in the inner suburban areas of Sabratha and Oea together with other significant structures further away from the main cities such as the areas of Tagiura, Silin, Zliten were characterized by an impressive set of decorations.

The implementation of these lavish elements dated mainly to the mid-Imperial period are probably contemporary to the Lepcitanian monumental building activities in which marble and specialized craftsmen were needed in large quantities (in general see PENSABENE 1986; BIANCHI 2005). Moreover, the contemporary spread and availability of valuable materials and specialized manpower could have facilitated "a competition" between different families that, through architectural expedients and decorative motifs, aimed to impress *clientes* and guests within their suburban/periurban properties.

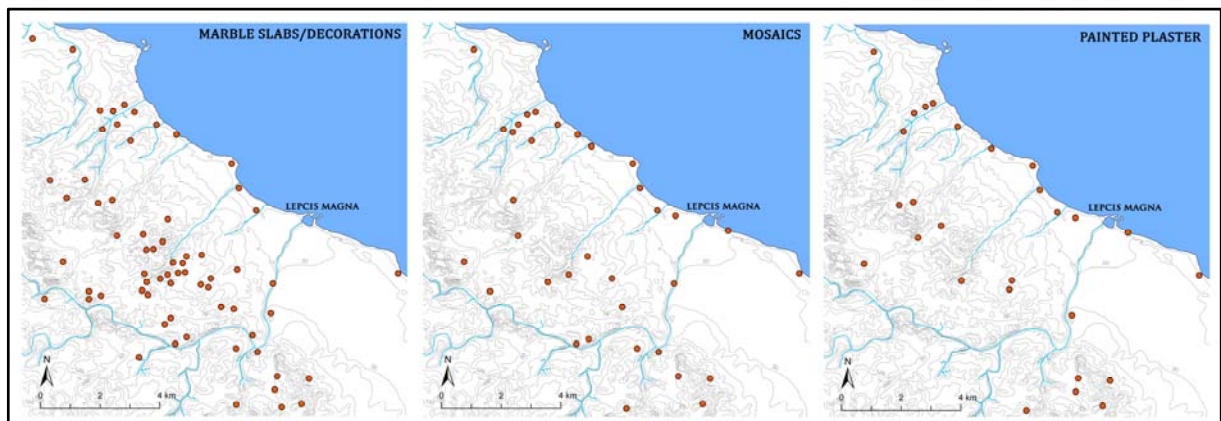


Fig. 6.6. Distribution of different decorative elements within the Lepcitanian peripheral area.

According to the data available, it is possible to determine the distribution of mosaic, marble and wall painting decorations (fig. 6.6). The spread of these three different decorative techniques seems homogeneous within the area analyzed suggesting their contemporary use. However, the high figure related to the marble decorations must take into account their better survival over time compared to the fragile fragments of painted plaster and the small mosaic *tesserae* found on the ground.

The Lepcitanian peripheral area is characterized by famous examples of mosaics such as the ones found in the villas "del Nilo" (VI2), "del cimitero israelitico" (VI5), "di Orfeo" (VI59). However, among all the mosaics, one of the best preserved and probably the most sumptuous is the one that covered the *frigidarium* of the Wadi Lebda villa (VI47). This mosaic floor, dated to the first half of the third century AD, is characterized by five different scenes (fig. 6.7) in which are depicted public games such as *munera*, *venationes*, a chariot race (*missus*) and also a procession of people sentenced to death (MUSO *et al.* 2013-2014, 49-51; MUSSO, MATOUG, SANDRI 2015). In this case, if on the one hand it is possible to relate the scenes depicted with the predilection of the landowner to the different games/activities practiced in the nearby amphitheatre and circus, on the other hand his involvement in organizing public spectacles for the urban communities must not be excluded.

6.3. SUMMARY OF THE CHAPTER

The chapter includes all those peripheral sites that preserve traces or remains of a lavish dwelling. Seventy-seven Roman *villae* have been detected in the first kilometres around Lepcis



Fig. 6.7. The mosaic floor of the *frigidarium* of the Wadi Lebda villa (VI47) recently restored in the Museum of Lepcis Magna (photo: A. Zocchi, 2013).

Magna and they include structures built close to the seaside (*villae maritimae*) and the ones built inland strictly connected with the profitable agricultural activities. Both the decorative apparatus and the structural features of these buildings are analyzed in this chapter together with a diachronic overview from the first Roman period until the transformations occurred in the Late Antique phase.

CHAPTER 7

CONCLUDING REMARKS

The analysis of the data collected allows me some concluding observations. Firstly, I present a series of diachronic maps of the peripheral area of Lepcis Magna from the Hellenistic period up to the sixth century AD. In a second section I consider all the sites documented on the basis of their distance from the city. This set of data allows me to trace an evolution (or involution) of the landscape through the centuries and determine how the peripheral landscape changed according to distance and its relationship with the city. Finally, a third section deals with some of the wider implications of the research related to studies of ancient *suburbia*.

7.1. THE PERIPHERAL LANDSCAPE OF LEPCIS MAGNA: A DIACHRONIC OVERVIEW

Archaeological evidence related to the suburban and peripheral landscape of Lepcis Magna before the fourth century BC are exiguous and referred exclusively to the funerary landscape characterized - in this phase - by the necropolis found beneath the theatre and by some burials located in the *Forum Vetus* area (fig.4.39, Nc5, Tb17, Fu29).

The oldest inland sites date from the late fourth to the third centuries BC and therefore it is not possible to establish to what extent the rural landscape was exploited in the previous periods. It is plausible to imagine that the areas cultivated and dedicated to the livelihood of the Libyo-Phoenician Lepcis were those closest to the city. In this sense it is useful to recall a passage from Herodotus (IV, 198) in which the coastal strip of the *Cinyps* region (Wadi Caam) - about 20 km east from Lepcis - is described as one of the most fertile and exploited areas of Tripolitania during the fifth century BC. This would include the flat areas located around Lepcis, above all those located in the eastern periphery (par. 5.2.4).

A different landscape characterized the Hellenistic phase (fig. 7.1). The main type of archaeological evidence attested within the inner Lepcitanian suburb is related to funeral structures. The theatre necropolis (Nc5) continued to be used until the second century BC while traces of grave goods have been detected in the harbour area, east of the Wadi Lebda (fig. 4.40, Fu24, Fu28). It cannot be excluded that the islets located at the mouth of the wadi were occupied by funerary/sacred areas from the first phases of the city. The hypothetical presence of a sacred

probably also west) of the promontory. Both the funerary evidence and the dock suggest the existence of a settlement/village between the headland and the coastal road (pars 4.7, 5.5.1).

During this phase, characterized by significant building activity in the city, different quarries along the coast were exploited: the one located at Sidi Barku (Qr1) and others, less extensive, close to Wadi Tualad (Qr27-Qr28) and along the Wadi Lebda (par. 5.1).

The rural sites dated to the second-first centuries BC are numerous. The significant increase compared to the fourth-third centuries can in part be explained by the greater commercial and political freedom of the city after the Carthaginian defeat at Zama (AD 202). The independence of Lepcis encouraged demographic and economic expansion. The spatial distribution of sites - mainly potsherds - is homogeneous across most of the territory suggesting that agricultural activities, devoted mainly to olive oil, wheat and wine production, were already wide spread by the mid-Hellenistic phase. Both the hilly hinterland around Lepcis as well as the flat "oasis" area to the south-east, were cultivated, with some emphasis, with orchards in the former and garden markets in the latter area (par. 5.2.4).

It is also possible to hypothesize the presence of an Hellenistic cult building on the top of Ras el-Mergheb, probably to be referred to the deity Tanit/*Caelestis*. Unfortunately, this suggestion is based exclusively on the presence of a rock cut inscription (IRT 268) dated to a subsequent period (par. 3.3).

From the end of the first century BC Lepcis was definitely under Roman control and at the end of the Augustan age the city was already provided with a series of public structures that underlined and emphasized this political/cultural passage. During the first century AD the suburban landscape of Lepcis changed considerably, confirming the positive economic trend that was already underway at the end of the Hellenistic period (fig. 7.2). This favourable situation would have had repercussions not only on economic sites but also on the construction of infrastructures and sites linked to the funerary and religious aspects.

The control of the internal territory was a priority during this first Roman phase. The restoration of the *via in mediterraneum* during the Tiberian age must be seen from this point of view, so to the possible construction of the two military fortlets/outposts of Ras el-Mergheb (Gs13) and Ras el-Hammam (Gs12). In this way the control of the main routes approaching the city was guaranteed (par. 3.4.2).

The areas close to the city, and especially next to the main roads, were characterized by *necropoleis* and by some *mausolea*. The analysis of the funerary epigraphic documentation provides a cross-section of the city's first century AD society, showing a strong Libyo-Punic substrate and, at the same time, the desire - among the wealthy local classes - to adopt in part Roman habits and nomenclatures (pars. 4.5-4.6).

The scale of building activity in the city during the first century AD caused the opening of several new quarry faces, grouped mainly in two districts: along the slopes of Ras el-Hammam

hill and another located along the Wadi Zennad. These were the two nearest and best connected hills that could provide good quality limestone (par. 5.1).

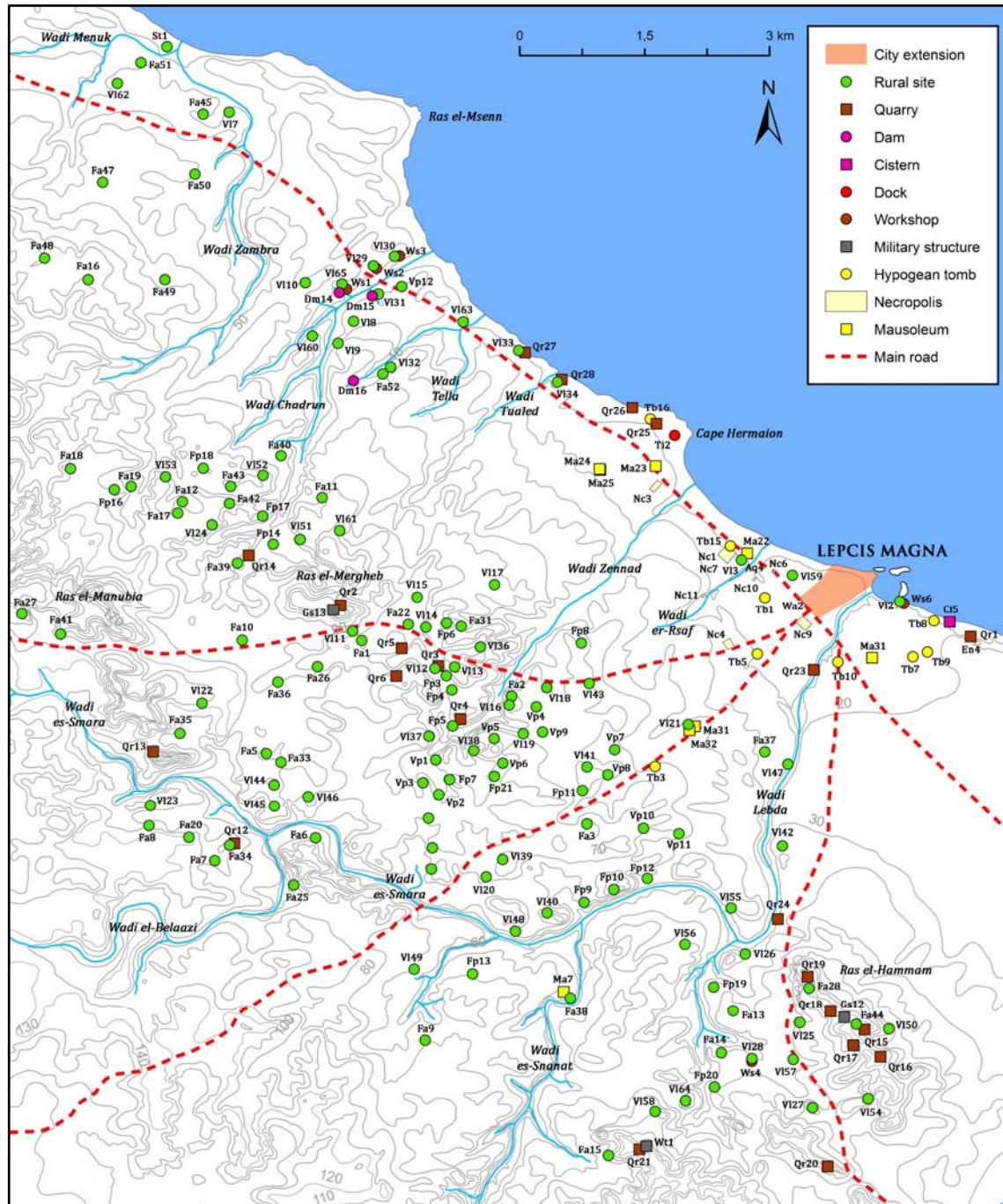


Fig. 7.2. The Lepcis periphery in the Early Roman period (first century AD).

With the growth of the city, the water supply needs increased (par. 3.2.1). Although there are no precise chronological data, it is likely that the spring waters located along the Wadi Lebda and the one in the area near Cape Hermaion were intensively exploited from this period onwards through the construction of an aqueduct (Aq1) and cisterns (Ci1?-Ci2).

By this period, the inner suburban areas had to be characterized by a series of workshops of which, up to now, few traces have been found. Apart from a site related to the production/blowing of glass located in the western sector of the city (Ws5), there is no

archaeological evidence related to the production of pottery, textile dyeing and fish-salting (pars 5.3-5.4). The absence of these productive processes for this period - and especially in the following mid-Imperial phase - appears strange considering both the size of the city and their presence in other North African coastal cities (Leptiminus, Sabratha, Meninx).

Particularly significant is the construction of the amphitheatre (En4) during the Neronian period built on a previous quarry site (Qr1). The presence of this important entertainment structure as well as that of the circus (En3), whose construction is commonly dated back to the second century AD, but probably was already operating in a previous period, must have influenced and conditioned the entire district, making this part of the suburb *de facto* an appendix of the urban core.

The number of sites linked to agricultural activities grew further compared to the previous period. Although it is often not possible to establish an accurate chronology, many suburban villas clearly dated to the mid-Imperial period probably had this function from the first century AD.

The mid-Imperial period (second-third centuries AD) constitutes the apogee of suburban development (figs 7.3-7.4). The city, significantly grown during the first century AD, passed through a further period of prosperity guaranteed by a long phase of internal and external peace and by a wise exploitation of its territory. The granting of colonial status (AD 109-110) must

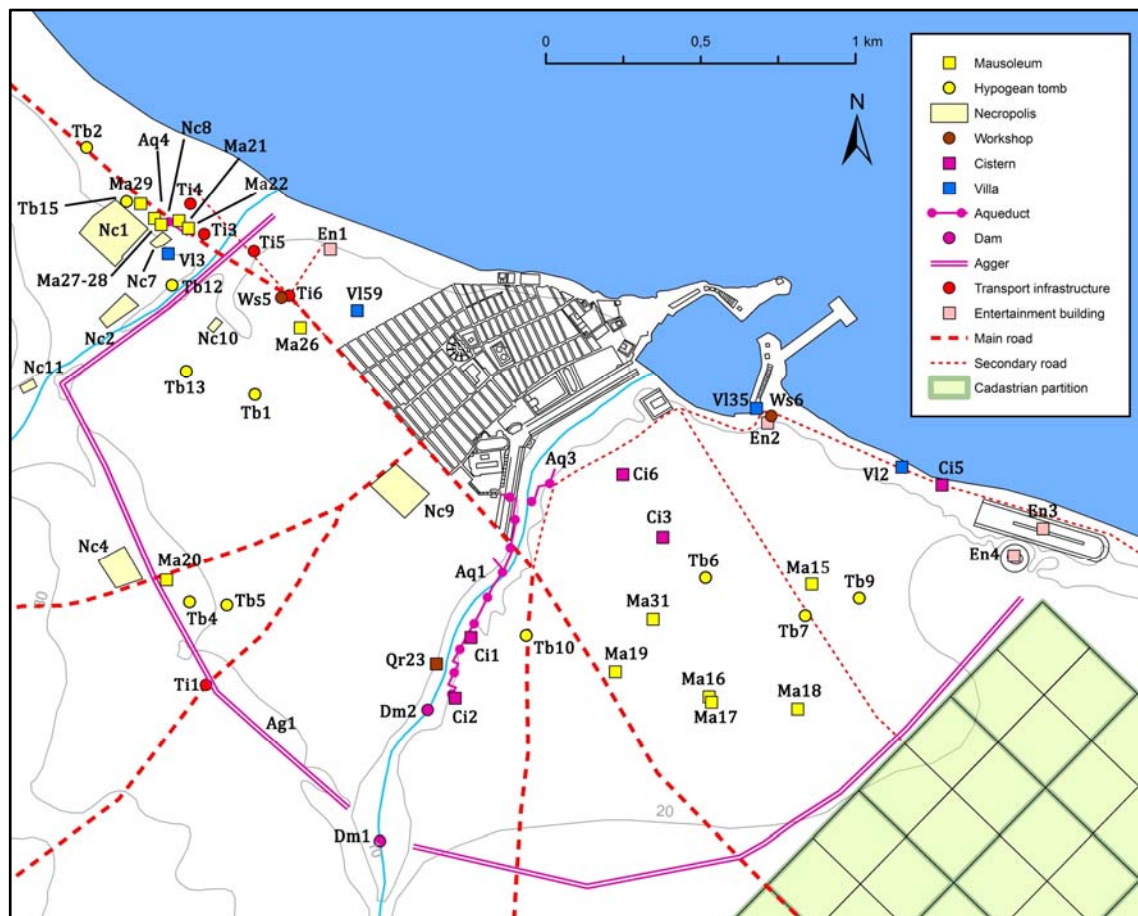


Fig. 7.3. The inner suburban area of Lepcis in the Mid-Roman period (second-third century AD).

have further fostered the aspirations of the local elite that, further enriched, they could aspire to the highest city and state offices and often invested on their suburban properties as well as on the construction/restoration of public buildings.

The first important change must have occurred concurrently with the granting of the colonial status. Probably between AD 110-120 the aqueduct from Wadi Caam (Aq5) was built and this structure, with its associated cisterns located a short distance from the city (Ci1?, Ci3), guaranteed the water security of the population, the supply of urban baths and probably also the proper irrigation of some of the agricultural areas that it crossed. Contemporary with the construction of this aqueduct, I believe was the layout of the land partition based on the module of 12x12 *actus*, identified in the sector between Wadi Hasnun and the amphitheatre/"Monticelli" *agger* (pars 3.1-3.2; Vol. II, App. IV.2.2).

The construction of the Hadrian Baths (inaugurated in AD 136) and the new urban extension toward the west bank of the Wadi Lebda, would probably have favoured the

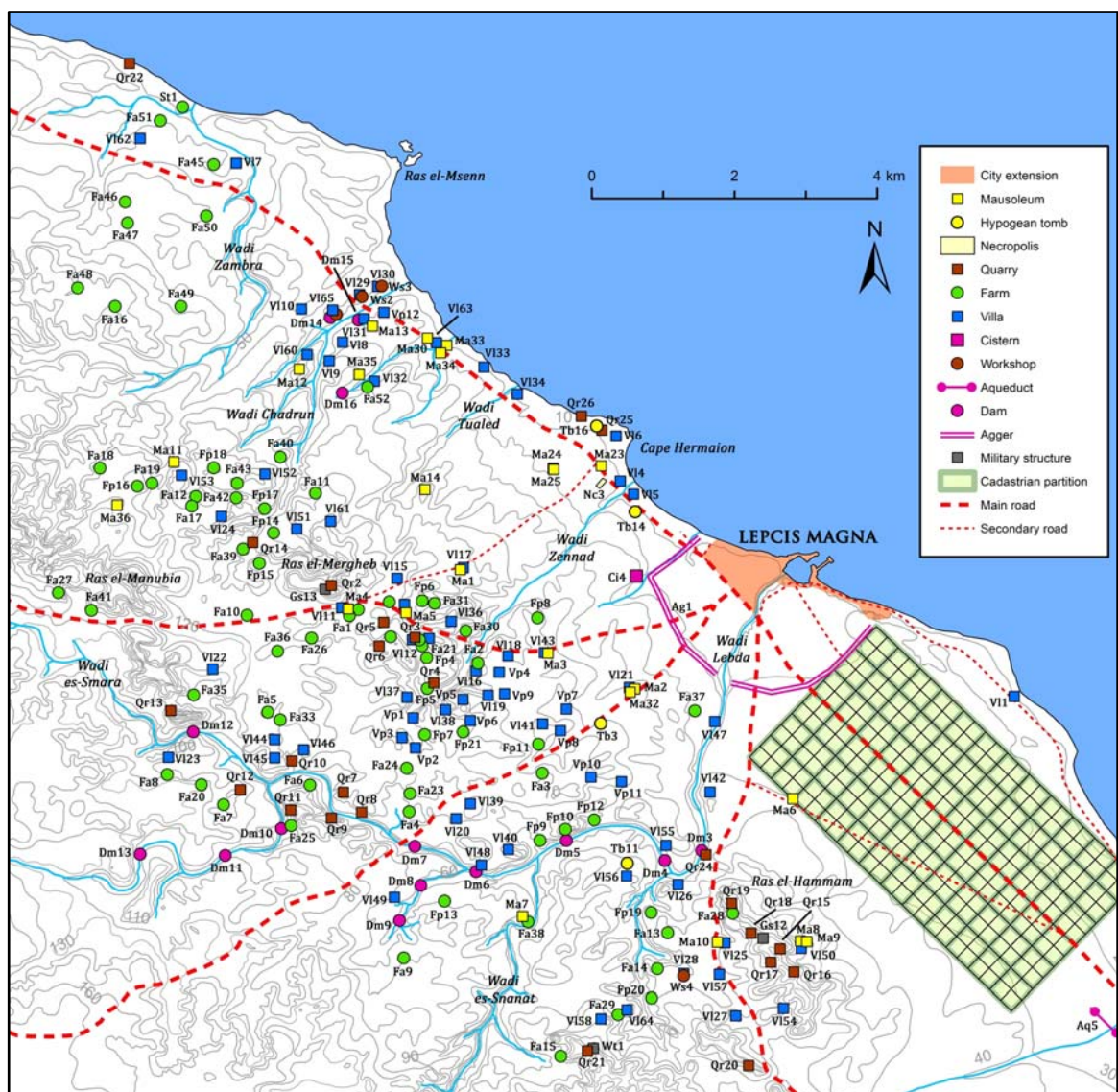


Fig. 7.4. The Lepcis periphery in the Mid-Roman period (second - third century AD).

simultaneous construction of important infrastructure aimed to protect the city from the river floods. This comprised a large *opus caementicium* dam (Dm1) built on the wadi bed, about two kilometres south from the city centre, and an earthen *agger* and ditch (Ag1). The dam had the function to block the floodwater and channelled it, through the ditch, towards the Wadi er-Rsaf to the west and/or to the agricultural parcelled district to the east. The system characterized by the Wadi Caam aqueduct - with its cisterns - the dam and the *agger* would therefore have ensured, if properly maintained, the water supply of the city and its protection from harmful floods caused by the Wadi Smara/Lebda basin.

The Lepcitanian suburban landscape during this period is also characterized by funerary structures. *Necropoleis*, isolated tombs and *mausolea* were built along the main routes (forming actual sepulchral roads) and occupied most of the eastern suburban area between the *agger* (Ag1) and the west limit of the urban area where the amphitheatre and the circus were located. Also in this period the numerous funerary inscriptions together with hundreds of items from dozens of tombs offer important data on Lepcitanian society and its relationship with the afterlife. Moreover, the numerous grave goods related to this period offer a clear picture of both the local production and importations and significant aspects related to the funerary rites and habits of the city's population life. Another important aspect of this period is that numerous *mausolea* were built not only in the inner suburbium but also in inland properties since they were directly associated with the estates and *villae* of the deceased's family (pars 4.2-4.7).

The areas close to the city were also characterized by the presence of structures related to leisure and social life (par. 3.5). Besides the already mentioned amphitheatre and the circus, two suburban baths were built during the second century AD: one to the east (Eastern Baths, En2) and one to the west (Hunting Baths, En1). Due to their small size, it must not be excluded that these facilities were reserved exclusively for a specific clientele (*sodalitates*).

Both the western and the eastern suburbs were involved, in this period more than ever, in the storage of different kinds of goods that reached the city from the hinterland and also from Tran-Saharan trade. Warehouses and caravanserais have been detected mainly in the western suburbs where large courtyards and rectangular room alignments are recognizable (thanks mainly to aerial photographs) within built-up areas (par. 5.5).

One of the most significant aspects of the Lepcitanian landscape related to the mid-Imperial phase is the spread and monumentalisation of its suburban villas; the density, the size and the wealth of these dwellings is high in comparison with other areas of North Africa. The proximity of many of these *villae* to pressing facilities and farms, would suggest that they were located within productive estates. Finally, the proximity of these *villae* with the city would have enabled the owners (and workers) to reach within hours the public urban meeting places. Lavish decorations (mosaics, marble, wall paintings and stuccoes) bath complexes and scenographic

settings are the main features of these luxury dwellings that actually constitute probably the most lavish examples in the whole North Africa (pars 6.1-6.2).

The numerous presses related to this period allow me to quantify the olive oil production of the area. The average figure of 637,200 litres per year calculated represents c.6% of the total production assumed for the entire territory controlled by Lepcis. However, it is highly probable that the area analyzed was characterized in this period - as in the previous phases - essentially by a mixed agriculture system in which vines, wheat and other cereals or legumes existed along with olive groves. Moreover, the quantity of olive oil (and wine) presses allows me to identify and divide different types of the press elements and compare these data with other rural regions of North Africa (pars 5.2.3-5.2.4).

A further aspect related to the productive activities during the mid-Imperial period is the role of the new limestone quarry district located along the Wadi es-Smara. The Ras el-Hammam and Wadi Zennad quarries had declined or been abandoned between AD 100-150 (par. 5.1). These new quarries were exploited essentially to provide material for the Severan buildings of the city (e.g. forum, basilica, nymphaeum, colonnaded street).

A first significant contraction in rural settlements occurred in the Late Antique phase (fourth-fifth centuries AD; fig. 7.5). The main reasons of this drop were linked mainly to natural causes and external and internal issues. During the fourth century the city and its suburbs suffered two different earthquakes (AD 309-310 and AD 365) that, as attested in several inscriptions, must have damaged or even collapsed numerous buildings. In addition, the outskirts of the city was affected by violent looting and raids culminating in the years 363-364 with the incursions of Austuriani who, according to the account of Ammianus Marcellinus (XXVIII 6. 4, 13) destroyed olive groves and other crops in the suburban area of Lepcis. The lack of maintenance of the main Wadi Lebda dam/*agger* system (Dm1, Ag1) may have caused the definitive collapse of the dam between the end of the fourth and the first half of the fifth century AD. This undoubtedly compromised the security of the city, silting the Severan harbour and causing collapses to the two aqueducts that crossed the Wadi Lebda (Aq1-Aq2). Finally, the significant decrease of commercial exchanges with Rome during the fourth and especially during the fifth century led to a further reduction in income for the local wealthy class based essentially on olive-oil and cereal productions.

The construction of the Late Antique walls (Wa3), which most likely occurred during the first half of the fourth century, provides useful data about the suburban landscape at that time. Firstly, the walls reused a large amount of architectural material from funerary structures (probably collapsed after the earthquake of AD 309-310) both in the eastern and western sectors. Furthermore, the wide extent of the perimeter of the enceinte in its eastern sector may indicate the desire to include the large underground cistern (Ci3) connected to the aqueduct of Wadi Caam within its perimeter (par. 3.4.1). This would suggest that the subterranean conduct

was still functioning during the first half of the fourth century. Finally, the silting of numerous structures during the second half of the fourth century in the western suburbium, would testify a landscape that was already partially abandoned or, in any case, poorly maintained.

In the inland areas *villae* continue to be occupied during the fourth century while the coastal

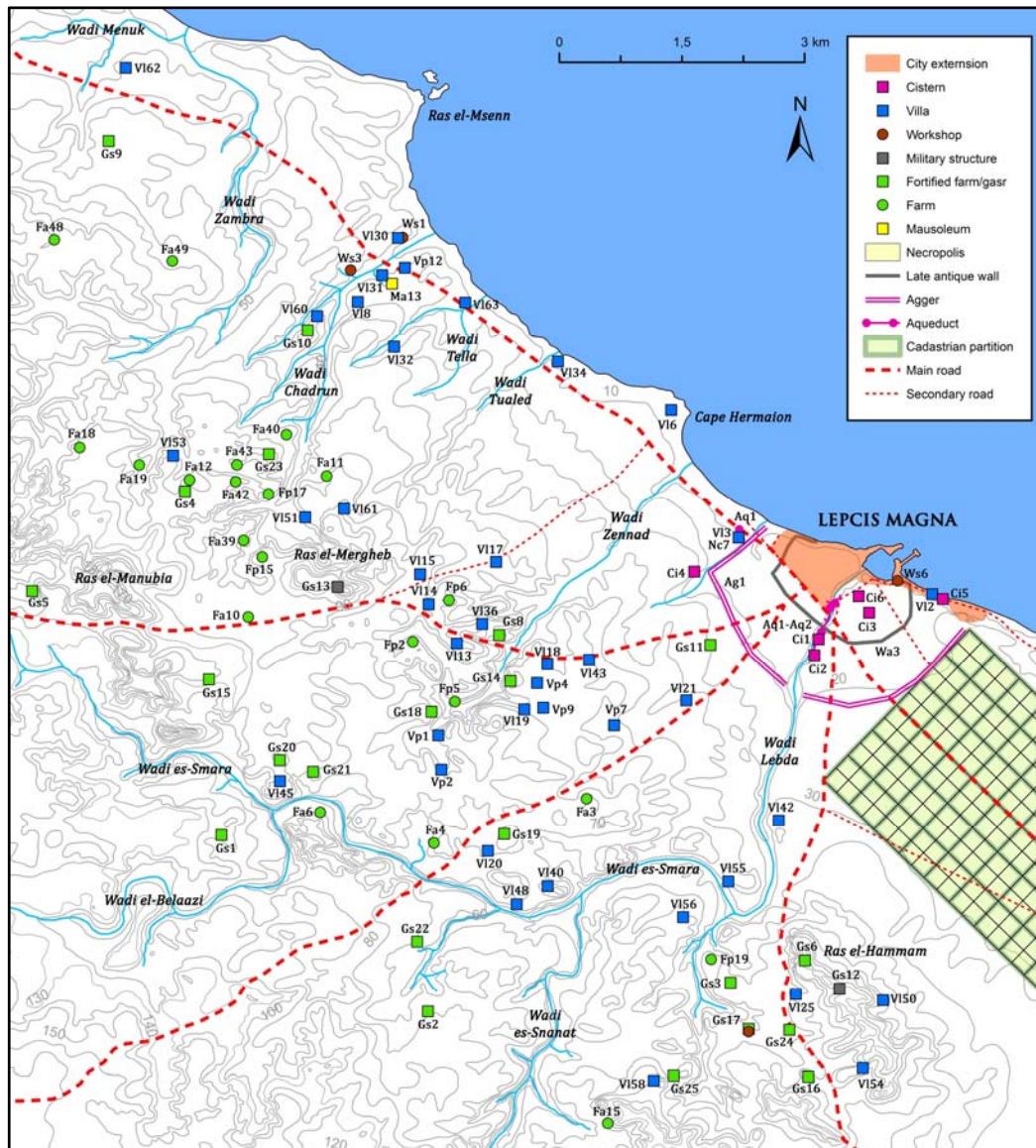


Fig. 7.5. The Lepcis periphery in the Late Antique period (fourth-fifth century AD).

luxury dwellings were the first ones to be abandoned, suggesting thus a greater resistance of the internal agricultural sites, evidently more productive. During this period, the surviving rural sites were flanked by a series of fortified farms whose function is, in some cases, not entirely clear. These structures, commonly called *gsur*, were built often on the ruins of pre-existing rural sites/*villae*, reusing blocks and even elements of the olive oil presses no longer in operation. In most cases these *gsur* were located along the main roads and often were flanked by unfortified rural sites, guaranteeing thus their safety (pars 5.2.2, 6.1).

By the sixth century, site contraction is even more evident (fig. 7.6). The fifth century Vandal domain and the subsequent Byzantine conquest must have caused a severe reduction in

Caesarensis and Meninx (Jerba). Both comparisons and major differences of these three cities with the Lepcitanian landscape can be summarized as follow:

Contrary to Lepcis Magna, Leptiminus' suburb shows less evidence of the Punic activity in the wider landscape than in the town. For the Roman phase, rural settlement was denser compared to the previous phases revealing a peak between the second and the fourth century AD, such has been registered in the Lepcis Magna periphery. Moreover, the Leptiminus inner suburban zones have revealed the extensive presence of manufacturing processes, like pottery kilns and fish-processing installations, not detected within the Lepcitanian suburb (BEN LAZREG, MATTINGLY, STONE 2011, 273-288).

The city of *Iol Caesarea* shows a landscape with a lower density of sites compared to Lepcis Magna. However, some similarities can be noticed. First, the littoral landscape of *Iol* was crossed by the coastal road and, as has been documented in the western Lepcitanian suburb, it was flanked by *necropoleis* and by some luxury dwellings. Moreover, the inner landscape was dotted by numerous Roman *villae* that, although not as numerous as those of Lepcis, reveal also in this case that rural economy was based and centred mainly on these structures (LEVEAU 1984, 501-505).

The survey carried out at Jerba revealed that the economic growth seems to have taken off during the second century BC, as is attested in the periphery of Lepcis. However, it seems that during the early and mid-Imperial period the suburban landscape of Meninx was characterized by market gardens and grains cultivated just for the city supply. Definitely, Meninx was an entirely industrial town rather than a "consumer city": fishing and textiles production were the main products of the island and the city's wealth was directly connected with their trade (DRINE, FENTRESS, HOLOD, 2009, 207-210).

7.2. THE PERIPHERAL LANDSCAPE OF LEPCIS MAGNA: SPATIAL CONSIDERATIONS

The 352 sites detected can be divided according to their distance from the city centre (figs. 7.7-7.8). Of these, 99 (28%) were located in the inner suburbium, within a radius of two kilometres from the city core (conventionally, the Severan arch on the main *decumanus*), 57 (16%) lay between 2 and 4 km, 102 (29%) between 4 and 6 km and, finally, 86 sites (25%) between 6 and 8 km. Distribution is thus fairly homogeneous among all the four sectors considered. The lower percentage registered between the second and the fourth kilometre may in part be due to visibility factors relating to recent overbuilding.

The site-typology distribution on each kilometre allows me to determine different land-uses according to distances from the city core (fig. 7.9).

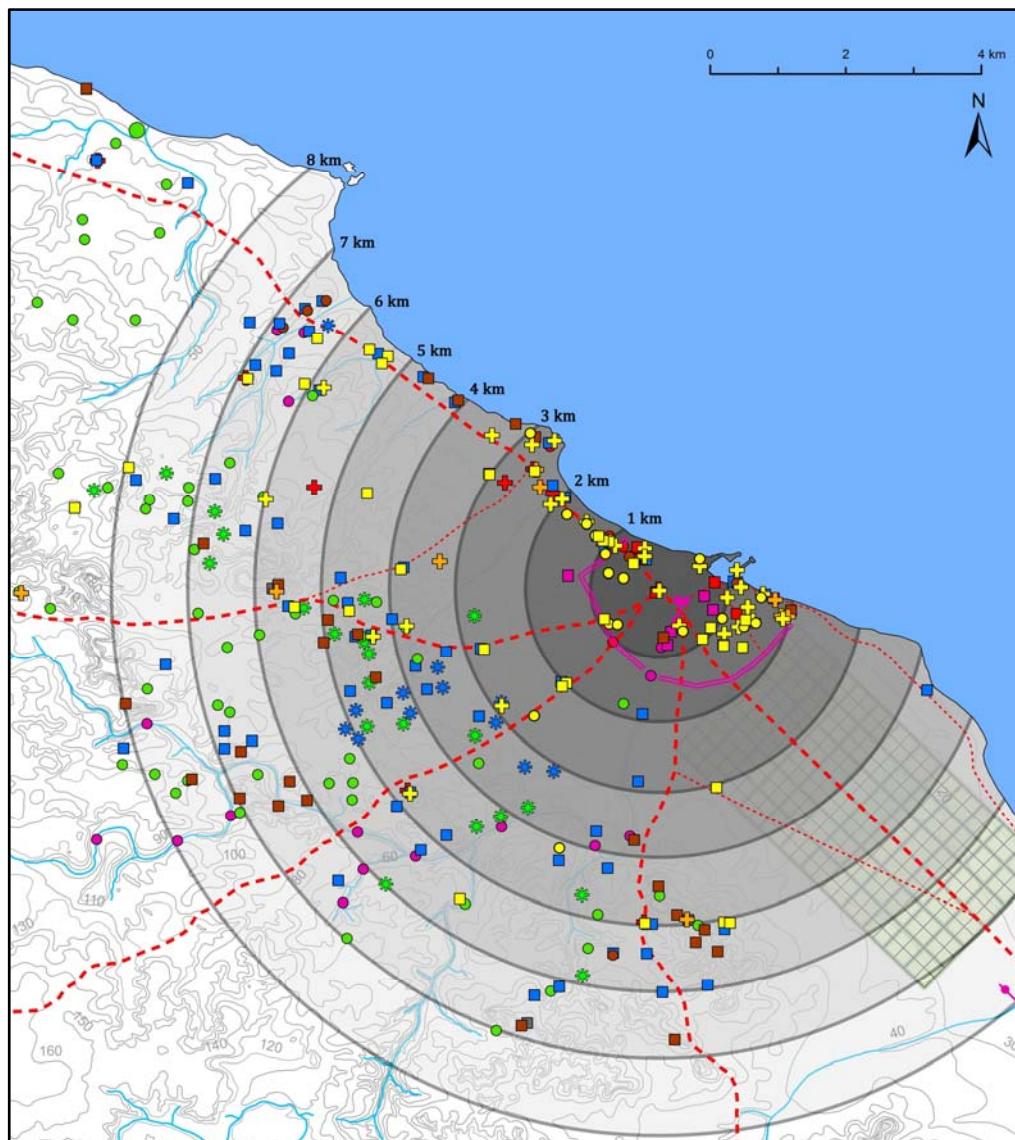


Fig. 7.7. Buffer zones showing distance from the sites to the city.

The inner suburban area (within the first two kilometres) is characterized mainly by funerary sites (between 49% and 59%) followed by structures linked mainly to the economy and commerce of the city such as warehouses, caravanserais and also infrastructures connected with its safety and livelihood such as aqueducts, dams, cisterns, *agger*. The percentage of the sites linked with productive processes, equal to 7%, is most likely underestimated. The absence of the evidence related to structures involved in different production processes (textiles, pottery, fish-salting and others), which however had to be present in the Lepcis suburbs, is very unusual.

The landscape changed significantly between the third and the fourth kilometre. The funerary evidence is still characterized by a substantial percentage (43% between the second and the third km and 21% between the third and the fourth km) while the percentages related both to *villae* (22% and 31%) and to other rural sites (14% and 38%) increased significantly. However, it is important to keep in mind that the agricultural land partition identified in the

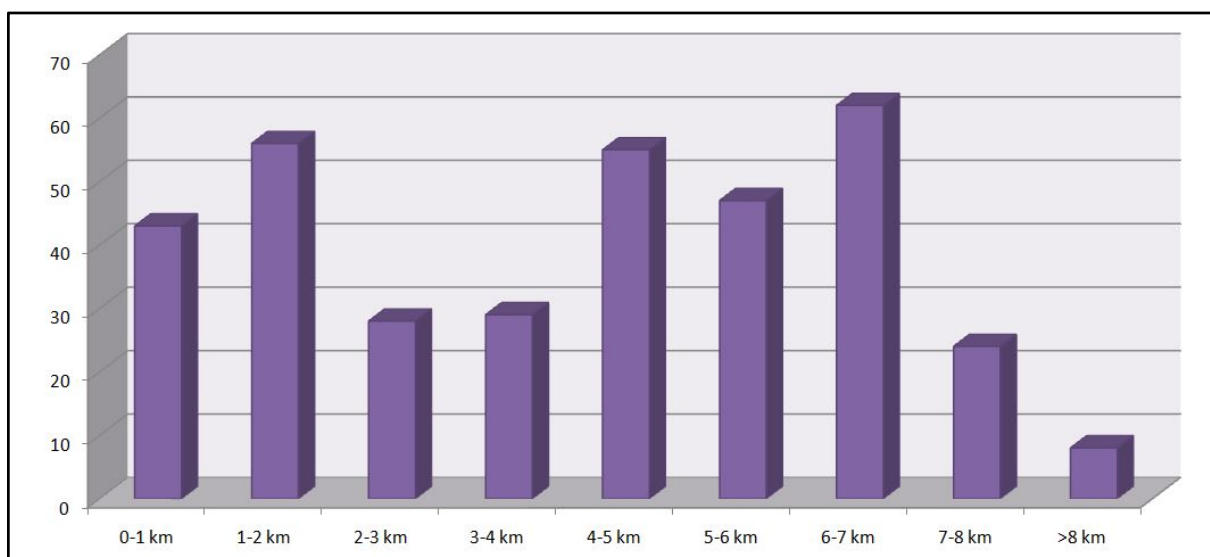


Fig. 7.8. Number of sites according to the distance from the city.

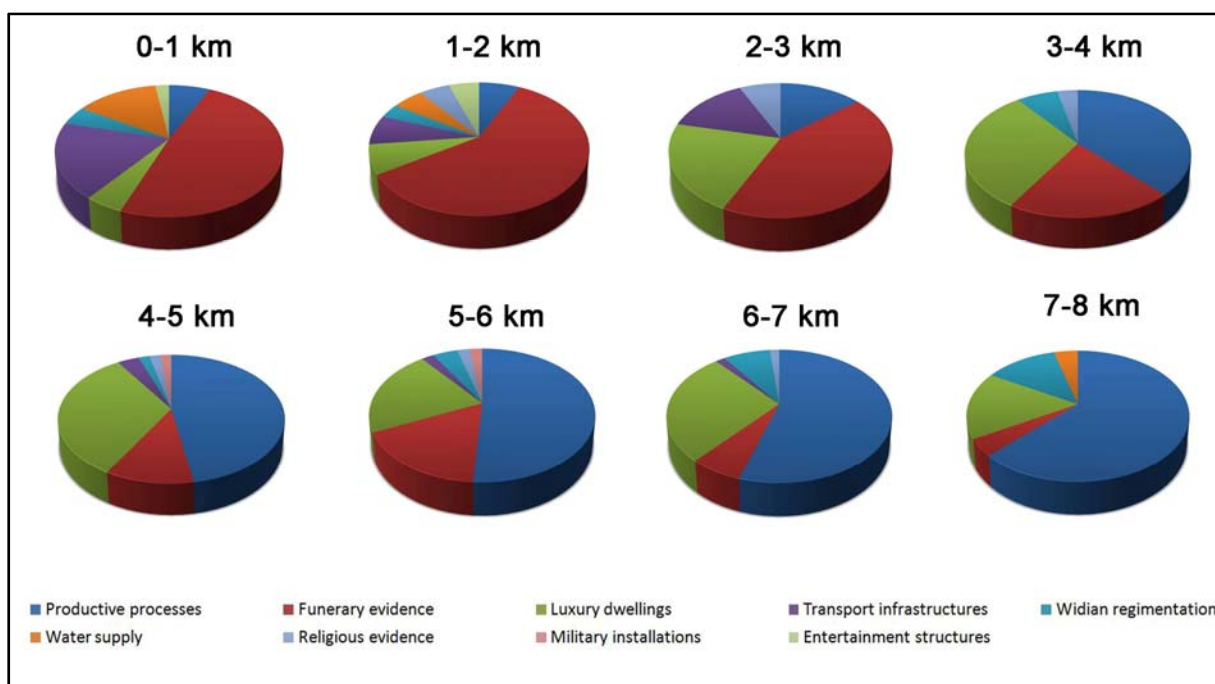


Fig. 7.9. The site-typology distribution for each kilometre.

eastern suburbium has left no archaeological traces of associated sites, and therefore the percentage of rural sites/activities should be increased surely. The infrastructures purely linked to the functioning and to the well-being of the city such as aqueducts, cisterns and warehouses are absent.

Between the fifth and the eighth kilometre the main types of site recorded have more or less constant percentages: the majority of the sites are characterized by farms and structures with olive oil/wine presses, followed by the constant presence of *villae* to which also *mausolea* are often associated.

The area analyzed shows two distinct situations in which can be distinguished two different landuse patterns. Site typologies reveal that there was an "inner suburb" within the first two kilometres. In this area the prevalence of organized *necropoleis* and structures linked to commerce and to the conservation of goods and the water supply of the city were predominant. From the third kilometre onwards, sites are mainly divided between funerary structures (essentially *mausolea*), rural sites and *villae*. This threefold subdivision is not casual and can be explained above all by the primary role and function of the lavish dwellings (to which often *mausolea* and farms were linked), probably the most significant trademark of the Roman suburban landscape of Lepcis.

7.3. KEY ASPECTS OF THE RESEARCH

This analysis of the Lepcitanian peripheral areas has tried to highlight the main aspects and issues of the periurban development of one of the most iconic cities of the Roman world.

Up to now, the knowledge of the *suburbium* of Lepcis has been based mainly on the data of a few main monuments and on brief reports related to previous surveys. Thanks to the 352 sites collected and analyzed, this thesis offers a unique study of a suburban landscape of ancient North Africa and, probably, within the Roman Mediterranean basin both for the quantity and the state of preservation of the sites that have been considered. Thanks to this analysis, it has been possible to better understand several aspects of the organization of the Lepcitanian periphery and how the city and its inhabitants were involved in its exploitation. The thesis allows us to see how the city's growth (and decline) phases involved its hinterland and also how the different areas of the periphery were intimately connected with the functioning and the sustenance of one of the major cities of Roman North Africa. Finally, the analysis of Lepcis' periphery has allowed me to better establish the manner and to what extent the Roman presence and habits had an impact both on local society (especially in relation to the funerary evidence) and on the landscape through the construction of a series of infrastructures and thanks to a favourable political and economic situation.

In a broader context, the peripheral landscape of Lepcis Magna demonstrates the contribution that an understanding of periurban space can make to debates concerning the character of a Roman city, its relationship with the countryside and the role of the local elites in exploiting and using their native lands. In the last decades, researches realized on ancient peripheral areas within the Mediterranean basin have revealed how important these studies are, often showing how the use of the land in those districts played a primary role in the city's development (GOODMAN 2007; MÈNARD, PLANA-MALLART 2015). The case of Lepcis Magna

represents in this sense an extraordinary example that clearly indicates how fruitful research focused on peripheral areas can be. As the Lepcitanian study clearly demonstrates, ancient peripheries were often densely populated areas where public spaces coexisted with private zones and where several aspects involved with urban life co-existed with rural life. Ultimately, the analysis of such landscapes allows us to better understand and define these "hybrid" zones and thus to appreciate aspects related both to the city and to the countryside. However, due to the relative shortage of comparable surveys related to other *suburbia* (especially in North Africa), the relationship between the main ancient cities and their hinterland is almost always scarcely known. This research, dealing with one of the major cities of the Roman Mediterranean, tries to fill this gap by touching the main social and economic topics and aspects related to its periphery.

Finally, it is important to keep in mind that the Lepcitanian landscape - as well as many regions of Tripolitania - is actually under threat. Unfortunately, this is not only due to the fall-out of the revolution in Libya which started in 2011, but also to imperfect knowledge of the archaeological evidence together with the impacts from the spread of modern settlement, looters and land consumption that are still continuing. Many sites presented in this analysis and that were surveyed between 2007 and 2013 are already damaged or have been destroyed. This research aims to offer to the Libyan Department of Antiquities, scholars and students a useful tool to preserve a rich archaeological landscape before it is too late and, in a wider context, it demonstrates the need for modern planning and conservation measures to operate larger buffer zones around ancient cities.

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For standard convention of abbreviations of ancient authors, *corpora* and *lexicon* see HORNBLOWER, S., SPAWFORTH, A., EIDINOW E. (eds), *Oxford Classical Dictionary*, Oxford: OUP, 2012 (4th ed.) and LIDDELL, H.G., SCOTT, R., JONES H.S., MCKANZIE R., *Greek-English Lexicon*, Oxford: Clarendon, 1940 (9th ed.). For journal abbreviations see *Archaeologische Anzeiger*.

ARCHIVES:

ASLS = *Archive of the Society for Libyan Studies, University of Leicester.*

AUSSME = *Archivio dell'Ufficio Storico dello Stato Maggiore dell'Esercito, Roma.*

BSR = *Archivio Fotografico della British School at Rome.*

CAS = *Archivio del Centro di documentazione e ricerca Archeologia dell'Africa Settentrionale "Antonino Di Vita", Università di Macerata.*

INASA = *Fototeca dell'Istituto Nazionale di Archeologia e Storia dell'Arte, Roma.*

LMDoA = *Lepcis Magna Department of Antiquities Archive.*

SGI = *Archivio Fotografico della Società Geografica Italiana, Roma.*

TDoA = *Tripoli Department of Antiquities Archive (Red Castle).*

TNA = *The National Archive, London.*

USAM = *Archivio dell'Ufficio Storico dell'Aeronautica Militare, Roma.*

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THE PERIPHERY OF LEPCIS MAGNA
SUBURBAN TOPOGRAPHY AND LAND USE OF A ROMAN CITY

VOL. II - SITE GAZETTEER AND APPENDICES

Thesis for the Degree of Doctor of Philosophy at the University of Leicester

by
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GUIDE TO THE SITE GAZETTEER AND TO THE APPENDICES

This volume consists of two parts: a site gazetteer in which are comprised the 352 sites detected within the Lepcitanian peripheral area and five appendices.

The site gazetteer is formed by different sections. The first section is related to the funerary and religious landscape. The union of these two different kinds of evidences has been chosen mainly for the strong relationship that unites burial customs to the religious sphere. In this section are included the *mausolea* (Ma), the necropolis (Nc), the isolated hypogean tombs (Tb), the scattered funerary finds (Fu) and finally the scattered religious finds (Re).

The second section consists of all the ancient evidence linked with productive processes of raw material such limestone quarries (Qr), *villae* with a productive section (Vl), farms (Fa - potsherd areas = Fp), fortified farms (*gsur*) whose function is somehow linked with storage (Gs) and workshops and stores (Ws).

The third section is related to the luxury dwellings and essentially includes the *villae* (Vl - potsherd areas = Vp). However, since numerous *villae* were provided with a *pars rustica* - and already included in the previous productive part - they have to be considered also pertinent to this specific section.

The fourth section comprises all the evidences involved with the movement of people or goods, like roads (Rd), various infrastructure such as bridges, warehouses, caravanserais, quays (all displayed with - Ti -) and milestones (Ms).

The fifth section is related to the structures linked with water supply and with the flood control of the wadis. This part includes aqueducts (Aq), cisterns (Ci), dams (Dm) and earthworks (*aggeres*, displayed with - Ag -).

The sixth part concerns military or defensive structures such as wall circuits (Wa), the *gsur* of Ras el-Hammam and Ras el-Mergheb and a watchtower (Wt). Finally, the seventh section concerns the sites related to entertainment and leisure activity such baths and the circus and the amphitheatre (all displayed with - En -).

Every site record sheet has more or less a common layout (minor changes have been made in order to specify structural types for *mausolea* or to indicate grave goods or funeral rites for the hypogean tombs).

The first three entries of the site sheet ("definition", "toponym/s" and "interpretation") present the key aspects of each site and offer an interpretation. These elementary data are then

followed by its position (GPS coordinates) and its distance from Lepcis Magna (measured from the Severan arch). The following set of entries is related to the topographic position, the visibility (in terms of accessibility and vegetation) and the actual land use and, finally, any disturbances that have occurred in recent times.

After the part related to "previous studies", "description" and "state of preservation" of the site, further entries are related to the chronology with a specific entry ("dating elements") intended to capture the factors that lead to ascribe a date range. Finally, data are provided concerning bibliography, cartography and archival documentation.

The five appendices include three tables related to the funerary inscriptions (App. I), to the main features of *villae* and farms (App. II) and to fortified farms/*gsur* (App. III) and two texts (App. IV and V). The first text (App. IV) is related to the peripheral road network of Lepcis Magna, recently published by the author (ZOCCHI 2018). The second text (App. V) deals with the analysis of the grave goods of the several Roman hypogean tombs discovered in the suburban areas of the city.

DEFINITION:	Structure.
TOPONYM/S:	Gasr Ben Nasser; Gasr Bunasar.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	3,800 m W.
GPS COORDINATES:	WGS 84 33S 0429543 - 3611445.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is clearly visible beside a path. Low vegetation around and inside the <i>mausoleum</i> .
TOPOGRAPHIC POSITION:	Low hill slope.
MODERN INTERFERENCE/S:	Part of the structure was reassembled for military purposes during the Italo-Turkish War (1912-1919). Rubbish inside and around the structure.
PREVIOUS STUDIES:	The structure was seen and identified as a tomb by Cowper (1897) on the road between Khoms and Ras el-Mergheb. He noted a vaulted <i>podium</i> and recognized a square plan and reported that the burial chamber was filled by soil while some of the exterior ashlar blocks were already removed. Some years later, Clermont-Ganneau (1903a) found an inscription (<i>IRT</i> 738) near the site that, according to Cini, could be related to the <i>mausoleum</i> . The tomb was recently surveyed and described by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2010; 2016).
DESCRIPTION:	The structure, built of limestone ashlar blocks, is visible near a modern path going from N toward S (pl. 1A). It is still possible to measure the original plan of the <i>mausoleum</i> (5.90x5.40 m at the crepidoma) that corresponds to the dimensions reported by Cowper (4 paces and half), while its max. preserved H is c.2 m. According to the inscription seen by Clermont-Ganneau, the <i>mausoleum</i> was dedicated to <i>Iulius Telamon</i> , a <i>medicus</i> , by a person named <i>Saturninus</i> <i>l.a.</i> Inside the funerary chamber some moulded elements were reassembled probably in recent times (pl. 1B). The moulded base of the <i>podium</i> is not visible all around the structure and the only part still <i>in situ</i> is on the NW side. The other sides of the structure were probably reassembled during the Italo-Turkish conflict, patching together the original collapsed blocks (the site was located c.400 m SE from the Italian stronghold named "Ridotta Parma" and the ancient structure seems to have been included in a defence line: Br. Murge 1919a-b, d-e).
OBSERVATIONS:	Around the structure, some collapsed limestone ashlar blocks lie on the ground.
STATE OF PRESERVATION:	The general plan of the quadrangular structure is still legible.
CHRONOLOGY:	AD 100-250.
DATING ELEMENT/S:	Relationship with a near dated site (VI17); building features; epigraphic elements.
STRUCTURAL TYPE:	"Tower" or " <i>Aedicula</i> above <i>podium</i> " <i>mausoleum</i> .
SPECIAL FINDS:	<u>Inscriptions:</u> - The inscription (<i>IRT</i> 738) is missing. It was inscribed in a single limestone ashlar block with the epigraphic text framed by a moulding. I TELAM[...] ...]edic[...] Saturn[...] [.]IRI[.]PO
BIBLIOGRAPHY:	COWPER (1897), 215 nr. 5; CLERMONT-GANNEAU (1903a), 344-345; PACI (1989), 233, fig. 2; MUNZI <i>et al.</i> (2010), 738, site KHM 35; (2016), 88-89, site KHM 35; <i>IRT</i> 738.
CARTOGRAPHY:	MÜLLER 1855, pl. XXI (<i>vetus turris</i>); IGM 1913a (<i>Casr</i>); IGM 1913b (<i>Kasr Bunasar</i>); IGM 1918a (<i>Bu Nasr</i>); Br. Murge 1919a (<i>Bunasar</i>); Br. Murge 1919b (<i>Rudero</i>); Br. Murge 1919c ("squared structure"); Br. Murge 1919e (<i>Bu Nasr</i>).

DEFINITION:	Structure.
TOPONYM/S:	Gasr Gelda; Gasr el-Gelédah.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	1,940 m SW.
GPS COORDINATES:	WGS 84 33S 0431969 - 3609719.
ACTUAL LAND USE:	Private garden.
VISIBILITY:	The structure is located inside a private garden and it is barely visible from outside. Dense vegetation inside and around the structure.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The structure was heavily damaged after the Italo-Turkish War (1915-1925). Rubbish inside and around the structure.
PREVIOUS STUDIES:	The <i>mausoleum</i> was mentioned for the first time by Ludwig Salvator (LOTHRINGEN 1874) who made also a significant sketch of the bottom wall, apparently the side still intact at his time (pl.1C). From the drawing are clearly visible the general proportion of the structure and the presence of the roof decorations (palmette and spirals), maybe already on the ground, as recorded few decades later by Romanelli. The structure was seen and briefly described also by Cowper (1897) as a two storey structure with the same planimetric dimensions actually visible. The <i>mausoleum</i> was also mentioned by Clermont-Ganneau (1903a), who noticed near it two inscriptions (Fu12) and a fragment of a marble statue of a <i>togatus</i> holding a <i>rotulus</i> . Romanelli (1925a) described the structure as already damaged by the Italo-Turkish conflict between 1915 and 1925. However, the scholar saw different architectural elements on the ground, now missing such <i>acroteria</i> (defined by palmette and spirals) and part of a Doric frieze, probably similar to others already stored at the Lepcis Magna Museum (VON HESBERG 2005a; MAHLER 2006; MUSSO <i>et al.</i> 2013-2014). He also recorded on the ground the inscription (IRT 745) of a member of the <i>Tapapi</i> family, written on an unframed limestone ashlar block. Thanks to the sketch of Ludwig Salvator (pl. 1C), to archive photographs (pls 1D-F, 2A) and the Romanelli description, it is possible to reconstruct partially the original aspect of the structure: the lower storey measured originally c.2.5-3 m in H while the second storey was characterized by 12 rows of limestone blocks for a total H of c.6 m. Except for the moulded base and for the cornice of the two storeys, there were no traces of further decoration <i>in situ</i> . The site has been recently (2009) surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The <i>mausoleum</i> , made wholly in limestone ashlar blocks, has a plan (still measurable at the base) of 5.90x5.50 m and a max. H of c.1.5 m (pl. 2B). The <i>podium</i> still preserves its moulded base and, among the scattered ashlar blocks on the ground, are recognizable elements belonging to the cornices of the two storeys. About 2 m SE from the facade of the structure and in central position, is still visible the moulded epystil (2.06x0.90 m) of the entrance of the subterranean chamber, actually covered by soil.
OBSERVATIONS:	Around the structure, several collapsed limestone ashlar blocks lie on the ground.
STATE OF PRESERVATION:	The general plan of the structure is still legible.
CHRONOLOGY:	AD 70-125
DATING ELEMENT/S:	Building features; epigraphic elements; relationship with a near dated site (VI21).
STRUCTURAL TYPE:	" <i>Aedicula</i> above <i>podium</i> " <i>mausoleum</i> .
SPECIAL FINDS:	<u>Inscriptions:</u> - Unframed limestone ashlar block located in the garden of the Old Museum of Lepcis Magna; partially preserved. ...] Ari- nis f(i)lius) Tapafius Diodorus Nizaz

sibi et suis
fecit

Sculpture:

- Fragment of a marble statue of a *togatus* holding a *rotulus* (CLERMONT-GANNEAU 1903a).

- BIBLIOGRAPHY: LOTHRINGEN (1874), 179; COWPER (1897), 214 nr. 3; CLERMONT-GANNEAU (1903a), 341-343; MERCATALI (1913), II, 523; ROMANELLI (1925a), 165, fig. 91; MERIGHI (1940), II, 161 nr. 20; FONTANA (1996), 81; (2001), 166, 168; VON HESBERG (2005a), 51, fig. 3; MAHLER (2006), cat. 815 F - 817 F; MUNZI *et al.* (2010), 738; (2013), 27-28, fig. 18; (2016), 86-87, site KHM 103; MUSSO *et al.* (2013-2014), 20, fig. 7; IRT 745.
- CARTOGRAPHY: IGM 1913a (*Casr el Benadre*); IGM 1913b (*Casr el Benadra*); IGM 1914 (*Mausoleo Gasr el Geleda*); IGM 1918a (quote 35 "ruins"); Br. Murge 1919a-b (*G. el-Benadra*); Br. Murge 1919c (*Rudero Adriano*); ROMANELLI (1925a), fig. 23 (*mausoleo*) CAGNAT (1926), 342 (*Mausolée*).
- ARCHIVAL DOCUMENTATION: Photographs: CAS, sc. 59/65a, sc. 59/82a, sc. 59/82b; INASA, Fondo Mariani inv. 73149; A. Zocchi Private Collection [1].

MA3

MAUSOLEUM (GASR ED-DUEIRAT)

- DEFINITION: Structure.
- TOPONYM/S: Gasr ed-Dueirat; Gasr ed Douirat.
- INTERPRETATION: *Mausoleum*.
- DISTANCE FROM LEP CIS MAGNA: 2,700 m WSW.
- GPS COORDINATES: WGS 84 33S 0430764 - 3610249.
- ACTUAL LAND USE: Modern road.
- VISIBILITY: The structure is not visible anymore and, recently (late 2014), a road has been built exactly where it was erected. However, the *mausoleum* was moved and rebuilt between 2001 and 2009 inside the garden of the Museum of Lepcis Magna.
- TOPOGRAPHIC POSITION: Plain terrain.
- MODERN INTERFERENCE/S: Road.
- PREVIOUS STUDIES: The Doric frieze of the *mausoleum* was mentioned by Durand who visited Lepcis Magna and its environs at the end of the 17th century. Two centuries later the structure was briefly described by H.S. Cowper (1897) and, subsequently, by Clermont-Ganneau (1903a) who visited the site and noticed, beside some architectural elements, the presence of a marble statue. During the Italian occupation the *mausoleum* was studied and described by several scholars (pl. 2C): Aurigemma (1915), Bartoccini (1922; 1925a; 1926) and, more in detail, by Romanelli (1925a; 1961; 1970). After its reconstruction (completed in 2009) inside the garden of the Museum of Lepcis Magna, the structure was analyzed in depth by Vêrité (2014) who has partially reconsidered the recent restoration and has proposed an interpretation that links some decorative elements to Mithraism. Moreover, he disagreed with the early 2nd century date assigned to the structure as was suggested both by Fontana (2001) and Mahler (2006) and proposed indeed to date the *mausoleum* to the Severan age. Recently (2007), the original location of the *mausoleum* has been surveyed by the Archaeological Mission of Roma Tre University (MUNZI *et al.* 2016).
- DESCRIPTION: Until the end of 2014, when a tarmac road was built across the site, the platform of the *mausoleum* and some limestone ashlar blocks were still visible on the ground. The structure was recently (2001-2009) reconstructed by specialists of the Mission archéologique française en Libye in the garden of the Archaeological Museum of Lepcis Magna (MICHEL 2011-2012, 120-121; 2012, 101) and it was reassembled as a two storey *mausoleum* (pl. 2D). The *mausoleum* was built on a crepidoma formed by

	<p>three steps while the <i>podium</i>, with its almost square plan (4.62x4.42 m), is c.3.5 m H and it is richly decorated (pl. 2E). This first storey has four pilasters on each side and every pilaster is decorated with acanthus scroll, while stretched niches form the intercolumnns. Above the Corinthian capitals, formed by prickly acanthus leaves, female heads are separated by semi-spherical shell-like caps in which are carved individual heads in high relief. The facade of the <i>podium</i> is characterized by a narrow entrance (0.52 m in width) to the burial chamber. On the door lintel is carved an head identified recently by Vérité (2014, 32) with Mithra <i>leontocephalus</i>, also according to the general cosmologic pattern of the second storey. The door lintel is surmounted by the <i>tabula ansata</i> with the inscription (IRT 729) that indicates the construction of the <i>mausoleum</i> by <i>Caius Marius Pudens Boccius Zurgem</i> and his wife <i>Velia Longina Bibai</i> to their two sons <i>Caius Marius Iovinus</i>, <i>Caius Marius</i> and his wife <i>Maria Victorina</i> with their son <i>Marsus</i>. Above the inscription, on a different ashlar block, is carved the representation in relief of the <i>capsa</i> (the case for the law scrolls), symbol of the political high status of the family. The second storey (pl. 3A) is characterized by an <i>aedicula</i> with six niches and six tortile columns linked together through arches. In these niches will have been accommodated the statues of the six people mentioned in the inscription and, according to Vérité (2014, 3-5), the statue found near the <i>mausoleum</i> and described by Clermont-Ganneau (1903a, 341), Bartoccini (1922, 81, fig. 8) and Musso (ABD AL-RAHMAN <i>et al.</i> 1996, 144, pl. 63b-c) should be the one related to <i>Velia Longina Bibai</i>. Above the arches, characterized in their upper part by a vegetal imbrication, is a Doric frieze composed by fourteen metopes and triglyphs. On two of these metopes were carved the personification of the Sun and of the Moon (ROMANELLI 1925a, 166, figs 95-96) and on the other twelve the signs of the Zodiac. Actually are preserved the signs of Cancer, Leo, Scorpio, Sagittarius and, partially, Pisces. Almost surely these metopes are those seen - at the end of the 17th century - by Durand (1694, 213) who mentions near a path "figures du Soleil et d'animaux". The upper cornice above the Doric frieze is characterized, at the four oriented corners, by the personification of the Seasons, all preserved except for Spring's. The covering of the <i>mausoleum</i> was conic with smooth imbrications while the pinnacle was composed by a Corinthian capital that could also have supported a further decoration like a pine cone or, according to Clauss Balty, a bird of prey in flight (VÉRITÉ 2014, 12). The recent analysis made by Vérité (2014, 23-31) on the decorative elements and on the general pattern suggest to date the <i>mausoleum</i> to the Severan age. However, both epigraphic elements (as the lack of the <i>diis manibus</i> formula and the presence of the <i>gentilicium</i> "Marius" from the African Proconsul <i>Marius Priscus</i> - AD 98/99) and architectural elements, prompt to date the structure to the beginning of the 2nd century AD (FONTANA 2001; MAHLER 2006).</p>
STATE OF PRESERVATION:	The structure was rebuilt inside the garden of the Lepcis Magna Museum.
CHRONOLOGY:	AD 100-125.
DATING ELEMENT/S:	Building features; epigraphic elements; relationship with a near dated site (VI43).
STRUCTURAL TYPE:	" <i>Aedicula</i> above <i>podium</i> " <i>mausoleum</i> .
SPECIAL FINDS:	<p><u>Inscriptions:</u></p> <p>- Limestone ashlar block included in the reconstruction of the <i>mausoleum</i> inside the garden of the Museum of Lepcis Magna (IRT 729). Inscription within a <i>tabula ansata</i>.</p> <p style="padding-left: 40px;">C(aio) Mario Iovino et C(aio) Mario et Mariae Victorinae et Marso f(ilio) eius C(aius) Marius Pudens Boccius Zurgem et Velia Longina Bibai parentes f(ili)is et nepoti fecerunt</p> <p><u>Sculpture:</u></p> <p>- Marble female statue that belongs to the <i>Grande Ercolanese</i> type (Cerere variant).</p>
BIBLIOGRAPHY:	DURAND (1694), 213; COWPER (1897), 214, nr. 4; CLERMONT-GANNEAU (1903a), 341; MC (1914), 162; AURIGEMMA (1915), 10, fig. 16; BARTOCCINI (1922), 81, 85, 87, figs 8,

	22, 31-32; (1925a), 322; (1926), 38; ROMANELLI (1925a), 165-167. figs 93-96; (1961), 593; (1970), 273-274, pl. 200b; MERIGHI (1940), II, 156-157 nr. 10; ABD AL-RAHMAN <i>et al.</i> 1996, 144, pl. 63b-c; FONTANA (1996), 81; (2001), 163, 168; MAHLER (2006), 43, pls 8e-f, 9a-c; KENRICK (2009), 135-136; MUNZI <i>et al.</i> (2010), 738; (2011), 25; (2016), 87-88, site KHM 68; MICHEL (2011-2012), 120-121; (2012), 101; VÉRITÉ (2014); <i>IRT</i> 729; <i>AE</i> 1925, 106; <i>AE</i> 1926, 167.
CARTOGRAPHY:	MÜLLER (1855), pl. XXI (<i>vetus turris</i>); IGM 1913b (<i>Cas</i>); IGM 1918a (quote 49 "ruins"); Br. Murge 1919a-b (<i>Gas</i>); Br. Murge 1919c (<i>G.</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-2a, WP G23-2a; CAS, sc. 59/57, sc. 59/58a, sc. 59/58b, sc. 59/58c, sc. 59/59a, sc. 59/59b, sc. 59/60, sc. 59/61, sc. 59/62; INASA, Fondo Mariani inv. 73151.

MA4

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	5,330 m W.
GPS COORDINATES:	WGS 84 33S 0428001 - 3610888.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is not visible anymore and it is noticeable just by its concrete platform on the ground.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The structure has been probably damaged during the Italo-Turkish clashes between 1911-1912 and destroyed in the following years.
PREVIOUS STUDIES:	The first mention of the <i>mausoleum</i> , together with other burial evidence located at the foot of Ras el-Mergheb, was given by the Beechey brothers (1828) in their journey along the Libyan coast. The first brief description of the structure is almost surely the one given by Barth (1849) who reported a <i>mausoleum</i> at the foot of Ras el-Mergheb. He measured the structure (exterior: 5.55x4.77 m; interior: 4.88x4.12 m) and hypothesized the existence of an inscription above the entrance, located on the S side. Between the end of the 19 th and the beginning of the 20 th century, Cowper (1897) and Méhier de Mathuisieulx (1906) were the subsequent travellers who described briefly the structure. Cowper noticed the limestone <i>podium</i> of ashlar blocks with still <i>in situ</i> both the <i>opus caementicium</i> vault and the moulding of the door (pl. 3B). He also gave a rough measurement of its total length (5 paces). Méhier de Mathuisieulx added to the Cowper description the dimension of the door (1.60x0.70 m), still visible on the E facade of the building (in Barth's description it was mentioned on the S side), and the max. preserved H of the first storey (c.4 m). The <i>mausoleum</i> was still visible, and cited together with another funerary structure, when the "Missione Archeologica Italiana" visited the area in 1910-1911: <i>Elenco edifici</i> (1912). The structure is also noticeable in the distance in a photograph taken by Vinassa de Regny (1913) at the beginning of the 20 th century, however without any written description. In a further unpublished photograph (pl. 3C) dated to 1912-1913 the mausoleum was already damaged compared to the photo taken by Cowper (pl. 3B) and to the description made both by Méhier de Mathuisieulx and by Barth. The site has been recently (2007) surveyed by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	Although the funerary structure is not visible anymore, its position is indicated by the maps and by photos documentation (VINASSA DE REGNY 1913, pl. VIII) and this seems to be confirmed by a regular concrete platform of c.8x7.5 m still visible on the ground. Moreover, the measurements gave by Barth and by Cowper seems to fit within the

OBSERVATIONS:	platform. The complete destruction of the <i>mausoleum</i> can be dated after 1919 (it is still mentioned in the <i>Brigata Murge</i> cartography). However, it has been damaged in the battle of the Mergheb fought in those fields between October 1911 and February/March 1912: <i>Campagna di Libia</i> 1924, pls I-II).
STATE OF PRESERVATION:	Apart from the concrete platform, the structure is completely destroyed and only a few concrete fragments are visible on the ground.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Relationship with a near dated sites (VI11; Fa1); building features.
STRUCTURAL TYPE:	"Tower" or "Aedicula above podium" <i>mausoleum</i> .
BIBLIOGRAPHY:	BEECHEY, BEECHEY (1828), 50; BARTH (1849), 305; COWPER (1897), 215 nr. 6, fig. 61; CLERMONT-GANNEAU (1903a), 344; MÉHIER DE MATHUISIEULX (1906), 77-78; <i>Elenco edifici</i> 1912, 45 s.v. Mergheb; VINASSA DE REGNY (1913), pl. VIII; MUNZI <i>et al.</i> (2016), 90, site KHM 2.
CARTOGRAPHY:	IGM 1913b (<i>Casr</i>); Br. Murge 1919a-b (<i>Gasr</i>); Br. Murge 1919c (<i>Gasr</i>); Br. Murge 1919e (<i>G.</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : A. Zocchi Private Collection [1].

MAS

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	4,540 m WSW.
GPS COORDINATES:	WGS 84 33S 0428796 - 3610837.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is hardly recognizable today but a few elements (ashlar blocks) are still <i>in situ</i> and others are scattered all around the ground.
TOPOGRAPHIC POSITION:	Hilltop.
MODERN INTERFERENCE/S:	The structure seems to have been heavily damaged by the construction of Italian strongholds/fortified lines in early 20 th century.
PREVIOUS STUDIES:	There is no specific literature related to this structure but generic comments concerning the <i>mausolea</i> around the Ras el-Mergheb area can be referred also to this one. The first notice of the existence of funeral structures is the one given by the Beechey brothers (1828) followed many decades later by Clermont-Ganneau (1903a) and by the "Missione Archeologica Italiana" (<i>Elenco edifici</i> 1912). The site has been surveyed by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2010; 2016).
DESCRIPTION:	The site is characterized by a mound of rubble with an extension of c.4x4 m (pl. 3D) and with few ashlar blocks <i>in situ</i> related both to the <i>mausoleum</i> (two contiguous blocks on the W side) and probably to the funerary enclosure whose measures cannot be however defined. A moulded lintel of the <i>mausoleum</i> door lies on the ground (pl. 3E) together with other limestone elements, including a moulded base. This structure seems to have suffered damage during the Italo-Turkish conflict; it is plausible that the Italian troops used part of its ashlar blocks to built the stronghold "Ridotta Palermo" which, according to the IGM 1913b and Br. Murge 1919b maps seems to be located on the same place as the ancient site.
STATE OF PRESERVATION:	Only a few ashlar blocks are still <i>in situ</i> ; the site is ruined and looted.
CHRONOLOGY:	AD 100-250.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	BEECHEY, BEECHEY (1828), 50; CLERMONT-GANNEAU (1903a), 344; <i>Elenco edifici</i> 1912,

MA6

MAUSOLEUM (GASR EL-BANÂT)

DEFINITION:	Structure.
TOPONYM/S:	Gasr el-Banât.
INTERPRETATION:	<i>Mausoleum.</i>
DISTANCE FROM LEPCIS MAGNA:	3,070 m SSE.
GPS COORDINATES:	WGS 84 33S 0434170 - 3608162.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is accessible; low vegetation around it.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	In 1727-1728 the Arab traveller-writer Abu Abd Allah Muhammad Ibn al-Tayyib al Maghribi, quoted by Romanelli (1925a), mentioned the structure noticing the presence of the heads of maidens ("Banât" is the Arab term for maidens, girls) maybe referring to a Doric frieze or decorations with female busts carved on them, today unfortunately missing. After a brief mention of the gasr named el- Bened by G. A. Freund in 1881 (<i>Pionieri Italiani in Libia</i> 1912), Henry Cowper (1897) cited the <i>mausoleum</i> as a "rendezvous of an organized band of robbers" without giving any further detail. Beside some archival photographs (pl. 4A-B), the structure was visited and described for the first time by Romanelli (1925a) in a state of preservation similar to what is visible today. Romanelli's summary description is also repeated by A. Merighi (1940). Recently (2009), the <i>mausoleum</i> was surveyed and published by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The structure, preserved for more than 7 m in H, was built with limestone ashlar blocks from the Ras el-Hammam quarries and it is composed by three storey (pl. 4C-D). The <i>podium</i> (4.85x5.07 m; H of c.3.7 m) and the second storey (c.3.5 m high) are characterized by smooth walls except for the moulded bases and cornices. The only element preserved for the third storey is the base of the NE corner pilaster. The general plan of the burial chamber is still legible: it is barrel vaulted with three niches at the bottom wall to the W, maybe to house the cinerary urns. The photographs took before the twenties (pl. 4A-B) show both the NE side of the <i>podium</i> and the second storey almost undamaged and two pilasters of the third storey still partially preserved.
STATE OF PRESERVATION:	The structure seems to have been partially damaged by the Italo-Turkish clashes (1913-1922); since then no further damages occurred.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	"Tower" <i>mausoleum</i> .
BIBLIOGRAPHY:	COWPER (1897), 214 nr. 2; <i>Pionieri Italiani in Libia</i> (1912), 181; MC (1913), II, 75 fig. 4; COLETTI (1923), pl. 16; ROMANELLI (1925a), 49, 164-165, fig. 97; BERTARELLI (1929), 376; MERIGHI (1940), II, 61 nr. 19; FONTANA (1996), 79, 81; MUNZI <i>et al.</i> (2011), 25; (2016), 91, site KHM 107; MUSSO <i>et al.</i> (2013-2014), 35-36, site KHM 107.
CARTOGRAPHY:	IGM 1913a (<i>Casr el Benet</i>); IGM 1913b (<i>Casr Benat Lahmar</i>); IGM 1915b (<i>Mausoleo</i>); IGM 1918a (<i>Mausoleo</i>); IGM 1918b (<i>Mausoleo</i>); Br. Murge 1919c (<i>Mausoleo</i>); MCUC 1920 (<i>Mausoleo</i>); ROMANELLI (1925a), fig. 23 (<i>mausoleo</i>); IGM 1937 (<i>G.^r el-Benat</i>); USAMS 1943a (<i>G.^r el-Benat</i>); USACE 1962a (<i>Ancient Roman ruins</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : A. Zocchi Private Collection [1]; BSR, WP G23-48b; CAS, sc. 59/52a, sc. 59/52b.

MA7**MAUSOLEUM (GASR LEGBEBA)**

DEFINITION:	Structure.
TOPONYM/S:	Gasr Legbeba, Gasr el-Gbeba.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEP CIS MAGNA:	5,430 m SSW.
GPS COORDINATES:	WGS 84 33S 0430425 - 3606531.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is visible and accessible; low vegetation around it.
TOPOGRAPHIC POSITION:	Plateau.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure was recently published for the first time by Matoug (1997). Moreover, the site has been surveyed (2009) by the Archaeological Mission of Roma Tre University (MUSO <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The <i>mausoleum</i> is visible for almost all its burial chamber (4.23x3.73 m and 3.93 in H) built using limestone ashlar blocks (pl. 4E). The ceiling is characterized by a concrete barrel vault, partially preserved. On the external corners of the <i>mausoleum</i> above a moulded base preserved for all the perimeter of the structure, are smooth pilasters 0.25 m wide and protruding 3 cm from the wall. On the N side, on the second row above a moulded door (H 1.42 m; c.0.90 m wide), is carved a <i>tabula</i> without inscription. A block of the cornice of this storey is still visible <i>in situ</i> and, at least, two corners of the same decoration lay upside down on the ground (pl. 5A).
STATE OF PRESERVATION:	Apart from the upper part of the structure and part of the concrete barrel vault, the <i>mausoleum</i> is well preserved.
CHRONOLOGY:	AD 50-200.
DATING ELEMENT/S:	Relationship with a nearby dated site (Fa38); building features.
STRUCTURAL TYPE:	"Grabhaus" <i>mausoleum</i> .
BIBLIOGRAPHY:	MATOUG (1997); MUSO <i>et al.</i> (2013-2014), 33-35, site KHM 104; MUNZI <i>et al.</i> (2016), 91-92, site KHM 104.
CARTOGRAPHY:	IGM 1915b (<i>Gasr el-Gbéba</i>); IGM 1918a (<i>Gasr el-Ghebbaa</i>); Br. Murge 1919d-e (<i>G el Ghebbàa</i>); MCUC 1920 (<i>G el-Ghéba</i>).

MA8**MAUSOLEUM**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEP CIS MAGNA:	5,060m SSE.
GPS COORDINATES:	WGS 84 33S 0434280 - 3606154.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is visible and accessible with low vegetation around it. The funeral chamber is not accessible.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	The subterranean structures was heavily damaged thanks to illegal excavations of the funeral chamber/s made using a backhoe.
PREVIOUS STUDIES:	The only scholar who briefly mentioned the <i>mausoleum</i> without giving any description, was Bartoccini (1927a). However, thanks to archive photographs (pl. 5B-C) it is possible to see the structure in a better state of preservation compared to what is

DESCRIPTION:	<p>visible today. Recently (2009), the <i>mausoleum</i> was surveyed and published by the Archaeological Mission of Roma Tre University (MUSO <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).</p> <p>The structure is partially preserved (pl. 5D) and its dimensions can be approximately outlined. The concrete platform (c.9.85x8.80 m) and part of the first rows of limestone blocks are still visible on the ground. The <i>mausoleum</i> should have a quadrangular plan with one of its side (the short one) facing to the NE. The NW wall is the best preserved (for a total length of c.6.5 m) and it is smooth and built with ashlar blocks set up on a three step <i>crepidoma</i> and a moulded base; the structure reaches a total H of c.7.8 m. Also part of the SW wall is preserved (c.1.6 m) and, in the corner between the two <i>opus quadratum</i> walls, is still <i>in situ</i> part of the concrete vault barrel ceiling. Due to illegal excavations at the foot of the structure on the NE side, the entrance to a funeral subterranean chamber is unfortunately full of soil and rubble (pl. 5E). The access is preceded by a concrete barrel vaulted <i>dromos</i> (coated with plaster) or maybe by a further chamber extending toward the NE for c.6 m (wide 1.9 m) and with a niche on the SE wall. The shoulders and the lintel (a monolith 1.70 m long) of the entrance to the funeral chamber are characterized instead by limestone blocks. Nearby the structure, laid on the ground a limestone column fragment and a column base (both with a diameter of c.0.5 m).</p>
OBSERVATIONS:	Around the structure some collapsed limestone ashlar blocks lie on the ground.
STATE OF PRESERVATION:	The general plan of the structure is still legible and part of the <i>podium</i> and of the funeral chamber/s is/are still visible.
CHRONOLOGY:	AD 100-250.
DATING ELEMENT/S:	Relationship with a near dated site (VI50); building features.
STRUCTURAL TYPE:	"Tower" or "Temple" <i>mausoleum</i> .
BIBLIOGRAPHY:	BARTOCCINI (1927a), 115-116; MUSO <i>et al.</i> (2013-2014), 36, site KHM 106; MUNZI <i>et al.</i> (2016), 92, site KHM 106.
CARTOGRAPHY:	IGM 1913a (<i>Ruderi</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-47a, WP G23-47b.

MA9

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPIS MAGNA:	5,080 m SSW.
GPS COORDINATES:	WGS 84 33S 0434354 - 3606149.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is visible and accessible; low vegetation around it.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The <i>mausoleum</i> was briefly mentioned only by Bartoccini (1927a) and recently (2009) surveyed and described by the Archaeological Mission of Roma Tre University (MUSO <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The structure was built of limestone ashlar blocks on a concrete platform (7.60x7.30 m). The preserved remains consists of two perpendicular walls (respectively 7.50 m and 6.05 m in length) for a total H of c.2.8 m at the corner (pl. 6A-B). Both the preserved sides of the building are characterized by a protruding <i>crepidoma</i> . However, the structure does not preserve any moulded base or other decorations.
OBSERVATIONS:	Around the structure, many collapsed limestone ashlar blocks lie on the ground.
STATE OF PRESERVATION:	The general plan of the structure is still legible and part of the <i>podium</i> is still visible.

CHRONOLOGY:	AD 100-250.
DATING ELEMENT/S:	Relationship with a near dated site (VI50); building features.
STRUCTURAL TYPE:	"Tower" or " <i>Aedicula above podium</i> " <i>mausoleum</i> .
BIBLIOGRAPHY:	BARTOCCINI (1927a), 115-116; MUSSO <i>et al.</i> (2013-2014), 36, site KHM 106; MUNZI <i>et al.</i> (2016), 92, site KHM 106.
CARTOGRAPHY:	IGM 1913a (<i>Rudert</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-52a.

MA10 *MAUSOLEUM*

DEFINITION:	Scattered ashlar blocks.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPICIS MAGNA:	4,970 m S (approx).
GPS COORDINATES:	WGS 84 33S 0433127 - 3606157 (approx.).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The remains of the structure are visible scattered on the ground. Low vegetation and dump all around the site.
TOPOGRAPHIC POSITION:	Low hill slope.
MODERN INTERFERENCE/S:	A modern road to the E and various houses N of the site. The structure seems to have been destroyed in recent times.
PREVIOUS STUDIES:	The site has been surveyed recently (2013) and briefly described by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	Unfortunately, is not possible to recognize the plan and the exact localization of the structure because its remains are all scattered on the ground (pl. 6C). Among the numerous blocks are still visible two elements of a moulded base and trapezoidal-shape block, probably related to a different base.
STATE OF PRESERVATION:	The structure has been destroyed and only slight remains are visible on the ground.
CHRONOLOGY:	AD 100-250.
DATING ELEMENT/S:	Relationship with a nearby dated site (VI25); building features.
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2016), 93, site KHM 146.

MA11 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPICIS MAGNA:	7,995 m WNW.
GPS COORDINATES:	WGS 84 33S 0425556 - 3613018.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is visible and accessible beside a path; low vegetation around it.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure has been surveyed and briefly described by the Archaeological Mission of Roma Tre University (MUSSO <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The structure measures c.3.8x5.8 m at the base and the first row of limestone blocks is

OBSERVATIONS:	preserved for three sides while no traces remain of the fourth (the short one facing the Wadi Chadrun). Between these three walls there is a block of concrete collapsed on the ground, probably related to the ceiling (pl. 6D).
STATE OF PRESERVATION:	All around the structure are still visible several ashlar blocks (all without decorations) and different fragments of concrete.
CHRONOLOGY:	The <i>mausoleum</i> is not preserved but the general plan of its quadrangular structure is still legible.
DATING ELEMENT/S:	AD 100-250.
STRUCTURAL TYPE:	Relationship with a near dated site (VI53); building features.
BIBLIOGRAPHY:	Undeterminable.
	MUSO <i>et al.</i> (2013-2014), 36, site KHM 136; MUNZI <i>et al.</i> (2016), 93, site KHM 136.

MA12

MAUSOLEUM (GASR EL-AHMAR)

DEFINITION:	Structure.
TOPONYM/S:	Gasr el-Amhar; Gasr el-Túra.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	6,825 m NW.
GPS COORDINATES:	WGS 84 33S 0427306 - 3614319.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is visible and accessible through dense vegetation around it.
TOPOGRAPHIC POSITION:	Top hill plateau.
MODERN INTERFERENCE/S:	The funeral chamber/s was/were probably robbed and damaged in recent times (BEN RABHA, MASTURZO 1997).
PREVIOUS STUDIES:	The first scholar who mentioned the <i>mausoleum</i> and its subterranean chamber was Méhier de Mathuisieulx (1906). A few years later, the structure was seen by Aurigemma (1914; 1925a) and indicated as the SE corner of a <i>gasr</i> named el-Ahmar or el-Túra. Aurigemma described the <i>mausoleum</i> as a rectangular structure with a shaped plinth and remains of columns (probably already scattered on the ground). Aurigemma, like Méhier de Mathuisieulx, noticed also the presence of a subterranean funeral chamber. The same description is repeated by Merighi (1940). The <i>mausoleum</i> was recently briefly outlined by Masturzo and Ben Rabha (1997) and by the Roma Tre University survey (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	The structure is preserved only for the lower part of its rectangular <i>podium</i> (4 x 2.4 m) made of limestone ashlar blocks and by a moulded base (pl. 6E). Along the southern side of the <i>mausoleum</i> is the entrance of the subterranean chamber/s (unfortunately no longer accessible). All around there are several collapsed limestone blocks; among them a moulded cornice, a half column base and a Corinthian capital with acanthus leaves. The structure has been reused as part of a <i>gasr</i> (Fa31).
OBSERVATIONS:	All around the structure are still visible ashlar blocks; some of them decorated.
STATE OF PRESERVATION:	The plan of the rectangular structure is legible and part of its decoration is still visible on the ground.
CHRONOLOGY:	AD 180-300.
DATING ELEMENT/S:	Relationship with a near dated site (VI60); findings; building features.
STRUCTURAL TYPE:	"Tower" or " <i>Aedicula</i> above <i>podium</i> " <i>mausoleum</i> .
SPECIAL FINDS:	<u>Architectural elements:</u> - Limestone Corinthian capital dated between the end of the 2 nd century AD and the 3 rd century AD (BEN RABHA, MASTURZO, 1997, 216).
BIBLIOGRAPHY:	MÉHIER DE MATHUISIEULX (1906), 78; AURIGEMMA (1914), 473; (1925a), 9; MERIGHI (1940), II, 158-159, n. 14; BEN RABHA, MASTURZO (1997), 216, pls. 92b-c, 93a-c; MUNZI <i>et al.</i> (2004), 56, site 49.

CARTOGRAPHY: IGM 1915b (*Gasr el-Ahmar*); IGM 1918a (*Gasr el-Ahmar*); Br. Murge 1919c (*Gasr el-Ahmar*); Br. Murge 1919d-e (*G el-Ahmar*); MCUC 1920 (*G el-Ahmar*); IGM 1937 (*G el-Ahmar*); USAMC 1943 (*G el-Ahmar*); USACE 1962b (*Ancient roman ruins*); SPLAJ 1979b (*Roman ruins*).

MA13

MAUSOLEUM

DEFINITION: Structure.

TOPONYM/S: None.

INTERPRETATION: *Mausoleum* with hypogean tomb.

DISTANCE FROM LEP CIS MAGNA: 6,255m NW.

GPS COORDINATES: WGS 84 33S 0428337 - 3614905.

ACTUAL LAND USE: Pasture/uncultivated land.

VISIBILITY: The *mausoleum* is accessible and visible; low vegetation around it. The hypogean tomb is not accessible.

TOPOGRAPHIC POSITION: Hilltop.

MODERN INTERFERENCE/S: In recent years the terrain around the structure has been leveled.

PREVIOUS STUDIES: The structure and its subterranean *hypogaeum* were surveyed in 1996 by the DoA of Lepcis Magna and partially dug in 1997 (MATOUG 1998).

DESCRIPTION: The *mausoleum* has a rectangular plan (2.80x5.05 m) and it is preserved for three rows of limestone ashlar blocks including part of its molded base (pls 6F-7A). Scattered on the ground are visible other elements of a different molded base/cornice. Around the *mausoleum* are still visible *in situ* some limestone slabs that sealed a square shaft that led to the subterranean rooms. The hypogean chambers formed a cross centered on the shaft that give access to three barrel vaulted corridors and then to the funeral chambers (pl. 7B); a fourth corridor with a flat ceiling is on the N and at the bottom of this corridor is a false limestone door. All the chambers and corridors (except for the northern one) have *loculi* for the depositions and the remains of at least six skeletons were found scattered on the ground. The N chamber contained instead a limestone *sarcophagus bisomus* that occupied all the N-S width of the room and it blocked the access of the E and W sides of the chamber. The *sarcophagus* must have been placed there before the construction of other chambers.

OBSERVATIONS: All around the structure are still visible several ashlar blocks; some of them decorated.

STATE OF PRESERVATION: The general plan of the *mausoleum* is still legible; part of its decoration is also visible scattered on the ground. The hypogean tomb is not accessible.

CHRONOLOGY: 3rd - 5th century AD.

DATING ELEMENT/S: Relationship with a near dated site (VI31); findings; building features.

STRUCTURAL TYPE: Unknown.

GRAVE GOODS: Pottery:
 - Amphorae [?]: types [?] not id.
 - Lamps: Eastern form [1]; African/Tripolitanian forms [?].
 - Corinthian pottery [1]: Cup with Hercules' labors relief decoration [1].
Numismatics:
 - Coins [4] not id.
Metals:
 - Necklace [1]; earrings [2]; bronze ring [1].
Cinerary urns/burials:
 - Limestone *sarcophagus bisomus* with double "pitched roof" covering.

BIBLIOGRAPHY: MUSSO *et al.* (1998), 187; MATOUG (1998).

MA14

MAUSOLEUM (GASR EL-FITÚRI)

DEFINITION:	Structure.
TOPONYM/S:	Gasr el-Fitúri.
INTERPRETATION:	<i>Mausoleum.</i>
DISTANCE FROM LEPCIS MAGNA:	4,620 m WNW (approx).
GPS COORDINATES:	WGS 84 33S 0428960 - 3612643 (approx.).
ACTUAL LAND USE:	Residential zone.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	An Italian stronghold was built near the <i>mausoleum</i> during the Italo-Turkish war. Since the 1950s the area was urbanized and the ancient structure was destroyed.
PREVIOUS STUDIES:	The structure is mentioned by the Italian cartographies from 1913 to 1919: these maps are the only documentation that allow us to ensure with accuracy the position of the <i>mausoleum</i> . The existence of the funeral structure on this site (Gasr el-Fitúri) was recorded by Aurigemma (1925a) then by Cesàro (1933) and by Merighi (1940). Unfortunately none of these scholars describe the structure in detail. An archival photograph (held in the INASA) made by Mariani in 1913 shows part of this monument that Romanelli, in a copy of the same photo preserved at Macerata University, indicates as "Gasr el-Fitúri. Homs - resti di un mausoleo" (pl. 7C).
DESCRIPTION:	The <i>mausoleum</i> is not visible anymore. The photograph taken by Lucio Mariani is the only documentation that permits a partial description and it depicts a quadrangular structure made by limestone ashlar blocks with a max. of 5 rows preserved on one side. There are no visible moulded or decorated elements.
STATE OF PRESERVATION:	The site has been destroyed.
CHRONOLOGY:	AD 100-250.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	AURIGEMMA (1925a), 11; CESÀRO (1933), 48; MERIGHI (1940), II, 159; SJÖSTRÖM (1993), 132 nr. 6.
CARTOGRAPHY:	IGM 1913b (<i>Kasr El Fitur</i>); Br. Murge 1919a (<i>Gasr el-Fitur</i>); Br. Murge 1919b (<i>G. el-Fitur</i>); Br. Murge 1919c-e (<i>R. G. el-Fitur</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : INASA, Fondo Mariani inv. 73150 (Same document with Romanelli's caption: CAS, sc. 59/64).

MA15

MAUSOLEUM (GASR SHADDAD)

DEFINITION:	Structure.
TOPONYM/S:	Gasr Shaddad.
INTERPRETATION:	<i>Mausoleum.</i>
DISTANCE FROM LEPCIS MAGNA:	1,330 m ESE.
GPS COORDINATES:	WGS 84 33S 0434577 - 3610647.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structure is visible and accessible; low vegetation around it.
TOPOGRAPHIC POSITION:	Plain.
MODERN INTERFERENCE/S:	Dump around and inside the structure. Some of the limestone ashlar blocks that were on the ground have been removed and reused in recent times by the local inhabitants or were taken by the Italian Army to build the nearby <i>Vittorio Emanuele III</i> and <i>Settimio</i>

PREVIOUS STUDIES:	<p><i>Severo</i> strongholds.</p> <p>The first traveller who described the <i>mausoleum</i> was Ludwig Salvator who visited Lepcis Magna in May 1873 (LOTHRINGEN 1874); at his time the structure was used as a sheepfold and it had two entrances (probably the original one in the bottom wall and the one made in recent times on the facade: pl. 7D). He noted the rosette decoration above the pilaster of the second storey. Cowper (1897) and Méhier de Mathuisieulx (1903) described the <i>mausoleum</i> as partially ruined, especially for its second storey which was framed by pilasters (Cowper) and by Corinthian columns and a frieze (Méhier de Mathuisieulx). Immediately after the Italian occupation of Khoms and Lepcis in 1911 Stroppa (1912) located the <i>mausoleum</i> within an area c.300 m wide and characterized by numerous funeral evidences. The soldier was able to enter in the funeral chamber and reported a well preserved Doric frieze on the second storey. Romanelli (1925a) described more in detail the structure, reporting measurements and trying to hypothesize a reconstruction of its original shape (pl. 7D). The <i>mausoleum</i> was then cited by different authors but never with detailed descriptions. After WWII the only report we have is that Gasr Shaddad was restored in 1947 (GOODCHILD 1949a; AURIGEMMA 1951). Beside the written documentation some archival photographs show the aspect of the structure at the beginning of the 20th century (pl. 7E).</p>
DESCRIPTION:	<p>The structure is characterized by two storeys for a max. preserved H of c.9.4 m (pl. 8A). The <i>mausoleum</i> was built entirely in limestone ashlar blocks from the quarries of the Wadi es-Smara district. The <i>podium</i>, in <i>opus caementicium</i> and covered with limestone blocks, has a quadrangular plan (6.40x7.50 m) and an H of 4.40 m. The base and the cornice are moulded while part of the plinth beneath the moulded base is actually buried. Inside, the <i>podium</i> has a barrel vaulted funeral chamber (5.84x4.28 m) partially buried (pl. 8B). The entrance to the chamber is on the SW side (opposite the facade), where part of the projecting jambs of the steps inside the structure is still visible. The second storey is partially preserved on the W corner and it is composed by smooth pilasters and a semi-column. In the inner side of the SW wall of the second storey is still visible a shelf between the half-column and the pilaster. Above the pilasters is still <i>in situ</i> an element of the architrave but the Doric frieze is not preserved. An element of the cornice and a column base has been found recently at the foot of the structure.</p>
OBSERVATIONS:	All around the structure are still visible several ashlar blocks.
STATE OF PRESERVATION:	The building is well preserved and many of its architectural and decorative elements (except for the Doric frieze) are visible on the ground.
CHRONOLOGY:	AD 120-130.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	" <i>Aedicula</i> above <i>podium</i> " <i>mausoleum</i> .
SPECIAL FINDS:	<p><u>Architectural elements:</u></p> <p>- Limestone upper cornice that could be dated in the 3rd decade of the 2nd century AD. For comparison: MAHLER (2006), cat. 827 KG, 829 KG, 833 KG. For the general pattern of the motif: BIANCHI (2005), 216, note 114.</p>
BIBLIOGRAPHY:	<p>LOTHRINGEN (1874), 178-179; COWPER (1897), 213 nr. 1; MÉHIER DE MATHUISIEULX (1903), 267 nr. 13; (1913), 281; STROPPA (1912), 62, 66; <i>Elenco edifici</i> 1912, 44 s.v. Lebda; MC (1914), 162; ROMANELLI (1925a), 162-163, fig. 90; (1961), 593; BARTOCCINI (1926), fig. 40; (1927a), 112, fig. 39; BERTARELLI (1929), 376; "OLIFANTO" (1930), 235; MERIGHI (1940), II, 160, nr. 15; GOODCHILD (1949a), 13; AURIGEMMA (1951), 86; BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI (1963), fig. 224; HAYNES (1981), 98; FONTANA (1996), 81; KENRICK (2009), 133-134 nr. 51.</p>
CARTOGRAPHY:	<p>MÉHIER DE MATHUISIEULX (1903), pl. I (L); STROPPA (1912), Le rovine di Lebda (<i>Mausoleo</i>); IGM 1913a (<i>Rudero</i>); IGM 1913b (<i>Casr</i>); IGM 1914 (<i>Mausoleo. Gasr Sciaddad</i>); IGM 1915a (14.4 "squared structure"); IGM 1918b (quote 14 "squared structure"); Br. Murge 1919a (<i>Gasr</i>); Br. Murge 1919b ("squared structure"); ROMANELLI (1925a), fig. 23 (<i>Gasr Sciaddad</i>); CAGNAT (1926), 342 (<i>Mausolée</i>); BARTOCCINI (1927a),</p>

ARCHIVAL DOCUMENTATION: Lepcis - Pianta degli Scavi (*Mausoleo - Gasr Shaddad*); BERTARELLI (1929), Leptis Magna (*Mausoleo Gasr Sciaddad*).
Photographs: BSR, WP G23-3a, WP G23-3b; CAS, sc. 59/72a, sc. 59/72b, sc. 59/73.

MA16 - MA17

MAUSOLEA (GASR ER-RİYÂHÎ)

DEFINITION:	Structures.
TOPONYM/S:	Gasr er-Riyâhî.
INTERPRETATION:	<i>Mausolea</i> .
DISTANCE FROM LEPCIS MAGNA:	1,265 m SE.
GPS COORDINATES:	WGS 84 33S 0434252 - 3610279.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is accessible; low vegetation around it.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure, cited as <i>Gasr er-Riahia</i> in the 1914 IGM map, was described for the first time by Romanelli (1925a) who recorded two - or more - <i>mausolea</i> within a big enclosure (30x42 m) built of limestone ashlar blocks. A useful source to recognize these funeral structures and the large enclosure around them are, together with the 1915 IGM map, three unpublished photographs taken between 1912-1915 (pl. 8C-E). According to Romanelli, the enclosure was characterized by a high base on which were pilasters and, between them, a stone balustrade. The western <i>mausoleum</i> (Ma16), preserved only for part of the SW side, was characterized by a short <i>podium</i> and by a second storey with smooth pilasters slightly protruding from the walls. Thanks to the photographic documentation, it is possible to establish that the structure originally faced to NW. The eastern funeral structure (Ma17), visible only on the left part of the photo taken by A. Alemanni around 1913 (pl. 8C), was characterized by a quadrangular structure with, apparently, not decoration preserved (it seems only two rows of limestone ashlar blocks were still <i>in situ</i>). After Romanelli's description the <i>mausolea</i> were cited by the <i>Touring Club Italiano</i> guide (BERTARELLI 1929), by "Olifanto" (1930) and by Antonio Merighi (1940) who was however not able to see the remains of the funeral structures.
DESCRIPTION:	Today only a few limestone ashlar blocks of the enclosure are still <i>in situ</i> (pl. 9A), while the position of the two <i>mausolea</i> is characterized by a higher terrain level. The two funeral structures are not preserved, but some architectural elements are still visible scattered on the ground: a Corinthian capital (pl. 9B), a fragment of the moulded base or cornice and a palmette <i>acroterion</i> . On the ground is also visible part of a pilaster of the enclosure seen by Romanelli.
STATE OF PRESERVATION:	Few traces of the structures are still <i>in situ</i> , numerous limestone ashlar blocks are scattered on the ground.
CHRONOLOGY:	AD 130-140.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	" <i>Aedicula</i> above <i>podium</i> " <i>mausoleum</i> (Ma16). Undeterminable (Ma17).
SPECIAL FINDS:	<u>Architectural elements</u> : - Limestone Corinthian capital (fig. 16.2) dated to the 4 th decade of the 2 nd century AD. For comparisons: Corinthian capitals of the Hadrian Baths (BIANCHI 2009, 51, fig. 5). - Limestone palmette <i>acroterion</i> . For comparison: MAHLER (2006), cat. 920 S - 921 S. <i>Elenco edifici</i> 1912, 44 s.v. Lebda; ROMANELLI (1925a), 163; BERTARELLI (1929), 376; "OLIFANTO" (1930), 235; MERIGHI (1940), II, 160 nr. 16.
BIBLIOGRAPHY:	IGM 1913b (<i>Casr</i>); IGM 1914 (<i>Mausoleo. Gasr er-Riahia</i>); IGM 1915a (quote 16.04: "squared structure"; "two perpendicular walls inside a rectangular enclosure"); Br.
CARTOGRAPHY:	

Murge 1919a (*Gasr*); Br. Murge 1919b-c ("squared structure"); ROMANELLI (1925a), fig. 23 (*Gasr Riahia*); CAGNAT (1926), 342 (*Mausolée*); BERTARELLI (1929), Leptis Magna ("squared structures within a rectangular enclosure").
 ARCHIVAL DOCUMENTATION: Photographs: A. Zocchi Private Collection [2]; CAS, sc. 18/44.

MA18 *MAUSOLEUM (GASR SIDI BU HADI)*

DEFINITION: Structure.
 TOPONYM/S: Gasr Sidi Bu Hadi.
 INTERPRETATION: *Mausoleum*.
 DISTANCE FROM LEP CIS MAGNA: 1,500 m SE.
 GPS COORDINATES: WGS 84 33S 0434536 - 3610247.
 ACTUAL LAND USE: Pasture/uncultivated land.
 VISIBILITY: The site is accessible.
 TOPOGRAPHIC POSITION: Plain terrain.
 MODERN INTERFERENCE/S: Private houses to the E. Most of the ancient material was removed and reused in recent times. The area is covered by garbage.
 PREVIOUS STUDIES: The structure was briefly described by Romanelli (1925a) who saw scarce remains of a limestone wall still *in situ* and many architectural elements scattered on the ground, including small limestone columns. According to Romanelli the site was used as a quarry. The same information is given a few years later by Merighi (1940).
 DESCRIPTION: The site, cannot be localized with accuracy but it can be located in an area where are still visible some ancient elements scattered on the ground. The site, a quadrangular structure perhaps within an enclosure (c.65x42 m), is visible in the RAF aerial-photographs.
 STATE OF PRESERVATION: The structure is not visible anymore.
 CHRONOLOGY: 2nd - 3rd century AD.
 DATING ELEMENT/S: Building features.
 STRUCTURAL TYPE: Undeterminable.
 BIBLIOGRAPHY: ROMANELLI (1925a), 163; MERIGHI (1940), II, 160 nr. 17.
 ARCHIVAL DOCUMENTATION: Air Photographs: BSR, WP G11-62; ASLS, *Leptis Magna 24999*.

MA19 *MAUSOLEUM*

DEFINITION: Structure.
 TOPONYM/S: None.
 INTERPRETATION: *Mausoleum*.
 DISTANCE FROM LEP CIS MAGNA: 980 m SE.
 GPS COORDINATES: WGS 84 33S 0433955 - 3610367.
 ACTUAL LAND USE: Pasture/uncultivated land.
 VISIBILITY: The site is visible and accessible.
 TOPOGRAPHIC POSITION: Plain terrain.
 MODERN INTERFERENCE/S: The coastal motorway Khoms - Lepcis Magna runs a few meters S of the site; low and medium vegetation inside and around the site. Garbage within the structure.
 PREVIOUS STUDIES: In 1913 Aurigemma (1930a), even if he did not describe the structures, noticed on the site a limestone ashlar block with part of an inscription (*IRT 751*) almost surely related to the *mausoleum* (author's indications: N of the modern road and c.300 m WNW from

DESCRIPTION:	Gasr er-Riyâhî). A few limestone ashlar blocks of a funeral structure are visible within a quadrangular enclosure also made of limestone blocks. The <i>mausoleum</i> is actually visible as a small mound of rubble and soil in the central part of the enclosure (pl. 9C). There are two perpendicular walls (c.3.2x2.5 m) that can be detected at ground level (pl. 9D). The funeral enclosure, whose limestone blocks are also visible at ground level, is noticeable especially to the W side of the <i>mausoleum</i> for a total length of c.40 m (pl. 9E). Scattered on the ground a smooth column limestone drum. The limestone blocks of the <i>mausoleum</i> belong to the same petrographic type as the inscribed block (IRT 751) found by Aurigemma in 1913 and mentioning the deceased <i>Victorina</i> . The capital letters and <i>formularium</i> suggest to date the inscription to the 2 nd century AD.
STATE OF PRESERVATION:	The structures (<i>mausoleum</i> and its enclosure) can only be detected by some limestone ashlar blocks on the ground.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Epigraphic evidences; building features.
STRUCTURAL TYPE:	Undeterminable.
SPECIAL FINDS:	<u>Inscriptions:</u> - Limestone ashlar block found within the site in 1913 (AURIGEMMA 1930a) now at the Garden of the Old Museum at Lepcis Magna. Inscription within a <i>tabula ansata</i> (IRT 751). <div style="text-align: center;">Di(i)s manibus [...] Victorinae [...]</div>
BIBLIOGRAPHY:	AURIGEMMA (1930a), 92; IRT 751.
CARTOGRAPHY:	IGM 1915a (quote 7.53, 15.0: "many ashlar blocks").

MA20

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> with hypogean tomb.
DISTANCE FROM LEP CIS MAGNA:	930 m SW.
GPS COORDINATES:	WGS 84 33S 0432497 - 3610697.
ACTUAL LAND USE:	Residential/commercial zone and road to the E and to the S.
VISIBILITY:	Some remains of the structure are scattered on the ground without any protection.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site may have been heavily damaged during the Italo-Turkish War and subsequently (1913-1914) some of its limestone blocks were probably reused to built a War Memorial Monument still partially visible c.180 m NW from the site.
PREVIOUS STUDIES:	Up to now, the only documentation existing related to the <i>mausoleum</i> are two photographs taken by Alemanni around 1913 (pls 9F-10A). The relevance to this <i>mausoleum</i> seems to be confirmed by the landscape visible in the photos around the ancient structure: the mound of soil should be indeed related to the earthen bank of "Monticelli" (Ag1) and the funeral structure seems built using and leaning partially on the earthen bank. The quadrangular structure visible in the two photographs is characterized by a three step <i>crepidoma</i> and a moulded base (for a total length at the base of c.2.5-2.8 m). Above the base is visible part of the <i>opus caementicium</i> that should fill the interior of the structure. In 1993 an hypogean tomb was discovered 6.5 m S from the structure (ABD AL-RAHMAN 1995).
DESCRIPTION:	On the site are still noticeable two limestone ashlar blocks buried partially by the collapsed "Monticelli" earthen bank (pl. 10B); they could be the same blocks related to the <i>crepidoma</i> visible in the Alemanni photographs (pls 9F-10A). All around are

	<p>numerous ashlar blocks and among them is also recognizable a base (pl. 10C), however, different from the one visible in the Alemanni documentation. It is plausible therefore that the base seen in the recent survey can be related to an altar. In the War Memorial built by the Italian soldiers c.180 m NW from the site (IGM 1914 "<i>Monumento ai caduti</i>"; MARIENI 1914), are also still visible some limestone ashlar blocks with smooth pilasters carved on them and in the photographs published by the Colonel Marieni (1914) are visible angular <i>acroteria</i>, probably coming from the same <i>mausoleum</i> (pl. 10D). The hypogean tomb discovered in 1993 a few meters S of the <i>mausoleum</i> and related to it, was characterized by a shaft entrance and by two similar rectangular funeral chambers (one to W and the other to E of the entrance) with a continuous banquette on all sides and five niches for each chamber, one in the back wall and two for each lateral wall (pl. 10E-10F). Pottery (amphorae and lamps) permits to date the tomb to the 2nd century AD.</p>
STATE OF PRESERVATION:	Only few limestone ashlar blocks <i>in situ</i> can be recognized on the site, while others are still visible scattered on the ground.
CHRONOLOGY:	AD 150-250.
DATING ELEMENT/S:	Findings; relationship with a near dated site (Ag1); building features; grave goods.
STRUCTURAL TYPE:	"Obelisk" <i>mausoleum</i> with hypogean tomb.
GRAVE GOODS:	<p><u>Pottery:</u></p> <ul style="list-style-type: none"> - Amphorae [9]: local production [2]; Dressel 2/4 [1]; <i>Benghazi</i> MR1 [6]. - Coarse Pottery [26]: bowls [4]; bottles [22]. - Lamps [4]: BRONEER (1930), type XXI [2]; LOESCHKE (1919), type VIII [2]. <p><u>Metals:</u></p> <ul style="list-style-type: none"> - Bronze mirrors [2]; iron strigils [2]. <p><u>Other:</u></p> <ul style="list-style-type: none"> - Alabaster Venus statuette [1]. <p><u>Cinerary urns:</u></p> <ul style="list-style-type: none"> - Limestone coffin-shaped [22].
SPECIAL FINDS:	<p><u>Architectural elements:</u></p> <ul style="list-style-type: none"> - Limestone base, probably related to an altar (fig. 20.2).
BIBLIOGRAPHY:	ABD AL-RAHMAN (1995), 155, pl. 68a-b.
ARCHIVAL DOCUMENTATION:	<p><u>Photographs:</u> CAS, sc. 18/45a, sc. 18/45b.</p> <p><u>Written reports:</u> LMDoA, Drawings Archive (not inv.).</p>

MA21

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEP CIS MAGNA:	1,050 m NW.
GPS COORDINATES:	WGS 84 33S 0432562 - 3611848.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is accessible and partially visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site was damaged by modern works and actually covered by a considerable amount of garbage.
PREVIOUS STUDIES:	The site was excavated in 1996 by the Archaeological Mission of University of Roma Tre in collaboration with the DoA of Lepcis Magna.
DESCRIPTION:	The <i>mausoleum</i> , together with Ma22, belonged to the <i>necropolis</i> (Nc8) located W of Wadi er-Rsaf and constitutes the W sector of the Roma Tre University "Area Nord" excavation (MUSO <i>et al</i> 1996). The structure was built within a squared area (9.60 m

STATE OF PRESERVATION:	each side) whose enclosure was defined by traces of robber trenches except for part of the NE side where a portion of the concrete foundation survived. In the middle of this NW-SE aligned area, another robber trench delimited a quadrangular space (4.70 x 5 m) characterized by a compact soil; this area should be the location where the <i>mausoleum</i> was built. Scattered on the ground were different ashlar limestone blocks (some of them moulded) probably piled during the robber activity prior to the excavation. A marble head, dated to the first half of the 2 nd century, was found in this area.
CHRONOLOGY:	Only few traces are still visible on the ground.
DATING ELEMENT/S:	2 nd century AD.
STRUCTURAL TYPE:	Relationship with a nearby dated site (Nc8); building features.
SPECIAL FIND:	Undeterminable.
BIBLIOGRAPHY:	<u>Sculpture:</u> - Marble head (dated to the first half of the 2 nd century). Musso <i>et al.</i> (1996), 155, 167-168.

MA22 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum.</i>
DISTANCE FROM LEPCIS MAGNA:	1,010 m NW.
GPS COORDINATES:	WGS 84 33S 0432588 - 3611826.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The structure is partially visible and accessible despite vegetation around it.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site is actually characterized by a considerable amount of garbage visible all around the structure.
PREVIOUS STUDIES:	At the beginning of the 19 th century the funeral structure was seen by Delaporte (1836) who, however, did not describe the <i>mausoleum</i> but transcribed only the Greek inscription of the <i>sarcophagus</i> . The structure has been excavated in 1996-1997 by the Archaeological Mission of Roma Tre University with the DoA of Lepcis Magna (Musso <i>et al.</i> 1997; 1998).
DESCRIPTION:	The structure is located inside a funeral enclosure whose walls were built using the <i>tin</i> technique and, together with Ma21, is part of the <i>necropolis</i> (Nc8) explored by Roma Tre University team. The <i>mausoleum</i> has a rectangular plan (2.95x4.10 m at the base) and it was built using limestone ashlar blocks (pl. 11A). Above the plinth is the moulded base and then a row of blocks of the <i>podium</i> . Some blocks of the moulded cornice of the <i>podium</i> have also been found scattered on the ground. Abutted on the SE side of the funeral structure, is a limestone <i>sarcophagus</i> with a Greek inscription (IRT 764) on the short side, facing SW (pl. 11B). Close to the SW, NW and SW side of the <i>mausoleum</i> have been built different <i>cupae</i> (Nc8c), dated between the second half of the 2 nd century AD and the 3 rd century.
STATE OF PRESERVATION:	The general plan of the structure is still legible and part of the <i>podium</i> is visible. The <i>sarcophagus</i> was moved to the Lepcis Magna Museum.
CHRONOLOGY:	AD 80-120.
DATING ELEMENT/S:	Relationship with a nearby dated site (Nc8); building features.
STRUCTURAL TYPE:	Undeterminable.
SPECIAL FINDS:	<u>Sarcophagus:</u> - On the SE side of the <i>mausoleum</i> was found a limestone rectangular <i>sarcophagus</i> without covering (pl. 11B). On its longer sides it was divided in quadrangular spaces imitating a panelled ceiling. On the short side facing SW (partially preserved) there are

two small pilasters on the corners and, beside, two *eroti* supporting a *tabula* with a Greek epitaph.

...]

ον παῖδά μ' [ἀποφθῖσθαι μίτος ὡς ἐπέ]-
κλωσεν ὁ Μοιρῶν παῖδά με [τυ]μβε[ῦ]-
σαι καὶ ἀφε[γγ]έα νύκτα περᾶσαι.

Translation (*IRT*):

...]

for me to die as a child
since the thread of the Fates spun that I should be buried
as a child and come to the darkness without light.

Sculpture:

- Fragments of a marble funerary statue.

BIBLIOGRAPHY:

DELAPORTE (1836), 334; MUSSO *et al.* (1997), 265-266, 285-286, 291; (1998), 204-206; *IRT* 764.

MA23

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	2,550 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0431424 - 3612828 (approx.).
ACTUAL LAND USE:	Residential/commercial zone.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	Nineteenth century buildings.
PREVIOUS STUDIES:	On August 1966, according to Bakir (1966-1967), the funeral structure has been found when a "Turkish building" at Khoms, adjacent to the city mosque, was destroyed. The remains of the <i>mausoleum</i> , still visible inside the Ottoman building were transferred to Lepcis Magna, under the supervision of Giovanni Ioppolo.
DESCRIPTION:	The information available related to the ancient funeral structure are scarce and, moreover, its topographic position is inaccurate. The short report (BAKIR 1966-1967) stated simply that there were "large scattered stone blocks" belonging to a <i>mausoleum</i> whose lower course of its base was found still <i>in situ</i> .
STATE OF PRESERVATION:	According to Bakir (1966-1967), the remains of the structure were transferred "in Lepcis". However, there are no survival traces of its limestone ashlar blocks.
CHRONOLOGY:	AD 50-250.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	BAKIR (1966-1967), 249.

MA24 - MA25

MAUSOLEA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausolea</i> .

DISTANCE FROM LEPCIS MAGNA:	3,060 m NW(approx).
GPS COORDINATES:	WGS 84 33S 0430806 - 3612878 (approx).
ACTUAL LAND USE:	Residential/commercial zone.
VISIBILITY:	The structures are not visible anymore.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	During the Italian occupation of Khoms and the works made to improve its defenses (1912-1913), the structures were reused for military purposes.
PREVIOUS STUDIES:	The only documentation available concerning the two <i>mausolea</i> (Ma24 -Ma25) are some photographs in part already published (pl. 11C-F). However, an unpublished map (Br. Murge 1919f) together with archival photos, allow me to locate with accuracy the original position of the structures. In the light of this, is possible to refer the two <i>mausolea</i> to the ones briefly mentioned by Ludwig Salvator (LOTHRINGEN 1874) and to locate them near the Khoms Pasha castle.
DESCRIPTION:	<p>The topographic position of the two <i>mausolea</i> (Ma24 - Ma25) can be determined by observing the label placed by the Italian "Alpini" soldiers above the door of the ancient structure visible in two photographs (pl. 11C-D) where is written "<i>Maggiorità Batt.^{ne} Mondovi</i>" (the office of the Major of "Mondovi" Battalion). According to a Khoms map included in the Generale Caneva report (reproduced in <i>Campagna di Libia</i> 1924, fig. 2) the Mondovi Battalion was in charge of the "3° Settore" of the city (Maggiore Buglione): the SW side of the modern city of Khoms. The exact location can be then determined with more accuracy thanks to the unpublished Khoms maps draw by "Murge" Brigade in 1919 that cited "<i>tomba/e romana/e</i>" in the same sector of the city, just beside the new city wall. The funeral structure Ma24 (pl. 11D and pl. 11C, E-F on the right part of the photos) was built using limestone ashlar blocks and it seems to have a quadrangular plan (c.4 m). From the bottom it is characterized by an high plinth and a moulded base; the structure has smooth pilasters on the corners and on the facade (approximately the N side) a moulded door. The upper cornice of the structure is visible for all the side shown in the photographic documentation and the total H of the building seems to reach more than 4 m. The <i>mausoleum</i> seems to have been included probably by the Italian soldiers as a corner of a bigger construction to house the Major office of the "Mondovi" Battalion or just included in the Khoms city wall. The other funeral structure (Ma25), visible partially on the left part of a 1912 postcard (pl. 11C) and better in a photograph published in the journal <i>Pro familia</i> (pl. 11E) and in an unpublished photo taken by Alemanni around 1913 (pl. 11F), was built entirely using limestone ashlar blocks and it seems to have a quadrangular plan (c.5 m). Like the other funeral structure (Ma24), this <i>mausoleum</i> is characterized by a moulded base and, at the corners, by smooth pilasters protruding few centimetres from the walls. On the facade (approximately the N side) there was a moulded door. The max. preserved H seems does not exceed 3.5-4 m. In the photograph took by Alemanni (pl. 11F) is also visible, leaning on the facade, an <i>acroterion</i> fragment characterized by a central palmette and part of spirals probably referred to one of the two <i>mausolea</i>. The limestone decoration is still visible in the garden of the old Museum of Lepcis Magna (pl. 12A). Moreover, in the same photograph, at the foot of the structure are two Corinthian capitals.</p>
STATE OF PRESERVATION:	The two <i>mausolea</i> are not visible anymore.
CHRONOLOGY:	AD 50-250.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	"Grabhaus" <i>mausolea</i> .
SPECIAL FINDS:	<p><u>Architectural elements:</u></p> <ul style="list-style-type: none"> - Limestone <i>acroterion</i> (pl. 12A) characterized by two spirals and three palmette decoration already noticed by Bartoccini (1926) at "Homs Museum" and recently published by Mahler (2006). Similar decoration (Fu6) is visible c. 140 m SW of Gasr Shaddad (Ma15).
BIBLIOGRAPHY:	LOTHRINGEN (1874), 180; MERCATALI (1913), II, 625; <i>Pro familia</i> (1912), fig. 4;

CARTOGRAPHY:
ARCHIVAL DOCUMENTATION:

BARTOCCINI (1926), 42, fig. 61; MATOUG (1997), 214, pl. 90b; MAHLER (2006), cat. 923 S; MUNZI *et al.* (2013), 20, fig. 9; MUNZI, ZOCCHI (2017), 52, fig. 1.
Br. Murge 1919a (*Tomba Romana*); Br. Murge 1919f (*Tom.^e Rom.*).
Photographs: A. Zocchi Private Collection [1]; CAS, sc. 18/43.

MA26

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPIS MAGNA:	545 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432940 - 3611494 (approx).
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The only mention concerns some marble architectural elements scattered on the ground that, according to Romanelli (1925a), belonged to a <i>mausoleum</i> .
DESCRIPTION:	Romanelli (1925a) reported many large marble blocks scattered on the ground, c.120 m NW from the western gate of the city and considered them as part of a sepulchral structure. Among these architectural fragments he recognized a marble Corinthian capital of a corner pilaster (1.47x1.20x0.68 m; capital: 0.94x0.65x0.68 m).
STATE OF PRESERVATION:	The remains of the <i>mausoleum</i> are not visible anymore.
CHRONOLOGY:	AD 150-250.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	ROMANELLI (1925a), 155.
CARTOGRAPHY:	IGM 1915a (quote 15.5: "numerous ashlar blocks").

MA27

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPIS MAGNA:	1,085 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432494 - 3611830 (approx).
ACTUAL LAND USE:	Road.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Constructions, road.
PREVIOUS STUDIES:	Romanelli (1925a) was the only scholar who mentioned the structure.
DESCRIPTION:	Romanelli (1925a) reported the lower part of a <i>mausoleum</i> with its plan still legible (4.50x5 m). It was located adjacent to a building he interpreted as an <i>horrea</i> (Ti4). No further details were given.
STATE OF PRESERVATION:	The structure is not preserved.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.

STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	ROMANELLI (1925a), 164.
CARTOGRAPHY:	IGM 1915a (quote 6.3 "squared structure").

MA28

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum.</i>
DISTANCE FROM LEPIS MAGNA:	1,070 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432506 - 3611822 (approx).
ACTUAL LAND USE:	Road.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Constructions, road.
PREVIOUS STUDIES:	Romanelli (1925a) was the only scholar who mentioned the structure.
DESCRIPTION:	Romanelli (1925a) reported a base of a <i>mausoleum</i> , with only a corner preserved. It was located adjacent to a building he interpreted as an <i>horrea</i> (Ti4). No further details were given.
STATE OF PRESERVATION:	The structure is not preserved.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	ROMANELLI (1925a), 164.
CARTOGRAPHY:	IGM 1915a (quote 6.3).

MA29

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum.</i>
DISTANCE FROM LEPIS MAGNA:	1,200 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432431 - 3611910 (approx).
ACTUAL LAND USE:	Modern constructions.
VISIBILITY:	The structure is not visible anymore and the site where it was built should be actually occupied by modern road or inside a fenced area.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Few meters S stands modern buildings related to a barrack.
PREVIOUS STUDIES:	The <i>mausoleum</i> was seen in 1806 and described for the first time by Delaporte (1836) who also published a sketch (pl. 12B). However, the structural description made by the scholar is brief and its architectural elements can be outlined only by its drawing. Moreover, the structure was in a precarious state of preservation: " <i>le pierres [...] sont en un tel point d'équilibre, que, si on venait à en détacher une, tout le monument croulerait aussitôt</i> " (1836, 333-334). Forty years after the journey of Delaporte, the <i>mausoleum</i> was seen and cited also by Barth (1849). The structure was then positioned on the <i>Tabulae in Geographos Graeci Minores</i> edited by Müller (1855) and cited as " <i>obeliscus</i> " and, few years later, mentioned by Rohlf (1869). Three European

	travellers, Ludwig Salvator (LOTHRINGEN 1874), Rae (1877) and Camperio (<i>Pionieri Italiani in Libia</i> 1912), also described the <i>mausoleum</i> . Even if they did not give a detailed account of its architectural elements, Ludwig Salvator and Rae, drew its northern side (facing the sea) and their depictions appear accurate (pl. 12C-D). The same state of preservation outlined by Delaporte was noted by Ludwig Salvator and Rae: the northern side of the structure appeared well preserved while the southern facade was collapsed. The structure probably completely fell down shortly after because it is not mentioned in the Khoms map compiled a few years later (IGM 1886) and because all the travellers between the end of that century and the first years of the following one did not mention it.
DESCRIPTION:	The position of the <i>mausoleum</i> unfortunately cannot be fixed even if both the Müller <i>tabula</i> (1855) and the 1914 IGM map indicate with the terms "obeliscus" and "pilastro" the place where it probably stood. However, the architectural scheme of the funeral structure can be easily outlined thanks to the sketch of Delaporte (1836) and especially to the drawings of the Archduke of Austria (LOTHRINGEN 1874) and Rae (1877). According to this documentation the <i>mausoleum</i> , built entirely in limestone ashlar blocks, was characterized by a double storey and a pyramidal covering. Even if Minutilli (1912) report a H of 9 m, it is possible to hypothesize a total H of 11-12 m (preserved at his time) while c.2.5 m was the length of each side at the bottom. Above an high plinth and a base, the first storey seems to be characterized by smooth walls delimited at the corners by protruding flat pilasters. Above the moulded cornice the second storey, was composed by Corinthian half-columns that framed an ornamental false door. Over the Corinthian capitals was a Doric frieze whose metopes were probably decorated with rosettes. The upper structure, above a moulded cornice, is characterized by a pyramidal shape.
STATE OF PRESERVATION:	The <i>mausoleum</i> is not visible anymore.
CHRONOLOGY:	3 rd century AD.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	"Obelisk" <i>mausoleum</i> .
BIBLIOGRAPHY:	DELAPORTE (1836), 332-334; BARTH (1849), 315; ROHLFS (1869), 475; LOTHRINGEN (1874), 169-170; RAE (1877), 37; <i>Pionieri Italiani in Libia</i> (1912), 220; MINUTILLI (1912), 185; ROMANELLI (1925a), 163-164, fig. 22; (1970), 272.
CARTOGRAPHY:	MÜLLER (1855), pl. XXI (<i>obeliscus</i>); GHISLERI (1912) 71 (<i>pilastro</i>); IGM 1914 (<i>pilastro</i>); IGM 1915a (quote 7.89).

MA30

MAUSOLEUM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	5,560 m NW
GPS COORDINATES:	WGS 84 33S 0429079 - 3614717.
ACTUAL LAND USE:	Residential zone.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The <i>mausoleum</i> has been destroyed (2000) due to the construction of new buildings.
PREVIOUS STUDIES:	The site has been surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The first row of the basement of a <i>mausoleum</i> was visible at short distance from the seashore, S of the modern harbour of Khoms. The ancient structure, entirely built in limestone ashlar blocks, is a square of c.2.4 m. Adjacent to the structure there was

	probably a shaft entrance to the funeral chamber/s that has been found full of rubble and soil and then not explored.
STATE OF PRESERVATION:	The <i>mausoleum</i> is not visible anymore.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features; relationship with a near dated site (VI63).
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	Unpublished.

MA31 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	950 m SE.
GPS COORDINATES:	WGS 84 33S 0434075 - 3610541.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible; low vegetation around and within the structure.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Electricity pylon.
PREVIOUS STUDIES:	The site has been surveyed (2006) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	Traces of a funeral enclosure with a central structure, almost surely a <i>mausoleum</i> , actually characterized by a mound of soil and scattered limestone ashlar blocks is actually recognizable on the ground at short distance from the SE side of the Late antique wall (Wa3). The quadrangular structures of the enclosure and the mound of rubble and soil are clearly recognizable in the 1942 and 1949 aerial RAF photographs. The funeral enclosure measures c.60x53 m while the central mound occupies a surface of c.200 m ² (15x13 m).
STATE OF PRESERVATION:	The general plan of the site is actually hardly recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Air Photographs</u> : BSR, WP G11-62; ASLS, <i>Leptis Magna 24999</i> .

MA32 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	2,020 m SW.
GPS COORDINATES:	WGS 84 33S 0431907 - 3609678.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible; low vegetation around and within the structure.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	A house and a dirt road have been built SW from the site.
PREVIOUS STUDIES:	The site has been surveyed (2007) by the Archaeological Mission of Roma Tre

DESCRIPTION:	University (KHM 69). Adjacent to the remains of a villa (VI21) and at short distance SE from the Gasr Gelda <i>mausoleum</i> (Ma2), is a quadrangular mound of rubble and soil (pl. 12E) that measures c.16x14 m (200 m ²); SW from that is an alignment of limestone ashlar blocks, probably referred to a funerary enclosure. The quadrangular mound, almost surely a <i>mausoleum</i> , is clearly visible in a 1942 RAF aerial photograph where it seems to be aligned with the close Gasr Gelda funerary structure (Ma2). On the site, scattered on the ground, is visible a fragment of limestone moulded pilaster (pl. 12F)
STATE OF PRESERVATION:	The general plan of the site is actually hardly recognizable on the ground.
CHRONOLOGY:	AD 50-200.
DATING ELEMENT/S:	Building features; relationship with a near dated site (VI21).
STRUCTURAL TYPE:	Undeterminable.
SPECIAL FINDS:	<u>Architectural elements:</u> - Fragment of a limestone moulded pilaster (pl. 12F).
BIBLIOGRAPHY:	Unpublished.
CARTOGRAPHY:	<u>Air Photographs:</u> ASLS, <i>Leptis Magna 94144</i> .

MA33 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	5,290 m NW.
GPS COORDINATES:	WGS 84 33S 0429352 - 3614614.
ACTUAL LAND USE:	Harbour facilities.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The <i>mausoleum</i> has been destroyed (2000) due to leveling works.
PREVIOUS STUDIES:	The site has been surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The site was characterized by a mound of a limestone ashlar blocks piled at short distance from the modern road that links Khoms to the modern harbour. Among these limestone blocks two can be referred to the cornice moulded with dentils.
STATE OF PRESERVATION:	The <i>mausoleum</i> has been destroyed.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features; relationship with a near dated site (VI63).
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	Unpublished.

MA34 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEPCIS MAGNA:	5,255 m NW.
GPS COORDINATES:	WGS 84 33S 0429273 - 3614501.
ACTUAL LAND USE:	Uncultivated; tarmac road.

VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The <i>site</i> has been heavily damaged due to the construction of the modern tarmac road that links Khoms to the modern harbour.
PREVIOUS STUDIES:	The site has been surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The site was characterized by a mound of c.30 limestone ashlar blocks piled next to the S side of a modern road. Among these blocks several still preserve mouldings that can be referred to the bases and to the cornices of the <i>mausoleum</i> .
STATE OF PRESERVATION:	The ancient site has been destroyed.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features; relationship with a near dated site (VI63).
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	Unpublished.

MA35 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEP CIS MAGNA:	6,040 m NW.
GPS COORDINATES:	WGS 84 33S 0428149 - 3614232.
ACTUAL LAND USE:	Pasture.
VISIBILITY:	The site is visible and accessible; low vegetation and shrubberies within the site.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been surveyed (2000) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	Several grey limestone ashlar blocks lie scattered on the ground along a hill slope facing the site of a villa (VI32). On some of these stones are visible mouldings. Actually, is hard to define if some of these blocks are still <i>in situ</i> .
STATE OF PRESERVATION:	The original plan of the site is not recognizable on the ground.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features; relationship with a near dated site (VI32).
STRUCTURAL TYPE:	Undeterminable.
BIBLIOGRAPHY:	Unpublished.

MA36 *MAUSOLEUM*

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	<i>Mausoleum</i> .
DISTANCE FROM LEP CIS MAGNA:	8,635 m WNW.
GPS COORDINATES:	WGS 84 33S 0424783 - 3612408.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible; low vegetation and shrubberies within the site.

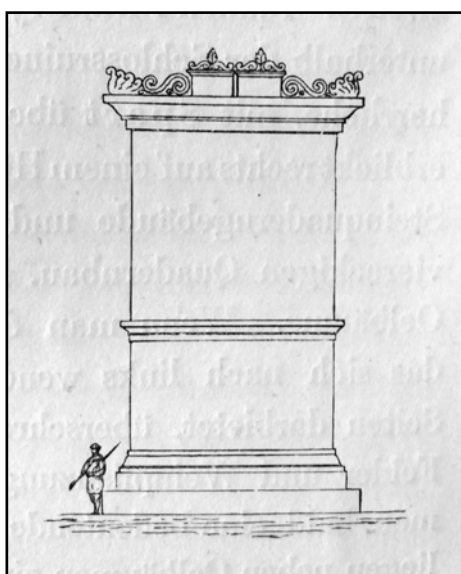
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	A house has been built N from the site while a dirty road is located few meters S.
PREVIOUS STUDIES:	The site has been surveyed (2004) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	On the slope of a hill located c.1 km N from Ras el-Manubia are the remains of a <i>mausoleum</i> built entirely in limestone ashlar blocks (pl. 13A). The general plan of the structure is not recognizable on the ground due to the numerous blocks collapsed on it. Scattered on the ground are several moulded parts of the structure (pl. 13B) such as cornice fragments, double column drums, semi-column blocks and a column base.
STATE OF PRESERVATION:	The general plan of the site is hardly recognizable on the ground.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	" <i>Aedicula</i> above <i>podium</i> " <i>mausoleum</i> .
BIBLIOGRAPHY:	Unpublished.



A. Gasr Ben Nasser *mausoleum* (Ma1) from E, 2007
(Photo: A. Zocchi).



B. Gasr Ben Nasser *mausoleum* (Ma1) from N, 2007
(Photo: A. Zocchi).



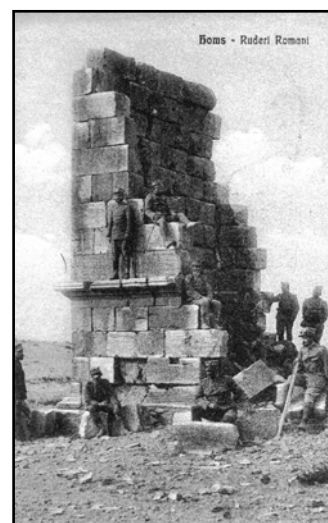
C. Gasr Gelda *mausoleum* (Ma2): a sketch realized by the Archduke of Austria, 1873 (LOTHRINGEN 1874, 179).



D. Gasr Gelda *mausoleum* (Ma2) from S, ca. 1910
(Foto Alemanni; CAS, sc. 59/82b).



E. Gasr Gelda *mausoleum* (Ma2) from N, 1910
(Foto Alemanni; CAS, sc. 59/82a).



F. Gasr Gelda *mausoleum* (Ma2) from S, ca. 1912
(Fototipia Alterocca 18166).



A. Gasr Gelda *mausoleum* (Ma2) from E, ca. 1913
(A. Zocchi private collection).



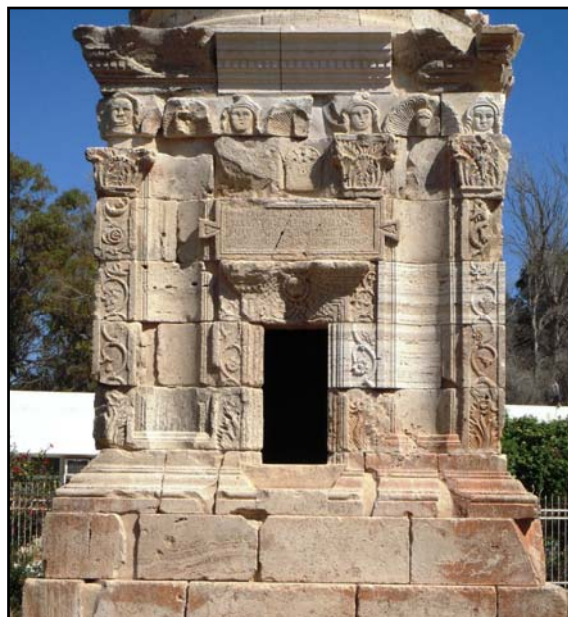
B. Gasr Gelda *mausoleum* (Ma2): the SW side, 2009
(Photo: A. Zocchi).



C. Gasr ed-Dueirat *mausoleum* (Ma3), ca. 1915 (CAS sc. 59/57).



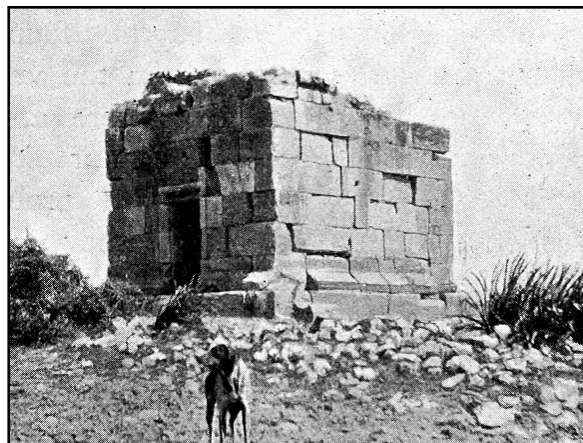
D. Gasr ed-Dueirat *mausoleum* (Ma3): reconstruction in the garden of the Museum of Lepcis Magna, 2009 (Photo: A. Zocchi).



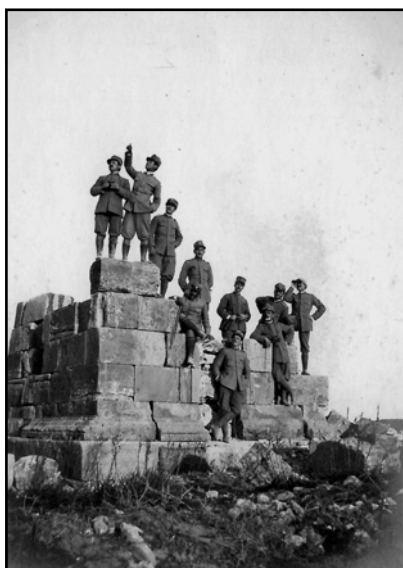
E. Gasr ed-Dueirat *mausoleum* (Ma3): the *podium*, 2009
(Photo: A. Zocchi).



A. Gasr ed-Dueirat *mausoleum* (Ma3): the second storey, 2009
(Photo: A. Zocchi).



B. *Mausoleum* Ma4, 1896 (COWPER 1897, fig. 61).



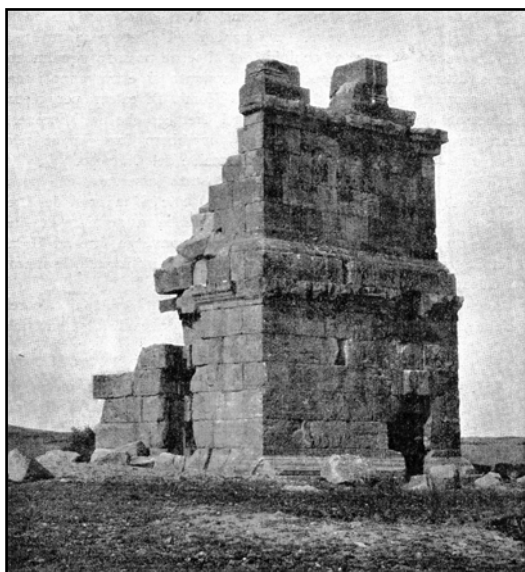
C. *Mausoleum* Ma4, 1912-1913
(A. Zocchi private collection).



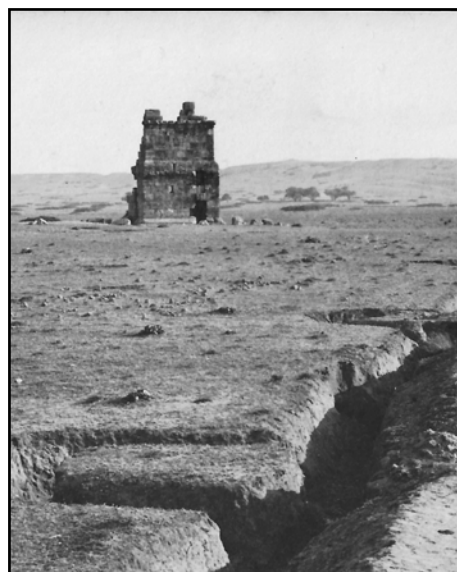
D. *Mausoleum* Ma5 from S, 2007
(Photo: A. Zocchi).



E. *Mausoleum* Ma5: the molded door lintel found within the site, 2007 (Photo: A. Zocchi).



A. Gasr el-Banât *mausoleum* (Ma6) from E, ca. 1912
(MC 1913, II, 75 fig. 4).



B. Gasr el-Banât *mausoleum* (Ma6) from NE, ca. 1913
(A. Zocchi private collection).



C. Gasr el-Banât *mausoleum* (Ma6) from S, 2009
(Photo: A. Zocchi).



D. Gasr el-Banât *mausoleum* (Ma6) from SE, 2009
(Photo: A. Zocchi).



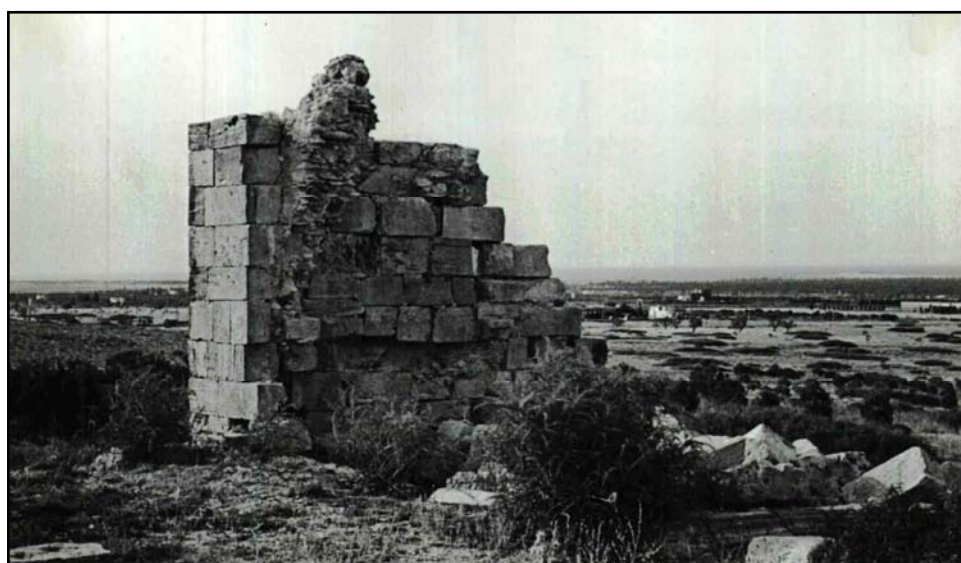
E. Gasr Legbeba *mausoleum* (Ma7) from NE, 2009 (Photo: A. Zocchi).



A. Gasr Legbeba *mausoleum* (Ma7): an upside down corner of the cornice, 2009 (Photo: A. Zocchi).



B. *Mausoleum* Ma 8 from W, ca. 1910-1920 (BSR, WP G23-47a).



C. *Mausoleum* Ma8 from S, ca. 1943-1949 (BSR, WP G23-47b).



D. *Mausoleum* Ma8 from N, 2009 (Photo: A. Zocchi).



E. *Mausoleum* Ma8: the *dromos* that leads to the funeral chamber/s from NE, 2009 (Photo: A. Zocchi).



A. *Mausoleum* Ma9 from E, 2009 (Photo: A. Zocchi).



B. *Mausoleum* Ma9 from S, 2009 (Photo: A. Zocchi).



C. *Mausoleum* Ma10: limestone blocks scattered on the ground, 2013 (Photo: A. Zocchi).



D. *Mausoleum* Ma11 from NW, 2013 (Photo: A. Zocchi).



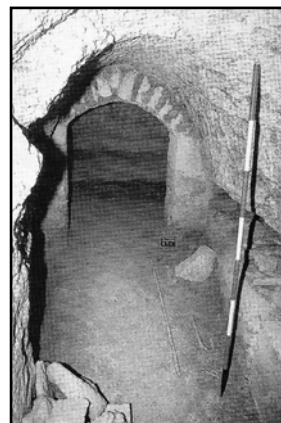
E. Gasr el-Amhar *mausoleum* (Ma12) from S (BEN RABHA, MASTURZO 1997, pl. 92b).



F. *Mausoleum* (Ma13) from N, 2009 (Photo: A. Zocchi).



A. *Mausoleum* Ma13 from S, 2009 (Photo: A. Zocchi).



B. *Mausoleum* Ma13: the E vestibule of the hypogeal tomb (MATOUG 1998, pl. 89a).



C. Gasr el-Fituri *mausoleum* (Ma14), 1913 (INASA, Fondo Mariani inv. 73150).



D. Gasr Shaddad *mausoleum* (Ma15) from NE, ca. 1920 (ROMANELLI 1925a, fig. 90).



E. Gasr Shaddad *mausoleum* (Ma15) from NW, ca. 1920 (CAS, sc. 59/73).



A. Gasr Shaddad *mausoleum* (Ma15): the W corner, 2009 (Photo: A. Zocchi).



B. Gasr Shaddad *mausoleum* (Ma15): the funeral chamber with the original entrance at the bottom, 2013 (Photo: A. Zocchi).



C. Gasr er-Riyāhī (Ma16 - Ma17): the two *mausolea* from W, ca. 1913 (Foto Alemanni: CAS, sc. 18/44).



D. Gasr er-Riyāhī *mausoleum* (Ma16) from S, ca. 1913 (A. Zocchi private collection).



E. Gasr er-Riyāhī *mausoleum* (Ma16): part of the funerary enclosure from NW, ca. 1912-1915 (A. Zocchi private collection).



A. Gasr er-Riyāhī (Ma16 - Ma17): traces of the funeral structures from S, 2009 (Photo: A. Zocchi).



B. Gasr er-Riyāhī (Ma16 - Ma17): a Corinthian capital, 2009 (Photo: A. Zocchi).



C. *Mausoleum* Ma19 from N, 2009 (Photo: A. Zocchi).



D. *Mausoleum* Ma19 from N, 2009 (Photo: A. Zocchi).



E. *Mausoleum* Ma19: funeral enclosure from NE, 2009 (Photo: A. Zocchi).



F. *Mausoleum* Ma20: view of the remains and the "Monticelli" agger (Ag1), ca. 1913 (Foto Alemanni; CAS, sc. 18/45a).



A. *Mausoleum* Ma20: the remains and the "Monticelli" *agger* (Ag1), ca. 1913 (Foto Alemanni; CAS, sc. 18/45b).



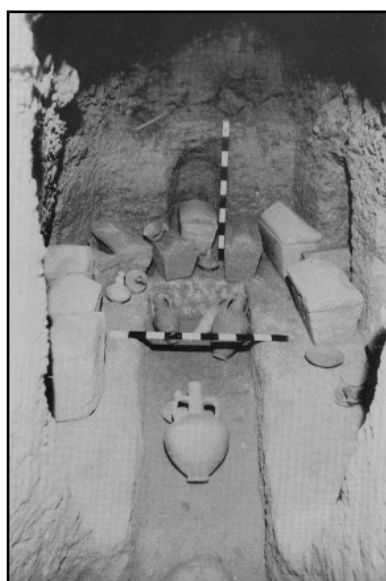
B. *Mausoleum* Ma20: the limestone ashlar blocks still visible inside the "Monticelli" *agger* (Ag1), 2009 (Photo: A. Zocchi).



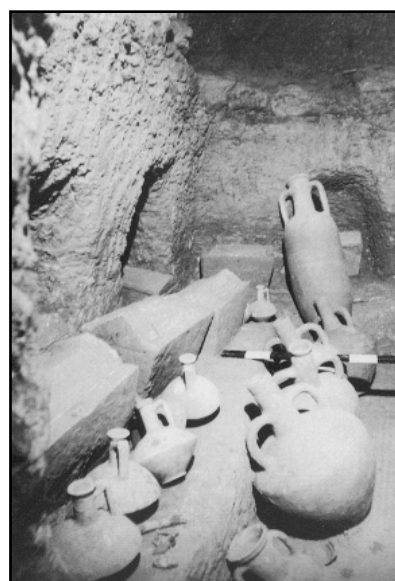
C. *Mausoleum* Ma20: The limestone base found near the site, 2009 (Photo: A. Zocchi).



D. *Mausoleum* Ma20: limestone ashlar blocks reused in the Italian War Memorial, 2009 (Photo: A. Zocchi).



E. *Mausoleum* Ma20: a funeral chamber of the hypogean tomb (ABN AL-RAHMAN 1995, pl. 68a).



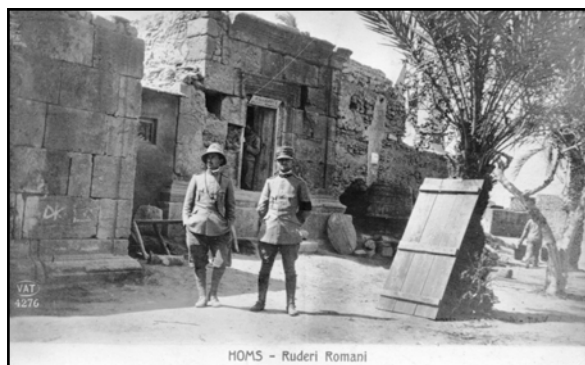
F. *Mausoleum* Ma20: a funeral chamber of the hypogean tomb (ABN AL-RAHMAN 1995, pl. 68b).



A. Mausoleum Ma22 from S (Musso *et al.* 1997, pl. 140a).



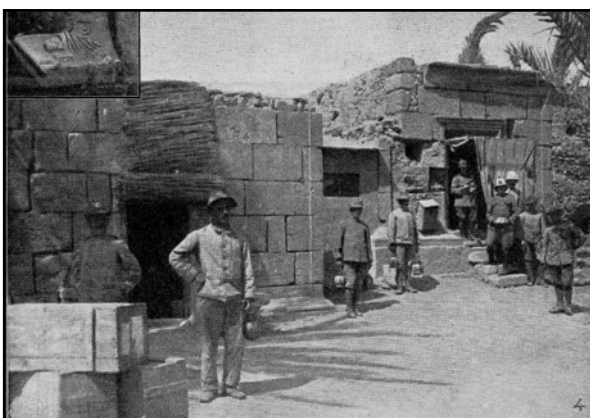
B. Mausoleum Ma22: the limestone sarcophagus, now stored at Lepcis Magna Museum, 2009 (Photo: A. Zocchi)



C. Mausolea Ma24 - Ma25 in the SW sector of Khoms, 1912 (Postcard VAT 4276).



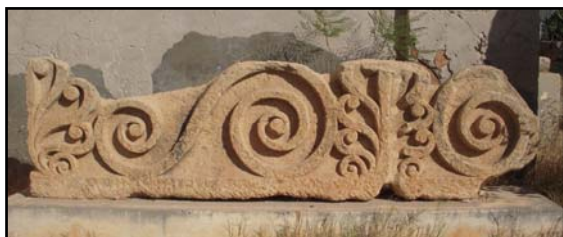
D. Mausoleum Ma24 in the SW sector of Khoms, 1912 (MUNZI, ZOCCHI 2017, fig. 1).



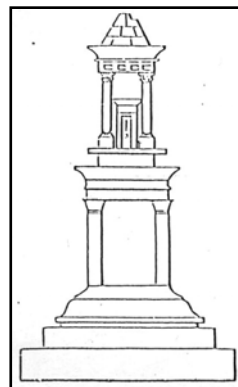
E. Mausolea Ma24 - Ma25 in the SW sector of Khoms, 1912 (*Pro familia* 1912, fig. 4).



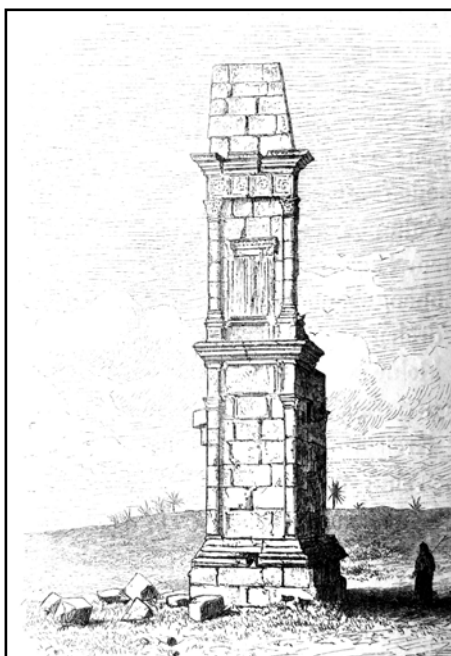
F. Mausolea Ma24 - Ma25 in the SW sector of Khoms, ca. 1913 (Foto Alemanni; CAS, sc. 18/43).



A. *Mausolea* Ma 24 - Ma25: part of a limestone *acroterion*, now at Lepcis Magna Museum, 2013 (Photo A. Zocchi).



B. *Mausoleum* Ma29: a sketch of the N side, 1806 (DELAPORTE 1836, 333).



C. *Mausoleum* Ma29: the N side, 1873 (LOTHRINGEN 1874, 170).



D. *Mausoleum* Ma29: the N side (RAE 1877, 36).



E. *Mausoleum* Ma32 from SE, 2007 (Photo A. Zocchi).



E. *Mausoleum* Ma32: part of a limestone pilaster found within the site, 2007 (Photo A. Zocchi).



A. *Mausoleum* Ma36 from N, 2004 (Photo: L. Marsico).



B. *Mausoleum* Ma36: architectural elements, 2004
(Photo: L. Marsico).

Nc1**NECROPOLIS**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	<i>Necropolis</i> .
DISTANCE FROM LEPICIS MAGNA:	1,200 m NW (approx.).
GPS COORDINATES:	WGS 84 33S 0432333 - 3611816 (approx).
ACTUAL LAND USE:	Barracks.
VISIBILITY:	The site is not accessible.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	Buildings related to barracks. Previously, during the fifties, the area was occupied by the British Officers Club and then (from the 1970s) by an hospital.
PREVIOUS STUDIES:	The first mention related to this <i>necropolis</i> , located c.250 m W of Wadi er-Rsaf, dates back to the early fifties. In those years, during the construction of the British Officer Club barracks, five hypogean chambers were explored (Nc1p-Nc1t) and several cinerary urns with Neo-Punic and Latin inscriptions were found together with amphorae, lamps and pottery (VERGARA CAFFARELLI 1954). Unfortunately, these structures were not published and, apparently, the documentation is not preserved. In the same area, during the 1970s different <i>hypogea</i> were found, one in 1971 (Nc1e) and two the following year (Nc1g and Nc1n). In 1975, during some works related to the transformation of the barracks into an hospital, eight different <i>hypogean</i> chambers were explored (Nc1a, Nc1f, Nc1h - Nc1m). Actually, even if the documentation held at the DoA of Lepcis Magna is not exhaustive, seems that these eight chambers should be relate to five tombs (Nc1h - Nc1k seems to be a single tomb with four different rooms). Another single hypogean was found in 1979 (Nc1o) and another in 1981 (Nc1b), while for other two tombs (Nc1c - Nc1d) is not possible to establish an excavation date. Apart from an isolated short report related to a single tomb (Nc1n) and a detailed description of another <i>hypogean</i> (Nc1b), nothing has been yet published of the seventeen tombs of this <i>necropolis</i> . Recently, the Archaeological Mission of Roma Tre University started to study both the grave goods and the written documentation related to these <i>hypogea</i> : Musso <i>et al.</i> (2010), 58-62; (2013-2014), 27-28.
DESCRIPTION:	Unfortunately, the area is not accessible; however, the structures built in these last decades should have erased the ancient hypogean structures. A topographic analysis of the <i>necropolis</i> cannot be done due to the lack of a general plan of the ancient site.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tombs.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1954), 117; FONTANA (1996), 80; MUSSO <i>et al.</i> (2010), 61.
ARCHIVAL DOCUMENTATION:	<u>Written reports</u> : LMDoA, Excavation report (not inv.).

Nc1a

DISCOVERY/EXCAVATION DATE:	1975.
STRUCTURE DESCRIPTION:	Rectangular hypogean chamber with a ogival vault. Along the two long sides there were banquettes on which have been found the cinerary urns.
GRAVE GOODS:	<u>Pottery</u> : - Amphorae [8]: Dressel 2/4 [7]; Shöne Mau XXXV [1]. - Coarse Pottery [12]: bottles [7]. - Lamps [1]: LOESCHCKE (1919), type VIII [1]. - Italian Sigillata [1]: form not id. [1]. - Eastern Sigillata A [1]: form not id. [1]. <u>Carved bones</u> :

	<ul style="list-style-type: none"> - <i>Spatula</i> [1]. <p><u>Metals:</u></p> <ul style="list-style-type: none"> - Bronze lanterns [2]. <p><u>Numismatics:</u></p> <ul style="list-style-type: none"> - <i>Quadrans</i> AD 75-150 [1]; Domitian <i>quadrans</i> [1]; Hadrian <i>quadrans</i> [1]; <i>As</i> [2] not id. <p><u>Cinerary urns:</u></p> <ul style="list-style-type: none"> - Limestone coffin-shaped [4]; marble, limestone and alabaster vase-shaped [6].
FUNERAL RITES:	Incineration [10].
DATATION:	AD 50-150.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.).
Nc1b	
DISCOVERY/EXCAVATION DATE:	24 th May 1981.
STRUCTURE DESCRIPTION:	<p>The tomb was discovered while a bulldozer was working in the area c.20 m from the NE corner of the modern barrack enclosure (pl. 14A). The DoA of Lepcis Magna (Inspector M.H.A. Baiomi) was in charge of the emergency excavation. The hypogean tomb was characterized by three chambers: the shaft, c.3 m deep, led to a wide vaulted pseudo-rectangular vestibule (4.25x2.40 m; pl. 14B), from which were doorways that led to the two funeral chambers arranged asymmetrically one on the NW and the other on the SE wall of the vestibule. Both the chambers were vaulted and had a pseudo-rectangular plan. The W room (c.2.60x1.10 m) was characterized by seven niches (located c.0.8 m from the floor), three for each long side and one at short wall facing the entrance. The E chamber (2.67x1.35 m) had six niches, three for each long side, and a 0.4 m wide banquette on the short side facing the entrance of the room (pl. 14C). No cinerary urns were found in the E chamber: it seems that this space has been reused in a second phase to place inhumed bodies. However, the original entrance to the tomb should be on the SW side of the vestibule and it was sealed reusing different decorated limestone: a funeral altar with a Latin inscription almost certainly not pertinent to the tomb and the lower part of a door, maybe originally used to close the first doorway of the chambers.</p>
GRAVE GOODS:	<p><u>Pottery:</u></p> <ul style="list-style-type: none"> - Amphorae [4]: Dressel 2/4 [1]; Sant'Arcangelo [1]; similar Dressel 20 [1]; local production [1]. - Coarse Pottery [25]: basin [1]; casseroles [3]; bowls [6]; bottles [13]; lids [2]. - Painted Coarse Pottery [3]: pitcher [1]; handled cup [1]; miniaturist mug [1]. - Lamps [4]: BRONEER (1930), type XXI [3]; LOESCHCKE (1919), type VIII [1]. - Thin Walled Pottery [4]: <i>Atlante II</i>, form I/122 [4]. <p><u>Glass:</u></p> <ul style="list-style-type: none"> - PRICE (1985), form 45 [1], form 46 [1]; ISINGS (1957), form 82 [1]. <p><u>Metals:</u></p> <ul style="list-style-type: none"> - Bronze mirror [1]; iron strigils [6]; bronze handles [6]. <p><u>Numismatics:</u></p> <ul style="list-style-type: none"> - <i>Quadrans</i> AD 75-150 [1]; Trajan <i>quadrans</i> [3]; <i>semis</i> AD 50-200 [1]; <i>Tessera frumentaria</i> [1]. <p><u>Cinerary urns:</u></p> <ul style="list-style-type: none"> - Limestone coffin-shaped [8]; amphorae [2].
SPECIAL FINDS:	<p><u>Inscriptions:</u></p> <ul style="list-style-type: none"> - Small funeral quadrangular limestone altar with the base and the cornice moulded. The inscription, like the mouldings, is divided on the three side of the altar while the fourth one should not be visible. The inscription is dated to the end of the 1st century AD (DI VITA-EVRARD, FONTANA, MUNZI 1997, 135-136). <p>Diis Manibus</p>

Aristonis
 Adrumucus
 s(ua) p(ecunia) f(ecit)
 Diodorus
 Adrumucus
 frater cura-
 vit

Architectural elements:

- Lower part of a limestone door with, in the lower right part, a cylindrical extension for the rotation on the cavity of a threshold. In the middle of the front side a vertical moulded decoration was made to imitate the junction of the two shutters and, on each of them, a ring-shape door knocker.

FUNERAL RITES: Incineration [10]; inhumation [1?].

DATATION: 2nd century AD.

BIBLIOGRAPHY: DI VITA-EVRARD, FONTANA, MUNZI (1997).

ARCHIVAL DOCUMENTATION: Photographs: LMDoA, Photographic Archive (not inv.).

Written reports: LMDoA, Drawings Archive (not inv.); Excavation report (not inv.); Finding register nr. 6498-6598.

Nc1c

DISCOVERY/EXCAVATION DATE: Unknown.

STRUCTURE DESCRIPTION: Hypogean tomb; details of the structure unknown.

GRAVE GOODS: Pottery:

- Coarse Pottery [24]: bottles [13]; *unguentarium* [1]; bowls [6]; casseroles [2]; lids [2].

Carved bones:

- Hairpins [3].

FUNERAL RITES: Incineration [?].

DATATION: 2nd century AD.

BIBLIOGRAPHY: Unpublished.

ARCHIVAL DOCUMENTATION: Written reports: LMDoA, Finding register nr. 170-211.

Nc1d

DISCOVERY/EXCAVATION DATE: Unknown.

STRUCTURE DESCRIPTION: Hypogean tomb; details of the structure unknown.

GRAVE GOODS: Pottery:

- Amphorae [1]: local production [1].

- Coarse Pottery [2]: bottle [1]; basin [1].

- Lamps [2]: BRONEER (1930), type XXI [2].

- African Red Slip Ware C [1]: form [1] not id.

Glass:

- burnt *unguentarium* [1]; burnt non id. fragments.

Metals:

- Bronze elements [2] probably related to a wooden box; bronze nail [1]; iron nails [5].

Numismatics:

- Coin [1] not id.

Cinerary urns:

- Amphorae [1?].

FUNERAL RITES: Incineration [1?]; Inhumation [?].

DATATION: 2nd - 3rd century AD.

BIBLIOGRAPHY: Unpublished.

ARCHIVAL DOCUMENTATION: Written reports: LMDoA, Finding register nr. 212-213.

Nc1e

DISCOVERY/EXCAVATION DATE: 1971.

STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	<u>Pottery:</u> <ul style="list-style-type: none"> - Amphorae [3]: Dressel 20 [1]; local production [2]. - Coarse Pottery [7]: bottles [2]; pitchers [4]; casserole [1]. - Lamps [1]: LOESCHKE (1919), type VIII [1]. - Thin Walled Pottery [2]: <i>Atlante II</i>, form I/122 [1], form I/125 [1]. <u>Metals:</u> <ul style="list-style-type: none"> - Bronze elements [2] probably related to a wooden box; bronze nail [1]; iron nails [5]. <u>Cinerary urns:</u> <ul style="list-style-type: none"> - Amphorae [2].
FUNERAL RITES:	Incineration [2?]; inhumation [?].
DATATION:	2 nd - 3 rd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Finding register nr. 1140.

Nc1f

DISCOVERY/EXCAVATION DATE:	1975.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	<u>Cinerary urns:</u> <ul style="list-style-type: none"> - Limestone coffin-shaped [18].
FUNERAL RITES:	Incineration [18].
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Finding register nr. 1231-1277.

Nc1g

DISCOVERY/EXCAVATION DATE:	18 th June 1972.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	<u>Cinerary urns:</u> <ul style="list-style-type: none"> - Limestone vase-shaped [1].
FUNERAL RITES:	Incineration [1?].
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Finding register nr. 2995-3002.

Nc1h

DISCOVERY/EXCAVATION DATE:	1975.
STRUCTURE DESCRIPTION:	According to the photographic documentation of the DoA of Lepcis Magna, this hypogean room was characterized by a rectangular chamber with ogival vault and with banquettes on the long sides.
GRAVE GOODS:	<u>Pottery:</u> <ul style="list-style-type: none"> - Amphorae [10]: Dressel 2/4 [8]; <i>Benghazi</i> MR1 [1]; Tripolitana II [1]. - Coarse Pottery [8]: bottles [5]; bowls [3]. - Lamps [4]: BRONEER (1930), type XXI [2], type XXVII [1]; LOESCHKE (1919), type VIII [1]. <u>Glass:</u> <ul style="list-style-type: none"> - ISINGS (1957), form 82 [5]; form [1] non id. <u>Metals:</u> <ul style="list-style-type: none"> - Bronze mirrors [3]; iron nails [25]. <u>Numismatics:</u> <ul style="list-style-type: none"> - <i>Quadrans</i> AD 75-150 [1]; Domitian <i>quadrans</i> [1]; Trajan <i>quadrans</i> [1]; Hadrian <i>quadrans</i> [2]; coins [6] non id. <u>Cinerary urns:</u> <ul style="list-style-type: none"> - Marble vase-shaped [3]; limestone coffin-shaped [5]; amphorae [7].

FUNERAL RITES: Incineration [15].
 DATATION: AD 50-200.
 BIBLIOGRAPHY: Unpublished.
 ARCHIVAL DOCUMENTATION: Photographs: LMDoA, Photographic Archive (not inv.).
Written reports: LMDoA, Finding register nr. 1368-1410.

Nc1i

DISCOVERY/EXCAVATION DATE: 1975.
 STRUCTURE DESCRIPTION: According to a drawing preserved at the DoA of Lepcis Magna, the hypogean chamber was characterized by a rectangular plan (c.4x3 m) with a banquette running all along the room (except for the entrance side, the NE one). The banquette is c.0.4 m wide along the long sides of the chamber and c.1 m wide in the short one. A niche was located along each long side.
 GRAVE GOODS: Pottery:
 - Amphorae [6]: *Benghazi*MR1 [4]; Dressel 20 [1]; local production [1].
 - Coarse Pottery [20]: bottles [11]; small amphorae [2]; casserole [1]; lid [1]; bowls [4]; cup [1].
 - Lamps [6]: BRONEER (1930), type XXI [2]; LOESCHCKE (1919), type VIII [4].
 - African Red Slip Ware A [4]: HAYES (1972), form 152 [1], form 17 b [1]; SALOMONSON (1968), VIII.
 - Thin Walled Pottery [1]: *Atlante II*, form I/122 [1]; form [1] not id.
Glass:
 - Vase [1] form non id.; *unguentaria* [2] forms non id.
Carved bones:
 - Spoon [1]; hairpins [3]; needle [1].
Metals:
 - Bronze mirrors [4]; iron strigils [4].
Numismatics:
 - Coins [8] non id.
Cinerary urns:
 - Marble vase-shaped [2]; limestone coffin-shaped [3]; amphorae [4]; glass vase [1].
 FUNERAL RITES: Incineration [10].
 DATATION: AD 100-250.
 BIBLIOGRAPHY: Unpublished.
 ARCHIVAL DOCUMENTATION: Written reports: LMDoA, Drawings Archive (not inv.); Finding register nr. 1416-1451.

Nc1j

DISCOVERY/EXCAVATION DATE: 1975.
 STRUCTURE DESCRIPTION: Hypogean tomb; details of the structure unknown.
 GRAVE GOODS: Pottery:
 - Amphorae [1]: *Benghazi*MR1 [1].
 - Coarse Pottery [4]: bottles [3]; mug [1].
 - Lamps [2]: BRONEER (1930), type XXI [2].
Glass:
 - Forms [3] non id.
Carved bones:
 - Hairpin [1].
Metals:
 - Bronze mirror [1]; iron strigils [3]; iron nails [4]; bronze nails [5]; lead fragments.
 FUNERAL RITES: Incineration [?]
 DATATION: AD 100-250.
 BIBLIOGRAPHY: Unpublished.
 ARCHIVAL DOCUMENTATION: Written reports: LMDoA, Finding register nr. 1452-1459.

Nc1k

DISCOVERY/EXCAVATION DATE:	1975.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	<u>Pottery:</u> - Lamps [1]; LOESCHCKE (1919), type IV [1]. <u>Numismatics:</u> - Hadrian <i>quadrans</i> [1]; coins [6] non id. <u>Cinerary urns:</u> - Limestone coffin-shaped [9].
FUNERAL RITES:	Incineration [?].
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Finding register nr. 1460-1471.

Nc1l

DISCOVERY/EXCAVATION DATE:	1975.
STRUCTURE DESCRIPTION:	Hypogean tomb with shaft entrance (c.2.5 m deep) with two funeral chambers located to the W and to the S from the shaft. The two chambers were similar and had a "bottle" plan with ogival vault and 4 niches for each long side. The W chamber was c.1.7 m wide and is 5.40 m long and has a max. H of 1.7 m; the S room was a little larger (2.1x6.27 m) and higher (max. H: 1.85 m).
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [7]: Dressel 2/4 [2]; <i>Benghazi</i> MR1 [2]; local production [3]. - Coarse Pottery [21]: bottles [11]; casserole [1]; lid [1]. - Lamps [1]; LOESCHCKE (1919), type IV [1]. <u>Glass:</u> - ISINGS (1957), form 51 [1], form 82 [4]; form [1] not id. <u>Carved bones:</u> - Spoon [1]; hairpin [1]. <u>Metals:</u> - Bronze bowl [1]; iron strigils [2?]; bronze elements probably related to a wooden box. <u>Numismatics:</u> - Hadrian <i>quadrans</i> [1]; coins [16] not id. <u>Cinerary urns:</u> - Limestone vase-shaped [4]; limestone coffin-shaped [7]; amphorae [7].
FUNERAL RITES:	Incineration [18].
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Drawings Archive (not inv.); Excavation report (not inv.); Finding register nr. 1301-1331.

Nc1m

DISCOVERY/EXCAVATION DATE:	1975
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Unknown.
DATATION:	1 st - 3 rd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Finding register nr. 1332-1367.

Nc1n

DISCOVERY/EXCAVATION DATE:	24 th May 1972.
STRUCTURE DESCRIPTION:	The short report mentions an hypogean tomb characterized by a long shaft and a single burial chamber.

GRAVE GOODS:	<u>Pottery:</u> - Lamps: fragments [?]. <u>Numismatics:</u> - Bronze coins [?] not id.
FUNERAL RITES:	Incineration [?].
DATATION:	1 st century AD.
BIBLIOGRAPHY:	ABOU-HAMED, SHAGLOUF, ATEYA (1974-1975), 300.

Nc1o

DISCOVERY/EXCAVATION DATE:	16 th May 1979.
STRUCTURE DESCRIPTION:	Hypogean tomb discovered during works on the sewage system and partially damaged by the backhoe in the N part. The entrance to the hypogeum was ensured by a squared shaft (c.1 m wide) deep c.1.5 m. The rectangular funeral chamber to the NE of the shaft (2.2x5.6 m) was characterized by a plastered vaulted barrel, with a max. H of c. 1.90 m. A banquette run along all the chamber and on the NW long side, near the corner with the NE short side of the room, there was a niche (0.4 m deep and 0.8 m wide). The cinerary urns were found on the banquette on the NE short side of the chamber while two inhumations on the NW long side.
GRAVE GOODS:	<u>Pottery:</u> - Coarse Pottery [9]: bottles [4]; bowls [4]; lid [1]. - Lamps [3]: LOESCHCKE (1919), type VIII [2], type X [1]. - Thin Walled Pottery [1]: <i>Atlante II</i> , form I/122 [1]. <u>Glass:</u> - ISINGS (1957), form 82b2[1]. <u>Metals:</u> - Iron strigil [1]; iron nails [4]. <u>Numismatics:</u> - Coins [4] not id. <u>Cinerary urns:</u> - Limestone coffin-shaped [3].
FUNERAL RITES:	Incineration [3]; inhumation [2].
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Drawings Archive (not inv.); Excavation report (not inv.); Finding register nr. 6291-6317.

Nc1p

DISCOVERY/EXCAVATION DATE:	1951-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 3 rd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1954), 117.

Nc1q

DISCOVERY/EXCAVATION DATE:	1951-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 3 rd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1954), 117.

Nc1r

DISCOVERY/EXCAVATION DATE:	1951-1953.
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STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 3 rd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1954), 117.

Nc1s

DISCOVERY/EXCAVATION DATE:	1951-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 3 rd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1954), 117.

Nc1t

DISCOVERY/EXCAVATION DATE:	1951-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 3 rd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1954), 117.

Nc2

NECROPOLIS

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tombs.
DISTANCE FROM LEP CIS MAGNA:	1,020 m WNW (approx.).
GPS COORDINATES:	WGS 84 33S 0432382 - 3611551 (approx.).
ACTUAL LAND USE:	Residential zone.
VISIBILITY:	The site is not accessible.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	Modern buildings.
PREVIOUS STUDIES:	The <i>hypogea</i> are unpublished but, recently, the Archaeological Mission of Roma Tre University started to study their grave goods (Musso <i>et al.</i> 2010, 58-62; 2013-2014, 27-28).
DESCRIPTION:	The two tombs are located along the banks of Wadi er-Rasf, S of the modern road Lepcis-Khoms. Unfortunately the area is not accessible; however, the modern structures built in these last decades should have erased the ancient structures. A topographic analysis of the site cannot be done due to the lack of a general plan of the two <i>hypogea</i> .
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tombs.
BIBLIOGRAPHY:	Unpublished.

Nc2a

DISCOVERY/EXCAVATION DATE:	2 nd April 1975.
STRUCTURE DESCRIPTION:	Hypogean tomb maybe characterized by two different chambers. Further details of the structure are unknown.

GRAVE GOODS:	<u>Pottery:</u> - Amphorae [4]: types [3] not id.; local production [1]. - Coarse Pottery [21]: bottles [6]; jugs [5]; bowls [3]; casseroles [3]; lids [3]; <i>unguentarium</i> [1]. - Lamps [8]: JOLY (1974), nr. 444 [1], nr. 638 [1], nr. 696 [1]; LOESCHCKE (1919), type II [2], type IV [1], type VIII [2]. <u>Glass:</u> - Form [1] not id. <u>Cinerary urns:</u> - Amphorae [4?]. Incineration [4?]; inhumation [?]. AD 100-250. Unpublished. <u>Written reports:</u> LMDoA, Finding register nr. 1476-1499.
FUNERAL RITES:	
DATATION:	
BIBLIOGRAPHY:	
ARCHIVAL DOCUMENTATION:	

Nc2b

DISCOVERY/EXCAVATION DATE:	2 nd April 1975.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	<u>Pottery:</u> - Coarse Pottery [1]: small amphorae [1]. - Lamps [8]: LOESCHCKE (1919), type IV [4]; BRONEER (1930), type XXV [4]. - African Red Slip Ware A/D [2]: <i>Raqqada</i> , pl. II, fig. 24 [1]. - Thin Walled Pottery [1]: <i>Atlante II</i> , form I/122 [1]. Incineration [?]; inhumation [?]. 2 nd - 3 rd century AD. Unpublished. <u>Written reports:</u> LMDoA, Finding register nr. 2513-2523.
FUNERAL RITES:	
DATATION:	
BIBLIOGRAPHY:	
ARCHIVAL DOCUMENTATION:	

Nc3

NECROPOLIS

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tombs.
DISTANCE FROM LEPICIS MAGNA:	2,390 m NW (approx.).
GPS COORDINATES:	WGS 84 33S 0431507 - 3612646 (approx.).
ACTUAL LAND USE:	Abandoned barracks.
VISIBILITY:	The site is not accessible.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	Modern buildings.
PREVIOUS STUDIES:	Two tombs were excavated between May and August 1976 by the DoA of Lepcis Magna in the area of the "new barracks" of Khoms, near a square actually used as a parking for taxis. The <i>hypogea</i> were recently briefly described by the Archaeological Mission of Roma Tre University that is studying their grave goods: Musso <i>et al.</i> (2010), 58-62; (2013-2014), 27-28.
DESCRIPTION:	The area is partially accessible; however, the modern structures built in these last decades should have erased the ancient structures. A topographic analysis of the site cannot be done due to the lack of a general plan of the <i>hypogea</i> .
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	3 rd century BC - 2 nd century AD.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tombs.

BIBLIOGRAPHY: MUSSO *et al.* (2010), 61-62.

Nc3a

DISCOVERY/EXCAVATION DATE: 29th May 1976.

STRUCTURE DESCRIPTION: Hypogean tomb with a shaft entrance (diameter c.1.5 m). The funeral chamber had an elliptical plan (c.1.5x2 m) and a barrel vault.

GRAVE GOODS: Pottery:
- Amphorae [4]: RAMON TORRES (1995), type 7.2.1.1 [1]; Greco-Italic [1]; types [2] not id.
- Coarse Pottery [159]: fish-plates [34]; bowls [39]; *unguentaria* [76]; lids [6]; mug [1]; bottle [1]; miniature jug [1]; miniature mug [1].
- Lamps [9]: DENEAUVE (1969), type VIII [2], type X [5]; RICCI (1973), type B [2].
- Black Glazed Pottery [16]: MOREL (1981), type 3321a [1], type 4821b [1], type 3112a 1 [1], type 2614f 1 [1], types 2650 [6], types 2780 [5], type 1120 [1].
Metals:
- Bronze nails [7]; bronze mirror [1]; iron nails [4]; iron strigils [2].
Numismatics:
- Coins [5] not id.
Cinerary urns:
- Amphorae [2].
FUNERAL RITES: Incineration ? [2].
DATATION: 3rd/2nd century BC - 1st century AD.
BIBLIOGRAPHY: MUSSO *et al.* (2010), 61.
ARCHIVAL DOCUMENTATION: Written reports: LMDoA, Excavation report (not inv.); Finding register nr. 3972-4092.

Nc3b

DISCOVERY/EXCAVATION DATE: 19th August 1976.

STRUCTURE DESCRIPTION: Hypogean tomb with a shaft entrance (diameter c.1.5 m) sealed with limestone slabs. The funeral chamber had a rectangular plan (c.3.5x2.5 m) with no banquettes and a barrel vault.

GRAVE GOODS: Pottery:
- Amphorae [76]: Schöne Mau XXXV [10]; Dressel 20 [1]; Van der Werff 2 [1]; *Benghazi* ERA1 [1]; Tripolitana I [2]; Sant'Arcangelo [1]; Dressel 6A [1]; *Benghazi* MR1 [8]; Dressel 2/4 [27]; local production [7].
- Coarse Pottery [133]: small amphorae [1]; *unguentaria* [9]; bowls [29]; bottles [68]; jugs [2]; cup[1]; dishes [13]; casseroles [2]; lids [6]; pots [2].
- Lamps[18]: LOESCHCKE (1919), type IV [6], type VIII [9].
- Italian Sigillata [12]: *Conspectus*, form 5.1 [1], form 6.2.1 [1], form 18 [6], form 22 [1], form 27 [1], form 29 [1], form 46.1.2 [1].
- Eastern Sigillata A [8]: *Atlante II*, form 4a [1], form 12 [1], form 36 [1], form 45 [1], form 47 [1], form 50 [1], form 51 [1], form 52 [1].
- Eastern Sigillata B [4]: *Atlante II*, form 4 [1], form 59 [1], form 62 [1], form 70 [1].
- African Red Slip Ware A [1]: HAYES (1972), form 5b [1].
- South Gaulish Sigillata: [?].
- Cypriot Sigillata: [?].
- Thin Walled Pottery [1]: *Atlante II*, form 2/407 [1].
Glass:
- ISINGS (1957), form 8 [10], form 16 [1], form 28b [1], form 49 [1], form 51 [1]; form 52 [1].
Carved bones:
- Hairpins [7].
Metals:
- Bronze mirrors [17]; bronze small nails [4]; bronze handles [2]; bronze small chains [2]; bronze elements [7] not id.; iron strigil [1]; iron nails [26]; several lead laces.

	<u>Numismatics:</u> Coins [53] not id.
	<u>Cinerary urns/burials:</u> - Limestone vase-shaped [1]; limestone coffin-shaped [58]; lead <i>sarcophagus bisomus</i> [1]; amphorae [?].
FUNERAL RITES:	Incineration [59+]; inhumation [2].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	Musso <i>et al.</i> (2010), 61-62.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.); Finding register nr. 4093-4429.

Nc4 *NECROPOLIS*

DEFINITION:	Structures.
TOPONYM/S:	Tazuit.
INTERPRETATION:	<i>Necropolis</i> .
DISTANCE FROM LEP CIS MAGNA:	1,000 m WSW (approx.).
GPS COORDINATES:	WGS 84 33S 0432349 - 3610773 (approx.).
ACTUAL LAND USE:	Residential/commercial zone.
VISIBILITY:	The structures are not visible anymore.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	Buildings, road.
PREVIOUS STUDIES:	Seven different tombs were excavated during the eighties by the DoA of Lepcis Magna in the Tazuit area, c.700 m W from the Lepcis Magna Museum. The majority of these <i>hypogea</i> (Nc4c-Nc4g) were discovered during the construction of a religious institute between the end of 1983 and the beginning of 1984. The Archaeological Mission of Roma Tre University is studying their grave goods (Musso <i>et al.</i> 2010) even if most of them are unfortunately missing.
DESCRIPTION:	The area is not accessible; however, both the modern structures built in these last decades and the Tripoli - Misurata highway should have erased the ancient structures. A topographic analysis of the site cannot be done due to the lack of a general plan of the <i>hypogea</i> .
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tombs.
BIBLIOGRAPHY:	Musso <i>et al.</i> (2010), 61.

Nc4a

DISCOVERY/EXCAVATION DATE:	1988.
STRUCTURE DESCRIPTION:	Hypogean (or semi-hypogean) tomb built with limestone ashlar blocks with different rows of niches.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	AD 1-250.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.).

Nc4b

DISCOVERY/EXCAVATION DATE:	4 th November 1984.
STRUCTURE DESCRIPTION:	Hypogean tomb; details of the structure unknown.
GRAVE GOODS:	<u>Pottery:</u>

	- Amphorae [1]: type [1] not id.
	- Coarse Pottery [20]: forms [20] not id.
	- Lamps [12]: BRONEER (1930), type XXI [1]; LOESCHCKE (1919), type IV [7], type VIII [3].
	- African Red Slip Ware A [7]: HAYES (1972), form 3a [1], form 16 [1], form 122 [1], form 123 [2], form 131 [1], form 153 [1].
	- Thin Walled Pottery [4]: <i>Atlante II</i> , form I/122 [4].
FUNERAL RITES:	Inhumation [?].
DATATION:	AD 150-250.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports</u> : LMDoA, Finding register nr. 7674-7710.

Nc4c

DISCOVERY/EXCAVATION DATE:	23 rd February 1984.
STRUCTURE DESCRIPTION:	Hypogean tomb located c.15 m NE from Nc4f. It was characterized by a squared shaft entrance (side of 1.10 m) originally sealed by two limestone slabs. The shaft was c. 5 m deep with tacks on its sides. The funeral chamber, separated from the shaft by a door, had a rectangular plan (7.9X1.6 m, max. H: 1.8 m) and with the semicircular side facing the entrance; the ceiling of the room was barrel vaulted. On the long sides there were a banquette and niches (five on the SE side and two on the NW side). The grave goods (pl. 14D-E) were found both on the banquettes and inside the niches.
GRAVE GOODS:	<p><u>Pottery</u>:</p> <ul style="list-style-type: none"> - Amphorae [10]: Dressel 2/4 [3]; <i>Benghazi</i> MR1 [6]; local production [1]. - Coarse Pottery [47]: bottle [24]; dishes [8]; <i>guttus</i> [1]; casseroles [7]; lids [7]. - Lamps [22]: LOESCHCKE (1919), type IV [3], type VIII [3]. - African Red Slip Ware A [1]: HAYES (1972), form 123 [1]. - Thin Walled Pottery [3]: <i>Atlante II</i>, form I/122 [3]. <p><u>Glass</u>:</p> <ul style="list-style-type: none"> - Vases [3] form not id. <p><u>Carved bones</u>:</p> <ul style="list-style-type: none"> - Hairpins [2]. <p><u>Metals</u>:</p> <ul style="list-style-type: none"> - Bronze mirrors [2]; bronze pin [1]. <p><u>Numismatics</u>:</p> <ul style="list-style-type: none"> - Coins [2] not id. <p><u>Cinerary urns</u>:</p> <ul style="list-style-type: none"> - Limestone vase-shaped [6]; limestone coffin-shaped [2].
FUNERAL RITES:	Incineration [8]; inhumation [2].
DATATION:	AD 50-200.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : LMDoA, Photographic Archive (not inv.). <u>Written reports</u> : LMDoA, Excavation report (not inv.).

Nc4d

DISCOVERY/EXCAVATION DATE:	10 th August 1983.
STRUCTURE DESCRIPTION:	Hypogean tomb characterized by several chambers fill by soil. A staircase of five steps built with limestone ashlar blocks, lead to three small rooms and then to other two chambers (0.70 x 2.15 m). It is also recorded a bigger chamber (4.35 x 2.37 m) with 48 niches on three sides.
GRAVE GOODS:	<p><u>Pottery</u>:</p> <ul style="list-style-type: none"> - Amphorae [1]: type [1] not id. - Coarse Pottery [7]: <i>unguentaria</i> [7]. - Lamps [1]: type [1] not id. <p><u>Glass</u>:</p>

	- Vases [2] form not id; forms [2] not id.
	<u>Metals:</u>
	- Bronze mirror [1].
	<u>Numismatics:</u>
	- Bronze coin [1] not id.
	<u>Cinerary urns:</u>
	- Limestone coffin-shaped [5]; amphorae [1].
FUNERAL RITES:	Incineration [6].
DATATION:	AD 50-200.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.).

Nc4e

DISCOVERY/EXCAVATION DATE:	30 th November 1983.
STRUCTURE DESCRIPTION:	Hypogaeum found c.10 m E from Nc4d. The tomb had a shaft entrance on the E side of the chamber; the funeral room was characterized by a corridor (7.40x1.30 m) on which walls were eight perpendicular little chambers (four on each long side) of c.2x1 m and 1.1 m high, with banquettes where have been found ten inhumed (two of them where found covered by plaster). In the W semicircular side of the hypogean chamber an isolated inhumation was found.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [2]: type [2] not id. - Coarse Pottery [11]: bottles [7]; bowls [2]; lids [2]. - Lamps [6]: LOESCHKE (1919), type VIII [6]. - Eastern Sigillata A [1]: <i>Altante II</i> , forma tarda g [1]. <u>Glass:</u> - Dish [1] form not id.; vase [1] form not id. <u>Carved bones:</u> - Fragments not id. <u>Metals:</u> - Bronze hinges [3] probably related to a wooden box. <u>Numismatics:</u> - Coins [3] not id. <u>Other:</u> - Marble head [1].
FUNERAL RITES:	Inhumation [10].
DATATION:	2 nd - 3 rd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Drawings Archive (not inv.); Excavation report (not inv.); Finding register nr. 7630-7673.

Nc4f

DISCOVERY/EXCAVATION DATE:	30 th November 1983.
STRUCTURE DESCRIPTION:	Hypogean tomb located NE from Nc4d and characterized by two different chambers. One room (4.90 x 1.20 m) had two banquettes characterized by a moulding and on which were several inhumation and their grave goods. At the end of this narrow chamber there was a squared room that has been found empty.
GRAVE GOODS:	<u>Pottery:</u> - Coarse Pottery [14]: bottles [8]; bowls [4]; lids [2]. - Lamps [15]: types not id. - Terracotta fragments [3] related to a bird (hen) statue. <u>Glass:</u> - Vases [3] form not id. <u>Metals:</u>

	- Bronze nails [?]; lead fragments.
	<u>Numismatics:</u>
	- Coins [10] not id.
	<u>Other:</u>
	- Head masks [3] material unknown.
	<u>Cinerary urns:</u>
	- Limestone coffin-shaped [3].
FUNERAL RITES:	Incineration [3]; inhumation [?].
DATATION:	2 nd - 3 rd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.).

Nc4g

DISCOVERY/EXCAVATION DATE:	12 th January 1984.
STRUCTURE DESCRIPTION:	Hypogean tomb with a shaft entrance located 5 m N from the tomb Nc4f. The rectangular funeral chamber (c.11x1.7 m) was characterized by a continuous banquette on all the sides except for the entrance one (pl. 14F). The ceiling was barrel vaulted with a max. H of 1.3 m.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [2]: Dressel 2/4 [2]. - Coarse Pottery [6]: bottles [2]; dishes [2]; casserole [1]; lid [1]. - Lamps [2]: LOESCHCKE (1919), type VIII [2].
FUNERAL RITES:	Inhumation [?].
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Photographs:</u> LMDoA, Photographic Archive (not inv.). <u>Written reports:</u> LMDoA, Excavation report (not inv.).

Nc5

NECROPOLIS

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	<i>Necropolis</i> .
DISTANCE FROM LEPICIS MAGNA:	340 m NNE (approx.).
GPS COORDINATES:	WGS 84 33S 0433466 - 3611431 (approx.).
ACTUAL LAND USE:	The <i>necropolis</i> is located within the archaeological site of Lepcis Magna, beneath the stage of the Roman theatre.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Not determinable, probably a low hill (top or slope).
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The <i>necropolis</i> was excavated between 1938 and 1940 and partially in 1949 by Caputo who detected nine different <i>hypogea</i> under the stage of the Augustan theatre (CAPUTO 1948; 1960). In 1972 De Miro and Fiorentini (1977) completed the excavation and analyzed their grave goods. More recently (JOLY, GARRAFFO, MANDRUZZATO 1992), some more finds related to the <i>necropolis</i> (mainly lamps and faience objects) have been published, unfortunately without any pertinence to the tombs.
DESCRIPTION:	The hypogean tombs were cut in the bedrock without any specific organization and decorations. It is reliable that the construction of the hypogean structures could take advantage from a low hill. Considering the area explored, the tombs are denser in the E sector (DE MIRO, FIORENTINI, 1977, pl. I).
STATE OF PRESERVATION:	The site is not visible anymore.

CHRONOLOGY:	6 th - 2 nd century BC.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tombs.
BIBLIOGRAPHY:	CAPUTO (1948), n. 3483; (1960), n. 4656; (1987), 18-19; FLORIANI SQUARCIAPINO (1966), 37-38; ABOU-HAMED, SHAGLOUF, ATEYA (1974-1975), 300; DE MIRO, FIORENTINI (1977), 5-6, 63, 73-75; JOLY, GARRAFFO, MANDRUZZATO (1992), 29, 137, 200; DE MIRO (2002), 404, 410; MASTURZO (2013), 201.

Nc5a

DISCOVERY/EXCAVATION DATE:	1938-1940.
STRUCTURE DESCRIPTION:	The <i>hypogeum</i> had an irregular quadrangular plan (c.1.8x1.9 m, max. H: 1.3 m) with two inhumed bodies placed side by side.
GRAVE GOODS:	<u>Pottery:</u> - Attic production [3]: <i>skyphos</i> [1]; fish-plate [1]; cup [1]. - Attic or Italic production [3]: <i>kylix</i> [1]; cups [2]. - Lamps [2]: <i>Meligunis Lipara II</i> , pl. CXXXIII, 408bis [1]; BRONEER (1930), type VII [1].
FUNERAL RITES:	Inhumation [2]
DATATION:	350-300 BC.
BIBLIOGRAPHY:	DE MIRO, FIORENTINI (1977), 42-44 (<i>Tb 7</i>).

Nc5b

DISCOVERY/EXCAVATION DATE:	1938-1940, 1949.
STRUCTURE DESCRIPTION:	Irregular shape hypogean tomb (c.2.1x3 m, max. H: 1.6 m) characterized by three different phases dated from the end of the 6 th century to the beginning of the 3 rd century BC. The first phase is related to a <i>loculus</i> for an amphora urn cut into the bedrock, subsequently the tomb was enlarged to house new burial/s and then, during the 3 rd century BC, a coffin tomb was placed into the chamber. The tomb has been rehased during the construction of the theatre foundations.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [3]: BISI (1971), type B [2]; type [1] not id. - Black Glazed Pottery [1]: MOREL (1981), type 2780 [1]. - Italic-Corinthian production [1]: <i>kylix</i> [1]. - Campanian production [2]: <i>lekythos-lagynos</i> [1]; cup [1]. - Local production [33]: <i>kylixes</i> [2]; <i>stamnos</i> [1]; <i>pyxis</i> [1]; <i>paterae</i> [2]; fish-plates [5]; pitchers [3]; cups [18]; bowl [1]. - Lamps [7]: CINTAS (1950), pl. XL, 4 [1], pl. XL, 5 [1]; BRONEER (1930), type VII [4]; type [1] not id. <u>Cinerary urns:</u> - Terracotta vase type CINTAS (1950), pl. XV, 201, 208 [1].
FUNERAL RITES:	Incineration [1]; inhumation [?].
DATATION:	520-270 BC.
BIBLIOGRAPHY:	DE MIRO, FIORENTINI (1977), 30-42 (<i>Tb 5</i>).

Nc5c

DISCOVERY/EXCAVATION DATE:	1938-1940, 1972.
STRUCTURE DESCRIPTION:	The hypogean tomb was characterized by two different chambers. The original entrance was to the S and, through a staircase (1.20 m wide), it lead to a common rectangular space (c.2.9x1 m) from which there were access to the two chambers, one toward N and the other toward W. The N room (DE MIRO, FIORENTINI 1977, <i>Tb 6</i>) had a quadrangular plan (side of 1.4 m) with a single inhumed oriented E-W. The W chamber (DE MIRO, FIORENTINI 1977, <i>Tb 13</i>) had the doorway sealed with stones and a quadrangular shape (2.1x2.3 m, max. H: 1.30). In this chamber has been found two or more inhumed.
GRAVE GOODS:	<u>Pottery:</u>

- Attic production [2]: fish-plate [1]; *kylix* [1].
- Attic or South Italic production [3]: cups [3].
- South Italic production [1]: *patera* [1].
- Local production [13]: *skyphos* [1]; *kylix* [1]; *calyx* [1]; *lekythos-guttus* [1]; *paterae* [2]; fish-plate [1]; cups [3]; *olpai* [2]; lid [1].
- Lamps [4]: CINTAS (1950), pl. XL, 4-5 [2]; BROONER (1930), type VII [1], simil type IX [2].

Metals:

- Iron hoe [1]; iron shears [2]; bronze ring [1].

Numismatics:

- Bronze coins [10] Tanit/horse type; bronze coin [1] Tanit/horse with palm type; bronze coins [4] not id.

FUNERAL RITES:

Inhumation [3+].

DATATION:

520-270 BC.

BIBLIOGRAPHY:

ABOU-HAMED, SHAGLOUF, ATEYA (1974-1975), 300; DE MIRO, FIORENTINI (1977), 42 (*Tb 6*), 52-62 (*Tb 13*).

Nc5d

DISCOVERY/EXCAVATION DATE:

1938-1940, 1972.

STRUCTURE DESCRIPTION:

The hypogeum was characterized by two different chambers and it was heavily damaged by a cistern/well built in a second phase on the W sector of the *hypogeum*. The original shaft entrance to the E lead to a staircase and to a rectangular room (2.2x1.1 m, max. H: 2.25 m) partially damaged in the NW sector by the cistern/well. On the SW side there was the access to the funeral chamber sealed by a limestone slab behind which have been found the limestone ashlar blocks related to the Roman theatre foundation that partially destroyed the tomb (DE MIRO, FIORENTINI 1977, *Tb 11*). The other room (c.1.1x1.3 m, also partially damaged by the cistern in the SW sector) was built N of the shaft and seems it was provided by a *dromos* on the SE side (DE MIRO, FIORENTINI 1977, *Tb 12*). All the finds collected came from this funeral chamber.

GRAVE GOODS:

Pottery:

- Local production [16]: cup [1]; pitcher [1]; *unguentaria* [14].

FUNERAL RITES:

Inhumation [?]; incineration [?].

DATATION:

3rd - 2nd century BC.

BIBLIOGRAPHY:

ABOU-HAMED, SHAGLOUF, ATEYA (1974-1975), 300; DE MIRO, FIORENTINI (1977), 55-56 (*Tb 11*), 51-52 (*Tb 12*).

Nc5e

DISCOVERY/EXCAVATION DATE:

1939.

STRUCTURE DESCRIPTION:

The *hypogeum* had a staircase entrance to the N side that lead to a narrow corridor (c.0.6x3.2 m, max. H: 2.2 m) with E-W orientation. S of the corridor has been built a funeral rectangular chamber (DE MIRO, FIORENTINI 1977, *Tb 3*). The room measured 2.35 x 1.15 m and its entrance was originally sealed with upside down amphorae cemented with stones and lime (pl. 15A). A funeral quadrangular chamber (c.2.1x2.2 m, max. H: 2.2 m) was built W of the corridor (DE MIRO, FIORENTINI 1977, *Tb 1*), unfortunately its grave goods are missing. To the E of the corridor another funeral chamber had a similar quadrangular plan (c.2.4x2.2 m, max. H: 1.6 m) where have been found the remains of two or more inhumed (DE MIRO, FIORENTINI 1977, *Tb 2*). The E chamber was subsequently connected to another tomb (Nc5i) through a narrow passage.

GRAVE GOODS:

Pottery:

- Amphorae [9]: CINTAS (1950), pl. XVI, 201, 207 [1], pl. XCVI, 331 [1], pl. XXV, 318 [1]; Greco-Italic [5]; local production [1].
- Attic production [9]: *skyphoi* [4]; fish-plates [2]; cups [3].
- Attic or Cyrenaic production [3]: *kylikes* [2]; *lekythos-lagynus* [1].

	<ul style="list-style-type: none"> - South Italian production [13]: fish-plates [3]; cups [5]; <i>kylix</i> [1]; <i>askoi</i> [2]; Apulian painted vase [1]; <i>skyphos</i> [1]. - Black Glazed Pottery [1]: MOREL (1981), type 2780 [1]. - Local production [24]: <i>skyphos</i> [1]; <i>olpai</i> [2]; fish-plates [3]; dish [1]; bowls [4]; cups [8]; <i>paterae</i> [2]; mug [1]; pitchers [2]. - Lamps [10]: DENEAUVE (1969), type VI [4]; BROONER (1930), type VI [1], type VII [4], type IX [1].
	<u>Glass:</u>
	- <i>Amphoriskos</i> [1] type NEUBURG (1949), pl. VII.
FUNERAL RITES:	Inhumation [2+].
DATATION:	520-270 BC.
BIBLIOGRAPHY:	MERIGHI (1940), I, fig. 1; DE MIRO, FIORENTINI (1977), 7 (<i>Tb 1</i>) 7-18 (<i>Tb 2</i>), 18-26 (<i>Tb 3</i>).

Nc5f

DISCOVERY/EXCAVATION DATE:	1938-1940.
STRUCTURE DESCRIPTION:	Hypogean tomb with a circular plan (c.2.2x2.2 m, max. H: 1.5 m) and doorway (width: 0.65 m) to SW that probably lead to a <i>dromos</i> . A quadrangular opening toward W should connect in some way this hypogeum to another tomb (Nc5g). In the chamber were found two overlapping inhumed bodies.
GRAVE GOODS:	<u>Pottery:</u> <ul style="list-style-type: none"> - Attic production [1]: cup [1]. - Italic production [8]: cups [8]. - Local production [8]: <i>pyxis</i> [1]; bowl [1]; <i>unguentaria</i> [4]; <i>paterae</i> [2]. - Lamps [3]: BROONER (1930), type VII [3]. <u>Carved bones:</u> <ul style="list-style-type: none"> - Pendant [1]. <u>Glass:</u> <ul style="list-style-type: none"> - Glass paste necklace elements [5]. <u>Metals:</u> <ul style="list-style-type: none"> - Iron blades [2], bronze nails [3]; iron nail [1]. <u>Numismatics:</u> <ul style="list-style-type: none"> - Bronze coin [1].
FUNERAL RITES:	Inhumation [2].
DATATION:	300-270 BC.
BIBLIOGRAPHY:	DE MIRO, FIORENTINI (1977), 45-50 (<i>Tb 9</i>).

Nc5g

DISCOVERY/EXCAVATION DATE:	1938-1940.
STRUCTURE DESCRIPTION:	Hypogean tomb with an irregular shape (c.2x1.7 m, max. H: c.1 m) and with its original entrance from SE. The chamber has been partially excavated and an inhumed has been found. A quadrangular opening toward E should connect this hypogeum to another tomb (Nc5f).
GRAVE GOODS:	<u>Pottery:</u> <ul style="list-style-type: none"> - Production not id [1]: <i>skyphos</i> [1].
FUNERAL RITES:	Inhumation [1].
DATATION:	520-400 BC.
BIBLIOGRAPHY:	DE MIRO, FIORENTINI (1977), 50-51 (<i>Tb 10</i>).

Nc5h

DISCOVERY/EXCAVATION DATE:	1938-1940.
STRUCTURE DESCRIPTION:	Hypogean tomb with a circular plan (c.1.8x2 m) and the entrance towards S.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Inhumation [?].
DATATION:	6 th - 2 nd century BC (?).

BIBLIOGRAPHY: DE MIRO, FIORENTINI (1977), 5 (*Tb 8*).

Nc5i

DISCOVERY/EXCAVATION DATE: 1939.

STRUCTURE DESCRIPTION: The hypogeum seems to be characterized by a funeral chamber (DE MIRO, FIORENTINI 1977, *Tb 4*) with an irregular shape (c.2.2x2.5 m, max. H: 1.7 m) and a corridor (c.2.8x1 m) to the E where probably the original access was located. The W chamber was subsequently connected to another tomb (Nc5e) through a narrow passage.

GRAVE GOODS: Pottery:
 - Attic production [4]: *skyphos* [1]; cups [2]; *kylix* [1].
 - South Italic production [3]: fish-plate [1]; cup [1]; *guttus* [1].
 - Local production [2]: *olpe* [1]; cup [1].
Metals:
 - Bronze little bells [11]; bronze nails [8].

FUNERAL RITES: Inhumation [1+].

DATATION: 500-300 BC.

BIBLIOGRAPHY: DE MIRO, FIORENTINI (1977), 27-30 (*Tb 4*).

NC6

NECROPOLIS

DEFINITION: Burials.

TOPONYM/S: None.

INTERPRETATION: Tombs.

DISTANCE FROM LEPICIS MAGNA: 635 m NW.

GPS COORDINATES: WGS 84 33S 0432907 - 3611597.

ACTUAL LAND USE: The tombs were found at the foot of the monumental arch of Marcus Aurelius (Ti6).

VISIBILITY: The excavation site is not visible anymore.

TOPOGRAPHIC POSITION: Undeterminable.

MODERN INTERFERENCE/S: None.

PREVIOUS STUDIES: Two different archaeological trenches were made during 1959 and 1964 by Ioppolo and Pisani Sartorio at the foot of the Marcus Aurelius *tetrapylon* (Ti6) (IOPPOLO 1969-1970; PISANI SARTORIO 1969-1970). These excavations were realized to analyze the foundation of the monumental arch and to better understand the stratigraphic sequence of this area.

DESCRIPTION: Two different burials were found in two different trenches realized SE of the Marcus Aurelius arch (Ti6), one at the foot of the W pylon and the other at the foot of the S pylon. Both the inhumed were laid in a pit and no grave goods were found except for one *unguentarium* dated in the first half of the 1st century AD. The skeleton found in the W pylon trench belonged to a male of c.14 years old while the other skeleton (S pylon), oriented NE, belonged to a 3-4 years old child buried with an *unguentarium*. Above this latter burial have been found different amphorae fragments and, on its right, an alignment of irregular stones. Both the burials were found beneath the same layer that can be dated to the second half of the 1st century AD.

STATE OF PRESERVATION: The site has been excavated.

CHRONOLOGY: AD 25-50.

DATING ELEMENT/S: Stratigraphic relations; findings.

GRAVE GOODS: Pottery:
 - Coarse Pottery [1]: *unguentarium* [1] type ALMAGRO (1955), nr. 53.

FUNERAL RITES: Inhumation [2].

BIBLIOGRAPHY: IOPPOLO (1969-1970); PISANI SARTORIO (1969-1970), 270-273.

Nc7**NECROPOLIS**

DEFINITION:	Structures, burials.
TOPONYM/S:	None.
INTERPRETATION:	<i>Necropolis</i> .
DISTANCE FROM LEPICIS MAGNA:	1,050 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432484 - 3611766 (approx).
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is accessible and visible even if some parts were buried after excavation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Dumps within the site and around it.
PREVIOUS STUDIES:	Beside a emergency excavation of a hypogean tomb in 1981, S of a tarmac road, a significant sector of an area W of the Roman <i>villa</i> (VI3) has been surveyed and excavated by Roma Tre University Archaeological Mission between 1994 and 1997 (FIANDRA 1995; MUSSO <i>et al.</i> 1996; 1997; 1998).
DESCRIPTION:	The site, located c.100 m W from Wadi er-Rsaf and c.300-350 m from the sea, revealed the presence of different types of funeral structures located N and W of an ancient <i>villa</i> (VI3). The first hypogean tomb (Nc7i) was discovered in 1981 during the construction of the tarmac road located N of the site. The excavation undertaken by Roma Tre University in the 1990s revealed, c.40 m S of the same road, different funeral structures and four main phases, dated from the 1 st century AD to the 4 th century AD. The site comprised three <i>hypogaea</i> (Nc7a, Nc7b and Nc7e), two <i>semata</i> (Nc7c and Nc7d), different structures related to the funeral rites (Nc7f and Nc7h), two or more <i>cupae</i> (Nc7g) and several pit burials for inhumed and incinerations. To the first phase (Musso <i>et al.</i> 1997, 278-279), dated to the second half of the 1 st century AD, belong two hypogean tombs (Nc7a and Nc7b) and a <i>cippus</i> with different incinerations around it (Nc7c). To the further phase (Musso <i>et al.</i> 1997, 279), dated to the first half of the 2 nd century, belong a quadrangular <i>signaculum</i> (Nc7d), five incinerations, three graves (not excavated) and a pit with intact ceramics maybe related to a ritual deposition of the funeral feast pottery. From the second half of the 2 nd century to the beginning of the 3 rd century the soil level was raised and a new <i>hypogeum</i> was built toward E (Nc7e; Musso <i>et al.</i> 1997, 279-282). In the same phase a limestone altar (Nc7f) was built together with a <i>cupa</i> tomb with its small altar (Nc7g); three incinerations and two inhumed were also recorded for this phase. In the subsequent phase (Musso <i>et al.</i> 1997, 282-283), dated to the 3 rd century AD, a "U shape" structure (probably a <i>triclinium</i> or a <i>mensa</i>) was built in the N sector of the area (Nc7h) and five inhumation were arranged. In the 4 th century (Musso <i>et al.</i> 1997, 283-284), the area was covered with alluvial deposits and, above it, have been found one or two <i>cupae</i> (Nc7g) and different inhumed and incinerations.
STATE OF PRESERVATION:	The site was found in good condition.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Findings; stratigraphic relations; building features.
STRUCTURAL TYPES:	Hypogean tombs; <i>semata</i> ; funeral rite structures; <i>cupae</i> .
BIBLIOGRAPHY:	FIANDRA (1995), 169-170; MUSSO <i>et al.</i> (1996), 153-155, 161-163; (1997), 262-263; 276-284; (1998), 181, 194-201.

Nc7a

DISCOVERY/EXCAVATION DATE:	1994-1995.
STRUCTURE DESCRIPTION:	Hypogean tomb with shaft entrance sealed with limestone slabs. The shaft (c.1x1.50 m; deep c.4.50 m) has been found partially covered by soil and with a inhumed in it dated to the last burial phase of the structure. The shaft led to the W to a rectangular

	<p>funeral chamber (3.35x2.2 m) with ogival vault and to the N to a small irregular chamber (1.17x1.49 m) with a barrel vault. The W chamber was originally sealed by a limestone slab, found fallen within the room, while the N chamber was closed by a dry stone wall. The bigger room revealed two main phases: the ancient one characterized by nine incinerations (dated between the second half of the 1st century AD - beginning of the 2nd century) and the subsequent phase by six inhumed (dated to the 2nd century AD). Within the N chamber were found five incinerations dated to the 2nd century AD. Outside the hypogeum there was a <i>sema</i> (pl. 15B) characterized by two limestone ashlar blocks above which there was a central block with a circular recession probably to house small column (similar to Nc7c).</p>
GRAVE GOODS:	<p><u>Pottery:</u></p> <ul style="list-style-type: none"> - Amphorae [6]: Schöne Mau XXXV [1]; Tripolitana I [1]; <i>Benghazi</i> MR2 [1]; <i>Benghazi</i> MR3 [1]; local production [1]; type [1] not id. - Coarse Pottery [18]: bottles [14]; casserole [1]; small amphorae [2]; <i>guttus</i> [1]. - Lamps [9]: BRONEER (1930) type XXVII [1]. - Italian Sigillata [1]: <i>Conspectus</i>, form 21.1 [1]. - Eastern Sigillata A [3]: <i>Atlante II</i>, form 51 [2], form 58 [1]. - Cypriot Sigillata [1]: <i>Atlante II</i>, form P28 [1]. - African Red Slip Ware A [1]: HAYES (1972), form 23 [1]. - African Red Slip Ware A/D [1]: HAYES (1972), form 14/17 [1]. - Thiny Walled Pottery [6]: <i>Atlante II</i>, form I/122 [6]. <p><u>Glass:</u></p> <ul style="list-style-type: none"> - Vases [2] form not id. <p><u>Carved bones:</u></p> <ul style="list-style-type: none"> - Fragments [3] not id. <p><u>Numismatics:</u></p> <ul style="list-style-type: none"> - Bronze coins [4] (1st century BC); Augustus <i>as</i> [1]; Augustus/Tiberius <i>sestertius</i> [1]; Hadrian <i>quadrans</i> [1]. <p><u>Cinerary urns:</u></p> <ul style="list-style-type: none"> - Limestone coffin-shaped [11]; glass vases [2]; amphorae [2].
FUNERAL RITES:	Incineration [15]; inhumation [7].
DATATION:	AD 50-200.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1996), 155, 161-165.

Nc7b

DISCOVERY/EXCAVATION DATE:	1997.
STRUCTURE DESCRIPTION:	<p>Hypogean tomb with a shaft entrance deep 4.50 m sealed by two limestone slabs. East from the shaft is the pseudo-rectangular barrel vaulted funeral chamber (3.55x2.15 m) entirely dug in the bedrock. In the bottom wall (the E side) a semicircular niche housed a limestone coffin-shaped cinerary urn and a small amphora belonging to the first phase of the hypogeum (1st century AD). The grave goods related to four inhumed and thirty-seven incinerations: they were stacked on the bottom wall and it was therefore possible to distinguish different phases from the 1st to the 3rd century AD (pl. 15C-D).</p>
GRAVE GOODS:	<p><u>Pottery:</u></p> <ul style="list-style-type: none"> - Amphorae [31]: Dressel 2/4 [?]; Forlimpopoli [?]; local production [?]. - Coarse Pottery [51]: bottles [?]; bowls [?]. - Lamps [9]: types [9] not id. - Italian Sigillata [5]: forms [5] not id. - Eastern Sigillata A [1]: form [1] not id. - African Red Slip Ware A [8]: forms [8] not id. - South Gaulish Sigillata [1]: form [1] not id. - Cypriot Sigillata [1]: form [1] not id. - Cnidian Pottery [2]: forms [2] not id. - Campanian Internal Red Slip Ware [3]: forms [3] not id.

	- Thin Walled Pottery [6]; forms [6] not id.
	<u>Glass:</u>
	- Vases [35] form not id.
	<u>Carved bones:</u>
	- Fragments [7] not id.
	<u>Metals:</u>
	- Bronze lanterns [?]; iron strigils [?]; bronze vases [2].
	<u>Numismatics:</u>
	- Coins [?].
	<u>Others:</u>
	- Plaster statuette [2]; plaster small torsos [3].
	<u>Cinerary urns:</u>
	- Marble vase-shaped [1]; limestone vase-shaped [3]; Alabaster vase-shaped [1]; limestone coffin-shaped [24]; amphorae [8].
FUNERAL RITES:	Incineration [37]; inhumation [4].
DATATION:	AD 50-250.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1998), 196-201.

Nc7c

DISCOVERY/EXCAVATION DATE:	1996.
STRUCTURE DESCRIPTION:	Limestone parallelepiped <i>cippus/sema</i> without inscription located a few m E from the <i>hypogeum</i> Nc7a (pl. 15E). The <i>cippus</i> was inserted in a limestone squared base with a recession in the middle. Around this structure have been found ten incinerations in earthen pits and one inhumed body.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [10]: local production [7]; type [4] not id. - Coarse Pottery [4]: <i>unguentarium</i> [1]; basin [1]; bowl [1]; pitcher [1]. - Lamps [4]: types [3] not id. - Eastern Sigillata A [1]: cup [1] form not id. - South Gaulish Sigillata [1]: cup [1] form not id. <u>Glass:</u> - <i>Unguentaria</i> [6] form not id.; dish [1] form not id. <u>Metals:</u> - Iron nails [5]; iron needles [2]. <u>Numismatics:</u> - Bronze coin [1] not id.; Domitian <i>quadrans</i> [2]; lead <i>tessera</i> [1]. <u>Cinerary urns:</u> - Amphorae [10].
FUNERAL RITES:	Incineration [10]; inhumation [1].
DATATION:	AD 50-100.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1997), 278-279.

Nc7d

DISCOVERY/EXCAVATION DATE:	1996 -1997.
STRUCTURE DESCRIPTION:	Limestone <i>sema</i> built in plastered limestone ashlar blocks (c.1.9x2 m) S of the <i>hypogeum</i> Nc7a and preserved only for a row of stone (H 0.50 m). Probably, it could originally have a step profile. North to this structure and related to it have been found five incinerations in earthen pits (pl. 15F).
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [?]: local production [?]. - Coarse pottery [?]: bottles [?]. - Lamps [?]: types [?] not id. - Thin Walled Pottery [?]: forms [?] not id. <u>Glass:</u>

	- Cups [?] form not id.
	<u>Metals:</u>
	- Bronze elements [?].
FUNERAL RITES:	Incineration [5].
DATATION:	AD 100-150.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1997), 279; (1998), 195.

Nc7e

DISCOVERY/EXCAVATION DATE:	1996-1997.
STRUCTURE DESCRIPTION:	Hypogean tomb located few metres N to the Roman <i>villa</i> (VI3) and E from the two <i>hypogea</i> Nc7a and Nc7b. The funeral structure was found thanks to an ancient breaking of an hypogean cistern N of the <i>villa</i> . The original entrance to the chamber was found still sealed by a limestone block to the NW side of the structure, while its original doorway could be a shaft type. The <i>hypogaeum</i> was characterized by a quadrangular room (2.60 x 2.64 m) and, to the SW side, by a smaller room (1.27x1.31 m) provided with three niches (pl. 16A-B). All the walls and the ceilings were covered by white plaster and both the chambers had barrel vaults. Related to a first phase (second half of the 2 nd century AD) belong an incineration (coffin-shaped urn in a niche) and seven inhumed. In a second phase (first half of the 3 rd century AD) the floor was raised and a squared masonry basement (1.26x1.27 m) was built in the NE sector of the bigger chamber. Related to this phase is a single inhumation. Between the second half of the 3 rd century and the 5 th century the structure flooded due to the breaking of the wall in connection with a close-by cistern.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [1]: <i>Benghazi</i> MR1 [1]. - Coarse Pottery [?]: bottles [?], small amphorae [?]; casseroles [?]. - Lamps [?]: types [?] not id. - African Red Slip Ware A/D [2]: dish [1] form not id.; bowl [1] form not id. <u>Glass:</u> - <i>Unguentarium</i> [1]; cups [?] form not id.; glasses [?] form not id.; small dishes [?] form not id. <u>Metals:</u> - Bronze element [1]; bronze mirror [1]; bronze ring [1]; iron needle [1]; iron knife [1]; iron strigils [?]. <u>Numismatics:</u> - Bronze token [1]; bronze coin [1] (1 st century BC); bronze Numidian coins [2] (2 nd century BC); Trajan as [1]; Trajan semis [1]; Hadrian as [1]. <u>Cinerary urns:</u> - Limestone coffin-shaped [1].
FUNERAL RITES:	Incineration [1]; inhumation [8].
DATATION:	AD 150-250.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1997), 262-263, 276-278; (1998), 194.

Nc7f

DISCOVERY/EXCAVATION DATE:	1996.
STRUCTURE DESCRIPTION:	Squared base (c.1.5 m) characterized by undecorated limestone ashlar blocks above which was probably housed an altar.
DATATION:	AD 150 - 230.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1997), 280-281.

Nc7g

DISCOVERY/EXCAVATION DATE:	1995-1996.
STRUCTURE DESCRIPTION:	Two or more <i>cupae</i> -type graves built in <i>opus caementicium</i> with a rectangular plan and

	<p>a semi-cylindric cover. The earlier one was built in the second half of the 2nd century AD on the SW sector of the excavation area and was covered by plaster and painted in red (pl. 16C). On its N short side was a circular hole for the <i>refrigerium</i> rite and a marble inscription (not <i>in situ</i>) mentioning the name of the dead child <i>Iulia Victorina</i> and her mother <i>Cornelia Cilopu</i>. At a short distance (c.1 m N) was found a small cubic masonry altar (c 0.7 m). The other <i>cupa</i> (NE sector) belonged to the last phase of the <i>necropolis</i> (4th century AD) and was preserved only at its rectangular basement level. To the same phase belonged two rectangular plastered structures.</p>
GRAVE GOODS:	None.
SPECIAL FINDS:	<p><u>Inscriptions:</u></p> <p>- Fragmented but whole marble slab.</p> <p style="padding-left: 40px;">D(iis) m(anibus) Iul(iae) Victorinae vixit an(nos) XI dies VIII Cor- nelia Cilopu m(a)t(er) fil(iae) p(iae) f(ecit)</p>
FUNERAL RITES:	Inhumation [2].
DATATION:	AD 150-400.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1997), 281, 283-284.

Nc7h

DISCOVERY/EXCAVATION DATE:	1996.
STRUCTURE DESCRIPTION:	U-shaped <i>opus caementicium</i> structure (c.2x2 m) in the N sector of the excavated area. The structure may have used as <i>triclinium</i> or <i>mensa</i> for the funeral rites.
DATATION:	3 rd century AD.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1996), 163; (1997), 282.

Nc7i

DISCOVERY/EXCAVATION DATE:	28 th August 1981.
STRUCTURE DESCRIPTION:	Information related to this hypogean tomb comes from a brief excavation report and a drawing/sketch made by the DoA of Lepcis Magna. According to this documentation the access to the <i>hypogeum</i> was a <i>dromos</i> (c.10 m long and 2 m wide, probably preceded by a shaft) that, from N, led to a circular <i>vestibulum</i> . To the W, after a short passage, four barrel vaulted perpendicular corridors (c.10-12 m long and c. 2 m wide) were built around a quadrangular chamber (4.10x3.50 m, H of 3 m). East from the <i>dromos</i> , the corridor continued in SE direction for c.7 m and, along its N side, a perpendicular corridor lead, through a narrow passage, to a long (c.18 m) chamber/corridor. It is not clear if this room was pertinent to the tomb or it originally belonged to a different type of structure (cistern?). According to the excavation report, the tomb was decorated by different painting including figures, horses and a <i>Victoria</i> .
GRAVE GOODS:	<p><u>Pottery:</u></p> <p>- Amphorae [?]: types [?] not id.</p> <p>- Lamps [?]: types [?] not id.</p>
FUNERAL RITES:	Inhumation [?].
DATATION:	3 rd century AD.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Drawings Archive (not inv.); Excavation report (not inv.).

Nc8

NECROPOLIS

DEFINITION:	Structures/burials.
TOPONYM/S:	None.

INTERPRETATION:	<i>Necropolis.</i>
DISTANCE FROM LEP CIS MAGNA:	1,030 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432575 - 3611836 (approx).
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is accessible and visible even if some parts were reburied once excavated.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Dumps within the site and around it.
PREVIOUS STUDIES:	The area has been surveyed and excavated by Roma Tre University Archaeological Mission in collaboration with the DoA of Lepcis Magna and the University of Khoms between 1995 and 1997 (Musso <i>et al.</i> 1996; 1997; 1998).
DESCRIPTION:	<p>The site, located c.100 m W from Wadi er-Rsaf and c.250 m from the sea, revealed the presence of difference funeral enclosures whose NE limit constitutes a common terracing wall toward the seashore and others structures (Ti4). On the contrary, the SW limit of the different enclosures divided them from the main E-W road of the region (Rd1).</p> <p>The excavation revealed the presence of two different enclosures plus a third one to the W enclosing a <i>mausoleum</i> (Ma21). Just SE to this area another quadrangular enclosure (9.6x10.5 m) was characterized by a hypogean tomb (Nc8a), a quadrangular basement whose function is still not clear (Nc8b) and different graves in <i>opus caementicium</i> such two <i>cupae</i> and six "dice-shaped" tombs (Nc8c). In the next SE enclosure (c.5x10 m) with inside a rectangular <i>mausoleum</i> (Ma22), have been found six <i>cupae</i> and four earthen pits (Nc8c). Further SE another funeral area, partially divided from the previous enclosure by an alignment of amphorae, was characterized by two <i>cupae</i>, a small altar and two earthen graves (Nc8c).</p>
STATE OF PRESERVATION:	The site was found in good condition.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Findings; stratigraphic relations; building features.
STRUCTURAL TYPES:	Hypogean tomb; altars; <i>cupae</i> .
BIBLIOGRAPHY:	Musso <i>et al.</i> (1996), 155, 166-168; (1997), 263-265, 284-286; (1998), 201-206.

Nc8a

DISCOVERY/EXCAVATION DATE:	1995-1997.
STRUCTURE DESCRIPTION:	<p>Hypogean tomb with a shaft entrance followed by a <i>dromos</i>; on the left of the shaft the <i>dromos</i> led to the funeral chambers (located c.3.5 m below the ground level). This <i>dromos</i> (1.02x4.64 m) was partially excavated in the bedrock and, for the upper parts, built in <i>opus caementicium</i>. The ceiling was probably characterized by a barrel vault. Along the sides of the <i>dromos</i> were built five semicircular niches and a rectangular one whose function is still not clear (pl. 16D). The shaft was sealed by limestone slabs while the <i>dromos</i> was closed by a limestone shutter assembled when the hypogeum was already partially silted. In the sandy filling of the <i>dromos</i> were found two inhumed related to the last use of the structure. The <i>dromos</i> lead to a central barrel vaulted corridor which gave access to three small funeral rectangular chambers. Along the E side of the corridor and an two sides of the S chambers run a banquette where have been found three inhumed (pl. 16E). On the floor of the same corridor were found also a lead <i>sarcophagus</i> and two earthen graves. Several inhumation were found in the other three chamber and has been also documented the shifting of bodies from their original position to house more burials.</p>
GRAVE GOODS:	<p><u>Pottery</u>:</p> <ul style="list-style-type: none"> - Lamps [?]: types [?] not id. <p><u>Glass</u>:</p> <ul style="list-style-type: none"> - Bottle [1] form not id.; cup [1] form not id. <p><u>Carved bones</u>:</p> <ul style="list-style-type: none"> - Hairpins [?]. <p><u>Metals</u>:</p>

	- Iron strigils [2]; iron knife [1]; gold rings [2].
	<u>Numismatics:</u>
	- Coins [?] not id.
	<u>Cinerary urns/burials:</u>
	- Lead sarcophagus [1] with wood traces.
FUNERAL RITES:	Inhumation [26].
DATATION:	2 nd - 3 rd century AD.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1996), 155, 166; (1997), 263, 284-285, 290-291.

Nc8b

DISCOVERY/EXCAVATION DATE:	1995-1997.
STRUCTURE DESCRIPTION:	A funeral quadrangular basement (c.1.2x1.5 m) were found within a squared enclosure (3.60 m) located in the W corner of the bigger enclosed space where the hypogeum Nc8a together with several graves were found (<i>Gruppo I</i> in Musso <i>et al.</i> 1998). The structure, characterized by limestone ashlar blocks and <i>opus caementicium</i> , could probably support an altar, a small monument or a statue (pl. 16F). Few centimetres S of this structure a squared <i>opus caementicium</i> structure (c.0.7x0.7 m), maybe an altar, has been found.
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	Musso <i>et al.</i> (1996), 155, 166; (1998), 201.

Nc8c

DISCOVERY/EXCAVATION DATE:	1996-1997.
STRUCTURE DESCRIPTION:	Within the excavation area explored between 1996 and 1997 were discovered 10 "cupa-type" tombs and six quadrangular structures containing cremations. The <i>cupae</i> were generally built using irregular stones and lime and covered with a thick layer of plaster often coloured in red. A significant <i>cupa</i> (Tomb 5 in Musso <i>et al.</i> 1997, 289-290) preserved still <i>in situ</i> inserted in the external plaster a marble slab with the inscription mentioning the slave <i>Victor</i> ; moreover, the <i>refrigerium</i> was possible thanks to a series of terracotta <i>tubuli</i> that connected the grave to the exterior. In the E sector was found the biggest <i>cupa</i> (c.2x3 m) built with considerable irregular limestone blocks covered with plaster; next to it another <i>cupa</i> and a small <i>opus caementicium</i> squared altar (pl. 17A). Within the enclosure with the hypogeum (Nc8a) were six quadrangular structures for incinerations made in <i>opus caementicium</i> and covered by plaster. Originally they could have a step profile and inside them the funerary urns; two of them had a circular hole for the <i>refrigerium</i> (pl. 17B).
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [?]: types [?] not id. - Coarse Pottery [3]: bottle [1]; bowl [1]; cup [1]. - Lamps [1]: LOESCHCKE (1919), type IV [1]. - Thin Walled Pottery [2]: mugs [2] form not id. <u>Numismatics:</u> - Bronze coin [1] <i>Lepcis</i> type; coin [1] not id. <u>Cinerary urns:</u> - Marble vase shaped [1]; small amphorae [4]
SPECIAL FINDS:	<u>Inscriptions:</u> - Marble slab. Victor Pescenni- orum circitor annorum vixit n(umero) LV Di(i)s m(anibus) uxor fecit
FUNERAL RITES:	Inhumation [14]; incineration [6].
DATATION:	2 nd - 3 rd century AD.

BIBLIOGRAPHY:

MUSO *et al.* (1997), 264-265, 288-290; (1998), 179, 181, 201-207.

Nc9**NECROPOLIS**

DEFINITION:	Structures
TOPONYM/S:	None.
INTERPRETATION:	<i>Necropolis</i> .
DISTANCE FROM LEPICIS MAGNA:	190 m SSW (approx).
GPS COORDINATES:	WGS 84 33S 0433257 - 3610975 (approx).
ACTUAL LAND USE:	Buildings related to the Lepcis Magna Museum.
VISIBILITY:	The site not visible anymore.
TOPOGRAPHIC POSITION:	Undeterminable.
MODERN INTERFERENCE/S:	Buildings.
PREVIOUS STUDIES:	The <i>necropolis</i> came to light during the post Second World War period and was only briefly mentioned by Vergara Caffarelli (1953) who was able anyway to date its findings between the 1 st and the 2 nd century AD.
DESCRIPTION:	Six different hypogean tombs (Nc9a-Nc9f) together with a <i>columbarium</i> in ashlar blocks (Nc9g) were excavated close N to the Khoms-Lepcis Magna coastal motorway and S of the Severan <i>tetraphylon</i> . No general plan of the site or analysis of their grave goods are available. Probably in the same area a limestone stele, dated from the 2 nd to the 3 rd century AD, was also recorded still <i>in situ</i> with its grave (Nc9h).
STATE OF PRESERVATION:	Not determinable; the site has been probably destroyed by the buildings of the New Museum of Lepcis Magna.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Epigraphic evidences; findings.
STRUCTURAL TYPES:	Hypogean tombs, <i>stela</i> .
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953); FONTANA (1996) 80; <i>IRT727</i> .

Nc9a

DISCOVERY/EXCAVATION DATE:	1947-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953).

Nc9b

DISCOVERY/EXCAVATION DATE:	1947-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953).

Nc9c

DISCOVERY/EXCAVATION DATE:	1947-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953).

Nc9d

DISCOVERY/EXCAVATION DATE:	1947-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953).

Nc9e

DISCOVERY/EXCAVATION DATE:	1947-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953).

Nc9f

DISCOVERY/EXCAVATION DATE:	1947-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953).

Nc9g

DISCOVERY/EXCAVATION DATE:	1947-1953.
STRUCTURE DESCRIPTION:	Hypogean tomb/ <i>colombarium</i> made entirely in limestone ashlar blocks.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	VERGARA CAFFARELLI (1953).

Nc9h

DISCOVERY/EXCAVATION DATE:	Unknown; before 1947.
STRUCTURE DESCRIPTION:	Tomb, probably a earthen grave with a <i>stela</i> .
GRAVE GOODS:	Unknown.
SPECIAL FINDS:	<u>Inscriptions:</u> - Limestone triangular headed <i>stela</i> (IRT 727) inscribed in Rustic capitals within a moulded panel. D(is) M(anibus) s(acrum) Marcia Eutychia vixit ann(os) XXXXVII Cornelius Marsus uxori suae fecit
FUNERAL RITES:	Incineration [?]; inhumation [?].
DATATION:	2 nd - 3 rd century AD.
BIBLIOGRAPHY:	IRT 727.

Nc10**NECROPOLIS**

DEFINITION:	Structures.
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TOPONYM/S:	None.
INTERPRETATION:	<i>Necropolis</i> .
DISTANCE FROM LEP CIS MAGNA:	760 m NW.
GPS COORDINATES:	WGS 84 33S 0432684 - 3611519.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The structures are partially accessible and visible; low vegetation within the site.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The funerary chambers were found already looted; vegetation around the structures.
PREVIOUS STUDIES:	The site was excavated between 1994-1997 by the Nasser University of Khoms in collaboration with the DoA of Lepcis Magna (MABRUK 1998).
DESCRIPTION:	Group of several hypogean chambers found partially looted and different late antique burials. Among the funerary structures, one chamber was described more in detail (MABRUK 1998). The structure of this chamber, made entirely in <i>opus caementicium</i> has a rectangular shape (c.4x5 m) with the entrance (facing W) located on the E side (pl. 17C). The roof was probably barrel vaulted and the walls are preserved in some parts up to the roof. The threshold and the door jambs are in limestone blocks and the recesses for the hinges are still visible. The structure contained two levels of niches: the N and S walls were characterized by four arched niches in the lower level, while the upper level was formed by three larger rectangular niches. The wall facing the entrance (the W side of the structure) has a single central arched niche. The structure should have been covered with plaster, still visible in some parts. A limestone undecorated sarcophagus (1.90 x 0.40 m; H of 0.70 m) was placed inside the funeral chamber, along the W wall.
STATE OF PRESERVATION:	Apart from the ceiling (barrel vaulted), the funeral chamber described (MABRUK 1998) is well preserved. The others funeral chambers are in a worst state of preservation.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPE:	Semi-hypogean; burials.
BIBLIOGRAPHY:	MABRUK (1998).

Nc11

NECROPOLIS

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	<i>Necropolis</i> .
DISTANCE FROM LEP CIS MAGNA:	1,270 m WNW (approx.).
GPS COORDINATES:	WGS 84 33S 0 432061 - 3611308 (approx).
ACTUAL LAND USE:	Residential/commercial area.
VISIBILITY:	The site not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Buildings related to residential/commercial zones.
PREVIOUS STUDIES:	The <i>necropolis</i> was excavated by the DoA of Lepcis Magna (BAKIR 1968).
DESCRIPTION:	Three different funeral chambers/columbaria (Nc11a-Nc11c) were found at short distance from the E limits of the new hospital of Khoms. Unfortunately, both the topographic information and the relationship between the structures are inadequate to permit a proper analysis of the site.
STATE OF PRESERVATION:	The site has been destroyed by modern buildings.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Building features; findings.
STRUCTURAL TYPES:	Hypogean tombs/ <i>columbaria</i> .
BIBLIOGRAPHY:	BAKIR (1968), 202-203.

Nc11a

DISCOVERY/EXCAVATION DATE:	1968.
STRUCTURE DESCRIPTION:	The structure is characterized by a rectangular chamber (1.74x2.82 m) and its floor is c.2 m below modern ground level. All around the walls are niches and c.1.8 m far from the doorway (0.73 wide) is a quadrangular platform (c.1.1 m) that could be used as an altar. Among the findings was found a marble ribbed cinerary urn.
GRAVE GOODS:	<u>Pottery:</u> <ul style="list-style-type: none">- Amphorae [3]: local production [2]; form not id. [1].- Coarse Pottery [12]: bottles [10]; bowl [1]; mug [1].- Lamps [7]: BRONEER (1930), type XXI [1]; LOESCHCKE (1919), type VIII [6]. <u>Glass:</u> <ul style="list-style-type: none">- ISINGS (1957), form 82 [1]; fragments forms not id. <u>Carved bones:</u> <ul style="list-style-type: none">- Spoon [1]; hairpin [1]. <u>Metals:</u> <ul style="list-style-type: none">- Bronze mirrors [2]; bronze handles [2]; several bronze elements related probably to a wooden box; iron nails [7]; iron strigil [1?]. <u>Numismatics:</u> <ul style="list-style-type: none">- Coins [9] not id. <u>Cinerary urns:</u> <ul style="list-style-type: none">- Marble vase-shaped [2]; limestone vase-shaped [1]; limestone coffin-shaped [1].
FUNERAL RITES:	Incineration [?].
DATATION:	AD 50-200.
BIBLIOGRAPHY:	BAKIR (1968), 202-203.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Finding register nr. 1139.

Nc11b

DISCOVERY/EXCAVATION DATE:	1968.
STRUCTURE DESCRIPTION:	The structure is characterized by a square semi-hypogean chamber with two niches on each side.
FUNERAL RITES:	Incineration [?].
DATATION:	AD 50-200.
BIBLIOGRAPHY:	BAKIR (1968), 202-203.

Nc11c

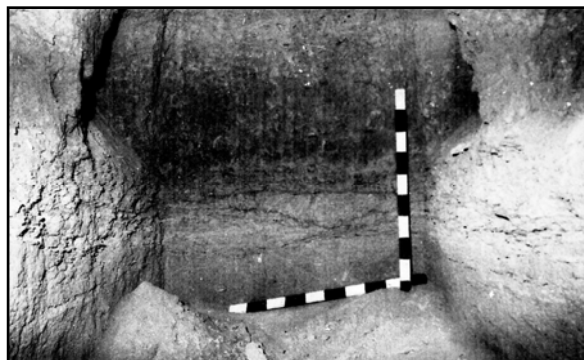
DISCOVERY/EXCAVATION DATE:	1968.
STRUCTURE DESCRIPTION:	The structure was only detected and recognized as a <i>columbarium</i> .
FUNERAL RITES:	Incineration [?].
DATATION:	AD 50-200.
BIBLIOGRAPHY:	BAKIR (1968), 202-203.



A. Hypogean tomb Nc1b: the shaft entrance, 1981
(LMDoA, not. inv.).



B. Hypogean tomb Nc1b: the N side of the vestibule, 1981
(LMDoA, not. inv.).



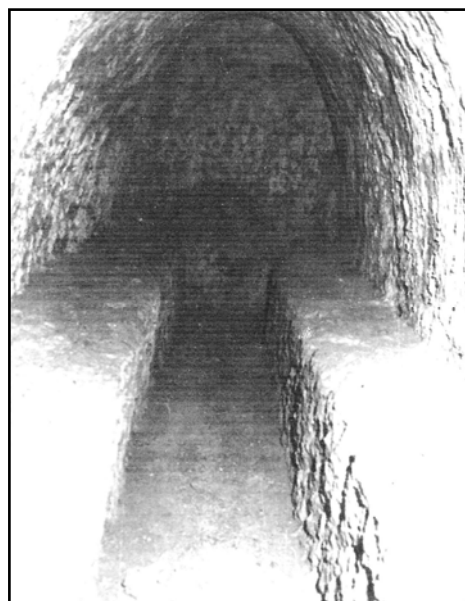
C. Hypogean tomb Nc1b: part of the E chamber, 1981
(LMDoA, not. inv.).



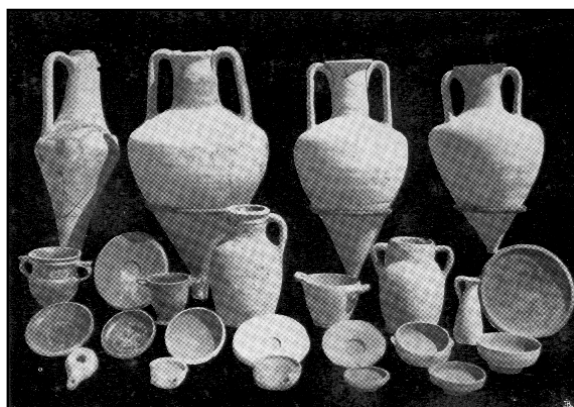
D. Hypogean tomb Nc4c: grave goods (LMDoA, not. inv.).



E. Hypogean tomb Nc4c: grave goods (LMDoA, not. inv.).



F. Hypogean tomb Nc4g: the funeral chamber (LMDoA, not. inv.).



A. Hypogeum Nc5e: grave goods (MERIGHI 1940, I, fig. 1).



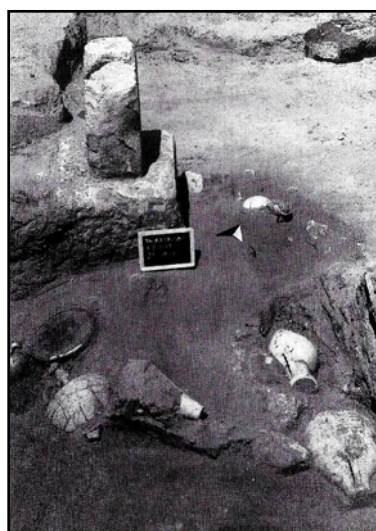
B. Hypogeum Nc7a: *sema* (Musso *et al.* 1997, pl. 135a).



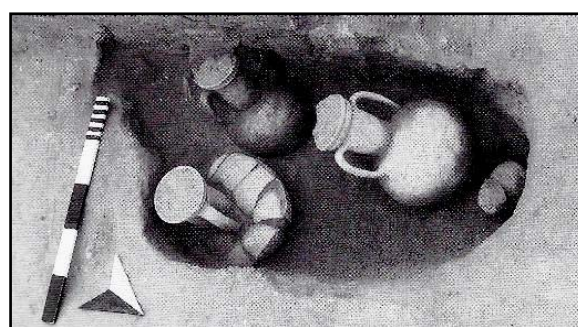
C. Hypogeum Nc7b: view of the grave goods during excavation (Musso *et al.* 1998, pl. 51a).



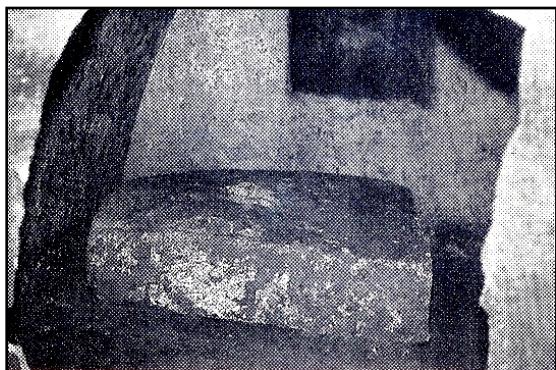
D. Hypogeum Nc7b: view of the grave goods during excavation (Musso *et al.* 1998, pl. 51b).



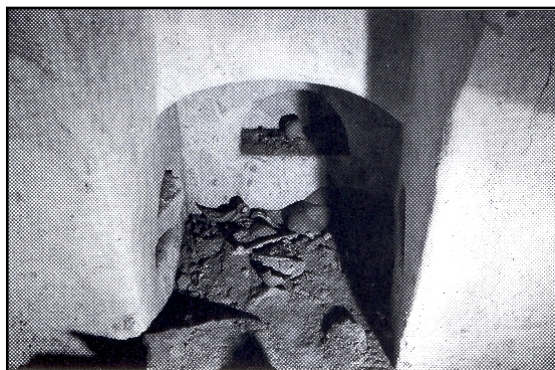
E. *Sema* Nc7c and the close incinerations (Musso *et al.* 1997, pl. 135b).



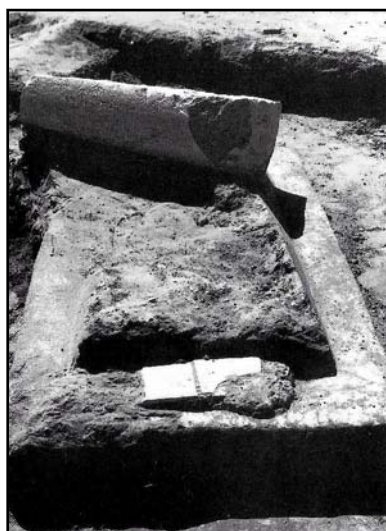
F. Two incinerations in a earthen pit with their grave goods near Nc7d (Musso *et al.* 1998, pl. 53d).



A. Hypogeum Nc7e: the main chamber with the masonry basement (Musso *et al.* 1997, pl. 134c).



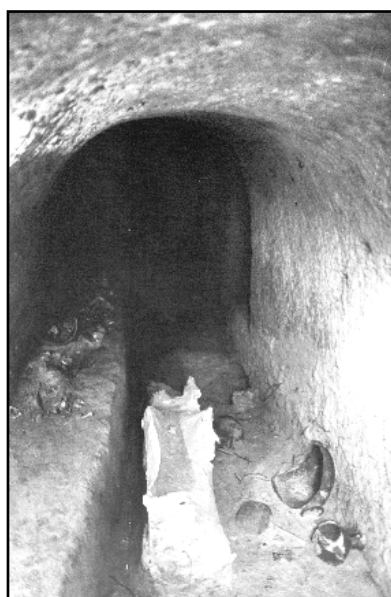
B. Hypogeum Nc7e: the SW chamber (Musso *et al.* 1997, pl. 134a).



C. *Cupa* Nc7g (Musso *et al.* 1997, pl. 136a).



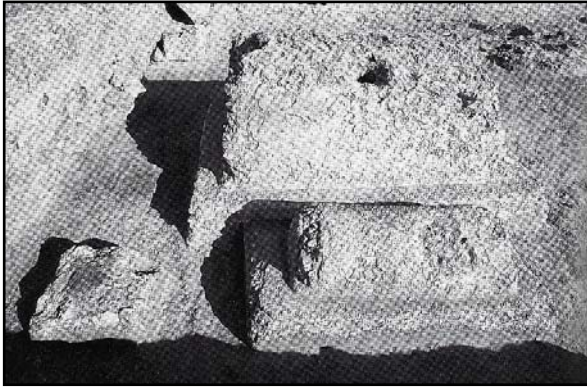
D. Hypogean tomb Nc8a: the shaft entrance and the *dromos* (Musso *et al.* 1997, pl. 137b).



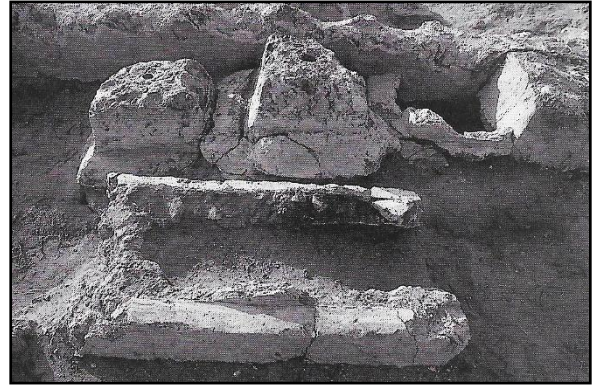
E. Hypogean tomb Nc8a: the main corridor (Musso *et al.* 1997, pl. 138b).



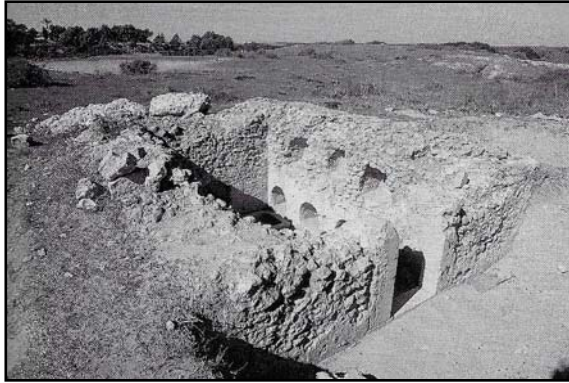
F. Hypogean tomb Nc8a and the SE structure (Nc8b) (Musso *et al.* 1997, pl. 71a).



A. Two *cupae* and a squared altar Nc8c
(Musso *et al.* 1998, pl. 56b).



B. The remains of a *cupa* and two small squared funeral structures
for incinerations Nc8c (Musso *et al.* 1997, pl. 139a).



C. Funeral chamber/*columbarium* Nc10 from S.
(MABRUK 1998, pl. 85a).

Tb1

HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEP CIS MAGNA:	545 m WNW (approx.).
GPS COORDINATES:	WGS 84 33S 0432799 - 3611282 (approx.).
ACTUAL LAND USE:	Paved road/sidewalk.
VISIBILITY:	The site is not visible.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	Road.
PREVIOUS STUDIES:	The tomb was excavated on August the 15 th 1976 during works on the sewage system, about 500 m W of the Old Museum of Lepcis Magna, to the N side of the road that leads to Khoms.
DESCRIPTION:	The hypogean tomb was characterized by a funeral chamber (c.3.5x4.5 m, max. H: 1.3 m). The entrance was via a squared shaft (c. 1.5 m wide).
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 1-150.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	<p><u>Pottery:</u></p> <ul style="list-style-type: none"> - Amphorae [2]: Dressel 2/4 [1]; local production [1]. - Coarse Pottery [79]: bottles [60]; bowls [8]; feeder-vases [4] with strainer; small casseroles [2]; lid [1]; <i>unguentaria</i> [4]. - Lamps [13]: LOESCHCKE (1919), type IV [9], type VIII [4]. - Italian Sigillata [4]: <i>Conspectus</i>, form 4 [1], form 20 [1], form 29 [1], form 32 [1]. - Eastern Sigillata A [5]: <i>Atlante II</i>, form 10 [2], form 39 [2], form 51 [1]. - Eastern Sigillata B [8]: <i>Atlante II</i>, form 4 [3], form 31 [2], form 64b [1], form 70 [2]. - African Red Slip Ware A [2]: HAYES (1972), form 3b [1]; form 8a [1]. <p><u>Glass:</u></p> <ul style="list-style-type: none"> - ISINGS (1957), form 8 [12], form 26 [1], form 28b [3], form 70 [2]; numerous burnt <i>unguentaria</i> forms not id. <p><u>Carved bones:</u></p> <ul style="list-style-type: none"> - Hairpins [7]. <p><u>Metals:</u></p> <ul style="list-style-type: none"> - Bronze mirrors [10]; bronze handle [1]; bronze elements probably related to a wooden box; several bronze nails; iron strigils [2]; numerous lead laces; several iron nails. <p><u>Numismatics:</u></p> <ul style="list-style-type: none"> - Coins [92] not id. <p><u>Cinerary urns:</u></p> <ul style="list-style-type: none"> - Limestone coffin-shaped [72].
FUNERAL RITES:	Incineration [72].
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.); finding register nr. 4430-4742.

Tb2

HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.

INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPCIS MAGNA:	1,450 m NW (approx.).
GPS COORDINATES:	WGS 84 33S 0432257 - 3612095 (approx.).
ACTUAL LAND USE:	Buildings.
VISIBILITY:	The site is not visible.
TOPOGRAPHIC POSITION:	Not determinable.
MODERN INTERFERENCE/S:	«al-Egteham» primary school buildings.
PREVIOUS STUDIES:	An hypogean tomb was found during works made on January 1989 close to the N corner of the primary school «al-Hadi al-Fergiani» (later named «al-Egteham») located c.500 m E of Wadi er-Rsaf and c.200 m from the shore. The tomb and its grave goods were published by the DoA in collaboration with Roma Tre University: ABD AL-RAHMAN <i>et al.</i> (1996).
DESCRIPTION:	The funeral chamber had a irregular rectangular plan (c.2.5x1.3 m) and it was characterized by barrel vault and with a banquette (0.53 m high) on three sides (pl. 18A). Along the long sides there were five semicircular niches: two on the SW side and three on the NE one, while a sixth niche should be on the short NW side. The access to the hypogeum was on the E side and it was characterized by stone lintels found still <i>in situ</i> . The incinerations were housed in the E niches while the two inhumations were found, laid on the floor and with a NE-SW orientation, on the W part of the chamber.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	<p><u>Pottery:</u></p> <ul style="list-style-type: none"> - Amphorae [4]: Dressel 2/4 [2], <i>Benghazi</i>/MR8 [1]; local production [1]. - Coarse pottery [11]: bottles [5]; bowl [1]; basin [1]; lid [1]; casseroles [3]. - Lamps [2]: LOESCHKE (1919), type VIII [1]; BRONEER (1930), type XXI [1]. - African Red Slip Ware A [3]: HAYES (1972) form 3b [1], form 4a [1] form 123 [1]. - Thin Walled Pottery [1]: <i>Atlante II</i>, form I/122 [1]. - Roman Glazed Wares [1]: mug with pinecone embricatures [1]. <p><u>Glass:</u></p> <ul style="list-style-type: none"> - PRICE (1985), form 88 [1]; ISINGS (1957), form 82a [1]. <p><u>Metals:</u></p> <ul style="list-style-type: none"> - Bronze mirror [1]. <p><u>Numismatics:</u></p> <ul style="list-style-type: none"> - Coin [1] not id. <p><u>Cinerary urns:</u></p> <ul style="list-style-type: none"> - Limestone vase-shaped [1]; amphorae [1].
FUNERAL RITES:	Incineration [2]; inhumation [2].
BIBLIOGRAPHY:	ABD AL-RAHMAN <i>et al.</i> (1996).
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Finding register nr. 8077-8095, 8097-8099, 8103, 8142.

Tb3

HYPOGEAN TOMB (GELDA'S TOMB)

DEFINITION:	Structure.
TOPONYM/S:	Gelda's tomb; "Flavian" hypogeum.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPCIS MAGNA:	2,610 m SSW.
GPS COORDINATES:	WGS 84 33S 0431508 - 3609242.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The site is accessible but the entrance is actually locked.

TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Modern structure related to the electricity network.
PREVIOUS STUDIES:	The hypogean tomb was discovered the 14 th May 1973 during works on the electricity network in the area, c.650 SW from the <i>mausoleum</i> of Gasr Gelda (Ma2). The excavation of the two rooms was undertaken by the DoA of Lepcis Magna under the supervision of M.S. Abou-Hamed who, after a first brief report (1974-1975), partially published the tomb (1976-1977). During the nineties the grave goods were studied in depth by the Archaeological Mission of Roma Tre University (DI VITA-EVRARD, FONTANA, MUSSO 1995; DI VITA-EVRARD <i>et al.</i> 1996).
DESCRIPTION:	The hypogean tomb is characterized by a shaft entrance c.3 m deep from ground level; the shaft walls were provided with tacks. From the shaft two similar rectangular chambers with barrel vault (max. H: 1.85 m) are located to the N and to the S. Both the chambers have equal measures (4.70 x 2.70 m) and a low banquette that runs all along the room, except for the entrance sides. Each funeral chamber was provided with ten semicircular niches, four on each long side and two on the short side facing the doorway (pl. 18B-C). The two rooms were originally sealed by limestone slabs, found broken on the floor. The floors like the banquettes, the walls and the ceilings were covered by thin plaster and lime, while the parts decorated with stucco, partially damaged by the humidity, were originally coloured. The stucco decorations divided the walls in different sections: each niche was indeed framed by stucco pilaster topped by different style capitals and then by a continuous architrave. Moreover, each niche was crowned by a stucco arch or by a little triangular or "pagoda style" pediment. These pediments were often decorated by a rosette or palmette ornament like a central <i>acroterion</i> . All the grave goods found in the hypogeum came from the N chamber (pl. 18D; the cinerary urns on the banquette and the three <i>sarcophagi</i> on the floor), while the S room was found empty.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 50-150.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	<p><u>Pottery:</u></p> <ul style="list-style-type: none"> - Amphorae [18]: Schöne Mau XXXV [2]; DRESSEL 2/4 [6]; <i>Benghazi</i> MR1 [6]; DRESSEL 6a [2]; <i>Benghazi</i> MR2 [1], local production [1]. - Coarse pottery [25]: bottles [22]; <i>gutti</i> [2]; basin [1]. - Lamps [2]: BRONEER (1930), type XXI [1]; LOESCHKE (1919), type VIII [1]. - Italian Sigillata [11]: <i>Conspectus</i>, form 19 [1], form 20 [5], form 29 [3], form 32 [1], form 34 [1]. - Eastern Sigillata not id. [2]: <i>oinochoe</i> [1]; cup [1]. - African Red Slip Ware A [1]: HAYES (1972), form 123 [1]. - Thin Walled Pottery [3]: <i>Atlante II</i>, form 2/348 [2], form 1/122 [1]. <p><u>Glass:</u></p> <ul style="list-style-type: none"> - PRICE (1985), form 18 [1], form 28 [1], form 33 [5], form 40 [1], form 41 [1], forms 41/45 [6], form 46 [2], form 47 [2], form 60 [1], form 69 [4], form 88 [1], form 90 [3]; form 93 [1], form 97 [1]; ISINGS (1957), form 41b [1], form 61 [1]. <p><u>Carved bones:</u></p> <ul style="list-style-type: none"> - <i>Kline</i> [2]; hairpin [1]. <p><u>Metals:</u></p> <ul style="list-style-type: none"> - Bronze seats [2]; bronze lanterns [2]; iron strigils [14]; several bronze element probably related to a wooden box. <p><u>Numismatics:</u></p> <ul style="list-style-type: none"> - Bronze coin [1] <i>Lepcis</i> type (1st century BC); Provincial coins [2] (1st century BC - 2nd century AD); Tiberius <i>as</i> [3]; Vespasianus (or Titus) <i>as</i> [1]; Vespasianus <i>quadrans</i>, [1]; Domitian <i>quadrans</i> (or <i>semis</i>) [1]; Trajan <i>quadrans</i> [2]; Hadrian <i>quadrans</i> [4]; <i>quadrans</i> [2] (1st - 2nd century AD); <i>tessera</i> [1] (AD 0-150).

	<u>Other:</u> - Plaster torsos [3].
	<u>Cinerary urns/burials:</u> - Limestone coffin-shaped [4]; limestone vase-shaped [6]; marble vase-shaped [1]; lead <i>sarcophagi</i> [3].
FUNERAL RITES:	Incineration [11]; inhumation [3].
BIBLIOGRAPHY:	ABOU-HAMED, SHAGLOUF, ATEYA (1974-1975), 300-301; ABOU-HAMED (1976-1977); DI VITA-EVRARD, FONTANA, MUSSO (1995); DI VITA-EVRARD <i>et al.</i> (1996); FONTANA (2001), 164, 169; MUNZI <i>et al.</i> (2010), 738.
ARCHIVAL DOCUMENTATION:	<u>Photographs:</u> LMDoA, Photographic Archive (not inv.). <u>Written reports:</u> LMDoA, Excavation report (not inv.); Finding register nr. 3791-3868.

Tb4

HYPOGEAN TOMB (MONTICELLI TOMB)

DEFINITION:	Structure.
TOPONYM/S:	"Monticelli" tomb.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPcis MAGNA:	890 m SSW (approx).
GPS COORDINATES:	WGS 84 33S 0432594 - 3610609 (approx.).
ACTUAL LAND USE:	Residential/commercial zone.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Buildings/road.
PREVIOUS STUDIES:	The tomb was discovered in 1916 c.200 m NW of the "Monticelli" Italian stronghold. Several years later, Romanelli (1925a) described the structure, probably basing on the original excavation report (now missing). Since then the hypogeum was not seen.
DESCRIPTION:	The hypogean tomb was described in detail by Romanelli (1925a). The structure was composed by two adjoining chambers, probably originally separated and then unified with a corridor. The entrance to the W chamber (and then to the other one) was on the N side and was characterized by a short <i>dromos</i> at the end of which there was still <i>in situ</i> a limestone two shutter door with a lock whose stone hinges were secured in the threshold and in the architrave. On the limestone architrave there was a space to accommodate the inscription, unfortunately not found. Inside the tomb, a thirteen step staircase protruding into the chamber allowed access to the floor (pl. 18E). The chamber had a squared plan (3.5x3.5 m) with a cross vault ceiling; both the walls and the vault were covered by a sandy-lime white plaster. A big stucco rosette with acanthus leaves was in the middle of the vault while an acanthus leaf decorated each corner of the same cross-vault. On each side except for the E one, two large niches were excavated at the floor level. All the six niches had irregular shapes (c.1 m wide and from 1.6 to 3 m long). On the E side, instead of the niches, there was a corridor (c.1 m wide) that lead to the other funeral chamber whose sealed entrance, on the S side, was characterized by a staircase that lead to the floor level. This E chamber had a different shape from the previous one: it was composed of a narrow corridor (less than 1 m) on which sides were eight perpendicular <i>loculi</i> (each of these c.0.5 m deep and from 1.5 to 2 m long). Some irregular niches and two different little rooms with a continuous banquette were located on the sides of the staircase.
OBSERVATIONS:	Romanelli (1925a) hypothesized also the presence of a funeral enclosure. However, it is not clear if he was able to recognize some archaeological evidence or not.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 100-250.
DATING ELEMENT/S:	Findings; building features.

STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	<u>Pottery</u> : - Amphorae [3]: types [3] not id. - Coarse Pottery: bottles [12]. <u>Cinerary urns</u> : - Limestone coffin-shaped [4]; limestone vase-shaped [3].
FUNERAL RITES:	Incineration [7]; inhumation [12].
BIBLIOGRAPHY:	ROMANELLI (1925a), 158-160, figs 87-88; BARTOCCINI (1926), 29, fig. 29; MERIGHI (1940), II, 144.
ARCHIVAL DOCUMENTATION:	<u>Written reports</u> : TDoA, Drawings Archive (not inv.).

Tb5 HYPOGEAN TOMB (MONTICELLI TOMB)

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPICIS MAGNA:	805 m SSW (approx).
GPS COORDINATES:	WGS 84 33S 0432711 - 3610599 (approx.).
ACTUAL LAND USE:	Residential/commercial zone.
VISIBILITY:	The structure is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Buildings.
PREVIOUS STUDIES:	The tomb was discovered in 1922 c.250 m N from the Italian stronghold "Forte dei Monticelli" and c.100 m E from another hypogeum (Tb4). Romanelli (1925a) was the only scholar who was able to explore the site even if partially covered by soil.
DESCRIPTION:	Hypogean tomb characterized on the ground level by an enclosure (c.3.8x15 m) composed by a irregular shape limestone walls. In a central position, in front of the access is a squared masonry platform (each side 0.92 m long) probably used to house an altar or a <i>signaculum</i> . The hypogeum entrance was characterized by a staircase that lead to a shaft with tacks on the sides. The tomb had four different rooms with a vaulted barrel ceiling and arches along the sides. One of the chambers was located under the staircase (2.3x2.65 m) and the other three rooms on the opposite side (2.65x2.10 m, 2.65x1.9 m and 2.65x1.7 m). However, due to the presence of soil inside the chambers, it was not possible to determine the existence of niches or banquettes along the walls.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 50-250.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPES:	Hypogean tomb with funeral enclosure.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Unknown.
BIBLIOGRAPHY:	ROMANELLI (1925a), 160-161; MERIGHI (1940), II, 144.

Tb6 HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.

INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPCIS MAGNA:	1,010 m ESE.
GPS COORDINATES:	WGS 84 33S 0434231 - 3610673.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The funeral enclosure is visible but the hypogeum is not accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The tomb was discovered the 1 st May 1975 c.350 m W of the <i>mausoleum</i> of Gasr Shaddad (Ma15).
DESCRIPTION:	Hypogean tomb; details of the structure unknown. On the ground level are still visible some archaeological evidence (limestone blocks and a mound of soil) related probably to the funeral enclosure (c.15x18 m) visible also in the RAF air-photographs of the forties in which seems that the entrance to the quadrangular structure is looking towards SW.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 100-150.
DATING ELEMENT/S:	Findings.
STRUCTURAL TYPES:	Hypogean tomb with funeral enclosure.
GRAVE GOODS:	<u>Pottery:</u> <ul style="list-style-type: none"> - Amphorae [3]: <i>Benghazi</i> MR1 [1]; local production [1]; type [1] not id. - Coarse Pottery [3]: types [3] not id. - Lamps [6]: BRONEER (1930), type XXI [1]; LOESCHCKE (1919), type Ib [1], type VIII [3]. - African Red Slip Ware A [1]: HAYES (1972), form 160 [1]. - Thin Walled Pottery [1]: <i>Atlante II</i>, form I/123 [1]. <u>Other:</u> <ul style="list-style-type: none"> - Limestone <i>stela</i> [1] with <i>togatus</i>. <u>Cinerary urns:</u> <ul style="list-style-type: none"> - Limestone coffin-shaped [2]; limestone vase-shaped [2]; amphorae [1].
FUNERAL RITES:	Incineration [5]; inhumation [1].
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Air photographs:</u> BSR, WP G11-62; ASLS, <i>Leptis magna 24998</i> . <u>Written reports:</u> LMDoA, Finding register nr. 7967-7999.

Tb7

HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPCIS MAGNA:	1,370 m ESE.
GPS COORDINATES:	WGS 84 33S 0434562 - 3610544.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The hypogeum is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The tomb was discovered the 29 th July 1981 c.100 m S of the <i>mausoleum</i> of Gasr Shaddad (Ma15).
DESCRIPTION:	Hypogean tomb characterized by a quadrangular shaft entrance wide c.1.2 m sealed by limestone slabs. The funeral chamber is on the E and has an elliptical plan (3.3x1.65 m, max. H: c. 0.9 m.).
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 50-150.

DATING ELEMENT/S:	Building features; findings.
STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	<u>Pottery</u> : - Amphorae [7]: types [7] not id. - Coarse Pottery [9]: bottles [5]; bowls [2]; casseroles [2]. - Lamps [1]: type [1] not id. <u>Cinerary urns</u> : - Limestone coffin-shaped [4]; amphorae [?].
FUNERAL RITES:	Incineration [4+].
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports</u> : LMDoA, Drawings Archive (not inv.); Excavation report (not inv.).

Tb8 HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPCIS MAGNA:	1,490 m E (approx).
GPS COORDINATES:	WGS 84 33S 0434813 - 3610976.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The hypogeum is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The tomb was discovered in 1958 S of the so called <i>Villa del Nilo</i> (VI2) and was mentioned by Di Vita (1968) who described the painted amphorae found in the hypogeum.
DESCRIPTION:	Hypogean tomb; details of the structure unknown.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 1-50.
DATING ELEMENT/S:	Findings.
STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	<u>Pottery</u> : - Amphorae [2]: <i>Benghazi</i> ERA1 [2]. - Italian Sigillata [?]: forms [?] not id. Numismatics: - Coins [?] age of Augustus and Tiberius. <u>Cinerary urns</u> : - Limestone coffin-shaped [4]; amphorae [?].
FUNERAL RITES:	Incineration [4+].
BIBLIOGRAPHY:	DI VITA (1968), 58-61; <i>IPT</i> 63-66.

Tb9 HYPOGEAN TOMB (HÔD EL-MOGHÂRAH)

DEFINITION:	Structure.
TOPONYM/S:	Hôd el-moghârah.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPCIS MAGNA:	1,495 m ESE (approx).

GPS COORDINATES:	WGS 84 33S 0434725 - 3610599 (approx.).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The hypogeum is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Electricity pylons.
PREVIOUS STUDIES:	The tomb was located S of the Italian stronghold <i>Vittorio Emanuele</i> , near Gasr Shaddad (Ma15). The hypogeum was described by Romanelli (1925a) and Bartoccini (1926) with plans and sections. Probably the tomb, that Romanelli found already opened, is the one mentioned in the <i>Ruine Leptis Magnae</i> map edited by Müller (1855) with the term "cenotaph".
DESCRIPTION:	The hypogeum had probably a <i>dromos</i> entrance and, above the architrave was placed a limestone <i>sarcophagus</i> (2.51 x 1.32 x 1.29 m) with the pitched cover and <i>acroteria</i> at the corners (pl. 18F). The structure, built entirely in limestone ashlar blocks, was discovered completely fill by soil. The hypogeum was characterized by a short corridor (1.8x1.25 m) with some steps and a quadrangular chamber (5.42x4.3 m) with probably some niches on the walls. The ceiling was barrel vaulted with a plastered moulding on the springer.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 50-200.
DATING ELEMENT/S:	Building features.
STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Incineration [?]; inhumation [?].
BIBLIOGRAPHY:	ROMANELLI (1925a), 161-162, fig. 89; BARTOCCINI (1926), 43, fig. 64.
CARTOGRAPHY:	MÜLLER (1855), tav. XXI (<i>cenothap</i>).

Tb10

HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEP CIS MAGNA:	715 m SSE.
GPS COORDINATES:	WGS 84 33S 0433674 - 3610493.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The hypogeum is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Road; sewage network.
PREVIOUS STUDIES:	The tomb was discovered in 1999 c.20 m N to the modern motorway Khoms-Lepcis Magna and c.200 m E from Wadi Lebda.
DESCRIPTION:	Hypogean tomb with a shaft entrance sealed with two limestone slabs (pl. 19A). The shaft was c.2,5 m deep with tacks on its sides. To the W, a corridor (c.1.3x0.7 m) with five steps led to a rectangular barrel vaulted funeral chamber (c.5.1x2.9 m) with 15 niches and a banquette on each of the four sides of the room (pl. 19B-C). The barrel vaulted niches (c.0.5x0.5 m, max. H: 0.8 m) were framed by stucco columns and by a moulding along the arches. Also the architrave of the doorway to the funeral chamber as the impost of the vault were decorated by a stucco moulding. The chamber, the corridor and the shaft were painted in white, while part of the moulding were highlighted in red.
STATE OF PRESERVATION:	Not determinable.
CHRONOLOGY:	AD 1-150.
DATING ELEMENT/S:	Findings; building features.

STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [17]: Dressel 2/4 [16]; local production [1]. - Coarse pottery [7]: bottles [7]. - Lamps [2]: types [2] not id. <u>Glass:</u> - Vase [1] form not id.; ISINGS (1957), form 26 [1], form 28b [1]. <u>Metals:</u> - Bronze mirror [1]. <u>Cinerary urns:</u> - Limestone coffin-shaped [17]; limestone vase-shaped [2]; alabaster vase-shaped [1]; glass vase-shaped [1].
FUNERAL RITES:	Incineration [21].
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Photographs:</u> LMDoA, Photographic Archive (not inv.).

Tb11 HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEP CIS MAGNA:	4,105 m SSW.
GPS COORDINATES:	WGS 84 33S 0431883 - 3607278.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The hypogeum is buried today.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Dump around and inside the structure. Water pipes has been placed close to the site to irrigate the near land.
PREVIOUS STUDIES:	The tomb has been surveyed recently by the Archaeological Mission of Roma Tre University (KHM 154).
DESCRIPTION:	Hypogean tomb located c.400 m S of Wadi es-Smara and c.180 N of the remains of a <i>villa</i> (VI56), probably connected to the tomb. The funeral chamber/s is/are not accessible but there is still <i>in situ</i> a limestone slab (1.7x0.6 m and thick c.0.25 m) that originally sealed the tomb; the other similar slab has been removed and lies next to the access (pl. 19D). The interior is full of soil but both the limestone architrave and the lintels of the doorway (c.0.7 m wide) are visible (pl. 19E). Subsequently, above the chamber/s were built a mortar floor and different walls around the hypogeum probably above its original enclosure (c.6x6 m, see pl. 19F).
STATE OF PRESERVATION:	The site, even if it is not accessible, seems to be well preserved.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Relationship with near dated sites (VI56); building features.
STRUCTURAL TYPES:	Hypogean tomb.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Unknown.
BIBLIOGRAPHY:	Unpublished.

Tb12**HYPOGEAN TOMB**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEP CIS MAGNA:	955 m NW (approx.).
GPS COORDINATES:	WGS 84 33S 0432529 - 3611641 (approx).
ACTUAL LAND USE:	Uncultivated land, road.
VISIBILITY:	The hypogeum is not visible anymore because it has been covered by soil during the construction of a modern tarmac road.
TOPOGRAPHIC POSITION:	Undeterminable.
MODERN INTERFERENCE/S:	Road; terrain leveling.
PREVIOUS STUDIES:	The hypogean tomb was discovered and excavated by the DoA of Lepcis Magna the 1 st April 1976 N of the Khoms - Lepcis Magna coastal motorway, close to Wadi er-Rsaf.
DESCRIPTION:	The only information related to the tomb come from the excavation report of the DoA of Lepcis Magna that mentions the structure as characterized by a single room; no further data are given.
STATE OF PRESERVATION:	Probably destroyed.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Findings; building features.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [3]: <i>Benghazi</i> LR10 [1]; imported types [2] not id. - Coarse Pottery [1]: bowl [1]. - Lamps [4]: LOESCHCKE (1919), type IV [2], type VIII [2]. <u>Glass:</u> - Form [1] not id. <u>Carved bones:</u> - Hairpin [1]. <u>Metals:</u> - Bronze needle [1]; bronze mirrors [3]; iron nails [2]. <u>Numismatics:</u> - Bronze coins [8] not id.
FUNERAL RITES:	Inhumation [?]; incineration [?].
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.); Finding register nr. 3945-3960.

Tb13**HYPOGEAN TOMB**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEP CIS MAGNA:	760 m WNW (approx.).
GPS COORDINATES:	WGS 84 33S 0432592 - 3611369 (approx).
ACTUAL LAND USE:	Commercial/residential zone; road.
VISIBILITY:	The hypogeum is not visible anymore.
TOPOGRAPHIC POSITION:	Undeterminable.
MODERN INTERFERENCE/S:	Buildings.
PREVIOUS STUDIES:	The hypogean tomb were discovered and excavated by the DoA of Lepcis Magna on January 1978 close to the modern coastal road that lead to Khoms.

DESCRIPTION:	Hypogean tomb with a shaft entrance that led to a rectangular funeral chamber (5.20x2.15 m, max. H of 1.8 m) with a barrel vault ceiling. At c.40 cm from the floor and along all the sides of the chamber, run a banquette on which are 14 semicircular niches. On the E corner of the chamber was excavated another irregular room characterized by two exedras, one of which had two niches (c.0.7x0.5 m).
STATE OF PRESERVATION:	Undeterminable.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Findings; building features.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [14]: Schöne Mau XXXV [1]; <i>Benghazi</i> MR1 [2]; local production [3]; types [8] not id. - Coarse Pottery [6]: casserole [1]; lid [1]; forms [4] not id. - Lamps [11]: LOESCHKE (1919), type IV [9], types [2] not id. - African Red Slip Ware A [4]: HAYES (1972), form 3a [1], form 5a [1], form 8a [2]. <u>Glass:</u> - Cups/mugs [11] forms not id. <u>Metals:</u> - Bronze mirrors [7]; bronze hairpins [?]. <u>Cinerary urns:</u> - Limestone coffin-shaped [29]; limestone vase shaped [2]; amphorae [?].
FUNERAL RITES:	Incineration [31+].
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.); Drawings Archive (not inv.); Finding register nr. 5060-5248.

Tb14

HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPIS MAGNA:	1,755 m NW (approx.).
GPS COORDINATES:	WGS 84 33S 0431970 - 3612233 (approx).
ACTUAL LAND USE:	Residential/uncultivated land.
VISIBILITY:	The hypogeum is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Buildings.
PREVIOUS STUDIES:	The hypogean tomb has been discovered and excavated by the DoA of Lepcis Magna in 1973 between the building of the barrack W of Wadi er-Rsaf (necropolis Nc1) and the Wadi Zennad, W of Khoms.
DESCRIPTION:	Hypogean tomb with shaft entrance that lead to a rectangular chamber with banquettes on all sides. Along the long sides of the chamber there were two semicircular niches.
STATE OF PRESERVATION:	Undeterminable.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Findings; building features.
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [14]: Dressel 2/4 [3]; Schöne Mau XXXV [1]; <i>Benghazi</i> MR1 [6]; local production [2]; types [2] not id. - Coarse Pottery [8]: bottles [8]. - Lamps [18]: LOESCHKE (1919), type IV [5], types VIII [13]. - African Red Slip Ware A [5]: SALOMONSON (1968), form fig. 20 A14 [1], dishes [2] form not id; bowls [2] form not id.

	<u>Glass:</u>
	- ISINGS (1957), form 8 [1]; form 82 [2]; fragments forms [?] not id.
	<u>Metals:</u>
	- Bronze mirror [1]; bronze elements [2] not id.; iron strigils [3].
	<u>Numismatics:</u>
	- Bronze coins [17] not id.
	<u>Cinerary urns:</u>
	- Limestone coffin-shaped [13]; limestone vase shaped [6]; amphorae [3].
FUNERAL RITES:	Incineration [19+].
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Written reports:</u> LMDoA, Excavation report (not inv.); Finding register nr. 439-514.

Tb15 HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Semi-hypogean funeral chamber.
DISTANCE FROM LEP CIS MAGNA:	1,215 m NW.
GPS COORDINATES:	WGS 84 33S 0432399 - 3611900.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The structure is inside a fenced area.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Few meters S are buildings related to a barrack; vegetation around the structure.
PREVIOUS STUDIES:	Concurrently with the construction of the N gate of the barrack buildings in 1997, the area was surveyed and the ancient structure excavated by Roma Tre University in collaboration with the DoA of Lepcis Magna (CIFANI <i>et al.</i> 2008).
DESCRIPTION:	The structure is characterized by a rectangular semi-hypogean chamber (4.64x3.74 m oriented NW-SE) with the entrance, formed by a 3 step <i>dromos</i> , on the NW side. Just ahead of the <i>dromos</i> has been found a quadrangular <i>opus caementicium</i> structure (c.1x1 m) that may have used as an altar. The funeral chamber was built digging the bedrock and using, for the upper parts, the <i>opus caementicium</i> technique. Inside the chamber a continuous banquette is preserved on all sides, while two niches are located in the bottom side (to the E) and three on the lateral walls. The floor was characterized by the bedrock with no coating. The walls were instead covered by white plaster and traces of red and green colours used to frame the niches are still visible. The roof is not preserved but should be barrel vaulted and made in <i>opus caementicium</i> . Inside the funeral chamber were found both cremations and inhumations for a total of, at least, ten bodies.
STATE OF PRESERVATION:	Apart from the ceiling (collapsed), the structure is well preserved.
CHRONOLOGY:	AD 80-150.
DATING ELEMENT/S:	Findings; building features.
STRUCTURAL TYPE:	Semi-hypogean <i>colombarium</i> .
GRAVE GOODS:	<u>Pottery:</u> - Amphorae [16]: Dressel 2/4 [7]; Sant'Arcangelo [1]; Forlimpopoli [1]; <i>Benghazi</i> MR1 [1]; Shōne Mau XXXV [1]; local production [5]. - Coarse Pottery [16]: bottles [10]; small amphorae [1]; bowls [2]; lids [2]; basin [1]. - Lamps [2]: LOESCHCKE (1919), type VIII [2]. <u>Carved bones:</u> - Hairpins [3]. <u>Glass:</u> - ISINGS (1957) form 8 [18], form 28a [1], form 70 [1]; glass paste necklace element [1].

	<u>Metals:</u> - Iron strigils [15]; iron nails [?]; lead lace [1].
	<u>Numismatics:</u> Bronze coin [1] not id.; <i>semis</i> [1] (1 st century BC); Tiberius <i>as</i> [1]; Augustus-Tiberius <i>semis</i> [1]; Domitian <i>semis</i> [1]; Trajan <i>quadrans</i> [1]; Hadrian <i>quadrans</i> [1]; <i>quadrans</i> AD 75-150 [1]; <i>quadrans</i> [1] (1 st - 2 nd century AD).
SPECIAL FINDS:	<u>Inscriptions:</u> - White marble slab, not pertinent to the tomb. _ _ _ _ _ / [---]ou+[---] / _ _ _ _ _ - Limestone cinerary urn, not pertinent to the tomb. [---]nis
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1998), 183; CIFANI <i>et al.</i> (2008).

Tb16 HYPOGEAN TOMB

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Hypogean tomb.
DISTANCE FROM LEPICIS MAGNA:	3,005 m NW.
GPS COORDINATES:	WGS 84 33S 0431429 - 3613452.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Around the site have been built several constructions; garbage inside the funeral chamber.
PREVIOUS STUDIES:	The site has been surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	Circa 40 m S from the Khoms lighthouse is an hypogean tomb with E-W orientation and entirely dug in the limestone bedrock. The entrance has moulded jambs and a tympanum above the architrave with probably a Tanit symbol carved on it. The funeral chamber is full of soil and has a rectangular plan.
STATE OF PRESERVATION:	The hypogean tomb is well preserved even if its interior has not been explored.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Building features.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Unknown.
BIBLIOGRAPHY:	Unpublished.

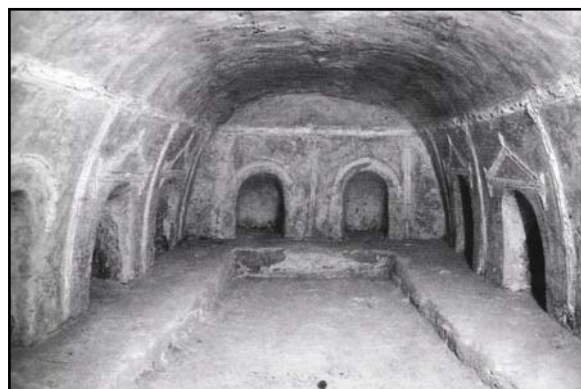
Tb17 EARTHEN BURIAL

DEFINITION:	Burial.
TOPONYM/S:	None.
INTERPRETATION:	Tomb.
DISTANCE FROM LEPICIS MAGNA:	720 m NE.
GPS COORDINATES:	WGS 84 33S 0433903 - 3611547.
ACTUAL LAND USE:	The burial has been found c.3-5 m beneath the actual ground level of the Roman Old Forum flooring.

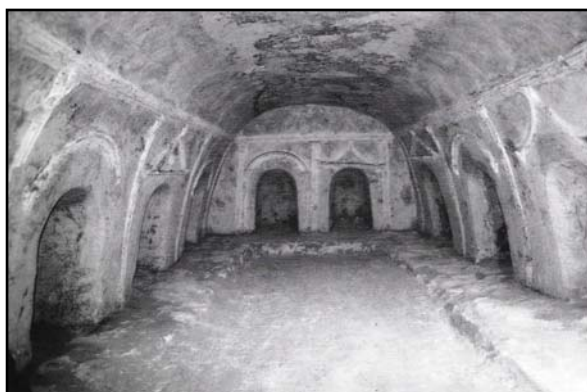
VISIBILITY:	The excavation site is not visible anymore.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The tomb has been excavated in 1960-1961 by the American University of Philadelphia during the exploration of the Phoenician and Punic levels of the city (in the Old Forum area). The scientific results of the excavation were partially published (HOWARD CARTER 1965).
DESCRIPTION:	The information related to the burial are scarce and it is not clear if it has been excavated or just detected. It has been described as a "well-built oblong stone slab tomb" (HOWARD CARTER 1965, 126). The stratigraphic relationship suggests to date the burial around the second half of the 6 th century BC.
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	550-500 BC.
DATING ELEMENT/S:	Stratigraphic relationship.
GRAVE GOODS:	Unknown.
FUNERAL RITES:	Inhumation [?].
BIBLIOGRAPHY:	HOWARD CARTER (1965), 126, pl. 31.3; DE MIRO, POLITO (2005), 123.



A. Hypogean tomb Tb2: the funeral chamber from NW
(ABD AL-RAHMAN *et al.* 1996, pl. 58a).



B. Hypogean tomb Tb3: the N funeral chamber
(DI VITA-EVRARD *et al.* 1996, pl. 32a).



C. Hypogean tomb Tb3: the S funeral chamber
(DI VITA-EVRARD *et al.* 1996, pl. 32b).



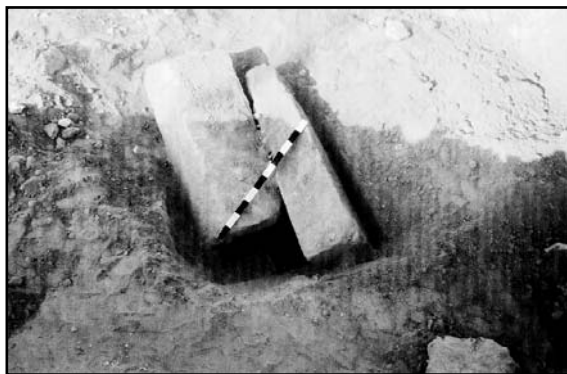
D. Hypogean tomb Tb3: the N chamber when discovered
(DI VITA-EVRARD *et al.* 1996, pl. 36).



E. Hypogean tomb Tb4: the N doorway (ROMANELLI 1925a, fig. 87).



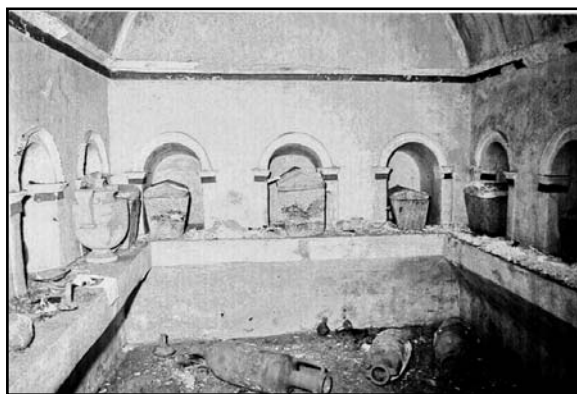
F. Hypogean tomb T9: the entrance to the funeral chamber and the large limestone *sarcophagus* (ROMANELLI 1925a, fig. 89).



A. Hypogean tomb Tb10: limestone slabs that sealed the structure (LMDoA, not. inv.).



B. Hypogean tomb Tb10: the NE sector of the funeral chamber (LMDoA, not. inv.).



C. Hypogean tomb Tb10: the W side of the funeral chamber (LMDoA, not. inv.).



D. Hypogean tomb Tb11: the entrance to the structure sealed by limestone slabs, 2013 (Photo: A. Zocchi).



E. Hypogean tomb Tb11: the doorway to the funeral chamber/s, 2013 (Photo: A. Zocchi).



F. Hypogean tomb Tb11: the later enclosure (from N) that probably overlapped the ancient one, 2013 (Photo: A. Zocchi).

FU1 - FU3

SCULPTURES

Three funerary sculptures have been discovered in addition to those that have been found within the funerary sites. All three finds are related to Iconic statues (*Grande Ercolanese* and *Pudicitia* types) and have been found in the W sector of Lepcis Magna, between Wadi er-Rsaf and Wadi Zennad and surely related to the nearby *necropolis* and *mausolea*. Some other sculptural finds related to the Lepcitanian funerary landscape are preserved in several Museums; unfortunately their findspots cannot be determined.

Fu1

DISCOVERY/EXCAVATION DATE: February 1968.
GPS COORDINATES: WGS 84 33S 0432677 - 3611754 (approx).
DESCRIPTION: White marble female statue with *capite velato* found at the mouth of Wadi er-Rsaf, c.300 m W of the Haunting Baths (En1). The sculpture belongs to the *Grande Ercolanese* type and probably was assembled into a *mausoleum* (pl. 20A).
DATATION: AD 100-150.
BIBLIOGRAPHY: BAKIR (1968), 202, pl. 82c; BIANCHI, EQUINI SCHNEIDER (1990), 796-797, pls III-V; ABD AL-RAHMAN *et al.* (1996), 146-147, pl. 63a; BUCCINO (2014), 33, fig. 31.

Fu2

DISCOVERY/EXCAVATION DATE: January 1989.
GPS COORDINATES: WGS 84 33S 0432255 - 3612119 (approx).
DESCRIPTION: White marble *acephalous* female statue found few metres N of an hypogean tomb (Tb2). The sculpture is partially ruined and its back side is un-worked since abutted to a structure. The statue belongs to the *Grande Ercolanese* type and probably was assembled into a *mausoleum* (pl. 20B).
DATATION: AD 190-225.
BIBLIOGRAPHY: ABD AL-RAHMAN *et al.* (1996), 142-149, pl. 62a-d.

Fu3

DISCOVERY/EXCAVATION DATE: Unknown; before 1927.
GPS COORDINATES: WGS 84 33S 0431725 - 3612388 (approx).
DESCRIPTION: White marble female statue found along the Wadi Zennad. It belongs to the *Pudicitia-Cerere* type and probably was assembled into a *mausoleum* even if some attributes (a bunch of wheat and poppies on one hand) could suggest a different destination maybe related to the close *villae* explored toward the seashore (VI4, VI5).
DATATION: AD 125-150.
BIBLIOGRAPHY: BARTOCCINI (1929), 166-167, figs 178-180; BIANCHI, EQUINI SCHNEIDER (1990), 797-799, pl. VII; ABD AL-RAHMAN *et al.* (1996), 145; BUCCINO (2014), 34, figs 33-34.

FU4 - FU8

ARCHITECTURAL ELEMENTS

Two different areas, located both E from the Wadi Lebda and SE of Lepcis Magna, preserved clear evidences of funeral structures reused in later buildings. Some architectural elements related to *mausolea* (Fu4) were indeed used to build the Late antique wall (Wa3) especially in the sector between Gasr Shaddad (Ma15) and the Severan harbour. Other different funeral elements are scattered on the ground; some of them (Fu5) lie within a quadrangular area close to Late antique wall (Wa3), between the structures of Gasr er-Riyâhî (Ma16 - Ma17) and Gasr Shaddad (Ma15) while a fragment of limestone spiral (Fu6) is visible S of Gasr Shaddad (Ma15) at short distance from the Late antique wall traces. Other architectural elements of *mausolea* (moulded bases Fu7, Fu8) were instead reused within a *gasr* (Gs19) or within a farm (Fa11).

Fu4

GPS COORDINATES:	WGS 84 33S 0434611 - 3610842.
DESCRIPTION:	Along the traces of the Late Antique wall (Wa3), c.200 m N of Gasr Shaddad (Ma15), are the remains of some decorated architectural elements reused in the defensive structure; among these two fragments of different limestone doors (pl. 20C) are surely related to <i>mausolea</i> while for some other elements like a Corinthian capital, moulded bases and cornices the funeral provenience is plausible but not certain.
DATATION:	AD 50-300.
BIBLIOGRAPHY:	Unpublished.

Fu5

GPS COORDINATES:	WGS 84 33S 0434264 - 3610441.
DESCRIPTION:	About 150 m N of Gasr er-Riyâhî (Ma16 - Ma17) is an area characterized by many architectural elements rearranged in a quadrangular enclosure doubtless in a post-antique phase but probably overlay a previous site. Among the numerous architectural limestone elements (fragments of bases, cornices and column shafts) and marble/granite fragments of column shafts, are some limestone carved blocks surely referred to funeral structures like a Doric frieze with rosettes and a band between them (pl. 20D), the upper part of a conical covering with smooth imbrications (pl. 20E) and a Corinthian type capital whose details are unfortunately hardly legible (pl. 20F).
DATATION:	AD 50-300.
BIBLIOGRAPHY:	Unpublished.

Fu6

GPS COORDINATES:	WGS 84 33S 0434481 - 3610548.
DESCRIPTION:	Limestone left spiral fragment (pl. 21A) located c.140 m S of Gasr Shaddad (Ma15) within a small low hill near the Late Antique wall (Wa3). The decoration is related certainly to a funeral structure and seem similar to the one found at the foot of a <i>mausoleum</i> at Khoms (Ma25 and pl. 12A). For comparison: MAHLER (2006), cat. 923 S.
DATATION:	AD 50 - 300.
BIBLIOGRAPHY:	Unpublished.

Fu7

GPS COORDINATES:	WGS 84 33S 0429692 - 3608127.
DESCRIPTION:	Two limestone moulded bases belonging to the same structure (pl. 21B), surely a <i>mausoleum</i> , have been reused within the main walls of Gasr Hammud (Gs19), c.4.5 km SW of Lepcis Magna.
DATATION:	AD 100-300.
BIBLIOGRAPHY:	Unpublished.

Fu8

GPS COORDINATES:	WGS 84 33S 0427567 - 3612512.
DESCRIPTION:	A limestone molded base, originally used in <i>mausoleum</i> , has been found reused within the area of an ancient farm (Fa11) located c.6 km W of Lepcis Magna (pl. 21C).
DATATION:	AD 100-300.
BIBLIOGRAPHY:	Unpublished.

Fu9 - Fu23**INSCRIPTIONS AND *SIGNACULA***

Numerous funerary inscriptions and *signacula* with inscriptions were found in the suburban and periurban areas of Lepcis

Magna; unfortunately, the localization of their find is often inaccurate. The funerary inscriptions are carved on bases or pedestal or on framed or unframed limestone blocks used for *mausolea*, rarely on limestone or marble slabs. Beside two inscriptions located near the Wadi Zennad (Fu11), four inscriptions (Fu12) near Gasr Gelda (Ma2) and some inscriptions found in the Khoms area (Fu18, Fu21, Fu22), most of the finds are recorded in the E and W sector of the Iepcitanian suburb.

Fu9

DISCOVERY/EXCAVATION DATE:	1997.
GPS COORDINATES:	WGS 84 33S 0432438 - 3611878 (approx).
DESCRIPTION:	Between the barrack buildings and the modern coastal road, c.40 m SE from a semi-hypogean tomb (Tb15), were discovered two quadrangular limestone blocks scattered on the ground. The two blocks were decorated and inscribed with a common motif for the funeral <i>semata</i> in Africa: a <i>tabula ansata</i> with the inscription and a garland below it. It could therefore resemble a pillar <i>signaculum</i> with probably a pyramidal covering to indicate an hypogean tomb (CIFANI 2006, 26). The inscription, mentioning the family name of <i>Pompeius</i> , is divided in two flanked sections (one for each person) plus a line in common below. <div style="text-align: center;"> [D(is) M(anibus)] s(acrum) Pompeio Nabori qui vix(it) annis XXVIII m(ensibus) VII D(is) M(anibus) [s(acrum)] Pompeio Ba[- - -] qui vix(it) an[nis] XXVII diebus X[- - -] Pompeius [.] + + [- -] +pus p+[..]r filis sui[s - -] </div>
DATATION:	AD 150-225.
BIBLIOGRAPHY:	CIFANI (2006).

Fu10

DISCOVERY/EXCAVATION DATE:	1912.
GPS COORDINATES:	WGS 84 33S 0429139 - 3610464 (approx).
DESCRIPTION:	Inscription (<i>IRT</i> 705) found by S. Aurigemma (1930a) near ancient structures (VI13) close to "Casa Iorio" or "Ridotta Iorio" (cfr. IGM 1913b; Br. Murge 1919b). The inscription is written on a <i>carystium</i> marble column shaft (pl. 21D) and mentions the deceased <i>Fulvia Crescentilla</i> and her husband <i>Marcus Candidus Rusonianus</i> (probably the same person of <i>IRT</i> 396). <div style="text-align: center;"> [D(is) M(anibus)] Fulviae [C]rescentillae uxoris sanctissimae Q(uintus) Marcus Candidus Rusonianus maritus fecit </div>
DATATION:	2 nd century AD.
BIBLIOGRAPHY:	AURIGEMMA (1930a), 86, fig. 5; ABD EL-AZIZ EL NEMSI (1997), 207, pl. 88b; <i>IRT</i> 705.

Fu11

DISCOVERY/EXCAVATION DATE:	1996-1997.
GPS COORDINATES:	WGS 84 33S 0429139 - 3610464 (approx).
DESCRIPTION:	During the excavation of a <i>gasr</i> (Fa30) at ez-Zeita, undertaken by the DoA and the University of Khoms, came to light two inscriptions reused within the Late Antique structure. The first text is written within a <i>tabula ansata</i> on a limestone ashlar block and are noticeable grammar mistakes. The inscription (pl. 21E) was certainly assembled

within a *mausoleum* that the freedman, *Marcus Epius*, built for him and his *patrona*.

Diis Manibus

fecit

Ma[. . .] Epii sib(i) et

suis et patrona

sua

The other inscription, written on a limestone column shaft, mentions the deceased *Lucia Silla Pia* and her uncle and heir *Silius Plautius Haterianus*, a nobleman and member of the *senatus* already known at Lepcis Magna: Fu12 (*IRT* 635) and *IRT* 542.

D(is) M(anibus)

L(uciae) Siliae L(ucii) fil(iae) Pia[e]

L(ucius) Silius Plautius

Haterianus

V(ir) C(larissimus)

patruus

h(eres) f(ecit)

DATATION:

3rd century AD.

BIBLIOGRAPHY:

ABD EL-AZIZ EL NEMSI (1997), 210-211, pls 86b, 88a.

Fu12

DISCOVERY/EXCAVATION DATE:

1903; 1934.

GPS COORDINATES:

WGS 84 33S 0431907 - 3609709 (approx).

DESCRIPTION:

The following four inscriptions were found at short distance from the *mausoleum* of Gasr Gelda (Ma2) and from another *mausoleum* (Ma32), S of Lepcis Magna. The first inscription (*IRT* 635), written on a rectangular base of compact limestone (pl. 21F), mentions the deceased *Caecilio Proculo* and the two dedicators *Lucius Silius Plautius Haterianus Blaesianus* and *Amicus Haterianus Gavilianus Proximus*; probably the same noblemen mentioned in an inscription on a funerary column shaft at ez-Zeita (Fu11) and in another inscription (not funerary) found near the Severan arch (*IRT* 542). The inscription records also that the funeral monument (probably the base) was erected in accordance with the will of *Sentiae Caecilianae*.

Caecilio Proculo

L(uci) Silii Plautii Hate-

rianus Blaesia-

nus et Amicus

Haterianus Gavi-

lianus Proximus

h(eredes) per suc(cessionem) permis(su)

splend(idissimi) ord(inis) p(oserunt)

ex testamento

Sentiae Caecili-

anae

The second inscription (*IRT* 657) found at short distance from the *mausoleum* of Gasr Gelda (Ma2) is carved within a prism shaped limestone *stela* (pl. 22A). The inscription mentions the deceased *Philippus*, a scribe, secretary and bookkeeper who died at the age of 27.

[Ph]il(i)ppus libra-

[r]ius notarius

[rat]iocinator n(u)m-

[er]arius omni-

[bus] his consum-

[p]tus vixit an-

[nos] XXVII sine

[ulla m]acula

[. . ? . .] pater fi-
[lio piiss]imo fecit

Another inscription (*IRT* 662), found in the same area, was carved on a marble block. The text was found incomplete and mentions a girl, probably named *Vibia*.

[- - - ?]
uies iuu [. . .]
bus bon[. . .]
memoria[. . .]
biae Ann[. . .]
atae quae [vixit an]-
nis XVI [virgin]-
ali pudiciti[a. . .]

The fourth inscription (*IRT* 755) found near Gasr Gelda (Ma2) was carved on a marble base, partially preserved. Unfortunately the text is incomplete and mentions a person who died at the age of 22.

[. . .]num de[.]
[- - - ? - - -]
[- - - ? - - -]
[. . .]nb[. . .]
[. . .]mori
[. . .]aoge
[. . .]ntiano
[. . .]nis annui
[l]onga generos(i)-
tate ornat qui vix(it)
ann(os) XXII m(enses) III et
[- - - ? - - -]be[. . .]ssu[. . .]-
ium ciuium suo[rum]

DATATION: 2nd - 3rd century AD.
BIBLIOGRAPHY: CLERMONT-GANNEAU (1903a), 341-342; *IRT* 635, 657, 662, 755.
ARCHIVAL DOCUMENTATION: Photographs: BSR, 47.XVII.29, 48.XV.18.

Fu13

DISCOVERY/EXCAVATION DATE: 1947.
GPS COORDINATES: WGS 84 33S 0435126 - 3610662 (approx).
DESCRIPTION: A marble panel with an inscription (*IRT* 674) was found within the Italian fort *Vittorio Emanuele III*, S of the amphitheatre (En4). The inscription mentions the two deceased *Africano Ginus* and his grandfather *Caecilius Ginus* and the dedicator *Caecilia Namgyddi*, mother of *Africano* and daughter of *Caecilius* (pl. 22B).

Fecit et posuit Cae-
cilia Namgyddi fi-
lio suo Africano Gi-
nus carissimo ani-
mo et patris suo
Caecilius Ginus

DATATION: 3rd century AD.
BIBLIOGRAPHY: *IRT* 674.
ARCHIVAL DOCUMENTATION: Photographs: BSR, 47.XIII.15.

Fu14

DISCOVERY/EXCAVATION DATE: 1903.
GPS COORDINATES: WGS 84 33S 0433097 - 3611716 (approx).
DESCRIPTION: Upper part of a molded limestone block was found at the beginning of the 20th century on the shore at short distance from the W edge of Lepcis Magna, between the Late

antique wall (Wa3) and the Hunting Baths (En1). The inscription (*IRT* 682), partially preserved, mentions the deceased *Claudia Sabina* and part of the name of the person who, probably, set the monument: *Sotericalus*.

Dis manusibus
Claud(i)ae [S]ab(i)nae
Soteric [. . .]

DATATION: 1st - 2nd century AD.
BIBLIOGRAPHY: CLERMONT-GANNEAU (1903a), 340-341; *IRT* 682.

Fu15

DISCOVERY/EXCAVATION DATE: 1948.
GPS COORDINATES: WGS 84 33S 0434680 - 3610636 (approx).
DESCRIPTION: The upper part of a moulded limestone base with an inscription (*IRT* 689) was found c.100 m E from Gasr Shaddad (Ma15); the inscription, partially preserved, mentions the deceased *Marcus Clutorius Baliahon* (pl. 22C).

D(is) m(anibus) s(acrum)
M(arcus) Cluto-
rius Bali-
ahon oli
[- - -]

DATATION: 2nd - 3rd century AD.
BIBLIOGRAPHY: *IRT* 689.
ARCHIVAL DOCUMENTATION: Photographs: BSR, 47.XV.14.

Fu16

DISCOVERY/EXCAVATION DATE: 1948.
GPS COORDINATES: WGS 84 33S 0433102 - 3611597 (approx).
DESCRIPTION: Limestone block with inscription (*IRT* 692) found reused in the Late antique wall (Wa3), near the "Villa di Orfeo" (VI59) in the W sector of the Lepcitanian outskirt (pl. 22D). The inscription, carved within a *tabula ansata*, mentions the deceased *Quintus Domitius Camillus Nysim* and his father *Marcus Domitius Crito*, who erected the funeral structure.

Q(uintus) Domitius Camillus
Critonis f(ilius) Nysim
vixit annis XX d(iebus) L
M(arcus) Domitius Crito
pater filio quieto fecit

DATATION: AD 50-150.
BIBLIOGRAPHY: *IRT* 692.

Fu17

DISCOVERY/EXCAVATION DATE: 1923-1937.
GPS COORDINATES: WGS 84 33S 0433102 - 3611597 (approx).
DESCRIPTION: Two inscriptions (*IRT* 695, 763) were found close to the Severan Arch. The first inscription (*IRT* 695) was carved on one short side of a limestone *cupa* tomb (pl. 22E). The monolith was found reused in Late antique - Medieval structures near the Severan Arch; it mentions the deceased woman *Elia Victoria Masquitana* and the dedicator *Elius Datus*.

D(is) m(anibus) s(acrum)
Elia Victoria
Masquitana
vixit an(n)is [. . .]XXI
Elius Datus fecit

The second inscription (*IRT* 763), found in 1937, is written in Greek on a marble block

resembling a temple (pediment and acroteria). The text is partially preserved and there is no trace of the deceased/s and of the dedicator/s.

ZH

τύμβος ἔμοι κ[εῖται]

DATATION: 2nd - 3rd century AD.
BIBLIOGRAPHY: BARTOCCINI (1931), 40; *IRT* 695, 763.

Fu18

DISCOVERY/EXCAVATION DATE: 1920-1948.
GPS COORDINATES: WGS 84 33S 0430857 - 3613422 (approx).
DESCRIPTION: At short distance from the W side of the wall of the modern city of Khoms were found two funerary *stelae* reused in the garden/cemetery of a marabout. The first inscription (*IRT* 711) was carved within a moulded rectangular panel in a round topped limestone *stela* with a crescent (pl. 22F). The text mentions the deceased girl named *Imaia lunia Victoria* died at the age of 14.

Dis mani-
bus sacr(um) Im-
aia lunia Vi-
ctoria vix-
it annos
XIV

The other inscription (*IRT* 741) is characterized by a round topped limestone *stela* that mentions the deceased *Septimia Cariota* (pl. 23A).

D(is) m(anibus) s(acrum)
Septimia
Cariota
h(ic) s(ita) e(st)

DATATION: 3rd century AD.
BIBLIOGRAPHY: *IRT* 711, 741.
ARCHIVAL DOCUMENTATION: Photographs: BSR, 47.XI.6, 47.XV.17.

Fu19

DISCOVERY/EXCAVATION DATE: 1912.
GPS COORDINATES: WGS 84 33S 0434315 - 3610978 (approx).
DESCRIPTION: Limestone bases found on a small hill occupied in 1912 by the 37th Italian Infantry Regiment E of the Wadi Lebda (Forte Settimio Severo). The inscribed base (*IRT* 714) mentions the deceased *Iulia Clymenis* and her husband *Marcus Aemilius Athictus* who dedicated the monument.

Dis manibis
Iuliae Clyme-
nis uxoris
M(arcus) Aemilius
Athictus
consacravit

Limestone base (or altar) with moulded panels on three sides of which only one is inscribed (*IRT* 675). The inscription was dedicated by the freedmen *Caius Caecina Artemas* and *Caecina Glyce Pusinna* and *Caecina Pusinna* to their patronus *Caecina Apollinaris*.

· · ? · ·] Caecinae C(aii) f(ilio)
Pap(iria tribu) Apollinari
C(aius) Caecina Artemas
et Caecinia Glyce Pusinna
et Caecinia Pusinna Artemae

filia heredes optimo et
indulgentissimo patro-
no faciendum curauer(unt)

DATATION: 2nd - 3rd century AD.
BIBLIOGRAPHY: AURIGEMMA (1930a), 87, 90; *IRT* 675, 714.

Fu20

DISCOVERY/EXCAVATION DATE: 1916.
GPS COORDINATES: WGS 84 33S 0434834 - 3611043 (approx).
DESCRIPTION: Marble *stela* in a form of a shrine with Corinthian columns, pediment and *acroteria* (pl. 23B) found reused within the latest phases structures of the "Villa del Nilo" (VI2). The Greek epithap (*IRT* 719) carved on the *stela* mentions the deceased *Lucius* and the dedicator *Sostratos* who erected the monument/inscription.

τὸν σεμνῶς ζήσαν-
τα καὶ ἤθεσι δοξασ(θέν)-
τα τειμαῖς τειμηθέν-
τα τέχνη δέ τοι μοῦ-
νον ἐόντα πάνσοφον
ἐν πολλοῖς ἔργεσιν
Λούκιον ἔνθα μέλαινα
Λιβύης κατὰ γαῖα κα-
λύπτ(ε)ι Σώστρατος
Λουκίῳ τῷ ἰδίῳ θρε-
πτῷ ζήσαντι ἔτη
κα' μνήμης
χάριν
[χ]αίρετε παροδεῖ-
ται

DATATION: 2nd - 3rd century AD.
BIBLIOGRAPHY: ROMANELLI (1925a), 151, fig. 77; AURIGEMMA (1929), 259-261; *IRT* 719.
ARCHIVAL DOCUMENTATION: Photographs: BSR, 48.XXXV.10.

Fu21

DISCOVERY/EXCAVATION DATE: 1927.
GPS COORDINATES: WGS 84 33S 0431896 - 3612457 (approx).
DESCRIPTION: Inside the old cemetery of Khoms located between the city and the Wadi er-Rsaf were found two funerary inscriptions. The first one (*IRT* 733) is carved on a yellow marble panel and mentions the name of the deceased person *Nyfthae*.

D(is) m(anibus)
Nyfthae

The second inscription (*IRT* 690) is carved on a limestone base with a molded foot and with Ionic volutes on the top. The inscription, carved within a molded panel, is a Greek epithap of the deceased *Delarkes*; the base (or the monument) was donated by his sons.

ΕΝΘΑΛΕΛΗ
ΛΑΡΚΙΣΚΙΜΕ
ΖΩΗΝΑΠΟ
ΤΙΣΑΣΑΣΟΥ
ΔΕΙΙΦΩΣΟΥΟ
ΩΓΛΥΚΙΟΝ
ΜΑΛΛΟΝΘΑ
ΝΑΝΑΙΟΙΟΑΛ
ΛΑΛΟΜΟΝ

ΠΛΟΥΤΗΟΣΕΧΩ
 ΚΕΧΑΛΚΕΟΝ
 ΥΠΝΟΝΙΟΙΙΑΝ
 ΤΕΣΦΙΛΕΕΣΚΟΝ
 ΑΛΕΓΑΝΛΡΙΣΤΕ
 ΤΕΚΕΑΦΡΟΠΩ
 ΛΕΙΕΝΙΚΡΗΤΑ
 ΣΩΦΡΠΟΣΥΝΗΣ
 ΕΝΕΚΕΝΚΕΠΙ
 ΣΤΡΙΟΣ·ΗΣΑ
 ΔΕΑΥΤΟΣΕΤΗ
 Θ[·]ΚΕΕΕΝΙΑΣΗ
 ΣΟΦΗΚΕΠΕΛΙ
 ΗΒΙΟΙΟΙΚΕΧΡΗ
 ΣΙΜΟΤΗΤΙΤΑΥΤΑ
 ΛΕΙΑΝΤΑΕΠΟΙ
 ΗΣΑΝΙΘΙΛΙΟΙ
 ΘΡΕΠΤΟΙΤΟΥΜΕ
 ΚΑΛΩΣΠΟΙΗΝΟΙ
 ΜΟΥΤΑΦΟΝΕΓΙΡΑΝ
 ΟΠΩΣΠΑΣΙΦΙ
 ΛΟΙΣΙΝΩΣΙΟ
 ΚΕΘΑΤΩΚΕΚΕΛΥΜΕ
 ΝΟΣΕΖΩΣΙΛΑΛΩΜΕ
 [·]ΓΥΧΙΙ ΧΦΙΛΟΘΥ[·]ΣΑΘΑΝΑΤΟ[·]

DATATION: 2nd - 4th century AD.
 BIBLIOGRAPHY: *IRT* 690, 733.
 ARCHIVAL DOCUMENTATION: Photographs: BSR, 48.XI.34, 48.XIV.14-15, 48.XXII.11, Sopr. DLM 1592 Leic.

Fu22

DISCOVERY/EXCAVATION DATE: 1911-1913.
 GPS COORDINATES: WGS 84 33S 0431775 - 3613328 (approx).
 DESCRIPTION: Limestone moulded base found near the modern quay, probably at Khoms. The inscription (*IRT* 753) mentions the deceased *Cerealis Macar* and the dedicator *Marcus Ulpus Balsilus*.

M(arcus) Ulpus Balsilus
 Cerialis Macari
 bon(a)e memoriae vi-
 ri

DATATION: 2nd - 3rd century AD.
 BIBLIOGRAPHY: ROBINSON (1913), 189; ROMANELLI (1925a), 65; *IRT* 753.

Fu23

DISCOVERY/EXCAVATION DATE: Unknown.
 GPS COORDINATES: WGS 84 33S 0433606 - 3610565.
 DESCRIPTION: Limestone block inscribed within a moulded panel found near the site of a tower of the S-E sector of the Late-antique wall (Wa3). The inscription (*IRT* 633) mentions the deceased *Lucius Avilius Marsus* and his father, the dedicator *Caius Avilius Castus*.

L(ucio) Avillio C(aii) Avilli Casti f(ilio) Quir(ina tribu) Marso
 expostulantibus universis bigam ordo decr(ovit)
 pater piissimo f(ilio) hon(ore) cont(entus) sua pec(unia) fecit

DATATION: 2nd - 3rd century AD.
 BIBLIOGRAPHY: GOODCHILD, WARD PERKINS (1953), 53; *IRT* 633.
 ARCHIVAL DOCUMENTATION: Photographs: BSR, Sopr. DLM 1544 Leic.

FU24

FINDS OF THE E SEVERAN MOLE

The E mole of the Severan harbour of Lepcis Magna was partially excavated during the 1920s and the 1950s. The scarce information related to the presence of a funeral site or even a *necropolis* are given by Bartoccini (1926; 1958) who was in charge of the excavation for some periods. He mentioned among the material found on the site a large number of limestone coffin-shaped urns with Latin or Neo-Punic inscriptions and some *stelae*. The relevance of the funeral finds is clearly visible in two unpublished photographs held at the BSR (pl. 23C) were a significant quantity of the urns stocked (right bottom corner of the photo) between the shrine and the quadrangular tower of the mole. Unfortunately, the excavation reports are missing and there is no evidence of any funeral structures apart from the presence of both limestone urns and *stelae* (pl. 23D). This data allow me to hypothesize the existence of a diversified landscape (funerary) before the construction of the Severan harbour when this area was separated from the continent (according to the IGM 1915a map, the original height of the island was around 7-8 m). On the other hand the possibility that these funeral finds were moved from a *necropolis* on the E sector of the Lepcis Magna suburbs and reused in the Late-Antique/Islamic buildings of the harbour area cannot be excluded.

DISTANCE FROM LEPCIS MAGNA:	1,165 m ENE (approx.).
GPS COORDINATES:	WGS 84 33S 0434452 - 3611400 (approx).
DISCOVERY/EXCAVATION DATE:	1924-1927; 1952-1958.
DESCRIPTION:	During the excavation were found c.30 limestone coffin shaped urns (pl. 23C), most of them with neopunic inscriptions. Beside the urns were found also three - or more - limestone <i>stelae</i> and a inscribed marble slab (<i>IRT</i> 750). Two of the <i>stelae</i> are characterized by an arch (<i>aedicula</i>) with a Neo-Punic inscription (<i>IPT</i> 15 and <i>IPT</i> 62); inside one of these <i>aediculae</i> is carved a male figure, named <i>Peregrinus</i> (pl. 23D) and on the other a child (probably named <i>Hattilius</i>).
DATATION:	1 st century BC - 2 nd century AD.
BIBLIOGRAPHY:	BARTOCCINI (1926), 23-24, fig. 18; (1958), 130, pl. 83.1-4; ROMANELLI (1925a), 157; MERIGHI (1940), II, 144; LEVI DELLA VIDA (1927), 98, 107; (1963), 471-478; <i>IPT</i> 15, 19, 33-59, 62, 69-72; <i>IRT</i> 750, 754(11), 754(14).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-19b, WP G23-26b.

FU11, FU25 - FU29

GRAVE GOODS

Beside the several limestone coffin shaped cinerary urns found on the E Severan mole (Fu24), some other finds related to ancient grave goods have been found in the Lepcitanian hinterland. A fragment of a limestone coffin shaped urn (Fu25) was found during a recent survey in a rubble mound made during the construction of a train cargo terminal c.3 km S of Lepcis Magna. A fragment of a marble urn (Fu11), together with two funerary inscriptions (see *infra*), was found within the Roman farm at ez-Zeita (Fa30). Several grave goods (Fu26) have been found during the excavation of the "Villa dello Sparto" at Khoms (VI6) while a considerable amount of Hellenistic *unguentaria* (Fu27) were found near the site of a villa (VI32) close to Wadi Tella. South of the E mole of the ancient harbour were also found in 1916 several cinerary urns (Fu28). Finally remains of a punic tomb (Fu29) were found close to the E wall of the Basilica Vetus at Lepcis Magna. For all these finds, there are no information to locate the original provenance.

Fu11

GPS COORDINATES:	WGS 84 33S 0429139 - 3610464 (approx).
DESCRIPTION:	In 1996-1997, during the excavation of a Late Antique <i>gasr</i> at ez-Zeita (Fa30) two joined fragments of a marble vase-urn were found. The survival pieces are part of the shoulders, decorated with bears-egg and dart, and the handles.
DATATION:	1 st - 3 rd century AD.
BIBLIOGRAPHY:	ABD EL-AZIZ EL NEMSI (1997), 211, pl. 87c.

Fu25

GPS COORDINATES:	WGS 84 33S 0431028 - 3609397.
DESCRIPTION:	During the construction of a train cargo terminal ancient structures probably belonging to a villa (Vp7) were destroyed and piled up by a bulldozer. Among the mould of rubble a fragment of a lid of a coffin shaped limestone cinerary urn was found.
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	Unpublished.

Fu26

GPS COORDINATES:	WGS 84 33S 0434264 - 3610441.
DESCRIPTION:	During the excavation of "Villa dello sparto" (VI6) were found several grave goods belonging to one or more tombs. The material is dated in the mid-Imperial period and is characterized by pottery (lamps, African Sigillata, coarse pottery) and ivory and bones items. Unfortunately, no excavation report is preserved and also the site localization is uncertain. However, is plausible to locate the villa near the modern quay of Khoms, where the esparto market and the esparto stores were built (see Br. Murge 1919f). The material found during this excavation is partially visible in the Lepcis Magna Museum.
DATATION:	AD 150-250.
BIBLIOGRAPHY:	BALDONI (s.d.).

Fu27

GPS COORDINATES:	WGS 84 33S 0428406 - 3614168 (approx).
DESCRIPTION:	Close to the site of a Roman villa (VI32) along the E side of the Wadi Tella have been found a considerable amount of fragments belonging to, at least, 23 Hellenistic <i>unguentaria</i> used, almost surely, for funerary purposes.
DATATION:	3 rd - 1 st century BC.
BIBLIOGRAPHY:	Unpublished.

Fu28

GPS COORDINATES:	WGS 84 33S 0434502 - 3611120 (approx).
DESCRIPTION:	According to Romanelli (1925a), several "tombs" characterized only by pottery <i>ollae</i> used as cinerary urns, were found in 1916 at short distance from the sea and from the Severan harbour due to the construction of the road that lead to the <i>Vittorio Emanuele III</i> stronghold. No further information were given.
DATATION:	1 st century BC - 2 nd century AD.
BIBLIOGRAPHY:	ROMANELLI (1925a), 157.

Fu29

GPS COORDINATES:	WGS 84 33S 0433922 - 3611436 (approx).
DESCRIPTION:	Part of a black glazed krater belonging to a burial grave goods was found within a layer dated to the end of the 4 th century BC. The container was found during the excavation of a trench dug in 1991 at short distance E from the <i>Basilica vetus</i> by the Archaeological Mission of Messina University.
DATATION:	4 th century BC.
BIBLIOGRAPHY:	DE MIRO, POLITO (2005), 17-18, 125-126.

VARIOUS INSCRIPTIONS FROM THE E *SUBURBIUM* (FINDSPOTS UNRECORDED)

Three inscriptions were seen by Delaporte in 1806 (*IRT* 680, 683, 693) E from the city, six inscriptions (*IRT* 584, 672-673, 679, 681, 752) were recorded by Bartoccini and one by Romanelli (*IRT* 747) during the 1920s "in the zone of *mausolea* E of

the city" probably in the area of the six *mausolea* Ma15-Ma19, Ma31. One marble inscribed relief (*IRT* 668) was found in the forties within the Wadi Lebda and probably was originally located on the E sector of the Lepcitanian suburbs. A double *stela* has been found in 1953 (*IRT* 980; REYNOLDS 1955, S8) by Cassels who, however, did not provide an accurate findspot ("within the circuit of the I cent. wall near the presumed site of the E gate").

DISCOVERY/EXCAVATION DATE: 1806-1953.

DESCRIPTION: Rectangular limestone *stela* (*IRT* 584) found in 1926. The inscription mentions the deceased *Marcus Cornelius Saturninus*, who lived 35 years and served in the *Legio III Augusta*.

D(is) m(anibus)
M(arcus) Corneliu[s]
Saturninus
miles leg(ionis) III
[A]ug(ustae) vix(it) an(nos) XXXV

Limestone block rounded above like a *cupa* or semi-column with *acroteria*; the block is inscribed within a moulding on one short face in a round headed panel. The inscription (*IRT* 672) mentions the deceased *Lucius Caecilius Barichionis* and the dedicator, his brother *Ianuarius*.

D(is) m(anibus) s(acrum)
L(uci) Caecili Bar-
ichionis
vix(it) an(n)is XXX
Ianuarius
fratri po(suit)

Limestone base with a moulded panels on all sides and inscribed on one face. The inscription (*IRT* 673) mentions the two brothers: the deceased *Quintus Caecilius Cerialis Phischon* and *Quintus Caecilius Cecilianus* the dedicator.

Dis mani-
bus Q(uinti) Cae-
cili Cerialis Phisch-
on Q(uintus) Cae-
cilius Cae-
cilianus
fratri pi-
ssimo fecit

Lower part of a limestone moulded base with inscription (*IRT* 679) that mentions the deceased *Quintus Calvisius Amicus* and the dedicator, his wife *Calvisiana*.

Dis mani-
bus Q(uinti) Cal-
visi Amic[i]
unicae in-
dulgenti-
ae mari-
ti Calvisia-
na uxor posuit

Limestone rectangular moulded base with an inscription (*IRT* 680) that mentions *Lucius Claudius Perpetuus Probatus* who died at the age of 20.

D(is) m(anibus)
L(uci) Cl(audii)
Perpe-
tui Pro-
bati
vixit ann(os)
XX

Limestone rectangular base with a moulded panels on all sides and inscribed on one face. The inscription (*IRT* 681) mentions the deceased *Claudia Salvia*.

D(is) m(anibus)
Clau-
diae
Salvi-
ae

Limestone little column with a moulded panel in the middle and capped by a finial. The inscription (*IRT* 747) mentions the dedicator, the freedman of *Lucius*, *Tetia Prima* who made the "monument" for her, her husband *Lucius Tetius Meiantho* (also a freedman of *Lucius*) and their family.

Tetia L(uci) l(iberta) Prima
Sibi et L(ucio) Tetio L(uci) l(iberto)
Meiantho viro
suo et sui

Limestone rectangular moulded base with an inscription (*IRT* 752) that mentions the deceased *Cnaeus Vituiasius* (or *Vitulasius*) *Africanus*.

Cn(aeo) Vituia-
sio Africano
heredes

Marble tomb inscribed relief with a half height figure of a man and a woman between two Corinthian pilasters. The inscription (*IRT* 668) within a high-relief *tabula ansata* mentions the deceased *Atilia Marith* and the dedicator, her husband *Atilius Corinthus Aurelianus*.

Diis manibus Ati-
lia Marith vi-
xit annor(um) XXX m(ensium) III
dier(um) XXV Atilius Corinthu[s]
[A]urellianus fecit uxori su-
ae sanctissimae et fideliss[i]-
mae

Limestone block with a double *stelae* culminating in two triangular points, inscribed on one face within two adjacent moulded panels (REYNOLDS 1955, S8; *IRT* 980). On the right side of the block is incised a rectangle and a crude disc; above them a 8-spoked wheel in high relief. On the left side is a funerary urn in high relief.

(a) D(is) s(acrum) m(anibus)

Claudius
Stiddin m-
onimentu-
m fecit
se vivo po-
sterius
suis

(b) D(is) s(acrum) m(anibus)

Claudius
Ladas mon-
imentum
fecit se vi-
vo poster-
ique suis

Inscription (*IRT* 693) found probably at short distance from *IRT* 680. The text mentions the deceased *Domitia Rogata*, died at the age of 23, and the dedicator, the husband *Marcus Iulius Cethegus Phelyssam*. Material and support unknown.

Domitiae Roga-

tiae vixit
annis XXIII
M(arcus) Iulius
Cethegus
Phelyssam uxori
carissimae fecit

Inscription (*IRT* 683) mentioning the deceased *Claudius Victor Probatius*. Material and support unknown.

D(is) m(anibus)
Cl(audius)
Victo-
ris Pr-
oba[ti ...]

DATATION: 1st - 3rd century AD.

BIBLIOGRAPHY: DELAPORTE (1836), 319-321; MÉHIER DE MATHUISIEULX (1906), 79; ROMANELLI (1925a), 158; BARTOCCINI (1926), 45, fig. 66; REYNOLDS (1955), S8; *IRT* 584, 668, 672-673, 679-681, 683, 693, 747, 752, 980.

ARCHIVAL DOCUMENTATION: Photographs: BSR, 48.XV.34, 48.XV.17, 47.XII.26.

VARIOUS INSCRIPTIONS FROM THE S AND W *SUBURBIUM* (FINDSPOTS UNRECORDED)

Two inscriptions (*IRT* 676-677) were found on the W side of the Wadi Lebda between the end of the 19th century by Clermont-Ganneau and the beginning of the 20th century by Aurigemma, probably between the wadi and the Severan arch or between Khoms and the Marcus Aurelius arch.

DISCOVERY/EXCAVATION DATE: 1895-1920.

DESCRIPTION: Limestone block inscribed on one face within a moulding. The inscription (*IRT* 676) mentions the three deceased: the couple *Calpurnia Barygdden* and *Calpurnius Cerealis* and their son *Calpurnius Candidus*; the dedicator is *Calpurnia Licinia Sadith*, daughter of the couple and sister of *Calpurnius Candidus*.

Calpurniae Barygddeni
et
Calpurnio Cereali et
Calpurnio Candidus
[fecit Cal]purnia Licinia Sadith
[parentibus suis et fratri pietatis causa]

Limestone block inscribed on one face within a moulded panel between two smooth pilasters. The inscription (*IRT* 677) mentions the three deceased *Calpurnius Zenas*, *Calpurnius Aristonius* and *Calpurnius Vibius* and the dedicator of the monument and sepulchrum, their brother *Caius Calpurnius Trachalus Dosides*.

Diis manibus
C(aius) Calpurnius Tracha-
lus Dosides Calpurni-
is fratribus carissim(is)
Zenae et Aristoni et V-
ibi monumentum et
sepulchrum fecit

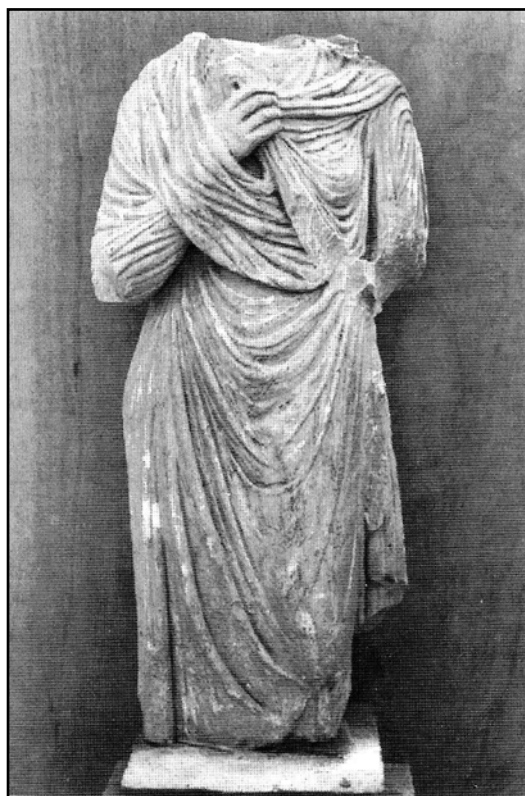
DATATION: 2nd - 3rd century AD.

BIBLIOGRAPHY: CLERMONT-GANNEAU (1903a), 340; *IRT* 676-677.

ARCHIVAL DOCUMENTATION: Photographs: BSR, 47.XII.23, 47.XV.13.



A. The *Grande Ercolanese* type statue (Fu1) from wadi er-Rsaf (ABD AL-RAHMAN *et al.* 1996, pl. 63a).



B. The *Grande Ercolanese* type statue (Fu2) found near the hypogean tomb Tb2 (ABD AL-RAHMAN *et al.* 1996, pl. 62a).



C. Limestone false door fragment (Fu4) reused along the E sector of the Late antique wall (Wa1), 2009 (Photo: A. Zocchi).



D. Doric frieze with rosettes (Fu5), 2009 (Photo: A. Zocchi).



E. Part of a conical imbricate covering (Fu6) of a *mausoleum*, 2009 (Photo: A. Zocchi).



F. Corinthian type capital with architrave (Fu5), 2009 (Photo: A. Zocchi).



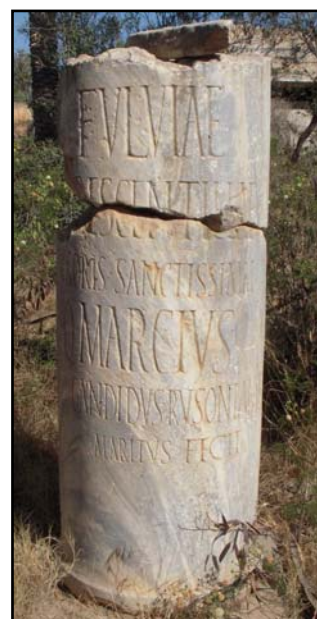
A. Part of spiral related to an *acroterion* decoration (Fu6), 2009 (Photo: A. Zocchi).



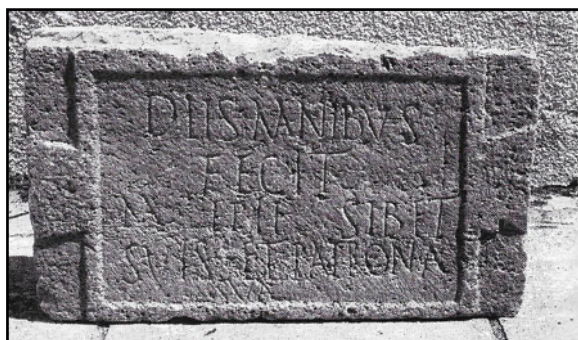
B. Two limestone molded bases (Fu7) reused within Gasr Hammud (Vr4), 2007 (Photo: A. Zocchi).



C. Limestone moulded base (Fu8) reused within the area of an ancient farm (Fa11), 2013 (Photo: A. Zocchi).



D. Inscription /RT 705 (Fu10) found near a Roman villa (V113), 2009 (Photo: A. Zocchi).



E. Inscription (Fu11) found within a *gasr* (Fa30) at ez-Zeita, 1996 (ABD EL-AZIZ EL NEMSI 1997, pl. 86b).



F. Inscription /RT 635 (Fu12) found near Gasr Gelda (Ma2), 2009 (Photo: A. Zocchi).



A. Inscription *IRT* 657 (Fu12) found near Gasr Gelda (Ma2), 2009 (Photo: A. Zocchi).



B. Inscription *IRT* 674 (Fu13) from *Vittorio Emanuele III* Italian fort, 1947 (BSR, 47.XIII.15).



C. Inscription *IRT* 689 (Fu15) found near Gasr Shaddad (Ma15), 2009 (Photo: A. Zocchi).



D. Inscription *IRT* 692 (Fu16) found reused into the Late antique wall (Wa1), 1948 (BSR, Sopr. CLM 948).



E. Cupa with inscription *IRT* 695 (Fu17) found at short distance from the Severan arch, 1920-1930 (BSR, 47.XII.27).



F. Inscription *IRT* 711 (Fu18) found W of the city wall of Khoms, 1947 (BSR, 47.XI.6).



A. Inscription /IRT 741 (Fu18) found W of the city wall of Khoms, 1947 (BSR, 47.XV.17).



B. Inscription /IRT 719 (Fu20) found reused within the Villa del Nilo (VI2), 2009 (Photo: A. Zocchi).



C. Several limestone coffin shaped cinerary urns (Fu23) - right bottom corner - found between the shrine and the tower of the E mole of the Severan harbour, 1924-1927 (BSR, WP G23-19b).



D. Stela (Fu23) found in the E mole of the Severan harbour, 1952-1958 (BARTOCCINI 1958, pl. 83.3).

Some religious inscriptions were found in different places in the Lepcitanian suburban area. A group of 3 inscribed limestone blocks (Re1), with reference to a religious building, were found within Gasr el-Hammam (Mi2). Other epigraphic evidences (Re4 - Re5), dedicated to different deities, were found in the area of the circus (En3) and the amphitheatre (En4). Both a rock-cut inscription mentioning the goddess *Caelestis* and a dedication to *Venus* (Re2) were found on the hill of Ras el-Mergheb. Other epigraphs related to *Mercurius* and *Minerva* and *Venus* (Re3, Re6) were instead discovered reused within modern buildings at Khoms.

Re1

DISCOVERY/EXCAVATION DATE:	1912-1920.
GPS COORDINATES:	WGS 84 33S 0433756 - 3606198.
DESCRIPTION:	<p>Trilingual inscription (Latin, Greek and Neo-Punic) carved on three different limestone blocks reused within the <i>gasr</i> of Ras el-Hammam (Mi2). On the late antique/Medieval structure actually is visible only one block (<i>a</i>) on the SW side of the doorway (pl. 24A), one is missing (<i>c</i>) and the third one (<i>b</i>) is stored at the Lepcis Magna museum (pl. 24B). The reading of the inscription is controversial: however, in the text is mentioned <i>Caecilius Diodorus</i> as the dedicator of a shrine/sacred place probably to be referred to an Imperial cult (<i>Caesaris delubrum</i>).</p> <p>(a) C[a]ecil[i]us Diodorus [...] Caesaris delubr(um) a[...] Καϊκίλιος Διόδωρος ἄμα [...] ἐκ τῶν ἰδίων εὔξατο θ[...]</p> <p>(b) ...]dium murum su[...] ...]ribunicia potestat[...] ...]Q'YSR BN 'LM []DR[] 'WGSTS HYPY/M'T[...] ...]υς μόνος τὸν ναὸν [...] ...]δεων αὐτοκράτο[ρ..]</p> <p>(c) [...?...] ...]ce maxsu[...] ...] καὶ τὸ πρόν[αον] [...?...]</p>
DATATION:	1 st - 2 nd century AD.
BIBLIOGRAPHY:	ROMANELLI (1925a) 170; LEVI DELLA VIDA (1927), 98-99; WILSON (2012), 284-286; MUNZI <i>et al.</i> (2016), 96-97; TOMASELLO (2015), 27; <i>IRT</i> 481; <i>IPT</i> 16.
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, 46.XVIII.33; CAS, sc. 61/20a, 61/20b, 61/20c.

Re2

DISCOVERY/EXCAVATION DATE:	1895, 1912.
GPS COORDINATES:	WGS 84 33S 0427708 - 3611159 (approx).
DESCRIPTION:	<p>Two inscriptions were found on the hill of Ras el-Mergheb between the end of the 19th and the beginning of the 20th century. The first one is a rock-cut inscription found by Clermont-Ganneau in 1895 on a vertical facade of a bedrock terrace on the S flank of the hill. The Latin inscription was 3.25 m long and the letters were c.12 cm H. After Clermont-Ganneau, the inscription was destroyed; however, he was able to make a sketch of the text.</p> <p>Celestis sanctissima propitia [te hab]eamus [ΛΛΛΛ]</p> <p>The second inscription was found in 1912 by the Italian soldiers allocated on the "Forte Italia", on the top of the hill. The inscription, carved within a moulded panel in a limestone block (pl. 24C), mentions the building of a cistern by <i>Lucius Tettius Eutychus</i> who made with his own money and donated to Venus and to the Lepcitanians.</p>

L(ucius) Tettius Eutyclus in suo sua
pecun(ia) cistern(am) Veneri et Lepcit(?)
donui cura L(uci) Tetti Comi l(iberti) f(aciendam) c(uravit)

DATATION: 1st - 3rd century AD.
BIBLIOGRAPHY: CLERMONT-GANNEAU (1903a), 334; MERCATALI (1913), II, 576; ANTONELLI (1922), 42; BARTOCCINI (1926), 45, fig. 67; MERIGHI (1940), II, 87-88; LANCELLOTTI (2010), BA3.4; *ILAF7*; *IRT*268, 314.
ARCHIVAL DOCUMENTATION: Photographs: BSR, Sopr. B 804, Sopr. B 832; INASA, Fondo Mariani inv. 73153.

Re3

DISCOVERY/EXCAVATION DATE: 1942.
GPS COORDINATES: WGS 84 33S 0431599 - 3612617 (approx).
DESCRIPTION: The inscription, written on a limestone base, was found in the Central barrack of Khoms in 1942. On the top of the bases are still visible traces of the insertion of a sculpture. The epigraph is an *ex-voto* to *Mercurius* and to *Minervae* made by the priest *Tullus* against the injuries inflicted to him by *Boccius Copo*.
Merc(urio) et Min(eruae)
v(otum) s(olvit) Tullus sacerdos
ex pecunia quam
a Boccio Copone
accepit ne cum eo
ex decr(eto) Marcelli
proco(n)s(ulis) qui eum
kalumniatore[m]
cogno(verat) iniuriar(um)
DATATION: 2nd century AD.
BIBLIOGRAPHY: FLORIANI SQUARCIAPINO (2003), 315; MARMOURI (2008), 143; *IRT*304.
ARCHIVAL DOCUMENTATION: Photographs: BSR, 48.XXXV.17, 48.XXXV.18.

Re4

DISCOVERY/EXCAVATION DATE: 1912.
GPS COORDINATES: WGS 84 33S 0435017 - 3610945 (approx).
DESCRIPTION: Two inscribed limestone bases were found at short distance from the *carceres* of the circus (En3) and c.30 m from the seashore. Another similar base was found nearby but its text was not legible. All the three bases should be provided with the statues of the gods. The first base mentions the goddess *Venus* (nominative case) linked to the *gens Cassia*.
Venus
Cassiana
The second base mentions the goddess *Iuno* (nominative case) always linked to the *gens Cassia*.
Iuno
Cassiana
DATATION: 1st - 3rd century AD.
BIBLIOGRAPHY: ROMANELLI (1925a), 152; AURIGEMMA (1930a), 76-77; CADOTTE (2007), 223; GASPERINI (2015), 483; *IRT*317.

Re5

DISCOVERY/EXCAVATION DATE: 1912.
GPS COORDINATES: WGS 84 33S 0435106 - 3610703 (approx).
DESCRIPTION: Limestone slab with a neo-Punic inscription within a moulded *tabula ansata* with handles. The epigraph was found between the circus (En3) and the amphitheatre (En4) in June 1912 (pl. 24D). The text mentions the dedication to the god El, here read as Poseidon/Neptune (LEVI DELLA VIDA 1927; *IPT*), of an exedra and a portico by

Candidus.

L'DN L'L QN 'RS BN' W
'YQDŠ T 'KSND R' WT'RPT ST
BTS'TM BTM Q'NDD' BN Q'NDD
BN HN' BN 'BDMLQRT K ŠM' QL' BRK'

Translation (*IP*):

To the divinity El, owner/creator of the world, has built and
devoted this exedra and portico
with his own money Candidus, son of Candidus
son of Hanno son of Bodmelqart; because he listened his voice and blessed him

DATATION:

1st - 2nd century AD.

BIBLIOGRAPHY:

ROMANELLI (1925a), 22-23; LEVI DELLA VIDA (1927), 105-107; *IP* 18.

Re6

DISCOVERY/EXCAVATION DATE:

1966.

GPS COORDINATES:

WGS 84 33S 0431424 - 3612828 (approx.).

DESCRIPTION:

A Latin inscription was found during the destruction of the Turkish building in 1966 near the central mosque at Khoms. Unfortunately, the inscription was not transcribed and the only information available is that there was a dedication to *Venus* on it.

DATATION:

1st - 3rd century AD.

BIBLIOGRAPHY:

BAKIR (1966-1967), 249.

Re7 - Re8

ARCHITECTURAL ELEMENTS

Two architectural elements have been found in the Lepcitanian hinterland that could be referred to religious structures: a limestone architrave with the symbol of the goddess Tanit (Re7) discovered between the city of Khoms and Ras el-Mergheb and a Christian *crux patens* (Re8) within a *gasr* (Fa27) on a hill W of Ras el-Mergheb.

Re7

DISCOVERY/EXCAVATION DATE:

1968.

GPS COORDINATES:

WGS 84 33S 0 430111 - 3611557 (approx.).

DESCRIPTION:

Circa 1 km S of Khoms, not far from the farm of Sayid Ali el-Merghani, was found a limestone architrave (1.63 x 0.56 m) decorated with the symbol of the goddess *Tanit*. Unfortunately, no further information are available and the architectural element is not visible anymore even if it should be stored in the Lepcis Museum.

DATATION:

2nd century BC - 3rd century AD.

BIBLIOGRAPHY:

BAKIR (1968), 202.

Re8

DISCOVERY/EXCAVATION DATE:

2013.

GPS COORDINATES:

WGS 84 33S 0424021 - 3611153.

DESCRIPTION:

During a recent (2013) survey has been found a limestone bracket related to an ecclesiastic structures (pl. 24E) scattered on the ground and at short distance from the external wall of a *gasr* (Fa27). Even if it is not well preserved it is recognizable a *crux patens* carved in the front and two spirals, one on each side.

DATATION:

4th - 6th century AD.

BIBLIOGRAPHY:

MUNZI *et al.* (2016), 74.

GPS COORDINATES:	WGS 84 33S 0435196 - 3610689 (approx).
DISCOVERY/EXCAVATION DATE:	1912, 1962-1963.
DESCRIPTION:	Two statues of Artemis Ephesia were found in different occasion both at short distance from the <i>sacellum</i> located in the amphitheatre's <i>summa cavea</i> (En4). It seems therefore that the two sculptures are strictly related to that shrine (DI VITA 1964). The first statue (pl. 24F) was founded in 1912 by the Italian soldiers during the construction of the defensive structures on the Sidi Barku hill (details of its discovery in AURIGEMMA s.d.). This marble statue is one of the best example of this type of statuary and it has been dated to the Hadrianic age (BARTOCCINI 1923; DI VITA 1964) even if both the hands, the peculiar headdress (<i>kalathos</i> or <i>polos</i>) and the two fawns beside her, are missing. A further fragment, belonging to another <i>Artemis Ephesia</i> statue, was found by Di Vita in the early sixties on the N slope of the Sidi Barku hill, between "Forte Vittorio Emanuele III" and the S side of the amphitheatre (En4). Compared to the <i>Artemis</i> found by the Italian soldiers, this marble fragment belongs to a much smaller statue and is preserved only for the lower part of her body. Also this fragment has been dated to the first half of the 2 nd century AD (DI VITA 1964).
DATATION:	AD 120-140.
BIBLIOGRAPHY:	AURIGEMMA (s.d.), tav. 13; BARTOCCINI (1923), 11-12; ROMANELLI (1925a), 27, 63; GUIDI (1935b), 48-50; DI VITA (1964), 136-137; FLEISCHER (1973), 19-20, n. E60, taf. 13.

VARIOUS INSCRIPTIONS FROM THE *W SUBURBIUM*

Three inscriptions were found or reported at Khoms and in its outskirts during the end of the 19th and the first half of the 20th century. The one with the dedication to *Asclepius* (IRT 264) was discovered in the Khoms outskirts, an inscription referring to the *numini Veneris* (IRT 315a) in the Carabinieri barracks of Khoms in 1949-1950 and the third one, with a dedication to *Mercurius* and *Minervae* (IRT 303), was seen somewhere in Khoms in 1895.

DISCOVERY/EXCAVATION DATE: 1895-1950.

DESCRIPTION: Marble stele in a form of a shrine found in the Khoms outskirts and characterized by Ionic pilasters and by a pediment containing a bust of *Serapis*, and rudimentary *acroteria* (pl. 25A). In the central panel, a crested serpent before a pine cone upon a moulded stand. The base, the lower left-hand corner of which is missing, consists of a *podium* moulded at the ends, smooth and inscribed at the centre and, between the ends and the centre, recesses which may have contained inset figures. The stele was provided with a Greek-Latin inscription (IRT 264) carved on different parts: on the pediment (a), on the pilasters (b) and finally on the base (c). The text contains a dedication to the god *Asclepius* by a marble merchant from Nicomedia named *Asclepiades*.

- (a) ἀγαθῇ τύχῃ [τῶν κυ]ρίων
 Ἀσκληπιάδης θεῶ
 Ἀσκληπιῶ εὐχαριστήρι[ον]
 (b) Pro vic-
 toria
 domi-
 norum
 nostro-
 rum
 (c) Aretes cau-

sa dio Aescu-
 lapio Ascle-
 piades Ascle-
 [piadis filiu]s marmorari[u]s
 Nicomed[ia]

Hexagonal base of grey limestone of which the crowning feature has been roughly cut back. The inscription (*IRT* 315a), found at the Carabinierii barrack at Khoms, is carved on one face within a recessed panel, curved at the top and squared at the foot. Each of the remaining five faces is ornamented with a recessed panel, curved at the top and shaped at the foot, within which is carved in relief one of the following symbols: a *caduceus*, probably a group of three *flagella*, a jug, probably a folded flagellum and finally a purse. The inscription is a dedication of the base to the *numinis Veneris* by the Imperial freedman *lucundus*, who was in charge to collect the public revenues of Africa and land-borne goods.

Num(ini)
 Veneris Ad-
 quisitricis
 Aug(ustae) sacrum
 lucundus
 Aug(usti) n(ostr)i ver-
 na veltigalis (sic)
 IIII p(ublicorum) A(fricae) vil(icus)
 Lepcis mag(nae)
 terrestris
 d(e) s(uo) p(osuit)

A base for a statue in the form of an ornamental pilaster with a dedication made by *Animosa* to *Mercurius* and *Minervae* (pl. 25B) was seen at Khoms at the end of the nineteenth century. The inscription (*IRT* 303) is divided in two parts: on the abacus of the Ionic capital and in the *tabella ansata* below the capital.

Merc(urio) et Minervae
 Animosa
 Symm(achi) fi(lia) d(edit) d(edicavit)

DATATION:

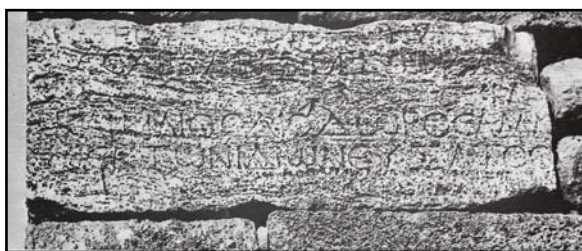
2nd - 3rd century AD.

BIBLIOGRAPHY:

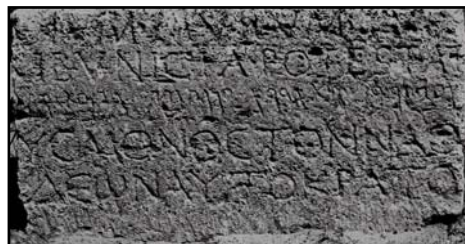
CLERMONT-GANNEAU (1903b); ROMANELLI (1925a), 64, figs 21, 29; FLORIANI SQUARCIAPINO (2003), 315; MARMOURI (2008), 143; *IRT* 264, 303, 315a.

ARCHIVAL DOCUMENTATION:

Photographs: BSR, Sopr. A 161, Sopr. A 775.



A. Part (a) of the inscription *IPT* 16 (Re1) reused in the *gasr* (Mi2) of Ras el-Hammam (*IPT*, tav. 5, 16a).



B. Part (b) of the inscription *IPT* 16 (Re1) reused in the *gasr* (Mi2) of Ras el-Hammam (*IPT*, tav. 5, 16b).



C. Inscription *IRT* 314 (Re2) - bottom - after its discovery at Ras el-Mergheb, 1913 (INASA, Fondo Mariani inv. 73153).



D. Inscription *IPT* 18 (Re5) found between the circus (En3) and the amphitheatre (En4) (*IPT*, tav. V, 18).



E. The limestone bracket with the *crux patens* (Re8) found close to the site of a *gasr* (Fa27), 2013 (Photo: A. Zocchi).



F. The statue of *Artemis Ephesia* (Re9) found close to the S side of the amphitheatre (En4) (GUIDI 1935b, fig. 22).



A. Marble stele with the dedication (*IRT* 264) to *Asclepius* (ROMANELLI 1925a, fig. 29).



B. Limestone base with the dedication (*IRT* 303) to *Mercurius* and *Minerva* (ROMANELLI 1925a, fig. 29).

QR1

SANDSTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Sandstone quarry.
DISTANCE FROM LEP CIS MAGNA:	1,935 m E (approx.).
GPS COORDINATES:	WGS 84 33S 0435222 - 3610732 (approx.).
ACTUAL LAND USE:	Roman amphitheatre and circus.
VISIBILITY:	The site is not longer visible due to the construction of the later buildings of the amphitheatre (En4) and the circus (En3).
TOPOGRAPHIC POSITION:	Low hill and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	Unpublished.
DESCRIPTION:	The ancient sandstone quarry is not visible anymore but it was surely exploited before and during the building of the 1 st century AD amphitheatre (En4). Due to the construction mainly of the amphitheatre (also of the 2 nd century AD circus, En3) the quarry located on the hill of <i>Sidi Barku</i> and along its slopes were hidden by these new structures.
STATE OF PRESERVATION:	Undeterminable because the quarry/ies face/s is/are not detected.
CHRONOLOGY:	1 st century AD (probably also during the first half of the 2 nd century AD).
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	HUMPHREY, SEAR VICKERS (1972-1973), 29; BRUNO, BIANCHI (2015), 40; MONTALI (2015), 387.

QR2

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEP CIS MAGNA:	5,470 m W (approx.).
GPS COORDINATES:	WGS 84 33S 0427849 - 3611147 (approx.).
ACTUAL LAND USE:	Undeterminable.
VISIBILITY:	Today the site is not visible because not easily accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	From the Italo-Turkish war onwards the area (Ras el-Mergheb hill) has been used as a military stronghold and several military installations have been built on the top of the hill and along its slopes.
PREVIOUS STUDIES:	The quarry face is mentioned for the first time by Cowper (1897) and by Clermont-Ganneau (1903a) who reported a platform on the top of the Ras el-Mergheb hill cut in the bedrock with a vertical cut on the S flank. More than forty years later Cesare Chiesa (1949) mentioned a quarry face on the slopes of the same hill and described the stone dug there similar to the limestone of the Ras el-Hammam quarries district.
DESCRIPTION:	The quarry/ies face/s are not longer visible due to the construction on the hilltop of a military outpost in 1912 (Forte Italia) and then used, always for military purposes, by the Libyan Army.
STATE OF PRESERVATION:	Undeterminable because the quarry/ies face/s is/are not visible anymore.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	COWPER (1897), 212-213; CLERMONT-GANNEAU (1903a), 343-344; MC (1913), I, 9, 14;

CARTOGRAPHY: ROMANELLI (1925a), 77; CHIESA (1949), 26; SJÖSTRÖM (1993), 136 nr. 17.
SPLAJ 1979b ("quarry symbols").

QR3

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	4,455 m W.
GPS COORDINATES:	WGS 84 33S 0428917 - 3610481.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The existence of a quarry along the Wadi Zennad was supposed by Cesare Chiesa (1949) who was however not able to locate it. The site has been recently published by the Roma Tre University survey report (MUNZI <i>et al.</i> 2010; 2016).
DESCRIPTION:	The limestone quarry face is located on the SW flank at the beginning of the northern branch of the Wadi Zennad. The quarry is composed by two contiguous sectors characterized by different steps for maximum total H of c.6 m (pl. 26A) and for a total length of c.40 m. At the foot of the quarry face between the quarry and the Wadi Seccum (the stream towards W) is still visible laid on the ground an unfinished column shaft (pl. 26B) with a lower diameter of 36 cm (27 cm the upper diameter) and a total length of 1.76 m.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the original working surfaces are damaged and hardly visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	CHIESA (1949), 26; MUNZI <i>et al.</i> (2010), 727; (2016), 78-79, site KHM 12.

QR4

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	4,395 m WSW.
GPS COORDINATES:	WGS 84 33S 0429132 - 3609814.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was recognized for the first time by S. Franchi (pl. 26C) during the survey made by the <i>Commissione per lo studio agrologico della Tripolitania</i> (MC 1913), however, due to the lack of an accurate cartography, it was not possible at that time to locate with accuracy the site. Cesare Chiesa (1949) mentioned the quarry but was not able to see and position it. The site is published by the Roma Tre University survey report (MUNZI <i>et al.</i> 2011; 2016).

DESCRIPTION:	The site is located on the S-E flank of the southern branch of the Wadi Zennad, near the junction with Wadi Seccum. The quarry face is c.200 m long and it is characterized by a vertical facade with wide and high steps for a total H of 8 m (pl. 26D). Between the quarry face and the wadi valley are still visible debris piles and some huge blocks partially cut along the upper part of the quarry face.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the original working surfaces are damaged and hardly visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MC (1913) I, 9, 64 and tav. XI, fig. 1; CHIESA (1949), 26; MUNZI <i>et al.</i> (2011), 26; (2016), 78-79, site KHM 18.
CARTOGRAPHY:	USACE 1962b (<i>Quarry</i>); SPLAJ 1979b ("quarry symbol").

QR5

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	4,855 m W.
GPS COORDINATES:	WGS 84 33S 0428483 - 3610713.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	Recent quarrying activity.
PREVIOUS STUDIES:	The site has been recently (2007) surveyed by the Archaeological Mission of Roma Tre University (KHM 7).
DESCRIPTION:	The site is located on the S flank of an hill located on the N side of Wadi Seccum, the main tributary of Wadi Zennad. The quarry face is c.80 m long and it is partially ruined by a modern quarry, actually abandoned. On some sectors of the quarry face are still visible the original ancient vertical cuts of the bedrocks.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the original working surfaces are damaged and hardly visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Unpublished.

QR6

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	4,940 m WSW.
GPS COORDINATES:	WGS 84 33S 0428441 - 3610382.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.

PREVIOUS STUDIES:	The site has been recently (2007) surveyed by the Archaeological Mission of Roma Tre University (KHM 8).
DESCRIPTION:	The site is located on the NW flank of an hill located W of Wadi Seccum, the main tributary of Wadi Zennad. The quarry face is hardly visible but it is recognizable for a total length of c.60 m and it seems to be originally characterized by different steps.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the original working surfaces are damaged and hardly visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Unpublished.

QR7

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	6,055 m SW.
GPS COORDINATES:	WGS 84 33S 0427920 - 3608377.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	It seems that some waste material from the quarry has been used to built some military structures (probably during the Italo-Turkish conflict) or civil buildings located nearby.
PREVIOUS STUDIES:	Cesare Chiesa (1949) attempted to detect with no success the ancient quarries along the sides of the Wadi Lebda/Wadi es-Smara. The site was surveyed recently and published by the Archaeological Mission of Roma Tre University (BRUNO, BIANCHI 2015; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The limestone quarry is located on the hilltop, N and E of the Wadi es-Smara. The quarry face has a semicircular and irregular shape for a total length of c.100 m and a maximum H of c.3.5 m (pl. 26E). At the foot of the quarry face are different debris piles and several unshaped blocks lie in the surroundings.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the original working surfaces are damaged and hardly visible.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	CHIESA (1949), 26; BRUNO, BIANCHI (2015), 40, sector VII; MUNZI <i>et al.</i> (2016), 80, site KHM 59.

QR8

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	5,975 m SW.
GPS COORDINATES:	WGS 84 33S 0428155 - 3608122.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.

TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	Cesare Chiesa (1949) attempted to detect with no success the ancient quarries along the sides of the Wadi Lebda/Wadi es-Smara. The site was surveyed recently and published by the Archaeological Mission of Roma Tre University (BRUNO, BIANCHI 2015; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	This limestone quarry is located on the S flank of the hill named, according to some Italian maps (IGM 1915; 1918a), Ras el-Gadatsa, located on the N side of the Wadi es-Smara. The quarry face, the largest of the Wadi es-Smara district, is c.300 m long and it preserves a maximum H of c.10 m. Many debris piles are still visible at the foot of the vertical facade and several regular blocks lie on the ground. On the quarry face are traces of ancient tool marks like the chisel (pl. 27A) and, beside them, are still noticeable on the bedrock some Greek letters, probably quarry marks (BRUNO, BIANCHI 2015).
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the surfaces are damaged even if several ancient working traces are still visible.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	CHIESA (1949), 26; BRUNO, BIANCHI (2015), 39-40, sector VI; MUNZI <i>et al.</i> (2016), 80, site KHM 60.

QR9

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEP CIS MAGNA:	6,375 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0427792 - 3607955 (approx).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible except for the modern quarry (S of the Wadi es-Smara) whose access is forbidden.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	A modern quarry face looking towards N (S of the Wadi es-Smara) actually overlaps the ancient site.
PREVIOUS STUDIES:	The site, even if was not recognized with accuracy, was probably detected and recognized as ancient by the scholars during the first years of the Italian occupation (MAIC 1912; MC 1913). Cesare Chiesa (1949), following the scarce information of the first Italian scholars of the twentieth century, tried to recognize these quarries but it was not able to locate them. The site was surveyed recently and published by the Archaeological Mission of Roma Tre University (BRUNO, BIANCHI 2015; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The site is composed by three different quarries located on the N, E and S flank of the hill that, according to an Italian map (IGM 1937), should be named as Ras el-Gadatsa (contrary to the previous Italian cartographies - IGM 1915; 1918a - where with this toponym was indicated a hill to the N). The quarry on the N side, facing the Wadi es-Smara, has partially been exploited in recent years (pl. 27B) but there are still traces of ancient quarrying activities like pick marks and wedges holes. It is also detectable an ancient slipway that lead to the valley of the wadi where different ashlar blocks are still visible (BRUNO, BIANCHI 2015, sectors I-II, 36-38). On the E side of the same hill and facing the Wadi es-Smara, there is another quarry face divided in three sections with numerous limestone regular blocks waiting to be carried away (BRUNO, BIANCHI 2015,

	sector V, 39). The last quarry of the site is located on the S part of the hill but it looks N, toward a saddle between two crests. This quarry face is one of the longest of the Wadi es-Smara district with c.200 m of extension and c.5 m in H; at the foot of the quarry, partially buried by debris, there are two dragon houses probably used by the quarry workers (BRUNO, BIANCHI 2015, sector IV, 38-39).
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MC (1913), I, 62; MAIC (1912), 40; CHIESA (1949), 26; BRUNO, BIANCHI (2015), 36-39, sectors I-II, IV-V; MUNZI <i>et al.</i> (2016), 79-80, site KHM 61.

QR10 LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEP CIS MAGNA:	6,560 m SW.
GPS COORDINATES:	WGS 84 33S 0427183 - 3608818.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	A short distance from the confluence of Wadi el-Belaazi with Wadi es-Smara and on the N side of the valley, there is an important quarry face c.50 m long and with a maximum preserved H of 8 m (pl. 27C). This quarry face is composed by different irregular steps and debris piles on its foot. On the bedrock are still visible ancient tool marks as the chisel and the pick.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2016), 80, site KHM 77.

QR 11 LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEP CIS MAGNA:	6,910 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0427183 - 3607955 (approx).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.

PREVIOUS STUDIES:	It is reliable that, together with the others quarry faces of the Wadi es-Smara districts, this site was probably detected and recognized as ancient by the scholars during the first years of the Italian occupation (MAIC 1912; MC 1913). More than thirty years later Cesare Chiesa (1949) attempted to recognize these quarries but it was not able to locate them. The site was surveyed recently and published by the Archaeological Mission of Roma Tre University (BRUNO, BIANCHI 2015; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	On the flanks of the hill between the S side of the Wadi es-Smara and the E side of the Wadi el-Belaazi there are different limestone quarry faces. Along the slopes of the hill were opened in ancient times four different sectors with extended quarry faces and preserved in height for a maximum of 3 m. There are also still visible different mounds of debris on the foot of the quarries. On the E flank of the hill (at short distance of the confluence of the two wadis) there are still <i>in situ</i> , on a flat yard, dozens of limestone blocks arranged in parallel lines waiting to be carried away (BRUNO, BIANCHI 2015).
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MC (1913), I, 62; MAIC (1912), 40; CHIESA (1949), 26; BRUNO, BIANCHI (2015), 38, sector III; MUNZI <i>et al.</i> (2016), 80, site KHM 80.

QR12

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	7,375 m SW.
GPS COORDINATES:	WGS 84 33S 0426486 - 3608368.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hilltop.
MODERN INTERFERENCE/S:	Garbage all around the site.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	A limestone quarry face is clearly visible on the upper part of a hill located on the S side of the Wadi es-Smara, c.400 m WSW of its confluence with Wadi el-Belaazi. The bedrock exploitation involved all the upper E side of this hill for more than 50 m in length and for a maximum H of 5 m. The quarry consists of low and wide steps (pl. 12D); traces of ancient extracting activities are still visible and different circular holes (diameter 20-25 cm) were made on the horizontal surface of the bedrock.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2016), 80, site KHM 84.

QR13

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	Ras Cohla; Ras Kókla.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEP CIS MAGNA:	7,945 m WSW.
GPS COORDINATES:	WGS 84 33S 0425539 - 3609520.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	A limestone quarry is located in the N-W part of the Wadi es-Smara valley, on the W side of the Ras Cohla hill, N of the wadi. The quarry face is irregular and with a segmented plan; on the whole it measures c.40 m in length and the maximum H preserved is c.3.5 m (pl. 27E).
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the ancient working surfaces are damaged and hardly visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2016), 80, site KHM 89.

QR14

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEP CIS MAGNA:	6,695 m W.
GPS COORDINATES:	WGS 84 33S 0426666 - 3611840.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	A small quarry, less than 50 m in length, was recognized along the slope of a low hill W of the beginning of the Wadi Chadrun, c.1.2 km NW from Ras el-Mergheb. This quarry face has a total H of 2.5 m and it is composed by five steps in which are still visible traces of chisels and picks (pl. 27F).
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2016), 84, site KHM 118.

QR15

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	5,150 m SSE (approx).
GPS COORDINATES:	WGS 84 33S 0434030 - 3606022 (approx).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	In 1938 part of the old quarry face was damaged by mines used to extract new limestone to built the houses of the close "Comprensorio Agricolo Valdagno" (CHIESA 1949). Today, the foot of the quarry face is partially covered by unauthorized dumps.
PREVIOUS STUDIES:	The first mention of this wide quarry face is made by Girard of Seyne in 1670, quoted by Romanelli (1925a). The French traveller was able to see the N flank of the Ras el-Hammam interested by the quarrying activities (see also Qr16) probably from the modern coast road. He describes the landscape looking S: "et vers le midy à une petite lieue de la ville s'élève une colline, où sont le carrieres du beau marbre blanc, dont Leptis estoit presque toute bastie". Less than 200 years later, Chiesa (1949) also mentioned the site and recognized different stone types coming from the Ras el-Hammam quarry district. He also reported the recent damages on the old quarry faces (probably together with Qr16) to extract new stone material. Recently the site was surveyed by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The site is located on the NE flank of the Ras el-Hammam hill and the quarry face is preserved, at whole, for c.400 m in length, with a maximum H of c.10 m. The majority of these quarry face sectors retain a vertical facade without steps (pl. 28A) while the inner NW part of the site seems to be exploited partially underground, probably seeking for a better quality of the bedrock (pl. 28B). Different tool marks are visible along the quarry face: chisel tracks and holes, pickaxe marks and numerous "V" shape wedge marks (pl. 28C). At the foot of the bedrock exploited there are still visible different mounds of debris that in part cover also the quarry faces; several blocks, often partially worked, lie on the ground. Towards N can be noticed also two large trails that led to the coastal plain that may follow ancient slipways.
STATE OF PRESERVATION:	Due to the bedrock exposed to the weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	ROMANELLI (1925a), 56; BARTOCCINI (1927a), 115-116; CHIESA (1949), 25-26; MUSSO <i>et al.</i> (2013-2014), 36, site KHM 138; MUNZI <i>et al.</i> (2016), 81, site KHM 138.
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-56a.
CARTOGRAPHY:	USACE 1962a ("quarry symbols").

QR16

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	5,540 m SSE (approx).

GPS COORDINATES:	WGS 84 33S 0434282 - 3605674 (approx).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	In 1938 part of the old quarry face was damaged by mines used to extract new limestone to built the houses of the close "Comprensorio Agricolo Valdagno" (CHIESA 1949). At the foot of the quarry face is a gravel road.
PREVIOUS STUDIES:	Together with the close quarry face Qr15, the first mention of this quarry is by Girard of Seyne in 1670, quoted by Romanelli (1925a). Chiesa (1949) also mentioned the site and recognized different stone types coming from the Ras el-Hammam district. He also reported the recent damages on the ancient quarry faces (probably together with Qr15). Recently the site was surveyed and published by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	A quarry face is located on the N flank of the Ras el-Hammam hill, c.200 m SE from the site Qr15. This quarry face is c.200 m long and it preserves a maximum H of c.10 m (pl. 28D). The facade is partially vertical and characterized by different steps.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	ROMANELLI (1925a), 56; BARTOCCINI (1927a), 115-116; CHIESA (1949), 25-26; MUSSO <i>et al.</i> (2013-2014), 36, site KHM 139; MUNZI <i>et al.</i> (2016), 81, site KHM 139.
CARTOGRAPHY:	USACE 1962a (<i>Stone quarry</i>).

QR17

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	5,305 m SSE.
GPS COORDINATES:	WGS 84 33S 0433897 - 3605850.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was recently surveyed and published by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	A quarry face is visible in the E part of the Ras el-Hammam hill facing toward S; the sector of the exploited bedrock is c.150 m long and it is preserved for a medium H of c.3.5 m. The quarry face is not linear and it is characterized by a segmented vertical shape (pl. 28E). Next to the western part of the site, beside different debris mounds at the foot of the quarry face, four big similar parallelepipedal limestone blocks lie on the ground (pl. 28F) of which the largest measures 1.54x1.1x0.85 m.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Musso <i>et al.</i> (2013-2014), 36, site KHM 142; MUNZI <i>et al.</i> (2016), 81, site KHM 142.

QR18

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	4,860 m S.
GPS COORDINATES:	WGS 84 33S 0433610 - 3606271.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was recently surveyed and published by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 2013-2014; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	Along the western part of the S flank of the Ras el-Hammam hill an ancient quarry face is visible for a total length of c.150 m and a maximum H of c.3-4 m (pl. 29A). Along the steps of this quarry are still noticeable wedges holes, chisel marks and narrow trenches made in the bedrock to separate and extract the different limestone blocks.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering, the surfaces are damaged even if several ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Musso <i>et al.</i> (2013-2014), 36, site KHM 143; MUNZI <i>et al.</i> (2016), 81-82, site KHM 143.

QR19

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	4,415 m S.
GPS COORDINATES:	WGS 84 33S 0433306 - 3606714.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	The western quarry of the Ras el-Hammam district is located at the W edge of the hill, facing partially to the N and partly to the S. The quarry face is not regular and often characterized by different steps (pl. 29B); moreover, sections of the lower part seems to be exploited in depth, partially underground. Still visible are traces of tools (chisels, wedges and picks) used to extract the limestone blocks.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering, the surfaces are damaged.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2016), 82, site KHM 145.
CARTOGRAPHY:	USACE 1962a ("quarry symbol").

QR20

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	6,755 m S (approx).
GPS COORDINATES:	WGS 84 33S 0433586 - 3604372 (approx).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hilltop and slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was recently surveyed and published by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 2013-2014, Munzi <i>et al.</i> 2016).
DESCRIPTION:	The site is located along the S flank of the Ras Sidi Husen hill S of Ras el-Hammam district. The quarry extension measures more than 700 m with a maximum H of c.2 m and is characterized mostly by short and low steps often ruined by the erosion (pl. 29C). The quarry seems to have exploited almost all the superior surface of the hill bedrock and along the steeps are still visible traces of the working phases like the separation cuts (c.10-15 cm wide, 10 cm in depth) made with wedges to extract the stones. The biggest block, partially quarried and then still <i>in situ</i> , measures 1.98 x 1.50 m and preserves an height of 0.65 m (pl. 29D). Others parallelepipedal blocks with different volume and shape are visible along the quarry face.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Musso <i>et al.</i> (2013-2014), 36, site KHM 156; Munzi <i>et al.</i> (2016), 83-84, site KHM 156.

QR21

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPICIS MAGNA:	6,775 m SSW (approx).
GPS COORDINATES:	WGS 84 33S 0431368 - 3604636 (approx).
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was recently surveyed and published by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 2013-2014, Munzi <i>et al.</i> 2016).
DESCRIPTION:	The site is located on the flank of a hill about 3 km SW from Ras el-Hammam hill and c.1.5 km W from Ras Sidi Husen. The quarry is characterized by different sections of which the longest one is visible on the W flank of the hill with a total length of c.250 m and a maximum H of c.3 m. The quarry face is irregular and characterized by different steps and large piles of debris on its foot (pl. 29E). On the eastern border of the same hill other smaller quarry faces are still recognizable; on the bedrock of this area there are evident traces of two different initial phases of the extraction of the limestone blocks both made with wedges (pls 29F-30A).

STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Musso <i>et al.</i> (2013-2014), 36, site KHM 167; MUNZI <i>et al.</i> (2016), 84, site KHM 167.

QR22

SANDSTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Sandstone quarry.
DISTANCE FROM LEP CIS MAGNA:	11,210 m NW.
GPS COORDINATES:	WGS 84 33S 0424983 - 3618612.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was recently surveyed and described by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004, 52).
DESCRIPTION:	The site is located at short distance from the seashore and 1 km NW from the mouth of Wadi Zambra. The quarry is characterized by a vertical facade c.200 m long and with a maximum height of 2.5 m. This sandstone quarry seems to be exploited in depth, partially underground where are still noticeable some quarry signs.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering, the surfaces are damaged even if some ancient working traces are still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 52, site 32.

QR23

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEP CIS MAGNA:	750 m SE.
GPS COORDINATES:	WGS 84 33S 0433393 - 3610379.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is hardly visible mainly due to the dense vegetation.
TOPOGRAPHIC POSITION:	Wadi slope.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The quarry is unpublished though the <i>Commissione per lo Studio Agrológico della Tripolitania</i> registered quarry faces along the Wadi Lebda (MC 1913, I, 9) that may refers to this site. The quarry face is visible in RAF air photographs made between 1942 and 1949.
DESCRIPTION:	The site is located along the left bank of the Wadi Lebda in an area facing the two ancient cisterns (Ci1 - Ci2) built along the opposite slope of the wadi. The quarry seems to be characterized by a vertical facade actually divided in different sections for a total length of c.300 m and with a H that is actually hard to measures but that should reach 4

STATE OF PRESERVATION:	m. Due to the bedrock being exposed to weathering, the surfaces are damaged even if some ancient working traces could be still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Unpublished.
ARCHIVAL DOCUMENTATION:	<u>Air Photographs</u> : BSR, WP G11-61a; ASLS, <i>Leptis Magna 24997</i> .

QR24

LIMESTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Limestone quarry.
DISTANCE FROM LEPCIS MAGNA:	3,845 m S (approx).
GPS COORDINATES:	WGS 84 33S 0432804 - 3607319 (7approx).
ACTUAL LAND USE:	Dam.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi slope.
MODERN INTERFERENCE/S:	A dam has been built on the site.
PREVIOUS STUDIES:	The quarry is unpublished even if Claudio Vita-Finzi (1969) mentioned it describing the close ancient dams along the Wadi Lebda.
DESCRIPTION:	The limestone quarry, on the right bank of the Wadi Lebda, was located below the level of a Roman dam (Dm2). No further information were given.
STATE OF PRESERVATION:	The quarry is not visible anymore due to the construction of a modern dam.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	VITA-FINZI (1969), 31.
ARCHIVAL DOCUMENTATION:	<u>Air Photographs</u> : BSR, WP G11-61a; ASLS, <i>Leptis Magna 24997</i> .

QR25

SANDSTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Sandstone quarry.
DISTANCE FROM LEPCIS MAGNA:	2,905 m NW.
GPS COORDINATES:	WGS 84 33S 0431496 - 3613391.
ACTUAL LAND USE:	Commercial zone.
VISIBILITY:	The site is hardly visible due to the presence of modern buildings.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site has been damaged by modern constructions.
PREVIOUS STUDIES:	The site has been surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The sandstone quarry is located c.100 m SE from the Khoms lighthouse between modern buildings. The ancient quarry face is characterized by two different quality of bedrock of which the lower one is harder. It is difficult to determine the total length of the quarry face as well as its height due to the presence of modern walls.
STATE OF PRESERVATION:	The quarry face is preserved for few portions.

CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Unpublished.

QR26

SANDSTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Sandstone quarry.
DISTANCE FROM LEPIS MAGNA:	3,255 m NW.
GPS COORDINATES:	WGS 84 33S 0431211 - 3613604.
ACTUAL LAND USE:	Beach.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been surveyed (1999-2000) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The sandstone quarry is located c.250 m NW from the Khoms lighthouse and facing the sea. The area is characterized by several segmented quarry faces for a total length of c.150 m and a max. preserved H of c.1.5 m.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering and sea, the surfaces are damaged even if some ancient working traces could be still visible.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated structures.
BIBLIOGRAPHY:	Unpublished.

QR27

SANDSTONE QUARRY

DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Sandstone quarry.
DISTANCE FROM LEPIS MAGNA:	4,650 m NW.
GPS COORDINATES:	WGS 84 33S 0429921 - 3614297.
ACTUAL LAND USE:	Beach.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	Houses have been built at short distance W and S from the site.
PREVIOUS STUDIES:	The site has been surveyed (1999-2000) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The sandstone quarry is located beneath and close to a Roman villa (VI33) facing the sea and located c.350 m NW from the mouth of Wadi Tualad. Some section of the quarry are still visible and it seems to be characterized by two different quality of bedrock of which the lower one is harder. Part of the horizontal surfaces of the quarry have been used as a foundation for the subsequent villa.
STATE OF PRESERVATION:	Due to the bedrock being exposed to weathering and sea, the surfaces are damaged even if some ancient working traces could be still visible.
CHRONOLOGY:	1 st century BC - 1 st century AD.

DATING ELEMENT/S:	Relationship with dated structures (VI33).
BIBLIOGRAPHY:	Unpublished.

QR28

SANDSTONE QUARRY

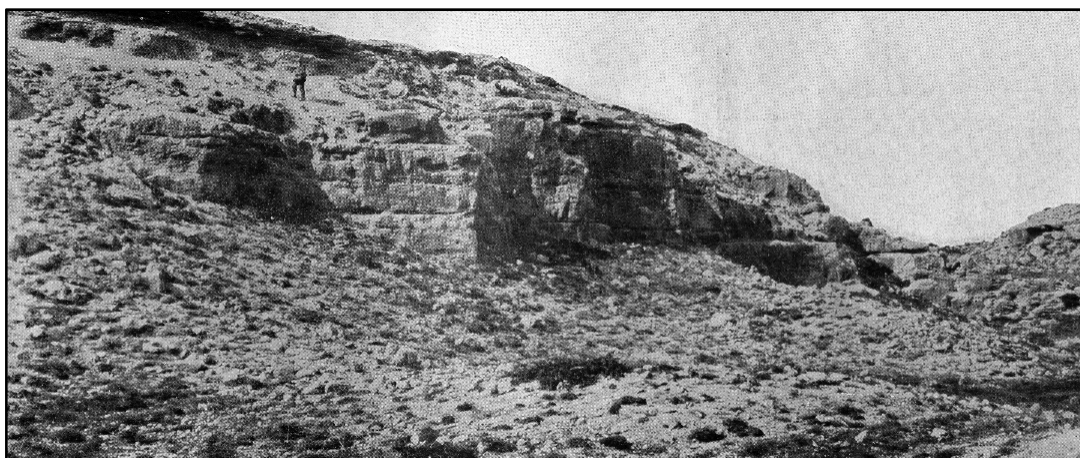
DEFINITION:	Working traces on the bedrock.
TOPONYM/S:	None.
INTERPRETATION:	Sandstone quarry.
DISTANCE FROM LEP CIS MAGNA:	4,070 m NW.
GPS COORDINATES:	WGS 84 33S 0430369 - 3613939.
ACTUAL LAND USE:	Commercial/residential area.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	Houses have been built on the site.
PREVIOUS STUDIES:	The site has been surveyed (1999-2000) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The sandstone quarry is located beneath and close to a Roman villa (VI34) facing the sea and located c.50 m NW from the mouth of Wadi Tualad. The quarry face W of the villa was characterized by two different quality of bedrock (the lower one was harder). The total length of this quarry section was c.40 m and it preserved a max. H of c.3 m. Moreover, the horizontal surfaces of the quarry have been used as a foundation for the subsequent villa.
STATE OF PRESERVATION:	The site has been destroyed.
CHRONOLOGY:	1 st century BC - 1 st century AD.
DATING ELEMENT/S:	Relationship with dated structures (VI34).
BIBLIOGRAPHY:	Unpublished.



A. Quarry Qr3: general view, 2007 (Photo: A. Zocchi).



B. Quarry Qr3: limestone column shaft at the foot of the quarry face, 2007 (Photo: A. Zocchi).



C. Quarry Qr4: partial view of the quarry face, 1911-1913 (MC 1913, tav. XI, fig. 1).



D. Quarry Qr4: partial view of the quarry face, 2007 (Photo: A. Zocchi).



E. Quarry Q7: the irregular shape of the quarry face from N, 2007 (Photo: A. Zocchi).



A. Quarry Qr8: chisel marks, 2007 (Photo: A. Zocchi).



B. Quarry Qr9: ancient and modern quarry faces from N, 2007 (Photo: A. Zocchi).



C. Quarry Qr10: partial view of the quarry face, 2007 (Photo: A. Zocchi).



D. Quarry Qr12: partial view of the quarry face, 2007 (Photo: A. Zocchi).



E. Quarry Qr13: partial view of the quarry face, 2007 (Photo: A. Zocchi).



F. Quarry Qr14: partial view of the quarry face, 2007 (Photo: A. Zocchi).



A. Quarry Qr15: part of the quarry face looking N, 2013
(Photo: A. Zocchi).



B. Quarry Qr15: part of the W sector,
probably exploited underground, 2013 (Photo: A. Zocchi).



C. Quarry Qr15: chisel and wedge marks, 2013
(Photo: A. Zocchi).



D. Quarry Qr16: partial view of the quarry face looking NE, 2013
(Photo: A. Zocchi).



E. Quarry Qr17: partial view of the quarry face, 2013
(Photo: A. Zocchi).



F. Quarry Qr17: two limestone blocks at the foot of the quarry face,
2013 (Photo: A. Zocchi).



A. Quarry Qr18: partial view of the quarry face from SE, 2013 (Photo: A. Zocchi).



B. Quarry Qr19: partial view of the quarry face looking towards E, 2013 (Photo: A. Zocchi).



C. Quarry Qr20: partial view of the quarry face looking towards W, 2013 (Photo: A. Zocchi).



D. Quarry Qr20: a block partially quarried, 2013 (Photo: A. Zocchi).



E. Quarry Qr21: partial view of the quarry face and of the debris piles at its foot, 2013 (Photo: A. Zocchi).



F. Quarry Qr21: traces of the initial phase of the stone extraction made by wedges, 2013 (Photo: A. Zocchi).



A. Quarry Qr21: two limestone blocks partially quarried, 2013 (Photo: A. Zocchi).

FA1	FARM
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DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	5,305 m W.
GPS COORDINATES:	WGS 84 33S 0428020 - 3610838.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	Part of the stone material was probably looted in 1912-1919 for the Italian strongholds of the Ras el-Mergheb hill.
PREVIOUS STUDIES:	At the beginning of the twentieth century M��hier de Mathuisieulx (1906) reported "les traces d'une bourgade, avec des pierres de taille en grand nombre" and he located it c.50 m S of the <i>mausoleum</i> Ma4: the location corresponds to this farm. The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 3).
DESCRIPTION:	On a low hill top located c.400 m S of Ras el-Mergheb are recognizable some traces of an ancient Roman farm characterized by <i>opus africanum</i> walls. Some limestone orthostats of the structure can be seen scattered on the ground together with a large quantities of small unshaped blocks referred to the mortar-packed sectors of these walls. In the central part of the site an underground cistern is still recognizable whose ceiling has collapsed while different wells are visible in the S and SW sides of the hill. On the N slope is still visible a limestone counterweight block of a press and a limestone tank. The near <i>mausoleum</i> (Ma4) located c.50 m N could be strictly related to this site.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	M��HIER DE MATHUISIEULX (1906), 78.

FA2	FARM
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DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	3,660 m WSW.
GPS COORDINATES:	WGS 84 33S 0429804 - 3610118.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 28).
DESCRIPTION:	On the top of a hill and on part of its slopes located c.200 m E from Wadi Zennad are traces of an ancient farm characterized by <i>opus africanum</i> walls (a few orthostats and a large quantity of small unshaped limestone blocks are still visible scattered on the ground). Part of a press upright seems to be still <i>in situ</i> (pl. 31A) while a limestone counterweight block was found upside down.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.

CHRONOLOGY: 1st century BC - 2nd century AD.
 DATING ELEMENT/S: Pottery, building features.
 BIBLIOGRAPHY: Unpublished.

FA3 FARM

DEFINITION: Structures.
 TOPONYM/S: Giama Hammud.
 INTERPRETATION: Farm.
 DISTANCE FROM LEPCIS MAGNA: 3,680 m SW.
 GPS COORDINATES: WGS 84 33S 0430688 - 3608549.
 ACTUAL LAND USE: Pasture/uncultivated land and partially residential/religious zone.
 VISIBILITY: The archaeological remains are visible beneath low vegetation.
 TOPOGRAPHIC POSITION: Terrace.
 MODERN INTERFERENCE/S: Recently around and on the site has been built several structure among which a mosque and different houses.
 PREVIOUS STUDIES: The site is mentioned as *Rudero dei fauni* on a map realized by the Regio Esercito in 1919: probably the site, at that time, was preserved better than now. The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 50).
 DESCRIPTION: On a terrace located c.1 km N from Wadi es-Smara are the remains of a farm characterized by *opus africanum* walls with some orthostats still *in situ* and numerous small unshaped limestone blocks (referred to their mortar-packed sectors) on the ground (pl. 31B). The structures can be detected in an area of c.10x15 m. Many other limestone blocks were piled near the Hammud mosque, few meters S from the site. Among them are two press uprights (pl. 31C). An Ionic capital and a column base (pl. 31D) were found on the ground c.100 m SE from the site. According to the people who live nearby, these architectural elements belong to this site.
 STATE OF PRESERVATION: The general plan of the ancient structures is partially recognizable on the ground.
 CHRONOLOGY: 1st century BC - 5th century AD.
 DATING ELEMENT/S: Pottery, building features.
 BIBLIOGRAPHY: Unpublished.
 CARTOGRAPHY: Br. Murge 1919c (*Rudero dei fauni*).

FA4 FARM

DEFINITION: Structures.
 TOPONYM/S: None.
 INTERPRETATION: Farm.
 DISTANCE FROM LEPCIS MAGNA: 5,435 m SW.
 GPS COORDINATES: WGS 84 33S 0428849 - 3608034.
 ACTUAL LAND USE: Pasture/uncultivated land.
 VISIBILITY: The archaeological remains are visible beneath low vegetation and shrubs.
 TOPOGRAPHIC POSITION: Hill top and part of its slopes.
 MODERN INTERFERENCE/S: None.
 PREVIOUS STUDIES: The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 54).

DESCRIPTION:	On a terrace located c.500 m N from Wadi es-Smara are the remains of a farm characterized by <i>opus africanum</i> walls (5 orthostats still <i>in situ</i> and numerous small unshaped limestone blocks on the ground), an <i>opus caementicium</i> basin coated with <i>opus signinum</i> (pl. 31E) and an underground cistern apparently dug in the bedrock. On the E are the preserved stone remains of a press (pl. 31F): uprights, the press base and the counterweight block and different fragments related to a <i>mortarium</i> of a mill (pl. 32A). All these structures occupy an area of c.1,700 m ² (25x70 m).
STATE OF PRESERVATION:	The general plan of the ancient structures is partially recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA5 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPICIS MAGNA:	6,660 m WSW.
GPS COORDINATES:	WGS 84 33S 0426880 - 3609447.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site is unpublished but it has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 75).
DESCRIPTION:	On the top of a hill named Ras Hamarna, c.800 m N from Wadi es-Smara, are the remains of a farm characterized by weak traces of <i>opus africanum</i> walls (an orthostat probably still <i>in situ</i> and small unshaped limestone blocks on the ground) and by part of an <i>opus caementicium</i> basin coated with <i>opus signinum</i> . In the centre of the site is a limestone counterweight block of a press (pl. 32B).
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA6 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPICIS MAGNA:	6,465 m SW.
GPS COORDINATES:	WGS 84 33S 0427453 - 3608410.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre

DESCRIPTION:	University (KHM 79). On a terrace located c.200 m S from Wadi es-Smara are the remains of a farm characterized by several orthostats of <i>opus africanum</i> walls still <i>in situ</i> together with a large quantity of small unshaped limestone blocks referred to the mortar-packed sectors of the same walls (pl. 32C). The structures occupies an area of c.1,200 m ² (c.40x30 m). On the site are also recognizable an <i>opus caementicium</i> basin coated with <i>opus signinum</i> and an underground cistern dug in the bedrock. In the southern sector of the site are visible the uprights of a press perfectly preserved (pl. 32D) and a mill <i>mortar</i> (pl. 32E).
STATE OF PRESERVATION:	The general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2010), fig. 6.

FA7/Gs1

FARM AND GASR (GASR UAFI)

DEFINITION:	Structures.
TOPONYM/S:	Gasr Uafi.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEPIS MAGNA:	7,665 m SW.
GPS COORDINATES:	WGS 84 33S 0426268 - 3608157.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs. Dense vegetation inside the structure of the <i>gasr</i> . On the site are small dumps.
TOPOGRAPHIC POSITION:	Hill top on a part of its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The <i>gasr</i> site has been cited (<i>Gasr Uafi</i>) in the IGM maps (1915; 1918) realized during the first years of the Italian period. On the cartography made by the Italian Murge Brigade (1919c) the structure is mentioned with the same toponym of the IGM maps even if it is depicted c.700 m more to the E. The site has been recently (2007) surveyed and cited by the Archeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	On a hilltop of a low hill and on its S slope located c.650 SW from the confluence between Wadi es-Smara and Wadi el Belaazi are the remains of a farm and a quadrangular <i>gasr</i> . The farm is recognizable mostly on the hilltop and is characterized by different orthostats <i>in situ</i> belonging to <i>opus africanum</i> walls. These structures, together with a underground cistern, are within an area of c.1,600 m ² (c.55x30 m). In the W sector of these structures is also a press with still <i>in situ</i> the two uprights (pl. 32F) while the limestone counterweight block lies upside down. Other press elements (mainly part of uprights) are visible scattered on the ground together with lava quern fragments. Within the southern sector of the farm has been built a quadrangular <i>gasr</i> (13.6x14.2 m) using the <i>opus quadratum</i> technique (pl. 33A). The building is well preserved and the N side has twelve rows of ashlar blocks still <i>in situ</i> . The entrance is on the central part of the S side and its jams are made reusing an upright of a press and a threshold. Inside the <i>gasr</i> are still recognizable an internal partition always made in <i>opus quadratum</i> technique (pl. 33B) that divide the structure in the S-N direction.
STATE OF PRESERVATION:	The <i>gasr</i> is very well preserved while the general plan of the ancient farm is partially recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2010), fig. 5; (2011), 27; (2014), 222, site KHM 82.
CARTOGRAPHY:	IGM 1915b (<i>Gasr Uafi</i>); IGM 1918a (<i>Gasr Uafi</i>); Br. Murge 1919c (<i>Gasr Uafi</i>).

FA8**FARM**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPICIS MAGNA:	8,240 m WSW.
GPS COORDINATES:	WGS 84 33S 0425480 - 3608590.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top an part of its slopes.
MODERN INTERFERENCE/S:	Walled fence on the SE part of the site and modern house to the W.
PREVIOUS STUDIES:	The site has been recently published with a sketched plan by the Archeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2010).
DESCRIPTION:	The site is recognizable on a hill top and part of its N slope located c.400 m S of the Wadi es-Smara (pl. 33C). The structures are characterized by <i>opus africanum</i> walls that seem to form a courtyard with traces of rooms on its N side. In the W sector is preserved a press with an upright (H of 2.78 m) still <i>in situ</i> (pl. 33D), the counterweight block and two perpendicular limestone basins coated with <i>opus signinum</i> and with central recessions (pl. 33E). The total area occupied by this structure is c.850 m ² (32x26 m).
STATE OF PRESERVATION:	The general plan of the site is partially recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2010), 735-736, site KHM 87.
CARTOGRAPHY:	USACE 1962b (<i>Ruins</i>).

FA9/Gs2**FARM AND GASR**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEPICIS MAGNA:	6,880 m SW.
GPS COORDINATES:	WGS 84 33S 0428777 - 3605958.
ACTUAL LAND USE:	Residential zone.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top an part of its slopes.
MODERN INTERFERENCE/S:	Both the farm and the <i>gasr</i> have been destroyed recently by the construction of several buildings.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	Traces of <i>opus africanum</i> walls (defined by several orthostats <i>in situ</i> and large quantities of small unshaped limestone blocks scattered on the ground) are clearly visible on a hill top and part of its E slope located in an area S of Wadi es-Smara (pl. 34A). On the site are still clearly visible the remains of a press with its uprights still <i>in situ</i> (pl. 34B), the counterweight block reused to built a nearby small marabout, and a limestone basin reused in a Arab/Ottoman well. Within the area of the farm, that measures a total surface of c.1,800 m ² (c.40x45 m), has been also found a limestone column base. Afterwards, in

STATE OF PRESERVATION:	the central part of these structures, has been built a squared <i>gasr</i> (c.7x8 m) preserved for a max. H of three rows of limestone ashlar blocks (pl. 34C).
CHRONOLOGY:	The general plan of the site is partially recognizable on the ground.
DATING ELEMENT/S:	2 nd century BC - 4 th century AD.
BIBLIOGRAPHY:	Pottery, building features. MUNZI <i>et al.</i> (2014), 222, site KHM 99.

FA10 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPCIS MAGNA:	6,750 m W.
GPS COORDINATES:	WGS 84 33S 0426590 - 3610819.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Terrace an part of its slopes.
MODERN INTERFERENCE/S:	The site is covered by a dark dirt coming from the near cement factory.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 111).
DESCRIPTION:	On a low hill located c.1,200 m W of Ras el-Mergheb are several <i>opus africanum</i> walls characterized by different limestone orthostats (some of them <i>in situ</i>) and a large quantity of small unshaped blocks scattered on the ground, originally forming their mortar-package sectors. On the site are also the remains of two presses (two limestone counterweight blocks) and traces of <i>opus signinum</i> basins together with an underground cistern dug in the bedrock.
STATE OF PRESERVATION:	The general plan of the site is hardly recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA11 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPCIS MAGNA:	5,960 m WNW.
GPS COORDINATES:	WGS 84 33S 0427532 - 3612539.
ACTUAL LAND USE:	Pasture/uncultivated land and partially residential zone.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace an part of its slopes.
MODERN INTERFERENCE/S:	The site has been recently damaged by modern buildings; part of the site has been indeed leveled using a bulldozer.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 120).
DESCRIPTION:	Traces of an ancient farm are visible on a terrace at short distance from Wadi Chadrun. Due to recent terrain leveling, several limestone ashlar blocks belonging to <i>opus</i>

STATE OF PRESERVATION:	<i>africanum</i> walls were piled along the slopes of the terrace. The only structure still partially visible <i>in situ</i> is an underground cistern with its circular well, both dug in the bedrock. On the site, among the scattered material, is also a limestone counterweigh block of a press (pl. 34D) and a limestone molded base, probably referred to a funeral structure (Fu8). The site has been heavily damaged by recent building activities, remains of the structures can be seen scattered on the ground.
CHRONOLOGY:	2 nd century BC - 4 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA12 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	7,585 m WNW.
GPS COORDINATES:	WGS 84 33S 0425869 - 3612511.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace an part of its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 128).
DESCRIPTION:	On a terrace facing a branch of Wadi Chadrun are the remains of two perpendicular walls (13x7 m) characterized by a row of limestone ashlar blocks (pl. 34E). Scattered on the ground are fragments of a <i>torcular</i> base, parts of lava querns, two thresholds and several ashlar blocks probably from opus <i>africanum</i> walls.
STATE OF PRESERVATION:	The general plan of the site is partially recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA13/Gs3 FARM AND GASR

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	4,920 m S.
GPS COORDINATES:	WGS 84 33S 0432459 - 3606277.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	During the Ottoman period a subterranean oil press (<i>masra</i>) was placed inside an ancient cistern whose ceiling is partially collapsed. A few meters N of the site the terrain has been leveled.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).

DESCRIPTION:	On the top of a hill located c.400 m E of Wadi Lebda are visible traces of <i>opus africanum</i> walls characterized by orthostats <i>in situ</i> and small unshaped blocks scattered on the ground, originally forming the mortar-package sectors of the walls (pl. 35A). Within these walls traces, are the remains of a <i>torcular</i> (an <i>arbor</i> and a counterweight block) and a <i>mortarium</i> of a millstone (pl. 35B). In the centre of the site is partially visible an underground cistern, subsequently occupied by an Ottoman oil press (<i>masra</i>). The structures of this farm occupy an area of c.750 m ² (30x25). In a second phase a squared <i>gasr</i> (12x12 m) was built within the farm. It is preserved for two rows of limestone ashlar blocks together with small thin blocks used to level the different rows (pl. 35C).
STATE OF PRESERVATION:	The general plan of the site is partially recognizable on the ground.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 223, site KHM 148.

FA14 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	5,460 m S.
GPS COORDINATES:	WGS 84 33S 0432314 - 3605752.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 161).
DESCRIPTION:	On the top of a hill located c.300 m S of Wadi Lebda are visible scarce traces of <i>opus africanum</i> walls characterized by few orthostats scattered on the ground together with small unshaped limestone blocks (pl. 35D). Within these walls traces, are two counterweight blocks of presses.
STATE OF PRESERVATION:	The general plan of the structures of the site is hardly recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 2 nd century AD.
DATING ELEMENT/S:	Pottery, coins, building features.
BIBLIOGRAPHY:	MUNZI (2017), 198 nr. 25-26.

FA15 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	6,975 m SSW.
GPS COORDINATES:	WGS 84 33S 0430960 - 3604558.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	Recent illegal excavations within the site area.

PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 168).
DESCRIPTION:	Along the slope of an hill located c.1 km E of Wadi es-Snanat are the remains of a farm characterized by <i>opus africanum</i> walls with few orthostats still <i>in situ</i> together with small unshaped limestone blocks scattered on the ground (pl. 35E). Other structural elements visible on the site are fragments belonging to <i>opus signinum</i> basins and limestone thresholds. The total surface occupied by the survival structures is c.900 m ² (c.30x30 m). Within these structures, is clearly recognizable a press with many of its stone elements preserved, like the uprights, the press base (pl. 35F) and counterweight block (pl. 36A).
STATE OF PRESERVATION:	The general plan of the structures of the site is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 4 th century AD.
DATING ELEMENT/S:	Pottery, coin, building features.
BIBLIOGRAPHY:	MUNZI (2017), 199 nr. 28.

FA16

FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPIS MAGNA:	9,520 m WNW.
GPS COORDINATES:	WGS 84 33S 0424730 - 3615209.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	Recent buildings have been built near the site.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	Along the slope of an hill located c.1 km W of Wadi Zambra are the remains of a farm characterized by traces of walls on the ground, orthostats of <i>opus africanum</i> walls scattered on the site together with unshaped small limestone blocks and fragments of basins coated with <i>opus signinum</i> . Within these structures are the uprights of two presses and fragments of lava querns.
STATE OF PRESERVATION:	The general plan of the structures of the site is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 55, site 42.

FA17/Gs4

FARM AND GASR

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEPIS MAGNA:	7,615 m WNW.
GPS COORDINATES:	WGS 84 33S 0425818 - 3612378.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top and its slopes.

MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and partially published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014; 2016).
DESCRIPTION:	On the top of a low hill and on its slopes are the remains of an ancient farm located c.500 m E of Wadi Chadrun. The elements belonging to the farm are scarce: an underground cistern dug in the rock and a limestone column drum and an upright of a press reused in the subsequent structure. The following phase of the site is characterized by the construction of a squared <i>gasr</i> measuring 17x17 m with still visible traces of a row of limestone ashlar blocks (pl. 36B). Internally, within a large quantities of debris, are recognizable traces of walls built using small unshaped limestone blocks. Around the structure is a ditch that measures c.40x50 m.
STATE OF PRESERVATION:	The general plan of the structure of the <i>gasr</i> is recognizable on the ground. Few traces related to the previous farm.
CHRONOLOGY:	2 nd century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 223, site KHM 130; (2016), 74, site KHM 130.

FA18 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	8,950 m WNW.
GPS COORDINATES:	WGS 84 33S 0424557 - 3612921.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was visited in June 1911 by the "Missione Sanfilippo-Sforza organized by the "Banco di Roma". In that expedition the photographer Ignazio Sanfilippo took two photos actually preserved at the Società Geografica Italiana (pl. 36C-D). Another photo of the site was made by S. Franchi and published without any description (MC 1913). The site has been recently surveyed (2004) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	On a hill top located c.1.6 km N from Ras el-Manubia are the remains of a farm characterized by several <i>opus africanum</i> walls (some limestone orthostats are still <i>in situ</i>), by two perpendicular <i>opus quadratum</i> walls c.7 m and 8 m long (pl. 36E) that, according to the archival photographs preserved at the Photographic Archive of the SGI, should constitute the main walls for the press rooms. The productive area seems to be characterized by the remains of three presses whose uprights are still <i>in situ</i> for two of them (pls 36F-37A); scattered on the ground is also a press base and a limestone basin. On the site are also visible traces of <i>opus signinum</i> and mortar floors while a large underground barrel vaulted cistern, dug entirely in the bedrock, is visible in the eastern part of the site (pl. 37B).
STATE OF PRESERVATION:	The general plan of the structure is not recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MC (1913), I, tav. XII, fig. 1.
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : SGI, Fondo storico 216-3-62, 216-4-10.

FA19**FARM**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	8,215 m WNW.
GPS COORDINATES:	WGS 84 33S 0425259 - 3612714.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	Recently some buildings have been built a few meters SW from the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 127).
DESCRIPTION:	Along a terrace are the remains of a farm characterized by <i>opus africanum</i> walls whose limestone orthostats are still <i>in situ</i> while a large quantity of small unshaped limestone blocks are scattered on the ground. In the area is also visible a limestone <i>mortarium</i> belonging to a mill (pl. 37C).
STATE OF PRESERVATION:	The general plan of the structure is not recognizable on the ground.
CHRONOLOGY:	1 st century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA20**FARM**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	7,845 m SW.
GPS COORDINATES:	WGS 84 33S 0425957 - 3608433.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 85).
DESCRIPTION:	On a hill top located c.600 m SW of Wadi es-Smara are scarce traces of an ancient farm. On the ground are still recognizable the remains of a wall (4 m long) made by an alignment of limestone slabs placed vertically and a large quantity of unshaped limestone blocks on the ground. On the site it is also visible part of a <i>opus caementicium</i> basin coated with <i>opus signinum</i> , fragments of lava querns and, at least, two underground cisterns provided with wells.
STATE OF PRESERVATION:	The general plan of the structure is hardly recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA21**FARM**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	4,390 m WSW.
GPS COORDINATES:	WGS 84 33S 0428985 - 3610449.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 11).
DESCRIPTION:	Along a terrace located c.700 m W of Wadi Zennad are the remains of a structure related to a farm. The building is characterized by some limestone orthostats belonging to the <i>opus africanum</i> walls together with a large quantity of small unshaped limestone blocks scattered on the ground. The total surface occupied by these structures is c.400 m ² (25 x 16 m). Within the area are also recognizable fragments of lava querns.
STATE OF PRESERVATION:	The general plan of the structure is partially recognizable on the ground.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA22**FARM**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	4,745 m W.
GPS COORDINATES:	WGS 84 33S 0428576 - 3610996.
ACTUAL LAND USE:	Partially residential and partially pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation; the W part of the site is inaccessible due to a wall fence.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	The area has been recently interested by some works and terrain leveling. The W part of the site is fenced and not accessible.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 23).
DESCRIPTION:	Traces of ancient structures related to a farm are located on the top of a low hill, c.750 m E of Ras el-Mergheb. An irregular underground cistern dug in the bedrock is visible along the hill slope of the site (pl. 37D). The reservoir, irregular in plan (c.2.5x8 m; max. H of 2.5 m), is barrel vaulted and was provided by a well. The inner surface was coated with <i>opus signinum</i> . Another well, probably related to another ancient cistern, is located more southward.
STATE OF PRESERVATION:	The general plan of the structure is not recognizable on the ground.
CHRONOLOGY:	1 st century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA23**FARM**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	5,270 m SW.
GPS COORDINATES:	WGS 84 33S 0428868 - 3608292.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 53).
DESCRIPTION:	Traces of ancient structures related to a farm are located on a terrace and on part of its slopes located c.400 m N of Wadi es-Smara. Different mounds of small unshaped limestone blocks are visible on the ground together with a well and part of the underground cistern.
STATE OF PRESERVATION:	The general plan of the structure is not recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA24**FARM**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	5,145 m SW.
GPS COORDINATES:	WGS 84 33S 0428816 - 3608636.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 55).
DESCRIPTION:	Traces of ancient structures related to a farm are located on a hill top and on part of its slopes located c.1 km N of Wadi es-Smara. Different mounds of small unshaped limestone blocks are visible on the ground together with a well and part of its underground cistern.
STATE OF PRESERVATION:	The general plan of the structure is not recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA25**FARM**

DEFINITION:	Structures.
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TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	6,910 m SW.
GPS COORDINATES:	WGS 84 33S 0427221 - 3607875.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 81).
DESCRIPTION:	On a hilltop located c.700 m S of Wadi es-Smara are the remains of a farm characterized by <i>opus africanum</i> walls whose orthostats, are scattered on the ground. On the site are also visible portions of <i>opus signinum</i> floors still <i>in situ</i> (pl. 37E).
STATE OF PRESERVATION:	The general plan of the structure is hardly recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA26 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	5,850 m W.
GPS COORDINATES:	WGS 84 33S 0427508 - 3610494.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 93).
DESCRIPTION:	On a hilltop located c.700 m SW of Ras el-Mergheb are traces of a farm characterized by mounds of small unshaped limestone blocks and by a <i>opus caementicium</i> basin coated with <i>opus signinum</i> (c.2.5x1.5 m). Next to the vat/basin are visible two ancient wells with the subterranean cistern/s.
STATE OF PRESERVATION:	The general plan of the structure is not recognizable on the ground.
CHRONOLOGY:	1 st century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA27/Gs5 FARM AND GASR

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	9,340 m W.
GPS COORDINATES:	WGS 84 33S 0423982 - 3611159.

ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and partially published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014; 2016).
DESCRIPTION:	On a high hilltop (named Ras el-Manubia) are the remains of an ancient farm and of a <i>gasr</i> . The farm is composed by the presence of several small unshaped limestone blocks scattered on the slopes of the hill, probably the remains of the mortar-package sectors of <i>opus africanum</i> walls. On the site are also visible, reused in the subsequent <i>gasr</i> , a limestone column drum and fragments of lava querns. In a subsequent phase, on the highest point of the hill, was erected a quadrangular <i>gasr</i> (pl. 38A). This structure was made by reusing essentially limestone ashlar blocks probably the orthostats of the <i>opus africanum</i> walls of the previous farm. The <i>gasr</i> is preserved for a maximum height of 4 rows of blocks (c.2 m) in the SE corner (pl. 38B) and measures c.15x17 m; inside is a large quantity of debris, essentially unshaped small limestone blocks. Beneath the western side of the <i>gasr</i> , there is a cistern dug in the bedrock and coated with a thick layer of <i>opus signinum</i> (pl. 38C). The underground reservoir is characterized by two contiguous rectangular rooms, both provided with a barrel vault and with an adjoining room probably for the wells whose wellhead were then located at the center of the above <i>gasr</i> . Scattered on the ground, among the walls of the <i>gasr</i> , was found a limestone bracket peculiar to an ecclesiastic structures, due to the <i>crux patens</i> carved on one side (Re8).
STATE OF PRESERVATION:	The <i>gasr</i> is well preserved while the previous structures are hardly recognizable on the ground.
CHRONOLOGY:	1 st - 6 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 223, site KHM 125; (2016), 73-74, site KHM 125.

FA28/Gs6

FARM AND GASR

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEPICIS MAGNA:	4,575 m S.
GPS COORDINATES:	WGS 84 33S 0433345 - 3606548.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	A pylon partially damaged the site to the N.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	On a hilltop located in the N part of the Ras el-Hammam hill are the remains of an ancient farm and of a quadrangular <i>gasr</i> . The farm is characterized by the presence, not <i>in situ</i> , of limestone ashlar blocks belonging to the <i>opus africanum</i> walls. Several small unshaped limestone blocks are also visible scattered on the slopes of the hill, probably the remains of the mortar-package sectors of <i>opus africanum</i> walls. A subsequent quadrangular structure (<i>gasr</i>) was built reusing essentially the limestone ashlar blocks of the previous farm (pl. 38D). Inside the structure that measures approximately 15x15 m is a large quantity of debris, essentially unshaped small limestone blocks.
STATE OF PRESERVATION:	The <i>gasr</i> is partially preserved while the previous structures are hardly recognizable on

CHRONOLOGY:	the ground.
DATING ELEMENT/S:	1 st - 5 th century AD.
BIBLIOGRAPHY:	Pottery, building features.
	MUNZI <i>et al.</i> (2014), 223, site KHM 144; MUNZI (2017), 197-198 nr. 13-14.

FA29/Gs7

FARM AND *gasr*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	6,165 m S.
GPS COORDINATES:	WGS 84 33S 0431776 - 3605159.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	On a low hill located c.250 m W of the Wadi Lebda, are the remains of a farm some of whose limestone orthostats - belonging to <i>opus africanum</i> walls - are still <i>in situ</i> . Scattered on the ground are also visible other limestone ashlar blocks and a large quantity of small unshaped stones originally forming the mortar-package sectors of the same <i>opus africanum</i> walls. The quadrangular <i>gasr</i> , located on the highest point of the hill, was built using the limestone ashlar blocks (one row preserved) and measures 8x8.5 m. Inside it a mound of debris of small unshaped limestone blocks (pl. 38E).
STATE OF PRESERVATION:	The general plan of the <i>gasr</i> is recognizable on the ground while the structures of the farm are partially visible.
CHRONOLOGY:	2 nd - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 223, site KHM 164.
CARTOGRAPHY:	USACE 1962a (<i>Ruins</i>); SPLAJ 1979a (<i>Ruins</i>).

FA30/Gs8

FARM AND *gasr*

DEFINITION:	Structures.
TOPONYM/S:	ez-Zeita.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	3,725 m W (approx).
GPS COORDINATES:	WGS 84 33S 0429139 - 3610464 (approx.).
ACTUAL LAND USE:	Railroad.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	The site has been recently destroyed due to the construction of a railroad.
PREVIOUS STUDIES:	The site was excavated by the DoA in collaboration with the University of Homs between 1996 and 1997. The structures related to the <i>gasr</i> together with the main finds recorded has been published in <i>Libya Antiqua</i> (ABD EL-AZIZ EL NEMSI 1997).
DESCRIPTION:	On the top of a hill located c.250 m W of Wadi Zennad were the remains of a rectangular

farm. The structure maintained the same external dimension through its different phases. It had a plan of 12.5x6 m and, in the first phase, it did not have internal partitions (pl. 39A-B). The structure was built in limestone ashlar blocks for the N and E walls (a maximum of two rows were preserved) while the other two walls were built using smaller irregular stones. The entrance was on the E side and the floor was made by rectangular limestone slabs laid directly on the bedrock. In a second phase (second half of the 4th century) some parts of the external walls were restored reusing material from the nearby sites. The third phase is characterized by an internal subdivision of the structure and by a reinforcement of the external walls with layers of irregular stones abutted to the previous ones. To this phase belongs also a staircase consisting of five steps. Along the S wall was also built a rectangular niche with a circular hole on its floor that probably led to a subterranean chamber (cistern or granary). The hole was closed reusing the upper part of a circular millstone. Other materials have been found reused within the structures: two funerary inscriptions and a fragment of marble vase-urn (Fu11) and different architectural elements referred to columns such limestone bases, drums and a Ionic capital.

STATE OF PRESERVATION: The site has been destroyed.
 CHRONOLOGY: 2nd - 6th century AD.
 DATING ELEMENT/S: Pottery, building features.
 BIBLIOGRAPHY: ABD EL-AZIZ EL NEMSI (1997).

FA31

FARM

DEFINITION: Structures.
 TOPONYM/S: None.
 INTERPRETATION: Farm.
 DISTANCE FROM LEPIS MAGNA: 4,135 m W.
 GPS COORDINATES: WGS 84 33S 0429194 - 3610959.
 ACTUAL LAND USE: Pasture/uncultivated land.
 VISIBILITY: The archaeological remains are visible beneath low vegetation and shrubs.
 TOPOGRAPHIC POSITION: Hill top.
 MODERN INTERFERENCE/S: Recently the terrain N of the site has been leveled due to the construction of a railroad.
 PREVIOUS STUDIES: The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 26).
 DESCRIPTION: North of the top of a low hill located c.800 m NW from the Wadi Zennad are piled several ashlar limestone blocks belonging to the *opus africanum* walls. Within the site, characterized on the ground by a large quantity of debris and small unshaped limestone blocks, are fragments of lava querns.
 STATE OF PRESERVATION: The plan of the structures is not recognizable on the ground.
 CHRONOLOGY: 1st - 3rd century AD.
 DATING ELEMENT/S: Pottery, building features.
 BIBLIOGRAPHY: Unpublished.

FA32

FARM

DEFINITION: Structures.
 TOPONYM/S: None.
 INTERPRETATION: Farm.

DISTANCE FROM LEP CIS MAGNA:	5,590 m SW.
GPS COORDINATES:	WGS 84 33S 0428513 - 3608280.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	Recently, the site has been crossed (N-S) by a dirty road.
PREVIOUS STUDIES:	The site it has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 57).
DESCRIPTION:	On a hill top located c.500 m N from Wadi es-Smara are scarce traces on the terrain of walls characterized by unshaped small limestone blocks. On the E slope of the hill is an ancient well (still in use) with a subterranean cistern dug in the bedrock.
STATE OF PRESERVATION:	The plan of the structures is not recognizable on the ground.
CHRONOLOGY:	3 th - 1 st century BC.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA33	FARM
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DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	6,510 m SW.
GPS COORDINATES:	WGS 84 33S 0427062 - 3609338.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	Dumps within the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 74).
DESCRIPTION:	On the SW slope of the Ras Hamarna hill, on a narrow terrace are the remains of an ancient farm characterized by some limestone orthostasts of the <i>opus africanum</i> walls still <i>in situ</i> (pl. 39C). Two walls are identifiable on the site, one oriented N-S (c.6.5 m long) and the other one oriented E-O (c.4.5 m long). The remains of the structures, recognizable by the presence of a quantity of small unshaped limestone blocks, are spread on a surface of c.500 m ² (c.50 x 10 m).
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA34	FARM
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DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	7,420 m SW.

GPS COORDINATES:	WGS 84 33S 0426443 - 3608345.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	Recently, a quarry has been installed at short distance SW from the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 83).
DESCRIPTION:	On the hill top located c.400 m W of Wadi es-Smara are some traces of ancient walls visible at ground level. Within the area of the site, lies a large quantity of small unshaped limestone blocks, probably belonging to the mortar-package sectors of the ancient <i>opus africanum</i> walls. A limestone threshold has been reused, probably as a jamb (pl. 39D).
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 1 st century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA35 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	7,600 m WSW.
GPS COORDINATES:	WGS 84 33S 0425862 - 3609710.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 91).
DESCRIPTION:	On the hill top located c.500 m N of Wadi es-Smara are scarce traces of ancient walls visible at ground level together with a small quantity of unshaped limestone blocks, probably belonging to the mortar-package sectors of the ancient <i>opus africanum</i> walls. An Arab/Ottoman well was built to take advantage from an underground ancient cistern.
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA36 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	6,370 m W.
GPS COORDINATES:	WGS 84 33S 0427014 - 3610308.

ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Most of the structures of the site seem to have been heavily damaged by agricultural activities.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 94).
DESCRIPTION:	Circa 1.2 km WSW of Ras el-Mergheb is an area characterized by scattered unshaped small limestone blocks probably belonging to the mortar-package sectors of the ancient <i>opus africanum</i> walls. The orthostats of the same walls are visible piled on the border of a modern field.
STATE OF PRESERVATION:	The plan of the structures is not recognizable on the ground.
CHRONOLOGY:	1 st century BC - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA37 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPCIS MAGNA:	1,795 m S.
GPS COORDINATES:	WGS 84 33S 0432808 - 3609407.
ACTUAL LAND USE:	Pasture/cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Agricultural activities.
PREVIOUS STUDIES:	The site is unpublished but it has been recently surveyed (2009) by the Archaeological Mission of Roma Tre University (KHM 102).
DESCRIPTION:	Circa 300 m W of Wadi Lebda are the remains of different structures. Many ashlar limestone blocks belonging probably to <i>opus africanum</i> walls, have been recently piled along a dirt path (pl. 39E). A quadrangular <i>opus caementicium</i> structure (c.13x15 m), probably a cistern, is still <i>in situ</i> and is partially visible in the W part of the site (pl. 39F). These structures could be related to the nearby <i>villa</i> (VI47) to the E.
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA38 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPCIS MAGNA:	5,455 m SSW.
GPS COORDINATES:	WGS 84 33S 0430460 - 3606482.
ACTUAL LAND USE:	Pasture/uncultivated land.

VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2009) by the Archaeological Mission of Roma Tre University (KHM 104).
DESCRIPTION:	On a plain terrain ca 150 m W of Wadi Lebda are the remains of different ancient walls probably built using the <i>opus africanum</i> technique (these structures were detected at ground level within a squared area of c.7x7 m). The extrados of an <i>opus caementicium</i> structure, probably an underground cistern, together with part of <i>opus signinum</i> floors are detectable on the ground in the E part of the site, towards the Wadi Lebda.
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA39 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPIS MAGNA:	6,830 m W.
GPS COORDINATES:	WGS 84 33S 0426517 - 3611769.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 116).
DESCRIPTION:	On the top of a low hill located c.1.5 km NW from Ras el-Mergheb are traces, on ground level, belonging to ancient walls probably built using the <i>opus africanum</i> technique.
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA40 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPIS MAGNA:	6,565 m WNW.
GPS COORDINATES:	WGS 84 33S 0427043 - 3613059.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The ancient structures have been recently heavily damaged; however, the archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Agricultural activities.

PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 122).
DESCRIPTION:	In the middle of a modern field located c.400 m S-E of Wadi Chadrun is preserved a small part of an ancient farm. Most of its original extension has been heavily damaged by recent agricultural activities so, actually, just a small portion of ancient soil is preserved (pl. 40A). Within this area a few limestone ashlar blocks belonging to <i>opus africanum</i> walls are visible, along with a large quantity of debris and fragments of lava querns.
STATE OF PRESERVATION:	The site has been heavily damaged by agricultural activities.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA41 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LECIS MAGNA:	8,880 m W.
GPS COORDINATES:	WGS 84 33S 0424439 - 3610914.
ACTUAL LAND USE:	Quarry/uncultivated land.
VISIBILITY:	The site has been recently damaged by a modern sand quarry; however, the archaeological remains survived are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	Quarrying activities.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 124).
DESCRIPTION:	On the top of an hill located c.700 m N of Wadi el-Belaazi are scarce traces of an ancient farm. The structural part is preserved only by an <i>opus quadratum</i> wall, actually visible for a single row of ashlar blocks and for a total length of c.3.5 m (pl. 40B). On the ground are also large quantities of small unshaped limestone blocks belonging probably to the mortar-package sections of <i>opus africanum</i> walls.
STATE OF PRESERVATION:	The site has been heavily damaged due to the quarrying activities.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA42 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LECIS MAGNA:	7,050 m WNW.
GPS COORDINATES:	WGS 84 33S 0426406 - 3612499.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.

TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 132).
DESCRIPTION:	On the N sector of an hilltop located c.350 m N of Wadi Tella are scarce traces of an ancient farm. This remains are characterized by two close and parallel walls detectable at ground level and built using small unshaped limestone blocks. This "corridor" delimited by these two walls leads to a room with a oval basin (c.2.3x1.2 m) coated with <i>opus signinum</i> (pl. 40C). Scattered all over the site are small unshaped limestone blocks.
STATE OF PRESERVATION:	The plan of the structures is not recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA43 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	7,070 m WNW.
GPS COORDINATES:	WGS 84 33S 0426427 - 3612681.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 134).
DESCRIPTION:	On the S sector of a low hill facing a N branch of Wadi Tella are scarce traces of an ancient farm characterized essentially by different walls preserved only for a few centimeters above the ground level. These walls were built using small unshaped limestone blocks and, around them, a large quantity of small stones, originally belonging to the same structures (pl. 40D). On the E edge of the site is a well recently restored but beneath it may be situated an ancient cistern.
STATE OF PRESERVATION:	The plan of the structures is not recognizable on the ground.
CHRONOLOGY:	1 st century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA44 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	5,030 m S.
GPS COORDINATES:	WGS 84 33S 0433923 - 3606129.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.

TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 137).
DESCRIPTION:	On the top of the Ras el-Hammam hill, c.200 m SE of Gasr el-Hammam (Gs12) are the remains of a quadrangular structure (c.7x5 m) built in <i>opus africanum</i> technique (pl. 40E). All the limestone orthostats are clearly visible <i>in situ</i> and in the S corner are recognizable traces of the original plaster. Within the structure and around it are several small unshaped limestone blocks belonging to the mortar-package sectors of the walls.
STATE OF PRESERVATION:	The plan of the structures is recognizable on the ground.
CHRONOLOGY:	1 st century BC - 1 st century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

FA45 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	9,425 m NW.
GPS COORDINATES:	WGS 84 33S 0426128 - 3617206.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On the top of a small hill located c.300 m S from Wadi Zambra are the remains of an ancient farm with some walls still visible and fragments of lava querns.
STATE OF PRESERVATION:	The plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 55, site 44.

FA46/Gs9 FARM AND GASR

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	10,110 m NW.
GPS COORDINATES:	WGS 84 33S 0424887 - 3616690.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	Agricultural activities.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).

DESCRIPTION:	On the top of a small hill located c.1.5 Km S from the mouth of Wadi Zambra are the remains of an ancient farm with some walls still visible on the ground together with fragments of lava querns. The site seems to be subsequently transformed in a quadrangular <i>gasr</i> (approx. 15x15) provided with an external ditch (c.40x40 m).
STATE OF PRESERVATION:	The plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	2 nd - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 54, site 39.

FA47 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPICIS MAGNA:	9,935 m NW.
GPS COORDINATES:	WGS 84 33S 0424915 - 3616411.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Agricultural activities.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On the top of a small hill located c.1.8 Km S from the mouth of Wadi Zambra are the remains of an ancient farm with some walls still visible on the ground together with fragments of lava querns.
STATE OF PRESERVATION:	The plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 54, site 40.

FA48 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPICIS MAGNA:	10,070 m WNW.
GPS COORDINATES:	WGS 84 33S 0424245 - 3615466.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On the top of a small hill located c.850 m N from the N branch of Wadi Zambra are the remains of an ancient farm with numerous limestone ashlar blocks <i>in situ</i> belonging to the <i>opus africanum</i> walls. On the ground are a large quantity of small unshaped blocks originally belonging to the same walls together with several fragments of <i>opus signinum</i>

STATE OF PRESERVATION:	floors. A limestone threshold and fragments of lava querns have been found on the site.
CHRONOLOGY:	The plan of the structures is partially recognizable on the ground.
DATING ELEMENT/S:	2 nd century BC - 5 th century AD.
BIBLIOGRAPHY:	Pottery, building features.
	MUNZI <i>et al.</i> (2004), 55, site 41.

FA49 FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	8,690 m WNW.
GPS COORDINATES:	WGS 84 33S 0425662 - 3615202.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Agricultural activities.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On a plain and cultivated terrain located c.800 m N from the Wadi Zambra are the remains of an ancient farm with traces of its <i>opus africanum</i> walls. On the ground are also recognizable fragments of <i>opus caementicium</i> walls and <i>opus signinum</i> floors.
STATE OF PRESERVATION:	The plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 57, site 52.

FA50 FARM

DEFINITION:	Structures.
TOPONYM/S:	Sidi Abu Saydah.
INTERPRETATION:	Farm.
DISTANCE FROM LEP CIS MAGNA:	9,065 m NW.
GPS COORDINATES:	WGS 84 33S 0426031 - 3616500.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	A dirt road cross the site and religious structures have been built in the area.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On the E slope of an hill located c.500 m W from the Wadi Zambra are the remains of an ancient farm with several limestone orthostats belonging to <i>opus africanum</i> walls still <i>in situ</i> . On the ground are also recognizable at least four underground cisterns, a limestone column drum and fragments of <i>opus signinum</i> basins and lava querns.
STATE OF PRESERVATION:	The plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.

BIBLIOGRAPHY: MUNZI *et al.* (2004), 56, site 46.

FA51

FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPCIS MAGNA:	10,390 m NW.
GPS COORDINATES:	WGS 84 33S 0425399 - 3617836.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On the top of a slow hill and its slopes located c.450 m SW from the mouth of Wadi Zambra are the remains of an ancient farm. Some traces of its structure are still visible on the ground: limestone orthostats belonging to <i>opus africanum</i> walls and some traces of <i>opus signinum</i> basins. Fragments of lava querns have been collected on the site.
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 45, site 7.

FA52

FARM

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Farm.
DISTANCE FROM LEPCIS MAGNA:	5,875 m NW.
GPS COORDINATES:	WGS 84 33S 0428252 - 3614070.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	On a terrace located on the E bank of the Wadi Tella are the remains of a farm characterized by scarce traces of walls. The structures cover an area of c.200 m ² and are located at short distance from a Roman villa (VI32) and then probably connected with it.
STATE OF PRESERVATION:	The plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

ST1**RURAL SETTLEMENT/VILLAGE**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Rural settlement/village.
DISTANCE FROM LEP CIS MAGNA:	10,350 m NW.
GPS COORDINATES:	WGS 84 33S 0425627 - 3618036.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	A short distance from the sea and from the mouth of Wadi Zambra are the remains of a settlement with different building recognizable on the ground. The area of these structures covers an area of more than 25,000 m ² (130x205 m). Within this large area are visible, together with the remains of <i>opus africanum</i> walls, rooms with <i>opus signinum</i> flooring and a basin.
STATE OF PRESERVATION:	The plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	4 th century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, coin, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 45, site 6.

Gs10***GASR EL-AMHAR***

DEFINITION:	Structures.
TOPONYM/S:	Gasr el-Amhar; Gasr el-Túra.
INTERPRETATION:	<i>Gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	6,825 m NW.
GPS COORDINATES:	WGS 84 33S 0427306 - 3614319.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	Dense vegetation around and inside the structure.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The first scholar who mentioned the <i>gasr</i> was Méhier de Mathuisieulx (1906) who just described it as an " <i>amas de pierre de taille</i> " in which he found reused a milestone (Ms3). Later the structure was seen by Aurigemma (1914; 1925a) and by Merighi (1940) who simply cited it as Gasr el-Ahmar or Gasr el-Túra. The structure was recently briefly outlined by Masturzo and Ben Rabha (1997) and by the Roma Tre University survey (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	The structure is located on the hill top c.200 E from Wadi Chadrun. It was built with limestone ashlar blocks preserved partially for a max. H of a row. Its quadrangular plan is still measurable (c.17x17 m) and defined by the large quantity of stone within its perimeter. Reused in the masonry of the <i>gasr</i> are the uprights of a <i>torcular</i> and a base for the press (<i>ara</i>), probably came from the close <i>villa</i> to the N (VI60). Moreover the remains of a mausoleum (Ma12) was incorporated in the SW corner of the structure. The <i>gasr</i> was also provided with a ditch measuring 40 m on each side.
STATE OF PRESERVATION:	The general plan of the structure is recognizable on the ground.
CHRONOLOGY:	4 th - 6 th century AD.

DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MÉHIER DE MATHUISIEULX (1906), 78; AURIGEMMA (1914), 473; (1925a), 9; MERIGHI (1940), II, 158-159, n. 14; BEN RABHA, MASTURZO (1997), 216, pl. 93d; MUNZI <i>et al.</i> (2004), 56, site 49; (2014); 220, site SLN 49.
CARTOGRAPHY:	IGM 1915b (<i>Gasr el-Ahma</i>); IGM 1918a (<i>Gasr el-Ahma</i>); Br. Murge 1919c (<i>Gasr el-Ahma</i>); Br. Murge 1919d-e (<i>G' el-Ahma</i>); MCUC 1920 (<i>G' el-Ahma</i>); IGM 1937 (<i>G' el-Ahma</i>); USAMS 1943a (<i>G' el-Ahma</i>); USACE 1962b (<i>Ancient roman ruins</i>); SPLAJ 1979b (<i>Roman ruins</i>).

Gs11

GASR

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	<i>Gasr</i> .
DISTANCE FROM LEPIS MAGNA:	1,340 m SW.
GPS COORDINATES:	WGS 84 33S 0432177 - 3610421.
ACTUAL LAND USE:	Residential area.
VISIBILITY:	The site is actually not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Several buildings has been built on the site from the 1960s to the 1980s.
PREVIOUS STUDIES:	The site is visible only in the map realized by the two topographers Grupelli and Giua in 1914 (IGM 1914) and in air photographs realized during the forties and the fifties.
DESCRIPTION:	Thanks to the map realized by the IGM (1914) the site can be identified as ancient. It is depicted as a squared ruin encircled by a quadrangular ditch. The same situation is visible on two air photographs realized in 1942 and subsequently in a 1954 USAF oblique aerial photo (author private collection). The squared structure measures c.25x25 m and the external ditch c.60x70 m.
STATE OF PRESERVATION:	The site has been completely destroyed.
CHRONOLOGY:	4 th - 6 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	Unpublished.
CARTOGRAPHY:	IGM 1914 (quote 34 "rudero symbol")
ARCHIVAL DOCUMENTATION:	<u>Air Photographs</u> : BSR, WP G11-62; ASLS, <i>Leptis Magna 94194</i> ; A. Zocchi Private Collection [1].

Fp1 - Fp21

POTSHERD SCATTERS RELATED TO FARMING ACTIVITIES

Twenty-one areas with a concentration of ancient material with not structures survived, have been detected by Roma Tre Archaeological Mission surveys carried out between 2007 and 2013.

Fp1

GPS COORDINATES:	WGS 84 33S 0428108 - 3610885.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 4). A medium-density potsherds area of c.2,500 m ² has been detected on a low hill.
MODERN INTERFERENCE/S:	Quarrying activities.

CHRONOLOGY: 2nd - 3rd century AD.

Fp2

GPS COORDINATES: WGS 84 33S 0428603 - 3610525.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 9). A medium-density potsherds area of c.1,000 m² has been detected on a low hill.

MODERN INTERFERENCE/S: None.

CHRONOLOGY: 1st - 5th century AD.

Fp3

GPS COORDINATES: WGS 84 33S 0429023 - 3610369.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 14). A high-density potsherds area of c.1,000 m² has been detected on the slope of a hill.

MODERN INTERFERENCE/S: None.

CHRONOLOGY: 1st century BC - 2nd century AD.

Fp4

GPS COORDINATES: WGS 84 33S 0429079 - 3610192.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 16). A medium-density potsherds area of c.2,500 m² has been detected on the slope of a low hill.

MODERN INTERFERENCE/S: Terrain levelling.

CHRONOLOGY: 2nd century BC - 3rd century AD.

Fp5

GPS COORDINATES: WGS 84 33S 0429100 - 3609758.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 19). A medium-density potsherds area of c.1,000 m² has been detected along the terrace of a hill.

MODERN INTERFERENCE/S: None.

CHRONOLOGY: 1st century BC - 5th century AD.

Fp6

GPS COORDINATES: WGS 84 33S 0429015 - 3610997.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 25). A medium-density potsherds area of c.3,800 m² has been detected on a hill top and its slopes.

MODERN INTERFERENCE/S: Dirt road crossing the site E-W.

CHRONOLOGY: 2nd century BC - 5th century AD.

Fp7

GPS COORDINATES: WGS 84 33S 0429076 - 3609093.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 31). A high-density potsherds area of c.20,000 m² has been detected on a hill top and its slopes.

MODERN INTERFERENCE/S: Building activities.

CHRONOLOGY: 3rd century BC - 3rd century AD.

Fp8

GPS COORDINATES: WGS 84 33S 0430586 - 3610750.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 43). A low-density potsherds area of c.200 m² has been detected on a plain terrain.

MODERN INTERFERENCE/S: Building activities; pylon; terrain levelling.

CHRONOLOGY: 1st century BC - 3rd century AD.

Fp9

GPS COORDINATES: WGS 84 33S 0430684 - 3607597.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 48). A medium-density potsherds area of c.2,250 m² has been detected on a hill

MODERN INTERFERENCE/S:	and part of its slopes.
CHRONOLOGY:	Pylon. 2 nd century BC - 2 nd century AD.
Fp10	
GPS COORDINATES:	WGS 84 33S 0431031 - 3607749.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 49). A low-density potsherds area of c.1,400 m ² has been detected on the top of a hill.
MODERN INTERFERENCE/S:	None.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
Fp11	
GPS COORDINATES:	WGS 84 33S 0430641 - 3608957.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 51). A medium-density potsherds area of c.5,000 m ² has been detected along the slope of a low hill.
MODERN INTERFERENCE/S:	Building activities.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
Fp12	
GPS COORDINATES:	WGS 84 33S 0431407 - 3607901.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 65). A low-density potsherds area of c.600 m ² has been detected on the top of a hill.
MODERN INTERFERENCE/S:	None.
CHRONOLOGY:	1 st - 3 rd century AD.
Fp13	
GPS COORDINATES:	WGS 84 33S 0429345 - 3606746.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 98). A high-density potsherds area of c.3,500 m ² has been detected on a hill and its slopes.
MODERN INTERFERENCE/S:	Building activities.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
Fp14	
GPS COORDINATES:	WGS 84 33S 0426944 - 3611966.
DESCRIPTION:	The site has been surveyed recently (2013) by the Roma Tre Archaeological Mission (KHM 114). A medium-density potsherds area of c.3,000 m ² has been detected on the top of a low hill.
MODERN INTERFERENCE/S:	None.
CHRONOLOGY:	1 st - 2 nd century AD.
Fp15	
GPS COORDINATES:	WGS 84 33S 0426756 - 3611558.
DESCRIPTION:	The site has been surveyed recently (2013) by the Roma Tre Archaeological Mission (KHM 115). A low-density potsherds area of c. 600 m ² has been detected on the top of a hill.
MODERN INTERFERENCE/S:	None.
CHRONOLOGY:	2 nd - 5 th century AD.
Fp16	
GPS COORDINATES:	WGS 84 33S 0425075 - 3612677.
DESCRIPTION:	The site has been surveyed recently (2013) by the Roma Tre Archaeological Mission (KHM 126). A low-density potsherds area of c.1,500 m ² has been detected on the top of a hill.
MODERN INTERFERENCE/S:	Building activities.
CHRONOLOGY:	3 rd century BC - 2 nd century AD.
Fp17	
GPS COORDINATES:	WGS 84 33S 0426839 - 3612325.

DESCRIPTION: The site has been surveyed recently (2013) by the Roma Tre Archaeological Mission (KHM 133). A high-density potsherds area of c.10,000 m² has been detected on a hill and its slopes. Coin has been found within the site: MUNZI (2017), 196 nr. 8.

MODERN INTERFERENCE/S: None.

CHRONOLOGY: 2nd century BC - 6th century AD.

Fp18

GPS COORDINATES: WGS 84 33S 0426118 - 3612903.

DESCRIPTION: The site has been surveyed recently (2013) by the Roma Tre Archaeological Mission (KHM 135). A medium-density potsherds area of c.7,000 m² has been detected on a terrace along the slope of a hill. Coin has been found within the site: MUNZI (2017), 196 nr. 9.

MODERN INTERFERENCE/S: None.

CHRONOLOGY: 3rd century BC - 2nd century AD.

Fp19

GPS COORDINATES: WGS 84 33S 0432219 - 3606573.

DESCRIPTION: The site has been surveyed recently (2013) by the Roma Tre Archaeological Mission (KHM 149). A high-density potsherds area of c.4,000 m² has been detected on a terrace along the slope of a hill.

MODERN INTERFERENCE/S: None.

CHRONOLOGY: 3rd century BC - 4th century AD.

Fp20

GPS COORDINATES: WGS 84 33S 0432223 - 3605362.

DESCRIPTION: The site has been surveyed recently (2013) by the Roma Tre Archaeological Mission (KHM 162). A medium-density potsherds area of c.7,000 m² has been detected along the slope of a low hill.

MODERN INTERFERENCE/S: None.

CHRONOLOGY: 2nd century BC - 2nd century AD.

Fp21

GPS COORDINATES: WGS 84 33S 0429591 - 3609138.

DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 41). A medium-density potsherds area of c.15,000 m² has been detected on the top and slopes of a low hills.

MODERN INTERFERENCE/S: Building activities.

CHRONOLOGY: 2nd century BC - 2nd century AD.



A. Farm Fa2: a press upright, 2007 (Photo: A. Zocchi).



B. Farm Fa3: part of the site looking toward NE, 2007 (Photo: A. Zocchi).



C. Farm Fa3: a press upright found within the site, 2007 (Photo: A. Zocchi).



D. Farm Fa3: the limestone Ionic capital and the column base found at short distance from the site, 2007 (Photo: A. Zocchi).



E. Farm Fa4: traces of a basin coated with cocchiopesto, 2007 (Photo: A. Zocchi).



F. Farm Fa4: the limestone elements of a press, 2007 (Photo: A. Zocchi).



A. Farm Fa4: parts of the mill mortar and the counterweight block of a press, 2007 (Photo: A. Zocchi).



B. Farm Fa5: The counterweight block of a press, 2007 (Photo: A. Zocchi).



C. Farm Fa6: general view of the site looking toward N, 2007 (Photo: A. Zocchi).



D. Farm Fa6: the press uprights found *in situ* within the site, 2007 (Photo: A. Zocchi).



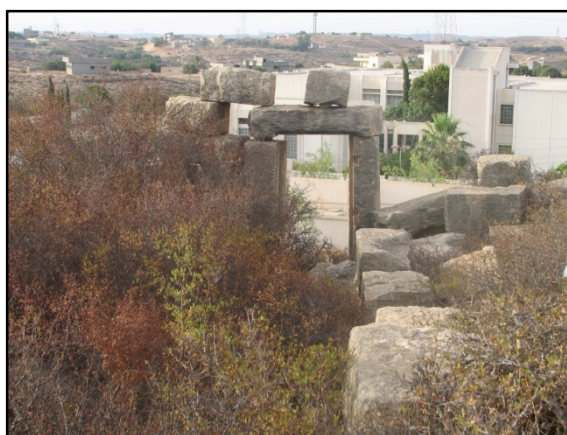
E. Farm Fa6: a limestone mill mortar, 2007 (Photo: A. Zocchi).



F. Site Fa7/Gs1: the press uprights found *in situ* within the site, 2007 (Photo: A. Zocchi).



A. Site Fa7/Gs1: the S side of the quadrangular gasr (Gasr Uafi), 2007 (Photo: M. Munzi).



B. Site Fa7/Gs1: part of the internal partition of the *gasr* (Gasr Uafi) looking toward S, 2007 (Photo A. Zocchi).



C. Farm Fa8: partial view of the site looking toward SE, 2007 (Photo: A. Zocchi).



D. Farm Fa8: a press upright within the site, 2007 (Photo: A. Zocchi).



E. Farm Fa8: a cocciopesto basin with central recessions, 2007 (Photo: A. Zocchi).



A. Site Fa9/Gs2: part of the *opus africanum* walls, 2007
(Photo: A. Zocchi).



B. Site Fa9/Gs2: the press uprights found within the site, 2007
(Photo: A. Zocchi).



C. Site Fa9/Gs2: the W side of the *gasr*, 2007 (Photo: A. Zocchi).



D. Farm Fa11: counterweight of a press found within the site, 2013
(Photo: A. Zocchi).



E. Farm Fa12: part of the structures looking towards N, 2013
(Photo: A. Zocchi).



A. Site Fa13/Gs3: Part of the remains of the farm looking N, 2013 (Photo: A. Zocchi).



B. Site Fa13/Gs3: a mill mortar, 2013 (Photo: A. Zocchi).



C. Site Fa13/Gs3: part of the N wall of the *gasr*, 2013 (Photo: A. Zocchi).



D. Farm Fa14: the site looking W, 2013 (Photo: A. Zocchi).



E. Farm Fa15: limestone orthostats of an *opus africanum* wall, 2013 (Photo: A. Zocchi).



F. Farm Fa15: a press base, 2013 (Photo: A. Zocchi).



A. Farm Fa15: a counterweight block of a press found within the site, 2013 (Photo: A. Zocchi).



B. Site Fa17/Gs4: the remains of the *gasr* from NE, 2013 (Photo: A. Zocchi).



C. Farm Fa18: partial view of the site looking toward W, 1911 (SGI, Fondo storico 216-3-62).



D. Farm Fa18: two uprights of a press within the site, 1911 (SGI, Fondo storico 216-4-10).



E. Farm Fa18: two perpendicular *opus quadratum* walls, 2004 (Photo: L. Marsico).



F. Farm Fa18: The uprights of a press, 2004 (Photo: L. Marsico).



A. Farm Fa18: The uprights of a press, 2004 (Photo: L. Marsico).



B. Farm Fa18: the underground cistern dug in the bedrock, 2004 (Photo: L. Marsico).



C. Farm Fa19: a limestone mill mortar found within the site, 2013 (Photo: A. Zocchi).



D. Farm Fa22: an underground cistern dug in the bedrock, 2007 (Photo: A. Zocchi).



E. Farm Fa25: part of the site looking SW and (bottom left) a fragment of a cocciopesto floor still *in situ*, 2007 (Photo: A. Zocchi).



A. Site Fa27/Gs5: the *gasr* looking toward W, 2013 (Photo A. Zocchi).



B. Site Fa27/Gs5: the SE corner of the *gasr*, 2013 (Photo: A. Zocchi).



C. Site Fa27/Gs5: a chamber of an underground cistern, 2013 (Photo: A. Zocchi).



D. Site Fa28/Gs6: the *gasr* looking toward S, 2013 (Photo: A. Zocchi).



E. Site Fa29/Gs7: general view looking toward N, on the right the remains of the *gasr*, 2013 (Photo: A. Zocchi).



A. Site Fa30/Gs8: the structures looking toward W
(ABD EL-AZIZ EL NEMSI 1997, pl. 84b).



B. Site Fa30/Gs8: the structures looking toward S
(ABD EL-AZIZ EL NEMSI 1997, pl. 84c).



C. Farm Fa33: partial view of the site with traces of an *opus africanum* wall, 2007 (Photo: A. Zocchi).



D. Farm Fa34: a limestone threshold reused probably as a vertical structural element, 2007 (Photo: A. Zocchi).



E. Farm Fa37: limestone ashlar blocks piled along the path, 2009
(Photo: A. Zocchi).



F. Farm Fa37: remains of an *opus caementicium* cistern, 2009
(Photo: A. Zocchi).



A. Farm Fa40: general view of the site surrounded by recent agricultural activities, 2013 (Photo: A. Zocchi).



B. Farm Fa41: portion of a limestone ashlar blocks wall, 2013 (Photo: A. Zocchi).



C. Farm Fa42: traces of a basin coated with cocciopesto, 2013 (Photo: A. Zocchi).



D. Farm Fa43: traces of a wall made by small limestone stones, 2013 (Photo: A. Zocchi).



E. Farm Fa44: partial view of the site looking toward S, 2013 (Photo: A. Zocchi).

Ws1**LIME KILN**

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Lime kiln.
DISTANCE FROM LEP CIS MAGNA:	6,775 m NW.
GPS COORDINATES:	WGS 84 33S 0427822 - 3615070.
ACTUAL LAND USE:	Uncultivated/pasture.
VISIBILITY:	The structures of the site are hardly visible on the ground, numerous shrubberies around and within the site.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	At short distance from a Roman villa (VI65) and between its structures and the Wadi Chadrun bed, are the remains of a lime kiln built using part of the bedrock exposed on the W bank of the wadi. The structure of the kiln is almost completely collapsed but its breather is still recognizable on the slope of the hill and it should have a diameter of c.0.9 m. Still clearly visible the burnt earth around the structure.
STATE OF PRESERVATION:	The site is almost completely destroyed and it is in a poor state of preservation.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Relationship with dated sites (VI65); pottery.
BIBLIOGRAPHY:	Unpublished.

Ws2**LIME KILN**

DEFINITION:	Potsherds area.
TOPONYM/S:	None.
INTERPRETATION:	Lime kiln.
DISTANCE FROM LEP CIS MAGNA:	6,655 m NW.
GPS COORDINATES:	WGS 84 33S 0428169 - 3615319.
ACTUAL LAND USE:	Uncultivated/pasture.
VISIBILITY:	The excavation site is hardly visible, numerous shrubberies around and within the site.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	Recently, c.100 m N from the site has been built a tarmac road.
PREVIOUS STUDIES:	The site has been recently surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	At short distance SE from the site of a Roman villa (VI29) has been found wide traces of dark-gray and red colored burnt soil belonging to a Roman lime kiln. However, no traces of its structure has been detected on the ground.
STATE OF PRESERVATION:	No traces of the structure/s have been found on the ground.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Relationship with dated sites (VI29); pottery.
BIBLIOGRAPHY:	Unpublished.

Ws3

LIME KILNS

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Lime kilns.
DISTANCE FROM LEP CIS MAGNA:	6,535 m NW.
GPS COORDINATES:	WGS 84 33S 0428453 - 3615473.
ACTUAL LAND USE:	Uncultivated/pasture.
VISIBILITY:	The excavation site is hardly visible, numerous shrubberies around and within the site.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	Recently, c.150 m S from the site has been built a tarmac road. To the E and to the N the terrain has been leveled due to the construction of the modern Khoms harbour.
PREVIOUS STUDIES:	The site has been recently surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	At short distance E from a Roman villa (VI30) were found four lime kilns whose combustion chambers were dug in the bedrock of the W bank of the Wadi Chadrun. One of these, the better preserved, has an ovoid plan and was provided with a circular breather (diameter of c.0.9 m). Still clearly visible the burnt earth around the structures.
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	1 st - 6 th century AD.
DATING ELEMENT/S:	Relationship with dated sites (VI30); pottery.
BIBLIOGRAPHY:	Unpublished.

Ws4

TILE KILN

DEFINITION:	Potsherds area.
TOPONYM/S:	None.
INTERPRETATION:	Tile kiln.
DISTANCE FROM LEP CIS MAGNA:	5,485 m S.
GPS COORDINATES:	WGS 84 33S 0432683 - 3605671.
ACTUAL LAND USE:	Uncultivated/pasture.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site is unpublished but it has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 160).
DESCRIPTION:	At short distance S from a Roman villa (VI28) along a slow hill slope, have been found numerous kiln waste fragments mainly characterized by overcooked <i>bessales</i> . However, no traces of the structure of the kiln has been detected.
STATE OF PRESERVATION:	No traces of the structure/s have been found on the ground.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Relationship with dated sites (VI28); pottery.
BIBLIOGRAPHY:	Unpublished.

Ws5

GLASS-BLOWING WORKSHOP

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Glass-blowing workshop.
DISTANCE FROM LEP CIS MAGNA:	620 m NW.
GPS COORDINATES:	WGS 84 33S 0432925 - 3611587.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is accessible and visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The glass-blowing workshop was found during a trenches realized in 1959 and 1964 by Giovanni Ioppolo and Giuseppina Pisani Sartorio at the foot of the W and S pylons of the Marcus Aurelius <i>tetrapylon</i> (Ti6). The stratigraphic sequence and datation were published few years later (IOPPOLO 1969-1970; PISANI SARTORIO 1969-1970).
DESCRIPTION:	Adjacent to the foundation of the S and W pylons of the Arch of Marcus Aurelius (Ti6) has been found a beaten earthen layer belonging to the floor of a glass-blowing workshop. Within this layer (layer 9 in the W pylon trench equal to layer 10 in the S pylon trench) have been found numerous glass waste, glass paste and charcoal.
STATE OF PRESERVATION:	Apart from the beaten surface, no traces of other structure/s have been found.
CHRONOLOGY:	AD 100-150.
DATING ELEMENT/S:	Stratigraphic relation.
BIBLIOGRAPHY:	IOPPOLO (1969-1970), 232-234; PISANI SARTORIO (1969-1970), 262-263; WILSON, SCHÖRLE, RISE (2012), 378.

Ws6

LIME KILN AND WORKSHOPS/STORES

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Workshops and stores.
DISTANCE FROM LEP CIS MAGNA:	1,135 m ENE.
GPS COORDINATES:	WGS 84 33S 0434450 - 3611195.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is accessible and visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	From 1994 until 2010 the site, together with the Eastern baths (En2), was excavated by the Mission archéologique française en Libye directed by A. Laronde (DAGNAS, PAULIN 2010-2012).
DESCRIPTION:	Between the preserved sector of the colonnaded road (Rd7) that should link the N part of the city (the <i>forum vetus</i> area) with the amphitheatre (En4) and the circus (En3) and the Eastern bath (En2) was excavated a cluster of rooms whose primary function was commercial/productive. A series of four rooms were facing the street (Rd4) and other smaller service rooms were behind them and in connection with the close baths (En2). Subsequently, from the middle of the 3 rd century AD and until the end of the 4 th century, the workshops facing the road (Rd4) were converted in shops and stores probably for wine. In this period also a room c.30 m S from the shops and stores, originally belonging to the <i>tiepidarium</i> of the Eastern baths (En2), was converted from its original function. Within this large room was indeed built first a kiln for lime and then a larger one that

STATE OF PRESERVATION:	should serve a bakery. The structures were found in a good state of preservation.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Building features; stratigraphic relationship; pottery.
BIBLIOGRAPHY:	DAGNAS, PAULIN (2010-2012), 106-113, 132-134, 142.

VL1

VILLA DI AT-THALIA

DEFINITION:	Structures.
TOPONYM/S:	Villa di at-Thalia.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	4,215 m ESE (approx).
GPS COORDINATES:	WGS 84 33S 0437238 - 3609572 (approx).
ACTUAL LAND USE:	Modern buildings (power plant).
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	A desalter and a power plant have been built on the site during the early eighties.
PREVIOUS STUDIES:	The villa was partially dug by the DoA between 1978 and 1979 due to the construction of a desalter and a power plant, c.7 km SE from Khoms and at short distance from the seashore. Unfortunately the site was briefly analyzed and soon destroyed by the new buildings. The villa is unpublished and only part of its decoration has been recently described and restored (Musso <i>et al.</i> 1998).
DESCRIPTION:	The remains of a coastal villa were found in 1978 at short distance from the sea, c.4 km SE from Lepcis Magna during the construction of a desalter and a power plant. Thanks to a general plan, a short report and a few photographs it is possible to describe the structures found during the emergency excavation (pl. 41A). A portico with 4 small rooms, probably residential, were built to the N side of the villa, facing the sea. Behind these rooms several others spaces were built and also a thermal area to the S. The majority of the rooms were arranged around a central portico and a "L" shape ambulatory divided other rooms facing the sea from the inner spaces. The thermal zone was exposed to SE. The western part of the villa was probably characterized by a <i>culina</i> and warehouses. Five cisterns were found in different part of the site. Different rooms were decorated with lavish floors (mosaics and <i>opus sectile</i>) while several walls were characterized by painted plaster (see B. Bianchi in Musso <i>et al.</i> 1998, 216-218). One of the best preserved mosaic was found on the floor of the <i>alveus</i> of the thermal area: The polychromatic decoration is composed by the figure of the goddess Nile lying on one side and surrounded by pygmies, exotic animals and vegetation (pl. 41B).
STATE OF PRESERVATION:	The site has been destroyed.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Pottery; coins; building features.
BIBLIOGRAPHY:	Musso <i>et al.</i> (1998), 186, 216-218.
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : LMDoA, Photographic Archive (not inv.). <u>Written reports</u> : LMDoA, Excavation report (not inv.); Drawings Archive (not inv.).

VL2

VILLA DEL NILO

DEFINITION:	Structures.
TOPONYM/S:	Villa del Nilo.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	1,540 m E.
GPS COORDINATES:	WGS 84 33S 0434867 - 3611024.
ACTUAL LAND USE:	Seashore, modern road.
VISIBILITY:	The site is partially visible.
TOPOGRAPHIC POSITION:	Plain terrain, seashore.
MODERN INTERFERENCE/S:	In 1916 the site was partially excavated - and damaged - by the Italian Army due to a

PREVIOUS STUDIES:	road construction. Part of the villa was excavated in 1916 by the 50 th Infantry Regiment of the Italian Army due to the construction of a military road that should link the Wadi Lebda to the "Vittorio Emanuele III" fort. The soldiers found a large room decorated with a geometric mosaic with three <i>emblemata</i> depicting hunting scenes located in correspondence of the entrance of different rooms. The mosaics were transferred to Tripoli and Romanelli (1925a), followed by Aurigemma a few years later (1929), published a brief report of the excavation and of the structures. A second excavation was made by Guidi (1933) in 1930; he brought to light an <i>atrium</i> and part of the thermal area with numerous mosaics, among them one depicting a Nilotic scene that gave the name to the villa.
DESCRIPTION:	Between the modern road that lead from the Wadi Lebda to the Sidi Barcu hill and the sea there are still noticeable traces related to different rooms of a coastal villa known as "Villa del Nilo" thanks to a mosaic depicting a Nilotic scene. The villa was built directly using the bedrock and it developed on different levels facing the sea (pl. 41C). Indeed, between the area explored in 1916 - the long E-W corridor with the geometric mosaic and the three <i>emblemata</i> (pl. 41D) - and the area dug in 1930 by Guidi (located a short distance to the N) there is a difference in level of c.4.5 m. The area explored in 1930 is characterized by different rooms arranged around an <i>atrium</i> defined by a portico of four columns (pl. 41C). The scene with the Nile was found E of the portico, in a large room interpreted as a <i>tepidarium</i> with two <i>piscinae</i> . The floor was decorated by four different mosaics and walls were provided with niches for sculptures.
STATE OF PRESERVATION:	The site is partially silted and only few traces of its original plan can be easily recognizable.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	ROMANELLI (1925a), 150-151; AURIGEMMA (1929); (1960), 45-49; GUIDI (1933); BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI (1963), 117; FLORIANI SQUARCIAPINO (1966), 127; MUSSO <i>et al.</i> (1997), 267; KENRICK (2009), 130; RIND (2009), 123-124, LM 7.
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-45a; CAS, sc. 45/53.

VL3

VILLA DI WADI ER-RSAF

DEFINITION:	Structures.
TOPONYM/S:	Villa di Wadi er-Rsaf.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	1,020 m NW.
GPS COORDINATES:	WGS 84 33S 0432513 - 3611746.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is partially visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site was partially exploited as a sand quarry. Actually the site is in part used as a dump.
PREVIOUS STUDIES:	The site, located on the W bank of Wadi er-Rsaf at short distance from the seashore, has been dug by the Archeological Mission of Roma Tre University in collaboration with the DoA of Lepcis Magna between 1995 and 1997 (Musso <i>et al.</i> 1996; 1997; 1998).
DESCRIPTION:	The site is located c.100 m W from the Wadi er-Rsaf and c.350 m from the sea. Different phases from the 1 st to the 4 th century characterized the evolution of the villa (pls 41E-42A). To the first phase, dated to the 1 st century AD, belong only two walls made by unshaped limestone small blocks and by pebbles. The monumental phase of the villa belong to the 2 nd century AD when the structure covered a total area of c.1,500 m ² . The

	<p>W side of the villa is characterized by a wide <i>triclinium</i> with a central mosaic floor and on its side different rectangular rooms were decorated by painted or white plaster and an earth-beaten floors. From one of these rooms a stair should lead to a second floor or to a small tower. The E side of the villa is characterized by another wide <i>triclinium</i> with a mosaic floor. The central area was instead occupied by a peristyle, different rooms, a cryptoporticus and a cistern. The further phases, dated from the first half of the 3rd century to the beginning of the 4th century AD, are characterized by different restoration works (subdivision of rooms and water/drain channels). Part of the peristyle from the second half of the 3rd century AD was reused as a dump while part of the W sector of the villa collapsed. During the 4th and then in the 5th century the area was completely abandoned.</p>
STATE OF PRESERVATION:	The site has been partially silted even if its original plan can be easily recognizable.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Pottery, coins, building features.
BIBLIOGRAPHY:	Musso <i>et al.</i> (1996), 152-160; (1997), 257-276; (1998), 176-186, 189-194; PENTIRICCI <i>et al.</i> (1998); FELICI, MUNZI (2008); RIND (2009), 127, LM 12.

VL4

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	2,220 m NW.
GPS COORDINATES:	WGS 84 33S 0431725 - 3612657.
ACTUAL LAND USE:	Residential/commercial area.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The area was urbanized during the sixties and the ancient structure was destroyed in that occasion.
PREVIOUS STUDIES:	The structures related to an ancient villa were explored in 1964 few meters E of the western side of the Italian wall of the city of Khoms. The discovery of this structure was possible thanks to the construction of the foundation of some houses. A brief a synthetic report was written by Antonino di Vita (1966).
DESCRIPTION:	The remains of some ancient walls in <i>opus caementicium</i> and <i>opus signinum</i> floors were discovered in 1964, 50 m E from the Italian W side of the Khoms wall, c.150 m from the seashore. A circular well made by handmade clay rings was found at short distance from the <i>opus caementicium</i> walls. A fragment of Dressel 20 amphorae was found inside the well.
STATE OF PRESERVATION:	The site has been destroyed.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	DI VITA (1966), 81-82.

VL5

VILLA DEL CIMITERO ISRAELITICO

DEFINITION:	Structures.
TOPONYM/S:	Villa del cimitero israelitico.

INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	1,940 m NW.
GPS COORDINATES:	WGS 84 33S 0431943 - 3612470.
ACTUAL LAND USE:	Uncultivated land/road.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site, after its excavation in 1924, was silted. In 1988 it was partially destroyed by the construction of a road and by the flooding of Wadi Zennad.
PREVIOUS STUDIES:	Traces of mosaic were found during the construction of a farm in 1924, near the Israelite cemetery, E of Khoms. The site was excavated by Renato Bartoccini (1926; 1927b) who was able to transfer part of the mosaics to Khoms and then to the Museum of Tripoli (AURIGEMMA 1960). In 1988, part of the site was excavated again by the DoA of Lepcis Magna (MATOUG 1995): the soundings revealed part of the excavation made by Bartoccini and did not bring to light any new data.
DESCRIPTION:	The villa was located at short distance between the sea and the Wadi Zennad, E of the city of Khoms. The rooms explored were arranged around a peristyle with limestone columns covered by stucco (pl. 42B). A channel for the rain water run all along the colonnade of the peristyle and lead to a large cistern. The floors were mainly characterized by geometric mosaics often with parts built in marble <i>opus sectile</i> (pl. 42C-D). Few traces of painted plaster were found and different bricks with a <i>Servili</i> stamps.
STATE OF PRESERVATION:	The site has been partially destroyed.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	BARTOCCINI (1926), 54; (1927b), 226-232; BERTARELLI (1929), 364; AURIGEMMA (1960), 50-52; MATOUG (1995); RIND (2009), 124-125, LM 8.

V16

VILLA DELLO SPARTO

DEFINITION:	Structures.
TOPONYM/S:	Villa dello sparto.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	2,690 m NW.
GPS COORDINATES:	WGS 84 33S 0431737 - 3613306.
ACTUAL LAND USE:	Residential/commercial area.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain; seashore.
MODERN INTERFERENCE/S:	After its excavation in 1972 the villa was destroyed and a school was built on the site.
PREVIOUS STUDIES:	The villa came to light during the destruction of the "Esparto Manufacturing and Trading Company" building in the summer of 1972 at short distance from the seashore and from the modern harbor of Khoms. The excavation was conducted by the DoA under the supervision of Mahmud Nemsy and for two weeks also by Di Vita. Unfortunately, apart from brief reports of the excavation (ABOU-HAMED, SHAGLOUF, ATEYA 1974-1975; DI VITA 1974), a full detail description of the structures and decoration of the villa have never been published. Recently Munzi (1998) studied the numerous 4 th century AD <i>nummi</i> (mainly related to the Julian emperor) found in the <i>calidarium</i> of the <i>thermae</i> .
DESCRIPTION:	According to Di Vita, the villa discovered at the harbor of Khoms in 1972 is one of the biggest of Roman Africa. During the excavation many rooms were exposed: the thermal area with <i>frigidarium</i> , <i>tepidarium</i> , <i>calidarium</i> and <i>sudatorium</i> and several other rooms arranged around a big court with three columns still preserved. The villa faced the sea both on its E and N side. The monumental phase of the structure, characterized by

	marble floors and decorated walls, was built during the mid of the 2 nd century AD. The date is confirmed by different brick stamps related both to <i>Domitia Lucilla minor</i> and <i>M. Valerius Homullus</i> (consul in AD 152) found on bricks of the <i>suspensurae</i> imported from Italy. Subsequently the villa was restored at the beginning of the 4 th century and then abandoned after the Austuriani raids (late AD 363) or due to the AD 365 earthquake (DI VITA 1990).
STATE OF PRESERVATION:	The site has been destroyed.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	ABOU-HAMED, SHAGLOUF, ATEYA (1974-1975), 299; DI VITA (1974), 234-239, 248-249; (1990), 455-457; JONES (1989a), 95; MUNZI (1998).

VL7 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPCIS MAGNA:	9,225 m NW.
GPS COORDINATES:	WGS 84 33S 0426439 - 3617267.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	The area is partially cultivated.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On a hill top and along part of its slopes there are a concentration of structures (defined by <i>opus africanum</i> orthostats) and pottery. The buildings seems to cover an area of c.7,200 m ² (c.90x80 m). Within the area were found a considerable amount of painted plaster fragments together with a small marble slab. On the hill top, in an area of c.16 m ² there are the remains of a polychromatic geometric mosaic, dated to the 2 nd century AD.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 55-56, site 45.

VL8 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPCIS MAGNA:	6,500 m NW.
GPS COORDINATES:	WGS 84 33S 0427911 - 3614677.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	At short distance from the site, to the W has been recently built a dam along the Wadi Chadrun.

PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On a hill top E of Wadi Chadrun are the remains of ancient structures and many pottery fragments related to an ancient villa. The buildings seems to cover an area of c.5,000 m ² (c.50x100 m). Within the area were found a considerable amount of mosaic <i>tesserae</i> , small marble slabs, <i>opus signinum</i> fragments and parts of lava querns.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	AD 50-450.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 56, site 47.

VL9 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	6,500 m NW.
GPS COORDINATES:	WGS 84 33S 0427726 - 3614418.
ACTUAL LAND USE:	Uncultivated land/quarries.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	The area has been recently interested by a quarrying activity; the site has also been recently dug illegally.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On a hill top E of Wadi Chadrun are the remains of ancient structures defined by <i>opus africanum</i> othostats and many pottery fragments related to an ancient villa. The buildings seems to cover an area of c.7,800 m ² (c.130x60 m). Within the area were found a considerable amount of mosaic <i>tesserae</i> .
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 56, site 48.

VL10 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	7,230 m NW.
GPS COORDINATES:	WGS 84 33S 0427311 - 3615128.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The area is partially cultivated.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).

DESCRIPTION:	On a plain terrain W of the Wadi Chadrun are the remains of ancient structures defined by <i>opus africanum</i> othostats still <i>in situ</i> and many pottery fragments related to an ancient villa with small marble slabs and fragments of lava querns on the ground. The structures seems to occupy an area of c.7,000 m ² (c.140x50 m). South of the core of the structures is an underground cistern, partially buried.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 57, site 51.

Vl11

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	5,400 m W.
GPS COORDINATES:	WGS 84 33S 0427926 - 3610938.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slope and plain terrain.
MODERN INTERFERENCE/S:	The area is partially destroyed by the construction of the motorway Tripoli - Misurata.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 1).
DESCRIPTION:	At the foot of Ras el-Mergheb (S flank) are the remains of a villa partially cut by the motorway Tripoli-Misurata (pl. 42E). Several limestone ashlar blocks probably originally belonging to <i>opus africanum</i> walls lie on the ground together with several fragments of mosaic floor, small marble slabs and a green painted plaster fragment. The area of the structures detected on the ground and preserved S of the modern road occupies c.420 m ² (26.5x16 m).
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	AD 1-250.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

Vl12

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	4,475 m W.
GPS COORDINATES:	WGS 84 33S 0428892 - 3610453.
ACTUAL LAND USE:	Pasture/cultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes/terrace.
MODERN INTERFERENCE/S:	The site is partially occupied by modern cultivation (olive trees).
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 13).

DESCRIPTION:	An a terrace along the slope of the hill facing the N side of a wadi (left tributary of Wadi Seccum) are the remains of a villa characterized by a central open area and different rooms defined by the remains of limestone orthostats of <i>opus africanum</i> walls (pl. 54F). At ground level were also detected traces of smaller walls built with mortar and small unshaped limestone blocks together with small marble slabs. The structures still visible occupies an area of c.1,500 m ² (c 60x25 m).
STATE OF PRESERVATION:	The general plan of the ancient structures is partially recognizable on the ground.
CHRONOLOGY:	AD 1-250.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL13 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	4,235 m W.
GPS COORDINATES:	WGS 84 33S 0429132 - 3610486.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	The site is partially damaged by modern constructions and by the Italian military structure named "Ridotta Iorio" (cfr. IGM 1913b; Br. Murge 1919b).
PREVIOUS STUDIES:	The site is mentioned by S. Aurigemma (1930a) on a small hill on which lie several ashlar blocks close to "Casa Iorio" or "Ridotta Iorio". The ancient site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 15).
DESCRIPTION:	On a hill top located c.500 m W from Wadi Zennad are still visible the remains of an ancient villa defined by numerous limestone ashlar blocks belonging to <i>opus africanum</i> walls (some of them still <i>in situ</i>) and a large quantity of unshaped small blocks on the ground (pl. 43A). Among these block are the remains of a large limestone threshold (pl. 43B). Circa 100 m SW from the main core of the structure is a large underground cistern built in <i>opus caementicium</i> and partially collapsed (pl. 43C). On the site have been registered the presence of small marble slabs, fragments of <i>opus signinum</i> and lava querns. The built area of the site occupies a surface of c.2,400 m ² (c.30x80 m).
STATE OF PRESERVATION:	The plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	50 BC - 500 AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	AURIGEMMA (1930a), 86.

VL14 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	4,555 m W.
GPS COORDINATES:	WGS 84 33S 0428766 - 3610979.
ACTUAL LAND USE:	Cultivated land/quarry.

VISIBILITY:	The site is partially visible and accessible.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	The site has been destroyed by modern quarry and by agricultural works.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 22).
DESCRIPTION:	On a low hill slope located c.950 m SE from Ras el-Mergheb are the remains of an ancient villa defined by numerous limestone ashlar blocks probably belonging to <i>opus africanum</i> walls and a large quantity of unshaped small blocks on the ground. Traces of a wall characterized by unshaped limestones bounded by white mortar and brick fragments and covered by white plaster has been noticed still <i>in situ</i> while different marble slab fragments have been found scattered on the ground.
STATE OF PRESERVATION:	The plan of the ancient structures is not recognizable on the ground.
CHRONOLOGY:	AD 50-450.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

Vl15 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	4,660 m W.
GPS COORDINATES:	WGS 84 33S 0428668 - 3611342.
ACTUAL LAND USE:	Residential buildings/quarry.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	The site has been recently destroyed by modern houses and a quarry.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 24).
DESCRIPTION:	On a low hill top and part of its slope located c.900 m E from Ras el-Mergheb are the remains of an ancient villa defined by numerous limestone ashlar blocks probably belonging to <i>opus africanum</i> walls and a large quantity of unshaped small blocks on the ground (pl. 43D). Traces of a mortar floor (1x1.5 m) is visible on the N side of the site while different holes on the ground may indicate the presence of underground cisterns. On the N slope of the hill there are traces of painted plaster still <i>in situ</i> (pl. 43E). The area of the structures still detachable on the ground is c.1,600 m ² (c.40x40 m)
STATE OF PRESERVATION:	The site has been destroyed.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

Vl16/Gs14 VILLA AND GASR

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	3,720 m WSW.

GPS COORDINATES:	WGS 84 33S 0429778 - 3610002.
ACTUAL LAND USE:	Residential buildings/uncultivated.
VISIBILITY:	The site is partially visible and accessible.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	The site has been damaged by the construction of different houses from the Ottoman period until recent times.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 29).
DESCRIPTION:	On a low hill top located c.200 m SE from Wadi Zennad are the remains of an ancient villa. The internal partition of a room is still <i>in situ</i> and it is characterized by a door and part of the walls; inside the survivor structure is a mound of rubble (pl. 43F). The walls still visible, that occupy an area of c.20 m ² (4.5x4.25 m), could be the remains of a <i>gasr</i> . Numerous limestone ashlar blocks of the original <i>opus africanum</i> walls and a cipollino marble column are reused in the close modern constructions. A serpentino marble slab fragment was found scattered on the ground.
STATE OF PRESERVATION:	The site has been heavily damaged.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

Vl17

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPIS MAGNA:	3,760 m W.
GPS COORDINATES:	WGS 84 33S 0429580 - 3611479.
ACTUAL LAND USE:	Pasture/cultivated land.
VISIBILITY:	The site is partially visible and accessible; low vegetation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The structures of the ancient villa may have suffered some damages during the Italo-Turkish War (1912-1919) caused by the construction of the close Italian stronghold named "Ridotta Parma" (IGM 1913b; Br. Murge 1919a-b, d-e). The area has been also characterized by recent agricultural works.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 35).
DESCRIPTION:	On a plain terrain/terrace located S of the modern city of Khoms and c.450 m NW from a branch of Wadi Zennad are scarce remains of a villa characterized by few traces of walls still <i>in situ</i> and some <i>opus africanum</i> orthostats scattered on the ground (pl. 44A). The site is also characterized by numerous fragments of marble slabs. The potsherds area occupies an area of c.1,600 m ² (c.40x40 m).
STATE OF PRESERVATION:	The site has been heavily damaged.
CHRONOLOGY:	AD 1-450.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL18

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	3,230 m WSW.
GPS COORDINATES:	WGS 84 33S 0430213 - 3610211.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is partially visible and accessible; low vegetation.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	In recent years the site has been heavily damaged by the construction of a railroad. Due to those works that cut the ancient structures, numerous ancient limestone ashlar blocks were piled at the edge of the site. An ancient cistern and its well have also been used until modern times reusing also architectural material from the same site.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 36).
DESCRIPTION:	On a terrace located S of the modern city of Khoms and c.500 m E from Wadi Zennad are still visible the remains of an ancient villa (pl. 44B) characterized by few traces of <i>opus africanum</i> walls (some portions of stones bounded with mortar are still <i>in situ</i> while numerous limestone ashlar blocks are scattered on the ground). The structures survived occupies a quadrangular area of c.210 m ² (13.3x15.7 m). Circa 40 m E from the structures is still visible a well with a subterranean cistern that have been used until recent times. The circular well, dug in the bedrock and is c.4 m depth while the cistern is full of rubble. Numerous fragments of marble slabs and mosaic <i>tesserae</i> have been found scattered on the ground.
STATE OF PRESERVATION:	The site has been heavily damaged.
CHRONOLOGY:	1 st century BC - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL19

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	3,685 m WSW.
GPS COORDINATES:	WGS 84 33S 0429937 - 3609650.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible; low vegetation.
TOPOGRAPHIC POSITION:	Hill slope.
MODERN INTERFERENCE/S:	In recent years the site has been heavily damaged by quarry activities due to the construction of new buildings.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 38).
DESCRIPTION:	On a hill slope located c.500 m SE from Wadi Zennad are still visible the remains of an ancient villa characterized by few traces of walls, probably realized in <i>opus africanum</i> technique. On the ground, beside some limestone orthostats, is a large quantity of small unshaped stones originally belonging to the mortar-packed sectors of the walls. In the E part of the site is visible a well with a underground cistern (actually full of soil) and a <i>opus</i>

	<i>signinum</i> basin. Several marble slab fragments have been found scattered on the ground.
STATE OF PRESERVATION:	The site has been heavily damaged and few traces of the structures are still visible.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL20 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	4,975 m SW.
GPS COORDINATES:	WGS 84 33S 0429508 - 3607922.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible; low vegetation.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	In recent years the site has been heavily damaged by the construction of a tarmac road that crosses the site SE-NW.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 46).
DESCRIPTION:	On a hill top and part of its slopes, located c.500 m N from Wadi es-Smara, are the remains of a villa actually preserved for two perpendicular <i>opus africanum</i> walls. The area interested by the structures is c.200 m ² (the SE-NW wall is 16.5 m long while the SE-NW is 12.3 m long). On the ground, beside some limestone orthostats, is a large quantity of small unshaped stones originally belonging to the mortar-packed sectors of the walls. Marble slab fragments have been found scattered on the ground.
STATE OF PRESERVATION:	The site has been heavily damaged and the few structures seen in 2007 are not visible anymore.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL21 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	2,005 m SW.
GPS COORDINATES:	WGS 84 33S 0431896 - 3609707.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	At short distance E and W from the site have been built several residential buildings, moreover the site has been damaged by recent agricultural works.
PREVIOUS STUDIES:	The site has been recently surveyed (2007 and 2009) by the Archaeological Mission of Roma Tre University (KHM 69).

DESCRIPTION:	On a plain terrain located c.1 km W from Wadi Lebda and at short distance from the remains of two <i>mausolea</i> (Ma2, Ma32) - probably connected with this site - are traces of an ancient villa actually preserved for few walls still detectable at ground level and for the remains of a cistern/basin coated with <i>opus signinum</i> (pl. 44C). Few limestone orthostats probably belonging to <i>opus africanum</i> walls and a large quantity of small unshaped stones originally part of the mortar-packed sector of the walls are scattered on the ground together several marble slab fragments. The area interested by the structures is c.1,750 m ² (c.70x25 m).
STATE OF PRESERVATION:	The general plan of the structure is not legible.
CHRONOLOGY:	1 st century BC - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

Vl22/Gs15

VILLA AND *gasr*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	7,295 m WSW.
GPS COORDINATES:	WGS 84 33S 0426103 - 3610067.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 90).
DESCRIPTION:	On the top of a low hill and part of its slopes located c.800 m N from Wadi es-Smara are the remains of an ancient villa subsequently occupied by a <i>gasr</i> (pl. 44D). Still visible on the ground are some traces of the villa characterized by <i>opus africanum</i> walls (some limestone orthostats and a large quantity of small stones belonging to the mortar-packed sectors of the walls are still visible on the ground). The area covered by these structures is c.6,400 m ² (c.80x80 m). Scattered on the ground are different fragments belonging to numerous marble slabs, painted plaster, fragment of glass probably used for windows, <i>opus latericium</i> bricks and black mosaic <i>tesserae</i> . On the top of the hill a quadrangular <i>gasr</i> (c.12x12 m) has been built in a second phase probably reusing the ancient villa limestone orthostats (pl. 44E). This later structure was also provided with an external ditch measuring c.30x30 m (pl. 44F).
STATE OF PRESERVATION:	The general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 6 th century AD.
DATING ELEMENT/S:	Building features; pottery; coin.
BIBLIOGRAPHY:	Unpublished.
CARTOGRAPHY:	Br. Murge 1919c (<i>Rudero Elfrad</i>).

Vl23

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.

INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	8,145 m WSW.
GPS COORDINATES:	WGS 84 33S 0425506 - 3608832.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 92).
DESCRIPTION:	On the top of a low hill and part of its slopes located c.200 m S from Wadi es-Smara are the remains of an ancient villa. Still visible on the ground is a 4 m long wall characterized by small stones probably belonging to the mortar-packed sectors of an <i>opus africanum</i> wall. The area covered by the potsherds is c.1,200 m ² (c.40x30 m). Scattered on the ground are some fragments of marble slabs.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 3 rd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

Vl24

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	7,165 m WNW.
GPS COORDINATES:	WGS 84 33S 0426245 - 3612228.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 131).
DESCRIPTION:	On the top of a hill and part of its slopes located at short distance from Wadi Chadrun are scarce remains of an ancient villa. Still visible on the ground are traces of walls characterized by small stones. On the site are also visible three wells dug in the bedrock probably in ancient times but surely used recently too (Ottoman pottery has been found within the site). Scattered on the ground are some fragments of marble slabs.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 2 nd century AD.
DATING ELEMENT/S:	Building features; pottery; coin.
BIBLIOGRAPHY:	MUNZI (2017), 196 nr. 7.

Vl25

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.

DISTANCE FROM LEP CIS MAGNA:	4,990 m S.
GPS COORDINATES:	WGS 84 33S 0433207 - 3606126.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	Houses have been built recently around the site and some dumps are visible within the ancient structures.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2016).
DESCRIPTION:	On the top of a low hill and part of its slopes located in the S flank of Ras el-Hammam are the remains of a lavish ancient villa (pl. 45A). The structures partially visible are essentially those of the thermal area characterized by different rooms. On the highest part of the hill are indeed visible three "round shape" rooms coated with <i>opus signinum</i> (general diameter of c.2.3-2.5 m) and other rooms, one covered with polychromatic mosaic and another paved with <i>bessales</i> (pl. 45B-C). <i>Opus latericium</i> were also used for the <i>tubuli</i> whose traces are still visible <i>in situ</i> on some of the walls, always built using the <i>opus africanum</i> technique. Around the thermal area are traces of numerous other walls and, scattered on the ground, several marble slabs fragment and painted plaster fragments. The total area covered by the structures is c.2,400 m ² (c.40x60 m).
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features; coins, pottery.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2016), 93, site KHM 146; MUNZI (2017), 198 nr. 15-20.
CARTOGRAPHY:	USACE 1962a (<i>Ancient Roman ruins</i>).

VL26

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	4,215 m SSW.
GPS COORDINATES:	WGS 84 33S 0432602 - 3606973.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	Houses have been built recently around the site and some dumps are within the area. An electric pylon seems to be built just where the core of the structures were.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 151).
DESCRIPTION:	On a terrace facing the S bank of the Wadi Lebda are scarce remains of an ancient villa characterized by few traces of walls. A large quantity of small unshaped stones belonging to these walls lies on the ground together with black and white mosaic <i>tessarae</i> and marble slabs fragments.
STATE OF PRESERVATION:	The general plan of the structures is hardly recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 3 rd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL27/Gs16

VILLA AND *GASR*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	6,040 m S.
GPS COORDINATES:	WGS 84 33S 0433352 - 3605082.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	The S flank of the hill has been cut recently due to agricultural works.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 157).
DESCRIPTION:	On a hill top located c.1 km SWS from Ras el-Hammam are the remains of an ancient villa characterized by different <i>opus africanum</i> walls whose limestone orthostats are partially visible still <i>in situ</i> (pl. 45D). Scattered on the ground are a large quantity of debris and small unshaped stones belonging to the mortar-packed sectors of the walls. A limestone column drum have been also found on the ground together with some <i>carystium</i> marble slabs fragments. Subsequently, a quadrangular <i>opus quadratum gasr</i> (6.8x7.1 m) has been built within the area of the villa probably reusing its limestone orthostats. Inside this structure are still recognizable some internal partitions made with smaller <i>opus caementicium</i> walls.
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features: coins, pottery.
BIBLIOGRAPHY:	MUNZI (2017), 198 nr. 23-24.

VL28/Gs17

VILLA AND *GASR*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	5,445 m S.
GPS COORDINATES:	WGS 84 33S 0432675 - 3605716.
ACTUAL LAND USE:	Pasture/cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill slopes.
MODERN INTERFERENCE/S:	The site has been heavily damaged recently by an illegal trench (more than 20 m long and c.3 m wide) made with an excavator.
PREVIOUS STUDIES:	The site is unpublished but it has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 160).
DESCRIPTION:	On a gentle hill slope located c.600 m E from Wadi Lebda are structures related to an ancient villa probably reused also in the medieval/modern centuries. A recent illegal trench made with an excavator shows in sections the presence of different structural element still <i>in situ</i> such a portion of <i>opus signinum</i> and mortar pavements together with <i>opus caementicium</i> or <i>opus africanum</i> walls (pl. 45E). Among the material piled on the sides of the trench are also visible limestone column bases and drums, a limestone rectangular slab with a channel carved on its border and numerous ashlar blocks (pl. 45F). Around the illegal excavation are still visible, at ground level, traces of <i>opus</i>

	<i>africanum</i> walls and a rectangular <i>opus caementicium</i> room (c.2x2 m) coated with <i>opus signinum</i> (pl. 46A). Remains of a subsequent quadrangular <i>gasr</i> (c.10x10 m) are few m S from the illegal excavation: visible is part of the south-eastern <i>opus quadratum</i> wall built probably reusing the villa's limestone orthostats (pl. 46B).
STATE OF PRESERVATION:	The general plan of the structures is not recognizable on the ground.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL29

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPIS MAGNA:	6,690 m NW.
GPS COORDINATES:	WGS 84 33S 0428149 - 3615352.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	Recently, c.80 m N from the site has been built a tarmac road.
PREVIOUS STUDIES:	The site is unpublished but it has been recently (1999) surveyed by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	On the W bank of the Wadi Chadrun, at short distance to the N from the modern road that leads to Silin are the ruins of a villa characterized by scarce remains of <i>opus africanum</i> walls with traces of painted plaster still <i>in situ</i> . The area where the structures are visible measures c.1,350 m ² (34x40 m) and it seems the ancient structure was built parallel to the wadi bed. On the site were collected several marble slab fragments of the <i>carystium</i> , <i>proconnesium</i> and <i>lapis batrachites</i> qualities.
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 3 rd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL30

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPIS MAGNA:	6,565 m NW.
GPS COORDINATES:	WGS 84 33S 0428400 - 3615458.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	Recently, c.130 m S from the site has been built a tarmac road. To the E and to the N the terrain has been leveled due to the construction of the modern Khoms harbour.
PREVIOUS STUDIES:	The site is unpublished but it has been recently (1999) surveyed by the Archaeological Mission of Roma Tre University.

DESCRIPTION:	At short distance (c.200 m) from the ancient seashore and from the W bank of Wadi Chadrun are the remains of an ancient villa characterized by portions of <i>opus africanum</i> walls still <i>in situ</i> . The total area occupied by the structures is c.1,100 m ² (30x36 m). Within the site were collected several fragments of painted plaster (red and green), parts of <i>opus signinum</i> floors and a fragment of a lava quern.
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 4 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL31 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	6,420 m NW.
GPS COORDINATES:	WGS 84 33S 0428219 - 3615018.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	The site has been partially cut by the modern road that links the Homs modern harbor with the city of Khoms. In recent years a sand cave has been opened few meters E from the site.
PREVIOUS STUDIES:	The site is unpublished but it has been recently (1999) surveyed by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	At short distance from the E bank of Wadi Chadrun and from the <i>mausoleum</i> Ma13 are traces of an ancient villa characterized by portions of <i>opus africanum</i> walls still <i>in situ</i> . The total area occupied by the structures is c.400 m ² . In the NE part of the site is partially visible a subterranean cistern with an elliptic plan and coated with <i>opus signinum</i> . Within the site were collected several black mosaic <i>tesserae</i> , a stucco bracket and a portion of a lava quern.
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 6 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL32 VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	5,220 m NW.
GPS COORDINATES:	WGS 84 33S 0428801 - 3613733.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace.
MODERN INTERFERENCE/S:	None.

PREVIOUS STUDIES:	The site is unpublished but it has been recently (1999) surveyed by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	Along the E bank of the Wadi Tella, at short distance from a farm (Fa54) - probably connected with this site - are the remains of a villa composed by several <i>opus africanum</i> walls whose many limestone orthostats are still visible scattered on the ground. The total surface occupied by the structures is c.600 m ² (30x30 m). Towards the wadi is also noticeable a portion of the thermal area actually characterized by a basin with a survived fragment of a black and white mosaic floor. Within the site were collected several marble slab fragments (<i>proconnesium</i>), black and white mosaic <i>tesserae</i> , <i>tubuli</i> and part of a lava quern.
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL33

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEP CIS MAGNA:	4,710 m NW.
GPS COORDINATES:	WGS 84 33S 0429870 - 3614331.
ACTUAL LAND USE:	Harbor store facilities.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	The site has been completely destroyed due to the construction of infrastructures related to the modern harbor of Khoms.
PREVIOUS STUDIES:	The site is unpublished but it has been recently (1999) surveyed by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	Facing the sea between the mouths of Wadi Tella and Wadi Tualad are the remains of Roman villa characterized by the <i>calidarium</i> and the <i>frigidarium</i> of a thermal area (pl. 46C); the two rooms were connected thanks to three wide steps coated with <i>opus signinum</i> . The polychromatic mosaic floor of the <i>frigidarium</i> , depicting a nilotic scene is actually exposed at the Lepcis Magna Museum. West from the thermal area on a small headland are visible traces of several rooms characterized by <i>opus caementicium</i> walls for a total area of c.2,400 m ² (46x52 m). Toward the sea and partially submerged were also noticed different basins whose function is not however clear. Within the site were collected mosaic <i>tesserae</i> , rectangular <i>tubuli</i> and marble slab fragments.
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL34

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.

INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	4,130 m NW.
GPS COORDINATES:	WGS 84 33S 0430332 - 3613944.
ACTUAL LAND USE:	Residential zone.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	The site has been completely destroyed due to the construction of modern houses.
PREVIOUS STUDIES:	The site is unpublished but it has been recently (1999) surveyed by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	Facing the sea and c.150 m E from the dry mouth of Wadi Tualad are the remains of Roman villa characterized by a thermal area (pl. 46D). Connected to the baths is a large rectangular vaulted room built in <i>opus caementicium</i> with skylights on the ceiling (pl. 46E). The structures lies between the seashore and the modern coastal road (portions of <i>opus signinum</i> floors and <i>opus caementicium/africanum</i> walls) and the area survived of the villa measured c.800 m ² (20x40 m). Within the site were found several painted plaster fragments (pink, white, red and black) and polychrome mosaic <i>tesserae</i> .
STATE OF PRESERVATION:	The general plan of the structures is partially recognizable on the ground.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.

VL35

VILLA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa.
DISTANCE FROM LEPICIS MAGNA:	1,085 m ENE.
GPS COORDINATES:	WGS 84 33S 0434399 - 3611220.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	The site has been covered by soil.
PREVIOUS STUDIES:	The villa is briefly described by Bartoccini (1958) and recently (DAGNAS, PAULIN 2010-2012) put in relation with the nearby sites (Rd4, En2, Ws6).
DESCRIPTION:	South from the E mole of the Severan harbour Bartoccini found the remains of a Roman villa facing the sea. Its structures were erased when the mole was built and they actually lie beneath the Byzantine Wall (Wa4). He reported that the rooms, once erased at the mole pavement level, were filled with rubble and soil to create a hard layer. A trench revealed that the villa was built, in this sector, c.1.50 m above the sea level.
STATE OF PRESERVATION:	The general plan of the structures is not recognizable on the ground.
CHRONOLOGY:	1 st - 2 nd century AD.
DATING ELEMENT/S:	Building features; relationship with near dated sites (Wa4).
BIBLIOGRAPHY:	BARTOCCINI (1958), 114; DAGNAS, PAULIN (2010-2012), 103.

VL36

VILLA WITH PARS RUSTICA

DEFINITION:	Structures.
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TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPIS MAGNA:	3,870 m WSW.
GPS COORDINATES:	WGS 84 33S 0429482 - 3610720.
ACTUAL LAND USE:	Pasture/uncultivated land; railway.
VISIBILITY:	The archaeological remains were visible beneath low vegetation and shrubs. Today the site is not visible anymore due to the recent terrain leveling and due to the construction of the near railway tracks (to the N).
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	Terrain leveling and modern dirt road.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 27).
DESCRIPTION:	The structures of this site are located on the top of a low hill while the finds dispersion is visible also on its slopes in a large area of almost 2 ha. The structures were characterized by <i>opus africanum</i> walls (there were different orthostats still <i>in situ</i>) and traces of smaller walls built with mortar and small unshaped limestone blocks. On the site are preserved both a limestone <i>arbor</i> belonging to a press (pl. 47A), probably still <i>in situ</i> , and a counterweight block maybe already broken in ancient times (pl. 47B). Within these structures are still visible two large fragments of a limestone threshold while marble slabs fragments were found together with pottery and a quern fragment.
STATE OF PRESERVATION:	Undeterminable, but the site has been probably completely destroyed by the construction of the modern railway tracks.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

VL37/Gs18

VILLA WITH *PARS RUSTICA* AND *GASR*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEPIS MAGNA:	4,750 m WSW.
GPS COORDINATES:	WGS 84 33S 0428804 - 3609642.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	Modern dumps.
PREVIOUS STUDIES:	The site has been recently published with a sketched plan by the Archeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2010; 2014).
DESCRIPTION:	On a hill S of Wadi Seccum are visible structures belonging to an ancient Roman villa (pl. 47C) defined by traces of walls built in <i>opus africanum</i> and others with small limestone unshaped blocks and mortar (<i>tin</i> technique). The villa occupies an area of c.45x45 m (c.2,000 m ²) and it is also characterized by tanks coated in <i>opus signinum</i> and limestone (the largest survived measures more than 2 m), a press counterweight block and the <i>mortarium</i> of a mill (pl. 47D). On the site have been found different marble slabs fragments. Within these structures was built, in a second phase, a quadrangular structure made for the first two rows entirely with limestone ashlar blocks (pl. 47E). This <i>gasr</i> measures 12.2 x 11 m with the entrance on the NE side; no internal partitions have been detected. Outside this quadrangular structure (SE area) were connected different rooms built reusing the limestone blocks of the villa like an upright of a press. Both the <i>gasr</i> and

STATE OF PRESERVATION:	its surrounding buildings have a different orientation (17 degree) from the previous villa.
CHRONOLOGY:	The general plan of its structures is recognizable on the ground.
DATING ELEMENT/S:	2 nd century BC - 5 th century AD.
BIBLIOGRAPHY:	Pottery, building features.
	MUNZI <i>et al.</i> (2010), 736-737, site KHM 34; (2014), 222, site KHM 34.

VL38

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	4,340 m WSW.
GPS COORDINATES:	WGS 84 33S 0429313 - 3609458.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	An illegal dig has done on the N part of the site in recent years.
PREVIOUS STUDIES:	The site is unpublished but it has been recently surveyed (2007) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	On a hill S of Wadi Zennad are visible structures belonging to an ancient Roman villa (pl. 48A) defined by traces of walls built in <i>opus africanum</i> and a long wall (c.15 m) built for its first row entirely in limestone ashlar blocks. The villa occupies an area of c.34x45 m (c.1,500 m ²) and it is also characterized by an <i>opus signinum</i> tank and a press limestone counterweight block. In the W part of the site is also visible a small quadrangular structure (5.35x7.40 m) made for the first two rows with limestone ashlar blocks and inside it is characterized by a mound of rubble (pl. 48B). On the site have been found some marble slabs and painted plaster fragments.
STATE OF PRESERVATION:	The site is well preserved and the general plan of its structures is recognizable on the ground.
CHRONOLOGY:	1 st century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 222, site KHM 40.

VL39/Gs19

VILLA WITH *PARS RUSTICA* AND *GASR* (GASR HAMMUD)

DEFINITION:	Structures.
TOPONYM/S:	Gasr Hammud.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	4,700 m SW.
GPS COORDINATES:	WGS 84 33S 0429696 - 3608136.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	An Arab/Ottoman village was built c.50 m NE from the site and to built it have been used many architectural elements of the ancient period. All around the ancient structures have been built also several modern houses.
PREVIOUS STUDIES:	The site is unpublished but it has been recently surveyed (2007) and cited by the

DESCRIPTION:	Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014). On a low hill are clearly visible three corners of a squared <i>gasr</i> (11.3 x 11.5 m) built in limestone ashlar blocks (pl. 48C) and characterized also by an external enclosure (c.33x37 m) made entirely by ashlar blocks (and with its entrance on the SE side (pl. 48D). The <i>gasr</i> reused some architectural elements (bases) probably referred to a previous <i>mausoleum</i> (Fu7) and also fragments of <i>arbores</i> and a counterweight block related to presses. On the site have also been found fragments of marble slabs and within a near abandoned Arab/Ottoman village (50 m NE), are still visible several elements reused in their structures. Among these, a <i>carystium</i> marble column shaft (pl. 48E) and presses elements belonging to the ancient <i>villa rustica</i> and many ashlar blocks of the villa and the <i>gasr</i> .
STATE OF PRESERVATION:	The site is well preserved and its structures are recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 222, site KHM 45.
CARTOGRAPHY:	MÜLLER 1855, pl. XXI (<i>Hammud</i>); Br. Murge 1919c (<i>Castello a tre punte</i>); IGM 1937 (<i>G. Hammud</i>); CSFAAS 1940 (<i>G. Hammud</i>); USAMS 1943a (<i>G. Hammud</i>).

VL40

VILLA WITH PARS RUSTICA

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPCIS MAGNA:	4,740 m SW.
GPS COORDINATES:	WGS 84 33S 0430317 - 3607452.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	Houses has been built recently few meters SW of the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 47).
DESCRIPTION:	The structures of an ancient Roman villa are visible on a low hill and part of its slopes c.300 m N of the Wadi es-Smara. The villa is characterized by different areas: a courtyard with different rooms around it build in <i>opus africanum</i> seems to distinguish the NW part of the site (pl. 49A) while the <i>pars rustica</i> of the villa with the remains of two presses (two uprights of two <i>torcularia</i> and a counterweight block) characterize the SE sector (pl. 49B). The structures occupy a total area of c.1,200 m ² (30x40 m). Within the site have been found also a limestone capital, part of a <i>catillus</i> of a grain millstone (pl. 49C) and different black and white mosaic <i>tesserae</i> . Furthermore, at short distance from the site has been found a <i>carystium</i> marble column shaft reused to built the gateway of an Ottoman underground oil press (<i>masra</i>).
STATE OF PRESERVATION:	The site is well preserved and main of its structures are recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, coins, building features.
BIBLIOGRAPHY:	Unpublished.

VL41

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPICIS MAGNA:	3,210 m SW.
GPS COORDINATES:	WGS 84 33S 0430695 - 3609259.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Plateau.
MODERN INTERFERENCE/S:	The area is actually cultivated (trees) and it is located few meters S of modern houses.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 62).
DESCRIPTION:	On a low terrace/plateau there are some structural elements belonging to a roman villa with a <i>pars rustica</i> . There are still recognizable some orthostats of <i>opus africanum</i> walls and, scattered on the ground, many small unshaped stones belonging to mortar-packed walls. In the N sector of the site an upright of a press is still <i>in situ</i> (pl. 49D) while a limestone counterweight block lies at short distance from it. Some marble slabs fragments have been found on the site.
STATE OF PRESERVATION:	Few structural elements of the site are still recognizable.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

VL42

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPICIS MAGNA:	2,865 m S.
GPS COORDINATES:	WGS 84 33S 0433013 - 3608269.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The area is actually cultivated (trees) and it is located few meters E from a modern tarmac road and few meters N from the underground gas pipeline.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 66).
DESCRIPTION:	In recent years, probably during the dig for the underground gas pipeline or probably during the leveling of some near areas, were piled many ancient limestone blocks belonging to a villa with a <i>pars rustica</i> (pl. 49E). Among these numerous ashlar blocks were different architectural limestone elements like a base and a shaft of a column. On the mound of rubble are also visible parts of a press like the uprights and the counterweight block plus several <i>opus signinum</i> fragments belonging probably to a tank (or a cistern). Different marble slabs fragments and painted plaster were also registered on the site.
STATE OF PRESERVATION:	The site has been recently destroyed by a bulldozer while the mound of ancient elements is still visible.
CHRONOLOGY:	1 st century BC - 5 th century AD.

DATING ELEMENT/S: Pottery, building features.
BIBLIOGRAPHY: Unpublished.

Vl43

VILLA WITH *PARS RUSTICA*

DEFINITION: Structures.
TOPONYM/S: None.
INTERPRETATION: Villa with *pars rustica*.
DISTANCE FROM LEP CIS MAGNA: 2,745 m SW.
GPS COORDINATES: WGS 84 33S 0430724 - 3610251.
ACTUAL LAND USE: Modern road.
VISIBILITY: The archaeological remains were visible beneath low vegetation.
TOPOGRAPHIC POSITION: Plain terrain.
MODERN INTERFERENCE/S: The structures are not visible anymore and, recently (late 2014), a tarmac road has been built exactly where the site was detected.
PREVIOUS STUDIES: The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 68).
DESCRIPTION: Traces of structures related to an ancient villa have been found near the original location of the Gasr ed-Dueirat *mausoleum* (Ma3). On the site, beside some traces related to *opus africanum* walls, are still visible, even if not *in situ*, some limestone elements of a press like the counterweight block and part of the *arbores* base (pl. 49F). Also a limestone threshold together with several marble slabs fragments have been registered on the site.
STATE OF PRESERVATION: The site has been recently destroyed.
CHRONOLOGY: 1st century BC - 5th century AD.
DATING ELEMENT/S: Pottery, building features.
BIBLIOGRAPHY: Unpublished.

Vl44/Gs20

VILLA WITH *PARS RUSTICA* AND *GASR*

DEFINITION: Structures.
TOPONYM/S: None.
INTERPRETATION: Villa with *pars rustica* and *gasr*.
DISTANCE FROM LEP CIS MAGNA: 6,670 m WSW.
GPS COORDINATES: WGS 84 33S 0426976 - 3609062.
ACTUAL LAND USE: Pasture/uncultivated land.
VISIBILITY: The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION: Hill top and its slopes.
MODERN INTERFERENCE/S: Recently, a house has been built NW of the site.
PREVIOUS STUDIES: The site has been recently surveyed (2007) and cited by the Archaeological Mission of Roma Tre University (MUNZI *et al.* 2014).
DESCRIPTION: On a low hill located between Wadi es-Smara and Ras Hamarna are the remains of a quadrangular *gasr* (11.6 x 12.9 m) built, for its first three rows, by limestone ashlar blocks and characterized inside by a mound of small unshaped limestone blocks (pl. 50A). Around this structure is still clearly visible part of its enclosure (c.35x30 m), also built using the limestone blocks (pl. 50B). Within this external wall are visible on the ground a large quantity of unshaped small limestone blocks belonging probably to different mortar-

	packed walls that, together with orthostats (<i>opus africanum</i>), could probably be referred to previous structures. Moreover, part of the two uprights of a press are still visible in their original position (pl. 50C) while fragments of the press counterweight block, mosaic <i>tesserae</i> and marble slabs fragments have been found scattered on the ground. Along the slopes of the hill are ashlar blocks and pottery fragments.
STATE OF PRESERVATION:	The site is well preserved and its structures are recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 222, site KHM 73.

Vl45

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPIS MAGNA:	6,760 m WSW.
GPS COORDINATES:	WGS 84 33S 0426971 - 3608800.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 76).
DESCRIPTION:	On the top of a hill N of the Wadi es-Smara there are several traces of <i>opus africanum</i> walls characterized on the ground by several limestone orthostats <i>in situ</i> and numerous small unshaped limestone belonging to the mortar-packed sectors of these walls (pl. 50D). On the site are visible two different units of structures separated by an area of c.40 m (the northern structure measures 35x30 m and the other to the S, c.15x30 m). The total area of the buildings covers c.3,500 m ² . Both the two structures were provided with a subterranean cistern. Within the southern structure is also visible still <i>in situ</i> an upright of a press and a limestone drum of a column shaft. Marble slabs fragments have been found on the site.
STATE OF PRESERVATION:	The site is well preserved and main of its structures are recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, coin, building features.
BIBLIOGRAPHY:	Unpublished.

Vl46/Gs21

VILLA WITH *PARS RUSTICA* AND *GASR*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEPIS MAGNA:	6,345 m WSW.
GPS COORDINATES:	WGS 84 33S 0427383 - 3608918.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill slopes.

MODERN INTERFERENCE/S:	Recently, a building has been built N of the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	Along the gentle slopes of a low hill c.300 m N of Wadi es-Smara are the remains of a squared <i>gasr</i> (7.8 x 7.8 m) preserved for two rows of limestone ashlar blocks and inside it a mound of rubble characterized mainly by small unshaped limestone blocks (pl. 50E). Around the <i>gasr</i> is also visible parts of its enclosure built reusing also part of previous structures such presses elements like a limestone base of the press (pl. 51A) and parts of the uprights. Around and within the <i>gasr</i> enclosure are different traces of <i>opus africanum</i> walls and different cisterns and tanks covered with <i>opus signinum</i> . Several elements belonging to at least <i>three presses</i> are visible on the site, even if none of these elements have been found in its original position: three counterweight blocks, two bases of the press and a base for the uprights (pl. 51B). Marble slabs fragments were found on the site.
STATE OF PRESERVATION:	Most of the structures of the site are recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, coin, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 222, site KHM 78.

Vl47

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	1,880 m S.
GPS COORDINATES:	WGS 84 33S 0433089 - 3609258.
ACTUAL LAND USE:	Cultivated land.
VISIBILITY:	The structures of the site are hardly visible just along the Wadi Lebda slopes due of their burial after they have been excavated. The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Plain terrain and wadi slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The villa was partially dug by Prof. Ziegert of the University of Hamburg between 1999 and 2004 (MERRONY 2005; WENDOWSKI, ZIEGERT 2005). Unfortunately few information were given about the different phases of the structures and even a general plan is still unknown. After its excavation the site was buried again (2004-2005) and it was recently (2007) surveyed by the Archaeological Mission of Roma Tre University (KHM 95). The importance of this site relates mainly to the stunning mosaics that were found in the thermal area of the villa. These luxury decorations were recently restored and moved inside the Lepcis Magna Museum (Musso <i>et al.</i> 2013-2014).
DESCRIPTION:	The structures of a lavish Roman villa were found in 1999 on the W bank of the Wadi Lebda, c.500 m S of the dam (Dm1). The floors belonging to the last phase were found 4.5 m in depth and the walls, mainly built using the <i>opus africanum</i> technique, were preserved for a reasonable H (a portion of a wall is still visible along the W section of the Wadi Lebda bank, pl. 51C). According to a brief report (WENDOWSKI, ZIEGERT 2005), the villa (or at least the part that has been explored) had four different phases between the 1 st century BC and the late 2 nd century AD. In the first phase the villa was equipped with an oil press and a mill mortar (pl. 51D) and characterized by a simple flat-roofed stone building. At this period should be also refereed the construction of a first thermal area. After probably an earthquake or a flood, the villa (or part of it) were restored, the floors

	were raised and the roof repaired. New levels of floors and impressive mosaics were built in the <i>frigidarium</i> of the villa characterized by five different panels (total area: 4.80x11.55 m) depicting gladiator fights, hunting scenes and chariot races (pl. 51E-F). The structure, probably because of a flood or an earthquake, was abandoned during the late 3 rd century or the 4 th century. The marble decorations were robbed and the structures were buried quickly (probably already covered by the beginning of the 5 th century) and partially eroded and destroyed by the Wadi Lebda flooding.
STATE OF PRESERVATION:	The ancient structures have been reburied (2004-2005) after their excavation and after the lifting and moving of the mosaics.
CHRONOLOGY:	1 st century BC - 3 rd century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MERRONY (2005); WENDOWSKI, ZIEGERT (2005); GOODMAN (2007), 73-74; MUSSO, BIANCHI (2012), 37; MUSSO <i>et al.</i> (2013-2014), 49-51; MUSSO, MATOUG, SANDRI (2015); WILSON (2018), 286.

V148

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPIS MAGNA:	5,175 m SW.
GPS COORDINATES:	WGS 84 33S 0429869 - 3607270.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	Some mechanical terrain leveling have been done recently in the SE part of the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 96).
DESCRIPTION:	On the hilltop and along part of its slopes are the remains of an ancient villa located c.100 m N of the Wadi es-Smara at short distance of a Roman dam (Dm5). The site is characterized by several walls built using the <i>opus africanum</i> technique and the structure detectable on the ground occupies an area of c.40x30 m (c.1,200 m ²). The villa was provided with at least two presses (two limestone counterweight blocks are visible) and one of them is characterized by the uprights still partially <i>in situ</i> (pl. 52A). On the ground are also visible the remains of tanks coated with <i>opus signinum</i> (pl. 52B), part of the mill mortar and two barrel vaulted cisterns (18x1.47 m and 14.6x2.97 m) built in <i>opus caementicium</i> and internally coated with <i>opus signinum</i> . One of these cistern, originally built underground, due to the erosion of the hill slope, is actually exposed and accessible (pl. 52C). On the site are visible different marble slabs fragments (also a molded skirting element) and mosaic <i>tesserae</i> .
STATE OF PRESERVATION:	The site is well preserved and the plan of its structures is recognizable on the ground.
CHRONOLOGY:	1 st century BC - 4 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

VL49/Gs22

VILLA WITH *PARS RUSTICA* AND *GASR* (GASR GUS)

DEFINITION:	Structures.
TOPONYM/S:	Gasr Gus.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	6,350 m SW.
GPS COORDINATES:	WGS 84 33S 0428653 - 3606824.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	A fence has been built recently around the hilltop.
PREVIOUS STUDIES:	The site is unpublished even if it has been surveyed (2007) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2010; 2014).
DESCRIPTION:	On a isolated small hill and on its slopes S of Wadi es-Smara are the remains of a Roman villa with its main walls built using the <i>opus africanum</i> technique (pl. 52D). On the site, are indeed visible many orthostats still <i>in situ</i> and, on scattered on the ground, a large quantity of unshaped small limestone blocks referred to the mortar-packed part of the walls. The area occupied by these structures covers a surface of c.1,400 m ² (c.35x40 m). On the site are visible also part of the uprights belonging to, at least, two presses (pl. 52E) and others elements related to an oil press like a limestone tank; marble slabs fragments were registered on the site. Within these structures was built a quadrangular <i>gasr</i> (c.12x12 m) using the limestone ashlar blocks of the previous villa; the entrance to this building (SE side) is preserved and it is composed by an arched doorway (3 m in height and 2 m large) entirely built in limestone ashlar blocks with nine hewn stones still <i>in situ</i> (pl. 53A).
STATE OF PRESERVATION:	The general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2010), 743, KHM 100; (2014), 222, site KHM 100.

VL50

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	5,185 m SSE.
GPS COORDINATES:	WGS 84 33S 0434300 - 3606029.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace and hill slope.
MODERN INTERFERENCE/S:	The site has suffered of recent illegal excavations.
PREVIOUS STUDIES:	The site has never been described in detail but it was visited by Bartoccini during the 1920s and then by Ward-Perkins in 1946. The Italian scholar published (1926; 1927a) a plan and a reconstruction drawing (realized by Luigi Turba) of part of the structures still visible at his time (the two presses). Ward-Perkins took three photographs (held at the British School at Rome) of the site including also the main courtyard, actually hardly recognizable on the ground. The site has been surveyed recently (2009) by the Archaeological Mission of Roma Tre University (KHM 106).
DESCRIPTION:	On a large terrace and along the slope of the NE flank of Ras el-Hammam hill are visible

	<p>the structures belonging to a large Roman villa strictly connected with two <i>mausolea</i> (Ma8 - Ma9). The site is characterized by different structures such as an oilery provided with, at least, two presses facing on a large courtyard with other rooms around it. Both the oil mills and the courtyard were clearly visible during the first half of the last century (pl. 53B-C). The courtyard was characterized by a colonnade whose limestone column bases and drums are still visible scattered on the ground (during the forties most of the bases were still <i>in situ</i>: see pl. 53C) . Facing the S side of the courtyard there is a large room (c.20x30) with two presses. The main structural elements of the two oil presses are still recognizable: the uprights, the bases, the <i>opus caementicium</i> basins and the limestone counterweight blocks are indeed <i>in situ</i> (pl. 53D-E). East of the courtyard there are different walls in <i>opus africanum</i> and a corner of a room built entirely in limestone ashlar blocks (pl. 54A). The area could serve as a <i>thermae</i> due to the presence of many <i>tubuli</i> and <i>bessales</i> found scattered on the ground. In the area have been also found marble slabs fragments, polychrome mosaic <i>tesserae</i> and painted plaster. Overall, the courtyard, oilery and thermal rooms covered an area of c.3,000-3,500 m² (c.80x40 m).</p>
STATE OF PRESERVATION:	The site is well preserved and the general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	BARTOCCINI (1926), 81; (1927a), 115-116.
CARTOGRAPHY:	IGM 1913a (<i>Ruder</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-52a, WP G23-52b, WP G23-52c.

VL51

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	6,130 m WNW.
GPS COORDINATES:	WGS 84 33S 0427265 - 3612034.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	House and terrain leveling on the NE and E slopes of the hill.
PREVIOUS STUDIES:	The site is unpublished and the only documentation available is a postcard dated 1911-1913 depicting some Italian soldiers sitting on its ruins (pl. 54B). The site has been recently (2013) surveyed by the Archaeological Mission of Roma Tre University (KHM 112).
DESCRIPTION:	On the top of a low hill located c.1 km N of Ras el-Mergheb are the remains of a <i>villa rustica</i> characterized by different traces of <i>opus africanum</i> walls together with some limestone ashlar blocks belonging to the <i>basis villae</i> (pl. 54C). All around are scattered several unshaped small limestone blocks: the remains of the mortar-packed walls. The ancient structures seem to cover an area of c.1,200 m ² (c.35x35 m). On the site are also visible limestone elements of two presses: two bases for the uprights and a press base (pl. 54D). Fragments of marble slabs and painted plasters have been found on the site.
STATE OF PRESERVATION:	The site is well preserved and the general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

VL52/Gs23

VILLA WITH *PARS RUSTICA* AND *GASR*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	6,715 m WNW.
GPS COORDINATES:	WGS 84 33S 0426828 - 3612828.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Low terrace.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and partially published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014; 2016).
DESCRIPTION:	On a low terrace located c.2 km N of Ras el-Mergheb are clearly visible the structures related to an ancient <i>gasr</i> and its ditch (pl. 54E). Within the squared ditch (c.40x40 m) a mound of rubble (mainly small unshaped limestone blocks) together with several reused limestone ashlar blocks scattered on the ground and partially <i>in situ</i> (pl. 55A), indicates the core of the <i>gasr</i> that should measures approximately 20x20 m. The existence, on the same place, of a previous <i>villa rustica</i> is confirmed by the presence of an <i>opus caementicium</i> tank coated with <i>opus signinum</i> (pl. 55B), a limestone tank reused in a recent well, a counterweight block of a press and limestone architectural elements like a threshold, column drums and a column base. On the ground were also found fragments of several marble slabs.
STATE OF PRESERVATION:	The site is well preserved and the general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 222-223, site KHM 123; (2016), 73, site KHM 123.

VL53

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	7,850 m WNW.
GPS COORDINATES:	WGS 84 33S 0425666 - 3612818.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	Arab/Ottoman houses were built nearby reusing ancient stones of the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 129).
DESCRIPTION:	On a hill and on a part of its NW slopes located E of Wadi Chadrun, are clearly visible the remains of a large <i>villa rustica</i> probably connected with a <i>mausoleum</i> (Ma11). The site is characterized by several <i>opus africanum</i> walls some of which are well preserved

	(pl. 55C) and parts of the <i>basis villae</i> composed by a row of limestone ashlar blocks (pl. 55D). The area occupied by the building is c.90x40 m (c.3,600 m ²). In the N part of the structure were at least two presses housed in a large room with <i>opus signinum</i> floor and tanks (pl. 55E). One of the press still preserves the main limestone elements <i>in situ</i> (uprights with their base, the press base and the counterweight block). On the site were collected different marble slabs fragments.
STATE OF PRESERVATION:	The site is well preserved and the general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	1 st century BC - 6 th century AD.
DATING ELEMENT/S:	Pottery, coins, building features.
BIBLIOGRAPHY:	MUNZI (2017), 196 nr. 5-6.

VL54 *VILLA WITH PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	5,980 m SSE.
GPS COORDINATES:	WGS 84 33S 0434036 - 3605180.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	Electric pylon N of the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 140).
DESCRIPTION:	On a hill and on a part of its SE slopes located c.1 km S of Ras el-Hammam, are the structures related to a <i>villa rustica</i> that seems to cover an area of c.1,000m ² (c.30x35 m). The site is characterized by several <i>opus africanum</i> walls (pl. 55F) and parts of the <i>basis villae</i> composed by two rows of limestone ashlar blocks for a total length of c.20 m (pl. 56A). In the central part of the building a natural depression may indicates the presence of a squared courtyard. Within the structures and partially on the E slope of the hill are some remains belonging to two presses: two counterweight blocks (pl. 56B) and part of the uprights. On the site were collected a large quantity of marble slabs fragments, black and white mosaic <i>tesserae</i> and painted plasters.
STATE OF PRESERVATION:	The site is well preserved and the general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	1 st century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, coins, building features.
BIBLIOGRAPHY:	MUNZI (2017), 196-197, nr. 10-12.

VL55 *VILLA WITH PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	3,725 m S.
GPS COORDINATES:	WGS 84 33S 0432411 - 3607515.

ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	Structures related to the modern dam built at the junction of Wadi Lebda with Wadi es-Smara in 1982.
PREVIOUS STUDIES:	The site is unpublished but it has been mentioned by C. Vita-Finzi (1969) who recognized it as a farm. Its structures has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 152).
DESCRIPTION:	On a hill located N of the junction between Wadi es-Smara and Wadi Lebda are the remains of ancient structure related to a <i>villa rustica</i> . The site is characterized by traces of <i>opus africanum</i> walls (pl. 56C) spread in an area of c.800 m ² (c.25x30 m). Among the scattered limestone ashlar blocks are still visible the remains of a press: a base for the uprights (pl. 56D) and part of the upright. On the site were also collected different marble slabs fragments. Within the S-E part of the <i>villa rustica</i> (the sector facing the junction of the two wadis) are visible the remains of a rectangular large room (16.7x8 m) preserved in some sectors for two rows of limestone ashlar blocks (pl. 56E).
STATE OF PRESERVATION:	The site is well preserved and the general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	VITA-FINZI (1969), fig. 16.

VL56

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	4,285 m S.
GPS COORDINATES:	WGS 84 33S 0431876 - 3607091.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site is surrounded (S, E and W side) by modern dirt roads while in the N side have been built modern buildings. Probably during these activities the site has been heavily damaged. Moreover, the site is characterized by different dumps.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 153).
DESCRIPTION:	The site is located c.500 m W from the confluence of Wadi Lebda with Wadi es-Smara and c.180 m S of an hypogean tomb (Tb11), probably strictly related to this structures. Due to modern building activities, only few traces of <i>opus africanum</i> walls are still visible on the site while a large quantities of unshaped small limestone blocks referred to the mortar-packed sectors of the same walls, are scattered all over the site. Among the numerous limestone ashlar blocks is visible also two uprights of a press (pl. 56F) and part of a <i>opus caementicium</i> tank and, probably, an underground cistern. Black and white mosaics <i>tessarae</i> and fragments of marble slabs have been found on the site.
STATE OF PRESERVATION:	Only few traces of the structures are still visible on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, coins, building features.
BIBLIOGRAPHY:	MUNZI (2017), 198 nr. 21-22.

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEP CIS MAGNA:	5,445 m S.
GPS COORDINATES:	WGS 84 33S 0433161 - 3605687.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	Different houses have been built few meters N and W from the site.
PREVIOUS STUDIES:	The site is unpublished but it has been recently surveyed (2013) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	Ancient structures are visible on a low hill c.750 m SW from Ras el-Hammam. The site is characterized by traces of <i>opus africanum</i> walls thanks to orthostats and small unshaped limestone blocks scattered all over the ground (pl. 57A). The structure covers an area of c.2,000 m ² (c.55x35 m). At ground level, some of these walls still preserve traces of white plaster while fragments of some marble slabs have been found in the area. Limestone elements of a press (a counterweight block and the uprights) have been reused in two different structures of a <i>gasr</i> built in a second phase. The two quadrangular buildings are close each others (c.15 m) and have small plans (4.5x6 m and 7.5x6.5 m). The smallest one to the N is preserved for three rows of limestone ashlar blocks (including the reused counterweight block) and is also characterized by a mound of small unshaped blocks inside it (pl. 57B). The other structure is preserved for a max. of two rows of ashlar blocks and inside, in central position, is visible part of two uprights of a press reused as jambs of a door (pl. 57C).
STATE OF PRESERVATION:	The general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	2 nd century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2014), 223, site KHM 155.

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	6,300 m SSW.
GPS COORDINATES:	WGS 84 33S 0431521 - 3605085.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Terrace and part of its slopes.
MODERN INTERFERENCE/S:	Different small buildings have been built N and NW of the site.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 165).
DESCRIPTION:	On a low terrace located c.350 m W of the Wadi Lebda are the remains of an ancient structure characterized by several traces of <i>opus africanum</i> walls (some limestone orthostats still <i>in situ</i> and a great amount of small unshaped blocks on the ground

STATE OF PRESERVATION:	belonging to the mortar-packed sectors of the walls). Beside the walls are also visible the remains of two <i>opus caementicium</i> basins coated with <i>opus signinum</i> (pl. 57D) and a subterranean room, probably a cistern. On the site have been also found several polychrome mosaic <i>tesserae</i> and colored plaster fragments. The productive part of the structure was characterized by at least two presses and a millstone: limestone elements such an upright (pl. 57E), two counterweights blocks (pl. 57F) and two press bases have been indeed found together with part of a large limestone wheel (<i>orbis</i>) of a mill.
CHRONOLOGY:	The general plan of the ancient structures is hardly recognizable on the ground.
DATING ELEMENT/S:	2 nd century BC - 6 th century AD.
BIBLIOGRAPHY:	Pottery, building features. Unpublished.

VL59

VILLA WITH *PARS RUSTICA* (VILLA DI ORFEO)

DEFINITION:	Structures.
TOPONYM/S:	Villa di Orfeo.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPIS MAGNA:	465 m NW.
GPS COORDINATES:	WGS 84 33S 0433112 - 3611526.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is not visible anymore because after its partial excavation it has been covered by soil. The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	Close to the W sector of the Late Antique wall (Wa3) Romanelli (1925a) saw part of a Greek cross shape room referred to a thermal area that probably belonging to this <i>villa rustica</i> . Other parts of the same site were partially excavated in the autumn of 1933 and briefly published by Guidi (1935a) however, with very short descriptions and without a general plan. The attention was indeed focused on the well preserved mosaics found in the main room depicting Orpheus with different <i>emblemata</i> and surrounded by other geometric mosaics. These floor decorations were also analyzed by Salvatore Aurigemma (1960) but no further information were given about the structures of the villa.
DESCRIPTION:	Parts of the <i>villa rustica</i> and in particular the thermal area, were seen by Romanelli. He described, at the foot of the sand dunes that covered the Late-antique walls, a Greek cross room covered with a vaulted ceiling and provided at the end of each side by a quadrangular window. It seems that this space was decorated with a polychrome parietal mosaic, in part still <i>in situ</i> at the time of Romanelli's visit and then, in a second phase, covered and restored with painted plaster. Adjacent to SW was a rectangular vaulted room externally coated with plaster and <i>opus signinum</i> and the inside, partially covered by sand, was decorated with several layer of plaster of which the last one was mainly colored in white with red strips. This rectangular room was divided in two different spaces both provided with windows on the vaulted ceiling. The other section explored in 1933 by Caputo was separated by the area seen by Romanelli and they were never put in relation (probably the remains seen by Romanelli were already collapsed during the thirties). The new explored section was characterized by two rooms built using the Ras el-Hammam district limestone and in <i>opus africanum</i> technique. Observing the photograph published by Guidi (pl. 58A) can be distinguished two different rooms. The E room (on the right) had a squared plan (5 m) and it was characterized in the central part of the floor by a mosaic decoration with the main theme of Orpheus playing the <i>lira</i> surrounded by different animals. East of this decoration are six <i>emblemata</i> depicting

	fishes, ducks and different day life scenes (pl. 58B). All around these mosaics were several other mosaics with different geometric schemes. West of this room (on the left part of the photograph) is a space where are visible two presses with the uprights still <i>in situ</i> . Probably due to the short space, the oil presses should be W of this room and what is visible is just the back side of the orthostats. Between the two presses is a limestone mill.
STATE OF PRESERVATION:	The site is buried after its partial excavation and the general plan of the ancient structures is not recognizable on the ground.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	ROMANELLI (1925a), 136-137; GUIDI (1935a), 110-143; AURIGEMMA (1960), 52-54; BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI (1963), 106; KENRICK (2009), 124.
CARTOGRAPHY:	IGM 1915a (quote 14.8 "Greek cross plan structure")
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : CAS, sc. 45/68, sc. 45/69, sc. 45/82.

V160

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	6,840 m WNW.
GPS COORDINATES:	WGS 84 33S 0427397 - 3614529.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top and part of its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site was probably cited by Méhier de Mathuisieulx (1906) who mentioned a in this area a " <i>bourgade, portent sur l'enceinte un sanam ou torcular (pressoir à huile). Les pierres de taille amoncelées ne laissent discerner aucun détail</i> " The structure of the <i>villa rustica</i> were subsequently surveyed and briefly described by Aurigemma (1914; 1925a) in the first years of the Italian occupation. He decided to visit the site due to the local oral tradition that indicated this place as the site where an ancient milestone was found (Ms3). During the 1990s the site was outlined and described with more detail by the Archaeological Mission of Roma Tre University in collaboration with the DoA (BEN RABHA, MASTURZO 1997) and, few years later, by the Silin area survey project (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	The structures of the <i>villa rustica</i> , together with the <i>gasr</i> (Fa30) and the <i>mausoleum</i> (Ma12) stands on a hill top and its slopes near the Wadi Chadrun. The site of the villa occupies a quadrangular area of c.1,700 m ² (c.40x43 m) and it is characterized by two different sectors. A bath complex was found on the W slopes of the hill, facing the wadi (from which probably drew its water supply). It was composed by three compartments; one of them is an <i>opus signinum</i> basin (1.40x1.60 m) that could be reached by steps. Within this sector were found several U-shaped clay tubes (for the <i>calidarium</i>), mosaic <i>tesserae</i> , marble slabs, stucco frames and painted plaster fragments. On the E side, on the hilltop, was the productive zone characterized on the ground by different traces related to basins coated with <i>opus signinum</i> , lava querns and by two presses, one reused within the masonry of the close <i>gasr</i> to the S (Fa30). The E part should be the one related to the residential zone with traces of different small rooms, one characterized by mosaic floor and another by pebbles.
STATE OF PRESERVATION:	The general plan of the ancient structures is recognizable on the ground.

CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Building features, pottery.
BIBLIOGRAPHY:	MÉHIER DE MATHUISIEULX (1906), 78; AURIGEMMA (1914), 473; (1925a), 9-10; BEN RABHA, MASTURZO (1997); MUNZI <i>et al.</i> (2004), 57, site 50; RIND (2009), 125, LM 9.

Vl61

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	5,670 m WNW.
GPS COORDINATES:	WGS 84 33S 0427744 - 3612142.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top and its slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 121).
DESCRIPTION:	On a hilltop located c.1 km N of Ras el-Mergheb are traces of structures related to a <i>villa rustica</i> . A few orthostats of <i>opus africanum</i> walls are still visible scattered on the ground together with a limestone counterweight block of a press and two ashlar blocks probably belonging to an arch. A oval basin coated with <i>opus signinum</i> is partially visible on the S side of the hilltop (pl. 58C). On the ground have also been found some <i>tubuli</i> fragments probably belonging to a bath <i>calidarium</i> . Marble slabs, bricks and painted plaster fragments together with mosaic <i>tesserae</i> have been collected on the site especially on the slopes of the hill probably due to the high erosion of the area.
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features, coins, pottery.
BIBLIOGRAPHY:	MUNZI (2017), 196 nr. 1-4.

Vl62

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEP CIS MAGNA:	10,485 m NW.
GPS COORDINATES:	WGS 84 33S 0425084 - 3617597.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed and published by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2004).
DESCRIPTION:	On the top of a hill there are several blocks from <i>opus africanum</i> walls, two circular basins coated with <i>opus signinum</i> and an underground cistern. On the site, together with two milestones (Ms9) were found part of a press' upright and a fragment of a lava quern.

STATE OF PRESERVATION:	Marble slabs fragments were also collected on the site.
CHRONOLOGY:	The general plan of the ancient structures is hardly recognizable on the ground.
DATING ELEMENT/S:	1 st - 5 th century AD.
BIBLIOGRAPHY:	Building features, pottery.
	MUNZI <i>et al.</i> (2004), 44-45, site 5.

V163

VILLA WITH *PARS RUSTICA*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> .
DISTANCE FROM LEPIS MAGNA:	5,360 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0429430 - 3614573 (approx).
ACTUAL LAND USE:	Commercial/industrial area.
VISIBILITY:	The site has been destroyed due to the recent construction of the new harbor of Khoms.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Building related to the new Khoms harbor.
PREVIOUS STUDIES:	The site has been recently (1999) surveyed by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	On a flat terrain a short distance from the seashore have been found traces of structures related to a Roman villa. A rectangular area of c.30x40 m (c.1,200 m ²) was interested by traces of <i>opus africanum</i> walls. On the site have been also found two limestone counterweight blocks of presses, limestone column drums together with marble (<i>carystium</i> , <i>proconnesium</i> and porphyry slab fragments) and painted plaster fragments and black and white mosaic <i>tesserae</i> .
STATE OF PRESERVATION:	The general plan of the ancient structures is recognizable on the ground.
CHRONOLOGY:	3 rd century BC - 5 th century AD.
DATING ELEMENT/S:	Building features, coin, pottery.
BIBLIOGRAPHY:	Unpublished.

V164/Gs25

VILLA WITH *PARS RUSTICA* AND *GASR*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEPIS MAGNA:	6,085 m S.
GPS COORDINATES:	WGS 84 33S 0431881 - 3605207.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The archaeological remains are visible beneath low vegetation and shrubs.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) and cited by the Archaeological Mission of Roma Tre University (MUNZI <i>et al.</i> 2014).
DESCRIPTION:	On a hill top located c.200 W of the Wadi Lebda are recognizable some traces of an ancient Roman farm characterized by <i>opus africanum</i> walls (limestone orthostats can be seen scattered on the site together with a large quantities of small unshaped blocks). Along the S slope of the hill an Islamic well was built probably reusing an ancient cistern

STATE OF PRESERVATION:	dug in the bedrock. A counterweight block of a press, a limestone tank and part of a lava quern lies on the ground together with marble slabs fragments. The site was subsequently characterized by the construction of a <i>gasr</i> provided with a ditch around it (pl. 58D). This squared structure is preserved for a maximum of three rows of limestone ashlar blocks (pl. 58E) and measures 19x18 m. Inside the building a mound of unshaped small limestone blocks and, reused within its external walls, a threshold.
CHRONOLOGY:	The general plan of the ancient structures is recognizable on the ground (<i>gasr</i>).
DATING ELEMENT/S:	2 nd century BC - 6 th century AD.
BIBLIOGRAPHY:	Pottery, coin, building features.
CARTOGRAPHY:	MUNZI <i>et al.</i> (2014), 223, site KHM 163; MUNZI (2017), 191, 199 nr. 27. USACE 1962a (<i>Ruins</i>); SPLAJ 1979a (<i>Ruins</i>).

VL65/Gs26

VILLA WITH *PARS RUSTICA* AND *GASR*

DEFINITION:	Structures.
TOPONYM/S:	None.
INTERPRETATION:	Villa with <i>pars rustica</i> and <i>gasr</i> .
DISTANCE FROM LEPICIS MAGNA:	6,835 m NW.
GPS COORDINATES:	WGS 84 33S 0427772 - 3615115.
ACTUAL LAND USE:	Pasture/uncultivated land.
VISIBILITY:	The structures are accessible and visible. The archaeological remains are visible beneath low vegetation and shrubs..
TOPOGRAPHIC POSITION:	Hill top and slopes.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (1999) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	On a hill top and along part of its slopes located on the W bank of Wadi Chadrun are the remains of a Roman <i>villa rustica</i> characterized by <i>opus africanum</i> walls (several limestone orthostats can be seen still <i>in situ</i> while, scattered on the ground, is a large quantities of small unshaped blocks) and numerous traces of <i>opus signinum</i> and mortar floors. Moreover, in the SW sector of the site, are two underground small cisterns coated with <i>opus signinum</i> (one is circular with a diameter of c.1 m, the other one has an elliptic plan of c.1.30x1 m). Scattered on the ground are a limestone oil-press counterweight, part of a lava quern and numerous <i>carystium</i> marble slab fragments together with polychrome mosaic <i>tesserae</i> and painted plaster fragments. On the top of the hill several blocks and a upright of a press have been reassembled to built a <i>gasr</i> whose planimetric dimension are however hard to define. The total surface covered by the preserved structures of the villa is c.1,450 m ² (38x38 m).
STATE OF PRESERVATION:	The general plan of the ancient structures is hardly recognizable on the ground.
CHRONOLOGY:	1 st century BC - 5 th century AD.
DATING ELEMENT/S:	Pottery, building features.
BIBLIOGRAPHY:	Unpublished.

VP1 - VP12

POTSHERD SCATTERS RELATED TO LUXURY DWELLINGS

Twelve areas with a concentration of ancient material with not structures survived, have been detected by Roma Tre Archaeological Mission surveys carried out between 1999 and 2007.

Vp1

GPS COORDINATES:	WGS 84 33S 0428893 - 3609353.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 30). A high-density potsherds area of c.2,000 m ² has been detected on the top of a low hill. Scattered on the ground have been found some marble slabs fragments and mosaic <i>tesserae</i> .
MODERN INTERFERENCE/S:	Quarrying activities.
CHRONOLOGY:	1 st - 5 th century AD.

Vp2

GPS COORDINATES:	WGS 84 33S 0428932 - 3608933.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 32). A high-density potsherds area of c.2,250 m ² has been detected on the top of a low hill. Scattered on the ground have been found some marble slabs fragments.
MODERN INTERFERENCE/S:	Recently, a house has been built on the site.
CHRONOLOGY:	1 st - 5 th century AD.

Vp3

GPS COORDINATES:	WGS 84 33S 0428741 - 3609070.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 33). A medium-density potsherds area of c.3,000 m ² has been detected on the top of a hill and part of its slopes. Scattered on the ground have been found some marble slabs fragments.
MODERN INTERFERENCE/S:	Quarrying activities.
CHRONOLOGY:	1 st - 3 rd century AD.

Vp4

GPS COORDINATES:	WGS 84 33S 0430077 - 3609963.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 37). A medium-density potsherds area of c.1,000 m ² has been detected on a low terrace. Scattered on the ground have been found some marble slabs fragments.
MODERN INTERFERENCE/S:	A marabout has been built on the site and, recently, a house has been constructed at short distance toward SE.
CHRONOLOGY:	1 st - 5 th century AD.

Vp5

GPS COORDINATES:	WGS 84 33S 0429581 - 3609612.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 39). A high-density potsherds area of c.4,000 m ² has been detected on the top of a hill and part of its slopes. Scattered on the ground have been found some marble slabs fragments and mosaic <i>tesserae</i> .
MODERN INTERFERENCE/S:	The site has been destroyed due to the construction of different buildings.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.

Vp6

GPS COORDINATES:	WGS 84 33S 0429684 - 3609311.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 42). A high-density potsherds area of c.2,500 m ² has been detected on a hill top and its slopes. Scattered on the ground has been found a marble slab fragment.
MODERN INTERFERENCE/S:	The site has been destroyed due to the construction of different houses.
CHRONOLOGY:	1 st - 3 rd century AD.

Vp7

GPS COORDINATES:	WGS 84 33S 0431027 - 3609404.
DESCRIPTION:	The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 63). A medium-density potsherds area of c.1,500 m ² has been detected on a plain terrain. Scattered on the ground have been found some marble slabs fragments, a red painted plaster fragment and mosaic <i>tesserae</i> .

MODERN INTERFERENCE/S: The site has been destroyed due to the construction of a railroad station.
 CHRONOLOGY: 2nd century BC - 5th century AD.

Vp8

GPS COORDINATES: WGS 84 33S 0430947 - 3609158.
 DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 64). A low-density potsherds area of c.800 m² has been detected on a low terrace. Scattered on the ground have been found some marble slabs fragments and painted plaster fragments.
 MODERN INTERFERENCE/S: None.
 CHRONOLOGY: 1st - 2nd century AD.

Vp9

GPS COORDINATES: WGS 84 33S 0430171 - 3609689.
 DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 67). A high-density potsherds area of c.1,000 m² has been detected on a plain terrain. Scattered on the ground has been found a marble slab fragment.
 MODERN INTERFERENCE/S: Two tarmac roads cross the site.
 CHRONOLOGY: 1st - 5th century AD.

Vp10

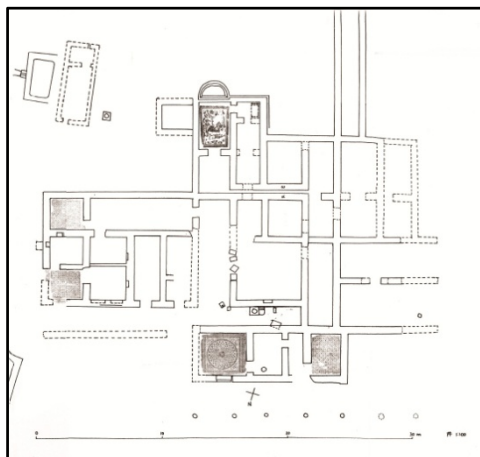
GPS COORDINATES: WGS 84 33S 0431351 - 3608499.
 DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 71). A medium-density potsherds area of c.2,500 m² has been detected on the slope of a low hill. Scattered on the ground have been found some marble slabs fragments and a black mosaic *tessera*.
 MODERN INTERFERENCE/S: None.
 CHRONOLOGY: 2nd century BC - 2nd century AD.

Vp11

GPS COORDINATES: WGS 84 33S 0431752 - 3608437.
 DESCRIPTION: The site has been surveyed recently (2007) by the Roma Tre Archaeological Mission (KHM 72). A medium-density potsherds area of c. 3,500 m² has been detected on the top of a low hill and its slopes. Scattered on the ground have been found some marble slabs fragments.
 MODERN INTERFERENCE/S: None.
 CHRONOLOGY: 1st century BC - 2nd century AD.

Vp12

GPS COORDINATES: WGS 84 33S 0428474 - 3615084.
 DESCRIPTION: The site has been surveyed recently (1999) by the Roma Tre Archaeological Mission. A high-density potsherds area of c.1,200 m² has been detected on the top of a low hill and its slopes. Scattered on the ground have been found some marble slabs fragments and black mosaic *tesserae*.
 MODERN INTERFERENCE/S: None.
 CHRONOLOGY: 3rd century BC - 5th century AD.



A. Villa di at-Thalia (V11): plan of the explored part of the structure (LMDoA, not. inv.).



B. Villa di at-Thalia (V11): nilotic mosaic found in the thermal area (LMDoA, not. inv.).



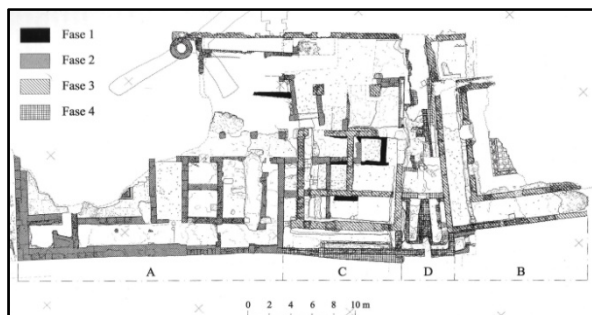
C. Villa del Nilo (VI2): the area excavated in 1930, on the right the *tepidarium* with the two *piscinae*, 1946-1948 (BSR, WP G23-45a).



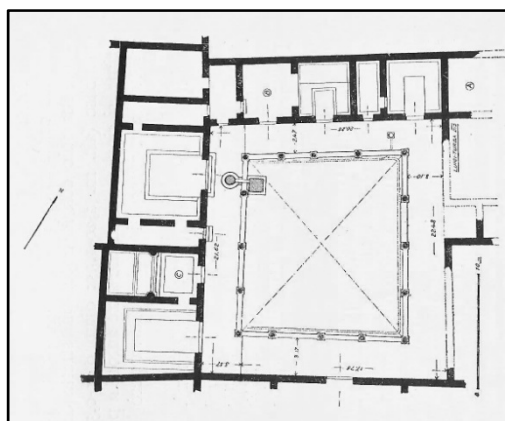
D. Villa del Nilo (VI2): the corridor with the geometric mosaic and the three *emblemata* dug in 1916 (AURIGEMMA 1960, tav. 76).



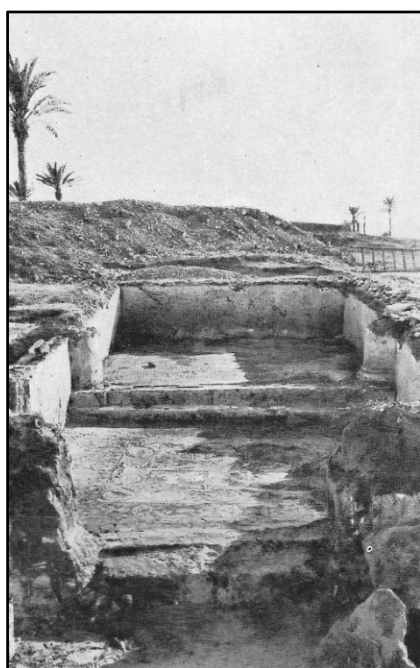
E. Villa di wadi er-Rsaf (V13): the central sector of the structure from SW (Musso *et al.* 1998, tav. 48a).



A. Villa di wadi er-Rsaf (VI3): general plan (Musso *et al.* 1998, fig. 3).



B. Villa dell cimitero israelitico (VI5): general plan (BARTOCCINI 1927b, fig. at p. 226).



C. Villa dell cimitero israelitico (VI5): the W sector (BARTOCCINI 1927b, fig. at p. 227).



D. Villa dell cimitero israelitico (VI5): a room decorated with a central mosaic with *emblemata* (BARTOCCINI 1927b, fig. at p. 230).



E. Villa VI11: general view of the site partially destroyed by the motorway Tripoli - Misurata, 2007 (Photo: F. Felici).



F. Villa VI12: general view of the site from S, 2007 (Photo: A. Zocchi).



A. Villa VI13: the central part of site from S, 2007 (Photo: A. Zocchi).



B. Villa VI13: part of a limestone threshold found within the site, 2007 (Photo: A. Zocchi).



C. Villa VI13: the underground cistern - partially collapsed - in the SW part of the site, 2007 (Photo: A. Zocchi).



D. Villa VI15: general view of the site, 2007 (Photo: A. Zocchi).



E. Villa VI15: part of red, yellow and green painted plaster on a wall, 2007 (Photo: A. Zocchi).



F. Site VI16: general view of the survivor structures belonging to a *gasr*, 2007 (Photo: A. Zocchi).



A. Villa VI17: limestone orthostats of *opus africanum* walls scattered on the ground, 2007 (Photo: A. Zocchi).



B. Villa VI18: limestone ashlars blocks within the site, 2007 (Photo: A. Zocchi).



C. Villa VI21: the cistern/basin coated with cocchiopesto within the site, 2007 (Photo: A. Zocchi).



D. Site VI22: general view from S, 2007 (Photo: A. Zocchi).



E. Site VI22: The SE corner of the quadrangular *gasr*, 2007 (Photo: A. Zocchi).



F. Site VI22: part of W side of the *gasr* external ditch, 2007 (Photo: A. Zocchi).



A. Villa VI25: partial view of the site from S, 2013 (Photo: A. Zocchi).



B. Villa VI25: part of the rooms with *cocciopesto* and *bessales* floor, 2013 (Photo: A. Zocchi).



C. Villa VI25: part of a polychromatic mosaic with traces of painted plaster on the walls, 2013 (Photo: A. Zocchi).



D. Site VI27: partial view of the site with the remains of an *opus africanum* wall, 2013 (Photo: A. Zocchi).



E. Site VI28: traces of a mortar pavement and of a wall in the NE section of the recent illegal trench, 2013 (Photo: A. Zocchi).



F. Site VI28: part of the ancient architectural elements piled around the illegal trench, 2013 (Photo: A. Zocchi).



A. Site VI28: the rectangular basin coated with cocchiopesto, 2013
(Photo: A. Zocchi).



B. Site VI28: remains of the quadrangular *gasr*, 2013
(Photo: A. Zocchi).



C. Villa VI33: general view of the thermal area looking towards NW,
1999 (Photo: L. Marsico).



A. Site VI36: limestone upright of a press, 2007
(Photo: A. Zocchi).



B. Site VI36: counterweight block of a press, 2007
(Photo: A. Zocchi).



C. Site VI37: part of the *villa rustica* from the *gasr*, 2007
(Photo: A. Zocchi).



D. Site VI37: limestone tank fragment and part of the *mortarium* of a millstone, 2007 (Photo: A. Zocchi).



E. Site VI37/Gs18: the quadrangular structure of the *gasr* from S, 2007 (Photo: A. Zocchi).



A. Site VI38: limestone ashlar blocks wall on the S sector of the site, 2007 (Photo: A. Zocchi).



B. Site VI38: the quadrangular structure built in limestone ashlar blocks, 2007 (Photo: A. Zocchi).



C. Site VI39/Gs19: the squared *gasr* (Gasr Hammud) from S, 2007 (Photo: A. Zocchi).



D. Site VI39/Gs19: external enclosure of the *gasr* (Gasr Hammud) from SW, 2007 (Photo: A. Zocchi).



E. Site VI39/Gs19: carystium marble column shaft reused as a lintel in an abandoned Arab/Ottoman house, 2007 (Photo: A. Zocchi).



A. Site VI40: part of the site from S, 2007 (Photo: A. Zocchi).



B. Site VI40: two uprights of two different aligned presses, 2007 (Photo: A. Zocchi).



C. Site VI40: part of the *catillus* of a grain millstone, 2007 (Photo: A. Zocchi).



D. Site VI41: a limestone upright of the press still *in situ*, 2007 (Photo: A. Zocchi).



E. Site VI42: remains of the structure piled at short distance from a tarmac road, 2007 (Photo: A. Zocchi).



F. Site VI43: part of the limestone base of the uprights of a press, 2007 (Photo: A. Zocchi).



A. Site VI44/Gs20: The quadrangular *gasr* from S, 2007 (Photo: A. Zocchi).



B. Site VI44/Gs20: part of the external limestone enclosure of the *gasr*, 2007 (Photo: A. Zocchi).



C. Site VI44/Gs20: Surviving parts of the uprights belonging to a press, 2007 (Photo: A. Zocchi).



D. Site VI45: the southern structure, 2007 (Photo: A. Zocchi).



E. Site VI46/Gs21: the quadrangular *gasr* from S, 2007 (Photo: A. Zocchi).



A. Site VI46/Gs21: the press base of a *torcular*, 2007 (Photo: A. Zocchi).



B. Site VI46/Gs21: part of the limestone uprights base of a press, 2007 (Photo: A. Zocchi).



C. Site VI47: part of a *opus africanum* wall from the W bank of the wadi Lebda, 2007 (Photo: A. Zocchi).



D. Site VI47: a mill mortar found on the edge of the W bank of the wadi Lebda, 2007 (Photo A. Zocchi).



E. Site VI47: the restored *frigidarium* mosaics at the Lepcis Magna Museum, 2013 (Photo: A. Zocchi).



F. Site VI47: a mosaic panel of the *frigidarium* depicting two gladiators after the fight (<http://amphi-theatrum.de/1321.html>).



A. Site VI48: uprights of a press partially still *in situ*, 2007
(Photo: A. Zocchi).



B. Site VI48: remains of an *opus caementicium* tank, 2007
(Photo: A. Zocchi).



C. Site VI48: the cistern in the SE part of the site looking toward wadi es-Smara, 2007 (Photo: A. Zocchi).



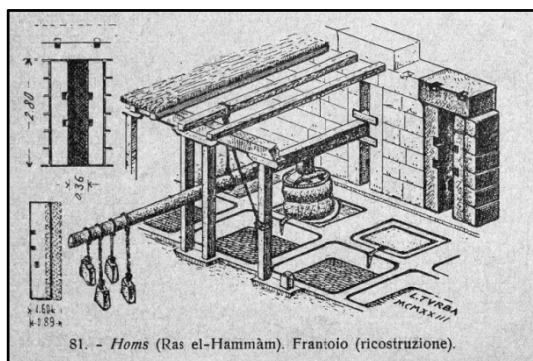
D. Site VI49/Gs22: part of structures in *opus africanum*, 2007
(Photo: A. Zocchi).



Site VI49/Gs22: part of the upright of a press, 2007
(Photo: A. Zocchi).



A. Site VI49/Gs22: the limestone doorway of the *gasr* (Gasr Gus), 2007 (Photo: A. Zocchi).



B. Site VI50: reconstruction of the two oil presses (BARTOCCINI 1926, fig. 81).



C. Site VI50: the alignment of the limestone column bases of the courtyard, 1946 (BSR, WP G23-52b).



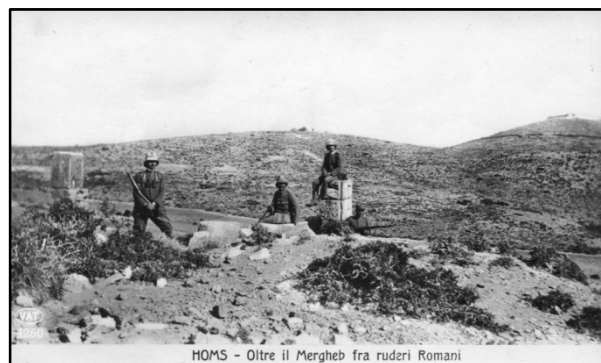
D. Site VI50: part of the two presses, 2009 (Photo: A. Zocchi).



E. Site VI50: the E press with the uprights, the press-base with the cocchiopesto tanks on the left and the counterweight block, 2009 (Photo: A. Zocchi).



A. Site VI50: part of the courtyard with a corner built in ashlar limestone blocks probably belonging to the thermal area, 2009 (Photo: A. Zocchi).



B. Site VI51: partial view looking toward SE, 1911-1913 (Postcard VAT 4260).



C. Site VI51: partial view looking N, 2013 (Photo: A. Zocchi).



D. Site VI51: the limestone base of the press, 2013 (Photo: A. Zocchi).



E. Site VI52/Gs23: The *gasr* with its external ditch looking N, 2013 (Photo: A. Zocchi).



A. Site VI52/Gs23: the survivor ashlar blocks still *in situ* of the SE corner of the *gasr*, 2013 (Photo: A. Zocchi).



B. Site VI52/Gs23: part of the *opus caementicium* basin coated in cocchiopesto, 2013 (Photo: A. Zocchi).



C. Site VI53: an *opus africanum* wall with part of the cocchiopesto coating, 2013 (Photo: A. Zocchi).



D. Site VI53: part of the *basis villae* built using limestone ashlar blocks, 2013 (Photo: A. Zocchi).



E. Site VI53: one of the two presses found within the site, 2013 (Photo: A. Zocchi).



F. Site VI54: partial view from S, 2013 (Photo: A. Zocchi).



A. Site VI54: part of the *basis villae* in the NW sector of the site, 2013 (Photo: A. Zocchi).



B. Site VI54: one of the two limestone counterweight block of a press found within the site, 2013 (Photo: A. Zocchi).



C. Site VI55: the NE part of the site with remains of *opus africanum* walls, 2013 (Photo: A. Zocchi).



D. Site VI55: base of the uprights of a press found within the site, 2013 (Photo: A. Zocchi).



E. Site VI55: the SE sector facing wadi es-Smara, 2013 (Photo: A. Zocchi).



F. Site VI56: part of an upright of a press, 2013 (Photo: A. Zocchi).



A. Site VI57/Gs24: general view looking toward E, 2013
(Photo: A. Zocchi).



B. Site VI57/Gs24: The N structure of the *gasr* looking toward NE, 2013 (Photo: A. Zocchi).



C. Site VI57/Gs24: the S structure of the *gasr* with two press uprights reused as jambs, 2013 (Photo: A. Zocchi).



D. Site VI58: partial view of the site looking toward N, 2013
(Photo: A. Zocchi).



E. Site VI58: a press upright and part of a subterranean room (cistern?), 2013 (Photo: A. Zocchi).



F. Site VI58: counterweight block of a press, 2013
(Photo: A. Zocchi).



A. Site VI59 (Villa di Orfeo): the explored area looking toward N, 1933 (GUIDI 1935a, fig. 1).



B. Site VI59 (Villa di Orfeo): the central part of the mosaic (AURIGEMMA 1960, tav. 107).



C. Site VI61: a cocciopesto basin, 2013 (Photo: A. Zocchi).



D. Site VI64/Gs25: the *gasr* with its external ditch looking N, 2013 (Photo: A. Zocchi).



E. Site VI64/Gs25: the limestone ashlar blocks of the NE corner of the *gasr*, 2013 (Photo: A. Zocchi).

Rd1**ROAD**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Road.
DISTANCE FROM LEPCIS MAGNA:	1,035 m NW.
GPS COORDINATES:	WGS 84 33S 0432559 - 3611829.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The excavation site is not visible anymore because it has been filled by soil.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site has been covered by soil and has been partially used as a dump.
PREVIOUS STUDIES:	The road, together with the Roman villa (VI3), the aqueduct (Aq4) and the close <i>necropolis</i> (Nc7 - Nc8), was excavated and published by the team of the Archaeological Mission of Roma Tre University between 1996 and 1997 (Musso <i>et al.</i> 1997; 1998).
DESCRIPTION:	Two parallel trenches were dug from the S side of the <i>necropolis</i> Nc8 toward SE. Both The excavation revealed the presence of different compact earthen layers referred to a road (the main coastal road) wide in this sector c.11 m and with a SE-NW orientation (pl. 59A). On different surface layers of the road have been noticed traces of the chariot wheels furrows. The S limit of the trenches were instead characterized by a long <i>opus caementicium</i> wall parallel to the S limit of the <i>necropolis</i> Nc8 and by two doorways.
STATE OF PRESERVATION:	The road, actually not visible, was found in good condition due to the subsequent layers that covered it.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Relationship with dated sites (VI3, Aq4, Nc7 - Nc8).
BIBLIOGRAPHY:	Musso <i>et al.</i> (1997), 286-287; (1998), 207-209.

Rd2**ROAD**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Road.
DISTANCE FROM LEPCIS MAGNA:	810 m ENE.
GPS COORDINATES:	WGS 84 33S 04434121 - 3611199.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site has been probably destroyed or buried.
PREVIOUS STUDIES:	The only documentation related to this sector of the road is an unpublished aerial photograph dated 1919 (pl. 59B) preserved at the archive of the USAM.
DESCRIPTION:	A considerable sector of a paved road is visible in an aerial photograph preserved at the USAM and dated April 1919 (pl. 59B). The road is located at short distance (c.30-40 m) from the E side of the <i>podium</i> of the temple of Jupiter Dolichenus. The paved street has a NE-SW orientation but it seems to curve towards E in the S sector. Observing the archival photos seems that the part preserved (or visible) of the road should reach a total length of c.40 m while its width c.4 m.
STATE OF PRESERVATION:	The site is not visible anymore.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Building features; relationship with near dated sites.
BIBLIOGRAPHY:	Unpublished.

RD3

ROAD

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Road.
DISTANCE FROM LEPCIS MAGNA:	1,160 m ESE.
GPS COORDINATES:	WGS 84 33S 0434452 - 3610745.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently (2013) surveyed by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	A short distance (c.100 m S) from the Italian stronghold "Settimio Severo" along a path are visible two limestone blocks related to an ancient road (pl. 59C). Other blocks/slabs are hardly visible because almost buried along the modern path. Unfortunately, the remains are scarce and it was not possible to measure the total width of the road.
STATE OF PRESERVATION:	The site is partially buried and few remains are still visible on the ground.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Building features; relationship with near dated sites.
BIBLIOGRAPHY:	Unpublished.

RD4

ROAD

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Road.
DISTANCE FROM LEPCIS MAGNA:	1,140 m ENE.
GPS COORDINATES:	WGS 84 33S 0434454 - 3611206.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been explored during the excavation of the close Eastern baths (En2) by the Mission Archeologique française en Lybie (DAGNAS, PAULIN 2010-2012).
DESCRIPTION:	Between the remains of the E sector of the Late Antique wall (Wa3) to the N and the Eastern baths (En2) and the stores (Ws6) to the S has been brought to the light a sector of a road (23 m long) with WNW-ESE orientation (pl. 59D). The road is 5.50 m wide and it has a portico (2.50 m wide) on the S side, abutted to the shops/stores (Ws6).
STATE OF PRESERVATION:	The sector of the road survived is well preserved even if probably its original limestone floor has been looted.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Building features; relationship with near dated sites (En2, Wa3, Ws6).
BIBLIOGRAPHY:	DAGNAS, PAULIN (2010-2012), 103-104.

RD5

ROAD

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Road.
DISTANCE FROM LEPICIS MAGNA:	700 m NW.
GPS COORDINATES:	WGS 84 33S 0432986 - 3611729.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and partially accessible because buried by sand.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The road has been briefly cited by Ward-Perkins (WARD PERKINS, TOYNBEE 1949) and, sixty years later, by Musso (MUSSO, BIANCHI 2012) both describing the close Hunting Baths (En1).
DESCRIPTION:	West to the Hunting Baths (En1) are the remains of a road paved with limestone blocks and with a SW-NE orientation (pl. 59E) leadings toward the monumental <i>tetrapylon</i> of Marcus Aurelius (Ti6). The sector actually visible is c.50 m long and the total width is c.5.50 m.
STATE OF PRESERVATION:	The road is in a good state of preservation.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Building features; relationship with near dated sites (En1).
BIBLIOGRAPHY:	WARD PERKINS, TOYNBEE (1949), 166; WARD PERKINS (1982), 35; MUSSO, BIANCHI (2012), 22.
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR 46.XVII.14

RD6

ROAD

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Road.
DISTANCE FROM LEPICIS MAGNA:	545 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432970 - 3611540 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The road has been never studied in depth but only cited together with the Marcus Aurelius Arch (Ti6).
DESCRIPTION:	Northwest from the Late Antique wall (Wa3) and between it and the Arch of Marcus Aurelius (Ti6) are the remains of a limestone paved road that is the prosecution W of the city of the <i>decumanus maximus</i> . The road is c.5.50 m wide and was provided with porticos defined by colonnades on both of it side, one side was realized or restored under the Severan age, the other was instead built previously (BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI 1963).
STATE OF PRESERVATION:	The road is in a good state of preservation.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Building features; relationship with near dated sites.
BIBLIOGRAPHY:	BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI (1963), 101; KENRICK (2009), 124.

Rd7**ROAD**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Road.
DISTANCE FROM LEPCIS MAGNA:	30 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0433263 - 3611072 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The road has been never studied in detail but only cited together with the Severan Arch.
DESCRIPTION:	Between the Severan Arch (the city conventional limit to the S) and the actual steps that lead from the excavation site entrance to the ancient city core is a paved road wide c.8 m with a NE - SW orientation. This section of the road, preserved for c.65 m in length, was paved using limestone rectangular blocks and there is no traces of the wheels passage.
STATE OF PRESERVATION:	The road is in a good state of preservation.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Building features; relationship with near dated sites.
BIBLIOGRAPHY:	Unpublished.



A. Road sector Rd1: general view of the excavation area from S (Musso *et al.* 1998, pl. 54a)



B. Road sector Rd2: aerial view of the paved road and the remains of the Jupiter Dolichenus temple, 1919 (USAM, Album 5, 118-309).



C. Road sector Rd3: two limestone blocks of the paved road S of the Italian stronghold Settimio Severo, 2013 (Photo: F. Baroni).



D. Road sector Rd4: partial view of the road and of its portico (DAGNAS, PAULIN 2010-2012, fig. 3).



E. Road sector Rd5: Partial view from NE (BSR 46.XVII.14).

Ti1

BRIDGE

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Bridge.
DISTANCE FROM LEP CIS MAGNA:	1,065 m SSW.
GPS COORDINATES:	WGS 84 33S 0432628 - 3610324.
ACTUAL LAND USE:	Commercial/residential area.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site was included within the Italian stronghold "Forte Lebda" during the Italo Turkish War (1912). However, the bridge has been destroyed recently (2009) and the area surrounding it levelled to favour the building of houses and commercial activities.
PREVIOUS STUDIES:	In the mid 19 th century Müller (1855) indicated the bridge in his map, between two <i>valla</i> of which the inner one should be the "Monticelli" <i>agger</i> (Ag1). However, the first briefly description of the structure was given by Romanelli (1925a) whose measurements reported corresponds to those seen until its recent destruction. The Italian scholar draw also a sketch of the surviving structures and published a photograph (pl. 60A). Recently (2007 and 2009), the site has been surveyed by the Archaeological Mission of Roma Tre University (KHM 101).
DESCRIPTION:	The bridge with NE-SW orientation, was built to cross the <i>fossatum</i> dug to divert the Wadi Lebda toward W during the 2 nd century AD. The structure, build in <i>opus caementicium</i> and probably clothed with limestone blocks, had a preserved length of more than 20 m and a width of 6.80 m. It had a single arch c.8 m long (pl. 60B).
STATE OF PRESERVATION:	The site, actually destroyed, was in good condition and preserved its original planimetric volumes.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Building features; relationship with dated structures (Ag1, Dm1).
BIBLIOGRAPHY:	ROMANELLI (1925a), 73, fig. 24; (1970), 22; BARTOCCINI (1926), fig. 76; BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI (1963), 120; KENRICK (2009), 134; MUNZI, ZOCCHI (2017), 61.
CARTOGRAPHY:	MÜLLER 1855, pl. XXI ("bridge symbol"); STROPPA (1912), Lebda nel maggio 1912 (<i>Ponte</i>); IGM 1913a ("bridge symbol"); IGM 1913b ("bridge symbol"); IGM 1914 (<i>Ponte Romano</i>); ROMANELLI (1925a), fig. 23 (<i>Ponte</i>); BARTOCCINI (1927a), Lepcis - Pianta degli scavi (<i>Ponte in località Monticelli</i>).

Ti2

QUAY

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Quay.
DISTANCE FROM LEP CIS MAGNA:	2,665 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0431741 - 3613276 (approx).
ACTUAL LAND USE:	Commercial/residential area.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Seashore.
MODERN INTERFERENCE/S:	After its excavation in 1972 the mole was destroyed and a school was built on the site.
PREVIOUS STUDIES:	The quay came to light during the destruction of the "Esparto Manufacturing and Trading Company" building in the summer of 1972 a short distance from the seashore and from

DESCRIPTION:	<p>the modern harbor of Khoms. The excavation was conducted by the DoA (ABOU-HAMED, SHAGLOUF, ATEYA 1974-1975) under the supervision of Mahmud Nemsı and for two weeks also by Di Vita who published the remains unearthed (DI VITA 1974). Part of the site was probably seen by Ludwig Salvator (LOTHRINGEN 1874) who reported in Khoms: "Auf den Uferfelsen sieht man Quaderfundamente, die einen rechten Winkel bilden, und Mauertrümmer, gewiss Ueberreste eines antiken Landungsplatzes".</p> <p>The quay was found in 1972 along the E side of the excavation area of the Roman "villa dello sparto" (VI6). The structure of the mole was composed mainly by the grey quality limestone ashlar blocks from the Ras el-Hammam quarries (probably from Qr15, Qr16). These remains were found in two different sectors far away c.200 m and both with an orientation NW-SE. The larger sector explored was the northern one and it was characterized by a total length of c.17 m. The ancient waterfront (to the E side) was provided every c.2 m by a protruding block with a rectangular hole crossing the protuberance, almost likely to house a wooden beam. The waterfront was composed by three rows of limestone blocks and its original H was c.1.4-1.5 m above the sea level; moreover the waterfront was protected by a subsequent <i>opus caementicium</i> layer, c.70 cm thick. In the area explored the mole measured c.3.5 m of width.</p>
STATE OF PRESERVATION:	The site, actually destroyed, was in good condition and preserved part of its original plan.
CHRONOLOGY:	4 th century BC - 2 nd century AD.
DATING ELEMENT/S:	Building features; relationship with dated structures (VI6).
BIBLIOGRAPHY:	LOTHRINGEN (1874), 168; ABOU-HAMED, SHAGLOUF, ATEYA (1974-1975), 299; DI VITA (1974), 239-249; (1975a), 12; JONES (1989a), 95.

Ti3

WAREHOUSES

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Warehouses.
DISTANCE FROM LEPcis MAGNA:	995 m NW.
GPS COORDINATES:	WGS 84 33S 0432609 - 3611809.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Garbage within the site.
PREVIOUS STUDIES:	The SW corner of the structure was excavated in 1997 and published by the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 1998). The general plan of the structure is clearly visible in two air photographs realized by the RAF during the forties and it was recognized as a warehouse by Berri Jones (1989).
DESCRIPTION:	<p>The structure is characterized by a quadrangular plan clearly visible observing the 1942 and 1949 RAF air photographs. The site measures a total area of c.50 m (N-S)x44(W-E) m and the SW corner, the part explored recently (an area of c.12x12 m), is composed by two external walls (pl. 60C) of which the western one is made in <i>opus caementicium</i> and - according to the collapsed rubble - was c.4.5 m high and 0.56 m thick. The external wall to the S was built using the <i>opus africanum</i> technique and was covered with plaster on its external side. Inside the structure a series of parallel stepped buttresses (0.75 m thick and c.2-3 m long) spaced every 5 m lean to the western external wall and, according to Cilla (Musso <i>et al.</i> 1998, 210), these walls should not define internal rooms. The excavation revealed also the presence of thick and hard beaten surfaces realized with beaten silt and with crushed lime and mortar.</p>
STATE OF PRESERVATION:	The general plan of the structure is hardly recognizable on the ground.
CHRONOLOGY:	2 nd - 4 th century AD.

DATING ELEMENT/S:	Building features: pottery.
BIBLIOGRAPHY:	JONES (1989a) 96-99; (1989b) 33; MUSSO <i>et al.</i> (1998), 210-212.
CARTOGRAPHY:	IGM 1915a ("quadrangular structure"); BARTOCCINI (1927a), Lepcis - Pianta degli scavi ("Quadrangular structure").
ARCHIVAL DOCUMENTATION:	<u>Air Photographs</u> : ASLS, <i>Leptis Magna 94144</i> , <i>Leptis Magna 24993</i> .

T14 CARAVANSERAI

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Caravanserai.
DISTANCE FROM LEPCIS MAGNA:	1,030 m NW.
GPS COORDINATES:	WGS 84 33S 0432627 - 3611875.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is accessible but the structure are not visible because covered by sand and partially destroyed.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Commercial/residential buildings.
PREVIOUS STUDIES:	The structure was noticed and outlined for the first time by the two topographers Grupelli and Alessandrini in their detailed map of Leptis Magna (IGM 1915a). However, the first description of the remains visible is given by Romanelli (1925a) who suggested to recognize the structure as a caravanserai. Moreover, the shape of the whole structure is clearly visible in the RAF aerial photographs realized during the forties and analyzed by Barri Jones (1989a; 1989b) who was more generic to define its function. New data are given by the recent survey undertaken by a team of the Archaeological Mission of Roma Tre University (Musso <i>et al.</i> 1996) who described the remains visible during the nineties in the N and S sides of the structure, however, considered as separated (the N side, the thermal area, was attributed to a villa).
DESCRIPTION:	Combining the data from the IGM map, the RAF aerial photographs and the description made by Pietro Romanelli and the Roma Tre University, is possible to outline a general overview of the structure. According to the IGM map (1915a) and the RAF documentation the building had a quadrangular plan with some internal partitions and with its minor side oriented NW - SE. The total extension seems to be c.80x100 m. Romanelli (1925a) noticed this large structure and described it as composed by three adjacent courtyards. On several sides of these courts he also recognized parallel rooms (3.6-3.7x13 m on the W side) whose walls were often covered with plaster. The N area of the building was instead characterized by several rooms with different shapes: one with a Greek-cross plan and many different rectangular and apsidal rooms often coated with <i>opus signinum</i> . The same N area was surveyed by Roma Tre University and recognized as a thermal area composed by three contiguous rectangular rooms with a SW-NE orientation (Musso <i>et al.</i> 1996). It was possible to detect a <i>calidarium</i> with <i>tubuli</i> on the walls, the <i>praefurnia</i> and, to the W, a long corridor with others rooms whose function is not clear. The SW side was composed by a long cistern coated with <i>opus signinum</i> . Separated and S from these structures are others <i>opus caementicium</i> walls, probably related to service spaces. The southern limit of the structure was contiguous with a <i>necropolis</i> (Nc8) and with <i>mausolea</i> (Ma21, Ma22) and was separated from the funerary structures by a terraced <i>opus caementicium</i> wall.
STATE OF PRESERVATION:	The structures are not visible anymore.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	ROMANELLI (1925a), 156; JONES (1989a) 96-99; (1989b) 33; MATTINGLY (1995), 118;

CARTOGRAPHY:	MUSO <i>et al.</i> (1996), 155-156, 165-166. IGM 1915a ("rectangular rooms within a larger structure"); BARTOCCINI (1927a), Lepcis - Pianta degli scavi ("rectangular rooms within a larger structure").
ARCHIVAL DOCUMENTATION:	<u>Air Photographs</u> : ASLS, <i>Leptis Magna 94144</i> , <i>Leptis Magna 24993</i> .

Ti5

WAREHOUSES

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Warehouses.
DISTANCE FROM LEPCIS MAGNA:	835 m NW.
GPS COORDINATES:	WGS 84 33S 0432786 - 3611757.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is accessible but the structure are not visible because covered by sand.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure was outlined for the first time by Gruppelli and Alessandrini in their detailed map of Leptis Magna (IGM 1915a). However, the first description of the remains visible is given by Romanelli (1925a).
DESCRIPTION:	According to the IGM map (1915a) the building had a quadrangular plan with some internal partitions and with its long side oriented NW - SE. The total extension visible at that time seems to define a rectangle of c.80x55 m. Romanelli (1925a) noticed along the long S wall (built in <i>opus africanum</i> technique) a series of rectangular communicating large rooms (each measured c.15.5 m long and c.4.25 m wide). These spaces were built entirely in <i>opus caementicium</i> and the walls between the rooms were 0.5 m thick. The inner part of the structure was instead characterized by a portico of which were still <i>in situ</i> some limestone bases of the columns.
STATE OF PRESERVATION:	The site is not visible anymore.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	ROMANELLI (1925a), 156.
CARTOGRAPHY:	IGM 1915a ("rectangular rooms within a larger structure "); BARTOCCINI (1927a), Lepcis - Pianta degli scavi ("rectangular rooms within a larger structure").

Ti6

TETRAPYLON (ARCH OF MARCUS AURELIUS)

DEFINITION:	Structure.
TOPONYM/S:	Arch of Marcus Aurelius.
INTERPRETATION:	Monumental arch.
DISTANCE FROM LEPCIS MAGNA:	620 m NW.
GPS COORDINATES:	WGS 84 33S 0432925 - 3611587.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is accessible and visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The monumental arch was dug by Vergara Caffarelli in the 1950s and the main architectural elements were found close to it. After its excavation the architecture and

	the dedication inscription were studied mainly by di Vita-Evrard (1963) and by Pensabene (2003).
DESCRIPTION:	The structure, a monumental marble arch in a form of a <i>tetrapylon</i> , is located along the prosecution of the <i>decumanus maximus</i> and c.200 NW from the Arch of Antoninus Pius. Actually is visible only the lower part of the structure, however many architectural elements lay on the ground nearby and it was possible to reconstruct its original aspect (pl. 60D). The monument was erected in 173 and it has a squared plan with a side of 30 feet (8,90 m). The arch stood on four pilasters on each of which was a protruding Corinthian column; the pilasters should support a cross vault. On the architrave was carved the inscription (AE 1967, 536); unfortunately the <i>atticus</i> and the upper cornice have not been found.
STATE OF PRESERVATION:	The lower part of the structure was found <i>in situ</i> and the general shape of the monument can be reconstructed.
CHRONOLOGY:	AD 173.
DATING ELEMENT/S:	Epigraphic elements; building features.
SPECIAL FINDS:	<u>Inscriptions:</u> - The inscription (AE 1967, 536) carved on the architrave mentions the dedication and the date of construction (AD 173). Moreover, the text mentions the expenditure supported to built the arch and for the sculpture that should dress the monument. The majority of this expenditure was made thanks to a legacy of <i>Avilius Castus</i> (120.000 <i>sestertia</i>) and by public (municipal) expenditure whose amount is not specified due to a lack of the text. <div style="padding-left: 40px;">Imp(eratori) Caes(ari) M(arco) Aurelio Antonino Aug(usto) Arm(eniaco) Med(ico) Par(thico) Ger(manico) p(ontifici) m(aximo) trib(unicia) pot(estate) XXVIII imp(eratori) co(n)s(uli) p(atri) p(atriciae) arcus ex HS CXX m(ilibus) n(ummis) ab Avilio Casto in eum et statuas legatis praeteris [...] HS quae de publico adiecta sunt dedicatus C(aio) Septimio Severo proco(n)s(ule) L(ucio) Septimio Severo leg(ato) pr(o) pr(aetore)</div>
BIBLIOGRAPHY:	BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI (1963), 101; DI VITA-EVRARD (1963) 189; FLORIANI SQUARCIAPINO (1966) 62-63; IOPPOLO (1969-1970); PENSABENE (2003), 353-362; KENRICK (2009), 124; AE 1967, 536.
CARTOGRAPHY:	IGM 1914 (quote 13 " <i>Rudero</i> symbol"); IGM 1915a (quote 13.3 "several scattered limestone blocks").



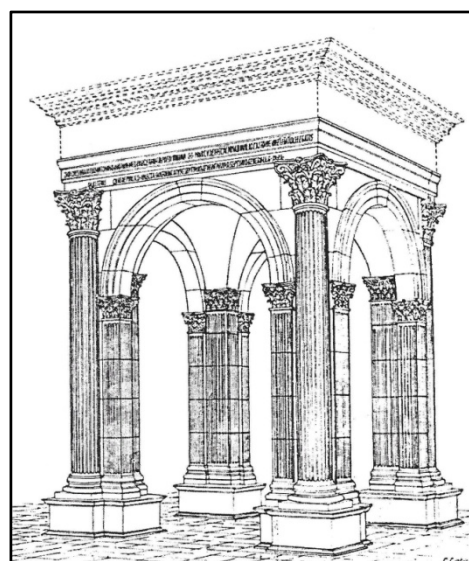
A. Bridge T1: the SE side with the Italian military structures on the background (ROMANELLI 1925, fig. 24)



B. Bridge T1: general view from NW, 2007 (Photo: A. Zocchi).



C. Warehouses Ti3: general view of the excavated area from NE (Musso *et al.* 1998, 60b).



D. Arch of Marcus Aurelius (Ti6): reconstruction made by M.C. Catanuso (Di VITA-EVERARD 1963, 394).

Ten milestones and a milestone base have discovered in the suburban area of Lepcis Magna and its hinterland. Two milestones (Ms5a-b) were found next to the Severan Arch and they should mark the *caput viae* from Lepcis Magna. Other three milestones were found in the area around the modern city of Khoms (Ms1-Ms2, Ms7) while other four inscriptions were found westward, toward Oea (Ms3 - Ms4, Ms8a-b). A milestone (Ms6) was found at short distance from Gasr Hammud (Gs19), c.4.5 km SW from the ancient city core. Finally, a limestone base (Ms9) belonging to a column milestone has been found recently in the Ras el Hammam area.

Ms1

DISCOVERY/EXCAVATION DATE:	1885 - 1886.
GPS COORDINATES:	WGS 84 33S 0431058 - 3612718 (approx).
DESCRIPTION:	Part of column milestone found by Aurigemma (1925b) in 1917 reused upside down as a jamb within the courtyard of the Sidi Ben Gehé mosque at Khoms. According to oral tradition reported by the Italian scholar, the milestone was found in the Lepcis Magna countryside between 1885 and 1886 and transferred to Khoms. The milestone, partially visible because in part buried in the Islamic structure, is carved on a grey limestone. It was set under the reign of Caracalla and mentions the 3 rd mile. <p style="text-align: center;">...Ipso felici Aug(usti) Parthico ma- ximo Britannico maxi- mo Germanico maximo pontifici maximo tribu- nicia potestatis XVIII imp(eratori) III co(n)s(uli) IIII p(atri) p(atriae) proco(n)s(uli) (milia passum) III</p>
DATATION:	AD 216.
BIBLIOGRAPHY:	AURIGEMMA (1925b), 145-146; GOODCHILD (1948), 24, nr. 37; <i>IRT</i> 971.

Ms2

DISCOVERY/EXCAVATION DATE:	1909.
GPS COORDINATES:	WGS 84 33S 0431752 - 3612588 (approx).
DESCRIPTION:	Limestone column milestone found in 1909 during an excavation close to the public butcher's shop outside Khoms at short distance from the seashore and from the W bank of the Wadi Zennad (AURIGEMMA 1925a). From there the milestone was transferred first in the Turkish barrack, then in the courtyard of the Turkish school and, in 1912, to the <i>Correr</i> Museum at Venice. The milestone was set under the Reign of Maximinus and Maximo and mentions the 1 st mile; moreover the inscription mentions reveals the bad state of preservation of the road and the collapsed bridges. <p style="text-align: center;">Imp(erator) Caes(ar) C(aius) Iulius Ve- rus Maximinus Piu(s) Felix Aug(ustus) Germanicus ma- ximus Sarmaticus ma- ximus Dacicus maximus tribuniciae potestatis ter(tium) imp(erator) V ponti(fex) maximus et C(aius) Iulius Verus Maximus nobilissimus Caes(ar) prin- ceps iuventutis Germani- cus maximus Sarmaticus maximus Dacicus maxi- mus pontes vetu(s)tate delapsos et iter longa in-</p>

iuria corruptum restitu-
erun(t) sua infaticabili
providentia pervium
commeantibus
reddiderunt
(milia passum) I

DATATION: AD 237.

BIBLIOGRAPHY: *Elenco edifici* 1912, 45 s.v. Homs; AURIGEMMA (1925a), 15-19; GOODCHILD (1948), 10, nr. 4; *IRT*924.

Ms3

DISCOVERY/EXCAVATION DATE: 1911.

GPS COORDINATES: WGS 84 33S 0427337 - 3614363 (approx).

DESCRIPTION: The milestone was found reused as a column inside a small mosque at the foot of Ras el-Mergheb in 1911 by Aurigemma (1925a). Thanks to an oral tradition mentioned by Aurigemma the previous collocation of the milestone can be located at el-Tura village. Moreover, according to the Italian scholar, the Late Antique remains where the inscription was found can be localized at the site of Gasr el-Ahmar (Fa31), at short distance from el-Tura and where the French traveller Méhier de Mathuiesieux (1906) reported a similar milestone. The inscription carved on the milestone can be dated to the Reign of Tacitus and mentions the 5th mile.

Imperator Cae-
sar M(arcus) Clau-
dius Taci-
tus Pius
Felix Aug(ustus)
pontifex
maximus
tribunici-
ae potesta-
tae II co(n)sul
m(iliarium) V

DATATION: AD 276.

BIBLIOGRAPHY: MÉHIER DE MATHUISIEUX (1906), 78; AURIGEMMA (1925a), 7-10; GOODCHILD (1948), 10, nr. 2; *IRT*926.

Ms4

DISCOVERY/EXCAVATION DATE: 1911.

GPS COORDINATES: WGS 84 33S 0428260 - 3612670 (approx).

DESCRIPTION: The limestone column milestone was found scattered on the ground at c.300 m SSW from the et-Tualeb village by the Missione Archeologica Italiana in Tripolitania in 1911 (AURIGEMMA 1925a). From that location the milestone was first transferred by the Italian soldiers to the site of Gasr el-Fituri (Ma14) and then to Khoms. The inscription was set under the Reign of Maximinus and there is not mention of the mileage number even if Aurigemma, according to the findspot, suggested the 3rd mile (pl. 61A).

Imp(erator) Caes(ar) C(aius) Iulius V[e]rus
Maximinus [a]u[g(ustus) G]er-
manicus maxim[us]
Sarmaticus maxi[mu]s
Dacicus maximu[s] t[ri]-
buniciae potesta[tis]
ter(tiae) imp(erator) V pontife[x]
m]aximus et C(aius) Iulius
Verus Maximus nobi-

lissimus Caes(ar) princeps
i[u]ventutis [G]erma-
nicus ma[x]i[m]us Sar[mat]i-
cus maxim[u]s Dacicus maxi-
mus pont[e]s v[e]tustate del[ap]sos
et i[t]er lon[g]a iniuria co(r)u[ptum]
res[ti]t[ue]run(t)] sua infatic[ab]ili
p[ro]vi[d]e[n]tia p[e]rvium com-
[mea]n[tibus reddider]un(t)

DATATION: AD 237.
BIBLIOGRAPHY: *Elenco edifici* 1912, 44 s.v. Tuáleb; AURIGEMMA (1925a), 10-15; GOODCHILD (1948), 10, nr. 3; *IRT* 925.
ARCHIVAL DOCUMENTATION: Photographs: BSR, WP, not inv.

Ms5a-b

DISCOVERY/EXCAVATION DATE: 1935 - 1955.
GPS COORDINATES: WGS 84 33S 0433280 - 3611102 (approx).
DESCRIPTION: Limestone column milestone (Ms5a) found *in situ* in 1935 at short distance SW from the Septimius Severus Arch. The inscription - a *caput viae* - is carved within a tabula with a double spiral above it. The milestone was set under the Reign of Tiberius by the proconsul *Lucius Aelius Lamia* who provided to link Lepcis Magna to the inland region for 44 miles (pl. 61B).
Imp(eratoris) Ti(beri) Cae-
Saris Aug(usti)
iussu
L(ucius) Aelius Lam-
ia proco(n)s(ul) ab
oppido in medi-
terraneum di-
rexist m(ilia) p(assum) XLIV
In the first years of the fifties part of a grey limestone column belonging to a milestone was found next to the Severan Arch at Lepcis Magna (Ms5b). The inscriptions was realized during the Reign of Domitian and, according to J. Reynolds (1955), it could mark probably a *caput viae*.
Imp(erator) [Caesar]
Domitia[nus] Aug(ustus)
Germa[ni]c[u]s

DATATION: AD 14-17; AD 84-91.
BIBLIOGRAPHY: GUIDI (1935c), 238; GOODCHILD (1948), 12, nr. 6; REYNOLDS (1955), 125, nr. 3; DI VITA-EVRARD (1979), 89-90; KENRICK (2009), 93; *IRT* 930.
ARCHIVAL DOCUMENTATION: Photographs: BSR, WP, not inv.

Ms6

DISCOVERY/EXCAVATION DATE: 1947.
GPS COORDINATES: WGS 84 33S 0429652 - 3608154 (approx).
DESCRIPTION: Limestone column milestone found reused in an Arab house at short distance (c.30 m) from the site of Gasr Hammud (Gs19). The inscription was set under the Reign of Caracalla and mentions the 2nd mile (pl. 61C).
Imp(eratori)
Caes(ari) divi Septi-
mi Severi Pii Ara-
bici Adiabenici Pa-
rthici maximi Bri-
tanici maximi filio

divi Antonini Pii
Germanici Sar-
matici nepoti di-
vi Antonini Pii
pronepoti divi
Hadriani ab-
nepoti divi
Traiani Parthici
et divi Nervae ad-
nepoti
M(arco) Aurellio Antonino
Pio Felici Aug(usto) Parthi-
co maximo Britanni-
co maximo Germani-
co maximo pontifici
maximo tr(ibunicia) pot(estate) XVIII
imp(eratori) III co(n)suli IIII p(atri)
p(atriciae) pro-
co(n)s(uli)
mil(liarum) n(umero) II

DATATION: AD 216.
BIBLIOGRAPHY: GOODCHILD (1948), 12, nr. 7; *IRT*931.
ARCHIVAL DOCUMENTATION: Photographs: BSR, WP, not inv.

Ms7

DISCOVERY/EXCAVATION DATE: 1966.
GPS COORDINATES: WGS 84 33S 0431468 - 3612924 (approx).
DESCRIPTION: A limestone column milestone was found during the destruction of the Turkish building at Khoms in 1996. According to Bakir (1966-1967), the inscription carved on the column was written under the Reign of Septimius Severus and marked the *caput via* of the road between Lepcis Magna and Oea. The text was then published by Gasperini (1988) who was able to correct the chronology of the milestone to the Reign of Caracalla.

Imp(eratori) Caes(ari) divi Septimi Severi
Pii Arabici Adiabenici Par-
[thi]ci maximi Britannici
maximi filio Antonini
Pii Germanici Sarmatici ne-
poti divi Antonini Pii prone-
poti divi Hadriani abnepoti
divi Traiani Parthici et divi
Nervae adnepot[i]
M(arco) Au[relli]o Antoni[n]o Pio Felici
Aug(usto) Parthico maximo Britannico
maximo Germanico maximo pon-
tifici maximo tr(ibuniciae) po-
t(estate) XVIII imp(eratori) III co(n)suli IIII
(milia passum) I

DATATION: AD 216.
BIBLIOGRAPHY: BAKIR (1966-1967), 249; GASPERINI (1988), 159-164.

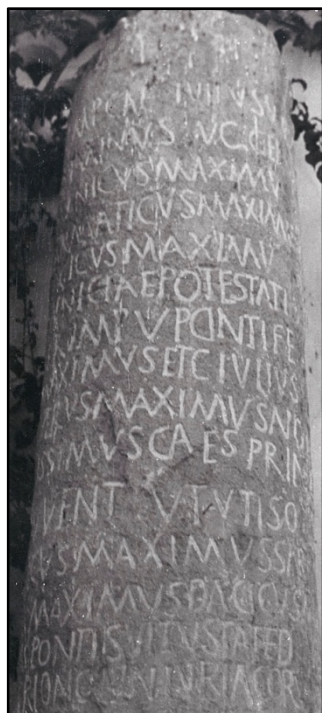
Ms8a-b

DISCOVERY/EXCAVATION DATE: 1997 - 1998.
GPS COORDINATES: WGS 84 33S 0425107 - 3617587 (approx).

DESCRIPTION:	<p>Two limestone columns belonging to milestones were found within the site of a large <i>villa</i> (VI62). The two milestone (one complete and another fragmentary) marked the V and probably the VI miles and were set under the reign of Caracalla. The first milestone (Ms8a) probably mark the VI mile and is the better preserved</p> <p>[Imp(eratori) Caes(ari)] divi Septimi Severi [Pii Arabici] Adiabenici Parthici [maximi Br]itannici maximi [filio divi Anto]nini Pii Germanici [nep]oti divi Antonini [Pii pronepoti div]i Hadriani abne- [poti divi Traiani] Parthici et divi [Nervae adnepoti] Marco Aurelio [Antonino Pio Felic]i [Aug(usto) P]arthico [maximo Britannico] m[a]ximo [Germanico maximo pontifici] [maximo tr(ibunicia) pot(estate) XVIII imperatori III] [co(n)s(uli) IIII p(atri) p(atriae) proco(n)s(uli)] [m(ilia) n(umero) VI]</p> <p>The second milestone (Ms8b) is preserved only for the lower part including the number (V) of the mile.</p> <p>[pontifici] maximo tribunic[iae] [potes]tatis XVIII imp(eratori) III co(n)s(uli) IIII [p(atri) p(atriae)] proco(n)s(uli) (milia numero) V</p>
DATATION:	AD 216.
BIBLIOGRAPHY:	MUNZI <i>et al.</i> (2004), 27-28, 44-45, site 5.

Ms9

DISCOVERY/EXCAVATION DATE:	2013.
GPS COORDINATES:	WGS 84 33S 0433118 - 3606167.
DESCRIPTION:	<p>Milestone base recently found (2013) by the Archaeological Mission of Roma Tre University (KHM 146) very close to the mausoleum (Ma10) and to the Roman villa (VI25) W of Ras el-Hammam. The base is characterized by a parallelepiped limestone shape block with a circular central recession on one side carved to house the inscribed column shaft (pl. 61D). The diameter of the central recession is 40 cm.</p>
DATATION:	3 rd century AD.
BIBLIOGRAPHY:	Unpublished.



A. Milestone Ms4 (BSR, WP, not inv.).



B. Milestone Ms5a (BSR, WP, not inv.).



C. Milestone Ms6 (BSR, WP, not inv.).



D. Milestone base Ms9, 2013 (Photo: A. Zocchi).

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Aqueduct.
DISTANCE FROM LEP CIS MAGNA:	830 m SSE (approx).
GPS COORDINATES:	WGS 84 33S 0433415 - 3610292 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is hardly accessible and a large portion of the aqueduct is no longer visible.
TOPOGRAPHIC POSITION:	Plain terrain and wadi bed.
MODERN INTERFERENCE/S:	Along the entire path of the aqueduct there are several dumps.
PREVIOUS STUDIES:	The first Western travelers who saw and cited the aqueduct were Ridgely in 1806 - quoted by Delaporte (1836) who travelled with him -, Smith in 1816 - quoted by the Beechey brothers (1828) -, Barth (1849), Ludwig Salvator (LOTHRINGEN 1874) and Rae (1877). However, the first document in which is clearly visible the state of preservation of part of this structure is a photograph made in June 1911 by the "Missione Sanfilippo-Sforza" organized by the "Banco di Roma" (pl. 62A). This shot, preserved at the Archive of the Società Geografica Italiana, shows the aqueduct at its starting point: the <i>opus quadratum</i> cistern (Ci1) along the Wadi Lebda. Subsequently, it was the object of other photos realized between 1913 and 1925 and actually preserved at the Macerata Archive (pl. 62B, D). The aqueduct was then briefly illustrated by Franchi (MC 1913) but, until now, described in detail only by Romanelli (1925a; 1925b; 1970).
DESCRIPTION:	Romanelli (1925a; 1925b) was able to see the majority of the hydraulic conduit: it was characterized by a thick (2.25 m) wall with no arches and with an H of 5.25 m above the Wadi Lebda bed (pl. 62A-C). The aqueduct started from the upper level of the first cistern (Ci2) and it was built entirely using small limestone unshaped blocks bounded with mortar. The <i>specus</i> was 0.65 m wide and 1.75 m H (pl. 62D). The covering was characterized by three limestone blocks: two of them were abutted to the shoulders of the conduit and the third one above had a triangular shape. Along these higher blocks were opened ventilation wells. The aqueduct started from the first cistern (Ci2) along the wadi and it run, after four 90 degrees curves, to the second cisterns (Ci1). However, the aqueduct was not bounded with the structures of the two reservoirs (pls 62D, 63A) and for the lower cistern (Ci1) its connection seems to be problematic (ROMANELLI 1925a, 148). Beyond the second cistern (Ci1) the aqueduct run straight to cross the Wadi Lebda and then, after others 90 degrees curves, it seems to reach the Hadrianic Baths cisterns.
STATE OF PRESERVATION:	The majority of the structure is collapsed.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features; relationship with dated structures (Ci1, Ci2, Aq2).
BIBLIOGRAPHY:	BEECHEY, BEECHEY (1828), 78; DELAPORTE (1836), 314; BARTH (1849), 313; LOTHRINGEN (1874), 171; RAE (1877), 40-41; <i>Elenco edifici</i> 1912, 44 s.v. Lebda; MC (1913), I, 63; ROMANELLI (1925a), 147-149; (1925b), 218-223; (1970), 221-223; BARTOCCINI (1927a), 99; KENRICK (2009), 134; TANTILLO, BIGI (2010), 156-157.
CARTOGRAPHY:	STROPPA (1912), Lebda nel maggio 1912 (<i>Acquedotto</i>); IGM 1914 ("red dots alignment"); IGM 1915a ("wall symbol"); Br. Murge 1919b ("black line symbol"); Br. Murge 1919c ("double black line symbol"); ROMANELLI (1925a), fig. 23 (<i>Acquedotto</i>); BARTOCCINI (1927a), Lepcis - Pianta degli scavi (<i>Acquedotti</i>); BERTARELLI (1929), Leptis Magna (<i>Acquedotto</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-5a, WP G23-5b; CAS, sc. 18/16, sc. 18/21, sc. 18/22, sc. 18/23, sc. 18/24; SGI, Fondo storico 216-3-53.

AQ2**AQUEDUCT**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Aqueduct.
DISTANCE FROM LEP CIS MAGNA:	830 m SSE (approx).
GPS COORDINATES:	WGS 84 33S 0433415 - 3610292 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is hardly accessible and large portion of the aqueduct is no longer visible.
TOPOGRAPHIC POSITION:	Plain terrain and wadi bed.
MODERN INTERFERENCE/S:	Along the entire path of the aqueduct there are several dumps, especially along the Wadi Lebda bed.
PREVIOUS STUDIES:	The aqueduct has been partially excavated at its starting point by Pietro Romanelli (1925a; 1925b; 1970) who also described the remains of the structure visible at his time.
DESCRIPTION:	Romanelli (1925a; 1925b) was able to see the majority of this hydraulic conduit that started from the lower level of the first cistern (Ci2) along the Wadi Lebda. Indeed, thanks to three opening at the base of the cistern the water, after it passed through an open-air basin, reached the conduit (pl. 62C). This channel was built at the foot of the other aqueduct (Aq1) and it abutted to its foundation step. It has a total H of 1.50 m above the wad bed and the <i>specus</i> was 0.85 m wide and 1.25 m H; it does not preserve any covering. This structure run abutted on the left side of the higher aqueduct (Aq1) until they cross the Wadi Lebda, then it curved toward W and it disappeared underground.
STATE OF PRESERVATION:	The majority of the structure is collapsed. The surviving parts are in a poor state of preservation.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features; relationship with dated structures (Ci1, Ci2, Aq1).
BIBLIOGRAPHY:	ROMANELLI (1925a), 149; (1925b), 227-228; (1970), 221-223; TANTILLO, BIGI (2010), 156-157.
CARTOGRAPHY:	IGM 1914 ("red dots alignment"); IGM 1915a ("wall symbol"); Br. Murge 1919b ("black line symbol"); Br. Murge 1919c ("double black line symbol"); ROMANELLI (1925a), fig. 23 (<i>Acquedotto</i>); BARTOCCINI (1927a), Lepcis - Pianta degli scavi (<i>Acquedotti</i>); BERTARELLI (1929), Leptis Magna (<i>Acquedotto</i>).

AQ3**AQUEDUCT**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Aqueduct.
DISTANCE FROM LEP CIS MAGNA:	440 m ESE (approx).
GPS COORDINATES:	WGS 84 33S 0433740 - 3610986 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The aqueduct was discovered by Hayes in 1945 during the exploration of the E side of the Byzantine defences of Lepcis Magna (Wa4, Wa5) and the description of its features were published by Goodchild and Ward-Perkins (1953).
DESCRIPTION:	An aqueduct was found under the external curtain of the unfinished Byzantine wall (Wa5) at short distance (E) from a tower. The foundation of the wall was carefully arched

STATE OF PRESERVATION:	the aqueduct that was then still in use during the 6 th century AD. The <i>specus</i> was 0.55 m wide; no further information were given.
CHRONOLOGY:	The aqueduct was found in a good state of preservation.
DATING ELEMENT/S:	2 nd - 6 th century AD.
BIBLIOGRAPHY:	Building features; relationship with dated structures (Wa5).
CARTOGRAPHY:	GOODCHILD, WARD-PERKINS (1953), 62-64.
	GOODCHILD, WARD-PERKINS (1953), figs 4, 8a.

AQ4

AQUEDUCT

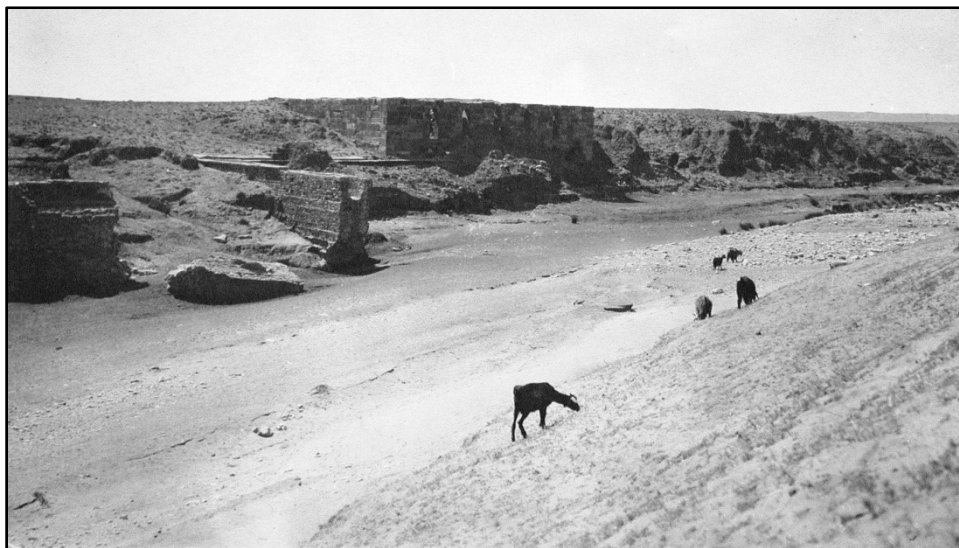
DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Aqueduct.
DISTANCE FROM LEPICIS MAGNA:	1,035 m NW (approx).
GPS COORDINATES:	WGS 84 33S 0432559 - 3611829 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The excavation site is not visible anymore because it has been filled by soil.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	The site has been covered by soil and has been partially used as a dump.
PREVIOUS STUDIES:	Probably, the underground aqueduct recently discovered is the one indicated by H. Müller in his map of Lepcis Magna (1855): it was depicted with a route that goes from Khoms towards Lepcis Magna (NW-SE orientation). A sector of the aqueduct, together with the Roman villa (VI3), the road (Rd1) and the close <i>necropolis</i> (Nc7 - Nc8) was excavated and published by the team of the Archaeological Mission of Roma Tre University between 1995 and 1997 (Musso <i>et al.</i> 1996; 1997; 1998).
DESCRIPTION:	On the S side of the road (Rd1) that from the Arch of Marcus Aurelius (Ti6) goes towards W, has been found an underground aqueduct that followed the same orientation of the road. The hydraulic conduct was detected for a total length of c.20 m and was built entirely in <i>opus caementicium</i> abutting directly on the bedrock (pl. 63B). Along the inner curtains of the <i>specus</i> are still visible the imprints of the wooden boards; the total thickness is c.2 m while the <i>specus</i> is c.1 m wide (it was not possible to measure its H). The ceiling was built in <i>opus caementicium</i> and it had a trapezoidal section. Along the route of the conduit were found different inspection wells (spaced every 13-15 m) covered with a limestone slab that were not sealed.
STATE OF PRESERVATION:	The aqueduct was found in a good state of preservation.
CHRONOLOGY:	1 st - 5 th century AD.
DATING ELEMENT/S:	Relationship with dated site (Rd1); building features.
BIBLIOGRAPHY:	MUSO <i>et al.</i> (1996), 168; (1997), 263, 287; (1998), 207-209.
CARTOGRAPHY:	MÜLLER 1855, pl. XXI (<i>subterraneus aqueductus</i>).

AQ5

AQUEDUCT

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Aqueduct.
DISTANCE FROM LEPICIS MAGNA:	8,100 m SE (approx).
GPS COORDINATES:	WGS 84 33S 0438652 - 3605119 (approx).

ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is actually no visible.
TOPOGRAPHIC POSITION:	Wadi bed.
MODERN INTERFERENCE/S:	Due to modern erosion the site is not visible.
PREVIOUS STUDIES:	The aqueduct has been mentioned by several authors since the nineteenth century who were able to see mainly the inspection shafts on the ground. The aqueduct has been detected at Wadi Hasnun by Bartoccini (1927a; 1929a) and also by Vita Finzi (1969; 1978)
DESCRIPTION:	On the Wadi Hasnun bed has been detected a section of the aqueduct coming from Wadi Caam. The structure visible on the Wadi Hasnun shows that the subterranean aqueduct was built in <i>opus caementicium</i> and that the structure was c.20 m long and 2 m wide. No further information were provided.
STATE OF PRESERVATION:	The aqueduct was found in a good state of preservation.
CHRONOLOGY:	2 st century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	BARTOCCINI (1927a); 99-100; (1929a), 72-74; VITA-FINZI (1969), fig. 4b; (1978), fig. 17
CARTOGRAPHY:	GOODCHILD 1949b, pl. 2.



A. Aqueduct (Aq1) and cistern (Ci2): general view from the W bank of the wadi Lebda with part of the first sector of the aqueduct, 1911 (SGI, Fondo storico 216-3-53).



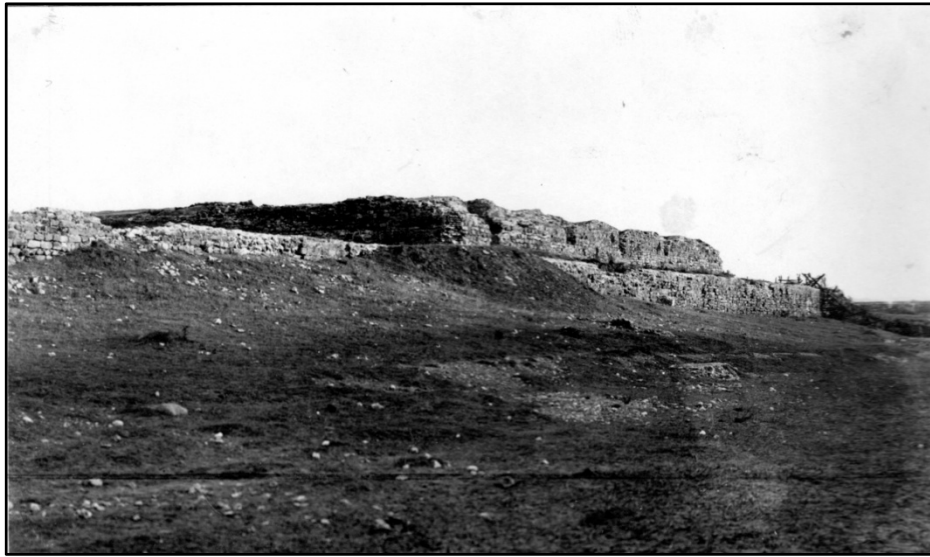
B. Aqueduct (Aq1): general view from the wadi Lebda bed with part of the first sector of the aqueduct, 1912-1919 (CAS, sc. 18/16).



C. Aqueducts (Aq1, Aq2) and cistern (Ci2): general view from the wadi Lebda bed with part of the first sector of the aqueduct, 1921-1922 (ROMANELLI 1925a, fig. 81).



D. Aqueduct Aq1: view of the inner conduit and relationship of the structure with the cistern (Ci1), 1913-1919 (CAS, sc. 18/23).



A. Aqueduct (Aq1) and cistern (Ci1): general view from N, 1921-1922 (ROMANELLI 1925a, fig. 82).



B. Aqueduct (Aq4): general view of the excavated sector (Musso *et al.* 1998, pl.55c).

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Cistern.
DISTANCE FROM LEP CIS MAGNA:	665 m S.
GPS COORDINATES:	WGS 84 33S 0433483 - 3610481.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site, even if hardly accessible, is visible.
TOPOGRAPHIC POSITION:	Terrace and wadi scarp.
MODERN INTERFERENCE/S:	Dumps near and within the site.
PREVIOUS STUDIES:	The cistern was seen, together with the aqueducts (Aq1-Aq2) and with the close cistern (Ci2) by several travelers who visited Lepcis Magna between the 19 th century and the beginning of the following one. The first mention of the structure is the one made by Delaporte (1836) in 1806: even if he was not able to see the cistern, he reported the impressions of the American consul M. Ridgely who travelled with him and identified the structure (together with the other cistern Ci2) as a barrack. The site was then visited by other authors such as Smith in 1816 - quoted by the Beechey brothers (1828) -, Ludwig Salvator (LOTHRINGEN 1874), Rae (1877), Méhier de Mathuisieulx (1903) and Franchi (MC 1913). The first detailed reports were however written by Romanelli (1925a; 1925b; 1970) and, to date, they constitute the better descriptions available. In 1921 the Italian archaeologist was indeed able to open some trenches inside the structure and observe in detail its building features.
DESCRIPTION:	The cistern is actually partially visible and its interior is hardly accessible. The structure is located on the right bank of the Wadi Lebda, c.500 m S from the Hadrianic baths and c.200 m N from the cistern Ci2 (pl. 63A). The description made by Romanelli during the twenties (1925a; 1925b) allow us to understand its main features. It has a rectangular plan (42.25x26 m) and it preserved a total H of 8.25 m from the bedrock and 6 m from the wadi bed (measured at the Romanelli's time). The structure was built using different techniques: the lower part was constructed using the <i>opus caementicium</i> technique and with a single row of bricks in the middle. Above this sector are four rows of limestone ashlar blocks and then, in the upper part, small limestone blocks with bricks at the corners covered and bounded with <i>opus signinum</i> . The interior is characterized by five parallel barrel vaulted naves each 21.70 m long and 5.95 m wide; the max. H registered at the top of the vault is 7.25 m. As visible in the close S cistern (Ci2), below the vault springers and along the bottom wall are several moulded modillions probably used to sustain a wooden passage inside the structure. The floor is coated with <i>opus signinum</i> while the walls and the vaults with a hard layer of lime. On the W side (towards the wadi and the aqueducts Aq1-Aq2) each nave was provided with a quadrangular entrance (2.05 m H and 1.30 m wide) preceded by a small vaulted room whose floor was 2.75 m higher than the nave's floor. The doors, according to Romanelli, were closed by the construction of the aqueduct (Aq1). The roof of the cistern was designed to collect the rainy water thanks to its humpbacked shape and to several opening that link the roof to the interior of the structure.
STATE OF PRESERVATION:	The surviving parts are in a good state of preservation; the interior is full of soil.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features; relationship with dated structures (Aq1, Aq2).
BIBLIOGRAPHY:	BEECHEY, BEECHEY (1828), 78; DELAPORTE (1836), 314-315; LOTHRINGEN (1874), 171; RAE (1877), 41; MÉHIER DE MATHUISIEULX (1903), 269; <i>Elenco edifici</i> 1912, 44 s.v. Lebda; MC (1913), I, 63; ROMANELLI (1925a), 144-147; (1925b), 214-219; (1970), 221-223; BARTOCCINI (1927a), 98-99; KENRICK (2009), 134; TANTILLO, BIGI (2010), 156-157.
CARTOGRAPHY:	STROPPA (1912), Lebda nel maggio 1912 (<i>Castello acqua</i>); IGM 1914 (<i>Serbatoio Romano</i>); IGM 1915a (<i>Serbatoio Romano</i>); Br. Murge 1919b ("Rectangular structure");

Br. Murge 1919c ("Rectangular structure"); ROMANELLI (1925a), fig. 23 (*Serbatoio nord*); BARTOCCINI (1927a), Lepcis - Pianta degli Scavi (*Serbatoio settentrionale*); BERTARELLI (1929), Leptis Magna (*Serbatoio Settentrionale*); USAMS 1943b ("rectangular structure"); USACE 1962a (*ruins*).

ARCHIVAL DOCUMENTATION:

Photographs: BSR, WP G23-14a, WP G23-14b; CAS. sc. 18/24.

Ci2

WADI LEBDA CISTERN

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Cistern.
DISTANCE FROM LEP CIS MAGNA:	850 m S.
GPS COORDINATES:	WGS 84 33S 0433426 - 3610279.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site, even if hardly accessible, is visible.
TOPOGRAPHIC POSITION:	Terrace and wadi scarp.
MODERN INTERFERENCE/S:	In 1912 above the roof of the ancient structure was built an Italian stronghold (named "Fortino Wadi Lebda", see IGM 1913a) that partially ruined the cistern (pl. 64A). Actually several dumps are near and within the site.
PREVIOUS STUDIES:	The cistern was seen, together with the aqueducts (Aq1-Aq2) and with the close cistern (Ci1) by several travelers who visited Lepcis Magna between the 19 th century and the beginning of the following one. The first mention of the structure is the one made by Delaporte (1836) in 1806: the French scholar was not able to see the cistern, however, he reported the impressions of M. Ridgely who travelled with him and identified the structure (together with the other cistern Ci1) as a barrack. The site was then cited by other authors such Smith in 1816 - quoted by the Beechey brothers (1828) - Ludwig Salvator (LOTHRINGEN 1874), Rae (1877), Méhier de Mathuisieulx (1903) and Franchi (MC 1913). Observing the structure, Méhier de Mathuisieulx had the same impression of M. Ridgely: "la première [ruine], sur la rive droite, est percée de grandes fenêtres et rappelle assez la façade d'une caserne". During the first years of the 20 th century and with the Italian colonial period, the structure was the object of several photographs (pls 62A-C, 64A-C). However, detailed reports are those written by Romanelli (1925a; 1925b; 1970) and, to date, they constitute the better descriptions available.
DESCRIPTION:	The cistern is actually partially visible and its interior is hardly accessible. The structure is located on the right bank of the Wadi Lebda, c.750 m S from the Hadrianic baths and c.200 m S from the cistern Ci1. Like the close cistern (Ci1) to the N, the description made by Romanelli during the twenties (1925a; 1925b) allow us to understand its main features. It has a quadrangular plan (22.40x26 m) and was built entirely in limestone ashlar blocks bounded with thin layers of lime (pls 62A-C, 64A). On the N and S side of the structure, in the lower parts, the ashlar blocks are less regular and some part are here characterized by small blocks and bricks. The total H of the cistern was 13 m from the wadi bed (measured at the Romanelli's time). On the W side (facing the wadi) there are at the lower level three openings with a moulded sill and, in the upper part of the facade, five niches. The tree opening, according to Romanelli, were originally three doors then reduced when the aqueduct (Aq1) was subsequently built abutted to the cistern. The interior is characterized by three barrel vaults each one provided with the door mentioned above. Each door is internally preceded by a small vaulted room and by seven steps that connected to the lower cistern floor (pl. 64B). As noticed in the close cistern (Ci1), below the vault springers and along the bottom wall were accommodated moulded modillions probably used to sustain a wooden passage. The interior bottom wall was instead provided with a small window with a portcullis closing (pl. 64C). The roof of the cistern

	had, in correspondence of each vault, humpbacked shape extradoses and, contrary to what is visible in the close N cistern (Ci1), the rainy water was not collected inside the structure but it was directed outside.
STATE OF PRESERVATION:	The surviving parts are in a good state of preservation; the interior is full of soil.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features; relationship with dated structures (Aq1, Aq2).
BIBLIOGRAPHY:	BEECHEY, BEECHEY (1828), 78; DELAPORTE (1836), 314-315; LOTHRINGEN (1874), 171; RAE (1877), 41; MÉHIER DE MATHUISIEULX (1903), 269; STROPPA (1912), 71; <i>Elenco edifici</i> 1912, 44 s.v. Lebda; MC (1913), I, 63; ROMANELLI (1925a), 143-144; (1925b), 214-216; (1970), 221-223; BARTOCCINI (1927a), 98-99; KENRICK (2009), 134; TANTILLO, BIGI (2010), 156-157; MUNZI, ZOCCHI (2017), 52.
CARTOGRAPHY:	STROPPA (1912), Lebda nel maggio 1912 (<i>Castello acqua</i>); IGM 1913a ("Quadrangular structure"); IGM 1913b (<i>F.no Uadi Lebda</i>); IGM 1914 (<i>Serbatoio Romano</i>); IGM 1915a (<i>Serbatoio Romano</i>); Br. Murge 1919b ("Quadrangular structure"); Br. Murge 1919c ("Quadrangular structure"); ROMANELLI (1925a), fig. 23 (<i>Serbatoio sud</i>); BARTOCCINI (1927a), Lepcis - Pianta degli Scavi (<i>Serbatoio meridionale</i>); BERTARELLI (1929), Leptis Magna (<i>Serbatoio Meridionale</i>); USAMS 1943b ("squared structure"); USACE 1962a (<i>ruins</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-13a, WP G23-14a, WP G23-14b; CAS, sc. 18/16, sc. 18/17, sc. 18/18a, sc. 18/18b, sc. 18/19, sc. 18/20, sc. 18/21, sc. 18/22; SGI, Fondo storico 216-3-53; Giovanni Marieni-Saredo personal archive [1].

Ci3

CISTERN

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Cistern.
DISTANCE FROM LEPCIS MAGNA:	850 m ESE.
GPS COORDINATES:	WGS 84 33S 0434110 - 3610797.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is accessible even is not visible because it is completely underground.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure is not visible because completely covered by soil or originally built underground. However, it is clearly visible from satellite images and thanks also to RAF air photographs took during the WWII and in the late forties. The rectangular structure is also depicted in some maps realized by the IGM (1914; 1915a).
DESCRIPTION:	The structure visible in the historical cartography and in the RAF air photographs is characterized by a rectangular volume that measures c.150x55 m and oriented SW-NE. Moreover, from the IGM map (1915a) and from the RAF air photographs the structure seems to be composed by two contiguous volumes or by a single one with an interior division. Thanks to the map realized by the IGM (1915a) are also noticeable internal partitions characterized by traces of walls that run parallel to the short sides of the structures (one wall is c.12 m far from the external SW wall).
STATE OF PRESERVATION:	Undeterminable.
CHRONOLOGY:	2 nd - 4 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	Unpublished.
CARTOGRAPHY:	IGM 1914 ("red dots alignments and soil anomalies"); IGM 1915a ("rectangular structure"); BERTARELLI (1929), Leptis Magna ("rectangular structure"); USAMS 1943b ("rectangular shape soil anomaly").

Ci4**CISTERN**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Cistern.
DISTANCE FROM LEPICIS MAGNA:	1,355 m WNW (approx).
GPS COORDINATES:	WGS 84 33S 0431983 - 3611312 (approx).
ACTUAL LAND USE:	Hospital.
VISIBILITY:	The site is not accessible.
TOPOGRAPHIC POSITION:	Undeterminable.
MODERN INTERFERENCE/S:	A modern hospital has been built on the site; the structures are located outside the built area and lie within the hospital garden.
PREVIOUS STUDIES:	The cistern was found in January 1968 during the building operations for the new hospital of Khoms. A short report of the findings was made by Bakir (1968).
DESCRIPTION:	The only information related to the cistern is that it was provided with a well.
STATE OF PRESERVATION:	Undeterminable.
CHRONOLOGY:	3 rd - 4 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	BAKIR (1968), 202.

Ci5**CISTERN**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Cistern.
DISTANCE FROM LEPICIS MAGNA:	1,665 m E (approx).
GPS COORDINATES:	WGS 84 33S 0434976 - 3610974 (approx).
ACTUAL LAND USE:	Seashore.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain; seashore.
MODERN INTERFERENCE/S:	In the recent years the tide probably damaged the structures that were, at the time of Romanelli, already silted.
PREVIOUS STUDIES:	The structure is mentioned by Romanelli (1925a); however, he was able to see this reservoir complex almost completely silted.
DESCRIPTION:	The structure described by Romanelli (1925a) was characterized by a series of communicating rectangular vaulted rooms coated with <i>opus signinum</i> . This structure was located between the Villa del Nilo (VI2) and the circus (En3).
STATE OF PRESERVATION:	Undeterminable.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	ROMANELLI (1925a), 151.

C16**CISTERN**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Cistern.
DISTANCE FROM LEP CIS MAGNA:	660 m E.
GPS COORDINATES:	WGS 84 33S 0433972 - 3611005.
ACTUAL LAND USE:	Uncultivated/pasture.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been partially dug during the 1940s and briefly cited by Goodchild and Ward-Perkins (1953).
DESCRIPTION:	The cisterns cited by the English scholars are characterized by three rectangular rooms oriented E-W and partially found beneath a tower belonging to the E sector of the unfinished Byzantine walls (Wa5). The plan published by Goodchild and Ward-Perkins shows two of these three rooms contiguous on one of their long sides. To the E a third rooms was detected and partially explored; this third rooms was adjacent and probably connected to the W with one of the two others rooms. It seems that the three rooms were connected and were characterized by the same plan (c.1x6 m); the thickness of some of the walls preserved (more than 1 m) suggests that the complex could have as a whole a considerable size. Unfortunately, no further detail were published.
STATE OF PRESERVATION:	Undeterminable.
CHRONOLOGY:	1 st - 4 th century AD.
DATING ELEMENT/S:	Building features; relationship with near dated structures (Wa5).
BIBLIOGRAPHY:	GOODCHILD, WARD-PERKINS (1953), 64.



A. Cistern Ci2: General view from SW, 1913 (MUNZI, Zocchi 2017, fig. 2).



B. Cistern Ci2: interior of a nave looking E, 1921-1925 (CAS, sc. 18/18b).



C. Cistern Ci2: interior of a nave looking W, 1921-1925 (BSR, WP23 13a).

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	1,305 m S.
GPS COORDINATES:	WGS 84 33S 0433201 - 3609825.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible.
TOPOGRAPHIC POSITION:	Wadi bed.
MODERN INTERFERENCE/S:	Dumps near and within the site.
PREVIOUS STUDIES:	The first mention related to the dam is the one made at the end of the seventeenth century by Durand who described the structure as "une Muraille épouvantable de quinze pas d'épasseur avec de soutiens d'espace en espace de douze pas en quarré. Cette Muraille est encore de trois cens pas de long (...)" (DURAND 1694, 212). The dam was then visited by Ludwig Salvator in 1873 who noticed "eine starke Mauer mit fünf vorspringenden Thurmsätzen aufweist" (LOTHRINGEN 1874, 179). Subsequently, the structure was cited by Méhier de Mathuisieulx (1903) and by Franchi (MC 1913). The first detailed description was however made by Romanelli (1925a). During the sixties (VITA-FINZI 1961; 1969) - and more recently - the dam was studied considering mainly the surrounding landscape and its efficiency (TANTILLO, BIGI 2010; PUCCI <i>et al.</i> 2011).
DESCRIPTION:	The dam is located along the Wadi Lebda bed c.1.5 km S from its mouth. The structure is preserved for 220 m (oriented NW - SE), was build in <i>opus caementicium</i> and has a max. H of 6.7 m in the central part (pl. 65A-B). At the top it has a thickness of 6.80 m and 7.25 m at the base. Romanelli was also able to notice a mortar coating on the S side of the structure (the one facing the sea). On the same side the dam was reinforced thanks to five trapezoidal buttresses (one actually collapsed) while on the top of the N side the dam was provided with a small wall that should serve as a parapet for a passage. At the NW and SE edge the dam was characterized by two curved wings (the one on the E is collapsed).
STATE OF PRESERVATION:	The site is in good state of preservation.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Building features; stratigraphic relationship.
BIBLIOGRAPHY:	DURAND (1694), 212; LOTHRINGEN (1874), 179; MÉHIER DE MATHUISIEULX (1903), 269; MC (1913), I, 62-63; ROMANELLI (1925a), 72; (1925b), 226-227; (1970), 262; BARTOCCINI (1926), 46-47; (1927a), 101; MERIGHI (1940), II, 77, 81; BIANCHI BANDINELLI, CAPUTO, VERGARA CAFFARELLI, (1963), 119-120; VITA-FINZI (1961), 16; (1969), 17-18; KENRICK (2009), 134-135; TANTILLO, BIGI (2010), 155-158; PUCCI <i>et al.</i> (2011), 175-177, 182-184.
CARTOGRAPHY:	MÜLLER (1855), tav. XXI ("linear structure with buttresses"); STROPPA (1912), Lebda nel maggio 1912 (<i>Diga</i>); IGM 1913b ("linear structure with buttresses"); IGM 1914 (<i>Diga</i>); IGM 1915a (<i>Diga</i>); IGM 1918a ("linear structure with buttresses"); Br. Murge 1919b ("linear structure with buttresses"); Br. Murge 1919c ("linear structure with buttresses"); ROMANELLI (1925a), fig. 23 (<i>grande diga</i>); BARTOCCINI (1927a), Lepcis - Pianta degli Scavi (<i>Sbarramento</i>); USACE 1962a (<i>Ancient Roman dam - destroyed</i>); SPLAJ 1979a (<i>Ruins</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-58a, WP G23-58b; CAS, sc. 18/25.

Dm2**DAM**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	870 m S.
GPS COORDINATES:	WGS 84 33S 0433356 - 3610248.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is partially visible and accessible.
TOPOGRAPHIC POSITION:	Wadi bed.
MODERN INTERFERENCE/S:	Dumps near and within the site.
PREVIOUS STUDIES:	The structure is briefly mentioned by S. Pietro Romanelli (1925b) and put in relation with the main Wadi Lebda dam (Dm1).
DESCRIPTION:	The structure is located along the Wadi Lebda bed c.430 m NE from the main dam (Dm1). It was built entirely in <i>opus caementicium</i> and measured c.20 m in length (with a NW- SE orientation) and c.3 m in width. According to Romanelli it should direct the water beyond the main dam (Dm1).
STATE OF PRESERVATION:	The site is in poor state of preservation.
CHRONOLOGY:	2 nd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	ROMANELLI (1925b), 227.
CARTOGRAPHY:	IGM 1914 ("red linear structure"); IGM 1915a (red linear structure"); ROMANELLI (1925a), fig. 23 (<i>diga minore</i>); BARTOCCINI (1927a), Lepcis - Pianta degli Scavi ("linear structure").

Dm3**DAM**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	3,710 m S.
GPS COORDINATES:	WGS 84 33S 0432836 - 3607446.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is partially visible.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	Structures related to the modern dam built at the junction of Wadi Lebda with Wadi es-Smara in 1982.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located at short distance N from the confluence of Wadi Lebda with Wadi es-Smara. The dam is characterized by an <i>opus caementicium</i> wall preserved for c.10 m in length (with a NW- SE orientation) and for c.2 m in width.
STATE OF PRESERVATION:	The site is in poor state of preservation.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), 29-31, fig. 5b nr II, fig. 16.

DM4**DAM**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	3,870 m S (approx).
GPS COORDINATES:	WGS 84 33S 0432449 - 3607352 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been destroyed due to the construction in 1982 of a modern dam at the junction of Wadi Lebda with Wadi es-Smara.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure was located close to the confluence of Wadi Lebda with Wadi es-Smara. According to Vita-Finzi (personal communication) the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	The site has been destroyed.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), 29-31, fig. 5b nr III, fig. 16.

DM5**DAM**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	4,235 m SSW (approx).
GPS COORDINATES:	WGS 84 33S 0430986 - 3607591 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along the Wadi es-Smara and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr IV.

DM6	DAM
DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	5,290 m SSW.
GPS COORDINATES:	WGS 84 33S 0429783 - 3607183.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible, shrubberies within the site.
TOPOGRAPHIC POSITION:	Wadi scarp.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was visited by Vita-Finzi (1969) who published a map where it has been positioned. The site has been recently surveyed (2007) by the Archaeological Mission of Roma Tre University (KHM 97).
DESCRIPTION:	The remains of the ancient structure lies on the S bank of the Wadi es-Smara. The dam was built in <i>opus caementicium</i> and it is preserved for a total length (SW - NE orientation) of c.4 m and a max. width of 2.3 m.
STATE OF PRESERVATION:	The site is in a poor state of preservation.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), 29-31, fig. 5b nr V.

DM7	DAM
DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	5,660 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0428920 - 3607559 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along the Wadi es-Smara and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr VII.

DM8	DAM
DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	5,975 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0429010 - 3606983 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along a small right tributary of the Wadi es-Smara and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr VI.

DM9	DAM
DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	6,575 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0428697 - 3606461 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along a small right tributary of the Wadi es-Smara and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr XII.

DM10	DAM
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DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	7,120 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0427040 - 3607808 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along the Wadi el-Belaazi and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr VIII.

DM11	DAM
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DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	7,930 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0426296 - 3607443 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along the Wadi el-Belaazi and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr IX.

DM12	DAM
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DEFINITION:	Structure.
TOPONYM/S:	None.

INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	7,740 m WSW (approx).
GPS COORDINATES:	WGS 84 33S 0425836 - 3609181 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along the Wadi es-Smara and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr X.

Dm13	DAM
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DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	8,980 m SW (approx).
GPS COORDINATES:	WGS 84 33S 0425129 - 3607453 (approx).
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is not visible anymore.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	The site has been probably covered by soil during the recent decades.
PREVIOUS STUDIES:	The structure should be one of the several dams mentioned by S. Franchi along the Wadi Lebda/Wadi es-Smara. Subsequently, the dam was surveyed by Vita-Finzi (1969) who published a map where it has been positioned.
DESCRIPTION:	The structure is located along the Wadi el-Belaazi and, according to Vita-Finzi (personal communication), the dam was built in <i>opus caementicium</i> .
STATE OF PRESERVATION:	Unknown.
CHRONOLOGY:	2 nd - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	MC (1913), I, 62; VITA-FINZI (1969), fig. 5b nr XI.

Dm14	DAM
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DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	6,820 m NW.
GPS COORDINATES:	WGS 84 33S 0427727 - 3615042.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible, shrubberies within the site.

TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been surveyed (1999-2000) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The dam is located along a short W tributary of Wadi Chadrun. The structure was built in <i>opus caementicium</i> and measured c.16 m in length (N-S orientation) and is 1.2 m thick.
STATE OF PRESERVATION:	The site is in poor state of preservation.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Building features; relationship with a near dated site (VI65).
BIBLIOGRAPHY:	Unpublished.

DM15 DAM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	6,455 m NW.
GPS COORDINATES:	WGS 84 33S 0428134 - 3614967.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible, shrubberies within the site.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been surveyed (1999-2000) by the Archaeological Mission of Roma Tre University.
DESCRIPTION:	The dam is located along an E tributary of Wadi Chadrun. The structure is characterized by two separate sections of the same <i>opus caementicium</i> wall that should measures overall c.18 m in length (NE-SW orientation) and 4 m in H. The thickness is 1.2 m.
STATE OF PRESERVATION:	The site is in poor state of preservation.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Building features; relationship with a near dated site (VI31).
BIBLIOGRAPHY:	Unpublished.

DM16 DAM

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Dam.
DISTANCE FROM LEP CIS MAGNA:	6,100 m NW.
GPS COORDINATES:	WGS 84 33S 0427911 - 3613948.
ACTUAL LAND USE:	Uncultivated.
VISIBILITY:	The site is visible and accessible, shrubberies around and within the site.
TOPOGRAPHIC POSITION:	Wadi bed/wadi scarp.
MODERN INTERFERENCE/S:	Cultivated area.
PREVIOUS STUDIES:	The site has been surveyed (1999-2000) by the Roma Tre University.
DESCRIPTION:	The dam is located along the W branch of Wadi Tella. The structure is characterized by an <i>opus caementicium</i> wall preserved only for c.2.5 m in length (NW-SE orientation) and the max. thickness reported is 0.7-0.8 m.

STATE OF PRESERVATION:	The site is in poor state of preservation.
CHRONOLOGY:	1 st - 3 rd century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	Unpublished.

AG1 *AGGER (MONTICELLI)*

DEFINITION:	Structure.
TOPONYM/S:	Monticelli.
INTERPRETATION:	Earthen <i>agger</i> .
DISTANCE FROM LEP CIS MAGNA:	925 m SW (min. distance); 1,965 m E (max. distance).
ACTUAL LAND USE:	Uncultivated; residential/commercial areas.
VISIBILITY:	Different sectors of the site are partially visible and accessible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	During the Italo-Turkish war (1911-1912) many sectors of the <i>agger</i> were used as a defensive line. Several sectors of the site have been bulldozed and destroyed especially from the 1960s onwards to built new residential and commercial areas.
PREVIOUS STUDIES:	The earthen mound located around Lepcis Magna was cited and recognized as a diverted canal by Captain Smyth in 1816 - quoted by the Beechey brothers (1828) who were able to see the artificial hills too. According to Smyth this <i>agger</i> together with its ditch should address the water to the cisterns (Ci1, Ci2) along the Wadi Lebda. The structure was then noticed by Cowper (1897) who, however, thought it was built for defensive purposes. A further information is given by Franchi (MC 1913), who was able to detect the earthen mound and its external ditch also E from the main Lebda dam (Dm1). The structure was then described more in detail by Romanelli (1925a; 1952) and by Ward-Perkins and Goodchild (1952; 1953). In particular they were able to define with accuracy its path observing a WWII RAF photograph (now preserved at the BSR). The primary function of this earthen <i>agger</i> and its external ditch was and remains still today problematic: defensive protection or an infrastructure designed to permit the Wadi Lebda flood to be diverted toward er-Rsaf to the W. Masturzo (1996) stated that this earthwork could be actually a mudbrick wall.
DESCRIPTION:	The earthen <i>agger</i> enceintes Lepcis Magna from Wadi er-Rsaf to the W, to the area of the amphitheatre (En3) to the E. The structure is partially preserved and the earthen mound reach a max. H of c.5 m and a width of c.10 m (pl. 65C). Within the soil that forms the earthwork have been found alluvial deposits (almost surely the soil from the excavation of the ditch), animal bones and charcoal that allow to date the structure from the beginning of the 1 st century AD to the first half of the 2 nd century (Pucci <i>et al.</i> 2011).
STATE OF PRESERVATION:	Some sectors of the <i>agger</i> are still well preserved.
CHRONOLOGY:	AD 120-140.
DATING ELEMENT/S:	Relationship with a near dated site (Dm1); charcoal analysis.
BIBLIOGRAPHY:	BEECHEY, BEECHEY (1828), 52, 78; COWPER (1897), 200; MINUTILLI (1912), 185; MC (1913), I, 63; ROMANELLI (1925a), 72-73; (1952); (1970), 262; GOODCHILD, WARD PERKINS (1952); (1953), 45-47; MATTINGLY (1995), 120. MASTURZO (1996), 62-63; (2013), 205-206; KENRICK (2009), 134; PUCCI <i>et al.</i> (2011), 175-177.
CARTOGRAPHY:	MÜLLER (1855), tav. XXI (<i>vallum</i>); STROPPA (1912), Lebda nel maggio 1912 (<i>Monticelli</i>); IGM 1914 (<i>Monticelli</i>); IGM 1918a (<i>Monticelli</i>); Br. Murge 1919c (<i>I Monticelli</i>); ROMANELLI (1925a), fig. 23 (<i>Monticelli di Lebda</i>); BARTOCCINI (1927a), Lepcis - Pianta degli Scavi (<i>Sbarramento</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-37a. <u>Air Photographs</u> : BSR, WP G11, 62.



A. Wadi Lebda dam (Dm1): general view looking SE, 1920-1925 (BSR, WG 23-58b).



B. Wadi Lebda dam (Dm1): general view looking NW, 1920-1925 (BSR, WG 23-58a).



C. Monticelli *agger* (Ag1): general view of the S sector looking NW, 2009 (Photo: A. Zocchi).

WA1

PUNIC WALLS

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Wall.
DISTANCE FROM LEP CIS MAGNA:	665 m NE.
GPS COORDINATES:	WGS 84 33S 0433891 - 3611445.
ACTUAL LAND USE:	Archaeological area.
VISIBILITY:	The site has been covered with soil after its excavation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure was detected and excavated in two trenches realized by the Archaeological Mission of the Messina University between 1989 and 1999 close and beneath the E wall of the <i>Basilica Vetus</i> of Lepcis Magna (DE MIRO, POLITO 2005).
DESCRIPTION:	Two different walls belonging to different phases were found in two trenches ("Saggio 1/97" and "Saggio 1/99" in DE MIRO, POLITO 2005) close the E limit of the <i>Basilica vetus</i> of Lepcis. To a first phase belong a mudbrick wall 1.30 m thick, SW - NE oriented, 2 m long and preserved for three rows of bricks (each brick measures 0.3x0.45x0.07 m) separated by a mortar layer (pl. 66A). According to the stratigraphic relations this wall was destroyed between the 4 th - 3 rd century BC. The second phase is characterized by a further wall, built above the mudbrick one and with the same orientation. This new wall consists of two faces of dressed limestone masonry and <i>emplecton</i> (mudbricks between them). This structure has the same thickness of the previous one (1.30 m) and it seems was in use until the 2 nd century BC (pl. 66B).
STATE OF PRESERVATION:	The site was found in good state of preservation even if it has been cut by later structures.
CHRONOLOGY:	5 th - 2 nd century BC.
DATING ELEMENT/S:	Building features; stratigraphic relationship.
BIBLIOGRAPHY:	DE MIRO, POLITO (2005), 57-61, 67-73, 126.

WA2

EARLY IMPERIAL WALL

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Wall.
DISTANCE FROM LEP CIS MAGNA:	165 m NW.
GPS COORDINATES:	WGS 84 33S 0433229 - 3611255.
ACTUAL LAND USE:	Archaeological area.
VISIBILITY:	The site has been covered with soil after its excavation.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure was detected and partially excavated in different trenches realized recently beneath the site of the temple along the main <i>decumanus</i> (TOMASELLO 2011) and beneath a room of the <i>Insula</i> 16, E of the temple (TOMASELLO 2015).
DESCRIPTION:	The western section of the wall was found in a trench ("Saggio 3" in TOMASELLO 2011) beneath the paved area of the S portico of the <i>decumanus</i> temple. The structure was characterized by a mudbrick wall with a NW - SE orientation and it was cut by the 2 nd century portico floor. The section of this wall was c.1 m H and the thickness registered was 1.3 m. The bricks found measured m 0.46x0.38x0.13 and each brick was separated

	by a mud-mortar layer 0.02-0.03 m thick. A second section of the same wall was found eastwards, inside a room ("vano E" in TOMASELLO 2015) of the <i>Insula</i> 16 and, according to F. Tomasello, a postern 2.96 m wide was located few meters E. Extending the ideal route of the wall towards SE it falls where the <i>Porta Augusta Salutaris</i> is located (few meters N from the Septimius Severus arch).
STATE OF PRESERVATION:	The site was found in good state of preservation.
CHRONOLOGY:	1 st century AD.
DATING ELEMENT/S:	Building features; stratigraphic relationship.
BIBLIOGRAPHY:	TOMASELLO (2011), 155-157; (2015), 17-20, 23-25; MASTURZO (2013), 204-205.

WA3

LATE ANTIQUE WALL

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Wall.
DISTANCE FROM LEP CIS MAGNA:	195 m SSW (min. distance); 1,325 m E (max. distance).
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is partially visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	Especially in the S sector the site has been destroyed also by new residential/commercial areas.
PREVIOUS STUDIES:	The structure was described the first time by Girard of Seyne in the 17 th century (ROMANELLI 1925a). He was able to see "(...) six milles de circuit; sa figure estoit ovale, et ses murailles dont les fondemens paroissent encore fort distinctement, avoient partout six pieds de Roy d'épaisseur, et elle estoient de Pierre de Taille. L'on voit plusieurs portes de la ville, qui sont encore en estat". Few decades later the structure was also cited by Durand (1694) and by Lemaire (OMONT 1902). At the beginning of the nineteenth century it was then cited by Delaporte (1836) and, few years later - 1816-1817 - by Smyth (BEECHY, BEECHY 1828) and by Lyon (1821). Barth (1849) and Ludwig Salvator (LOTHRINGEN 1874) were the first ones who recognized the small mounds on the E sector of the city as part of the wall circuit. The structure was then just cited by Cowper (1897) and by Méhier de Mathuisieulx (1903). Part of the same E sector of the wall briefly mentioned by Ludwig Salvator is clearly visible in a photograph made in 1911 by Sanfilippo and preserved in the Archive of the Società Geografica Italiana (pl. 66C). However, the first detailed descriptions were made during the 20 th century by Romanelli (1925a) and by Goodchild and Ward-Perkins after the WWII (1953). Recently, Masturzo (1996) analyzed the seawards E sector that linked the wall circuit to the E mole of the Severan harbour.
DESCRIPTION:	The defensive wall follows a course that goes from the sea W of the Lepcis Magna city core and enclose it reaching (to the S) the modern motorway Suk el-Khamis - Khoms and then it turns towards N reaching the beach between the eastern mole and the Villa del Nilo (VI2). The circuit also partially protected the city from the N (sea side) in the eastern part reaching the structure of the Severan harbour and probably also to the W (sector C1 of the Goodchild and Ward-Perkins article). Its standard width is 1.75 m and it consists of two faces of dressed limestone masonry with an <i>opus caementicium</i> core (pl. 66D-E). The wall is often built using reused material from previous structures, mainly funerary structures. The most well preserved section is the one visible on the W part of the circuit and where the gate was built incorporating the monumental remains of the Arch of Antoninus Pius (the so called Porta Oea). The detailed study made by Goodchild and Ward-Perkins (1953) shows that the wall was provided with several towers
STATE OF PRESERVATION:	The site is partially preserved even if it has been looted in many sectors.

CHRONOLOGY:	AD 300-350.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	DURAND (1694), 208-209; LYON (1821), 337; BEECHEY, BEECHEY (1828), 77; DELAPORTE (1836), 307; BARTH (1849), 313; LOTHRINGEN (1874), 178; COWPER (1897), 201; OMONT (1902), II, 1045; MÉHIER DE MATHUISIEULX (1903), 256; ROMANELLI (1925a), 55, 83-86; BARTOCCINI (1927a), 25-26; GOODCHILD, WARD PERKINS (1953), 47-53, 68; MASTURZO (1996), 59-62; TANTILLO, BIGI (2010), 164-167.
CARTOGRAPHY:	MÜLLER (1855), tav. XXI ("segmented black lines"); COWPER (1897), pl. II ("double black line"); MÉHIER DE MATHUISIEULX (1903), pl. I (7); IGM 1914 (<i>Mura?</i>); IGM 1915a ("red dots alignments and soil anomalies"); ROMANELLI (1925a), fig. 23 (<i>Antiche mura</i>); BARTOCCINI (1927a), Lepcis - Pianta degli Scavi (<i>Mura romane</i>); BERTARELLI (1929), Leptis Magna (<i>Mura Romane</i>); USAMS 1943b ("soil anomalies"); GOODCHILD, WARD PERKINS (1953), fig. 1.
ARCHIVAL DOCUMENTATION:	Photographs: SGI, Fondo storico 216-3-58; BSR, WP G23-35a, WP G23-35b; WP G23-35c; WP G23-36a, WP G23-36b.

WA4 BYZANTINE WALL

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Wall.
DISTANCE FROM LEP CIS MAGNA:	295 m ENE (min. distance); 1,165 m NE (max. distance).
ACTUAL LAND USE:	Uncultivated land/archaeological area.
VISIBILITY:	The site is partially visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	Some sections of the wall, even if not yet recognized as Byzantine, can be distinguished in the maps made by Müller (1855) and by the IGM (1915a) and cited by Smyth (BEECHEY, BEECHEY 1828), Barth (1849) and Méhier de Mathuisieulx (1903) when they describe the remains of the Severan harbour. Subsequently, they were analyzed and dug by Bartoccini in the 1920s who also published a brief paper devoted to this late structure (1925b). After a brief description of the survived structures by Romanelli (1925a), a detailed account was made by Goodchild and Ward-Perkins few years after the WWII (1953) and then analyzed more recently by Pringle (1981).
DESCRIPTION:	This defensive wall follows a course that goes from the sea W of the <i>Forum vetus</i> of Lepcis Magna and goes toward S reusing previous structures such the Severan complexes of the Forum and of the <i>nymphaeum</i> . From the monumental fountain it turns N-E including part of the colonnaded street and then it crosses the Wadi Lebda reaching and also including the E part of the Severan harbour; it hwas provided with several towers normally of the size of 4.50 x 5.65 m externally. The two British scholars Goodchild and Ward-Perkins (1953) stated that: "The new city wall was normally 1.90 meters broad, resting, where necessary, on a strong concrete foundation 2.20 meters broad. Its superstructure is of solid masonry, built of re-used but carefully selected blocks of limestone and sandstone, and cemented with a powerful lime mortar consisting mainly of crushed sea-shell. This characteristic shell mortar is very distinctive, and often reveals the line of the defences even when only a few blocks of stone protrude above the surface of the ground".
STATE OF PRESERVATION:	The site is partially preserved.
CHRONOLOGY:	6 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	BEECHEY, BEECHEY (1828), 77; BARTH (1849), 306, 309; MÉHIER DE MATHUISIEULX (1903)

CARTOGRAPHY:

256; ROMANELLI (1925a), 86-88; (1970), 402-403; BARTOCCINI (1925b); (1927a), 90-94; (1958), 113-134; (1961), 106-108; GOODCHILD, WARD PERKINS (1953), 55-68; SQUARCIAPINO (1966), 27-28; PRINGLE (1981), I, 208-212; KENRICK (2009), 109.
MÜLLER (1855), tav. XXI ("segmented black lines"); IGM 1915a ("red dots alignments and soil anomalies"); BARTOCCINI (1927a), Lepcis - Pianta degli Scavi (*Mura bizantine*); BERTARELLI (1929), Leptis Magna (*Mura Bizantine*); GOODCHILD, WARD PERKINS (1953), figs 1, 4.

WAS

UNFINISHED BYZANTINE WALL

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Wall.
DISTANCE FROM LEPCIS MAGNA:	330 m ENE (min. distance); 1,060 m ENE (max. distance).
ACTUAL LAND USE:	Uncultivated land/archaeological area.
VISIBILITY:	The site is partially visible in short sectors thanks to soil anomalies.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The structure has been analyzed and partially dug (Haynes) by Goodchild and Ward-Perkins (1953), since then no further researches have been made.
DESCRIPTION:	This uncompleted or dismantled defensive wall follows a course that from the southern corner of the Severan nymphaeum crosses the Wadi Lebda towards E and reaches the area S of the E mole of the Severan harbour. The remains of this wall are 1.95 m wide and consist of two courses of limestone blocks, well coursed and set in a shelly mortar. Goodchild and Ward Perkins were also able to see, thanks to the Haynes excavation in 1945 made in different sectors, an 0.8 H rubble foundation c.2.3 m wide. This part of the wall was originally designed to have 4 towers.
STATE OF PRESERVATION:	The site is partially preserved because was not completed.
CHRONOLOGY:	6 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	GOODCHILD, WARD PERKINS (1953), 62-66.
CARTOGRAPHY:	IGM 1914 ("red dots alignments"); IGM 1915a ("wall symbol"); BERTARELLI (1929), Leptis Magna (<i>Mura Bizantine</i>); GOODCHILD, WARD PERKINS (1953), figs 1, 4.

Gs12

RAS EL-HAMMAM

DEFINITION:	Structure.
TOPONYM/S:	Gasr Ras el-Hammam.
INTERPRETATION:	Military structure.
DISTANCE FROM LEPCIS MAGNA:	4,887 m S.
GPS COORDINATES:	WGS 84 33S 0433752 - 3606213.
ACTUAL LAND USE:	Uncultivated land; pasture.
VISIBILITY:	The site is visible even if the general plan of the enclosure is not preserved.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	A medieval/modern village was built inside the wider ancient enclosure of the site. The site is partially damaged due to recent religious clashes.
PREVIOUS STUDIES:	The site has been mentioned by Barth (1849; 1857) and then visited by Romanelli (1925a)

DESCRIPTION:	and Bartoccini (1926). Recent analysis on its structures have been carried out by Roma Tre University survey (KHM 105; MUNZI <i>et al.</i> 2016). The site is characterized by a quadrangular structure (17.4x18 m) and by an external enclosure (c.43x35 m), both built using limestone ashlar blocks. The main structure has its entrance on the W side and it is provided with four irregular angular towers (pl. 67A). The portico is characterized by an arched doorway. Several rooms characterized the interior of this building. Thanks to archival documentation (pl. 67B) the external enclosure was provided with an entrance looking north. Actually the modern mosque of Al-Saba built using the remains of the ancient walls, prevent a proper reading of this side of the enclosure.
STATE OF PRESERVATION:	The site is partially preserved.
CHRONOLOGY:	1 st - 6 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	BARTH (1849), 316; (1857), 85-87; ROMANELLI (1925a), 169-170; BARTOCCINI (1926), figg. 93-94; SJÖSTRÖM (1993), 137 n. 21; BRESC, NEF (1999), 208; MUNZI <i>et al.</i> (2016), 96-98.
CARTOGRAPHY:	MÜLLER 1855, pl. XXI (<i>Hammam Ziphaa</i>); IGM 1918b (<i>Sidi Ahmed el-Gandur</i>).
ARCHIVAL DOCUMENTATION:	<u>Photographs</u> : BSR, WP G23-50a-c, WP G23-51a-c, WP G23-53a-b, WP G23-54a-c, WP G23-55a-b; CAS, sc. 61/20a-c, sc. 61/21a-b, sc. 61/22, sc. 61/23, sc. 61/24; A. Zocchi Private Collection [2]. <u>Drawings</u> : ASLS, NM 2012-99-1a-b, NM 2012, 99-2, NM 2012, 99-11.

Gs13

RAS EL-MERGHEB

DEFINITION:	Structure.
TOPONYM/S:	Gasr Ras el-Mergheb.
INTERPRETATION:	Military structure.
DISTANCE FROM LEPIS MAGNA:	5,728 m W.
GPS COORDINATES:	WGS 84 33S 0427681 - 3611140.
ACTUAL LAND USE:	Uncultivated land; pasture.
VISIBILITY:	Only the monumental arch is actually visible.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	The ancient site was occupied by the Italian fort (Forte Italia) since 1912. From the 1970s a radar station was installed on the site.
PREVIOUS STUDIES:	The site has been mentioned by several authors from the nineteenth century onwards. The first partial description have been made by Clermont-Ganneau (1903a) and by Méhier de Mathuisieulx (1906). Recently (2013), the site has been visited by the University of Roma Tre team (KHM 108; MUNZI <i>et al.</i> 2016).
DESCRIPTION:	According to the historical account, a quadrangular structure in limestone ashlar blocks (7.9x8.5 m) was built on the top of the hill (pl. 67C) and, at the beginning of the nineteenth century was c.9 m high. This building was provided by an external enclosure (22.5x14.6 m) with the main entrance along its S side. This arched doorway is still preserved and it is c.3 m high (pl. 67D).
STATE OF PRESERVATION:	The site is looted and the general plan is hardly legible on the ground.
CHRONOLOGY:	1 st - 6 th century AD.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	BEECHY, BEECHY (1828), 50-52; DELLA CELLA (1819), 38-39; BARTH (1849), 305; (1857), 85-87; COWPER (1897), 212-213; CLERMONT-GANNEAU (1903a), 343; MÉHIER DE MATHUISIEULX (1906), 76-77; ROMANELLI (1925a), 167-169; SJÖSTRÖM (1993), 136 n. 17; BRESC, NEF (1999), 208; MUNZI <i>et al.</i> (2014); 230-232 (2016), 74-75; MUNZI, ZOCCHI (2017), 52.
CARTOGRAPHY:	MÜLLER 1855, pl. XXI (<i>Merkob</i>).

ARCHIVAL DOCUMENTATION: Photographs: BSR, WP G23-49a; CAS, sc. 60/51a-c; SGI, Fondo storico 216-3-63, Fondo storico 216-4-01, Fondo storico 216-4-02; A. Zocchi Private Collection [3].

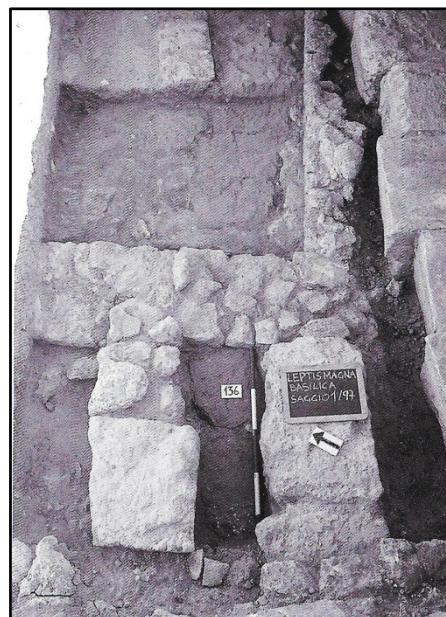
WT1

WATCHTOWER

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Military structure.
DISTANCE FROM LEP CIS MAGNA:	6,700 m S.
GPS COORDINATES:	WGS 84 33S 0431428 - 3604700.
ACTUAL LAND USE:	Uncultivated land.
VISIBILITY:	The site is characterized by the presence of low vegetation and shrubbery
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been recently surveyed (2013) by the Archaeological Mission of Roma Tre University (KHM 166).
DESCRIPTION:	Quadrangular structure (6.90x5.20 m) made in limestone ashlar blocks and partially in opus africanum. Three rows of blocks are preserved in the north-west corner. Numerous limestone blocks scattered on the ground.
STATE OF PRESERVATION:	The site is partially preserved because was not completed.
CHRONOLOGY:	2 nd century BC - 2 nd century AD.
DATING ELEMENT/S:	Building features; pottery.
BIBLIOGRAPHY:	Unpublished.



A. Punic wall (Wa1): the first phase realized with mudbricks (DE MIRO, POLITO 2005, fig.65).



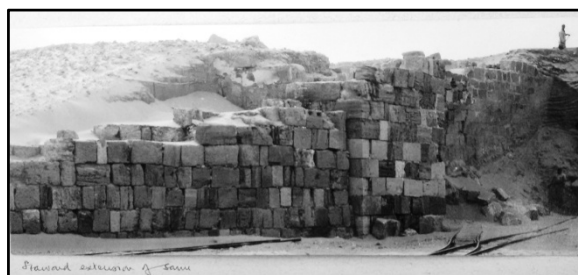
B. Punic wall (Wa1): the second phase realized with limestone blocks and *emplecton* (DE MIRO, POLITO 2005, fig.67).



C. Late Antique wall (Wa3): the E sector looking towards NW, 1911 (SGI, Fondo storico 216-3-58).



D. Late Antique wall (Wa3): section of the structure, 1947-1953 (BSR, WP G23-35a).



E. Late Antique wall (Wa3): W sector of the structure, 1947-1953 (BSR, WP G23-36b).



A. The quadrangular structure of Gasr el-Hammam (Gs12), from NE, 1913 (A. Zocchi private collection).



A. The N side of the external enclosure of Gasr el-Hammam (Gs12), 1913 (A. Zocchi private collection).



C. The structure related to Gasr el-Mergheb (Gs13), 1910-1911 (SGI, Fondo Storico 216-4-1).



D. The entrance to Gasr el-Mergheb (Gs13), 1910-1911 (SGI, Fondo Storico 216-4-2).

EN1**HUNTING BATHS**

DEFINITION:	Structure.
TOPONYM/S:	Hunting Baths.
INTERPRETATION:	Baths.
DISTANCE FROM LEPICIS MAGNA:	680 m NW.
GPS COORDINATES:	WGS 84 33S 0433063 - 3611892.
ACTUAL LAND USE:	Archeological area.
VISIBILITY:	The site is accessible and visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been excavated by Guidi during the 1930s and than has been studied in detail by Ward-Perkins and Toynbee (1949). Recently the site has been restored and published by the Roma Tre University team (MUSSO, BIANCHI 2012).
DESCRIPTION:	The bath complex probably belonged to an association of some sort, and has been suggested (from the theme of some paintings) that this may at one point in its history have been a guild. Thanks to the presence of domes and vaults it seems that the attention of the architect was directed less to the external appearance than to the arrangement of internal space. Entry was on the seaward side (NE). Stucco and impressive paintings decorated the main rooms (<i>frigidarium</i> , <i>calidarium</i>).
STATE OF PRESERVATION:	The site is in good condition and well preserved.
CHRONOLOGY:	2 nd - 3 rd century.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	WARD-PERKINS, TOYNBEE (1949); KENRICK (2009), 124-126; MUSSO, BIANCHI (2012).

EN2**EASTERN BATHS**

DEFINITION:	Structure.
TOPONYM/S:	Eastern Baths.
INTERPRETATION:	Baths.
DISTANCE FROM LEPICIS MAGNA:	1,145 m E.
GPS COORDINATES:	WGS 84 33S 0434473 - 3611344.
ACTUAL LAND USE:	Archeological area.
VISIBILITY:	The site is partially accessible and visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been excavated by the team of Laronde from 1994 and recently published (PAULIGN, DAGNAS 2010-2012).
DESCRIPTION:	This complex, located on the foreshore just to the E of the E mole of the Severan harbour had a portico facing the street along the N side. This portico led through a long and irregular entrance hall to a rectangular <i>frigidarium</i> , flanked on either side by cold plunge-baths. Beyond this were the heated rooms, which rose to a height of 9 m beneath the vaults but which are still not explored. There is evidence of cisterns and of a <i>noria</i> , a wheel for raising the water into the building.
STATE OF PRESERVATION:	The excavation site is in good condition even if partially silted.
CHRONOLOGY:	2 nd - 3 rd century.
DATING ELEMENT/S:	Building features.
BIBLIOGRAPHY:	KENRICK (2009), 129-130; PAULIN, DAGNAS (2010-2012).

EN3**CIRCUS**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Circus.
DISTANCE FROM LEPIS MAGNA:	2,050 m E.
GPS COORDINATES:	WGS 84 33S 0435359 - 3610994.
ACTUAL LAND USE:	Archeological area.
VISIBILITY:	The site is accessible and visible.
TOPOGRAPHIC POSITION:	Plain terrain.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been mentioned by several scholars from the seventeenth century onward. It has been analyzed and partially excavated between the sixties and the seventies (HUMPHREY, SEAR, VICKERS 1972-1973).
DESCRIPTION:	The circus lies between the amphitheatre (En4) and the sea, and the two are linked directly by access tunnels and corridors. The structure was 450 m long and 70 wide; it had eleven tiers of seating along either side and around the curved E end, surmounted by a portico of the Tuscan order. Its capacity has been estimated at around 20,000 spectators. The seating was cut out of the hillside on the S and built up on a solid mass of concrete on the N towards the sea. On the N side there were barrel-vaulted passages leading through the seating, presumably to a road along the foreshore. The <i>spina</i> begins at some distance from the start, and the <i>carceres</i> are therefore set in an arc centered upon which the chariots have to squeeze into one half of the track. The ends of the <i>spina</i> were marked by semicircular stone plinths (<i>metae</i>) surmounted at each end by three conical pillars 4.75 m high, with knobs in the form of stylized pine-cones on top.
STATE OF PRESERVATION:	The site is in good condition and visible.
CHRONOLOGY:	2 nd - 4 th century.
DATING ELEMENT/S:	Building features, epigraphic evidence.
BIBLIOGRAPHY:	DURAND (1694), 206-208; BEECHY, BEECHY (1828), 76; MÉHIER DE MATHUISIEUX (1903), 267; HUMPHREY, SEAR, VICKERS (1972-1973); KENRICK (2009), 132-133.

EN4**AMPHITHEATRE**

DEFINITION:	Structure.
TOPONYM/S:	None.
INTERPRETATION:	Amphitheatre.
DISTANCE FROM LEPIS MAGNA:	1,955 m E.
GPS COORDINATES:	WGS 84 33S 0435265 - 3610906.
ACTUAL LAND USE:	Archeological area.
VISIBILITY:	The site is accessible and visible.
TOPOGRAPHIC POSITION:	Hill top.
MODERN INTERFERENCE/S:	None.
PREVIOUS STUDIES:	The site has been mentioned by several authors from the seventeenth century and excavated by Di Vita during the 1960s.
DESCRIPTION:	The position of the amphitheatre has always been evident from a slight depression in the ground, but it was not excavated and restored until 1962-1964. It was constructed initially in AD 56, almost certainly making use of a hollow created by the excavation of a quarry

	(Qr1). Its shape is not elliptical, but composed of two semicircular ends separated by a short stretch of straight seating. Its capacity has been estimated at about 16,000 spectators. The uppermost tiers of seating may have been surrounded by a portico, and in the middle of the S side this was interrupted by a temple, of which only the foundations remain. The seating area was accessed by the usual arrangement of staircases and peripheral corridors. There were two principal access route from the city: one at the level of the arena and the other a high-level road which crossed the first by means of a lofty bridge and led directly to the top of the <i>cavea</i> .
STATE OF PRESERVATION:	The site is well preserved and in good condition.
CHRONOLOGY:	1 st - 4 th century.
DATING ELEMENT/S:	Building features, epigraphic evidence.
BIBLIOGRAPHY:	DURAND (1694), 206-208; BEECHY, BEECHY (1828), 76; MÉHIER DE MATHUISIEULX (1903), 267; CHIGHINE, MADARO, MAHGIUB (1976-1977); KENRICK (2009), 130-132.

APPENDIX I

THE FUNERARY INSCRIPTIONS

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
1	IRT 738 CIL VIII, 22684	I Telam[3] / medic[3] / Saturn[3] / [1]iri[1]po	Limestone block	Mausoleum Ma1 (?)	Iulia (?)	Saturninus/a	Telamon	/	?
2	IRT 745	] Ari/nis f(ilius) Tapafius / Diodorus Nizaz / sibi et suis / fecit	Limestone block	Mausoleum Ma2 (?)	"Tapapia"	/	Diodorus	Aris Nizaz	Peregrinus
3	IRT 729 AE 1925, 106 AE 1926, 167	C(aio) Mario Iovino et C(aio) Mario et / Mariae Victorinae et Marso f(ilio) eius / C(aius) Marius Pudens Boccius Zurgem et Velia / Longina Bibai parentes f(ili)is et nepoti fecerunt	Limestone block	Mausoleum Ma3	Maria Velia	Iovinus Victorina Marsus Pudens Longina	/	Boccius Zurgem Bibai	Roman citizens
4	IRT 751	Di(i)s manib[us] / Victorinae [	Limestone block	Mausoleum Ma19 (?)	?	Victorina	?	?	?
5	IRT 764 IG 5363 CIL VIII, 10997	] / ον παῖδά μ' [ἀποφθεῖσθαι μίτος ὥς ἐπέ] / κλωσεν δ Μοιρῶν παῖδά με [τυ]μβε[ῖ] / σαι καὶ ἄφε[γγ]έα νύκτα περᾶσαι.	Tabula of sarcophagus	Mausoleum Ma22	?	?	?	?	?
6	ABD EL-AZIZ EL NEMSI 1997, tav. 86b AE 1997, 1585	Di(i)s Manib[us] / fecit / Ma(rcus?) Ep(p)li<us=> sib(i) et / suis et patrona / sua	Limestone block (Fu11)	Mausoleum (not id.)	Eppia	/	/	/	Freedmen, Roman citizen
7	IRT 682 CIL VIII, 22680	Dis man[us]ibus / Claud(i)ae [S]ab(i)nae / Soterie[us]	Limestone block (Fu14)	Mausoleum (not id.)	Claudia	Sabina	Soterica/us	/	Roman citizen
8	IRT 692	Q(uintus) Domitius Camillus / Critonis f(ilius) Nysim / vixit annis XX d(ebus) L / M(arcus) Domitius Crito / pater filio quieto fecit	Limestone block (Fu16)	Mausoleum (not id.)	Domitia	Camillus	Crito	Nysim	Roman citizen
9	IRT 633	L(ucio) Avillio C(ai) Avilli Casti f(ilio) Quir(ina) Marso / expostulantibus universis bigam ordo decr(emit) / pater piissimo f(ilio) hon(ore) cont(entus) sua pec(unia) fecit	Limestone block (Fu23)	Mausoleum (not id.)	Avil(l)ia	Castus Marsus	/	/	Roman citizen
10	IRT 654 CIL VIII, 15 IPT 13	Boncar Mεcράσι Clodi/us medicus // Βώνχαρ Μεχράσι Κλώδι/ος ιατρός // BD'LQRT HMQR.. QL'Y HRP'	Limestone block	Mausoleum (not id.)	/	Clodius	/	Boncar Mecrasi	Peregrinus
11	IRT 655 CIL VIII, 16 IPT 12	Byrtych Balsilechis f(ilia) mater Clodi medici // Βύρυχθ Βασιλάληχ θυγάτηρ μήτηρ Κλωδίου ιατροῦ // BRKT BT B'LŠLK' M QL'Y HRB'	Limestone block	Mausoleum (not id.)	/	Clodius	/	Byrtych Balsilechis	Peregrinus
12	IRT 676 CIL VIII, 22678 AE 1904, 15	Calpurniae Bargyddeni / et / Calpurnio Cereali et / Calpurnio Candido / fecit Calpurnia Licinia Sadith / parentibus suis et fratri pietatis causa	Limestone block	Mausoleum (not id.)	Calpurnia Licinia	Cerialis Candidus	/	Bargyddeni Sadith	Roman citizens
13	IRT 677	Di(i)s Manib[us] / C(aius) Calpurnius Tracha/lus Dosides Calpurni/is fratribus carissim(is) / Zenae et Aristonni et V(ibi) monumentum et / sepulc(h)um fecit	Limestone block	Mausoleum (not id.)	Calpurnia	Trachalus	Aristo	Dosides Zena Vibis	Roman citizens
14	IRT 688	Dis manib[us] C(ai) Cosco/ni Marsi	Limestone block	Mausoleum (not id.)	Cosconia	Marsus	/	/	Roman citizen
15	IRT 721 CIL VIII, 10995	]s P(ubli) Lucreti Rogatiani fil(ius) / [3 monumentum] quod opere signino pater / [3] f(e)cerat sibi posteris(ue) suis / [3] restituit et a fundamento erexit / [3 ex] (sestertiis) LXXX milib(us) n(ummum)	Limestone block	Mausoleum (not id.)	Lucretia	Rogatianus	/	/	Roman citizens
16	IRT 720 CIL VIII, 22682	P(ublio) Lu]cretio / Cres[c]enti / bono fratr(i) / P(ublius) Lu]cretius / Rogatinus / pater feci[t]	Limestone block	Mausoleum (not id.)	Lucretia	Crescens Rogatinus	/	/	Roman citizen
17	IRT 746 CIL VIII, 23	[L(ucius)] Tettius Eu[tyches 3]m sib[i] et / [3]tice uxori / [cura L(uci) T]etti Comi lib(erti)	Limestone block	Mausoleum (not id.)	Tettia	Comus	Eutyclus	/	Roman citizen
18	IPT 10 JONGELING 2007	P'L M'QR HRDS / LQN'M WL'HY' / YG' WLWL'S / LKN . HR BBRYT	Limestone block	Mausoleum (not id.)	/	/	/	Maqr Aygo	Peregrinus
19	PACI 1989, n. 5 AE 1989, 771	] / Crescentis filius sibi [	Limestone block	Mausoleum (not id.)	/	Crescens	/	/	?
20	IPT 14 JONGELING, KERR 2005, 18	[B]DMLQRT BN . HNB'L . H . . QY P'L' . LBNY' YQ' / LMBMHY'	Limestone block	Mausoleum (not id.)	/	/	/	Abdmelgart Annobal	Peregrinus
21	REYNOLDS 1955, n. 8	D(is) s(acrum) M(anibus) / Claudius m/on<cu=>l-mentu/m fecit / se vivo po/sterius / suis // D(is) s(acrum) M(anibus) / Claudius / Ladas m/on<cu=>l-mentum / fecit se vi/vo poster/isque suis	Limestone block	Funerary cippus, hypogeum sema (?)	Claudia	/	/	Stiddin Ladas	Roman citizens
22	IRT 827 KERR 2010, 205-206	LYMYTHICSIN AMICE / BAL YSRIM YSA / VMYLTHE	Limestone relief	/	/	Amicus	/	Mythicsin Mylthe	Peregrinus

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
23	IRT 668	D(i)s Manibus Ati/lia Marith vi/xit annor(um) XXX m(ensium) III / dier(um) XXV Atilius Corinthu[s] / [A]urellianus(?) fecit uxori su/ae sanctissimae et fideliss[i]mae	Marble relief	/	Atilia	Aurelianus Corinthus	/	Marith	Roman citizen
24	IRT 669	D(is) m(anibus) / Aurelius Eros / filius patri sanctissimo p(osuit)	Limestone relief	/	Aurelia	/	Eros	/	Roman citizen
25	IRT 828 KERR 2010, 206-207	[M]YNSVFT[H M JV FEL BARICBAL TYPAPI LOB[THE-]/M VIYSTILA VLILYSTIM IHIMYTHEM BYRYSOTH / VYBIVY MYSTYTH FEL.BAIAEM BITHEM	Limestone block	Hypogeum (not. id)	"Tapapia"	/	/	Baricbal Vystila Lilystim	Peregrini
26	CIFANI 2006, fig. 5	[D(is) M(anibus)] s(acrum) / Pompeio Nabori / qui vix(it) annis / XXVIII m(ensibus) VII // D(is) M(anibus) s(acrum) / Pompeio Ba[3] / qui vix(it) an[nis] / XXVII diebus X[2] / Pompeius [5]pus p[2]r filis sui[s2]	Limestone blocks (Fu9)	Hypogeum sema (?)	Pompeia	/	Callipus or Chrysippus (?)	Nabor	Roman citizens
27	ABD EL-AZIZ EL NEMSI 1997, tav. 88a AE 1997, 1586 AE 2014, 1454	D(is) M(anibus) / L(uciae) Siliae L(uci) fil(iae) Pia[e] / L(ucius) Silius Plautius / Haterianus / v(ir) c(larissimus) / patruus / h(eres) f(ecit)	Marble column (Fu11)	Hypogeum sema (?)	Silia Plautia	Pia Haterianus	/	/	Roman citizen
28	IRT 747	Tetia L(uci) liberta Prima / sibi et L(ucio) Tetio L(uci) l(iberto) / Meiantho viro / sui et suis	Limestone column	Hypogeum sema (?)	Tettia	Prima	/	Mehiantus	Freedmen
29	IRT 705	D(is) M(anibus) / Fulviae [C]rescentillae / uxoris sanctissimae / Q(uintus) Marcius Candidus Rusonianus / maritus fecit	Marble column (Fu10)	Hypogeum sema (?)	Fulvia Marcia	Crescentilla Candidus Rusonianus	/	/	Roman citizen
30	AE 1997, 1584	D(i)s Manibus // Aristonis / Adrumucus / sua pecuni(a)s fecit // Diodorus / Adrumucus / frater cura/vit	Limestone base (Nc1b)	Altar, base, sema (?)	/	/	Aristo Diodorus	Adrumucus	Peregrini
31	IRT 635	Caecilio Proculo / Luci Silii Plautii Hate/rianus Blaesilia/nus et Amicus / Haterianus Gavu/lianus Proximus / h(eredes) per suc(cessionem) permis(su) / splend(idissimi) ord(inis) p(oserunt) / ex testamento / Sentiae Caecili/anae	Limestone base (Fu12)	Altar, base, sema (?)	Caecilia Silia Plautia Sentia	Proculus Amicus Blaesianus Gavilianus Haterianus Proximus Caeciliana	/	/	Roman citizen
32	IRT 662 CIL VIII, 22685	[V]IES iuv[3]/bus bon[3] / memoria[3]/biae Ann[3]/atae quae [vixit an]/nis XVI [virgin]/ali pudicit[i]a	Marble block (Fu12)	Altar, base, sema (?)	?	?	?	?	Roman citizen
33	IRT 755 CIL VIII, 22675	[N]VN DE[1] / [6] / [6] / [3]NB[2] / [3]MORI / [3]AAGE / [3]ntiano / [3]nis annui / [1]longa g(a)eneros[1]/tate ornati qui vix(it) / ann(os) XXII m(enses) III et / [3]BE[3]SSV[2]/um civium suol[rum]	Marble block (Fu12)	Altar, base, sema (?)	/	/	/	/	?
34	IRT 763	ZH // τὸ μῦθος ἐμοὶ κ[ε]ῖται	Marble block (Fu17)	Altar, sema (?)	/	/	/	/	?
35	IRT 689	D(is) M(anibus) s(acrum) / M(arcus) Cluto/rius Bali/ahon O [Q] I [Q] / [	Limestone base (Fu15)	Altar, base, sema (?)	Clutoria	/	/	Balihaon	Roman citizen
36	IRT 714	Dis Manibus / Iuliae Clyme/nis uxori(s) / M(arcus) Aemilius / Athictus / cons(=A>cravit	Limestone base (Fu19)	Altar, base, sema (?)	Iulia Aemilia	/	Clymenis Athictus	/	Roman citizen
37	IRT 690	ΕΝΘΑΛΕΛΗ / ΛΑΡΚΙΣΚΙΜΕ / ΖΩΗΝΑΠΟ / ΤΙΣΑΕΑΣΟΥ / ΔΕΙΦΟΞΟΥΟ / ΩΓΛΥΚΙΟΝ / ΜΑΛΛΑΟΝΘΑ / ΝΑΝΑΙΟΙΟΑΛ / ΑΛΛΟΜΟΝ / ΠΛΟΥΤΗΘΣΕΧΩ / ΚΕΧΑΛΚΕΟΝ / ΥΠΝΟΝΙΟΠΑΝ / ΤΕΣΦΙΔΕΕΣΚΟΝ / ΑΛΕΓΑΝΑΡΙΣΤΕ / ΤΕΚΕΑΦΡΟΠΩ / ΛΕΙΕΝΙΚΡΗΤΑ / ΣΩΦΡΙΟΣΥΝΗΣ / ΕΝΕΚΕΝΚΕΠΙ / ΣΤΡΙΟΣ-ΗΣΑ / ΔΕΑΥΤΟΣΕΤΗ / Θ[-]ΚΕΕΝΙΑΣΗ / ΣΟΦΗΚΕΠΕΛΙ / ΗΒΙΟΙΟΙΚΕΧΡΗ / ΣΙΜΟΤΗΤΙΤΑΥΤΑ / ΔΕΠΑΝΤΑΕΠΟΙ / ΉΕΑΝΙΘΙΛΙΟΙ / ΘΡΕΠΤΟΙΤΟΥΜΕ / ΚΑΛΩΣΠΟΙΗΝΟΙ / ΜΟΥΤΑΦΟΝΕΓΙΡΑΝ / ΟΠΩΣΠΑΣΙΦΙ / ΔΟΙΣΙΝΩΣΙΟ / ΚΕΘΑΤΩΚΕΚΕΛΥΜΕ / ΝΟΣΕΖΩΣΙΑΛΩΜΕ / [-]ΓΥΧΙΙ ΧΦΙΛΘΟΥ[-]ΣΑΘΑΝΑΤΟ[-]	Limestone base (Fu21)	Altar, base, sema (?)	/	/	Delarkes	/	?
38	IRT 753	M(arcus) Ulpius Balsilus / Cerialis Macari / bon(a)e memoriae vi/r(i)s	Limestone base (Fu22)	Altar, base, sema (?)	Ulpia	Cerialis	/	Balsilus Macar	Roman citizen
39	IRT 673	Dis Mani/bus Q(uinti) Cae/cili Cera/lis Phisch/on Q(uitus) Cae/cilius Cae/cilianus /fratri pi/issimo fecit	Limestone base	Altar, base, sema (?)	Caecilia	Cerialis Caecilianus	/	Physcon	Roman citizen
40	IRT 679	Dis Mani/bus Q(uinti) Cal/visi Amic[i] / unicae in/dulgenti/ae mari/ti Calvisia/na uxor posuit	Limestone base	Altar, base, sema (?)	Calvisia	Amicus Calvisiana	/	/	Roman citizen
41	IRT 680 CIL VIII, 18	D(is) M(anibus) / L(uci) Cl(audi) / Perpe/tui Pro/bati vix(it) ann(os) / XX	Limestone base	Altar, base, sema (?)	Claudia	Perpetuus Probatius	/	/	Roman citizen

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
42	IRT 681 CIL VIII, 22681	D(is) M(anibus) / Clau/diae / Salvi/ae	Limestone base	Altar, base, <i>sema</i> (?)	<i>Claudia</i>	<i>Salvia</i>	/	/	Roman citizen
43	IRT 752	Cn(aeo) Vitula/sio Africani / heredes	Limestone base	Altar, base, <i>sema</i> (?)	<i>Vitulasia</i>	<i>Africanus</i>	/	/	Roman citizen
44	IRT 693 CIL VIII, 19 AE 1962, 67 AE 2008, 1616	Domitiae Roga/tae vixit / annis XXIII / M(arcus) Iulius Cethegus / Phelyssam uxori / carissimae fecit	Limestone base	Altar, base, <i>sema</i> (?)	<i>Domitia Iulia</i>	<i>Rogata</i>	/	<i>Cethegus Phelyssam</i>	Roman citizen
45	IRT 683 CIL VIII, 22679	D(is) M(anibus) / Claudii / Victo/ris Pr/oba[ti]	Limestone base (?)	Altar, base, <i>sema</i> (?)	<i>Claudia</i>	<i>Victor Probatius</i>	/	/	Roman citizen
46	IRT 675	[1] Caecinae C(ai) f(filio) / Pap(iria) Apollinari / C(aius) Caecina Artemas / et Caecina Glyce Pusinna / et Caecina Pusinna Artemae / filia heredes optimo et / indulgentissimo patro/no faciendum curaver(unt)	Limestone base (?)	Altar, base, <i>sema</i> (?)	<i>Caecina</i>	<i>Apollinaris Pusinna</i>	/	<i>Artemas Glyce</i>	Roman citizen
47	MUSO <i>et al.</i> (1997), tav. 146	D(is) M(anibus) / Iul(iae) Victorinae vixit / an(nos) XI dies VIII Cor/nelia Cilopu mat(er) fl(iae) p(iae) f(ecit)	Marble slab	<i>Cupula</i> (Nc7g)	<i>Iulia Cornelia</i>	<i>Victorina</i>	/	<i>Cilopu</i>	Roman citizen
48	MUSO <i>et al.</i> (1997), tav. 139	Victor Pescenni/orum curator / annorum vixit / n(umero) LV Di(f)i's Manibus / uxor fecit	Marble slab	<i>Cupula</i> (Nc8c)	/	<i>Victor</i>	/	/	Slave
49	IRT 695	D(is) M(anibus) s(acrum) / Elia Victoria / Masquitana / vixit an(n)is [2]XXI / Elius Datus fecit	Limestone monolith (Fu17)	<i>Cupola</i> (not id.)	<i>Aelia</i>	<i>Victoria Datus</i>	/	<i>Masquitana</i>	Roman citizen
50	Unpublished	D(is) M(anibus) s(acrum) / L(ucius) Asinius / Statianus / vixit / an/nos III d(ies)/ XXVIII	Limestone monolith	<i>Cupola</i> (not id.)	<i>Asinia</i>	<i>Statianus</i>	/	/	Roman citizen (?)
51	IRT 672	D(is) M(anibus) s(acrum) / L(uci) Caecili Bar/ichionis / vix(it) an(n)is XXX / Ianuarius / fratri po(suit)	Limestone block	<i>Cupola</i> (not id.)	<i>Caecilia</i>	<i>Ianuarius</i>	/	<i>Barichio</i>	Roman citizen
52	IRT 727	D(is) M(anibus) s(acrum) / Marcia Eutychia vixit / annos XXXXVII Cornelius / Marsus uxori suae fecit	Limestone <i>slela</i>	Burial (Nc9h)	<i>Marcia Cornelia</i>	<i>Marsus</i>	<i>Eutychia</i>	/	Roman citizen
53	IRT 657	[Ph]il(i)ppus libra/[r]jii notarius / [rat]iocinator n(u)m[er]arius omni/[bus] his consum/[p]tius vixit an/[nos] XXVII sine / [ulla m]ajacula / [3] pater fi/[lio pi]iss[jimo] fecit	Limestone <i>slela</i> (Fu12)	Burial (not id.)	/	/	<i>Philippus</i>	/	Slave
54	IRT 711	Dis Mani/bus sacr(um) Im/aia Iunia Vi/ctoria vix(it) annos / XIV	Limestone <i>slela</i> (Fu18)	Burial (not id.)	<i>Iunia</i>	<i>Victoria</i>	/	<i>Imaia</i>	Roman citizen
55	IRT 741	D(is) M(anibus) s(acrum) / Septimia / Cariota / hi(c) s(ita) e(st)	Limestone <i>slela</i> (Fu18)	Burial (not id.)	<i>Septimia</i>	/	/	<i>Cariota</i>	Roman citizen
56	IRT 719	τὸν σεμνῶς ζήσαν/τα καὶ ἡθεσι δοῦσα(θέν)/τα τεμνῶς τεμνθέν/τα τέχνη δέ τοι μοῦ/νον ἔδοντα πάνσοφον / ἐν πολλοῖς ἐργεσιν / Λούκιον ἔνθα μέλαινα / λιβύης κατὰ γαῖα κα/λῶπτ(ε)ῖ Σώστρατος / Λουκίῳ τῷ ἰδίῳ θρε/πτῶ ζήσαντι ἔτη / κα' μνήμης / χάριν / [x]αῖρετε παροδεῖ/ται	Limestone <i>slela</i> (Fu20)	Burial (not id.)	/	/	<i>Sostratos</i>	/	Slave
57	IPT 15	H. YTLV BN B'LHN' B'N/T	Limestone <i>slela</i> (Fu24)	Burial (not id.)	/	<i>Hattilius</i> (?)	/	<i>Baaliathon</i>	<i>Peregrinus</i>
58	IPT 62	PRGRYN' BDSPN	Limestone <i>slela</i> (Fu24)	Burial (not id.)	/	<i>Peregrinus</i>	/	<i>Abdsaphon</i>	<i>Peregrinus</i>
59	IRT 584	D(is) M(anibus) / M(arcus) Corneliu[s] / Saturninus / miles leg(ionis) III [A]ug(ustae) vix(it) an(nos) XXXV	Limestone <i>slela</i>	Burial (not id.)	<i>Cornelia</i>	<i>Saturninus</i>	/	/	Roman citizen
60	IRT 699	D(is) M(anibus) / Flaminia / Agaui(e) vixit / annis n(umero) LXVI / m(ensibus) VIII	Limestone <i>slela</i>	Burial (not id.)	<i>Flaminia</i>	/	/	<i>Agave</i>	Roman citizen
61	IRT 743	Dis Manibus sacrum / SIZ A<u>Y>r(eli) / Faustini / Cunni	Limestone <i>slela</i>	Burial (not id.)	<i>Aurelia</i>	<i>Faustinus Cunnus</i>	/	/	Roman citizen
62	IRT 749	Μνημ/εῖον Θευδύ/τας θυγατρὸς / Αἰγλάνο/ροισ τοῦ / Τεμοκράτους / ἐτελεῦ[τησεν]	Limestone <i>slela</i>	Burial (not id.)	/	/	<i>Timocrates</i>	<i>Theudyta Aiglanor</i>	Slave (?)
63	PACI 1989, n. 6 AE 1989, 772	D(is) M(anibus) / Caecilius / TH[1]FR[3]IIS	Limestone <i>slela</i>	Burial (not id.)	<i>Caecilia</i>	/	/	/	Roman citizen
64	KERR 2010, 207-208	CHADDA / BIN NIM/IRATH / NYTROS / FEL MYN/FYTH LIM/NIM THV/BAB	Limestone <i>slela</i>	Burial (not id.)	/	/	/	<i>Chadda Nimyrath Nytros Thubab</i>	<i>Peregrinus</i>
65	IRT 826 KERR 2010, 204	[SIDEN FE]/LA LVIA OCLE/S FELA VIA / OCES ESRIM / XX	Marble slab	Burial (not id.)	/	/	/	<i>Stiden Ocles</i>	<i>Peregrinus</i>
66	IRT 671 KERR 2010, 206	BAL / V. SANS	Marble slab	Burial (not id.)	?	?	?	?	?
67	IRT 586	[ic(?) leg[3] / [3]t vixi[t 3] / [annos] XXXX [	Marble slab	Burial (not id.)	/	/	/	/	Roman citizen
68	IRT 674	Fecit et posuit Cae/cilia Nangyddi fi/lío suo Africano Gi/nus carissimo ani/mo et patri{s} suo Caecilio Ginus	Marble slab (Fu13)	Burial (not id.)	<i>Caecilia</i>	<i>Africanus</i>	/	<i>Nangyddi Ginus</i>	Roman citizens

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
69	IRT 656 AE 1931, 3 AE 1938, 3	Narcisso Aug(usti) lib(erto) / architecto / Aquilia Hedone / marito optimo / fecit	Marble slab	Burial (not id.)	Aquilia	/	Narcissus Hedone	/	Freedman
70	IRT 733	D(is) M(anibus) / Nyfthae	Marble slab (Fu21)	Burial (not id.)	/	/	/	Nyftha	Slave
71	IRT 761	[D(is)] M(anibus) s(acrum) / [3]ianu[3] / [3]mag[3] / [3] m(enses) III[3] / [3] VII pr[idiu]	Marble slab	Burial (not id.)	?	?	?	?	?
72	IRT 750	[D(is)] M(anibus) / [3]lia Venusia / [3] pia)e vixit an(nos) LXX	Marble slab (Fu24)	Burial (not id.)	?	Venusia	/	/	?
73	IRT 737 CIL VIII, 22683	Rutil(i)us Victor / vixit annis XI	?	?	Rutilia	Victor	/	/	Roman citizen
74	IRT 742 CIL VIII, 20	Dis Mani/bus MIO / MAMIO / Severo / piissimo	?	?	Mamia	Severus	/	/	Roman citizen
75	IRT 712	Iovinas	Marble vase urn	Hypogeum (not id.)	/	Iovina	/	/	?
76	IRT 735	Pompei / Damaru[s]	Limestone vase urn	Hypogeum (not id.)	Pompeia	/	/	Damarus	Roman citizen
77	IRT 740	[S] Segulianus [3] / [3]T Nicebi [	Marble vase urn	Hypogeum (not id.)	/	Segulianus	/	Nicebis	?
78	IRT 754 (1)	Ammonis	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Ammon	Peregrinus
79	IRT 754 (2)	Anno[	Limestone coffin urn	Hypogeum (not id.)	?	?	?	?	?
80	IRT 754 (3)	Ano[	Limestone coffin urn	Hypogeum (not id.)	?	?	?	?	?
81	IRT 754 (4)	A[3] / Amo	Limestone coffin urn	Hypogeum (not id.)	?	?	?	?	?
82	IRT 754 (5)	Aquili / Aquiliani / Tyra	Limestone coffin urn	Hypogeum (not id.)	Aquilia	Aquilianus	/	Tyra	Roman citizen
83	IRT 754 (6)	Arisu	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Arisu	?
84	IRT 754 (7)	Arrisut	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Arrisut	?
85	IRT 754 (8)	Balbilla	Limestone coffin urn	Hypogeum (not id.)	/	Balbilla	/	/	?
86	IRT 754 (9)	Capito / Cesalo	Limestone coffin urn	Hypogeum (not id.)	/	Capito	/	Cesalo	?
87	IRT 754 (10)	Ceria	Limestone coffin urn	Hypogeum (not id.)	/	Ceria	/	/	?
88	IRT 754 (11)	C Copria	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	Copria	?
89	IRT 754 (12)	Deme[tri]a	Limestone coffin urn	Hypogeum (not id.)	/	/	Demetria	/	?
90	IRT 754 (13)	Dicar	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Dicar	?
91	IRT 754 (14)	Hedone	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	Hedone	?
92	IRT 754 (15)	Imilcho[3] / Ra[2]th	Limestone coffin urn	Hypogeum (not id.)	/	/	/	?	?
93	IRT 754 (16)	Momi	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Momus	?
94	IRT 754 (17)	Orfiti Min[	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Orfitus	?
95	IRT 754 (18)	Mythunibal	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Mythunibal	?
96	IRT 754 (19)	Peticii Pefus	Limestone coffin urn	Hypogeum (not id.)	/	Peticus	/	Pefus	?
97	IRT 754 (20)	Salvian(a)e / f(ilius)	Limestone coffin urn	Hypogeum (not id.)	/	Salviana	/	/	?
98	IRT 754 (21)	Septimia Marcilla	Limestone coffin urn	Hypogeum (not id.)	Septimia	Marcilla	/	/	Roman citizen
99	IRT 754 (22)	P(ubli) Severosi	Limestone coffin urn	Hypogeum (not id.)	/	Severosus	/	/	?
100	IRT 754 (23)	Zabda	Limestone coffin urn	Hypogeum (not id.)	/	/	/	Zabda	?
101	IRT 754 (24)	1]aicila / Bal	Limestone coffin urn	Hypogeum (not id.)	?	?	?	?	?
102	IRT 754 (25)	]obal[	Limestone coffin urn	Hypogeum (not id.)	?	?	?	?	?
103	IRT 754 (26)	]RSFBAC	Limestone coffin urn	Hypogeum (not id.)	?	?	?	?	?
104	IRT 666	M(arcus) Aqu(i)l(ius) Aquilianus Veteri f(ilius)	Limestone vase urn	Hypogeum (not id.)	Aquilia	Aquilianus Veterus	/	/	Roman citizen
105	IPT 19	'DRB 'L HR/T/NDB'	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	Aderbal	?

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
106	<i>IPT</i> 33	'MTB'LHŠRY	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Amathba</i>	?
107	<i>IPT</i> 34	'MT B[	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Amathba</i> (?)	?
108	<i>IPT</i> 35	]N/T'N/TY	Limestone coffin urn (Fu24)	Hypogeum (not id.)	?	?	?	?	?
109	<i>IPT</i> 36	'RŠT BT	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Arisut</i>	?
110	<i>IPT</i> 37	B'LŠLK BN B'LŠLK / B (?) K (?)	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Balsilechis</i>	?
111	<i>IPT</i> 38	BQY DD/R'Y	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Boccius Dida</i> (?)	?
112	<i>IPT</i> 39	BRYK [	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Birich</i>	?
113	<i>IPT</i> 40	BRK'T	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Baricha</i>	?
114	<i>IPT</i> 41	BRKT BT K(?) 'D/R'	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	?	/	<i>Baricha</i>	?
115	<i>IPT</i> 42	GRSKN DD/R	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Gisco</i>	?
116	<i>IPT</i> 43	G.RN/T	Limestone coffin urn (Fu24)	Hypogeum (not id.)	?	?	?	?	?
117	<i>IPT</i> 44	N'MTGD'	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Na'amatgidde</i>	?
118	<i>IPT</i> 45	HMLQRT	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Hamilcar</i>	?
119	<i>IPT</i> 46	YHNBLŠRY	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Yihannibal</i>	?
120	<i>IPT</i> 47	KLTT/NN	Limestone coffin urn (Fu24)	Hypogeum (not id.)	?	?	?	?	?
121	<i>IPT</i> 48	LWQ'MYL BN	Limestone coffin urn (Fu24)	Hypogeum (not id.)	<i>Aemilia</i>	/	/	/	Roman citizen
122	<i>IPT</i> 49	MYK' ŠT B'LŠLK / 'K'KS	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	/	?
123	<i>IPT</i> 50	MK	Limestone coffin urn (Fu24)	Hypogeum (not id.)	?	<i>Macer</i> (?)	/	/	?
124	<i>IPT</i> 51	M'RY H[	Limestone coffin urn (Fu24)	Hypogeum (not id.)	<i>Maria</i>	?	?	?	Roman citizen
125	<i>IPT</i> 52	M'RS' / ZT'	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	<i>Marsus</i>	/	/	?
126	<i>IPT</i> 53	N'MTPM' ŠT / HNB'L 'RKS	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Na'amtpame Annobal</i>	?
127	<i>IPT</i> 54	'T/N	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	/	?
128	<i>IPT</i> 55	'RŠT	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Arisut</i>	?
129	<i>IPT</i> 56	PLYQL' BT PRYM'	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	<i>Felicula Primus</i>	/	/	?
130	<i>IPT</i> 57	P'WLT' / M'L/MR	Limestone coffin urn (Fu24)	Hypogeum (not id.)	?	?	?	?	?
131	<i>IPT</i> 58	ŠPN/T	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Sapho</i>	?
132	<i>IPT</i> 59	Q'N/TKM	Limestone coffin urn (Fu24)	Hypogeum (not id.)	?	?	?	?	?
133	<i>IPT</i> 60	RGYN' 'GL	Limestone coffin urn	Hypogeum (not id.)	/	<i>Reginus</i>	/	/	?
134	<i>IPT</i> 61	M'RG'RYT['/]	Limestone coffin urn	Hypogeum (not id.)	/	<i>Margarita</i>	/	/	?

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
135	<i>IPT</i> 63	N'MTGD' ŠT MŠDYGN/T'	Limestone coffin urn	Hypogeum (Tb8)	?	?	?	<i>Na'amatgidde</i>	?
136	<i>IPT</i> 64	HKSN/TY ŠP'W'	Limestone coffin urn	Hypogeum (Tb8)	?	?	?	?	?
137	<i>IPT</i> 65	KMN/T/N/T' ŠT KBB	Limestone coffin urn	Hypogeum (Tb8)	?	?	?	?	?
138	<i>IPT</i> 66	T/N'PM' PYL	Limestone coffin urn	Hypogeum (Tb8)	?	?	?	<i>Pyelon</i>	?
139	<i>IPT</i> 67	N'MTGD' ŠT MŠDYGN/T'	Limestone coffin urn	Hypogeum (Tb8)	?	?	?	<i>Na'amatgidde</i>	?
140	<i>IPT</i> 69	NPT'N	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Nyptanis</i>	?
141	<i>IPT</i> 70	N/TKSPN/T	Limestone coffin urn (Fu24)	Hypogeum (not id.)	?	?	?	?	?
142	<i>IPT</i> 71	M'RS'	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	<i>Marsus</i>	/	/	?
143	<i>IPT</i> 72	'RST	Limestone coffin urn (Fu24)	Hypogeum (not id.)	/	/	/	<i>Arisut</i>	?
144	Cifani <i>et al.</i> 2008, 2292	[3]nis	Limestone vase urn	Hypogeum (not id.)	?	?	?	?	?
145	Di Vita-Evrard <i>et al.</i> 1996, 102, n. 1	PWBLY PL'WY PRQL YT/NN/T	Limestone coffin urn	Hypogeum (Tb3)	<i>Flavia</i>	<i>Proculus</i>	/	<i>laton</i>	Roman citizen
146	Di Vita-Evrard <i>et al.</i> 1996, 102-103, n. 2	YHST YT/NN/T	Limestone coffin urn	Hypogeum (Tb3)	/	<i>Iustus</i>	/	<i>laton</i>	?
147	Di Vita-Evrard <i>et al.</i> 1996, 103, n. 3 <i>AE</i> 1996, 1687	Flavia Amoth/mic Nysfur	Limestone coffin urn	Hypogeum (Tb3)	<i>Flavia</i>	/	/	<i>Amothmic Nysfur</i>	Roman citizen
148	Di Vita-Evrard <i>et al.</i> 1996, 103-104, n. 5 <i>AE</i> 1996, 1688	C. Flavi Proculi	Limestone vase urn	Hypogeum (Tb3)	<i>Flavia</i>	<i>Proculus</i>	/	/	Roman citizen
149	Di Vita-Evrard <i>et al.</i> 1996, 104, n. 6 <i>AE</i> 1996, 1689	Namgydde	Limestone vase urn	Hypogeum (Tb3)	/	/	/	<i>Namgyddus</i>	?
150	Di Vita-Evrard <i>et al.</i> 1996, 104, n. 7 <i>AE</i> 1996, 1690	C(ai) F(lavi) Procu<li=IL> Bydba/lis f(ili)	Limestone vase urn	Hypogeum (Tb3)	<i>Flavia</i>	<i>Proculus</i>	/	<i>Bydbal</i>	Roman citizen
151	Di Vita-Evrard <i>et al.</i> 1996, 105, n. 8 <i>AE</i> 1996, 1691	Procul<li=E>	Limestone vase urn	Hypogeum (Tb3)	/	<i>Proculus</i>	/	/	?
152	Di Vita-Evrard <i>et al.</i> 1996, 105, n. 9 <i>AE</i> 1996, 1692	Candide	Limestone vase urn	Hypogeum (Tb3)	/	<i>Candidus</i>	/	/	?
153	Di Vita-Evrard <i>et al.</i> 1996, 105, n. 10 <i>AE</i> 1996, 1693	M(arci) F(lavi) Iusti	Limestone vase urn	Hypogeum (Tb3)	<i>Flavia</i>	<i>Iustus</i>	/	/	Roman citizen
154	Di Vita-Evrard <i>et al.</i> 1996, 105, n. 11 <i>AE</i> 1996, 1694	Flaminiae / Gaetulae	Marble vase urn	Hypogeum (Tb3)	<i>Flaminia</i>	<i>Gaetula</i>	/	/	Roman citizen
155	Di Vita-Evrard, Fontana, Munzi 1997, 121-122, n. 1 <i>AE</i> 1997, 1580	M(arci) Laurenti / Silani p(atris)	Limestone coffin urn	Hypogeum (Nc1b)	<i>Laurentia</i>	<i>Silanus</i>	/	/	Roman citizen
156	Di Vita-Evrard, Fontana, Munzi 1997, 122-123, n. 3 <i>AE</i> 1997, 1581	Maso	Limestone coffin urn	Hypogeum (Nc1b)	/	/	/	<i>Masof</i>	?
157	Di Vita-Evrard, Fontana, Munzi 1997, 124, n. 5 <i>AE</i> 1997, 1582	Silane	Limestone coffin urn	Hypogeum (Nc1b)	/	<i>Silanus</i>	/	/	?
158	Di Vita-Evrard, Fontana, Munzi 1997, 124-125, n. 7 <i>AE</i> 1997, 1582	Ti(berius) Clau[di]/us Orf[i]/tus	Limestone coffin urn	Hypogeum (Nc1b)	<i>Claudia</i>	<i>Orfitus</i>	/	/	Roman citizen
159	Unpublished	M(arcus) Vibius C(larissimus) V(ir) Crescens	Marble vase urn	Hypogeum (Nc1a)	<i>Vibia</i>	<i>Crescens</i>	/	/	Roman citizen
160	Unpublished	M(arcus) P(ompeius) B(?)	Limestone vase urn	Hypogeum (Nc1a)	<i>Pompeia</i>	?	/	?	Roman citizen
161	Unpublished	M(arcus) Crescens Bibie	Limestone vase urn	Hypogeum (Nc1a)	/	<i>Crescens</i>	/	<i>Bibie</i>	Roman citizen
162	Unpublished	Pompeia Galla	Alabaster Vase urn	Hypogeum (Nc1a)	<i>Pompeia</i>	<i>Galla</i>	/	/	Roman citizen
163	Unpublished	I(ulius) Mar[c]ius Maurus	Limestone vase urn	Hypogeum (Nc1a)	<i>Marcia</i>	<i>Maurus</i>	/	/	Roman citizen
164	Unpublished	M(arcus) V(ibius) Quintil(i)ianus vixit annos LXX m(enses) I m(l)	Marble vase urn	Hypogeum (Nc1h)	<i>Vibia</i>	<i>Quintillianus</i>	/	/	Roman citizen
165	Unpublished	Pudens Byntytrane	Limestone vase urn	Hypogeum (Nc1h)	/	<i>Pudens</i>	/	<i>Byntytrane</i>	?
166	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc1h)	?	?	?	?	?
167	Unpublished	- Untranslated text (Greek) -	Limestone coffin urn	Hypogeum (Nc1h)	?	?	?	?	?

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
168	Unpublished	Capito	Limestone vase urn	Hypogeum (Tb14)	/	Capito	/	/	?
169	Unpublished	- Untranslated text (Latin) -	Limestone vase urn	Hypogeum (Tb14)	?	?	?	?	?
170	Unpublished	ASCLAIOL	Limestone vase urn	Hypogeum (Tb14)	?	?	?	?	?
171	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
172	Unpublished	L(uci) Pompei Rufi (?)	Limestone coffin urn	Hypogeum (Tb1)	Pompeia	Rufus	?	?	Roman citizen
173	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
174	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
175	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
176	Unpublished	Zena	Limestone coffin urn	Hypogeum (Tb1)	/	/	/	Zena	?
177	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
178	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
179	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
180	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
181	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
182	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
183	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
184	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
185	Unpublished	Prob(a)te	Limestone coffin urn	Hypogeum (Tb1)	/	Probatas	/	/	?
186	Unpublished	Aristo(s)	Limestone coffin urn	Hypogeum (Tb1)	/	/	Aristos	/	?
187	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
188	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
189	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
190	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
191	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
192	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
193	Unpublished	] Pomp[	Limestone coffin urn	Hypogeum (Tb1)	Pompeia	?	?	?	Roman citizen
194	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
195	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
196	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
197	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
198	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
199	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
200	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
201	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
202	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
203	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
204	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
205	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
206	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
207	Unpublished	Namgyde	Limestone coffin urn	Hypogeum (Tb1)	/	/	/	Namgyddus	?
208	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
209	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
210	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
211	Unpublished	Marina	Limestone coffin urn	Hypogeum (Tb1)	/	Marina	/	/	?
212	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
213	Unpublished	] Saturnine [	Limestone coffin urn	Hypogeum (Tb1)	/	Saturninus	/	/	?
214	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
215	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
216	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Tb1)	?	?	?	?	?
217	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc11a)	?	?	?	?	?
218	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
219	Unpublished	Cerialis	Limestone coffin urn	Hypogeum (Nc3b)	/	Cerialis	/	/	?
220	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
221	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
222	Unpublished	Camil(l)e	Limestone coffin urn	Hypogeum (Nc3b)	/	Camillus	/	/	?
223	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
224	Unpublished	Iuli(us) Sacer	Limestone coffin urn	Hypogeum (Nc3b)	Iulia	Sacer	?	?	Roman citizen
225	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
226	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
227	Unpublished	Silvani / [	Limestone coffin urn	Hypogeum (Nc3b)	/	Silvanus	/	/	?
228	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
229	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
230	Unpublished	Micho	Limestone coffin urn	Hypogeum (Nc3b)	/	/	/	Micho	?
231	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
232	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc3b)	?	?	?	?	?
233	Unpublished	Namgyde	Limestone coffin urn	Hypogeum (Nc1o)	/	/	/	Namgyddus	?
234	Unpublished	Severi/ne	Limestone coffin urn	Hypogeum (Nc1o)	/	Severinus	/	/	?
235	Unpublished	An(n)obal	Limestone coffin urn	Hypogeum (Nc1i)	/	/	/	Annobal	?
236	Unpublished	An(n)obal / Suchub	Limestone coffin urn	Hypogeum (Nc1i)	/	/	/	Annobal Suchub	?
237	Unpublished	Amicus	Limestone vase urn	Hypogeum (Nc1i)	/	Amicus	/	/	?
238	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc1l)	?	?	?	?	?
239	Unpublished	Saturn(inus)	Limestone coffin urn	Hypogeum (Nc1l)	/	Saturninus	/	/	/
240	Unpublished	Iulia s	Limestone coffin urn	Hypogeum (Nc1l)	Iulia	?	?	?	Roman citizen
241	Unpublished	Nafa/me	Limestone coffin urn	Hypogeum (Nc1l)	/	/	/	Nafame	?
242	Unpublished	Boc/ci	Limestone coffin urn	Hypogeum (Nc1l)	/	/	/	Boccius	?
243	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc1k)	?	?	?	?	?

	REFERENCES	TEXT	SUPPORT	STRUCTURE	NOMINA	COGNOMINA	GREEK NAMES	LIBYO-PHOENICIAN NAMES	DECEASED/S STATUS
244	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc1k)	?	?	?	?	?
245	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc1k)	?	?	?	?	?
246	Unpublished	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc1k)	?	?	?	?	?
247	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc1k)	?	?	?	?	?
248	Unpublished	Marce	Limestone coffin urn	Hypogeum (Nc1k)	Marcia (?)	Marcio (?)	/	/	?
249	Unpublished	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc1k)	?	?	?	?	?
250	ABD AL-RAHMAN <i>et al.</i> 1996, 136-137	Secundio / act(ori) / Q(uinti) Servili Candidi / vixit annis LXVI m(ensibus) V d(iebus) XII s(emis)	Limestone vase urn	Hypogeum (Tb2)	Servilia	Secundus Candidus	/	/	Slave
251	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
252	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
253	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
254	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
255	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
256	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
257	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
258	MUSO <i>et al.</i> 1996, 261	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7a)	?	?	?	?	?
259	MUSO <i>et al.</i> 1998, 200-201	MTN'LM	Limestone coffin urn	Hypogeum (Nc7b)	/	/	/	Mythulinim	?
260	MUSO <i>et al.</i> 1998, 200-201	ŠPT	Limestone coffin urn	Hypogeum (Nc7b)	/	/	/	Safot	?
261	MUSO <i>et al.</i> 1998, 200-201	YWRT	Limestone coffin urn	Hypogeum (Nc7b)	/	/	/	Iurath	?
262	MUSO <i>et al.</i> 1998, 200-201	G'YY	Limestone coffin urn	Hypogeum (Nc7b)	/	/	/	Gaia	?
263	MUSO <i>et al.</i> 1998, 200-201	DYDR'	Limestone coffin urn	Hypogeum (Nc7b)	/	/	Diodorus	/	?
264	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
265	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
266	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Neopunic) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
267	MUSO <i>et al.</i> 1998, 200-201	Diodore	Limestone coffin urn	Hypogeum (Nc7b)	/	/	Diodorus	/	?
268	MUSO <i>et al.</i> 1998, 200-201	Primil(l)a	Limestone coffin urn	Hypogeum (Nc7b)	/	Primilla	/	/	/
269	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
270	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
271	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
272	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
273	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
274	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?
275	MUSO <i>et al.</i> 1998, 200-201	- Untranslated text (Latin) -	Limestone coffin urn	Hypogeum (Nc7b)	?	?	?	?	?

APPENDIX II

VILLAE AND FARMS

SITE	BUILT AREA	STRUCTURAL FEATURES	PRODUCTIVE/PROCESSING ELEMENTS	DECORATIVE ELEMENTS	CHRONOLOGY
VI1	1,430 m ² (35x40 m)	Portico facing the sea Peristyle Thermal area Cisterns	/	Mosaics Marble slabs Painted plaster	2 nd - 3 rd cent. AD
VI2	792 m ²	Portico facing the sea <i>Atrium</i> Thermal area	/	Mosaics Painted plaster	2 nd - 4 th cent. AD
VI3	1,500 m ² (30x50 m)	Peristyle Criptoporticus Thermal area Cistern	/	Mosaics Marble slabs Painted plaster	1 st - 4 th cent. AD
VI4	/	Well made by clay rings	/	?	2 nd - 3 rd cent. AD
VI5	484 m ² (22x22 m)	Peristyle Cistern	/	Mosaics Marble slabs Painted plaster Stucco fragments	2 nd - 3 rd cent. AD
VI6	5,000 m ² (50x100 m)	Portico facing the sea Peristyle Thermal area Cistern	/	Mosaics Marble slabs Painted plaster	2 nd - 4 th cent. AD
VI7	7,200 m ² (90x80 m)	<i>Opus africanum</i> walls	/	Mosaics Marble slabs Painted plaster	2 nd cent. BC - 2 nd cent. AD
VI8	5,000 m ² (50x100 m)	?	Lava quern (fragments)	Mosaics Marble slabs	1 st - 5 th cent. AD
VI9	7,800 m ² (130x60 m)	<i>Opus africanum</i> walls	/	Mosaics	1 st - 2 nd cent. AD
VI10	7,000 m ² (140x50 m)	<i>Opus africanum</i> walls Underground cistern	Lava quern (fragments)	Marble slabs	1 st - 2 nd cent. AD
VI11	420 m ² (26,5x16 m)	<i>Opus africanum</i> walls	/	Mosaics Marble slabs Painted plaster	1 st - 3 rd cent. AD
VI12	1,500 m ² (60x25 m)	<i>Opus africanum</i> walls Peristyle	/	Marble slabs	1 st - 3 rd cent. AD
VI13	2,400 m ² (30x80 m)	<i>Opus africanum</i> walls Limestone threshold Underground cistern	Lava quern (fragments)	Marble slabs	1 st cent. BC - 5 th cent. AD
VI14	/	<i>Opus africanum</i> walls	/	Marble slabs	1 st - 5 th cent. AD
VI15	1,600 m ² (40x40 m)	<i>Opus africanum</i> walls Underground cistern/s	/	Painted plaster	2 nd cent. BC - 5 th cent. AD
VI16	/	<i>Opus africanum</i> walls	/	Marble slabs Marble column shaft	1 st - 4 th cent. AD
VI17	/	<i>Opus africanum</i> walls	/	Marble slabs	1 st - 5 th cent. AD
VI18	/	<i>Opus africanum</i> walls Underground cistern	/	Mosaics Marble slabs	1 st cent. BC - 5 th cent. AD
VI19	/	<i>Opus africanum</i> walls Underground cistern	<i>Opus signinum</i> tank	Marble slabs	2 nd cent. BC - 5 th cent. AD
VI20	/	<i>Opus africanum</i> walls	/	Marble slabs	2 nd cent. BC - 5 th cent. AD
VI21	1,750 m ² (70x25 m)	<i>Opus africanum</i> walls Underground cistern	/	Marble slabs	1 st cent. BC - 5 th cent. AD
VI22	6,400 m ² (80x80 m)	<i>Opus africanum</i> walls	/	Mosaics Marble slabs Painted plaster Glass fragments (windows)	2 nd cent. BC - 4 th cent. AD
VI23	/	<i>Opus africanum</i> walls	/	Marble slabs	3 rd cent. BC - 3 rd cent. AD
VI24	/	Underground cistern	/	Marble slabs	3 rd cent. BC - 2 nd cent. AD
VI25	2,400 m ² (40x60 m)	<i>Opus africanum</i> walls Thermal area	/	Mosaics Marble slabs Painted plaster	2 nd cent. BC - 5 th cent. AD
VI26	/	?	/	Mosaics Marble slabs	2 nd cent. BC - 3 rd cent. AD
VI27	/	<i>Opus africanum</i> walls	/	Marble slabs Limestone column drum	2 nd cent. BC - 4 th cent. AD
VI28	/	<i>Opus africanum</i> walls	/	Limestone column drums Limestone column bases	1 st - 4 th cent. AD
VI29	1,350 m ² (34x40 m)	<i>Opus africanum</i> walls	/	Marble slabs Painted plaster	3 rd cent. BC - 3 rd cent. AD
VI30	1,100 m ² (30x36 m)	<i>Opus africanum</i> walls <i>Opus signinum</i> floors	Lava quern (fragment)	Painted plaster	3 rd cent. BC - 4 th cent. AD
VI31	400 m ²	<i>Opus africanum</i> walls Underground cistern	Lava quern (fragment)	Mosaics	3 rd cent. BC - 6 th cent. AD
VI32	600 m ² (30x30 m)	<i>Opus africanum</i> walls Thermal area	Lava quern (fragment)	Mosaics Marble slabs	3 rd cent. BC - 5 th cent. AD
VI33	2,400 m ² (46x52 m)	Thermal area	/	Mosaics Marble slabs	1 st - 3 rd cent. AD

SITE	BUILT AREA	STRUCTURAL FEATURES	PRODUCTIVE/PROCESSING ELEMENTS	DECORATIVE ELEMENTS	CHRONOLOGY
V134	800 m ² (20x40 m)	<i>Opus africanum</i> walls Thermal area Underground cistern	/	Mosaics Painted plaster	1 st - 4 th cent. AD
V135	/	Rooms facing the sea	/	?	1 st - 2 nd cent. AD
V136	/	<i>Opus africanum</i> walls Limestone threshold	<i>Torcular</i> (orthostat, counterweight) Lava quern (fragment)	Marble slabs	2 nd cent. BC - 5 th cent. AD
V137	2,000 m ² (45x45 m)	<i>Opus africanum</i> walls	<i>Torcular</i> (orthostat, counterweight) <i>Opus signinum</i> tanks Millstone (<i>mortarium</i>)	Marble slabs	2 nd cent. BC - 4 th cent. AD
V138	1,500 m ² (34x45 m)	<i>Opus africanum</i> walls <i>Opus quadratum</i> (<i>basis villae</i>) Underground cistern <i>Opus quadratum</i> walls	<i>Torcular</i> (counterweight) <i>Opus signinum</i> tank Lava quern (fragment)	Marble slabs Painted plaster	1 st cent. BC - 3 rd cent. AD
V139	/	/	2 <i>torcularia</i> (orthostats, counterweight) Limestone tank Lava quern (fragment)	Marble slabs Marble column shaft	2 nd cent. BC - 4 th cent. AD
V140	1,200 m ² (30x40 m)	<i>Opus africanum</i> walls Traces of a courtyard	2 <i>torcularia</i> (orthostats, counterweight) Millstone (<i>catillus</i>) Lava quern (fragment)	Mosaics (B/W) Marble column shaft Limestone capital	2 nd cent. BC - 5 th cent. AD
V141	/	<i>Opus africanum</i> walls	<i>Torcular</i> (orthostat, counterweight)	Marble slabs	2 nd cent. BC - 2 nd cent. AD
V142	/	/	<i>Torcular</i> (orthostats, counterweight) <i>Opus signinum</i> tank Lava quern (fragment)	Marble slabs Painted plaster Limestone column base Limestone column drum	1 st cent. BC - 5 th cent. AD
V143	/	<i>Opus africanum</i> walls Limestone threshold	<i>Torcular</i> (orthostats base, counterweight) Limestone tank	Marble slabs	1 st cent. BC - 5 th cent. AD
V144	/	<i>Opus africanum</i> walls	<i>Torcular</i> (orthostats base, counterweight) Lava quern (fragments)	Mosaics Marble slabs	2 nd cent. BC - 4 th cent. AD
V145	450 m ² (15x30) 1,050 m ² (35x30 m)	<i>Opus africanum</i> walls Underground cistern Two separate structures	<i>Torcular</i> (orthostat, press-bed) Lava quern (fragments)	Marble slabs Limestone column drum	2 nd cent. BC - 6 th cent. AD
V146	/	<i>Opus africanum</i> walls Cistern	3 <i>torcularia</i> (orthostats base, press-bed, counterweights) <i>Opus signinum</i> tanks Millstone (<i>mortarium</i>)	Marble slabs	2 nd cent. BC - 4 th cent. AD
V147	/	<i>Opus africanum</i> walls Atrium Thermal area	<i>Torcular</i> (?) Millstone (<i>mortarium</i>)	Marble decorations Mosaics (polychrome)	1 st cent. BC - 3 rd cent. AD
V148	1,200 m ² (30x40 m)	<i>Opus africanum</i> walls Cisterns (barrel vaulted)	2 <i>torcularia</i> (orthostats, counterweights) Millstone (<i>mortarium</i>) <i>Opus signinum</i> tank	Mosaics Marble slabs	1 st cent. BC - 4 th cent. AD
V149	1,400 m ² (35x40 m)	<i>Opus africanum</i> walls	2 <i>torcularia</i> (orthostats) Limestone tank Lava quern (fragments)	Marble slabs	2 nd cent. BC - 4 th cent. AD
V150	3,200 m ² (80x40 m)	<i>Opus africanum</i> walls <i>Opus quadratum</i> walls Thermal area Large colonnaded courtyard	2 <i>torcularia</i> (orthostats, press-beds, counterweights) <i>Opus signinum</i> tank	Mosaics Marble slabs Painted plaster Limestone column drums	2 nd cent. BC - 5 th cent. AD
V151	1,200 m ² (35x35 m)	<i>Opus africanum</i> walls <i>Opus quadratum</i> (<i>basis villae</i>)	2 <i>torcularia</i> (orthostats bases, press-bed)	Marble slabs Painted plaster	2 nd cent. BC - 5 th cent. AD
V152	/	Limestone threshold	<i>Torcular</i> (counterweight) <i>Opus signinum</i> tank Limestone tank	Marble slabs Limestone column drum Limestone column base	2 nd cent. BC - 4 th cent. AD
V153	3,600 m ² (90x40 m)	<i>Opus africanum</i> walls <i>Opus quadratum</i> (<i>basis villae</i>) <i>Opus signinum</i> floor	2 <i>torcularia</i> (orthostats, press-beds, counterweight) <i>Opus signinum</i> tank	Marble slabs	1 st cent. BC - 6 th cent. AD
V154	1,000 m ² (30x35 m)	<i>Opus africanum</i> walls <i>Opus quadratum</i> (<i>basis villae</i>) Squared courtyard	2 <i>torcularia</i> (orthostats, orthostats base, counterweights)	Mosaics Marble slabs Painted plaster	1 st cent. BC - 5 th cent. AD
V155	800 m ² (30x25 m)	<i>Opus africanum</i> walls <i>Opus quadratum</i> walls Large rectangular room	<i>Torcular</i> (orthostats base, orthostat, counterweight)	Marble slabs	3 rd cent. BC - 5 th cent. AD
V156	/	<i>Opus africanum</i> walls Underground cistern	<i>Torcular</i> (orthostats) <i>Opus caementicium</i> tank	Mosaics (B/W) Marble slabs	2 nd cent. BC - 5 th cent. AD
V157	2,000 m ² (55x35 m)	<i>Opus africanum</i> walls	<i>Torcular</i> (orthostats, counterweight)	Marble slabs Painted plaster	2 nd cent. BC - 4 th cent. AD
V158	/	<i>Opus africanum</i> walls Underground cistern	2 <i>torcularia</i> (orthostat, press-bed, counterweights) <i>Opus signinum</i> tank Millstone (<i>orbis</i>)	Mosaics (polychrome) Painted plaster	2 nd cent. BC - 6 th cent. AD
V159	/	<i>Opus africanum</i> walls Thermal area	2 <i>torcularia</i> (orthostats) Millstone (<i>mortarium</i>)	Mosaics (polychrome) Painted plaster	1 st - 3 rd cent. AD
V160	1,700 m ² (40x43 m)	<i>Opus africanum</i> walls Thermal area Several small rooms	3 <i>torcularia</i> (orthostats) <i>Opus signinum</i> tank Lava querns (fragments)	Mosaics Marble slabs Painted plaster Stucco fragments	1 st - 4 th cent. AD
V161	/	<i>Opus africanum</i> walls Arched doorway Thermal area	<i>Torcular</i> (counterweight)	Mosaics Marble slabs Painted plaster	3 rd cent. BC - 5 th cent. AD
V162	/	<i>Opus africanum</i> walls Underground cistern	<i>Torcular</i> (orthostat) <i>Opus signinum</i> tank Lava quern (fragment)	Marble slabs	1 st - 5 th cent. AD
V163	1,200 m ² (30x40 m)	<i>Opus africanum</i> walls	2 <i>torcularia</i> (counterweights)	Mosaics (B/W) Marble slabs Painted plaster Limestone column drums	3 rd cent. BC - 5 th cent. AD
V164	/	<i>Opus africanum</i> walls Underground cistern Limestone threshold	<i>Torcular</i> (counterweight) Limestone tank Lava quern (fragment)	Marble slabs	2 nd cent. BC - 4 th cent. AD

SITE	BUILT AREA	STRUCTURAL FEATURES	PRODUCTIVE/PROCESSING ELEMENTS	DECORATIVE ELEMENTS	CHRONOLOGY
Vl65	1,450 m ² (38x38 m)	<i>Opus africanum</i> walls <i>Opus signinum</i> floors	<i>Torcular</i> (orthostat, counterweight) Lava quern (fragment)	Marble slabs Painted plaster	1 st cent. BC - 4 th cent. AD
Fa1	/	<i>Opus africanum</i> walls Underground cistern	<i>Torcular</i> (counterweight) Limestone tank	/	1 st - 2 nd cent. AD
Fa2	/	<i>Opus africanum</i> walls	<i>Torcular</i> (orthostat, orthostats base, counterweight)	/	1 st cent. BC - 2 nd cent. AD
Fa3	150 m ² (10x15 m)	<i>Opus africanum</i> walls	<i>Torcular</i> (orthostats)	/	1 st cent. BC - 5 th cent. AD
Fa4	1,750 m ² (25x70 m)	<i>Opus africanum</i> walls Underground cistern	<i>Torcular</i> (orthostats, press-bed, counterweight) <i>Opus signinum</i> tank Millstone (<i>mortarium</i>)	/	2 nd cent. BC - 5 th cent. AD
Fa5	/	<i>Opus africanum</i> walls	<i>Torcular</i> (counterweight) <i>Opus signinum</i> tank	/	2 nd cent. BC - 3 rd cent. AD
Fa6	1,200 m ² (30x40 m)	<i>Opus africanum</i> walls Underground cistern	<i>Torcular</i> (orthostats) <i>Opus signinum</i> tank Millstone (<i>mortarium</i>)	/	2 nd cent. BC - 5 th cent. AD
Fa7	1,600 m ² (55x30 m)	<i>Opus africanum</i> walls Underground cistern	3 <i>torcularia</i> (orthostats, counterweight) Lava quern (fragments)	/	2 nd cent. BC - 4 th cent. AD
Fa8	850 m ² (32x26 m)	<i>Opus africanum</i> walls Courtyard Several small rooms	<i>Torcular</i> (orthostat, counterweight) <i>Opus signinum</i> tanks	/	2 nd cent. BC - 3 rd cent. AD
Fa9	1,800 m ² (40x45 m)	<i>Opus africanum</i> walls	<i>Torcular</i> (orthostats, counterweight) Limestone tank	/	2 nd cent. BC - 4 th cent. AD
Fa10	/	<i>Opus africanum</i> walls Underground cistern	2 <i>torcularia</i> (counterweights) <i>Opus signinum</i> tanks	/	2 nd cent. BC - 5 th cent. AD
Fa11	/	<i>Opus africanum</i> walls Underground cistern	<i>Torcular</i> (counterweight)	/	2 nd cent. BC - 4 th cent. AD
Fa12	150 m ² (15x10 m)	<i>Opus africanum</i> walls <i>Opus quadratum</i> walls 2 limestone thresholds	<i>Torcular</i> (orthostats base)	/	2 nd cent. BC - 6 th cent. AD
Fa13	750 m ² (30x25 m)	<i>Opus africanum</i> walls Underground cistern	<i>Torcular</i> (orthostat, counterweight) Millstones (<i>mortarium</i> , <i>mola</i>)	/	1 st cent. BC - 4 th cent. AD
Fa14	/	<i>Opus africanum</i> walls	2 <i>torcularia</i> (counterweights)	/	3 rd cent. BC - 2 nd cent. AD
Fa15	900 m ² (30x30 m)	<i>Opus africanum</i> walls Limestone threshold	<i>Torcular</i> (orthostat, press-bed, counterweight) <i>Opus signinum</i> tanks	/	2 nd cent. BC - 4 th cent. AD
Fa16	/	<i>Opus africanum</i> walls	2 <i>torcularia</i> (orthostats) <i>Opus signinum</i> tanks Lava querns (fragments)	/	2 nd cent. BC - 3 rd cent. AD
Fa17	/	Traces of walls Underground cistern	<i>Torcular</i> (orthostat)	/	2 nd cent. BC - 4 th cent. AD
Fa18	/	<i>Opus africanum</i> walls Underground barrel vault cistern <i>Opus signinum</i> floors	3 <i>torcularia</i> (orthostats, press-bed) Limestone tank	/	3 rd cent. BC - 6 th cent. AD
Fa19	/	<i>Opus africanum</i> walls	Millstone (<i>mortarium</i>)	/	1 st cent. BC - 5 th cent. AD
Fa20	/	Traces of walls 2 underground cisterns	<i>Opus signinum</i> tanks Lava querns (fragments)	/	2 nd cent. BC - 2 nd cent. AD
Fa21	400 m ² (25x16 m)	<i>Opus africanum</i> walls	Lava querns (fragments)	/	2 nd - 3 rd cent. AD
Fa22	/	Traces of walls 2 underground cisterns	/	/	1 st cent. BC - 3 rd cent. AD
Fa23	/	Traces of walls Underground cistern	Lava querns (fragment)	/	2 nd cent. BC - 2 nd cent. AD
Fa24	/	Traces of walls Underground cistern	Lava querns (fragment)	/	2 nd cent. BC - 2 nd cent. AD
Fa25	/	<i>Opus africanum</i> walls <i>Opus signinum</i> floors	/	/	2 nd cent. BC - 3 rd cent. AD
Fa26	/	Traces of walls Underground cistern	<i>Opus signinum</i> tank	/	1 st cent. BC - 3 rd cent. AD
Fa27	/	<i>Opus africanum</i> walls Underground cistern	Lava querns (fragments)	/	1 st cent. BC - 4 th cent. AD
Fa28	/	<i>Opus africanum</i> walls	/	/	1 st - 4 th cent. AD
Fa29	/	<i>Opus africanum</i> walls	/	/	2 nd - 4 th cent. AD
Fa30	75 m ² (12,5x6 m)	<i>Opus quadratum</i> walls Underground cistern	Millstone	/	2 nd - 4 th cent. AD
Fa31	/	<i>Opus africanum</i> walls	Lava quern (fragments)	/	1 st - 3 rd cent. AD
Fa32	/	Traces of walls Underground cistern	/	/	3 rd - 1 st cent. BC
Fa33	500 m ² (50x10 m)	<i>Opus africanum</i> walls	/	/	1 st - 2 nd cent. AD
Fa34	/	<i>Opus africanum</i> walls	Lava quern (fragments)	/	3 rd cent. BC - 1 st cent. AD
Fa35	/	<i>Opus africanum</i> walls Underground cistern	/	/	1 st cent. BC - 3 rd cent. AD
Fa36	/	<i>Opus africanum</i> walls	/	/	1 st cent. BC - 2 nd cent. AD
Fa37	195 m ² (13x15 m)	<i>Opus africanum</i> walls Cistern	/	/	1 st - 2 nd cent. AD
Fa38	/	<i>Opus africanum</i> walls Underground cistern <i>Opus signinum</i> floors	/	/	1 st - 3 rd cent. AD
Fa39	/	Traces of walls	/	/	1 st cent. BC - 5 th cent. AD
Fa40	/	<i>Opus africanum</i> walls	Lava quern (fragments)	/	1 st - 5 th cent. AD
Fa41	/	<i>Opus africanum</i> walls	/	/	1 st - 2 nd cent. AD
Fa42	/	Traces of walls	<i>Opus signinum</i> tank	/	2 nd cent. BC - 6 th cent. AD
Fa43	/	Traces of walls Underground cistern	/	/	1 st cent. BC - 5 th cent. AD
Fa44	40 m ² (7x5 m)	<i>Opus africanum</i> walls	/	/	1 st cent. BC - 1 st cent. AD

SITE	BUILT AREA	STRUCTURAL FEATURES	PRODUCTIVE/PROCESSING ELEMENTS	DECORATIVE ELEMENTS	CHRONOLOGY
Fa45	/	Traces of walls	Lava quern (fragments)	/	2 nd cent. BC - 2 nd cent. AD
Fa46	/	Traces of walls	Lava quern (fragments)	/	2 nd - 4 th cent. AD
Fa47	/	Traces of walls	Lava quern (fragments)	/	1 st - 2 nd cent. AD
Fa48	/	<i>Opus africanum</i> walls <i>Opus signinum</i> floors Limestone threshold	Lava quern (fragments)	/	2 nd cent. BC - 5 th cent. AD
Fa49	/	<i>Opus africanum</i> walls <i>Opus signinum</i> floors	/	/	1 st - 5 th cent. AD
Fa50	/	<i>Opus africanum</i> walls 4 underground cisterns	<i>Opus signinum</i> tanks Lava querns (fragments)	/	1 st - 3 rd cent. AD
Fa51	/	<i>Opus africanum</i> walls	<i>Opus signinum</i> tanks Lava querns (fragments)	/	1 st - 3 rd cent. AD
Fa52	200 m ² (?)	Traces of walls	/	/	3 rd cent. BC - 3 rd cent. AD
St1	25,000 m ² (130x205 m)	<i>Opus africanum</i> walls <i>Opus signinum</i> floors	<i>Opus signinum</i> tanks		4 th cent. BC - 3 rd cent. AD

APPENDIX III

FORTIFIED FARMS/*GSUR*

GASR	PREVIOUS SITE	POSITION	BUILT AREA	STRUCTURAL FEATURES	REUSED ELEMENTS	CHRONOLOGY
Gs1	Fa7	Hilltop	193 m ² (13,6x14,2 m)	Limestone ashlar blocks walls Internal partition	<i>Torcular</i> (orthostats) Ashlar blocks Limestone threshold	4 th - 5 th cent. AD
Gs2	Fa9	Hilltop	56 m ² (7x8 m)	Limestone ashlar blocks walls	Ashlar blocks	4 th cent. AD
Gs3	Fa13	Hilltop	144 m ² (12x12 m)	Limestone ashlar blocks walls	Ashlar blocks	4 th - 5 th cent. AD
Gs4	Fa17	Hilltop	289 m ² (17x17 m) Ext: 2,000 m ² (40x50 m)	Limestone ashlar blocks Internal partition walls External ditch	<i>Torcular</i> (orthostat) Ashlar blocks	4 th - 6 th cent. AD
Gs5	Fa27	Hilltop	255 m ² (15x17 m)	Limestone ashlar blocks Underground cistern Well in central position <i>Crux patens</i> on a limestone bracket	Ashlar blocks	4 th - 6 th cent. AD
Gs6	Fa28	Hilltop	225 m ² (15x15 m)	Limestone ashlar blocks	Ashlar blocks	4 th - 5 th cent. AD
Gs7	Fa29	Hilltop	68 m ² (8x8,5 m)	Limestone ashlar blocks	Ashlar blocks	4 th - 5 th cent. AD
Gs8	Fa30	Hilltop	75 m ² (12,5x6 m)	Limestone ashlar blocks Underground cistern	Ashlar blocks Millstone Funerary inscriptions (Fu11) Limestone architectural elements	4 th - 6 th cent. AD
Gs9	Fa46	Hilltop	225 m ² (15x15 m) Ext: 1,600 m ² (40x40 m)	Limestone ashlar blocks External ditch	Ashlar blocks	4 th - 5 th cent. AD
Gs10	/	Hilltop	289 m ² (17x17 m) Ext: 1,600 m ² (40x40 m)	Limestone ashlar blocks External ditch	<i>Torcular</i> (orthostats, press-bed) Ashlar blocks	4 th - 6 th cent. AD
Gs11	/	Plain terrain	625 m ² (25x25 m) Ext: 4,200 m ² (60x70 m)	Limestone ashlar blocks External ditch	Ashlar blocks	4 th - 6 th cent. AD
Gs12	/	Hilltop	313 m ² (17,4x18 m) Ext: 1,665 m ² (37x45 m)	Limestone ashlar blocks Corner towers Gates External ashlar blocks enclosure	2 <i>torcularia</i> (orthostats) Ashlar blocks Inscription (Re1)	4 th - 6 th cent. AD
Gs13	/	Hilltop	67 m ² (7,9x8,5 m) Ext: 326 m ² (22,5x14,5 m)	Limestone ashlar blocks Gate External ashlar blocks enclosure	Ashlar blocks	4 th - 6 th cent. AD
Gs14	VI16	Hilltop	20 m ² (4,3x4,5 m)	Limestone ashlar blocks Doorway	Ashlar blocks	4 th - 5 th cent. AD
Gs15	VI22	Hilltop	144 m ² (12x12 m) Ext: 900 m ² (30x30 m)	Limestone ashlar blocks External ditch	Ashlar blocks	4 th - 6 th cent. AD
Gs16	VI27	Hilltop	48 m ² (6,8x7,1 m)	Limestone ashlar blocks	Ashlar blocks	4 th - 5 th cent. AD
Gs17	VI28	Hillslope	100 m ² (10x10 m)	Limestone ashlar blocks	Ashlar blocks	4 th - 5 th cent. AD
Gs18	VI37	Hilltop	134 m ² (12,2x11 m)	Limestone ashlar blocks walls Structures around the <i>gasr</i>	<i>Torcular</i> (orthostat) Ashlar blocks	4 th - 5 th cent. AD
Gs19	VI39	Hilltop	130 m ² (11,3x11,5 m) Ext: 1,220 m ² (33x37 m)	Limestone ashlar blocks walls External ashlar blocks enclosure	<i>Torcular</i> (orthostats, counterweight) Ashlar blocks Limestone column base (Fu7)	4 th - 5 th cent. AD
Gs20	VI44	Hilltop	150 m ² (11,6x12,9 m) Ext: 1,050 m ² (35x30 m)	Limestone ashlar blocks walls External ashlar blocks enclosure	Ashlar blocks	4 th - 6 th cent. AD
Gs21	VI46	Hillslope	61 m ² (7,8x7,8m)	Limestone ashlar blocks walls	<i>Torcular</i> (orthostats, press-bed) Ashlar blocks	4 th - 6 th cent. AD
Gs22	VI49	Hilltop	144 m ² (12x12 m)	Limestone ashlar blocks walls Arched doorway	Ashlar blocks	4 th - 5 th cent. AD
Gs23	VI52	Low terrace	400 m ² (20x20 m) Ext: 1,600 m ² (40x40 m)	Limestone ashlar blocks walls External ditch	Ashlar blocks	4 th - 5 th cent. AD
Gs24	VI57	Hilltop	27 m ² (4,5x 6 m) 45 m ² (7,5x6 m)	Limestone ashlar blocks walls Two separate <i>opus quadratum</i> structures	<i>Torcular</i> (orthostats, counterweight) Ashlar blocks	4 th - 5 th cent. AD
Gs25	VI64	Hilltop	342 m ² (19x18 m) Ext: 2,250 m ² (45x50 m)	Limestone ashlar blocks walls External ditch	Ashlar blocks Limestone threshold	4 th - 6 th cent. AD
Gs26	VI65	Hilltop	/	Limestone ashlar blocks walls	<i>Torcular</i> (orthostat) Ashlar blocks	4 th - 5 th cent. AD

APPENDIX IV

THE LEPCITANIAN PERIPHERAL ROAD SYSTEM

IV.1. ANCIENT ROADS AND TRACKS IN TRIPOLITANIA

Knowledge of the Roman road network in Africa rests mainly, on the one hand, on the finding of milestones and, on the other by the analysis of ancient *Itineraria*. Both of these help us to trace the routes through uncertainties remain, since their courses were characterized essentially by beaten earth and thus hardly recognizable on the ground (general accounts in SALAMA 1951; ROMANELLI 1970, 8-23, DESANGES *et al.* 2010, 39-47). In addition to the *Itineraria* and milestones, the analysis of maps, satellite images and air photographs can help identify modern tracks that may have been used in ancient time. However, this can be problematic since sometimes it is hard to distinguish between antique routes and ones used exclusively in later periods especially where the lack of close archaeological evidence makes it difficult to read properly the ancient landscape.

The current knowledge of the Tripolitanian ancient road network is based on the three

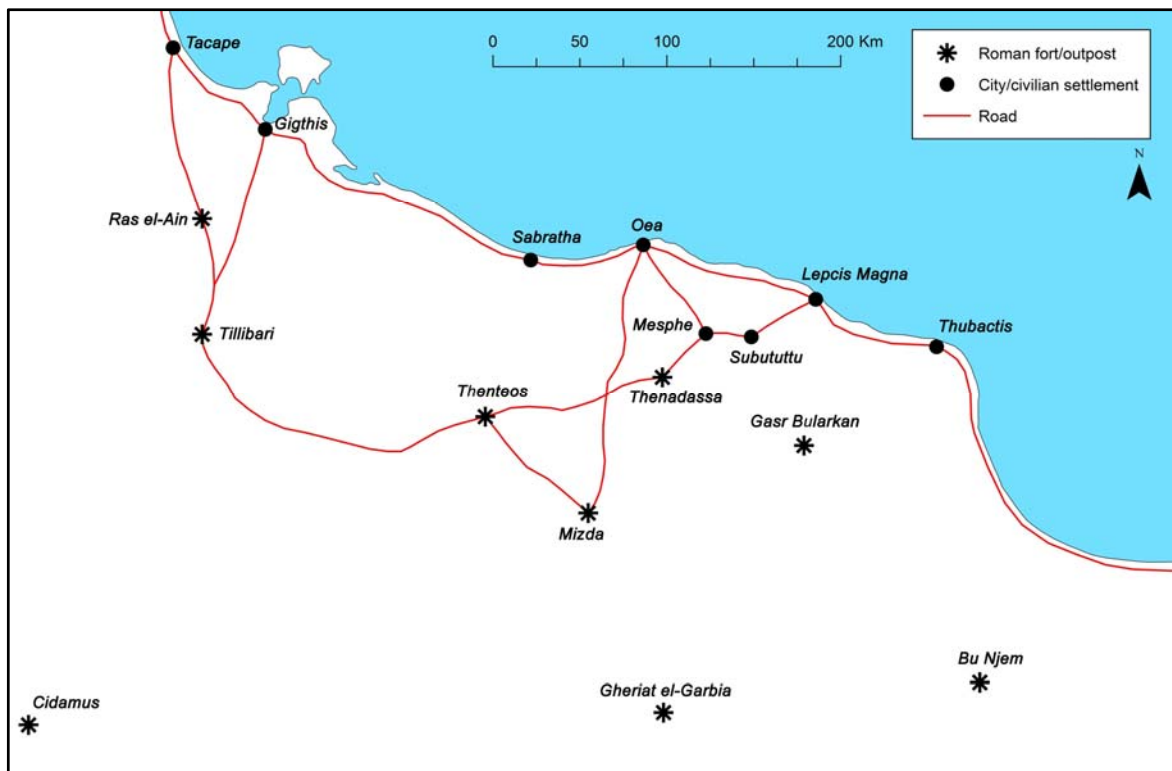


Fig. IV.1. The main road network of Tripolitania (third century AD).

factors mentioned above. The general frame of the regional routes was first established by Richard Goodchild (1948) and, apart from some corrections due to new findings that have occurred in the last 70 years, his overview remains still valid. Three main roads have been identified within the region (fig. IV.1): the sector of the route that followed the entire African coast from Mauretania to *Aegyptus*, an internal road that passed through the Djebel from *Tacape* (Gabes) to Lepcis Magna and a route that from Oea headed southward reaching the fort of Mizda. Other connections linked up with these three main routes: the internal road Lepcis Magna - Oea via *Mesphe* (Medina Doga) and the one between the forts of Mizda and *Thenteos* (Zintan). Of course many other caravan tracks and roads, actually no longer traceable, must have linked the minor settlements and the different forts, *centenaria* or outpost of the *limes* reaching also the furthest forts of *Cidamus*, Gheriat el-Garbia and Bu Njem.

Apart from the roads that linked Midza to Oea and to *Thenteos*, the other routes mentioned above are included in both the Peutinger Table (a medieval copy of an *itinerarium pictum* dated to the late second century AD; see MILLER 1887; CHEVALLIER 1989, 28-34; DESANGES *et al.* 2010, 17, 73-76) and in the Antonine Itinerary (a list of sites and distances dated to the early third century AD; see CUNTZ 1929; CHEVALLIER 1989, 34-37; DESANGES *et al.* 2010, 17, 69-71). Every route in the two *Itineraria* mentions the main sites with distances (figs IV.2-IV.3) and this fundamental information helps to locate and identify many other different categories of

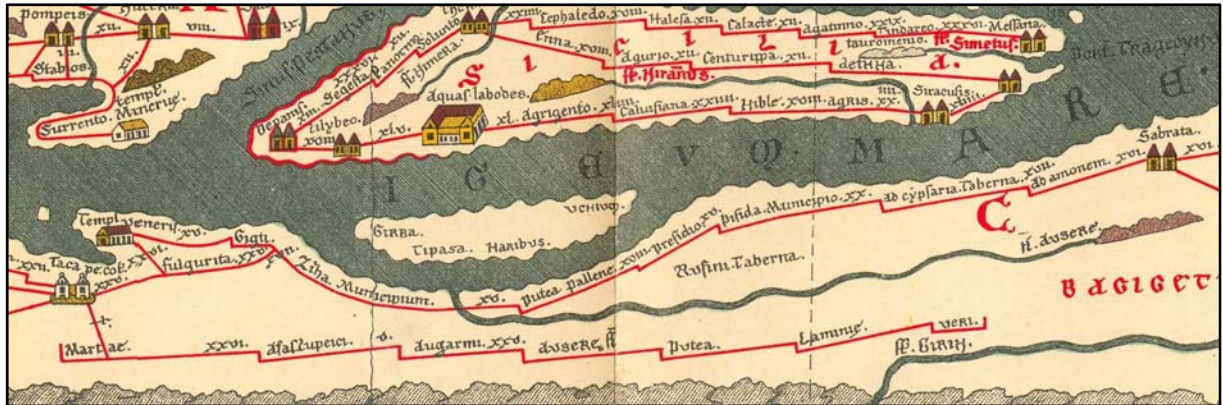


Fig. IV.2. The Peutinger Table: Tacape to Sabratha (MILLER 1887).

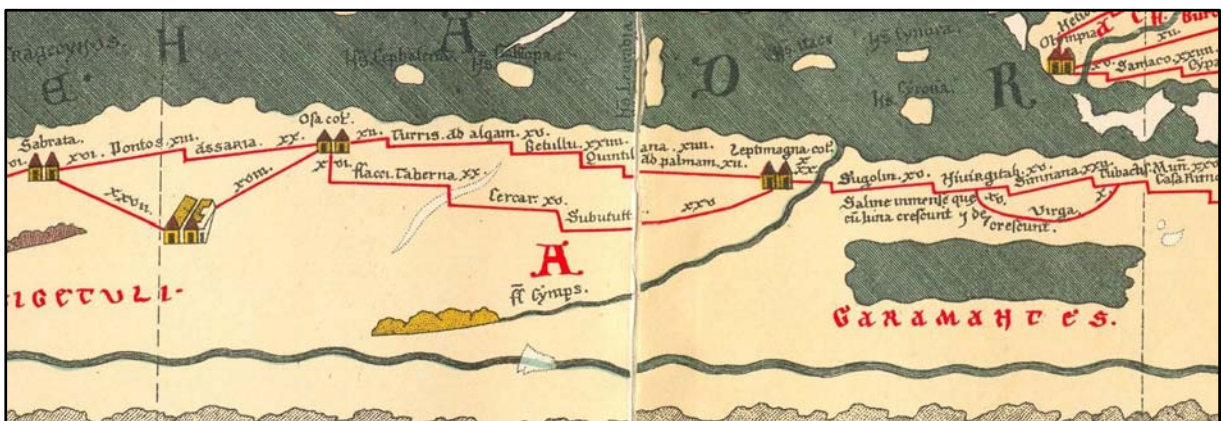


Fig. IV.3. The Peutinger Table: Sabratha to Thubactis (MILLER 1887).

settlements/structures thanks to their toponyms (MATTINGLY 1995, 61-62). In addition to these two ancient sources, there are also the sites lists included in the *Ravennatis Anonymi Cosmographia* dated to the seventh century AD (CHEVALLIER 1989, 38-39; DESANGES *et al.* 2010, 18, 77-79) and in the *Liber Guidonis* (CAMPOPIANO 2008; DESANGES *et al.* 2010, 18, 80), in which however the distances between places are not provided.

The coast road in Tripolitania linked *Tacape* (Gabes) to *Thubactis* (probably Misurata Marina) and put in direct connection the three main port cities of the region: Sabratha, Oea and Lepcis Magna. This important route was in use, almost surely in many sectors, before the Romans took control of the region and the milestones found along its path are dated from Augustus to the late third century. It was also used, in some sectors and with variations, until the medieval Arab pilgrimages to the Holy cities in the Middle East. However, its exact course cannot be identified always with certainty because it seems to have followed a more inland route in places, probably to avoid wadis and areas characterized by sand-dunes (MERIGHI 1940, II, 191-199; GOODCHILD 1948, 9-10; 1968, 158; MATTINGLY 1995, 61-62).

The main inland road that ran in a wide arc ran from *Tacape* to Lepcis Magna connecting the main Roman forts along the Djebel, is indicated in the Antonine Itinerary as "*Iter quod limitem Tripolitanum per Turrem Tamalleni a Tacapis Lepti Magna ducit*". This route should indeed have a significant military and economic role since it linked the forts of Ras el-Aïn, *Tillibari* (Remada), *Thenteos*, *Thenedassa* (Aïn Wif) and then reached the rich agricultural areas of the settlements of *Mesphe* and *Subututtu* (Gasr ed-Daun) to the east. The eastern sector was surely in use at least from the beginning of the first century AD when the terminal milestone (Ms5a) was set outside the city of Lepcis Magna by the proconsul *L. Aelius Lamia* (AD 15-17) who built the road for 44 miles into the interior, probably the *terminus* of the Lepcitanian territory toward the southwest (see par. 2.1). The route was certainly in use until the Late Antique period and the milestones found along its path date from Caracalla to Gallienus (GOODCHILD 1948, 11; 1951, 75-76; 1968, 158-159; OATES 1953, 89-92; ROMANELLI 1970, 13; DI VITA-EVRARD 1979, 90; MATTINGLY 1995, 62-66).

The milestones that have been found along the Tripolitanian roads can be dated mainly to the third century AD (87% of the total) and especially to the reign of Caracalla. In this region, as other Roman provinces, late milestones were used not only to remember restorations or works made on the routes but they often acted as a political propaganda tool (MATTINGLY 1995, 61). Moreover, the reorganization of the *limes* started by Septimius Severus, and continued by the Severan dynasty, certainly played a fundamental role in redefining - and then marking - the main routes that reached the *limes* from the coast as well as those that crossed it.

Caracalla's milestones (and, in general, third century ones) seems to have common features in Tripolitania. The inscription is almost always carved on a limestone column with a shaft approximately 2.20 m high and with a diameter of c.40 cm. Unlike the majority of the milestones

of Cyrenaica and elsewhere in the Roman Empire, the column shaft was here separated from the base. This latter element was essentially a limestone cube/parallelepiped with a circular recess to house the column (GOODCHILD 1948, 7; 1968, 156; ROMANELLI 1970, 12). This is an important detail, since in the post-antique period the milestone columns were frequently reused as architectural elements in new buildings while their bases were often left *in situ*, thus leaving for us a clear witness of the road route.

IV.2. THE PERIPHERAL ROAD NETWORK OF LEP CIS MAGNA: THE MAIN ROUTES

According to the Peutinger Table (fig. IV.3) and to the Antonine Itinerary two main roads reached Lepcis Magna in Roman time: the coast road (in the two sections northwest and southeast of the city) and the so called *via in mediterraneum* also known as the East Gebel road (fig. IV.4). The epigraphic evidence of milestones helps both to define more or less the routes of



Fig. IV.4. The road system in the periphery of Lepcis Magna with the milestones found (Ms1-Ms9) and the numbering of miles according to the routes hypothesized.

these two roads in the close Lepcitanian territory and confirm what is indicated in the two *Itineraria*.

New data from recent surveys and from the analysis of cartographies and aerial/satellite images allow me to hypothesize also the existence of two other major routes that led inland (fig. IV.4). The remains of a milestone base (Ms9) together with air photo interpretation would indicate the existence of a road that ran southwards from Lepcis Magna towards the Orfella region (Beni Ulid) and the south and east sector of the *limes*. Another important road seems to have linked the city to the area of Ras el-Mergheb to the west and, from there, probably rejoined the coastal road.

IV.2.1. THE COASTAL ROAD (NORTH-WESTERN SECTOR)

West of Lepcis Magna the coastal road can be traced above all by the presence of seven milestones that, even if almost always found not *in situ*, would suggest more or less its route. This archaeological evidence is related to the restoration works occurred in the third century AD all across the Tripolitania; however, it is highly presumable that in the previous centuries the road followed - perhaps with minor variations - the same path.

From the Severan arch the *decumanus maximus* (the coastal road within the city) ran on a consistent sector northwest passing through the Antoninus Pius arch (the west gate from the fourth century AD) and the Marcus Aurelius arch (Ti6). The road sector (Rd6) between these last two arches was fully urbanized and defined, at least from the mid-Imperial Roman period, by continuous colonnaded porticoes on both sides (fig. IV.5). In this sector the road is still paved

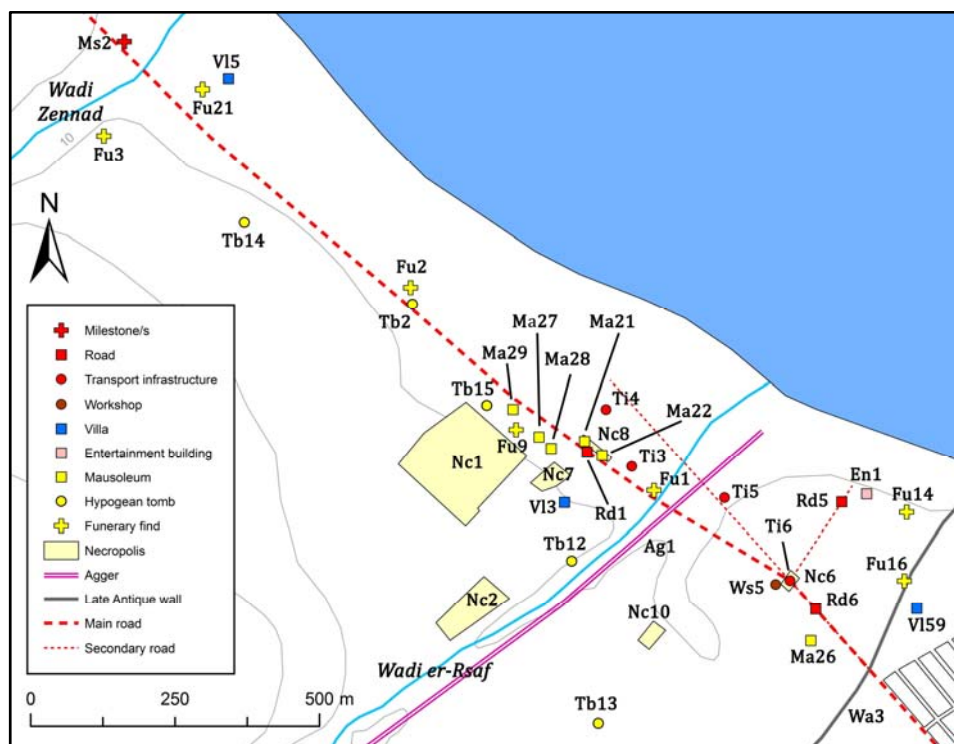


Fig. IV.5. The first mile of the coastal road in the western *suburbium*.

with limestone slabs and is 5.50 m wide, enough to allow the transit of two vehicles. After the Marcus Aurelius arch (Ti6) the road turned slightly toward west, aiming for a point c.600 m south of Cape Hermaion (Khoms). In this sector the route and its orientation is certain: part of the road was dug near the west bank of Wadi er-Rsaf (Rd1) and the first milestone was found close to the west bank of Wadi Zennad (Ms2). Moreover, the presence of several *mausolea* (Ma21-Ma22, Ma27-Ma29), hypogean tombs (Tb2, Tb14, Tb15) and necropolis (Nc1, Nc6-Nc8) flanking the supposed route would confirm the exact location of its passage. During the 1990s the Roma Tre University explored part of the Wadi er-Rsaf area bringing to light a section of the road (Rd1) that in this area was unpaved and wide, during the second/third century AD, c.11.5 m. The excavation revealed the presence of a compact sandy surface dented by numerous wheel ruts sometimes filled and levelled together with several hollows from the late second century AD onwards. Beneath this layer other compact clayish surfaces of the route were found while the lowest *strata* dug (dated to the first century AD) indicate the presence of a structure in the northern sector of the trench, probably a narrower version of the road or a different route. However, in the mid-Imperial Roman period the road was in this sector more than 11.5 m wide that is similar to the value reported by Hyginus Gromaticus (*De limitis constituendis*, 194, 9-16) who mentioned an Augustan disposition that imposed the width of the *decumanus maximus* in relation to the *agri centuriati* (thus outside the city) as equal to 40 feet (c.11.8 m). Moreover, the remarkable width of the road in this sector could be related to the presence of warehouses (Ti3, Ti5) and a caravanserai (Ti4) and therefore a place where the passage or rest of packed animals and wheeled transport were frequent and intense.

The discovery of the milestone (Ms2) marking the first mile, dated to the reign of Maximinus (AD 237) at short distance from the west bank of the Wadi Zennad provides an important update concerning the western extension of the city in the second/third century AD. According to Salvatore Aurigemma (1925a, 19), the milestone was probably *in situ* and thanks to the topographic information given by the Italian Superintendent, it is possible to locate with accuracy its find spot. It is plausible to suggest that, in the first half of the third century AD and probably also before, the western *caput viae* of the coastal road was at the Marcus Aurelius arch (Ti6) located exactly one mile (1,481.5 m) from the find spot of Maximinus milestone. Another milestone (Ms7) related to the first mile and dated to Caracalla was found reused in the Turkish building at Khoms (c.450 m northwest from the Wadi Zennad milestone) where several archaeological finds were collected after its construction, in the mid-nineteenth century (LOTHRINGEN 1874, 167).

The road, once it crossed the Wadi Zennad, continued toward the northwest reaching the area of Cape Hermaion and almost certainly underlying the modern street south of the "Turkish building" at Khoms where the remains of a mausoleum (Ma23) were found still *in situ* during the 1960s. The ancient road probably prosecuted retracing the street named by the Italians "via XX

Settembre" (see fig. 2.23). This street was one of the oldest of Khoms and, together with the road south of the "Turkish building", formed the main axis around which the city has developed during the nineteenth century (fig. IV.6; see also figs 2.15, 2.17).

Once past the modern city of Khoms the road continued northwest crossing Wadi Tualad and Wadi Tella and probably at short distance from the seashore (fig. IV.4). Evidence of Roman coastal *villae* in this sector (Vl33-Vl34, Vl63) and *mausolea* near the mouth of Wadi Tella (Ma30, Ma33-Ma34) would suggest the presence of the road just a few hundred metres from the sea. Moreover, the construction during the early modern era of the marabouts of Sidi Za'id al Garib and Sidi Abd Allah al Barrakish (figs 1.5, 1.6, 2.20; CESÀRO 1933, 47) close to the hypothesized ancient route northwest of Khoms on a modern track that ran in the same direction (see figs 1.5, 2.14), would support the existence of an ancient route in this area. Unfortunately no milestones have been found *in situ* in this sector. However, a Caracallan column shaft that marked the third mile (Ms1) was found reused in the Sidi Ben Geha mosque at Khoms while another milestone dated to the reign of Maximinus (Ms4) was found scattered on the ground near the et-Tualad village. Even if there is no trace of the mile number, it is possible to believe that this milestone could mark either the third mile, as suggested by Aurigemma (1925a, 15), or the second mile, located not far away from the west limit of Khoms. It is also possible that this latter milestone belonged to the inland route of the coastal road (see below), passing c.1.5 km to the south.

The archaeological evidence related to the next sector of the road (northwest of Wadi Tella) is less clear. The recent discovery of two milestones (Ms8a-b) dated to the reign of Caracalla and reused in the Late Antique phase of a *villa* (Vl62) located near the mouth of Wadi Zambra, could

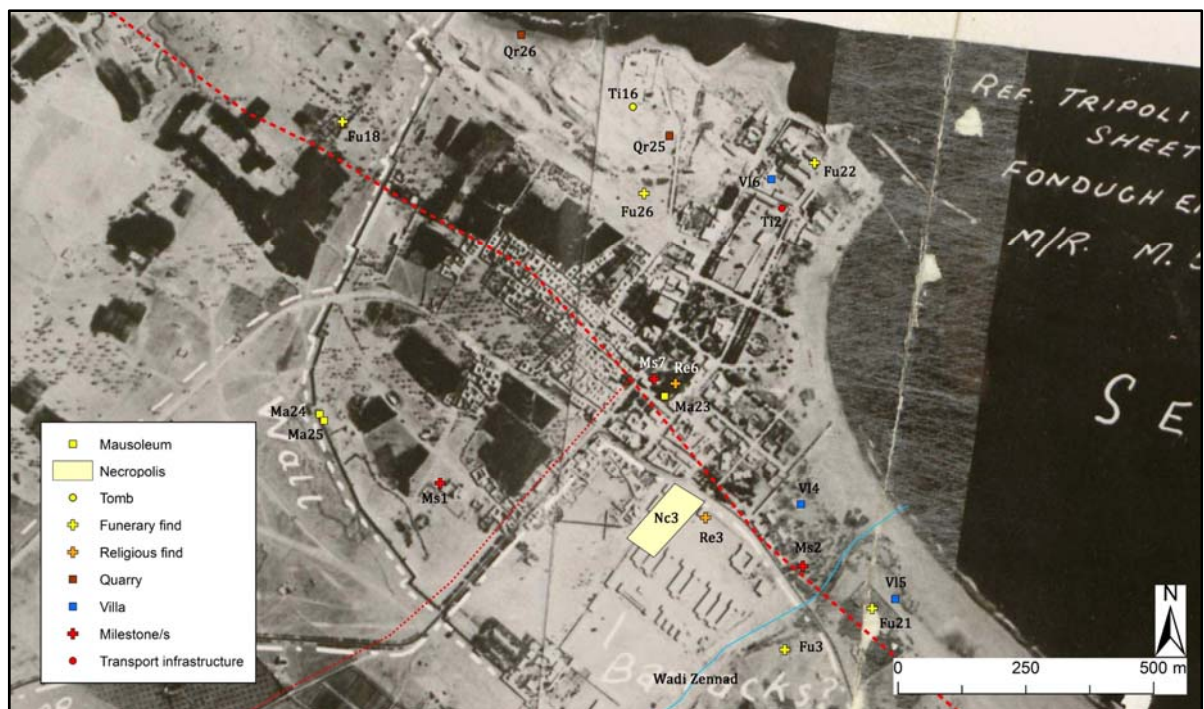


Fig. IV.6. The second mile of the coastal road crossing the city of Khoms (background image: RAF aerial photograph 20/09/1941. TNA, War Office 234, 79 - detail).

suggest that the coastal road ran at short distance from this site (fig. IV.4). One of the two milestones marks the fifth mile (Ms8b), located more or less few hundred metres southeast of the right branch of the Wadi Zambra. The other milestone (Ms8a) probably marked the sixth mile (MUNZI *et al.* 2004, 28) but, according to its find spot, it could also mark the seventh mile. A third milestone (Ms3) dated to the reign of Emperor Tacitus (AD 276) and marking the fifth mile, was found reused in a Late Antique gasr (Gs10) located close to Wadi Chadrun and c.2 km south from the suggested original position. The events that characterized its reuse are however not very clear and the accurate location of its original find spot is unsure (AURIGEMMA 1925a, 7-10; MUNZI *et al.* 2004, 28-29).

Considering the position of the Tacitus milestone (Ms3) and the Maximinus one (Ms4), it is also possible to hypothesize a inland road that, starting from the area of Cape Hermaion, ran to the west, probably flanking the two *mausolea* (Ma24-Ma25) at Khoms (see fig. IV.6) and continuing its route a short distance north from the find spot of the Maximinus milestone. From there it could headed northwest avoiding the wadis and finally rejoining the coastal road once passed the Wadi Zambra (fig. IV.4). The milestone of Tacitus (Ms3) marking the fifth mile, even if found reused within the gasr (Gs10), would fit more or less with this hypothetical route in terms of distance from the Marcus Aurelius arch (Ti6). According to Aurigemma, this ancient road was overlapped by an Arab track - partially still visible - that linked the area of Cape Hermaion (Khoms) to the village of el-Tura (AURIGEMMA 1925a, 9; MUNZI *et al.* 2004, 28-30; see also figs 1.5, 2.20).

In the absence of further data it is reasonable to presume that the coastal *via publica* from the Wadi Chadrun until the right branch of the Wadi Menuk (Wadi as Sawalim) continued on the same orientation used by the so called modern "Port Road". The presence of Arab religious structures along its sides such as the marabouts of Sidi Abu Saydah and Sidi Abd as Salam (see fig. 1.6) could emphasise this hypothesis.

Two other milestones were found west of the area investigated and they marked the tenth mile (MUNZI *et al.* 2004, 28, 48-49 dated to Caracalla) and the thirteenth mile (SALZA PRINA RICOTTI 1970-1971, 158). Both the milestones were reused in subsequent structures; however, their find spots (the first one at Gasr Silin 2 km from the coast, the other close to the coastal *villa* known as "Villa dell'Odeon Marittimo") should be not far from their original locations as suggested by the mile number carved on them. Taken together the archaeological evidence support the view that the sector of the coastal road from Lepcis Magna to the first *statio* to the west cited by the *Itineraria* and named *ad Palmam* (or *civitas Palma*) ran pretty close to the coastline and that the *statio* (or *vicus*) was located somewhere halfway between Wadi Jabrun and Wadi Ganima.

The epigraphic text of two milestones dated to the reign of Maximinus (AD 237) - one related to the first (Ms2) and the other probably to the third or second mile (Ms4) - provide

details that may suggest the existence, at that time, of ruined bridges that had been restored (*pontes vetustate delapsos et iter longa iniuria corruptum restituerunt*). This is a common and stereotyped formula used frequently in several areas (ROMANELLI 1970, 12-13; DI VITA-EVRARD 1979, 74) and apparently there are no evidence of bridges along the Tripolitanian main rivers (MATTINGLY 1995, 61). However, it would be plausible to consider the existence of viaducts across the main Lepcitanian watercourses (GOODCHILD 1948, 7, 9; MUNZI *et al.* 2004, 30) due to the presence of several wadis with often steep banks and the high rate of traffic approaching Lepcis Magna. Recently (MUNZI *et al.* 2004, 30), has been also hypothesized the existence of dams carrying the coastal road; however, their structural features - provided with lateral spillways and characterized by a reduced thickness on the top (see VITA-FINZI 1969, 20-24) - would exclude, in my opinion, this interpretation.

IV.2.2. THE COASTAL ROAD (SOUTH-EASTERN SECTOR) AND TRACES OF LAND PARTITION

The only archaeological evidence of the southeast sector of the coast road from Lepcis Magna are the traces recognizable from the historical documentation such as maps and aerial photographs and from the satellite images. The closest milestone to the city was found outside the area investigated and is the one reused in the Sidi Mohammed ben Brahim mosque (AURIGEMMA 1925a, 19-21) located c.11 km from Lepcis Magna (fig. 2.20). The milestone, dated to Caracalla, is incomplete and the mile number is not preserved; however, due to its find spot, it could mark the seventh or the eighth mile.

According to the *Itineraria* the distance between Lepcis Magna and the centre of *Sugolin/Seggera* to the southeast was 15 miles (*Tabula Peutingeriana*) or 20 miles (Antonine Itinerary), thus located in an area between Wadi Caam, the famous *Cynips flumen* (fig. IV.3), and the modern city of Zliten that has been identified, precisely, with *Sugolin/Seggera* (DESANGES *et al.* 2010, 220). The flat sector between Lepcis and Wadi Caam, one of the most fertile areas of ancient Tripolitania, was surely crossed by a coast road since the first Phoenician/Carthaginian settlers occupied the region. Strabo (17, 3, 18) mentioned some sort of infrastructures in this strip of land, including probably a road: "next (from Lepcis) in order one comes to a river (Wadi Caam); and afterwards to a kind of cross-wall which the Carthaginians built, wishing to bridge over some gorges which extend up into the interior" (translation and edition by H. L. Jones, 1967).

The position of the eastern *caput viae* at Lepcis Magna is actually not identifiable but, since the built area reached the Wadi Lebda at least from the beginning of the second century AD, it is possible to hypothesize its position somewhere in this area and most likely at the intersection between the coastal *via publica* and the southern road (fig. IV.4). However, it is not surprising to hypothesize the position of the *caput viae* at the crossing with the Wadi Lebda taking into account the important role of rivers and bridges as *capita viarum*, as suggested by several

examples in *Gallia Cisalpina* (CALZOLARI 2002). Moreover, according to Di Vita (1975a, 23-26), at the edge of the west bank of the Wadi Lebda another monumental arch dated to Hadrian's reign, was detected along the main *decumanus* by the assistant F. Russo. Probably this arch acted as *caput via* such as the Marcus Aurelius arch for the western sector of the city and the Severan arch for the *via in mediterraneum*.

The traces of the coastal route are unfortunately missing from the sector between the Wadi Lebda and the west limit of the es Sahel area. However, analyzing the recent satellite images, a WWII RAF aerial photograph (fig. 2.25) and also according to the photo-interpretation made by Richard Goodchild during the late 1940s (1948, 9; 1949b, 38; fig. 2.28), the ancient coast road would be clearly visible in the following section, that is between the west limit of the es Sahel oasis and Wadi Hasnun. In this segment the ancient road overlaps indeed an old Arab track that is still in use even if it has been asphalted (fig. IV.7). Once passed Wadi Hasnun the "via Litoranea" seems to overlap the ancient road straight until Wadi Caam (19 km to the southeast).

Contrary to what has been argued by Goodchild, the coastal *via publica* and the subsequent Arab track in the east sector between Lepcis Magna and the Wadi Hasnun was not the exact

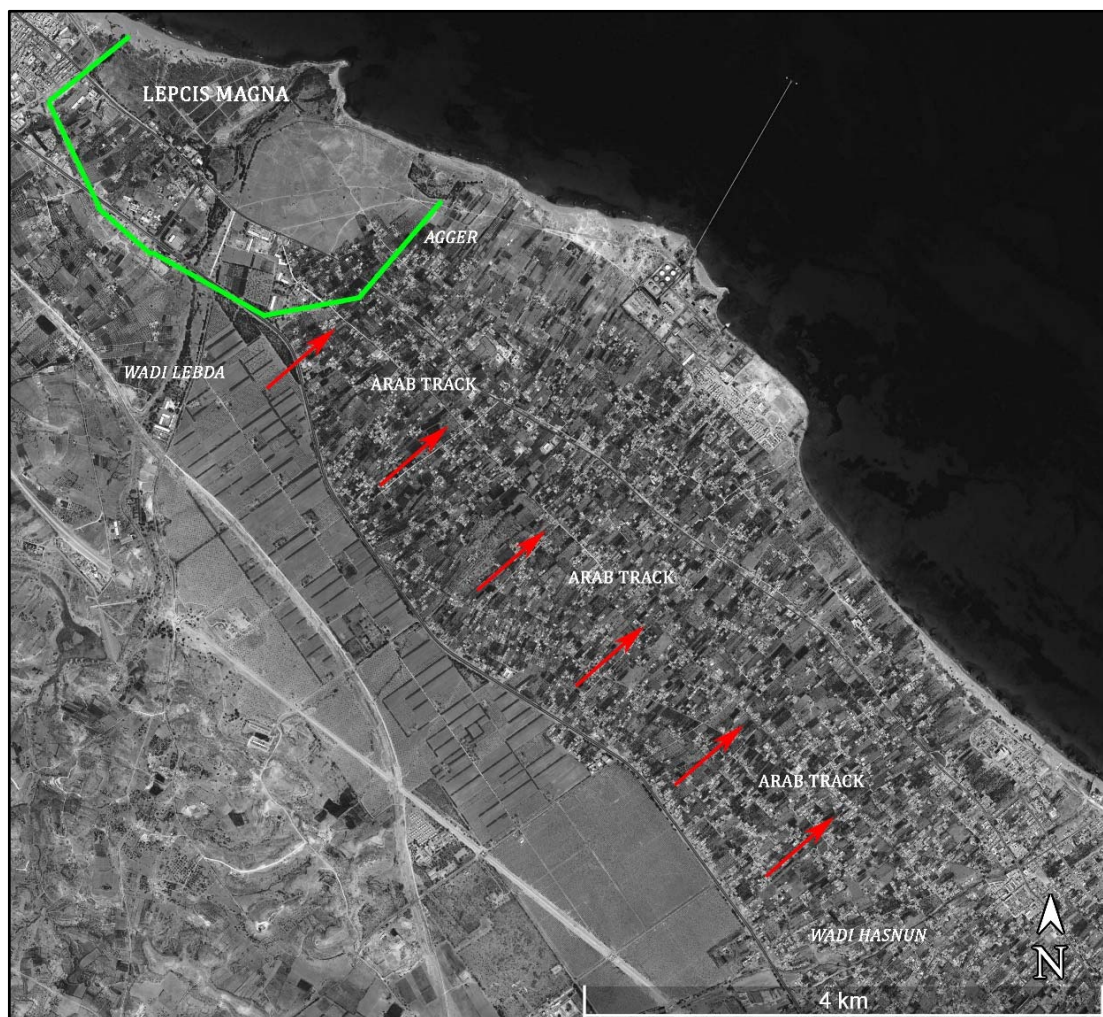


Fig. IV.7. Traces of the Arab track in the sector between the west limit of the es-Sahel oasis and the Wadi Hasnun (background image: Google Earth).

extension of the city's *decumanus maximus*, but it diverged from it passing southwards and then, with a different orientation, continuing southeast. The orientation of the coastal road (if retraced by the Arab track) is indeed c.8° different from the city's main *decumanus*. These discrepancies related to the position and orientation of the peripheral *decumanus* had to be overcome in the short sector between the Wadi Lebda and the beginning of the es Sahel oasis where, however, there is no traces of the coastal *via publica*. The remains of the enclosure of the two *mausolea* (Ma16-Ma17) and the enclosure of a third one (Ma19), partially still noticeable on the ground but clearly visible in the IGM map realized in 1915 (fig. 2.19) and in a WWII RAF aerial photograph (fig. 2.25), could help in defining the course of this junction between the two sectors of the road (fig. IV.8). Both the funerary enclosures seem to follow indeed the orientation of the hypothesized road from the Wadi Lebda to the alignment defined by the Arab track. The two enclosures, the closest recognized to the proposed route and both dated to the second century AD, would have an unusual orientation if not considering their relationship with the junction between Lepcis and the peripheral *decumanus maximus*, apparently the starting point of the organized land partition detected eastwards.

The reasons of the different orientation and position of the coastal road from the city's *decumanus* (c.8°) are unknown. However, it seems reasonable to think that the new alignment was more suitable to the Roman land partition that has been detected in the flat strip between the west limit of the es Sahel oasis and the Wadi Hasnun (for these aspects see TOZZI 1974, 61-70; LE GALL 1975; REGOLI 1983; ADAM 1988, 12).

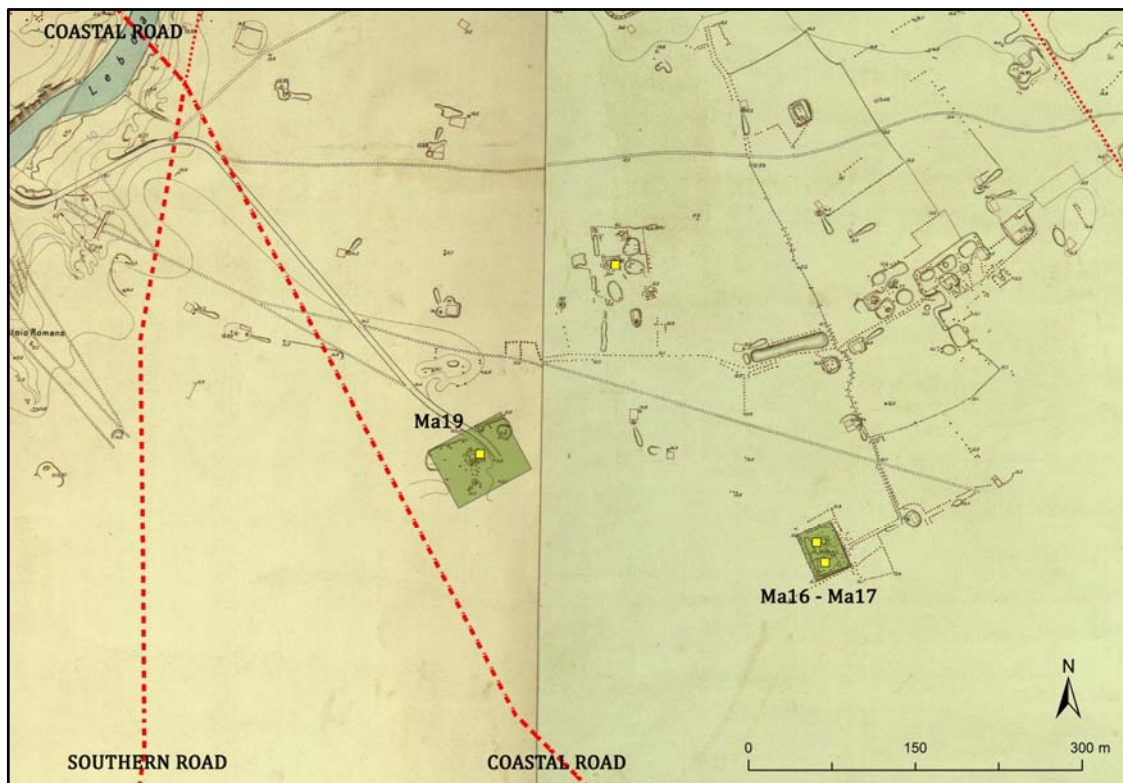


Fig. IV.8. The first sector of the coastal road southeast of Lepcis Magna with highlighted the two funerary enclosures related to the *mausolea* Ma19 and Ma16-Ma17 (background image: IGM 1915a - detail).

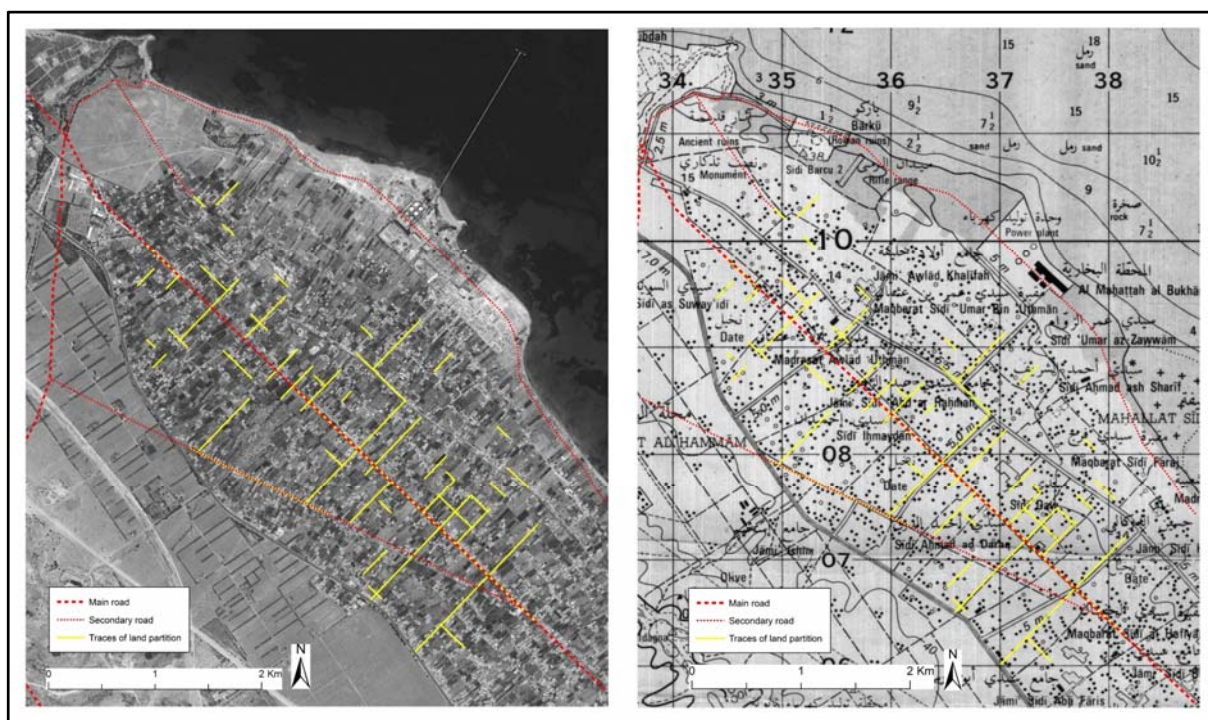


Fig. IV.9. Left: Traces of ancient land partition detected on the satellite image (background image: Google Earth). Right: The same traces partially overlap tracks and roads on the Polish map realized in the late 1970s (SPLAJ 1979a - detail).

A further proof of the prosecution of the coastal road retracing the Arab track is given by the numerous traces of ancient land partition that have been detected between the earthen *agger* (Ag1) and the Wadi Hasnun and that should have as its starting point the coastal *via publica* (fig. IV.9). Several other traces associated with the same cadastre can be identified also further southeast, extending until the Wadi Caam. Examining recent satellite images, it is possible to trace an ancient "*centuriatio*" based on the module of 12x12 *actus* (c.426 m) - with an internal subdivision of 6x6 *actus* (c.213 m) - thanks to several minor roads/tracks and also to tree or hedge alignments as well as modern boundary partitions (revealed also by the construction of houses that preserve specific alignments and positions). Unfortunately, no traces are visible of this ancient cadastre in the area north and northeast of the Ras el-Hammam due to the establishment of the Italian colonial settlement named "Concessione Valdagno" during the 1930s.

Even though the area covered by this ancient *limitatio* has been overbuilt especially in the last forty years (see par. 2.2.2), the historical maps are in some cases useful in defining this partition. The map realized by Palmiro Storti in 1919 (fig. 1.5) unfortunately is not very detailed for the es Sahel area while some traces noticed in the satellite images overlap the ones outlined in two IGM maps dated to 1918: the accurate one (1:10,000 scale) related just to limited portion north to the Ras el-Hammam hill (fig. 2.21) and the 1:50,000 scale cartography of the "Zona di Homs" (fig. 2.20). Further traces overlap the ones in the 1:50,000 scale maps realized after the 1960s (USACE 1962a; SPLAJ 1979a = fig. 1.6). In these cartographies are indeed drawn both tracks and paved/unpaved roads that in several areas seem to retrace ancient boundaries (fig. IV.9).

The land partition attested in this area (fig. IV.10) is based on the canonical Roman *actus* (35.52 m) and the module detected is a square of c.426 m (12 *actus*) with at least an internal subdivision of four squares each one with a side of c.213 m (6 *actus*). The 12x12 *actus* "*centuria*" (that corresponds to 72 *iugera*) seems to have been used since the mid-Republican Roman phase in several parts of the Italian peninsula such as *Minturnae*, *Norba*, *Alba Fucens*, *Aesernia*, *Cubulteria*, *Ad Tricesimum* and *Forum Iulii* (DILKE 1971, 85; CHEVALLIER 1974, 52; ANDREANI 2006). This partition, based on the multiple of 2, fits also with the further subdivision in *iugera* (2 *actus quadratus*) and *heredia* (4 *actus quadratus*).

The orientation of the Lepcis land partition is c.42° compared to the east-west axis. The reasons of this alignment could be explained mainly by the natural shape of the nearby coastline.

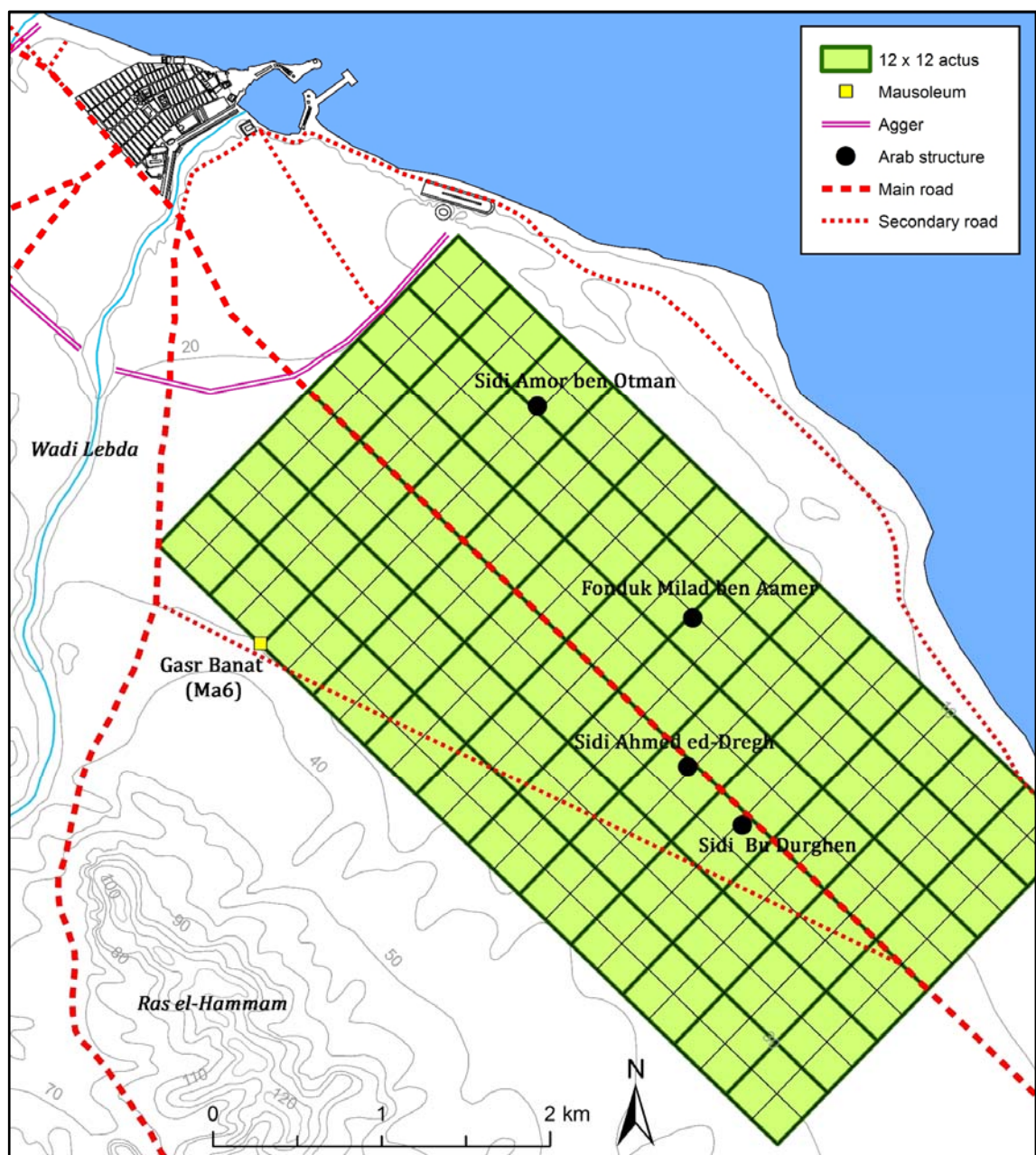


Fig. IV.10. The hypothesized land partition with the ancient and Islamic structures associated.

According to Frontinus and Hyginus Gromaticus the methods used by *Gromatici* to establish the orientation of the *centuriatio* and thus of the *decumanus maximus* (or *cardo maximus*) were indeed influenced also by several geographical features and not only by the astronomic orientation (CASTAGNOLI 1958, 26-27; CHEVALLIER 1974, 50-51; FILIPPI 1983a, 125-126, WILLI 2014, 144-149). In this frame the sea or the foot of hills may have constitute a valid border known respectively as *limes maritimus* and *limes montanus* and, in the area considered, both the *mare Mediterraneum* and the Ras el-Hamman northeast slopes have the same orientation of the hypothesized cadastre. According to the same sources, also the terrain slope and the consequent water flow would act as fundamental factor to determine the orientation.

Beside the traces still visible from the satellite images and confirmed by several maps, the module proposed seems also proved by archaeological evidence that can be connected in some way with this cadastral subdivision. A first element is given by the position of the earthen *agger* (Ag1) that seems to run along the *limitatio* to the northwest. The distance between the last row of "*centuriae*" to the west and the east side of the *agger* is c.30 m that is a reasonable space to house an external ditch and an associated path. A further significant element is the position of the Gasr Banat mausoleum (Ma6) that is c.1,275 m away from the coastal *via publica* right at the edge of the 36th *actus* southwest from it and exactly at the corner of the third 12x12 *actus* partition. We should also bear in mind that the role of funerary evidence as boundary markers in Roman times is commonly attested within *centuriatio* and land divisions in general and it is also indicated in the text *De sepulchris* collected in the *Corpus agrimensorum Romanum* (LACHMANN 1848, 271-272; see also CASTAGNOLI 1958, 11; FRANCISCI 2010, 283; 2017, 57-64; ROSADA 2010, 143). Finally, other minor ancient roads seem to adapt their routes according to the cadastral partition: the path that ran from the Severan harbour towards southeast (see par. IV.3.3) and the diagonal road that linked the coastal *via publica* to the southern road (see par. IV.3.1).

The position of some Islamic religious structures and of a fonduq may constitute further indirect evidence related to this antique land partition (fig. IV.10). According to the Italian maps (figs 1.5, 2.20-2.21; IGM 1915b) and also to the subsequent American and Polish documents (USACE 1962a; SPLAJ 1979a = fig. 1.6), the three main marabouts (Sidi Amor ben Otman, Sidi Ahmed ed-Dregh and Sidi Bu Durghen) with their associated cemeteries identified within the area of the hypothesized cadastre plus the Milad ben Aamer fonduq, were located along main ancient partition *limites*. The existence of old paths retracing the internal Roman subdivisions may have indeed conditioned the place where to build, for instance, holy tombs of the marabouts who, from the fifteenth century onwards, decided to live and preach within the coastal oasis. A similar connection between religious structures and ancient cadastres can be noticed for several rural Christian votive niches or chapels in northern Italy (FILIPPI 1983b, 138; PAOLETTI 1983, 266-267), where they seem to have replaced ancient shrines built at the countryside crossroads (*compita pagana*). However, for the Lepcitanian case study, due to the lack of any archaeological

evidence, it is not possible to establish a direct relationship between ancient and modern religious structures. Nonetheless it appears plausible to link the marabouts to the ancient paths/*limites*, a connection already highlighted by Raymond Chevallier (1989, 78).

Considering the lack of any epigraphic evidence, dating the Lepcitanian cadastre and the related redefinition of the southeast sector of the coastal road, is not easy. However, on the one hand the use of Roman measurement instead of Punic ones could indicate that the project to organize - or reorganize - the fertile rural landscape southeast from Lepcis Magna was realized from the first century AD onwards. On the other hand the construction of the massive mausoleum of Gasr Banat (Ma6) seems to be strictly related to the land partition as a boundary marker. According to the proposed dating of the funerary structure (the mid second century AD, see Munzi et al. 2016, 91) it is thus plausible to argue that this large land organization (including probably an area that at least could reach Wadi Caam) was planned between the first and the first half of the second century AD.

Possible contexts for relating this cadastre to wider territorial organization include that realized under Vespasian after the severe boundary crisis between *Lepcitaniani* and *Oeenses* (see in general DI VITA-EVRARD 1979, 77-81 = *AE* 1979, 648-649) and probably culminated to the concession of the municipal status to the city (AD 74-77, see DI VITA-EVRARD 1984) or, alternatively and much more likely, it could be related to the granting of its colonial status during the reign of Trajan (AD 109-110, see GASCOU 1972, 75-80). Moreover, the Lepcitanian case would not constitute the only example related to a *limitatio* process in Africa at the time of Trajan and Hadrian (see also *ILS* 9381 = *AE* 1904, 144; *AE* 1942-1943, 35; CORTÉS BARCENA 2013, ns 66-67, 69). The use of Roman measurements however, could indicate that the Lepcis land partition was realized after the granting of a new civic status. This suggestion comes from the case of *Thapsus* in *Byzacena* where it seems that a cadastre based on the Punic *cubitus* (c.51,5 cm) was organized when the city was still *libera et immunis* while at least two new land partitions based on the Roman *actus* were realized subsequently, after it gained the colonial status (BRIAND-PONSART, HUGONOT 2006, 89; OUNI, PEYRAS, DEBAINE 1995). However, it is not surprising to believe that at Lepcis in both cases - the concession of the municipal or colonial status - the land partition detected probably overlapped a previous one considering the vicinity to the city and also to the favourable morphological situation that encouraged to exploit this fertile area since the pre-Roman period.

Moreover, it is important to bear in mind a further significant aspect that may help and prompt to date this Lepcitanian land partition between the end of the Trajan dominion and the beginning of Hadrian's reign: the water management activity that interested the city in those years. Primarily, the effort made by the well-known Lepcitanian notable *Q. Servilius Candidus* in AD 119-120 to bring the water to the city from the Wadi Caam through a subterranean aqueduct (*sua impensa aquam quaesitam et elevatam in coloniam perduxit*: *IRT* 357, see also *IRT* 358-359).

This important infrastructure(Aq5) that would have supplied water to the Hadrianic Baths (and probably not only) had surely involved also a strip of land that coincides - in the area close to Lepcis - with the cadastran land partition just detected and that probably continued towards south-east (the closest section of the aqueduct towards Lepcis has been found at Wadi Hasnun; see fig. 2.28; BARTOCCINI 1926, 47-38; 1927a, 99-100, fig. 33; 1929a, 72-74; CROVA 1967, 112-14; HAYNES 1981, 99-100; MUNZI, CIFANI 2003, 91-94). According to Bartoccini (1929a, 73) and to G. F. Lyon (1821, 337), the underground aqueduct was provided with large wells (*foramina*) c. every 80 m (Bartoccini) and this may have constituted significant modifications to the above ground landscape that would suggest a contemporary new *limitatio* and land assignment (for hydraulic structures and Roman division grids see WILLI 2014, 150-54). Moreover, even if this infrastructure was built mainly for the city needs, it cannot be excluded that its water was used also for rural villas and estates located along and near its route (for this aspect see WILSON 1999a; 2008a, 309-311). Also the construction of the dam along the Wadi Lebda (Dm1), recently dated to the Hadrianic period (PUCCI *et al.* 2011, 175-177, 183; TANTILLO, BIGI 2010, 155-158) together with the use of the east sector of the Monticelli *agger* and ditch (Ag1) could be related with the new *limitatio* (fig. IV.10; see par. 3.1.2). It is likely indeed that the Wadi Lebda water surplus of the rainy seasons could be easily diverted to the east and used to irrigate the fields - archaeological evidence of the east sector of the earthen *agger* and its ditch come from the WWII RAF air-photographs (figs 2.25, 2.27) and from an Italian colonial account (MC 1913, I, 63, 79). This Wadi Lebda water regimentation would also be confirmed considering the fact that the Monticelli *agger*/ditch ended at the south slope of *Sidi Barku* (where the amphitheatre is) obstructing the flood waters to flow into the sea.

IV.2.3. THE COASTAL ROAD: INLAND ROUTE

According to my analysis of archival documentation, recent satellite images and evidence from archaeological surveys, it is possible to identify an ancient route that linked Lepcis Magna to the hill of Ras el-Mergheb (figs IV.4, IV.11). Furthermore, from that point the road seems to have continued toward west reaching the south slope of Ras el-Manubia and then probably joined the coastal road at short distance from the sea (west of the area investigated). The importance and the nearness of Ras el-Mergheb hill from Lepcis Magna in ancient times cannot be ignored. The importance of the structural traces that have been found on the hill suggest a route linking it to the city. Even if the remains of Ras el-Mergheb are poorly known, the presence across different centuries of quarries (Qr2), religious evidence (Re2) and a fortified installation (Gs13) suggest the significant role of the site probably since the Punic phase.

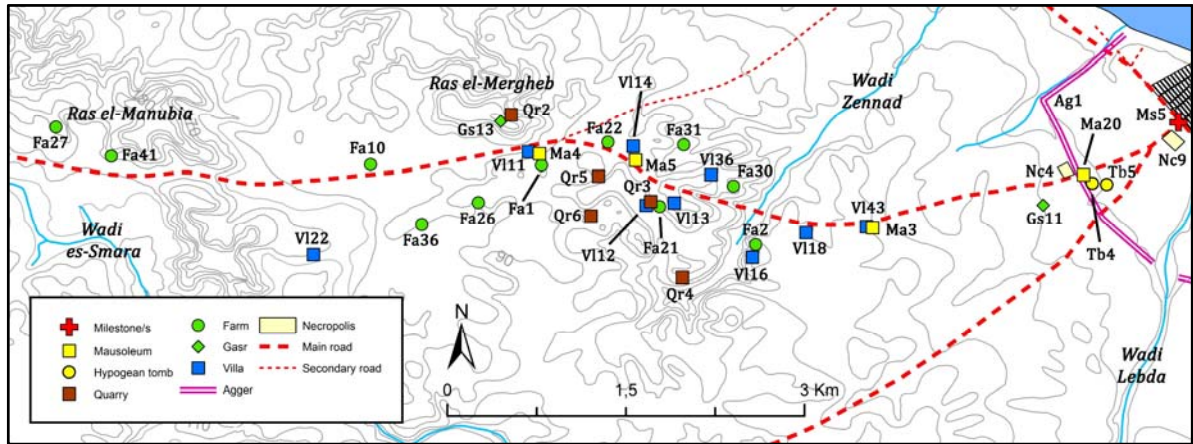


Fig. IV.11. The ancient inland route of the coastal road with the sites close to it.

The starting point of this route was the same as for the *via in mediterraneum* (Ms5a), that is where the *Porta Augusta Salutaris* was located and where the arch of Septimius Severus was subsequently built. It should also be remembered that beside the milestone erected by *L. Aelius Lamia*, another milestone dated to Domitian was found in the same area (Ms5b; see REYNOLDS 1955, 125, nr. 3). Unfortunately, due to its poor state of preservation, it is not possible to establish if this milestone - most likely a *caput viae* - belonged to this road or to the "East Jebel road". However, the will to specify the direction of the path with the word *in mediterraneum* in the *Aelius Lamia*'s milestone (Ms5a) could suggest the need to distinguish the two roads that, apparently, shared the same starting point.

The first c.70 m of the road (from the Severan arch to the modern monumental step of the archaeological area) were dug during the Italian colonial period (Rd7; see fig. IV.12). The portion investigated shown that the route was here c.8 m wide and paved with limestone slabs. However, there are no traces on the surface of the passage of wheeled transport; the presence of

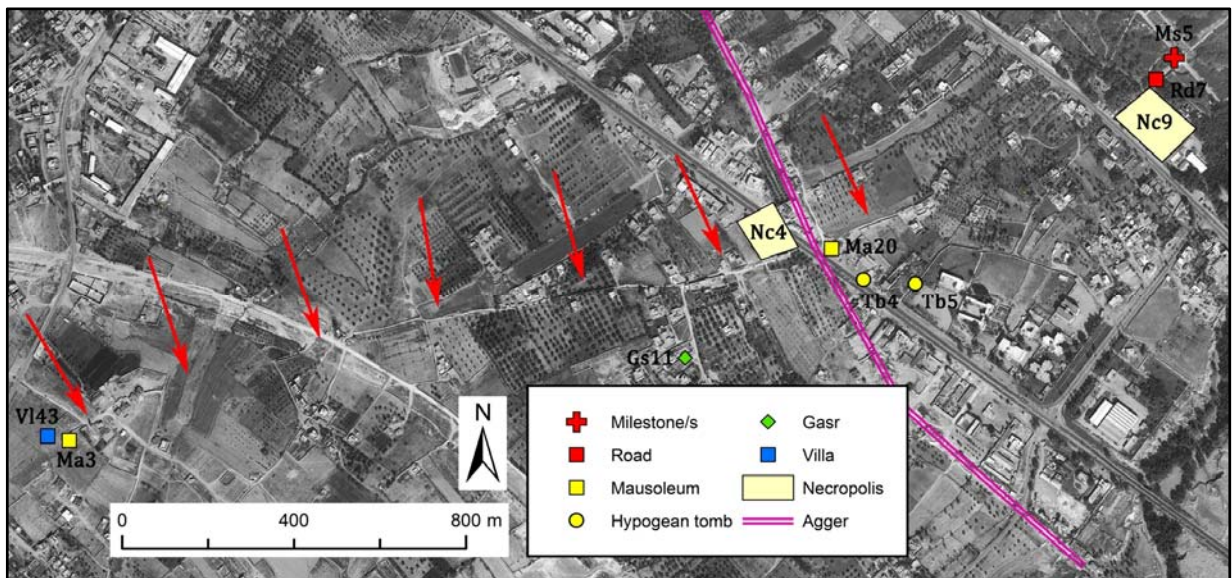


Fig. IV.12. The traces of the first sector of the ancient inland route of the coastal road with the sites close to it (background image: Google Earth).

the monumental arch with steps up onto the road, hindered - at least from the beginning of the third century AD - the direct passage of carriages.

The first 2 miles (c.3 km) are clearly traceable thanks to the archival documentation: both the RAF and USAF aerial photographs made during the 1940s and 1950s (figs 2.24, 2.25, 2.) and the maps realized from the Italian colonial period onwards (figs 1.5, 1.6, 2.17, 2.18, 2.20, 2.22) indicate the presence of a path (figs IV.12, IV.13) that is still clearly visible and partially walkable as far as the site of the Gasr ed-Dueirat mausoleum (Ma3). The antiquity of this sector of the route is confirmed by the presence of several Roman funerary structures that have been built along its sides. Southwest of the section of the road dug by the Italians (Rd7), the path was flanked by necropolis (Nc9, Nc4) and by the mausoleum (Ma20) built - it would seem - leaning over the earthen *agger* (Ag1). According to aerial photographs (figs 2.24, 2.25) and to the IGM map realized in 1914 (fig. 2.18), this earthen bank is discontinuous at the point where the route crosses it, further evidence of the antiquity of the road. It is unlikely that this passage through



Fig. IV.13. Traces of the first sector of the ancient routes southwest of the Severan arch with the sites mentioned in the text (background image: A. Zocchi personal archive; USAF flight dated 5/11/1954 - detail).

the *agger* was opened in the Arab/Ottoman periods given the scale of effort required to level it when there was certainly an already existing passage for the *via in mediterraneum* (Ti1), located a few hundred meters southeast (see fig. IV.13). However, contrary to the crossing of the close *via in mediterraneum* with the *agger's* ditch (Ag1), there is no archaeological evidence related to a bridge for this route (the area has been recently heavily overbuilt).

There are no clear traces on the ground for the rest sector that goes from the mausoleum of Gasr ed-Dueirat (Ma3) to the Ras el-Mergheb hill (fig. IV.11). However, once again, the presence of *mausolea* (Ma4-Ma5), funerary inscriptions (Fu10-Fu11) and the close proximity of sites of *villae* and farms could help to define the ancient route that led just beneath the external Roman gate built on the hilltop of Ras el-Mergheb (Gs13). This section of road was certainly used also by the nearby Wadi Zennad and Ras el-Mergheb quarry districts. There is an established connection between a type of large ashlar limestone blocks used in Lepcis and the quarries of Wadi Zennad, thus a road that linked these quarry faces to the city should must have existed.

The sector between Ras el-Mergheb and Ras el-Manubia is unfortunately poorly preserved in terms of archaeological visibility due to the cement factory and its related gravel and sand quarries (see par. 2.2.2). However, the presence of two significant *gsur* (Fa27/Gs5, VI22/ Gs15) built in dominant positions on both sides of a valley together with the same morphological conformation of the area (wide valley to the east and a narrow passage south of Ras el-Manubia) suggest that the route continued westwards from the hill of Ras el-Mergheb. Moreover, the modern highway Tripoli -Misurata retraced in this sector an older route attested since the Ottoman period (IGM 1886; also figs 1.5, 2.17, 2.20, 2.22) and that, in turn, probably overlaid an ancient one.

The ancient road probably continued west of Ras el-Manubia (outside the area investigated) for c.3.5 km and, at short distance from Sidi bu Ghedir, it turned north following a valley that runs for c.7 km toward the coast heading between Wadi Jabrun and Wadi Ganima. This valley is actually crossed by the modern Tripoli - Misurata highway (see fig. 1.6) but, according to the map attached to the account of the *Commissione per lo Studio Agrologico della Tripolitania* (MC 1913, I), it was crossed previously by an ancient caravan route (partially visible also in IGM 1915b). However, according to this hypothesis, the area where this inland route should finally join with the coastal *via publica* is at the twelfth/thirteenth mile. It is thus plausible to think that the junction between the two paths was situated at the *statio/vicus* named *ad Palmam* or *civitas Palma* listed as twelve miles west of Lepcis in the *Itineraria* (fig. IV.3).

IV.2.4. THE VIA IN MEDITERRANEUM

Together with the coastal *via publica*, the *via in mediterraneum* is the only road mentioned by the *Itineraria* that reached Lepcis Magna (figs IV.3, IV.4). According to the *caput viae* set by *L. Aelius Lamia* (Ms5a) during the Tiberius reign, the ancient route from Lepcis headed southwest

for 44 miles reaching the territorial border of the city, identified near to *Mesphe* (Medina Doga, see par. IV.1). This sector of the route - the east end of the inner *limes tripolitanus* road - is quite well known and is attested by several different milestones (*IRT* 931-938; DI VITA-EVRARD 1979, 69-73). Two boundary stones dated to Vespasian (DI VITA-EVRARD 1979, 77-83 = *AE* 1979, 648-649) confirm the Lepcitanian western border indicated by the *caput viae* (see par. 2.1.2).

The first 8 miles of this route are included in the area investigated here and they can be traced with accuracy as far as the Wadi es-Smara. A few ancient structures, together with some traces visible thanks to the archival documentation and to satellite imagery, help to define the path from its *caput viae* (Ms5a) to the wadi (fig. IV.14).

From the *Porta Augusta Salutaris* the road initially shared the same path with the route that headed to Ras el-Mergheb (for its description see above). Once to the south of the administrative building of the DoA of Lepcis Magna, it separated from it following a southwest direction to reach the ancient bridge (Ti1) built over the ditch of the *agger* (Ag1) (figs IV.13, IV.14). The unpaved track, still partially visible in the area southwest of the Department's offices, is indicated until the viaduct on the IGM map dated 1914 (fig. 2.18). However, the construction of an airstrip during the 1920s northeast from the Italian "Forte Lebda", has obliterated the traces indicated on the IGM map.

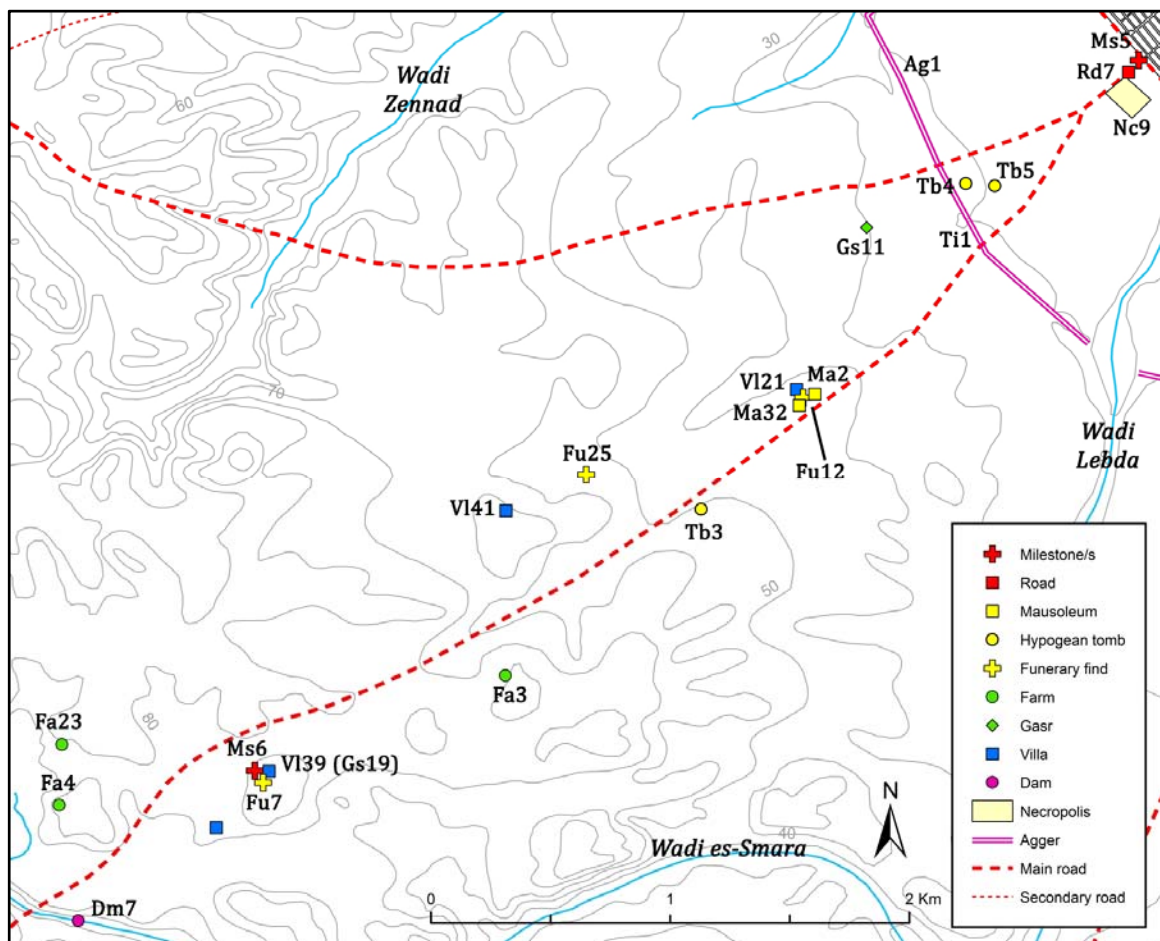


Fig. IV.14. The first sector (first - fourth miles) of the *via in mediterraneum* with the sites close to it.

The *opus caementicium* bridge (Ti1), unfortunately recently destroyed, was 6.80 m wide and c.20 m long (the span is c.8 m) and seems to be the only ancient viaduct preserved in Tripolitania (GOODCHILD 1948, 7; ROMANELLI 1970, 22). From the Roman bridge the road turned gently towards southwest and then, probably after 500 m, it aligned with a track that still runs a short distance southeast from a funerary area characterized by the mausoleum of Gasr Gelda (Ma2), by another monumental structure (Ma32) and by several inscriptions found nearby (Fu12). With the same orientation the route continued WSW for at least c.650 m where a significant hypogean tomb dated to the Flavian period was found (Tb3). From this point, the traces of the track are missing; however a Caracalla milestone marking the second mile (Ms6) was found at short distance from the ruins of Gasr Hammud (Gs19). This find, together with some architectural elements belonging to a mausoleum (Fu7) reused as *spolia* within the same *gasr*, allow me to hypothesize that the ancient road ran a short distance from this Late Antique construction. According to the route proposed, this milestone was originally set c.1.5 km far from Gasr Hammud that is instead located a little further than the third mile (see fig. IV.4). Moving the column from its original position to the *gasr* (probably in a time span between the fourth and the sixth century AD) make more sense if the road was close to both locations.

From the site of Gasr Hammud (Fa39/Gs19) the road continued towards Wadi es-Smara and then followed a southwest orientation perhaps retracing more or less the old caravan route, actually asphalted, that led to Cussabat (figs 1.6, 2.20). The crossing of Wadi es-Smara could constitute however an issue since it is one of the largest wadi of the area and the numerous ancient dams built along its bed, suggest that it was certainly capable of moving considerable quantities of eroded material during the short rainy season. Even if there is no evidence of the exact location of the crossing place, the wadi sector close to the proposed route is actually one with the slightest slopes, a factor that could ease the crossing without the aid of a viaduct. Furthermore, it cannot be excluded that the nearby dam (Dm7) acted as protection for this road from the periodical flood waters (in this case it has to be positioned west from the route); an hypothesis that has been recently proposed for the western wadis of the Lepcitanian area (MUNZI *et al.* 2004, 30).

IV.2.5. THE SOUTHERN ROAD

The finding of a milestone base (Ms9) together with some traces detected on RAF aerial photographs taken during the 1940s, suggest the existence of a road that headed southwards from Lepcis Magna (fig. IV.4). Indeed, it would appear quite strange if a wide portion south of the city was not directly linked to the coast in a similar way to the area served by the other roads just described (see fig. IV.1). This archaeological lack was already noted by Goodchild (1948, 28-29) who proposed the existence of a track between Lepcis and the area of Beni Ulid. Moreover, as shown by different surveys (MATTINGLY 1995, 77-88, 144-153; BARKER *et al.* 1996; MUNZI

2004), the area comprised between the Wadi Taraglat and Wadi Soffegin basins revealed a rich and agriculturally well developed territory in ancient times with additional significance in terms of Roman military control: all factors that necessitated a direct and safe connection with the coast and with the city.

Even if the archaeological traces of this route are limited only to the very first sector, the recent and unpublished discovery of a milestone in itself would suggest the importance of the road and that it probably continued for a considerable length, at least until the Msellaten area, probably towards the *quadriburgus* known as Gasr Bularkan (BARKER *et al.* 1996, II, Md2).

The milestone base (Ms9) was found among the scattered finds related to a Roman mausoleum (Ma10) located at the western hill foot of Ras el-Hammam. The base is characterized by a limestone parallelepiped with a circular socket to house the column's shaft; the diameter of the recession is c.40 cm, similar to many of the milestones set up by Caracalla in the region. Even if there are no further elements to establish an accurate date, the beginning of the third century AD would be a reasonable hypothesis considering the efforts made by the Severan dynasty to reorganize the whole system of the *limes*, including also the road network (in general see MATTINGLY 1995, 77-83). The base was not *in situ*; however, its original location had to be pretty close due to the fact that it came to light thanks to mechanical works realized recently alongside a modern road running few meters east from the mausoleum (Ma10).

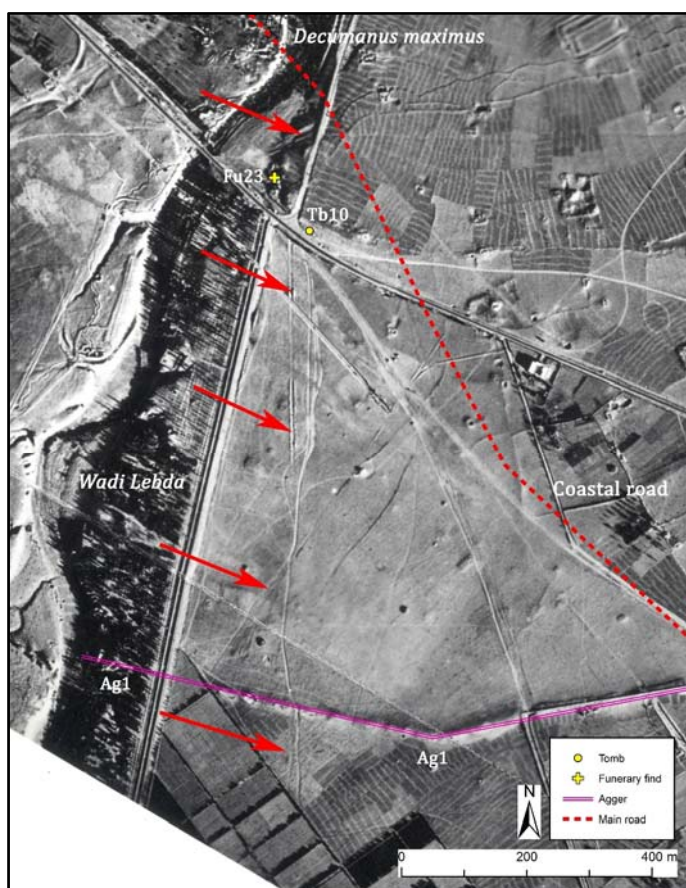


Fig. IV.15. The traces of the first sector of the southern road with the sites close to it (background image: BSR, WP G11-62 - detail).

The course of this road cannot be traced with accuracy. However, both some traces visible analyzing the aerial photographs dated to the 1940s (fig. IV.15; see also figs 2.24, 2.26, 2.27) and funerary evidence would suggest its starting point just on the east bank of the Wadi Lebda, precisely at the crossing with the *decumanus maximus*. Beside the track visible in the air photographs, the route could also be confirmed by the position of an hypogean tomb (Tb10), whose grave goods can be dated from the first century AD, and by the finding of a funerary inscription related to a mausoleum (Fu23). We have also to bear in mind that the tall mausoleum

named Gasr Banat (Ma6), located c.650 m to the east of the hypothesized southern route, had its facade looking west, that is towards this road. Moreover, a modern track with apparently the same orientation and position is shown also in the Lepcis map edited by Karl Müller in 1855 (fig. 2.14).

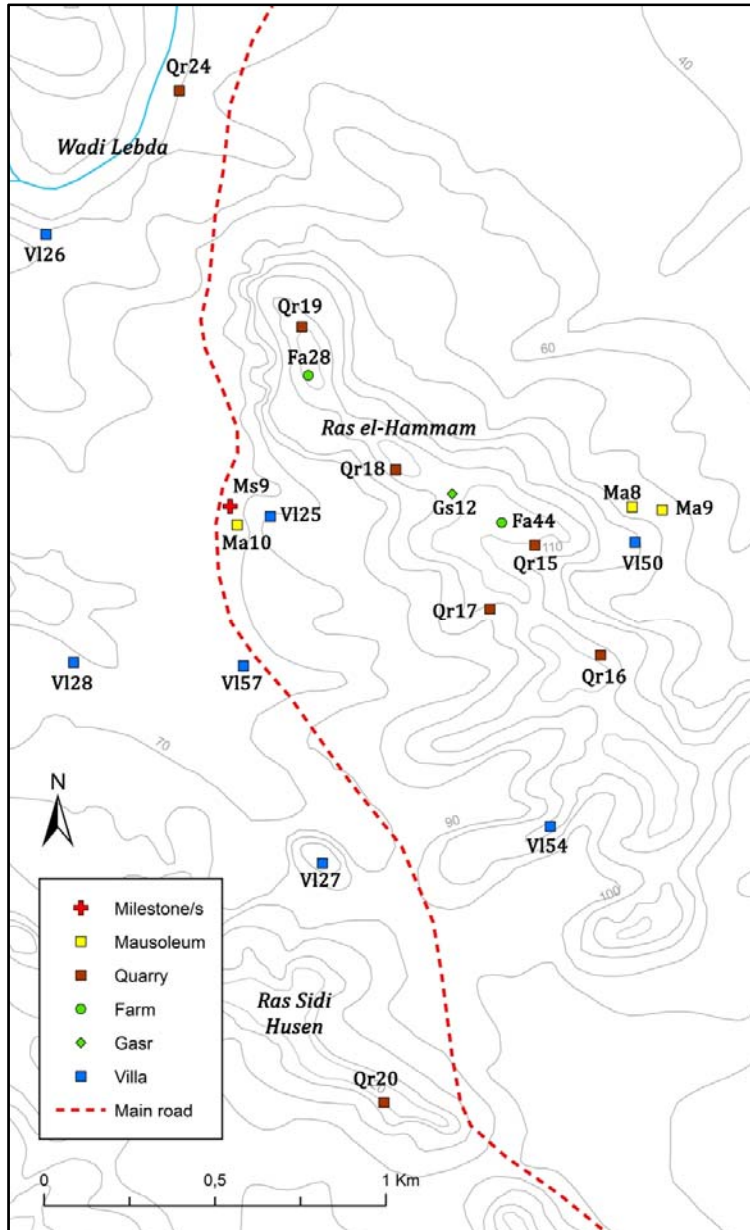


Fig. IV.16. The sector from the second to the fifth mile of the southern road with the sites close to it.

If we assume that the *caput viae* of this road was situated at the crossing with the coastal *via publica/decumanus*, it would be then convincing to state that the milestone base found near Ras el-Hammam (Ms9) marks with some precision the third mile (fig. IV.4).

In the sector between the earthen *agger* (Ag1) and the north slopes of Ras el-Hammam the traces of the road detected in the aerial photos have been obliterated due to the construction of the "Concessione Valdagno" settlement. Beside the finding of the milestone base, the path of the further segment, that is at the foot of the west flank of Ras el-Hammam hill, would be instead confirmed by the presence of the mausoleum (Ma10), by numerous *villae* (VI25-VI28, VI54, VI57) located nearby (fig. IV.16). It is important

also to keep in mind that an ancient fortlet (Gs12) was built along the Ras el-Hammam ridge and its position would easily fit with the importance of controlling both the southern road and the coastal *via publica*. The course of the route suggested here is also strengthened if we take into account the terrain morphology, characterized on the east side by the Ras el-Hammam hill and on the west side by the hills of Ras Sidi Husen and Ras el-Gattara.

Moreover, the presence of limestone quarries along the slope of the hills flanking its path constitutes an additional element that has to be taken in consideration (fig. IV.16). The track

would have indeed facilitated stone transportation to the city, especially for the quarries located on the west side of Ras el-Hammam where the extraction of very large ashlar blocks has been recently documented (Qr17).

IV.3. THE PERIPHERAL ROAD NETWORK OF LEP CIS MAGNA: THE MINOR ROUTES

A further two roads have been detected in addition to the main routes that led to Lepcis Magna from the different areas of Tripolitania. In both cases these paths, certainly less important in terms of length and traffic, acted as connections between two of the main roads analyzed above (see par. IV.2). One of these connected the coastal *via publica* east of Lepcis with the southern road, the other allowed travellers from Cape Hermaion and the coastal road to reach the inland route and the Mergheb hill (fig. IV.4). Of course several other minor roads or even footpaths must have linked different sites. Sometimes their evidence, since they were not provided with milestones or limestone paving (except in the immediate environs of the city), is suggested only by their relationship with ancient structures or by the morphological features of the terrain. Due to the difficulty of identifying these minor, and certainly numerous, roads it was considered appropriate to take into account only those that preserve some archaeological evidence or clear traces in the historical documentation.

IV.3.1. THE JUNCTION BETWEEN THE COASTAL ROAD AND THE SOUTHERN ROAD

In the area east of Lepcis, and precisely in the es Sahel oasis, between the Tripoli - Misurata highway and the modern artery that retraces the ancient coastal *via publica*, is a tarmac road about 3 km long that preserves a different orientation compared to the other modern routes (fig. IV.17). This anomaly was noted already by Richard Goodchild (1949b, 38) who was also able to analyze the WWII aerial photographs on his disposal (fig. 2.28). The British scholar suggested that this Arab track (not asphalted at his time) retraced an ancient route and perhaps acted as a "by-pass" to avoid the city main *decumanus*, where the passage of the wheeled transport was hindered by the presence of the Severan arch.

A few further topographic elements could however be added to the hypothesis carried out by Goodchild and, apparently, they seem to confirm the existence of this road in ancient times. A first element is that the Arab track continued its route further to northwest compared to the extent seen by Goodchild, passing by the mausoleum of Gasr Banat (Ma6). The new cultivated fields set up within the Concessione Valdagno during the 1930s erased the track in the sector west of the funerary structure, preventing Goodchild from detecting it since he based his analysis on wartime aerial photographs; however, the maps made before the construction of the



Fig. IV.17. The traces of the junction between the coastal road and the southern road (background image: Google Earth).

Italian settlement (figs 2.20, 2.21), shown that the path ran straight until shortly before the Wadi Lebda, then crossed it and prosecuted westwards. This ancient path should indeed have continued at least until it joined with the southern road, whose route was unknown to the British scholar. Unfortunately, there are not enough elements to establish if this road continued its route further, crossing the Wadi Lebda and then linking with the other main routes to the west such as the *via in mediterraneum* and the inland route of the coastal road (fig. IV.4). This possibility would have allowed travellers to avoid entering the city and saved time especially if one had to prosecute the journey in the east-southwest or east-west direction or vice versa.

The most convincing element that allows me to hypothesize with enough certainty the antiquity of this link road is its position within the cadastral partition detected in this area (fig. IV.10 and par. IV.2.2). This route, diverging c.17° from the coastal *via publica*, would cross indeed the internal partition of 6 *actus* with a ratio of 1:3 (every 6 *actus* westwards this road deviated from the coastal *via publica* of a distance equal to 2 *actus* = c.71 m). This ratio is not casual since in this way the route would have respected the corners of cadastral parcelling based on the multiple of 2 *actus* such as the *heredium* (2x2 *actus*) and the *iugerum* (2x1 *actus*) and, at the same time, would also have avoided to overlap with the *termini* of the 12x12 *actus* partition where probably the inviolable boundary stones were set; an expedient recognized in other similar cases (MUZZIOLI 2001, 12). The diagonal roads were commons within the organized

Roman land partitions and the different ratio between these courses and the cadastre is widely documented (TOZZI 1974, 44-60; BOTTAZZI 1988). However, a factor seem to be sure in this case: the diagonal road that linked the coastal *via publica* with the southern route was planned *ex novo* or retraced in relation to this parcelling.

A further element that would confirm the ancient origin of this course is the position of the already cited mausoleum of Gasr Banat (Ms6), located at the corner of a 12x12 *actus* partition (fig. IV.10 and par. IV.2). Beside the will to mark a boundary it is now clear that the choice to build this funerary structure was also conditioned by the proximity (c.70 m) of this diagonal road.

IV.3.2. THE ROAD FROM CAPE HERMAION TO RAS EL-MERGHEB

According to traces detected both on the satellite images and from the historical cartographic documentation, it seems reasonable to hypothesize the existence of a road between the area of Cape Hermaion (Khoms) and the hill of Ras el-Mergheb; this route, c.4 km long, would have connected the coastal *via publica* to the inland route that from Lepcis headed west (fig IV.4). The reasons of this link can be explained in relation to the existence of a secondary harbour (Ti2) at Cape Hermaion, attested from at least the fourth to the second century BC (fig. IV.18). The importance of this area within the Lepcitanian suburban zone is also underlined by other subsequent findings and structures including lavish *villae* (VI4-VI6), a



Fig. IV.18. The traces of the road from Cape Hermaion to Ras el-Mergheb with the sites associated (background image: Google Earth).

necropolis (Nc3), funerary structures (Ma23-Ma25, Tb16) and perhaps religious buildings/areas and commercial activities.

Beside evident traces detected on the satellite images, the route is clearly shown in the majority of the Italian maps related to the surrounding of Khoms (figs 2.15, 2.17, 2.22). Moreover, the northern part of its course seems also indicated in the map edited by Müller (fig. 2.14), the only one showing the area before Khoms was established.

According to the plan of Khoms realized by Palmiro Storti in 1919 (fig. 2.23), this track was retraced by the street named by the Italians *via Cussbat*, a road that from the Turkish Building (indicated the map as *G.no pubblico* and that is the point from where the ancient route would be departed from the coastal *via publica*) headed to the south gate of the city (*Porta Mergheb*). The irregular course of the subsequent sector is still clearly detectable in the south outskirts of Khoms and, actually, more of the half of the whole path of the road has been lost beneath an intense overbuilding (fig. IV.18). Just outside the built area a few archaeological evidence such a *villa* (Vl17) and the mausoleum of Gasr Ben Nasser (Ma1) would confirm the antiquity of the route, still visible a few meters northwest from these ancient structures.

The sector close to Ras el-Mergheb is less clear, however both the direction followed by the previous segment of the hypothesized road and the remains of two Roman *villae* located nearby (Vl14-Vl15) would enforce the hypothesis that this ancient route continued with the same orientation and joined the main inland road south of the Mergheb hill.

IV.3.3. THE ROAD SYSTEM OF THE INNER EAST SUBURBIUM

The area east of Lepcis defined by the Wadi Lebda to the west, the earthen *agger* (Ag1) to the east and the motorway Suk el-Khamis - Khoms to the south contains numerous and considerable archaeological sites belonging to different categories (fig. IV.19). However unfortunately, two main factors contribute to prevent the correct reading of the its main topographic features such as the road network. On the one hand there was considerable looting and destruction of ancient structures during the Italo-Turkish war to built forts, trenches and redoubts in the area. This has erased most of the ancient remains of wall alignments that could help to identify roads or paths. On the other hand the lack of any extensive geophysical investigation such as a magnetometer survey hinders the analysis of the buried evidence; however, a recent preliminary survey has been made in 2009 within the *Ports Project* but it has not been published in detail (KEAY 2010, 333-334). In addition to these factors also the actual use of numerous and well-frequented footpaths makes it hard to distinguish between them and ancient ones. In view of all this, the only elements that could contribute to define the evidence of ancient roads of this area are the detailed maps made by the IGM in 1914 and 1915 (figs 2.18, 2.19) and a few archaeological remains or traces.

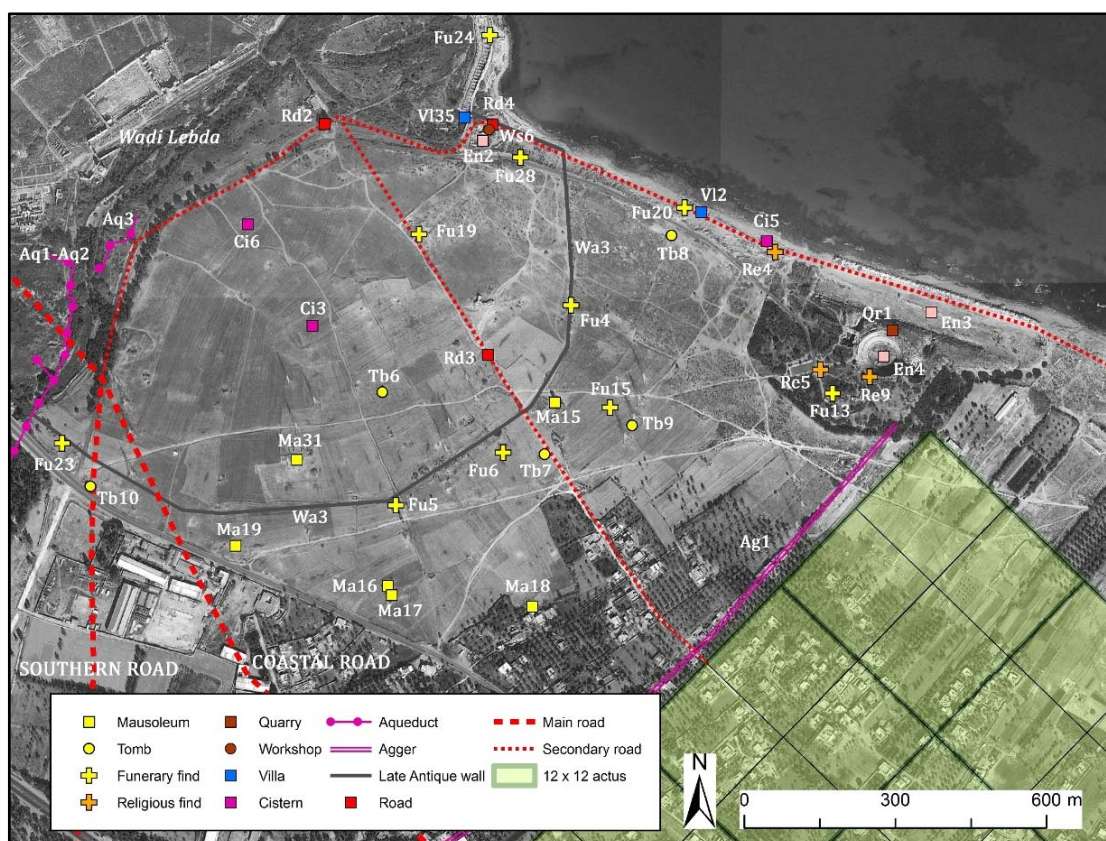


Fig. IV.19. The road network in the close east suburbium of Lepcis Magna with the main archaeological evidence associated (background image: Google Earth).

Two of the three sites related to roads that have been found in this area belong to a route that from the *decumanus maximus/coastal via publica* headed northwards just west from the Wadi Lebda (fig. IV.19). The route should link the main east-west axis with the Lepcis harbour without entering within the city core; from there it turned to the east and, at short distance from the shore, reached the circus (En3) and finally it probably prosecuted to the east (fig. IV.4). The first c.300 m of this path, that is from the *decumanus* to the first moderate turn toward northeast, seems to be traceable thanks to a series of wall alignments close to the Wadi Lebda clearly visible in the IGM maps and in a WWII RAF air photograph (figs 2.18, 2.19, 2.26). In particular, the 1915 map (fig. 2.19) indicates a wide structure (c.65 m long), unexcavated and probably provided with a portico, whose importance certainly would have required a direct road access. The further part of the route - until the east mole of the harbour - is attested by a sector of the road (Rd2) brought to light, probably by the Italian soldiers, at short distance from the east side of the temple of Jupiter Dolichenus. The segment found is actually not visible anymore but an unpublished aerial photograph dated to 1919 discovered in the USAM Archive (fig. IV.20), shows that it was paved and c.5 m wide; moreover is also clear that it curves gently probably to be aligned with the quay of the close harbour to the north. The road continued its course following the south-eastern quay of the Severan port and from there, through part of the east mole, it ran at short distance from the coastline reaching the circus (En3).



Fig. IV.20. The remains of the road (Rd2) at short distance east from the Temple of Jupiter Dolichenus, 1919 (USAM, Album Ufficio Storico nr. 5, 118-309 - detail).

A further portion of the road (Rd4) has been dug recently by the French Archaeological Mission a few meters east from the harbour. According to this excavation the route is here configured as a *platea maritima* with a portico on the inland side that is towards a series of shops and stores (Ws6) as well as the *vestibulum* of thermal area (En2), known as the Eastern Baths (DAGNAS, PAULIN, 2010-2012). The sector has been cut on the north side by the Late Antique city wall (Wa3), but the *platea* should have originally had a considerable width and probably acted as a quay. However, according to the function of the associated buildings and the nearness of the harbour, the road had to be heavily used in this sector during the mid and late Roman Imperial phases.

The further east segment linked the city to the circus (En3), whose monumentalization is dated to the mid second century AD. As already stated by Delaporte at the beginning of the nineteenth century (1836, 332), this road sector - at his time partially visible - was flanked by both the structures facing the sea such as the "Villa del Nilo" (Vl2) and funerary monuments to the south, as attested by a first century AD hypogean tomb (Tb8). In the sector just before reaching the circus Romanelli (1925a, 152) reported also the finding of three limestone bases (Re4) - dedicated to *Juno* and *Venus* by the *gens Cassia* - just beside the ancient road, however not visible at his time. Moreover, the portion of the road close to the circus, according to Cowper (1897, 210-211) and M  hier de Mathuisieulx (1903, 266), was flanked by other remarkable structures, now lost, identified as small temples and as squared buildings with pilasters in addition to a great amount of columns on the ground.

An indirect witness of the existence of the road come from the circus (En3): the presence of several entrances along its external north side would indeed confirm that the route ran in this

area flanked on one side by the circus and, to the north, by the seashore (HUMPHREY, SEAR, VICKERS 1972-1973, 29; HUMPHREY 1986, 27). There are no traces of the road in the section further east; however, both the report made by Romanelli (1925a, 155) who cited the remains of several isolated houses and *villae* along the coast, and the excavation of a coastal villa (Vl1) located 2 km eastward would suggest its continuation.

The traces of another road (Rd3) has been recently detected in the central area of the east inner suburbium, c.100 south from the Italian stronghold named "Settimio Severo" (fig. IV.19). Unfortunately, the remains of this route are characterized by few limestone slabs and it is not possible to determine its original width nor its orientation. However, thanks to its hypothetical extension both northwest and southeast it is possible to establish, with enough certainty, its course. Extending the route towards northwest from the site of the limestone slabs and following a modern path it would seem that the starting point of this road was the southern quay of the harbour; moreover, the hypothesized path would have the same orientation as the Jupiter Dolichenus temple. To the southeast, extending the orientation, it would have reached - following the same modern path - the edge of the 6x6 *actus* partition of the cadastre detected just outside the earthen *agger* (Ag1). There is another significant evidence that would confirm the existence of this route: the coincidence between the road orientation with the wall alignments of the funerary structures close to it. Is the case of the mausoleum of Gasr Shaddad with its enclosure (Ma15), but also the remains of the mausoleum of Gasr Sidi Bu Hadi (Ma18) and the enclosure of an hypogean tomb (Tb6) located southwest.

In addition to the evidence mentioned above it is significant to notice that the hypothesized route runs parallel to the coastal *via publica* in its sector between the Wadi Lebda and the new alignment of the land cadastre to the east (see par. IV.2). Ultimately, it seems that the majority of the structures located in this area, including the large cistern (Ci3) followed, with minor variations, the same northwest-southeast orientation dictated by the two main road axes.

Without a doubt other minor roads crossed the same area and, for instance, it is highly probable that a route approached the amphitheatre (En4) from the southwest. However, any attempt to define a hypothetical course for it would be unfounded as would any efforts to identify the small paths that from the main roads should lead to specific funerary structures.

Finally, it is important to consider that some modifications to this organized road network occurred with the construction of both the Late Antique and Byzantine walls (Wa3-Wa5); due to their construction some routes probably had to change their courses adapting to the closest gates, whose positions in this area are still unknown.

IV.3.4. THE ROAD SYSTEM OF THE INNER WEST SUBURBIUM

The northwest sector of the inner suburbs of Lepcis Magna and in particular the area defined by the Marcus Aurelius arch (Ti6) to the east and by a large necropolis to the west (Nc1),

is characterized by ancient structures that are in most cases strictly related to the coastal road (fig. IV.21). All the sites that have a "public" function such as warehouses (Ti3, Ti5), a caravanserai (Ti4) and probably also the thermal building known as the Hunting Baths (En1), are situated within the narrow strip (c.300 m) between the main road and the seashore. The historical documentation together with archaeological remains allows us to identify at least two minor roads in the strip mentioned above. Both these short paths had their starting points at the Marcus Aurelius Arch (Ti6) that, according to the find spot of the first milestone (Ms2), would have marked - at least from the second century AD onwards - the *caput viae* of the coastal road west of Leptis (see par. IV.2).

The first route linked the *decumanus maximus*/coastal road to the Hunting Baths (En1) and almost certainly it would have continued north, reaching the shore and probably joining with a west-east road heading towards the city (fig. IV.21). The main features of this paved route that had a preserved total width of 5.50 m, are clearly visible in the sector (Rd5) that has been

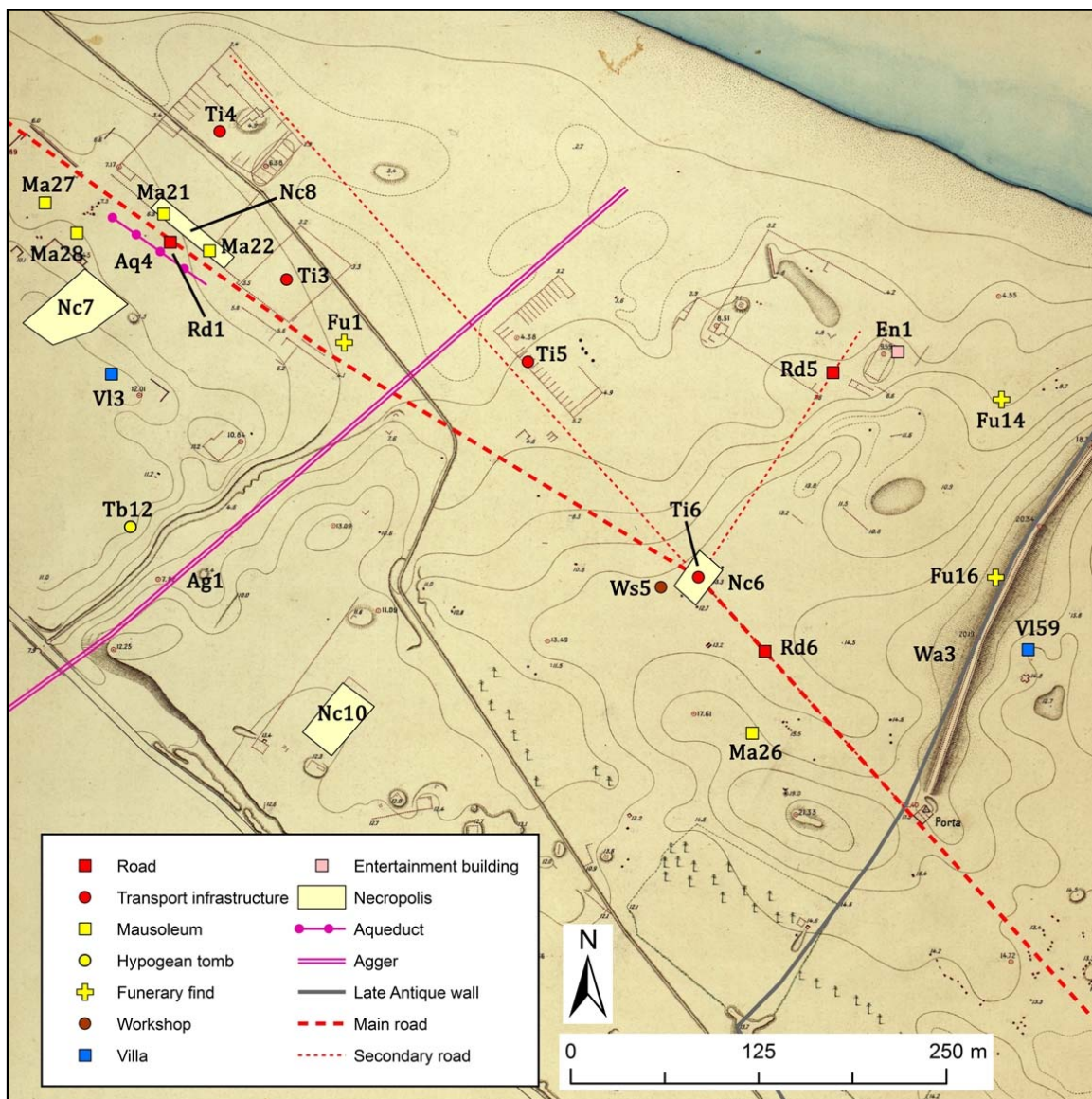


Fig. IV.21. The road network in the close west suburbium of Leptis Magna with the main archaeological evidence associated (background image: IGM 1915a - detail).

excavated west of the thermal building. On the opposite side a large building dated to the second century AD and characterized by a monumental entrance framed by two columns, was detected already by the IGM topographers and marginally excavated during the 1930s (MUSSO, BIANCHI 2012, 22-25; see fig. IV.21). Although the function is not clear, its significance within the area certainly justified, together with the Hunting Baths, the provision of this paved road.

From the arch of Marcus Aurelius another road headed with the same orientation as the city's *decumanus maximus* for at least further 450 m northwest. Even if actually there are no archaeological evidence of this road, its course can be traced with certainty by analyzing both the 1915 IGM map (fig. IV.21) and the RAF aerial photographs taken during the 1940s (figs 2.24, 2.27). These documents show indeed two large and important buildings, the caravanserai (Ti4) and the warehouses (Ti5), aligned with the extension of the Leptis *decumanus* (see also JONES 1989a, 96-99; MATTINGLY 1995, 118 and fig. 6:1). The road may have deviated or stopped at the end of the caravanserai due to the convergence of the shoreline: probably it turned both to the left to repair the coastal road and to the right where it may have joined a hypothetical road situated very close to the sea and that headed to the western quays of the Lepcis harbour.

APPENDIX V

THE ROMAN GRAVE GOODS

The analysis of the Lepcitanian Roman grave goods, besides dating *hypogea* and *necropoleis*, allows us to acquire significant information concerning the importation, circulation and consumption of specific classes of objects. However, it is worth considering that these items had distinctive functions as part of the funerary rite (see pars 4.5.2-4.5.3) and, often, their symbolic destruction or alienation from the land of the living, has to be seen in relation with the will of the society (or of the family) to show and represent the deceased in the funeral ceremony. This means that the general social framework expressed through grave goods does not always reflect the real condition of the dead: quantity and quality of the objects could declare a real acquired economic situation or, on the other hand, could relate to an ostentatious display of a desired social status.

The first and primary concern was probably where to preserve the remains of the deceased inside the *hypogeum*. The Lepcitanian situation offers a large spectrum of solutions that range from *amphorae* to limestone coffin-shaped urns and marble, limestone, glass or alabaster vessels and essentially lead, marble or limestone *sarcophagi* for inhumations. In the 63 Roman *hypogea* analyzed, there have been found 444 cinerary urns: 331 were limestone coffin-shaped urns (73%), 65 have a vase shape (15%) and the remains of 53 cremated bodies have been found inside *amphorae* (12%).

The stone vessels constitute for Lepcis the majority of the funerary urns (87%) and can be divided into three main types: limestone coffin-shaped urns with superimposed lids, limestone coffin-shaped urns with sliding lids (fig. V.1) and limestone, marble or alabaster vase-shaped urns (fig. V.2). The first type of urn, the coffin with a superimposed lid, is the most common type at Lepcis Magna and similar examples can be found from the third century BC at Carthage (BENICHOUS-SAFAR 1982, 241-242) and at *Lilybaeum* in Sicily (BISI 1971b, 34-35). These coffins mainly were made from Ras el-Hammam limestone and were used at Lepcis - according to the data available - from the first century BC to the end of the first century AD, when they seem to have been replaced by the other two types of urns. Their shape is basically a truncated-pyramid shaped box provided with a pitched lid (rarely with a curvilinear section) anchored with lead laces that passed through holes made both on the lid and on the box. Their length varies from a minimum of 40 cm to a maximum of 80 cm; however, their standard size is about 50 cm,

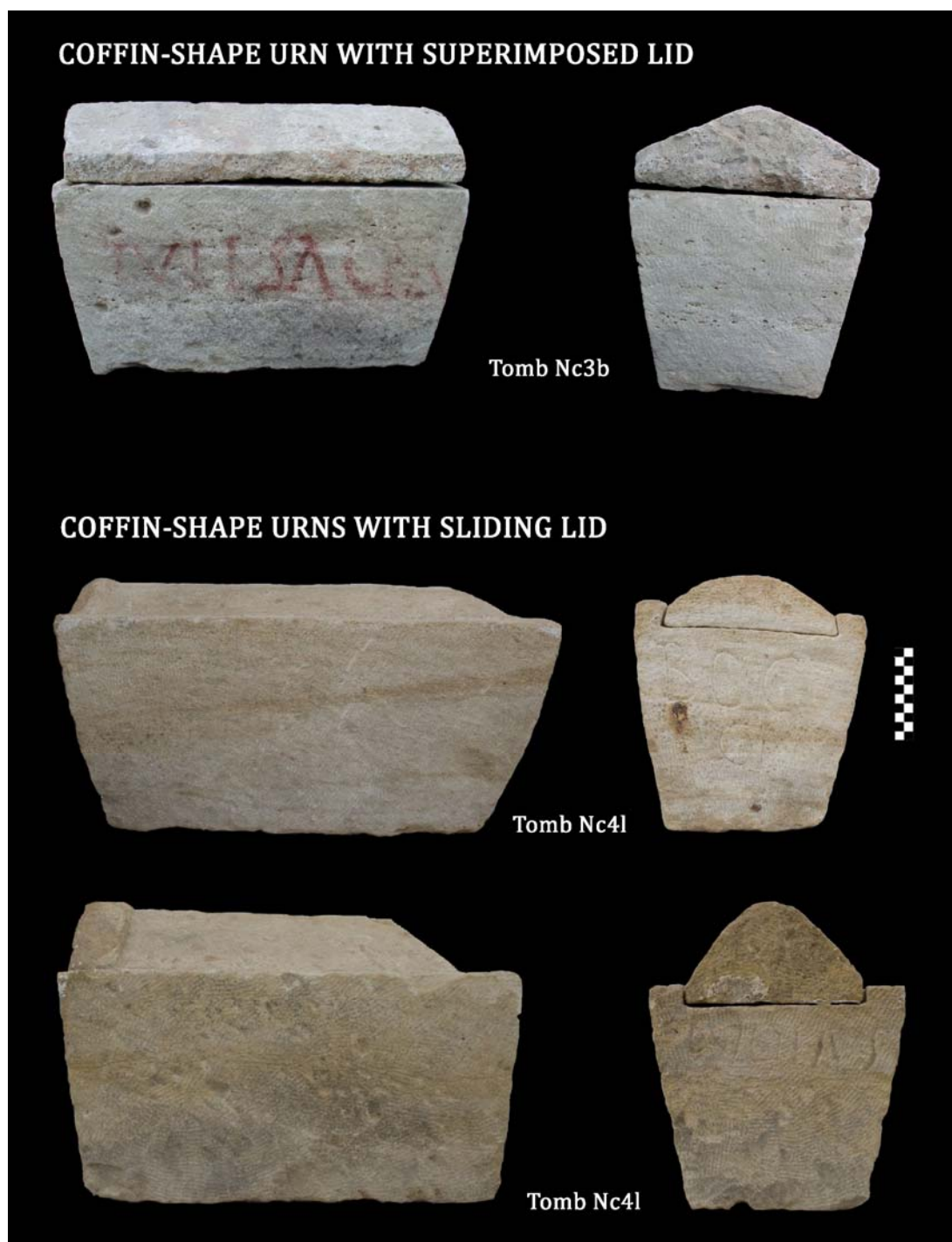


Fig. V.1. The two types of the Lepcitanian coffin-shaped urns.

probably in relation to the Punic *cubitus* (51.5 cm). Often these urns still preserve Neo-Punic or Latin inscriptions with the name of the deceased carved or just painted on the lid or along one long side of the box. The second type of limestone cinerary urns, the ones provided with a sliding lid are almost exclusive to Lepcis Magna since other similar examples were found only at *Thaenae*, in Tunisia (HARRAZI 1985, 965-966). This type of urns were made using Ras el-Hammam limestone, though their use is concentrated from the end of the first century AD to the middle of the subsequent one. The boxes in this case were characterized by a truncated pyramid

whose upper internal edges were bordered on three sides by an offset that allowed the slip of the lid (fig. V.1). This new system, compared to the previous one, simplified the opening mechanism and avoided piercing both the lid and the box of the urn. Usually, lids have a pitched, trapezoidal or a round section and the whole length of the vessel did not exceed 55 cm, suitable for the majority of the niches found within the *hypogea*. The name of the deceased was generally inscribed (or painted) on the short side of the box, the only one visible after the urn was placed in the niche.



Fig. V.2. Examples of Lepcitanian marble and alabaster vase urns.

The vase urns (fig. V.2), mainly made in limestone (from Ras el-Hammam and Wadi Zennad quarry districts) but also in marble and alabaster, were common at Lepcis Magna from the end of the first century AD while a very few examples were found in other part of Africa: *Sousse* and *Carthage* (HARRAZI 1985, 963-964) and *Iol Caesarea* (LEVEAU 1987, 283, taf. 49b). Local production of these objects probably occurred at Lepcis from the Flavian period, imitating models and shapes from Rome where they were used from the proto-Augustan age (FONTANA 2001, 163-164; DI VITA-EVRARD *et al.* 1996, 89-97). The Lepcitanian vase urns have different shapes, characterized essentially by a hemispherical, stamnoid or cylindrical body with often ribbed decorations. Several shapes define instead handles and shoulders (also adorned with

animal protomes: ROMANELLI 1925, fig. 88; BARTOCCINI 1926, fig. 29) while the foot had ring or bell shapes and the lid was often conical with a pommel at the top.

Beside the limestone/marble cinerary urns a few glass vase urns were also found in three *hypogea* (Nc1i, Nc7a, Tb10) for a total of 4 vessels. It is important to notice that their number in the Lepcitanian *necropoleis* could have been much higher given the fragility of the material and that scattered glass fragments may have not been recorded in excavation reports. Their percentage (c.1% of the total of the urns) indeed surely underestimates their importance also bearing in mind the high number of these vessels found, for instance, within the *necropoleis* at Oea (AURIGEMMA 1958, 66-67; CINGOLANI 2015, 45-57, cat. 133-190).

The use of *amphorae* at Lepcis Magna was probably a cheaper solution compared to the limestone/marble or glass urns and they were used for 53 cremations (12%). Most of the time small *amphorae* such as the Schöne-Mau XXXV type (Tb15, Nc7a) were adopted. These and probably others small pottery vessels were locally produced and their kilns could be located in the Lepcitanian territory (CIFANI *et al.* 2008, 2304-2306).

Sarcophagi were used within Lepcitanian *hypogea* when inhumed bodies were not placed on the banquette or buried in earthen pits. Lead *sarcophagi* have been found in three tombs (Nc3b, Nc8a, Tb3); they were most likely provided with a wooden case fixed on the metal through nails and then coated with a layer of stucco. This process could finish with the painting of the stucco as is widely attested in the Hellenistic and Roman *sarcophagi* produced in Egypt (PARLASCA 1991; DI VITA-EVRARD *et al.* 1996, 97; MUSSO *et al.* 2010, 61). Only one large undecorated limestone *bisomus sarcophagus* has been found inside a funerary chamber at Wadi el-Fani (Ma13).

Pottery constitute the most representative objects of the Lepcis Magna *hypogea*. The total of these items (entire or partially complete) reaches 1,373 vessels. Half of the total (51%, 707 objects) belongs to coarse ware pottery, the other half is represented by *amphorae* (21%, 291 vessels), lamps (16%, 216 objects) and fine ware pottery (12%, 159 pieces).

Amphorae have been found in half of the structures (33 out of a total of 63) and their functions, besides their use as cinerary urns (see above), were connected both to contain the remains of the *ustrinum* and the consumption of wine during libations (see par. 4.5). According to the data available, 16 different types of *amphorae* have been identified plus a considerable quantity of forms that have not yet been recognized (fig. V.3). The *amphorae* Dressel 2/4 are the most used ones within the Lepcitanian *hypogea* (87 pieces) and their fabrics seems to indicate a Tyrrhenian production, especially from *Latium* and Campania. The use of these Italic *amphorae* seems also to be connected mostly with the consumption of wine during the funerary rite and then with their reuse to contain the remains of the funeral pyre (see par. 4.5). The presence of this amphora within first and second century AD funerary contexts is not surprising since it is also well attested in other sites at Lepcis (FELICI, FONTANA 2003, 77-79) as well as other parts of

SITE	DR. 2/4	MAU XXXV	SANT' ARCANDELO	DR. 6A	DR. 20	FORLIMP.	MR1	MR2	MR3	MR8	ERA1	LR10	TRIP. I	TRIP. II	VAN DER WERFF 2	LOCAL PRODUCTION	NON ID.	TOT.
Nc01a	7	1																8
Nc01b	1		1		1											1		4
Nc01d					1											1		1
Nc01e																2		3
Nc01h	8						1							1		1		10
Nc01i					1		4									1		6
Nc01j							1									3		1
Nc01l	2						2									1		7
Nc02a																1	3	4
Nc03a																2	2	2
Nc03b	27	10	1	1	1		8				1		1		1	7	18	76
Nc04b																1	1	1
Nc04c	3						6									1	1	10
Nc04d																	1	1
Nc04e																	2	2
Nc04g	2																2	2
Nc07a		1						1	1				1			1	1	6
Nc07b																	1	31
Nc07e							1										1	1
Nc11a																2	1	3
Tb01	1															1	2	4
Tb02	2									1						1	1	18
Tb03	6	2		2			6	1								1	3	3
Tb04																	1	3
Tb06							1									1	7	2
Tb07											2						1	17
Tb08																	2	3
Tb10	16															1	8	14
Tb12												1					2	14
Tb13		1						2								3	2	16
Tb14	3	1					6									2	2	9
Tb15	7	1	1			1	1									5		9
Ma20	1						6									2		
TOTAL	86	17	3	3	4	1	43	4	1	1	3	1	2	1	1	37	83	291

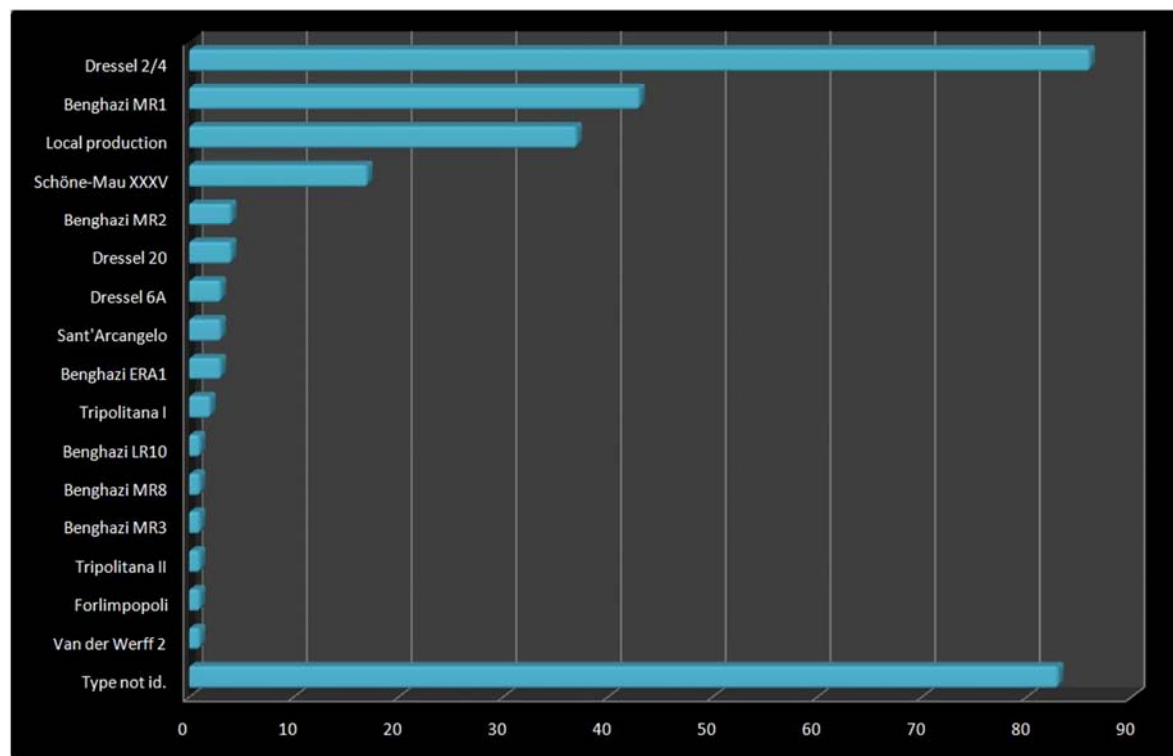


Fig. V.3. Subdivision and quantities of *amphorae* found in Lepcitanian Roman *hypogaea*.

Tripolitania like at the "Forte della Vite" necropolis at *Oea* (AURIGEMMA 1958, 56) and at *Sabratha* (DORE, KEAY 1989, 38-39). Less substantial, but equally significant, is the presence of the *Benghazi* MR1 (43 vessels) and of the Schöne-Mau XXXV (17 vessels) wine *amphorae*. The first type was produced probably in eastern Sicily or even locally (PENTIRICCI *et al.* 1998, 82-84; CAPELLI, MAZOU 2011, 73-74) and the second one - imitating the Dressel 2/4 - probably along the coast of Tripolitania, as is attested by numerous kilns found both at Gargaresh, near *Oea* (BAKIR 1966-1967, 243-244; 1968, 198; SHAKSHUKI, SHEBANI 1998) and in the island of Jerba (FENTRESS 2001; DRINE, FENTRESS, HOLOD 2009, 278-284). Like other small transport vessels found at Lepcis

Magna such as *Benghazi* ERA1, it seems that the Schöne-Mau XXXV *amphorae* were used as cinerary urns or to contain the remains of *ustrina* and they were often decorated using white and red painting with Punic symbols like Tanit, caduceus and crescent moon and also with vegetal motifs (for this aspect see DI VITA 1968, 58-61, fig. 19; DI VITA-EVRARD *et al.* 1996, 114-116; MUSSO *et al.* 2010, 61, fig. 17). The last significant group (37 vessels) is a heterogeneous group of small *amphorae* that were most likely produced locally between the end of the Hellenistic period and the mid-Imperial Roman phase. Even if a typological analysis for these *amphorae* has not yet been realized, it seems that these small vessels were used in the Lepcitanian tombs almost always as cinerary urns and rarely to host the remains of the *ustrina* (CIFANI *et al.* 2008, 2304-2307, fig. 13a-c).

The imported *amphorae* from the eastern regions are less common: Cretan wine *amphorae* *Benghazi* MR2 (4) and *Benghazi* ERA 1 (3) are the most attested followed by an unique example of *Benghazi* MR3, *Benghazi* LR10 (Asia Minor) and *Benghazi* MR8 (Cyrenaica). Other minor importations come from North Italy and the Adriatic area such as the Dressel 6 (3), Sant'Arcangelo (3) and Forlimpopoli (1) *amphorae*. Olive oil *amphorae* found in the Lepcitanian *hypogea* are rare however, the most used seems to be the Hispanic Dressel 20 (4) while less attested are the large vessels produced in Tripolitania (two examples of Tripolitana I and one Tripolitana II).

Together with the transport vessels, the fine wares help to define the general trend of imported objects within the Roman funerary structures (fig. V.4). In some of the tombs built during the first century AD (Nc3b, Nc7a, Nc7b, Tb3) it is interesting to notice the presence of the Eastern pottery productions together with the Italic Sigillata. The co-existence of these pottery productions in this period has been also highlighted in the significant tomb of Ganima, 30 km east from Lepcis Magna (FELICI, FONTANA 2003, 67). Both the Eastern Sigillata A (produced in Syria and Palestine), the Eastern Sigillata B (produced in Asia Minor) and also the Cypriot Sigillata are attested within the most lavish Lepcitanian *hypogea* and their presence has to be put in relation with the importation of wine from the East, as suggested by some transport vessels found in the tombs. From the third decade of the first century AD, the Italic Sigillata seems to have replaced gradually the Eastern productions of fine wares and, also in this case, they could have travelled together with the contemporary wine transport vessels from the Italian peninsula, such as the Dressel 2/4. In a tomb between Lepcis and Cape Hermaion (Nc3b) are attested objects in Italic Sigillata made by the freedmen of *Ateius* whose workshops were located at Pisa and who were active from the second decade of the first century (OXÉ, COMFORT 1968, nos. 144-145). In other suburban tombs (Nc1a, Tb1, Tb3) some stamps mention *L. Rasinius Pisanus* and *Sex. Murrius Festus* (OXÉ, COMFORT 1968, nos. 159-161) confirming the importation of this fine wares pottery until the end of the first century/beginning of the second century AD (DI VITA-EVRARD *et al.* 1996, 113).

Site	Italian Sig.	East. Sig. A	East. Sig. B	Cypriot Sig.	Cnidian pottery	Corinthian pottery	Campanian internal RSW	S. Gaulish Sigillata	Thin walled pottery	African RSW A	African RSW C	African RSW A/D	Glazed wares	TOTAL
Nc1a	1	1												2
Nc1b									4					4
Nc1d											1			1
Nc1e									2					2
Nc1i									1	4				5
Nc1o									1					1
Nc2b									1			2		3
Nc3b	12	8	4	1				1	1	1				28
Nc4b									4	7				11
Nc4c									3	1				4
Nc4e		1												1
Nc7a	1	3		1					6	1		1		13
Nc7b	5	1		1	2		3	1	6	8				27
Nc7e												2		2
Nc8c									2					2
Tb1	4	5	8							2				19
Tb2									1	3			1	5
Tb3	11	2							3	1				17
Tb6									1	1				2
Tb13										4				4
Tb14										5				5
Ma13						1								1
TOTAL	34	21	12	3	2	1	3	2	36	38	1	5	1	159

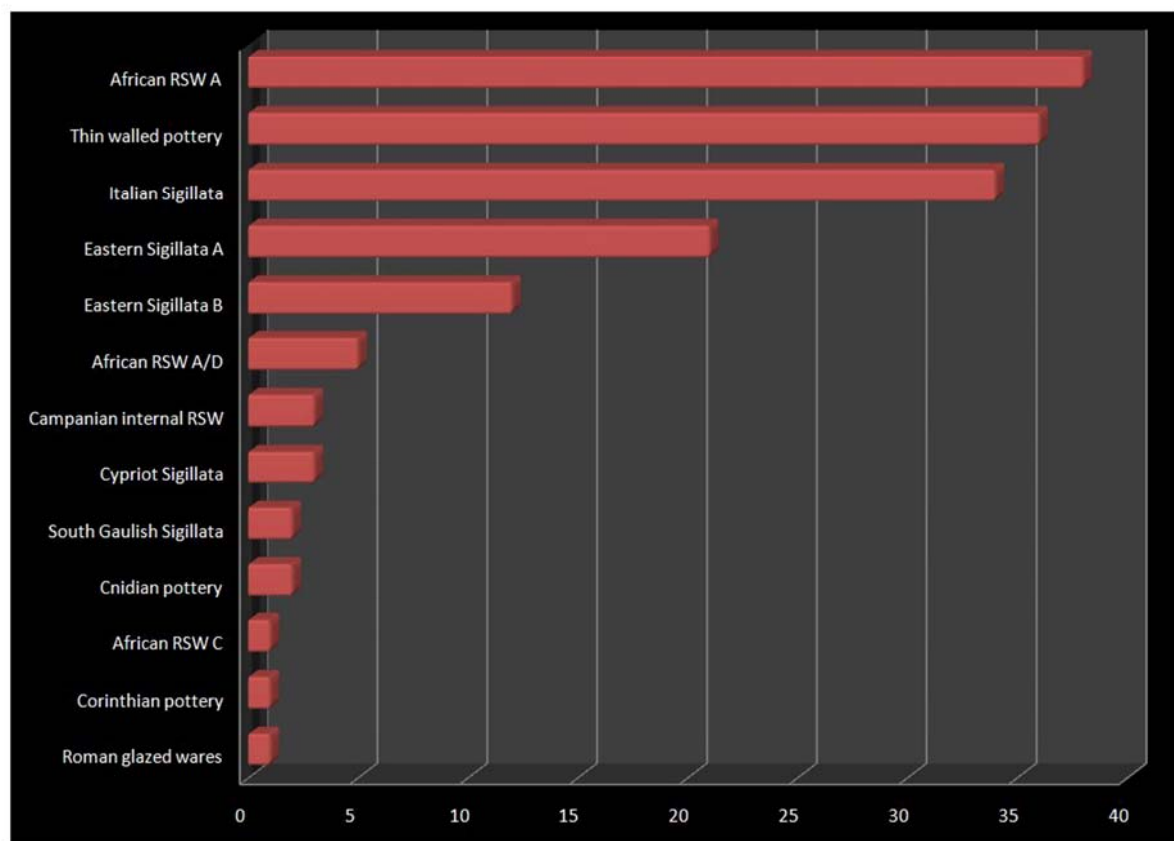


Fig. V.4. Subdivision and quantities of the fine wares pottery found in the Lepcitanian Roman *hypogea*.

The most common fine ware pottery in the Roman tombs is the African Red Slip Ware A, produced in North Tunisia between the end of the first century AD and the end of the third century. Concerning this class of pottery, its presence constitutes the index fossil for the second/third century AD Lepcitanian *hypogea*. Among the African RSW A objects belonging to a tomb of the western suburbium (Nc11), it is noteworthy to mention a bowl - probably an *unicum* - internally decorated with deities interspersed by wild animals and vine-branches (fig. V.5). Numerous were also the thin-walled pottery that have been found in many *hypogea* dated from the first to the second century AD. The majority of these objects are small mugs (*Atlante II*,

I/122) or *unguentaria*. Unfortunately, the current analysis does not allow us to determine where they were produced; however, the Greek inscription (Σεραπῖς/*Serapis*) noticed on a mug from a tomb of the necropolis of Tazuit (Nc4b) would suggest their provenance also from the Eastern Mediterranean.



Fig. V.5. The internal decoration of an African RSW A bowl from the grave goods of an hypogean tomb (Nc11).

Lamps are one of the most common finds within Lepcitanian *hypogea*. Their presence within the underground structures is constant for two reasons: they lighting in the tombs and, above all, they had an important role during the funerary ceremony, especially when the body of the deceased was exposed before the pyre or burial (see par. 4.5.2), as is suggested by the numerous lamps found often inside the *amphorae* used to preserve the remains of the *ustrinum*. The

most frequent lamp types are the Brooner XXI and Loeschcke VIII and the motifs depicted on the *disci* comprise a wide repertoire. Even if their analysis is still partial, it seems that the only examples imported from Rome (and environs) were the lamps with the graven signature *Oppi* (Tb3) and the stamp of *C. Oppius Restitutus* (Tb1, Tb13) whose workshops were probably working from the Flavian age (CECI, MASTRIPIERI 1990). Also the first/second century lamps coming from the workshops of *L. Munatius Adiectus* and *L. Munatius Threptus* found in three tombs (Tb13, Nc3b, Nc7a) probably came from Rome even if it seems that a branch of their productions was working also in Africa (JOLY 1974, 92). Clearly attested and numerous are the lamps produced in Tunisia from the second century AD: first and foremost the lamps of the two freedmen *C. Junius Draco* and *C. Junius Alexius* (BAILEY 1988, 98-99) and the ones produced by the *Pullaeni* family (SOLOMONSON 1972, 103-104). Finally, the Late Antique phase (fifth/sixth century AD) of the hypogean of Wadi el-Fani (Ma13) constitute the unique witness for lamps produced in Tripolitanian Sigillata.

A little more than half of the ceramics found in the Roman Lepcitanian *hypogea* comprises coarse wares. The majority of these are close-shaped objects, above all flagons but also pitchers, *gutti* and *unguentaria*; beside these vessels, there are also open-shaped items that often were used to accompany or replace fine wares pottery. Due to their use probably during the libations, flagons constitute one of the most common items within the Roman *hypogea* during the first and

the second centuries AD (see par. 4.5.3). There are several variants of these local productions of flagons and a first attempt at subdividing them has been recently made starting from the items found in a single Lepcitanian tomb (Tb15; see CIFANI *et al.* 2008; 2296-2298); however, taking into account the data from several other *hypogea* it seems that the variants were more numerous and characterized by different fabrics and decorations (fig. V.6), probably due to the existence of various workshops located around the city or in the Tripolitanian region.



Fig. V.6. Examples of different shapes of coarse ware flagons found in the Roman Lepcitanian *hypogea*.

Among the funerary equipment, metal items constitute an important section and they can be essentially divided into bronze mirrors (58), iron strigils (60), bronze lanterns (5), bronze vases/bowls (3) and iron folding seats (2). Beside these objects, have been found a large amount of iron and bronze nails together with small metal handles, hinges and parts of locks, originally belonging to wood objects and cases, lost over the centuries. From the Archaic period mirrors were common objects within funerary assemblages in many Punic cities such as Carthage (GAUCKLER 1915, tavv. 122, 124, 128-129), *Berenice* (DENT, LLOYD, RILEY 1976-1977, 181, fig. 12 nr. 110), *Lilybaeum* (BECHTOLD 1999, 173-175, tav. 37), *Panormus* (SPANÒ GIAMMELLARO 1998, 390, 396, 404), *Caralis* (TARAMELLI 1912, 141) and Mellita in Tripolitania (BISI 1969-1970, 218 fig. 14) and their wide use continued during the Roman period in African contexts. In the suburban *hypogea* of Lepcis circular and rectangular bronze mirrors have been found in 17 tombs with seventeen examples being recorded in one single tomb (Nc3b) located a short distance east from Khoms. Another common metal item found in the Roman hypogean tombs is the strigil, found in 16 tombs. Like mirrors, *strigiles* were common in the Mediterranean since

the Hellenistic period and within the Punic *necropoleis* they were attested in Carthage (GAUCKLER 1915, tav. 150), Olbia (LEVI 1949, 17-18) and *Lilybeum* (BECHTOLD 1999, 173, tav. 36). Their use ranged mainly from athletic practices to both male and female body care in the baths; however strigils were used also to horse grooming, as an agricultural tool and as a votive object (KOTERA-FREYER 1993; BUONOPANE 2012, 196). No less than fourteen strigils have been in the so called Gelda's tomb (Tb3) and fifteen in a semi-hypogeic structure in the western suburbium (Tb15). Since they were divided in only two bunches in the Gelda's tomb, it is likely that in some cases there was an ostentatious desire expressed by their high number (DI VITA-EVRARD *et al.* 1996, 119-120. A similar case with seven *strigiles* is attested at *Oea*: AURIGEMMA 1958, 60, tav. 18b). Inside three *hypogea* (Nc1a, Nc7b, Tb3) have been also found five bronze lanterns, all of them similar to one type common in Pompeii and Herculaneum (LOESCHCKE 1909, taf. 21) and equal to the examples found within the "Forte della Vite" necropolis at *Oea* (AURIGEMMA 1958, 59, 62-63, tavv. 17b, 19c). It is likely that these light sources were part of the tomb furniture as suggested by a hole made in the plaster of one chamber of the Gelda's tomb (Tb3; DI VITA-EVRARD *et al.* 1996, 119). In the same hypogeum two iron folding seats were also found that probably should indicate a public function of some of the deceased. The two chairs resemble the *sellae castrenses/sellae curules* of magistrates and they seem identical to one example found in a second century AD barrow at Bartlow, in Britain (DI VITA-EVRARD *et al.* 1996, 119-120; in general see also PEARCE 2015, 231).

Beside the glass vase-shaped urns mentioned above, the majority of the glass finds of the Lepcis *hypogea* are related to small *unguentaria*, frequently found inside *amphorae* that were used to preserve the remains of the *ustrinum* (see par. 4.5). Due to their exposure to the high temperatures of the funeral pyre, most of these items were burnt and it is often hard to recognize the original forms. As well as *unguentaria*, glass vessels include open-shaped forms (cups, glasses, dishes) and close-shaped objects such as bottles (Tb3, Nc1a, Nc1h, Nc7b). The majority of this class of material coming from the funerary equipment is dated within the first half of the second century AD and can be compared to the glass objects found in several *necropoleis* of *Oea* and its surroundings (AURIGEMMA 1958, 66-67; CINGOLANI 2015). According to these similarities, it is possible to hypothesize both a local/regional production and a provenance from Italic and Cypriot glassworks (PRICE 1985, 91).