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A PROVINCIAL CAPITAL IN ITS TERRITORIAL CONTEXT: REASSESSING THE ENVIRONS AND FUNERARY EVIDENCE OF *AUGUSTA EMERITA* (1st CENTURY BC – 3rd CENTURY AD)

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SCHOOL OF HISTORY, CLASSICS AND ARCHAEOLOGY

A THESIS SUBMITTED FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

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JANUARY, 2023

Abstract

*Colonia Augusta Emer*ita was a Roman colony located in the southwest of the Iberian Peninsula, in modern-day Mérida (Spain). It was founded in 25 BC by the veterans of *Legio V Alaudae* and *Legio X Gemina*. This foundation followed the Augustan policy of establishing settlements in the Iberian Peninsula after the conclusion of the Cantabrian Wars, as it occurred in other areas of nearby Portugal and in northeast Iberia. *Augusta Emerita* was subsequently designated the capital of the Roman province of *Lusitania*, one of the three provinces into which Augustus divided *Hispania*. My thesis project has re-evaluated several major aspects of the colonial process, focusing on the centuriation in the rural peripheral areas of *Emerita* and the burial evidence. This process was favoured by various factors, including the substantial communication network that developed around the Augustan colony, the dimensions of the allotments, and the early establishment of farmsteads controlling the Lusitanian hinterland. I have also assessed the urbanism of the colony in Early Imperial contexts through the study and quantitative analysis of funerary contexts from suburban areas of *Emerita* between the 1st century BC and the 3rd century AD.

Moreover, I evaluated the connectivity between the colony and rural settlements within its sphere of influence, as well as the relationships between the provincial capital and other parts of *Hispania* and the Mediterranean area, by analysing various typologies of grave goods. The study of multiple types of evidence allows for the evaluation of the territorial context of *Augusta Emerita*, considering its peripheral areas of the mid Guadiana Valley. The data suggests a greater connectivity than previously thought between various areas of the Mediterranean in the early phases of the colonial process. In addition, the chronological study of the grave good contexts points to a possible variation of the *pomerium* between the foundation of the colony in ca. 25 BC and the beginning of the 3rd century AD. The study of the rural areas surrounding *Emerita* confirms the results obtained in the suburban areas, thus proving early use of the land for craft activities with a later stage of abandonment prior to their use as funerary spaces by the beginning of the 3rd century AD.

Lay Summary

Colonia Augusta Emerita was a Roman colony located in the southwest of the Iberian Peninsula, in modern-day Mérida, Spain. It was founded in 25 BC by discharged soldiers from two legions -*V Alaudae* and *X Gemina*- in a strategic location in the mid Guadiana Valley. It followed the Augustan agenda of establishing settlements of Roman citizens in areas where the Roman presence was scarce, or insufficient. The colonial process took decades to be completed, and highlighted *Emerita* in the Iberian context when it was appointed as the capital of the province of *Lusitania*. By the mid-1st century AD, *Augusta Emerita* was a strong Roman settlement, whose influence as a provincial capital radiated towards the Lusitanian hinterland and had become a prominent urban settlement in the western Mediterranean. My research has reassessed major aspects of the colonial process, with a special emphasis on the process of urbanism and the connectivity between the urban centre and the rural territory of the Augustan colony in Early Imperial Roman contexts. This has improved the knowledge of the distribution of rural allotments amongst the Roman colonists, as well as analysed the relationships between the Lusitanian hinterland and *Emerita*. I have developed an extensive dataset of funerary evidence encompassing between the late 1st century BC and the beginning of the 3rd century AD. Through the database, I have analysed the chronological range of funerary structures in order to discern patterns of occupation of the suburban areas of *Augusta Emerita* in Early Imperial Roman contexts, and the changes in the urbanism of a settlement which was not completely formed yet.

Furthermore, I have analysed the connectiveness between urban and rural contexts studying over 200 typologies of artefacts, which allowed to delve further into the trading role of *Emerita* within the Iberian context. The data support a greater degree of connectivity between various areas of the western Mediterranean and *Augusta Emerita*, including local funerary practices imported from across the Mediterranean. I was also able to discern a pattern of occupation for the suburban areas of the colony, establishing a chronological range to determine which areas of the Augustan colony were primarily occupied, and their subsequent urban evolution.

Acknowledgements

First, I would like to express my gratitude to my supervisors, Prof. Manuel Fernández-Götz and Prof. Jim Crow, who have been extremely supportive during the course of my research. This thesis would not have been completed without their insightful comments, suggestions, and feedback. I would also like to thank the School of History, Classics and Archaeology of the University of Edinburgh, and their staff. You truly create a friendly, rich, and encouraging atmosphere for Undergraduate and Graduate students to complete their research. The Archaeology Seminar Series, which I had the honour to co-convene in 2017-2018, brought young scholars together creating a motivating environment of research, camaraderie and, overall, passion for history and archaeology. I am forever grateful for the opportunity I was given of developing my research in this academic institution.

It is not possible to complete a research project of this size by yourself. During this journey I have enjoyed the support, companionship, humour, and affection of many friends and colleagues who enriched my time in Edinburgh, Madrid, Mérida, and all the excavation projects in which I participated while working on my Ph.D. Many thanks are owed to Dr. Julieta Gómez García-Donas, Dr. Andrea Bonicelli, Dr. Annamaria Diana, Marianne Sice, Dr. Sinéad Philip, Dr. Guillermo Díaz de Liaño del Valle, Dr. Alicia Núñez-García, Dr. Xavier Rubio Campillo, Dr. María Yubero, Dr. María Coto, Dr. María Alejo, Dr. Lucía Ruano, Dr. Martina Astolfi, Farah Sheikh García, Dr. Andrew McLean, and Graeme Erskine, amongst many, many more friends and colleagues. You have made all these years more valuable. I would like to especially thank Dr. José Luis Ramos Soldado, for his unwavering support, humour, affection, and gastronomical exploration at ungodly hours.

I would like to thank Deutsches Archäologisches Institut in Madrid, their director Dr. Dirce Marzoli and members of staff, for welcoming me in their institution during a research placement and allowing me to pursue my research interests in their magnificent library. I would also like to express my gratitude to the National Library of Spain and their staff, for kindly welcoming me and granting me access to the resources I needed.

Many thanks are owed to Dr. Trinidad Nogales Basarrate, Dr. José María Murciano Calles, Agustín Velázquez Jiménez and Dr. Emilio Gamo Pazos, at the National Museum of Roman Art, in Mérida (Spain). They kindly welcomed me in their institution and provided all resources I needed without hesitation. I am especially grateful for the books, papers and other bibliographic materials supplied before the lockdown began. You have contributed enormously to the completion of this PhD.

I would also like to thank Consorcio de Mérida, with a special emphasis to Dr. Miguel Alba Calzado, Santiago Feijóo, Fabián Lavado, Sara Rodríguez, and Ana Bejarano, for granting me access to unpublished excavation reports and for your advice and insightful feedback on my work. I would also like to thank the Heritage branch of Junta de Extremadura, for providing me the archaeological inventory of the province of Badajoz.

This thesis would not have been possible without the immeasurable assistance provided by Dr. Jesús García Sánchez at Instituto de Arqueología de Mérida-CSIC. Many thanks for sharing with me archaeological reports, inventories, statistical and GIS-related advice, very valuable feedback, and thoughts on the progress of my thesis.

To my friends in Mérida, especially Fernando and Jaime, for all those plans I have missed because I was writing or excavating in various projects. Thank you for being understanding and supportive during all these years.

I would also thank my partner, Kristin, on behalf of each late night working before a deadline, and all the cancelled plans and trips because I had to work. Thank you for being so kind, considerate, supportive, and understanding during all these years. Thank you for believing in me even when I doubted myself.

Finally, I would like to express my gratitude to my family, especially my parents, Paco and Presen, my sister María, and my grandparents, Julián, Presen, Luis, and Libertad. I cannot put into words how appreciative I am for all you have done for me. This thesis would not have been possible without your unfailing support, encouragement, patience, and affection. My thesis is as yours as it is mine.

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PART I

1 Introduction

This PhD thesis analyses the development of *Colonia Augusta Emerita* (present-day city of Mérida, province of Badajoz, Spain) during the Early Imperial Roman period. My research intends to re-evaluate some major aspects of the colonial agenda in order to improve the current understanding of the foundational context of *Augusta Emerita* and its connection with the environs from the late 1st century BC to the beginning of 3rd century AD. This includes the centuriation process, where I assess the land planning and distribution of allotments between the colonists as well as the colonial and provincial limits. In addition, I analyse the funerary evidence in the suburban areas of the colony, including the grave goods to gain insights into aspects such as connectivity. I am also interested in the role of coinage and its depiction of a Roman past to create a sense of identity and attachment to the territory. Finally, I analyse the rural settlements in the environs of *Augusta Emerita* to study the occupation process of the territory and its relation to the colony, considering the communication system around *Emerita* as a key element which organised the suburban landscape of the Augustan colony.

Colonia Iulia Augusta Emerita (fig. 1) was a Roman colony founded in approximately 25 BC. It was established under direct command of the first Roman emperor, Augustus, according to classical sources, ‘once the war against the Cantabrians was coming to an end’ (Dio, *Roman History* LIII, 25. 2). The war, was, nonetheless, an ongoing process, and the settlement followed the Augustan agenda of establishing colonies with veteran soldiers discharged from the military in order to both occupy and secure areas where the Roman presence was scarce. Thus, *Augusta Emerita* followed a similar settlement process as found in *Pax Iulia* (Beja, Portugal), or *Caesaraugusta* (Zaragoza, Spain), other Augustan settlements in the Iberian Peninsula.

The emperor granted the discharged soldiers of *Legio V Alaudae* and *Legio X Geminae* a major urban centre, outstanding facilities, public buildings, and a substantial *ager publicus*. Both military units had been involved, one way or another, with both Caesar and Augustus in the tumultuous events of the third quarter of the 1st century BC, leading to the ending of the Roman Republic. Moreover, Augustus granted the veterans allotments twice as large as the usual

centuriation, settling them in the fertile meadows of the Lusitanian hinterland. Soon after its foundation, the colony was appointed as the capital of a new province, *Lusitania*, one of the three provinces into which Augustus divided the Iberian Peninsula. It enhanced and increased the power and influence of *Emerita* within its territory favouring the settlement of *Augusta Emerita* as one of the major urban centres in the Mediterranean west. The classical author Ausonius (*Ordo Urbium Nobilium* 11), in the 4th century AD, would list *Emerita* as the 11th Roman settlement in importance, ahead of urban centres like Athens, Tarragona or Narbonne. Thus, *Emerita* was ranked the most important city in the Iberian Peninsula.



Figure 1. Outline of the Roman provinces in *Hispania* and the provincial capitals in the 1st century AD: *Colonia Augusta Emerita* (Mérida), *Colonia Patricia* (Córdoba) and *Tarraco* (Tarragona). Map: Carlos Cáceres-Puerto.

The selection of the area for the foundation of *Emerita* was not unintentional; evidence suggests Publius Carisius, the legate commissioned by Augustus to undertake this task, and probably the *deductor* of the colony, chose the location deliberately. Its situation within the mid Guadiana Valley is one of dominance. As an assimilation to the *Dea Roma*, *Emerita*, whose name was

charged with remarkable symbolism adducing the military past of the colonists, was also founded atop hills. The colony overlooked the *Anas* (Guadiana River) as it flows westwards through a large meander to the southern-southeastern side of the colony, whereas the northern areas were protected by the slopes of the valley of the *Barraeca* (Albarregas River). The *Anas* also offered protection as it spans approximately 700 metres at its course through *Emerita*.

The location of the colony also served a political purpose. As the new Emperor seized power, he established a new territorial entity separated from the Republican memory in *Metellinum* (to the east), the past civil conflicts involving *Sertorius* in *Dipo* (to the west) and the Caesarean past in *Norba* (to the north) (fig. 2).

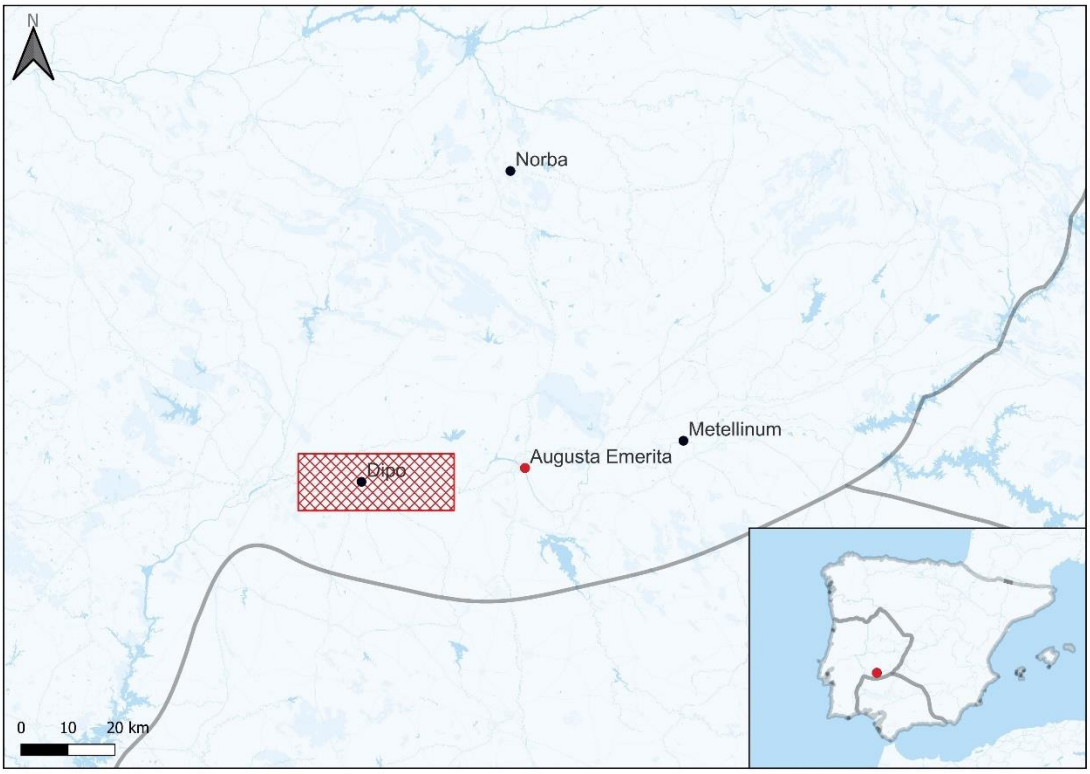


Figure 2. Location of Metellinum, *Norba, Emerita,* and the alleged location of *Dipo.* Map: Carlos Cáceres-Puerto.

This position also favoured its strengthening as the main communication hub in southwestern Iberia. Thus, the political and economic importance acquired by the Augustan colony during the reign of Augustus and his successors favoured the creation of a multicultural landscape in which multiple idiosyncrasies converged. It constitutes a magnificent case study to analyse *ager-urbs*

relationships and the influence of foreign artefacts towards the hybridisation of the local populations, and, ultimately, the Romanisation of this particular area of the Mediterranean west.

1.1 Aims of the thesis

My research aims to re-assess major aspects of the colonial process, and the connection of *Augusta Emerita* with the surrounding rural areas during the Early Imperial Roman period. I re-evaluate a wide range of archaeological and historiographical sources that I use to back my hypothesis. I support the premisses of a permeable *pomerium* in earlier chronologies which can be observed with the development of the funerary areas. I also support the theory of a more connected colony with both its environs and other provinces since it was founded, with evidence provided by the grave goods artefacts. The funerary evidence does not cover the entire thesis, *per se*, but I consider the perspective given by the artefacts contained within funerary contexts to be a good starting point for the development of my study.

Emerita's past has encouraged research concerning its archaeological assemblage covering a wide range of topics. However, some of this research needs further updating. I am interested in the study of the connectivity between *Augusta Emerita* and its surrounding area of influence from the moment of its foundation and throughout the Early Imperial Roman timeframe. I began this research with a series of preconceived perceptions regarding the Lusitanian hinterland, the foundational process of *Emerita*, the early colonial urbanism process and the connectiveness among the colonial scope and its territorial contexts. My research has the aim of exploring whether the funerary contexts excavated in the suburban areas of *Emerita* could elucidate various chronological problems concerning the early urbanism of the colony. Besides the dataset of funerary contexts, I develop a multivariate approach to study and analyse *Colonia Augusta Emerita* and its foundation process in a broader context. I include the analysis of four additional datasets that I consider essential to the appropriate fulfilment of this thesis: the centuriation process, coinage, the testimonies of Classical sources, and the settlements in the hinterland. However, the main part of my research, as will be seen in Part II, covers the thorough and systematic

analysis of the funerary contexts in the suburban areas of *Colonia Augusta Emerita* between the late 1st century BC and the early 3rd century AD.

I present the statistical analysis of the funerary contexts and their grave goods as the key contribution of this thesis. Despite the enormous amount of data gathered over two decades of continuous archaeological work in Mérida, the study of the Early Imperial Roman funerary evidence has not been given enough attention by the scientific community. The material culture from the funerary deposits provides crucial data which allow us to understand the settlement process, the suburban urbanism of a Roman provincial capital, the connectivity between *Emerita* and its environs, and the distribution of the first inhabitants in the public land granted to the Augustan colony.

Hence, I study the funerary contexts by putting them in perspective with other variables and assessing the connectivity of the urban spheres with the rural landscapes surrounding *Emerita*. In order to achieve this purpose, I explore the colonial land planning and centuriation process in the rural peripheral areas of the Lusitanian capital. The development of the provincial settlement was favoured by various factors, like the substantial communication network developed around the Augustan colony, the dimensions of the allotments and the early establishment of farmsteads controlling the Lusitanian hinterland. Finally, I evaluate the role of iconography in coinage as an assimilation enhancer for the first colonists, utilising the depiction of pre-Roman deities and the Roman assimilation of such depictions to create an iconographical discourse linking the Roman colonists to the Lusitanian territory. Although my main contribution, as has already been mentioned, is the re-evaluation of the urbanism of the suburban areas of the colony in the Early Imperial Roman period.

1.2 Research questions

The objective of my research is to improve the current understanding of the context of the Augustan foundation of *Emerita* during the Early Imperial Roman period. To achieve this aim, I re-evaluate some key aspects of the colonial process and the connection between the Lusitanian capital and the environs of the colony. My research can be categorised in the study of the distribution of the allotments amongst the colonists and the configuration of the Roman land

planning, the usage of funerary archaeology evidence to establish patterns of occupation, and the relationship set between *urbs* and *ager* in Early Imperial Roman contexts. The study of the occupation patterns also serves its purpose as an additional study of the suburban landscape of the colony as well as develop a further understanding of its urbanism.

Furthermore, there are seven more specific research questions:

1) How did the land distribution process shape the environs of *Augusta Emerita* in Early Imperial Roman contexts?
2) What was the relationship between *urbs* and *ager*, and the role of communication nodes as arteries connecting rural and urban spaces?
3) What is the role of the funerary contexts in shaping the suburban areas of *Emerita*?
4) What connectiveness can be determined by quantitative analysing the funerary contexts and their grave goods artefacts?
5) What was the role of the typologies of grave goods artefacts in the development of *Augusta Emerita,* its suburban areas, and its environs?
6) What was the role of coinage from the mint in *Augusta Emerita* in creating a sense of attachment to the territory for the first colonists?
7) What was the nature and chronology of rural settlements in the immediate environs of Emerita?

1.3 Theoretical framework

The new Roman colonial society was in a position of power, dominating the socioeconomical processes of the colony and its territory. This also affected the indigenous presence; however small it was, it was attested in Strabo's accounts (III, 2.15). But one must wonder about the appropriate terminology and conception concerning the relationship between conqueror and conquered if such terms shall be applied to this case at all. The traditional models explaining "Romanisation" as a linear transfer of ideas, knowledge, culture, and idiosyncrasies (Mommsen, 1968; Kalenderian, 2020), or Haverfield's conception of '"Romanisation" as progress' (Haverfield, 1912; Webster, 1996: 12) have long

been proved to be obsolete. It is a mistake, however, to associate modern political terminology with former political and military entities, and it is an error most of us tend to subconsciously commit. We shall not compare, for instance, Rome with modern examples of imperialism, as the ethos and socioeconomical aspects of Rome's dominance differ from modern politics, even if the outcome was very similar.

However, "Romanisation", and Rome altogether, have been widely utilised terms for cultural, political, and military reasons in the past, which do not help to prevent the association between "Romanisation" and modern politics. Mussolini and the *Romanità* (Visser, 1992: 5), or *Hispania* and Franco (Jiménez Díez, 2008: 21) are mere examples of a widespread social and cultural phenomenon evenly distributed throughout Western Europe as it was the utilisation of archaeology and the idea of Rome in favour of a determined political agenda. Mérida itself has parallels of such, although it is necessary to go back to the 16th and 17th centuries, when the most prominent noble families seized Roman remains in the city centre of Mérida to settle in cultural and monumental strongholds, as it will be later commented in Chapter 2.1 (figs. 4, and 5). These families, by confiscating the ownership of Temple of Diana (fig. 4), for instance, were connecting their lineage to the grandeur Roman Empire, not dissimilar to what the Fascist dictatorships developed in their political discourse in the first half of the 20th century.

Häussler (1998: 11) described "Romanisation" as a justification to maintain the post-Republican Empire, not as a key element within the Roman society. However, this approach does not differ much from the post-colonial theories which removed the agency of the indigenous populations, with certain narratives advocating, and reinforcing, a sense of inevitability around Roman domination. Although post-colonial and globalising theories share key points on their theories, such as the creation of a hybrid society as a result of the cultural exchange (Gardner, 2013: 6). Nevertheless, 'globalisation' as a concept might be useful in the "Romanisation" debate as it updates the terminology evoking contemporary concepts for us, thus making the debate more relatable (Hingley, 2011: 99).

The native population was not a passive actor in the process of cultural hybridisation, as it has been analysed in Gaul and the resulting Romano-Gaulish

nobility accumulating power after the Roman conquest (Woolf, 1998). Millett (1990) discussed that the Romanisation and Roman imperialism was more related to the internal political situation at Rome, rather than an ulterior desire to spread civilisation amongst their neighbours. Hence, following Woolf's accounts when affirming that the native elites would still be in a position of dominance. However, this still seizes the agency of part of the indigenous population during the process. In what follows I use the definition of "Romanisation" provided by Roymans (1996: 99), as "a process of creative interpretation and appropriation of Roman cultural forms and values by groups and individuals from their own cultural background and social strategies".

Modern models, like those developed by Webster (2001) and Dietler (2005), advocate for a hybrid approach in which Romans and indigenous adopted and appropriated foreign elements. In any case, as occurred with Mommsen and Haverfield's approaches, the association of *Romanitas* as civilization and native elements as barbarian has also long been refuted (Webster, 1996; Mattingly, 2013; Alston, 2013). However, the dichotomy drawn between 'civilisation' and 'barbary' has had a profound impact on the "Romanisation" debate on the Iberian Peninsula, but also in other regions of the Empire. This debate presents theories and arguments cataloguing the conquered people as inferior, while assuming that the Romanising concept was a one-way transmission of certain cultural aspects. This entire idea, surging from the academic community in the European countries in the first half of the 20th century, sought to study the transmission of knowledge, customs, and ideas to the colonies by the colonial entities, and has been long refuted (Jiménez Díez, 2008: 40). As a matter of fact, this top-down approach towards the "Romanisation" process bestows a greater level of influence upon the elites, removing the agency from the indigenous communities. The main misconception lays in the pre-assumed concept of a cultural clash between two homogeneous cultures, when the conqueror and conquered were, in fact, substantially different (Stewart, 1951: 249-263; Jiménez Díez, 2008: 40). This two-fold approach would, in fact, decrease the differentiation between 'Roman' and 'indigenous' (Fernández-Götz, 2014: 233) after the conquest since the resulting society was a hybrid combination of both. Hence, rendering that social

classification futile, as Woolf (1998) and Pitts (2021: 117-130) studied in Gaul and southern Britain, respectively.

Roman-ness was imposed by religion and urbanism, but was also enforced by military superiority (Revell, 2009: 191). The Province of *Lusitania* never had a permanent military unit garrisoned within its borders, although the mid Guadiana Valley was colonised by discharged soldiers from the Augustan army in northern *Hispania*. However, the presence of veterans never played an important role within the Augustan agenda in this area of *Hispania*. The military background of the veterans might have influenced Augustus to settle them in the mid Guadiana Valley, but it was never a main factor. The lack of evidence and mentions in classical references of any conflict in the territory of the mid Guadiana Valley when *Emerita* and other colonies, such as *Pax Iulia* (Beja, Portugal), were founded suggests a 'peaceful transition' where all the communities were involved, not only the elites. However, important wars -like the Lusitanian Wars- in the regions in the 2nd century BC might suggest otherwise. During this time, when Rome was at the threshold of the Lusitanian landscape, Viriathus commanded the Lusitanians in an armed conflict that hindered the Roman conquest of the area for decades. Hence, despite the sources suggesting that the transition was 'peaceful', the reality might have differed from the 'official' accounts written by the classical sources. Pliny, as a matter of fact, did not consider the name of the native communities difficult to pronounce in Latin (*Naturalis Historia*, III. 7), as covered in Chapter 4.3.1, which gives us an idea of the bias with which classical authors covered pre-Roman *Hispania*.

However, these changes were swiftly implemented when the first settlements were established, allowing the socioeconomical status-quo to be altered in favour of the Roman ethos. This was, nonetheless, facilitated by the scarce and segmented Iron Age population in the mid Guadiana Valley. The connectiveness between the urban centres and the rural settlements in the region was already thriving during the Iron Age period, as it will be discussed in Chapter 4.2. The east-west axis set between *Dipo* (uncertain location, traditionally situated between Guadajira and Talavera la Real, Badajoz) and *Conisturgis/Metellinum* (Medellín, Badajoz) implied a certain level of occupation

(fig. 2). This was complemented by the farmstead complexes between El Carrascalejo/Aljucén, to the north, and Alange, to the south (fig. 3).

Ancient sources do refer to some indigenous communities included in the centuriation process as *'incolae'* -indigenous people included in the centuriation process- (Strabo, III. 2. 5; Edmondson, 2011: 32-33), which would imply a peaceful transition/"Romanisation" of this native populations in the mid Guadiana Valley. Although as Fernández-Götz, Maschek and Roymans (2020: 1637) suggest, we must not sanitise the past. The lack of evidence for a violent occupation of the land does not implicitly mean a peaceful transition. As a matter of fact, native communities could have been dispossessed from their land leaving no tangible evidence of this forceful occupation. We must consider that the Roman imperialism, steadfastly, achieved a certain degree of hybridisation with the local communities, whether voluntarily or not, using iconography, amongst other methods, to whitewash the process and legitimise their occupation, like coinage. This consideration has often been seen as the traditional, albeit outdated, paradigm of being Roman as an association to free, male, and wealthy individuals of the native communities incorporated into the Roman political sphere (Revell, 2009: 189). Coinage acts according to these views in the mint of *Emerita* since it highly praises motifs of the army and the founding legions, connecting the military past of the veterans to the territory. Coinage and the military background of the colonists of *Colonia Augusta Emerita* suggest a certain degree of improvisation, arbitrariness, and adaptation.

However, coinage involves and incorporates a wider spectrum of the provincial, and imperial, society. Thus, the availability of currency, even the lowest weighs and values, to the public became a powerful tool of domain and "Romanisation". Those controlling the minting system also controlled the official discourse, the propaganda. Augustus, alongside his subordinates in the new colonies in *Hispania*, achieved a cohesive iconographical policy to create a sense of attachment to the territory. Coinage, especially the first six series of *Emerita*, would act as a propagandistic tool towards the recently established colony. The union of both Iron Age deities and members of the Roman pantheon in coinage facilitated the incorporation of the native communities from the mid Guadiana Valley to the new Roman political and social landscape, as it will be further

analysed on Chapter 6. It supposed a brilliant example of syncretism in a seemingly vacant area of Iron Age-Roman interactions. Thus, by associating local deities to the new Roman colony, the veterans were using what I have called 'indigenous' iconography as a means of "Romanisation". This inclusion of "indigenous" allowed the native inhabitants and the Roman colonists a sense of belonging, as their religious ethos was intertwined in the iconographical motifs on the coins they used daily. These motifs shaped the "Romanisation" process towards the creation of hybrid, shared identities: Augustus, *Romanitas*, the Empire.

The immediacy of coinage also facilitated its Romanising role. Material culture like *terra sigillata*, oil lamps, and glass vessels, which are widely present in my database of funerary contexts I analyse in Chapter 9, did imitate Italic models. But the arrival of those artefacts, whether original Italic productions or copies from Iberian workshops, was not sudden. Trading routes and networks took time to establish themselves, even if we refer to craftsmen in legionnaire encampments. Currency, whether it was minted in the colony or using mobile mints reached the veterans faster. This early 'Transitional' coinage was later circulated by the colonists in their daily economical transactions.

Finally, material culture was the physical embodiment of a shared identity, as coinage played a similar a role in creating and shaping this common ethos. Materiality and "Romanisation" have been analysed by Pitts (2021: 117-130) in southern Britain and northern Gaul, whereas Millett (1990) proposed distribution models based on material culture to analyse the Romanisation of Britain, albeit not necessarily from funerary contexts.

However, the lack of material culture typically classified as 'Roman', does not imply a later contact between Rome and the indigenous community. This would simply mean that the "Romanisation" process touched different aspects of the native idiosyncrasy while developing. Nearby *Emerita*, for instance, in the Alentejo region (Eastern Portugal, nearby the Spanish frontier), the common ware shapes from funerary contexts suggest a widespread presence of the Smit Nolen typology, similar to the shapes found in *Emerita*. The incorporation of more commonly considered Roman shapes, like *sigillata*, did occur as well in rural areas. The material culture present in the rural settlements analysed in Chapter

7.2, implies that commercial links were not fully formed yet, but also the existence of peripheral sites whose focus was set on the construction of the colony and its critical infrastructure. The Romanising framework cannot be seen as a top-to-bottom approach by the Roman power. Local communities left their trace on the Roman colonists, since the shared the territory, community, and landscape. To consider the “Romanisation” process similar to the European colonial period must be seen as a failure. The transmission of identity created hybrid communities. This hybridisation explains the diversity and multiculturality of the Roman provinces since every territory provided singularities in their incorporation process to the Empire.

1.4 Methodology

The key contribution of this Ph.D. thesis is the systematic reorganisation of the funerary evidence in the suburban spaces of *Colonia Augusta Emerita* from the Early Imperial Roman period. I chose this research project as there were multiple publications analysing the funerary evidence around *Emerita*, but the grave goods had not been fully considered as an entire case study, and some areas were partially neglected. Traditionally each funerary area has been studied independently and the grave goods artefacts were not analysed as an ensemble. I considered different approaches, especially concerning the funerary evidence, and assessed the information available from a different perspective. This is the first research project in which the funerary evidence of *Augusta Emerita* has been assessed with a quantitative approach and examined using the ‘R’ programming language to create statistically generated occupation models for the suburban areas of *Emerita*.

In order to carry out my research concerning the funerary evidence, I needed tangible evidence of the occupation of the suburban areas in which support my theories, analysis and comparisons regarding the spatial distribution, its connectivity with the surrounding areas and some “Romanisation” aspects for the first colonists of *Augusta Emerita*. The data I examined already existed but were not systematised. I examined the published reports the Archaeological Consortium of Mérida, written after every intervention in the municipality of Mérida between 1991 and 2011. I had access to some unpublished materials,

belonging to excavation projects prior to 1994, although most of my dataset did originate from the dataset of published reports (1994-2011). These reports are accessible online via the website of the Consortium of Mérida[1]. However, I was unable to continue my research as the Consortium has not published further updates in their report catalogue since 2011. Nevertheless, I created a dataset compiling evidence from 77 excavations where Early Imperial Roman funerary evidence was attested, since 1994 to 2011. The amount of information was certainly overwhelming as I gathered it together: 1,015 funerary structures, identifying 2,255 grave goods artefacts, all from between the last quarter of the 1st century BC and the beginning of the 3rd century AD. The analysis of these grave goods contexts allowed me to extrapolate the information they provided towards multiple aspects of the territory of the colony. With said data I assessed the relationship with rural settlements, early consumption habits and trading connections, which proved highly effective at showing patterns of distribution and "Romanisation" in the suburban areas of the colony.

I have also utilised aerial photography for the study of the communication system and the occupation of the *ager publicus* of *Augusta Emerita*. The images are available online via the Spanish National Geographical Institute website[2], where the PNOA cartographical source comprises three series of aerial photography developed by the US Navy between 1945 and 1968. Series A (1945-1946) and B (1956-1957) were a crucial source of information, especially Series A, as the images were taken before the Badajoz Plan started, which altered the geography of the mid Guadiana Valley in the 1950s.

However, in order to develop a consistent overview of *Colonia Augusta Emerita* and its environs, I also considered a multivariate approach to analyse the foundational process of a provincial capital in a broader context. Besides the funerary database I compiled, the four main datasets considered to the appropriate fulfilment of this thesis are the centuriation process, coinage, classical sources, and the settlements in the hinterland.

[1] See archaeological reports in https://www.consorciomerida.org/biblioteca

[2] https://www.ign.es/web/comparador_pnoa/index.html

The centuriation process carried out on the public land of *Emerita*, broadly analysed by Roman land surveyors, has left its trace in the archaeological record, as well as epigraphical evidence. By analysing the *Corpus Agrimensorum Romanorum* (Thulin, 1913), I gathered crucial information on the *ager publicus* of the colony, its territorial limits, and its distribution. I also studied the limits of the *pertica* of *Emerita*, considering the settlement of indigenous communities in the edges of the *territorium*, as it is described in ancient sources, and it has been attested in the epigraphical record.



Figure 3. Location of Metellinum, *Norba, Emerita,* and the alleged location of *Dipo.* Map: Carlos Cáceres-Puerto.

I also considered the mint of *Colonia Augusta Emerita* and the iconographical discourse developed in the first coinage series to set a sense of belonging on an area largely unpopulated by Roman citizens. I studied 449 coins from the collection of the National Museum of Roman Art (MNAR)[3]. I analysed the similarities between *Emerita* and other mints in *Hispania* from the same

[3] I would like to personally thank Dr. José María Murciano Calles for granting me access to the coinage collection of the museum, and for providing digital copies of the coins I needed for the fulfilment of my research.

period, establishing patterns and dissimilarities in the numismatic iconographical discourse of the local minting in the 1st century AD in the Iberian Peninsula.

I include the references to *Emerita* and *Lusitania* in ancient sources through a thorough research of Latin and Greek authors, as it can be seen in Chapter 4.3. Although I mention small passages and references in Chapter 4, I included the entire dataset of Classical sources referenced throughout this thesis as an Appendix in Annex II[4].

I considered the environs of the colony and the situation of the rural settlements within a 15km radius from *Emerita*, their economical purpose, and the categorisation of the population. I consulted the Archaeological Inventory of the Province of Badajoz, evaluating the inventory of 16 municipalities (fig. 3): Alange, Aljucén, Arroyo de San Serván, Calamonte, El Carrascalejo, Don Álvaro, Esparragalejo, La Garrovilla, Mérida, Mirandilla, San Pedro de Mérida, Torremayor, Torremejía, Trujillanos, Valverde de Mérida, and Villagonzalo. In total, I compiled 83 archaeological sites from the Early Imperial Roman period, with a wide typological range (villas, small farming complexes, quarries and mines, and dams), although the small farming complexes were the most common type of lesser rural site.

1.5 Structure of the thesis

The thesis is structured in twelve chapters, subsequently divided in two parts. Part I (Chapters 1-7) includes the chapters concerning the territory surrounding *Colonia Augusta Emerita*, the environs of the colony with the land distribution process, the communication nodes, and the lesser rural settlements. In addition, the history of research, some consideration on the urbanism of the colony and the use of symbology in coinage as a means of “Romanisation” are also included in Part I. Part II (Chapters 8-12) includes the chapters relating to the funerary evidence in *Emerita*, the analysis of my dataset, and a historiographical

[4] Classical references were taken from The Loeb Classical Library (Harvard University Press).

discussion of the funerary research in *Emerita* and other cities of *Hispania*. Part II also includes a chapter discussing the results of this thesis, and the conclusion.

After this introduction, in Chapter 2 I elaborate on the historiographical debate, taking into consideration the critical research developed on the projects analysed in my thesis. This historiographical debate covers aspects of my research I further analyse in later chapters, providing critical thinking and a historiographical background on the history of research in Mérida. I have not written a conventional 'Literature Review'; however, along with what it is assessed in Chapter 2, I include a review of the research in every chapter, covering in more depth the latest research on the topic and putting it in perspective with my research.

Chapter 3 covers the walls of *Colonia Augusta Emerita*, its purpose, layout, and the historiographical debate on its chronology. I elaborated a detailed map of the layout of the walls following the latest research and introduce the topic of the walls in *Emerita* in relations to the urbanism of the colony, which will be further explained and analysed in Chapter 10.

Chapter 4 is dedicated to contextualising the mid Guadiana Valley geographically and historically. I delve deeper in the Iron Age occupation of this area, considering various settlements which shaped the landscape and had a considerable influence om the territory the colonists encountered upon their arrival in *circa* 25 BC. Settlements like *Conisturgis-Metellinum*, with its native-Roman hybridisation, established the development of the Roman presence in the mid Guadiana Valley until the foundation of *Emerita*. I also analyse the 'presence' of *Emerita* and *Lusitania* in classical sources, corroborating the general lack of awareness of the region within the Roman orbit and the consumption habits when considering some accounts made by Livy (*History of Rome*, 7. 26-27).

In Chapter 5 I assess the distribution of the land among the colonists, including native elements as mentioned by Strabo (*Geography*, 2. 15). The layout of the grid, setting boundaries with surrounding settlements, also took some land from the nearby communities, with the aforementioned settlement of *Metellinum* especially affected.

Chapter 6 studies the iconographical discourse developed in the first coinage series of *Augusta Emerita* to set a sense of belonging on an area largely unpopulated by Roman citizens. The Roman colonists compensated for the lack of Roman settlements in the mid Guadiana Valley with a powerful iconographical discourse attaching the new Roman occupants to the Augustan colony and its environs.

In Chapter 7 I examine the communication system in the peripheral areas of the colony, researching the level of occupation in Early Imperial Roman contexts. I evaluate evidence from this chapter that considers the relationship between the *pars urbana* and the urban areas of *Emerita*, considering the road system as the arteries shaping the territory of the colony. This relationship between city and countryside is also evaluated in this chapter, where I considered the situation of the rural settlements within a 15km radius from *Emerita*, their economical purpose, and the categorisation of the population. Part I concludes at the end of Chapter 7. The literature review for the funerary evidence in *Colonia Augusta Emerita* is included in Chapter 8. Due to its length, I decided to include it as a separate chapter serving as an introduction for the analysis of my database on funerary evidence around the Lusitanian capital. In this chapter I discuss the connectivity of different areas of the Empire and *Emerita*, and how funerary evidence can help us trace these connections, like the North African *cupae*.

Chapter 9 contains the analysis of my dataset[5] consisting of 1,015 funerary structures and 2,255 grave goods artefacts present in funerary contexts from the Early Imperial Roman period. I also assess evidence for foreign influence in the colony throughout the funerary evidence and provide a thorough analysis of the 200 typological varieties of artefacts contained within the funerary contexts. Those artefacts serve a dual purpose considering their chronological range. They establish patterns of occupation in the suburban areas of the colony, as seen in Chapter 10, but they also provide insightful information concerning the import-export ratio of the colony, foreign influence by trade and relationship with various areas of the Iberian Peninsula.

[5] The Catalogue can be consulted in the Appendix.

The analysis of the funerary areas in the following chapter, Chapter 10, were also used to elucidate historiographical problems in the early urbanism of the colony, such as the alleged permeability of the *pomerium* in the late 1st century BC and the first half of the 1st century AD. Finally, I discuss my results in Chapter 11, finishing the thesis with my conclusions in Chapter 12.

2 History of research

Centuries have passed since the Roman remains of the ancient *Augusta Emerita* awoke an interest in scholars and curious personalities of the past. Throughout the centuries, decades and years, the research about the Roman past of the Lusitanian colony has created one of the most extensive bibliographies concerning Roman archaeology in the Iberian Peninsula (Velázquez Jiménez, 2011; 2018: 65–166; Alba Calzado *et alii*, 2014a: 86). Therefore, it is possible to draw a research trajectory from the dawn of the archaeological field in Spain to the latest scientific approaches, as applied to the archaeological branch, during the excavation and study of the Augustan colony (Mora, 2004; De La Barrera, 2010; Alba Calzado *et alii*, 2014a: 85–112). However, the large amount of evidence gathered, especially since the Archaeological Consortium of Mérida began managing the archaeological research after its foundation in 1996, has provoked a substantial delay in the publication of new research. As a matter of fact, it affects the labour of the researchers; it has affected the development of my PhD thesis, as the archaeological authority has a delay of approximately 10 years in publishing excavation reports.

2.1 Antiquarianism. *Augusta Emerita* before 1910



Figure 4. Palace of the Duke of Los Corbos. Engraving by Laborde (1806).

Despite the late beginning of the archaeological excavations, officially starting on September 17, 1910, the remnants of *Colonia Augusta Emerita* have drawn the attention of the scholars since medieval times. Elio Antonio de Nebrija, a notorious humanist from the 15th century, mentioned the past grandeur of *Emerita* in his scripts. The fascination with the Classical world was a defining feature of the Renaissance period. As well as writing about the Roman past of the colony, some noble families started to acquire the most prominent Roman remains to establish strongholds in Mérida or to incorporate Roman elements into medieval palaces. The most prominent examples are the Palace of the Duke of La Roca (fig. 5), demolished in the late 19th century, and the Palace of the Duke of Los Corbos (fig. 4), located in the so-called Temple of Diana.

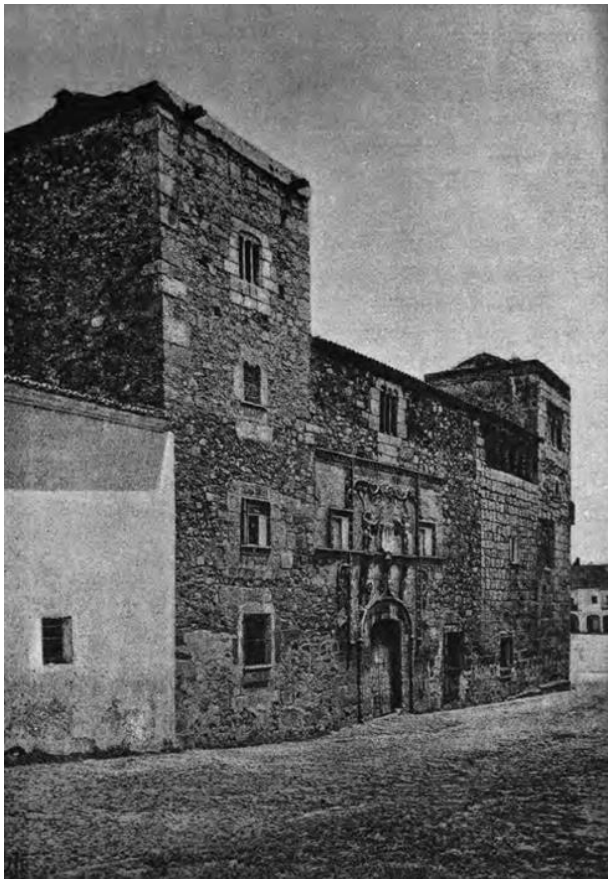


Figure 5. Palace of the Duke of La Roca. 19th century. Photo: Barrero *et alii*, 2014: 45.

The history of *Emerita* and its monuments subsequently attracted scholars in the context of the Enlightenment Age. The famous engravings (fig. 4) of Alejandro de Laborde (1806) entailed a summit within this period, and in the 18th century travel books current (Canto de Gregorio, 2001: 21–22). Some antiquarians, like Joseph Townsend (1786–1787), Antonio Ponz (1778) and

Wilhelm von Humboldt (1799–1800) were the key elements of a movement that publicised Mérida throughout Europe with various travel guides. During the 19th century the existence of Mérida, alike the rest of the mid Guadiana Valley, went unnoticed, only to be altered when Manuel de Godoy, prime minister of Charles IV, intended to transform Mérida into the 'Spanish *Pompeii*' by relocating the population to the southern bank of the Guadiana River. However, political turmoil in the beginning of 19th century Spain, the arrival of Napoleon, and the Peninsular War buried the project, and it was never put into action. One might think that after the interest awaken in the late 18th century, and by the Prime Minister of Charles IV, the remains in Mérida were more studied. However, they were swiftly neglected and forgotten about, until 1910.

All the aforementioned authors described the Roman past of Mérida but tended to be imaginative with the depiction of *Augusta Emerita* that they envisioned, granting the Augustan colony features that it never possessed. Opportunely, the beginning of the excavations in 1910 facilitated the disappearance of myths with the local heritage, such as the incapability of the amphitheatre to celebrate *naumachia*, or the layout of the defensive wall, for instance, as it will be further discussed later in Chapter 3. In that chapter I will mention the main historiographical dichotomies and theories, past and present, concerning the Roman walls of *Emerita*. The majority of these belong to the field of urbanism, as it has been a much-desired goal for the archaeological community to outline the perimeter of the Roman walls and whether they contained additional defensive feature, such as ditches, along the 4km enclosure. There has been a special emphasis on compounds not originally envisioned in the Augustan colony, like the Provincial Forum, studied in earlier stages by Schulten (1922). I will not discuss here the funerary evidence since its historiography is summarised in Chapter 8.1, as an introductory chapter prior to analysing the grave goods contexts in Chapter 9.

2.2 Considerations concerning a pre-Roman occupation and the foundational date of *Augusta Emerita*

The first main historiographical debate regarding *Augusta Emerita* shall be sought in the very beginning, in its foundational date. Despite a general

consensus of the foundational chronology, based on the scripts of Cassius Dio in 25 BC (*Roman History,* LIII, 25, 2), some scholars tend to differ on the dates. According to Dio, the *deductio* occurred on April 21, 24 BC, and the first *duoviri* were appointed in 20 BC. This date is corroborated by three inscriptions from the theatre: two lintels commemorating the sponsorship of Agrippa towards the construction of the theatre complex (CIL II 474, Gamo Pazos, 2021: 121-122) (fig. 7) and another inscription honouring the restauration works developed under Trajan (fig. 6), dated in AD 105 (Trillmich, 1989-1990: 87-96).



Figure 6. (ANNO) COLONIAE CXXX (C)AES(ARI) AVG(VSTO) GER(MANICO) DACIC(O) (PROVI)NCIAE LVSIT ARI LARVM ET IMAGINVM D DAT A D.- Year 130 (AD 105) since the foundation of the colony, Caesar Augustus Germanicus Dacian gifts the Province of *Lusitania* and altar of statues and images […]). Photo: Carlos Cáceres-Puerto.

On the other hand, other scholars have supported a different date, despite the orthodox axioms. Le Roux (2006), for instance, defends a parallel approach between the establishment of the colony and the creation of *Lusitania* as a province around 16–13 BC. Whereas Stylow and Ventura (2009: 453–523) proposed a foundational date closer to 20 BC, after the study of some inscriptions from the theatre compound (fig. 7). Meanwhile Canto de Gregorio (1987: 289–98; 1989: 149–206; 2011; 2017: 341–92) has suggested a previous Caesarean settlement, meaning the Augustan compound would be a re-foundation.



Figure 7. Lintel commemorating the construction of the theatre, 16BC. M AGRIPPA L F COS III TRIB POT III (Marcus Agrippa, son of Lucius, Consul for the third time, and Plebeian Tribune for the third time). Photo: Carlos Cáceres-Puerto.

Other scholars, past and present, have discussed the plausibility of an earlier foundation of the colony and a prior population in the area. Moreno de Vargas (1633) and Fadón Sánchez (1906) considered both alternatives. However, the main advocate for a preceding Roman foundation is Canto de Gregorio, whose main publications on the topic are listed above. She provides evidence such as indigenous toponymics, the inclusion of '*Iulia*' in the name of the colony stamped on a rooftile (fig. 8) and a poor medieval translation of the scripts of Cassius Dio. However, the majority of scholars maintain the Augustan influence in the foundational process. It is evident that some places retained indigenous toponymics, like *Anas* and *Barraeca*, as some indigenous deities remained in the idiosyncrasies of the local Roman population, like *Ataecina*, identified as *Proserpina*, whose worship controlled a sacred forest, *Lucus Feroniae*, northwards *Emerita* (Thulin, 1913; Rodríguez Bordallo and Ríos Graña, 1976; Álvarez Martínez, 1988; Cordero Ruiz, 2013: 83–84; Almagro-Gorbea; 2018: 397–436; Cáceres-Puerto, 2019: 135–151). However, this does not imply a Caesarean influence towards the foundation of the colony. Saquete Chamizo (1997: 24–38) even wrote that 'it is impossible to prove the existence of what never happened', when refuting the hypothesis developed by Canto in her 1989 publication.

Canto's hypotheses were linked to the general foundation process of Roman settlements in the Iberian Peninsula during Republican times. After a period of conquest and subjugation of the native communities, the Romans established settlements in flatlands, displacing the native communities away from mountainous, treacherous regions where the indigenous tribes could be a threat for the Roman occupiers. Hence, this colonisation process often followed a

development of forlets around the conquered territory to guarantee the Roman control of those areas.



Figure 8. Rooftile with CIAE stamp. Photo: MNAR. Piece CE14058.

The mid Guadiana Valley did not avoid those side effects of the Roman conquest, especially throughout the 1st century BC. Mayoral Herrera (2018) studied the military complexes and the "Romanisation" process in an adjacent area, the La Serena region to the southeast of *Emerita*, documenting dozens of Roman fortifications using non-invasive techniques and traditional surveying methodology. One of the main pieces of evidence supporting the theory of a Caesarean presence in *Emerita* is the existence of a military outpost controlling the ford in the Guadiana River. However, such infrastructure has never been documented, regardless of countless interventions, nearby *Emerita.* Although a Roman military camp near Campillo de Lácara might be the exception, albeit its chronology is still unclear (Cordero Ruiz *et alii*, 2017: 197-201). While the aforementioned rooftile (fig. 8) with the stamp 'C-I-A-E/*COLONIA IULIA AUGUSTA EMERITA*' could provide some support to the theory of the Caesarean foundation (MNAR, piece no. CE14058), in my opinion it would rather signify a mechanism of assimilation of the new emperor with his adoptive father, rather than a confirmation of the authorship of the foundation of *Emerita*. It also occurs

in coinage, as will be further discussed in Chapter 6, where Augustus assimilated rites and symbology in the newer imperial mints as he was settling as Head of the Empire.



Figure 9. Chalcolithic stronghold on Calvario Hill. Map: Carlos Cáceres-Puerto, after Barrientos Vera, 2002: 149. Plate 6.

The pre-Roman presence in the territory occupied by *Emerita* has been widely proved. However, this occupation process, spanning from Palaeolithic times, suddenly declined after the Bronze Age, as there is not a documented Iron Age site in the city of Mérida. Despite of the lack of evidence, there are various theories of an Iron Age site, especially if we consider the Calvario Hill as an *oppidum*. As a matter of fact, at Calvario Hill (fig. 9) there have been various documented features supporting these theories of a primitive stronghold in this area from the Chalcolithic period (Barrientos Vera, 1997: 25–40; 2000: 135–171). However, after hundreds of archaeological interventions around Mérida, there is not a positive result indicating a prior Iron Age occupation (Alba Calzado, 1997a: 285–316; Almagro Gorbea, 2011: 59–92; Jiménez Ávila, 2004: 41–66; 2011: 35–58). One argument overused to explain the lack of Iron Age remains is the soil movement upon the arrival of the Romans, circa 25 BC. Alba Calzado *et alii* (2014: 87) suggest that this hypothesis is futile considering that archaeologists

have discovered Palaeolithic, Chalcolithic and Bronze Age artefacts within the limits of the Roman walls. Exceptional findings from alleged Iron Age horizons in or around *Emerita* have been documented, but the characteristics of their discovery are dubious as they have always been handed in by non-archaeologists, hence the information about their contexts is lost.



Figure 10. *Hospitium* of Juromenha. Photo: Museu Nacional de Arqueologia. Piece 2000.40.1.

Despite the Iron Age artefacts located in and around *Emerita*, this pre-Roman material culture raises some consideration regarding the relationship between these indigenous communities and the Roman colonists upon the foundation of *Emerita* and prior to said process. Le Roux (2006; 2015: 99–108), for instance, has looked carefully into these connections regarding the *hospitium* of Juromenha (Alandroal, Portugal) (fig. 10), which constitutes one of the first documented cases of interaction between the provincial capital and a subordinated settlement. In addition, there are other examples of the relationship between the natives and the Romans, as the inclusion of native communities in the centuriation process of *Emerita* as *incolae* -native individuals that were

included in the centuriation process (Strabo, III. 2. 5; Edmondson, 2011: 32-33). Other scholars like Hidalgo *et alii* (2019) analysed the funerary inscriptions around the colony to study the socioeconomical ethos of *Emerita*, which also implied considerations concerning migrants from other areas with both Roman and indigenous backgrounds. Pando Anta (2005, 219–40; 2017) developed an extensive research process to study the funerary *stelae* of the *conventus emeritensis* to determine distribution patterns based on the degree of 'Romanity' and 'Indigeneity'. This field of research was continued in the publication by Hidalgo *et alii* (2019).



Figure 11. Grave good from alleged Late Republican cremation in the amphitheatre (Marcos Pous, 1961). Left: MNAR 10562, 7th – 8th cent. AD. Right: MNAR 10501, 7th – 8th cent. AD. Photo: Alba Calzado *et alii,* 2014: 1735. Fig. 3.

Funerary presence does concur with Canto's (1989: 149-206) hypothesis, as Marcos Pous (1961) documented one cremation from the Late Republican period underneath some foundations of the amphitheatre. Late Republican funerary presence has been also documented by Lequément (1977: 150), despite his work generating some doubts and creating some controversies among the academic community (Murciano Calles, 2010; Bello Rodrigo and Márquez Pérez, 2010: 404–42). Alba Calzado *et alii* (2014a) suggested the cinerary urn had a medieval production, and Murciano Calles (2010) argues that the discovery should not be relevant for the understanding of the colony since Marcos Pous was not present when the remains were discovered, and he merely

catalogued them as “Late Republican” based on the appearance of the grave good ensemble (fig. 11). Nevertheless, Marcos Pous’ discovery diverts the historiographical debate towards the more than plausible expansion(s) of the Augustan precinct, which entails another main historiographical debate.

Nevertheless, the finding documented by Marcos Pous was a first in a series of discoveries that challenged the understanding of the urbanism of *Colonia Augusta Emerita*. Evidence from the amphitheatre, and later from the Albarregas Valley in the northern side of the colony (Bello Rodrigo and Márquez Pérez, 2010: 404-442) questioned the consensus on an unchanged *pomerium* in *Emerita*. I do believe that the perimeter of the walls was modified as it was being built. The coin found within the mortar of the wall, dated in AD 41, and the situation of the amphitheatre adjoining the walls demonstrate a lengthy construction period for the wall that undoubtedly modified the layout of the urban space of *Emerita*. As I will further explain in Chapter 3 while discussing the walls, they changed over time the same way their dimensions changed. It was not a fixed feature of the colony. Thus, the plausibility of funerary contexts within the *pomerium* shall be modified, since when those contexts were created that spaces were not, in fact, urban. Those spaces, once part of the suburban areas encircling the colony after its foundations, were swiftly absorbed by a colony in constant growth, especially after its designation as the capital of the Province of *Lusitania,* during the late 1st century BC and the beginning of the 1st century AD.

2.3 *Augusta Emerita* and the Iberian context in the late 1st century BC

After 28-27 BC, Augustus was governing Syria, *Hispania,* and *Gallia* through the figure of the *legatus*. This transformation of the Republican political order will become the standard system during the Principate and the Empire (López Barja de Quiroga, 2017: 238). The *legati* were used as a temporary administrative solution who were granted power on behalf of the *imperium* bestowed upon Augustus by the Senate. Thus, their authority was subservient to Augustus, who was the head of the three aforementioned provinces. The *legati* used Republican terminology when addressing themselves in coinage, for instance –*Legatus Pro Praetore*– as it can be observed in the first series of the mint of *Emerita*, further

analysed in Chapter 6. In addition to the shifting political status quo, the war against the *Cantabri* and *Astures* caused a further re-organisation of the Iberian Peninsula, its territories, peoples, and more importantly, the number and limits of the pre-existent provinces (Le Roux, 2006).

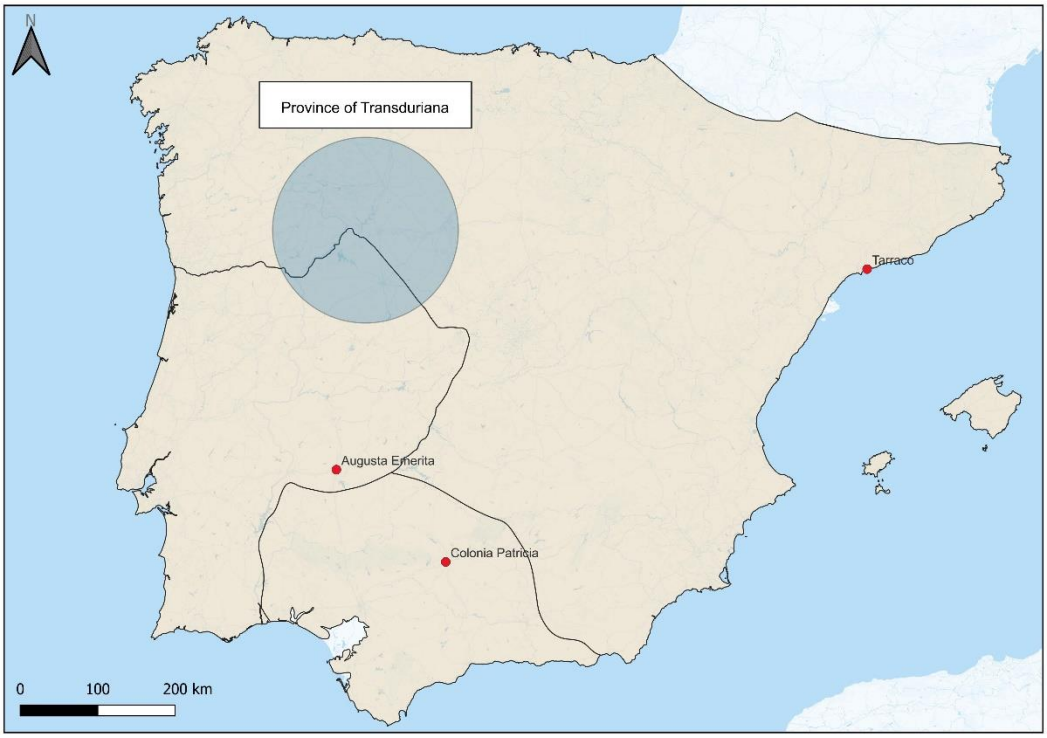


Figure 12. Approximate location of the *Transduriana* Province. Map: Carlos Cáceres-Puerto.

The Republican limits of the provinces of *Hispania Citerior* and *Ulterior* were altered favouring the creation of different political units by Augustus, thus granting himself the direct control of the gold, silver, and copper deposits in north-western Iberia and in the area nearby Cástulo, in southern *Hispania*. Furthermore, he allocated the rule of *Baetica*, a stable and fruitful province, under direct control of the Senate whereas *Lusitania* and *Tarraconensis* remained under the control of Augustus. The creation of the *Transduriana* province (fig. 12) converged within the transitional process between the conquering period, as the conflict was not yet concluded, and the annexation to the Empire of the conquered areas. *Transduriana* comprehended part of the territories of the *Cantabri* and the *Astures*, in northern *Iberia*. On the other hand, there has been a historiographical debate, considering the Bierzo Edict (fig. 13) (Richardson, 2002: 411-415), to determine to which province this territory was assigned after its brief existence, although it has been agreed that this area was ceded to the

Tarraconensis province. However, Strabo (III. 4.20) did mention that the people inhabiting the northern bank of the Douro River were previously referred to as *Lusitani*, and later became *Gallaeci*. Nevertheless, as I debate further in Chapter 4.3.1 Strabo always referred to ethnic groups, rather than geographical regions.



Figure 13. Bierzo Edict. Photo: Archivo Epigráfico de Hispania, Universidad Complutense de Madrid.

Whether it was a province *per se*, as defended by López Barja de Quiroga (2017: 241) or a military district (Alföldy, 2011: 189), the establishment of *Transduriana* belongs to a period of political instability in the Iberian Peninsula which followed the arrival of Augustus to power. *Emerita* was founded within this

context of change and mutability of different territories which conformed the three provinces of *Hispania* in late 1st century BC: *Tarraconensis, Baetica* and *Lusitania*.

Augusta Emerita was the highest hierarchical level of the organisation of the territory in *Lusitania*. Alongside *Colonia Pax Iulia* (Beja, Portugal) and *Scallabis Praesidium Iulium* (Santarem, Portugal), organised the Lusitanian hinterland into 3 *conventus iuridici*, which would redirect the social and economic inputs towards the capital, *Emerita*. This distribution of the territory with 3 colonies managing part of the province of *Lusitania*, under direct control of *Emerita*, guaranteed an organisation system where the *emeriti*, the Roman citizens, were directly involved in the "Romanisation" process and the assessment of the resources of the province. Despite of the indigenous people included in the foundational process of *Augusta Emerita* (Edmondson, 2011: 35), the majority of native people were distributed in *civitates stipendariae*, 36 according to Pliny (*NH*, III) (fig. 34).

Pliny (*NH*, III) mentioned the existence of 5 colonies in *Lusitania*, as it is further discussed in chapter 4.3.2. However, only 3 of said colonies were appointed as a capital of a *conventus*. The foundation of *Emerita* was unfavourable to the remaining colonies, *Colonia Metellinensis* (Medellín, Badajoz) and *Colonia Norbensis Caesarina* (Cáceres) since both colonies lost a portion of their *ager publicus* to *Augusta Emerita*. Augustus set a new colony separated from the Republican memory in *Metellinum* -founded in 79-78 BC by Quintus Caecilius Metellus Pius-, and the Caesarean past of *Norba* -various theories have arisen in the past decades, although the founder is not yet clear, the foundation must have occurred between 75-34 BC, as seen in Chapter 4.2-, to establish a new centre of provincial power. Augustus promulgated in *Emerita* an important iconographical discourse and a substantial policy of sponsoring public buildings, which culminated with the 3 land distribution processes in a vast *ager publicus*, taking part of the territory previously owned by *Metellinum* and *Norba*. The foundation of *Emerita* followed the standard process of a colony settled in an uninhabited area. Possibly this major land distribution process was favoured by a certain level of emptiness, although lesser rural settlements have been documented nearby *Emerita* (fig. 25) (Jiménez Ávila, 2004: 41-66; Sanabria

Murillo, 2008). These settlements, inheritors of cultural horizons from the Second Iron Age, were later assimilated by the Roman settlers, and incorporated into the new colony, *conventus* and province.

The question of the area of the walled enclosure has drawn the attention of multiple scholars, continuing with the typological problem of the layout of the colony mentioned before. Regardless of the size of the Augustan foundation, some scholars have debated the intentionality and the status quo of the *emeritii* upon the foundational process. Saquete Chamizo (1997) did propose that *Emerita* was a punitive foundational process for the veterans. He argued that establishing a colony in a recently established province in a peripheral region would imply a certain degree of punishment. Other scholars have contended that the settlement in a peripheral region would signify distancing the discharged troops from the Italian Peninsula. Considering the efforts made by the new administration and the key sponsors *Emerita* enjoyed upon its foundation, I tend to disagree on these premises. As a matter of fact, the allotments provided for agricultural purposes were so exceptionally large — 400 *iuguera* (fig. 35)— that Classical land surveyors took *Emerita* as a case study (Cáceres-Puerto, 2019: 135–151). Therefore, this suggests a reward rather than a coercive measure. The location of the foundation has been studied by Rodríguez Martín (2010: 118–40) and Saquete (2011: 111–24).

One of the main features of the colony, the bridge over the Guadiana River, has been the focus of multiple research projects, although the most crucial one considering the impact was the PhD thesis of Álvarez Martínez (1981). It has been further analysed by Álvarez (1983), Fernández Casado (1980) who developed an architectural analysis of the bridge, Rodríguez Martín (2004), Feijóo (1997: 323–27) and Durán Fuentes (2004). Nogales and Álvarez (2018: 95) argue that the main island in the Guadiana River was created at the same time of the construction of the bridge to separate the course of the river and to protect the structure as well as serving as a colonial *Forum Boarium.* The study of the bridge has been researched at close range with the deification of the river *Ana* and *Barraeca* (Bejarano Osorio, 2004). This phenomenon was compared to coinage and the mythological types employed by the imperial mints under Augustus' reign. The debate about the relationship between motifs on coinage

and the question of indigeneity will be analysed in Chapter 6, although further research can be observed in the following publications: Beltrán (1976: 93–105), Blázquez Cerrato (1992), Marqués de Faria (1998: 164–65), Ripollés (2010: 45–64) and Trillmich (2018: 84–112).

As a result, the founding of *Augusta Emerita* as a likeness of Rome and a praise to the imperial figure, responds to the political uncertainty in the Iberian provinces that followed the end the Republic and the culmination of the conquest of *Hispania* with the Cantabrian Wars. The reorganisation of the provinces, urban centres and the settlement of veterans originated from the determination to bring peace and stability to a strategic territory that had been immerse in fratricidal conflicts during the 1st century BC. The colonial process can be better understood by analysing the urbanism and land distribution system of *Emerita* under the reign of Augustus (Olesti Vila, 2014: 375).

3 Wall. Chronology, purpose, and historiographical debate on the urbanism of *Emerita*

The question of the Roman walls in *Emerita* has drawn the attention of many researchers, although few of them seem to agree on the basic concepts such as the layout, chronology, and the purpose of their construction, albeit the latter might appear easy to elucidate. The chronology of the walls has been closely connected to the foundation of *Emerita* itself, and the cultural horizon of its founders. Thus, Mélida (1921: 4) and Macías (1929) seemed to recognise Iron Age evidence in the shape of alleged cyclopean masonry in lower strata of the walls they excavated in the northeaster side of the colony near the amphitheatre (Alba Calzado *et alii*, 2014a: 87). Those inputs were, however, intrinsically related to the agreement at the time that *Augusta Emerita* was founded over a pre-existent settlement belonging to the cultural horizon of the *Vettones*, a fact that has been refuted since there is no evidence proving a pre-Roman occupation of *Emerita*. Hence, following Mélida and Macías' theories, the origin of the main buildings in the Roman colony had to be sought in pre-Roman cultures allegedly present in the past of the city, like the walls. Fernández Pérez (1893), for instance, argued that Phoenicians and Carthaginians did found Mérida, adducing an alleged Punic origin for the columns in the Alcazaba (López Díaz, 2018: 54), which, were, in fact, Visigoth.

Regardless of the chronology of the walls its study and the early urbanism of *Emerita* needs to be updated. Recent publications, like Sánchez Barrero (2010), Mateos and Pizzo (2018: 13–40), Cáceres-Puerto and García Sánchez (2020: 53–67) and Murciano and Sabio (2020: 155–181), work towards a better understanding of the evolution of the urban enclosure. Furthermore, Cáceres-Puerto and García Sánchez (2020: 53–67) use funerary evidence to clarify the urban development of the suburban areas of the colony, complementing the Sánchez Barrero's work (2010) on the communication nodes between the urban centre and the *ager publicus* of the colony, as it is further analysed in Chapter 7.

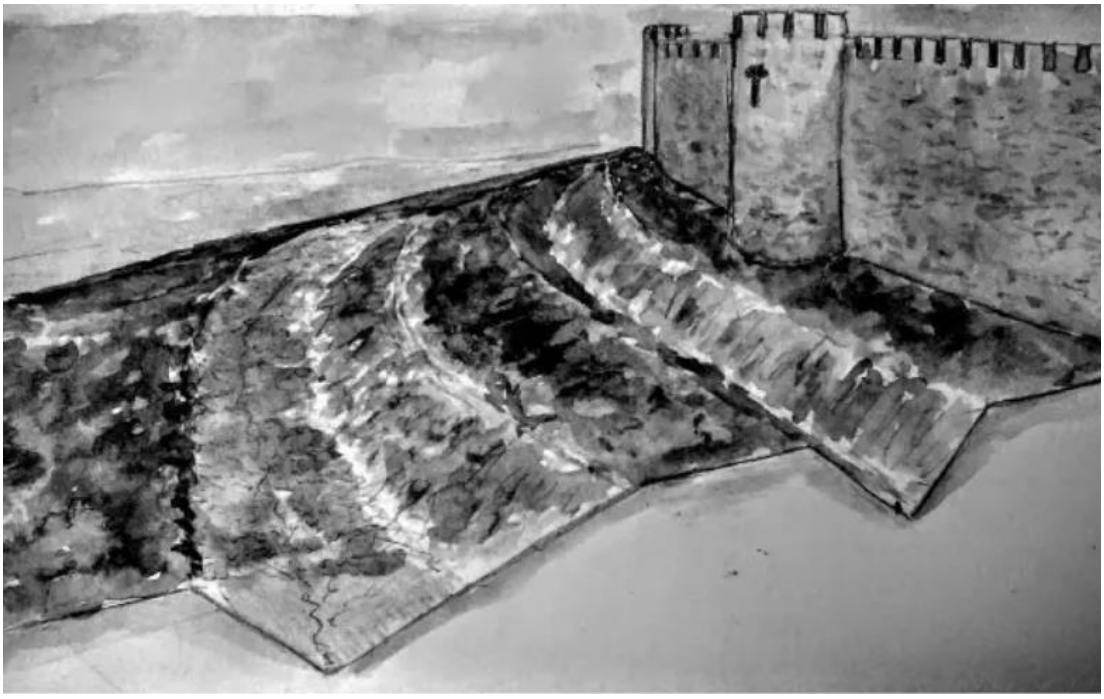


Figure 14. Representation of the walls and the ditch in the amphitheatre sector. Image: Sabio González and Murciano Calles, 2019: 169 (fig. 6).

As Richmond (1930: 99–116) suggested in the 1930s, he considered *Emerita* as a settlement in continuing growth, which has been the predominant model and the theory I, and most scholars nowadays, support, refuting Schulten's hypothesis of '*Emerita quadrata*' (fig. 18). In my opinion, although the walls were undoubtedly planned during the Augustan period, they were altered in numerous occasions throughout their construction span. The strengthening of the walls and the addition of towers undertaken during the 3rd century is clear evidence of a wall enclosure adapting to the needs of an ever-changing political landscape. This structural change implies a definitive layout after mid-3rd century AD but does not necessarily imply a fixed outline of the walls prior to that date.

However, Richmond considered the layout of the city walls to have been determined upon its foundation (Nogales and Álvarez, 2018: 13–52). This effectively removes all possibility of growth and discarded the hypothesis of ulterior changes to the original plan. He considered the closeness of the amphitheatre and the walls (fig. 15), as well as the branch of the *Aqva Avgvsta* placed nearby (fig. 16), as from a later date. This hypothesis has proved to be outdated, as the layout of the walls we observe nowadays are the evidence of the last reinforcement. If the walls could be strengthened, the ground plan could

be altered as well. Nevertheless, Richmond was not the only scholar proposing this principle. Other authors consider the foundational process as a greater construction project rather than a gradual one (Álvarez Martínez, 1981, Calero, 1986; 1995; Hernández, 1998; Feijóo, 2000b: 571–81; Acero, 2011; Alba Calzado *et alii*, 2014b).



Figure 15. Wall adjoining the amphitheatre. Photo: Carlos Cáceres-Puerto.

The existence of a defensive ditch (figs. 14, and 16) at various points throughout the perimeter has been used by certain scholars to evaluate the defensive value of the walls (Nogales and Álvarez, 2018: 13–52) and to provide further evidence of its alleged Augustan chronology. This ditch (fig. 14), effectively documented in the northeast sector between the '*Domus* of the amphitheatre' and the allotment of the National Museum of Roman Art building, belonged to Augustan chronologies; however, it was backfilled by the 2nd half of the 1st century AD (Alba *et alii*, 2014a: 89; Sabio and Murciano, 2018: 149–172; Murciano and Sabio, 2020: 155–181). It does not prove, as some authors have mentioned, that the entire perimeter was constructed under Augustus' reign, especially if we take into consideration the Claudian *aes* that appeared inside the wall in the northern side of the colony. The chronological issue arises in this area again, as we contemplate the aforementioned *Aqva Avgvsta* and the arch supporting it through the ditch nearby the '*Domus* of the Amphitheatre' (fig. 15).

Feijóo (2000b: 571-81) argued that the existence of an arch means the ditch must have necessarily been built prior the aqueduct.



Figure 16. *Domus* of the Amphitheatre. Branch of *Aqva Avgvsta* crossing the defensive ditch. This arch is the only surviving stretch of the original Roman ditch. Photo: Carlos Cáceres-Puerto.

Despite multiple scholars defending an Augustan chronology for most of the public infrastructure of the colony (Alba Calzado *et alii*, 2014a: 96–97), there is a clear distinction between when a building was conceived and the completion of the building process. Therefore, I think it is presumptuous to assume that most public buildings from *Augusta Emerita* belong to the Augustan period, especially when there is evidence of a Claudian coin embedded within the mortar of a sector of the walls (Palma García, 2004a: 35-53). Other scholars have a similar perception, and they consider the later incorporation of certain public buildings in empty allotments throughout the colony (Bendala Galán and Durán, 1995; Mateos, 2004; 2011; Palma, 2004a; Pizzo, 2010; De La Barrera, 2014).

Some authors, like Le Roux (2015: 102) suggests an early construction of the defensive wall. However, the *aes* documented by Palma is the evidence of an ongoing construction process, proposing an unfinished defensive enclosure

by the reign of Claudius. The coin — *TI·CLAVDIVS·CAESAR·AVG·P·M·TR·P·IMP* — signals an estimated chronology in AD 41 (Palma García, 2004a: 38, excavation number: 6019).

The later construction of the western sector adjoining the amphitheatre (fig. 15) concurs with my hypothesis of a steady constructive process, occurring during various decades, in which the most crucial infrastructures -bridges, aqueducts, or temples- were built, and superfluous facilities took slightly longer to complete -walls, amphitheatre, circus, sewage system-. This does not imply the inexistence of certain public buildings until the mid-1st century AD, but the utilisation of semipermanent materials in said buildings, like wood. There is evidence of a wooden amphitheatre, with similar shape although arguably of smaller capacity, similar to the examples documented in *Carnuntum* (Lower Austria), or *Isca Augusta* (Caerleon, Wales), as depicted in figure 17.

Nevertheless, research concerning the layout of the Lusitanian colony has not always followed a concordant theory. During the first half of the 20th century, the majority of scholars defended a primitive Augustan enclosure, similar to normative Roman military camps we can observe in Northern Iberia, for instance. These postulates, with Schulten (1922) as their main advocate, were known as '*urbs quadrata*', and, despite prominent academics like Richmond (1930: 99–116) insistently refuting this argument, *'urbs quadrata'* (fig. 18) *Emerita* was considered the established blueprint for the first stage of the colony.

It was first established that *Emerita*, since it was a military foundation, ought to have had a military explanation for its existence, and, a military reason for its location, which it partially had, as a supply centre for the Cantabrian campaigns (Saquete Chamizo, 2011: 111-24). Thus, *'Emerita Quadrata'* made sense since researchers firstly considered a foundation among a Celtiberian settlement as the most probable scenario (Alba Calzado, *et alii*, 2014b: 1731).

This theory, nowadays rightfully forgotten, considered the 'Arch of Trajan' to be the main entrance to the Provincial Forum complex, as one of the main four gates of the military complex. They also mentioned a hypothetical arch, named 'Arch of Cimbrón', whose presence in the archaeological ensemble has never been proven. 'Arch of Cimbrón' was probably located estimating the area of the

colony following the model of '*urbs quadrata'*, in the opposite axis to Arch of Trajan. Schulten's theory, despite Richmond's considerations, declared that *Augusta Emerita* was founded as an '*urbs quadrata*' and steadily grew during the 1st century AD to reach the layout we nowadays observe. Therefore, the Arch of Trajan would be a vestigial gate from this primitive era (Alba Calzado *et alii*, 2014a: 89).

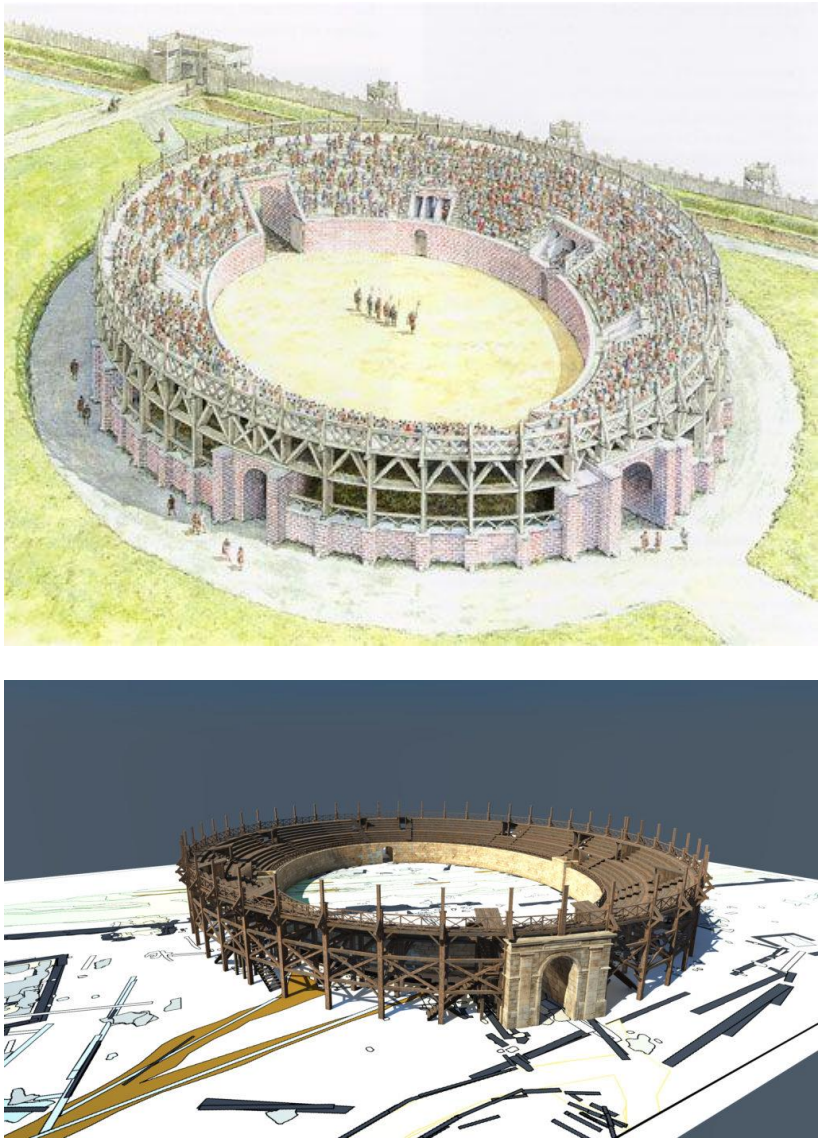


Figure 17. Reconstruction of the amphitheatre of *Isca Augusta* (Welsh Historic Monuments. Top), and *Carnuntum* (LBI ArchPro, 7reasons. Bottom).

However, the arch was part of a major construction project developed under the reign of Tiberius, which implied the demolition of various *domus* and the relocation of colonists to clear four blocks for the construction of the Provincial Forum complex. This phenomenon has been further studied by Mateos Cruz

(2006: 315; 2011: 133), Ayerbe *et alii* (2009) Nogales Basarrate and Álvarez Martínez (2003: 294–303, 2018: 28–30) and Mateos and Pizzo (2012: 191–210). However, due to the premature clearance of the area, and the alleged 24 *domus* demolished (Mateos and Pizzo: 2012: 195), some allotments might not have been occupied. Nogales Basarrate and Álvarez Martínez (2018: 38–39) argued that the perimeter should have been previously set, hence implying a thorough planning of the empty allotments for future construction.



Figure 18. Schulten's *Emerita Quadrata*. Map: Carlos Cáceres-Puerto.

The theory developed by Richmond (1930) concerning the urbanism of *Emerita* was the opposite to the hypothesis drawn by Schulten (1922). However, the layout of the walls does not interest me as much as the chronology of the wall does. Both layout and chronology are intertwined, however, since one affects and influences the other. Although we shall take into consideration the underlying factor leading to the construction of the wall, which will effectively elucidate the final layout.

I do believe, regardless of what authors like Álvarez Martínez (1983; 2007), Feijóo (2000b), or Alba Calzado (2014) considered, that the walls, alike the foundational process altogether, had a certain degree of improvisation. It is

the only reasonable explanation for the late Republican contexts in the amphitheatre and in the northern area of the colony, near the *Kardo Maximus*' exit towards the Albarregas Valley. In addition, the modification of the layout throughout the Augustan period, and over the 1st century AD, has been proven over and over in the archaeological record of Mérida.

The amphitheatre was not built at the same time as the walls, at least not the primitive wooden enclosure which was used during the first decades of the colony. The vision of a grand colony where all the public buildings were overly decorated, made of stone, and, more importantly, finished in a few years concurs to the script of a Hollywood movie, rather than the archaeological record. Hence, the theatre, much more important and with greater significance for the Imperial propaganda designed by Augustus and developed in the provinces by Agrippa, was given priority. Even though theatre was not the most popular among the military classes, who preferred *munera gladiatoria* instead. The first colonists constructed a temporary structure by the theatre, as I have already mentioned, mainly made of wood (fig. 17), which were not a rare feature in Roman settlements.

However, at some point in first half of the 1st century AD, the local authorities decided to dismantle the wooden structure and replace it with a stone amphitheatre, whose remains are visible nowadays (fig. 15). This new amphitheatre would have matched the status of the colony as a provincial capital, but one must wonder what happened to the perimeter of the wall. Whether it was demolished and rebuilt to accommodate the amphitheatre, or it was not built when the amphitheatre works began, it entails a modification of the urban perimeter. Implicitly, it also suggests a certain degree of improvisation and a non-defensive utilisation of the walls. Undoubtedly, the more than probable absence of a wall constraining the building, as seen again in figure 15, might have also been a key factor taken into consideration to build the amphitheatre where it currently stands.

The fact that the outer wall of the amphitheatre was finished following identic aesthetic criteria to the other areas of the building proves a unique constructive phase. According to my hypothesis, soon after its construction, it was agreed that the wall should encircle the amphitheatre, following the

topography of St. Albín Hill, thus blocking three main gates of the amphitheatre on its north-west side. *Augusta Emerita*'s walled perimeter was undoubtedly permeable, and it did change throughout its constructive phases.

Finally, the debate of the functionality of the wall is futile. An imposing wall would have served both the propagandistic element and the intrinsically defensive value a wall has. The defensive use would then complement the propagandistic element. The wall was built following the topography using the higher ground of the Albarregas Valley as an advantage, hence the irregularity of the layout, almost 'un-Roman'. The adaptation to the terrain in the northern side of the colony has been attested by various authors (Sánchez Barrero, 2017: 33-44; Palma García, 2004a: 35-53; Feijóo Martínez, 2000b: 571-581), thus it presents no surprises.



Figure 19. Surviving section of the Roman wall inside the Moorish Citadel. Granite blocks and tower correspond to the Visigoth reinforcement. Photo: Carlos Cáceres-Puerto.

The existence of a ditch (fig. 14, and 16) (Feijóo Martínez, 2000b), attested in various excavations around Mérida would only add monumentality to the defensive infrastructure. However, this is not a black or white discussion. Both factors can perfectly coexist, and they very well do, in my opinion. Another hypothesis that cannot be ruled out is the existence of the ditch since the

foundation of the colony, around 25 BC. Although the construction of a preliminary line of defence would imply a reconsideration of the layout planning in later stages of the colony, to accommodate certain areas within the city walls. The section of the wall closest to the '*Domus* of the amphitheatre' (fig. 16) preserves a deposit of crushed diorite rocks from the ditch (Alba Calzado, *et alii*, 2014b: 1733). This refutes the theory of the construction of the ditch as an earlier defensive line, as it was built at the same time as that section of the walls. It is plausible, nonetheless, that the wall-ditch infrastructure was built in phases, instead of an earlier defensive system –ditch– and a later imposing wall.

Nevertheless, the study of the walls still presents numerous doubts, and has been traditionally difficult since the Moorish citadel partially demolished the walls in the 9th century AD (fig. 19). The study of the urbanism in *Emerita* and its wall is still a work in progress, although funerary research can bring some light to the layouts of the colony, and the transformation from a military supply centre to the capital of the Province of *Lusitania*.

4 Pre-Roman occupation of the mid Guadiana Valley: archaeology and classical sources

4.1 Geographical scope of the mid Guadiana Valley

The area of study is situated in the northern strip of the province of Badajoz, in the autonomous community of Extremadura. The main water source, and the one moulding the terrain into a northeast-southwest direction, is the Guadiana River, *Flumen Anas* in Latin (fig. 20). The basin of this river forms a meander 20m south of Mérida and therefore approaches the colony from the southeast flowing towards the northwest. There are also lesser tributary sources shaping the orography of the territory and impacting on the inhabitants. As Bernabé Moreno de Vargas (1633), a local historian from the 17th century, would write, Mérida, mirroring Egypt, is a gift from the River *Anas* (Morgado Portero, 2006: 15). It is certain that the river played a key role in the developing of the Roman colony, but it is also the main character in shaping the territory.



Figure 20. Aerial Image of Mérida and the Guadiana River. Photo: Ayuntamiento de Mérida.

The northern limit of this boundary is located in the southernmost spurs of Sierra de San Pedro and Sierra de Montánchez mountain ranges (fig. 21), the

limits for both provinces in Extremadura: Badajoz and Cáceres (Sanabria Murillo, 2008: 17).



Figure 21. Sierra de Montánchez, Alcuéscar (Cáceres). Photo: Carlos Cáceres-Puerto.

The region surrounding modern-day Mérida forms a peneplane, a homogeneous platform only disrupted by medium-sized mountains encircling the mid Guadiana Valley (fig. 22). The Guadiana River sits in a clay-based soil as it forms meanders on an east-west direction before turning southwards where the current Spanish-Portuguese border stands. Since the Pleistocene period, the erratic course of the Guadiana has created alluvial terraces over the millennia (Morgado Portero, 2006: 15). Those meanders are the natural solution to overcome harder material like granite and gabbro (Mora Aliseda, Garrido Velarde, Mora: 2018). The most significant morphological feature is the hilltop of 'El Carija', within the Sierra Araya, coincidentally preserving remains of a Roman toponym after P. Carisius, the *deductor* of the colony (Edmondson, 2011: 35). The hilltop forms a wide and mostly flat plateau which disguises itself as part of the peneplain below (Sos Baynat, 1965: 215).

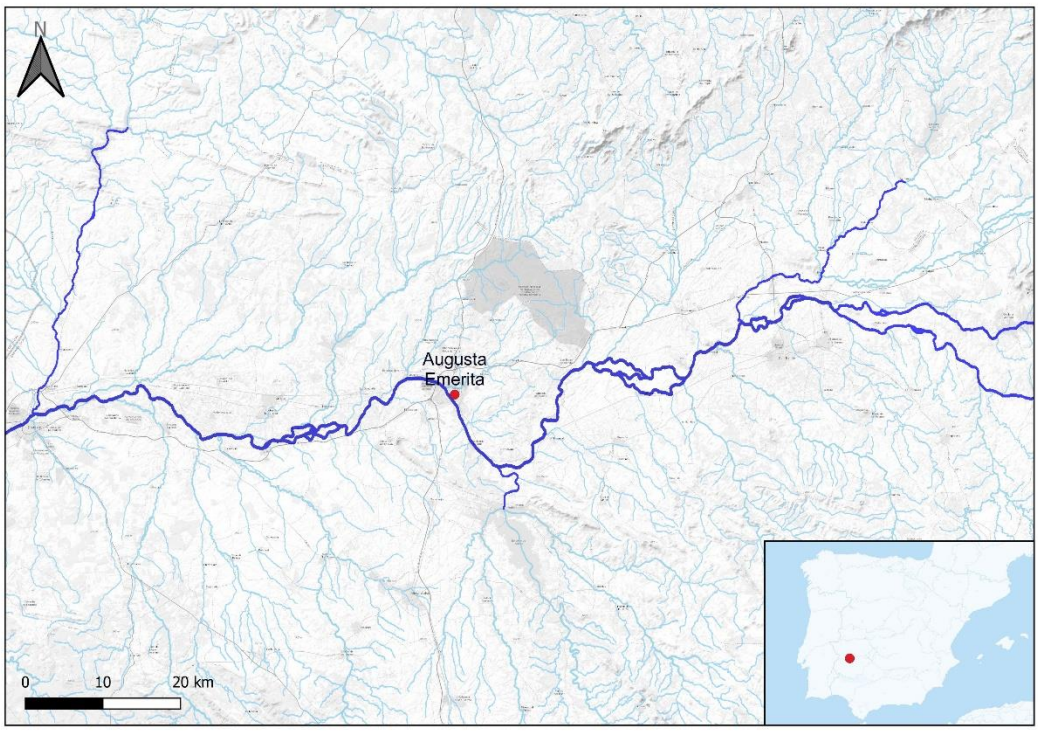


Figure 22. Mérida and its nearby geographical features, with a special emphasis on the hydrology of the area. Map: Carlos Cáceres-Puerto.

The mere existence of the meanders and the prominent, deep, clay-based soil of the southern bank of the Guadiana, towards a region known as *Tierra de Barros*, which translates to 'Land of Clays', is the explanation for the predominance of farming plots and allotments granted to the veterans on this side of the river. These are not the only location of said allotments. As has been specified, the course of the Guadiana River was kept for public use except for towards the north of the colony where it was used for industrial facilities and funerary practice. In northern *Emerita,* there would have also been distributed allotments among the settlers, although the dichotomy with the boundaries in nearby *Norba* does not make the solution easy to understand. Eastwards the explanation is simpler. During the 1950s and 1960s, Franco's regime put into practice a large development project in the heavily depressed areas of Extremadura after the Spanish Civil War, following the course of the Guadiana Valley, named 'Plan Badajoz'. The movement of soil that the founding of villages, farms, building roads and channels provoked, destroyed the remains of any archaeological features, especially in the vicinity of Medellín.

The area surrounding the prospective Roman colony was formed by mildly eroded hills composed of granite, red diorites, and gabbro (fig. 23). The terrain is homogeneous and predominately flat with plains at 200–230m above the sea level, except for some mild and peripheral elevations scattered throughout the edges of the territory with fluctuating heights. Medium sized courses of water flow along moderately wide valleys, discharging either into the Guadiana River or a bigger stream of water which in turn flows into the Guadiana. Sierra de San Serván, for instance, has a peak of 608m above the sea level (Mora Aliseda *et alii*, 2018: 25), whereas the summit of Sierra Grande de Hornachos, in southern Almendralejo, is 943m (Cordero Ruiz, 2013: 216). The remaining average height of mountains and eroded hills varies at around 320m above sea level.

The Spanish geologist V. Sos Baynat (1965: 215) analysed the topography, geography, and geology of the region of Mérida, limiting area of study to specific boundaries based on various geographical features around the city. As stated in Sos Baynat's work, the region of Mérida was demarcated by Sierra de San Serván in the southwest and south, adjoining the spurs of Zarza de Alange and Alange on the southwest. Sierra de Mirandilla acts as the northeastern boundary. The discharge of the Aljucén River into the Guadiana River is the northwestern limit (Sos Baynat, 1965: 215–16). Despite Sos Baynat limiting to four geographical features, especially with the case of the rivers a statement needs to be made. The Guadiana River is, without hesitation, the most important course of water in the region, but the choice of the Aljucén River is merely due to its location closing the northwest limit at its mouth into the Guadiana. The Albarregas River, for instance, which flows within Mérida towards the Guadiana, or the Matachel River, nearby Alange, are also significant, as will be seen later in the chapter; many pre-Roman settlements were founded around those two rivers. The Guadajira River, towards the west, is also an important geographical feature shaping the southern part of the mid Guadiana Valley. If the Matachel and the Albarregas Rivers are important features when considering the amount of pre-Roman sites established on their banks, the Guadajira River forms, alongside the Matachel River (fig. 92), the main axis of Early Imperial Roman rural sites in the mid Guadiana Valley, which will be further analysed in Chapter 7.

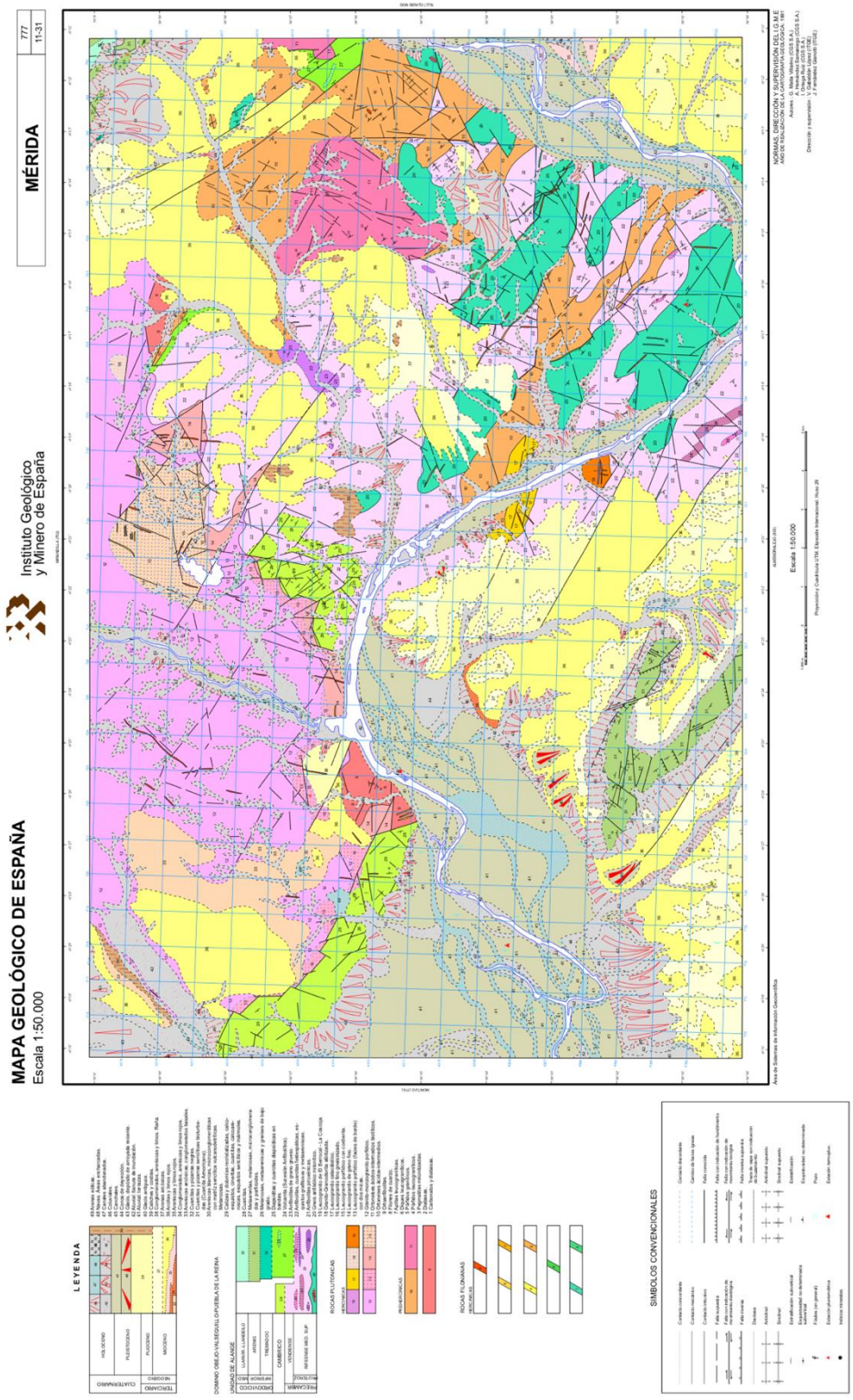


Figure 23. Geological map of the area of Mérida. Map: Instituto Geológico y Minero de España.

4.2 The mid Guadiana Valley before the Romans



Figure 24. Limits of the *Lusitanian* province with the analysed area highlighted. Map: Carlos Cáceres-Puerto.

The foundation of *Colonia Iulia Augusta Emerita* can be understood as the summit in the urbanisation process in the mid Guadiana Valley (Almagro-Gorbea, 2005). The splendour of the Augustan foundation has, however, overshadowed the prior and the later periods of the Roman presence in Mérida or Extremadura (Álvarez Martínez, 1984), despite of the increasing number of sites uncovered in recent years. Álvarez Martínez (1984: 10) has stated that systematic work needed to be done regarding to the pre-Roman history in Extremadura, more precisely within the area comprising the Roman colony. I cannot refer to '*territorium emeritensis*' in this chapter as I am discussing historical contexts before the foundation of *Colonia Augusta Emerita*, hence, I would be falling into an anachronism. The study of the habitat prior to the Roman conquest — whether if we argue for a hypothetical Caesarean settlement or the Augustan colony — must be related to the surroundings of modern-day Mérida (fig. 24), with loose limits (Almagro-Gorbea, 2005).

4.2.1 First Iron Age (8th century BC – 5th century BC)

The First Iron Age in the region is also known as ‘Orientalising phase’ due to contacts with Tartessian communities and Eastern Mediterranean people, spanning from the 8th century to the 5th century BC. This corresponds to the cultural, political, and economic contact with the Tartessian nuclei in southern Iberia: in Cádiz, Huelva and Sevilla, with a consequent assimilation from this easternmost people (Almagro-Gorbea, 1977a: 159-194; 1990: 85-125; Celestino Pérez, 2005: 767-786). The material culture we have gathered from this period is an amalgamation of Phoenician and Greek pieces, alongside inputs of local productions. This period must not be understood as an Eastern Mediterranean invasion but rather as a coevolution of people from different geographical places through commerce and craftmanship. The ending of the 5th century BC and the disintegration of the Tartessian culture will develop the region into the post-Orientalising period, which navigates its way towards the Second Iron Age in the 4th century BC.

The mid Guadiana Valley had been considered, for a long time, as the ‘pantry’ of the Tartessian core in the Guadalquivir Valley when regarding natural resources (Enríquez Navascués, 2003); although it has been consistently proven that the relationship among both regions was an association between equals, not where the mid Guadiana Valley was subordinate to its southern counterpart, despite the arguments of scholars who support the opposite hypothesis (Pavón *et alii*, 2009). The research of this period in Extremadura, however, has been summarised in the two paradigmatic sites of the territory: Medellín and Cancho Roano (Jiménez Ávila and Ortega Blanco, 2008: 252). The study of this period in the region has been slowed down due to the lack of settlements found during archaeological excavations (fig. 25). Both scholars agree that the reason for this pace in researching the area is due to the fixation of some scholars with finding sites on higher ground, as in the Chalcolithic/Bronze Age phenomenon. This is applicable for pre-existent sites with Tartessian strata but not necessarily for *ex-novo* settlements established by the Tartessian newcomers. They were after ideal locations for commercial outposts, not necessarily for defensive purposes.



Figure 25. Map of the main Iron Age sites in the region. Map: Carlos Cáceres-Puerto. 1) Mérida. 2) Cerro de la Muela (Badajoz). 3) Medellín. 4) La Carbonera (La Guarda). 5) Cerro Borreguero. 6) Alange. 7) Cancho Roano. 8) El Palomar (Oliva de Mérida). 9) La Mata (Campanario). 10) Casas del Turuñuelo. 11) El Carrascalejo. 12) El Chaparral (Aljucén).

The transition between Bronze Age and the First Iron Age is very subtle in the region. The settlements did not undergo an enormous level of transformation, nor were they founded in other areas. The society, accordingly, did not suffer a violent transition, as the evidence suggests. The change is perceptible through material culture; at a certain level in the stratigraphy richer objects with a critically different decoration motives appear within the Bronze Age sites. This phenomenon, alongside the introduction of iron, which will replace the use of bronze in ornamental objects and weapons altogether, as well as the introduction and standardisation of wine consumption and new measurement units for trade, characterise this transition. It is proven that the Tartessian/Phoenician influence was being increased from the 10th century BC onwards, towards the colonisation of the Guadiana basin by those peoples (Almagro-Gorbea, 2014: 343–44). The nature of most sites preserves a certain level of influence from the Chalcolithic period, and the Bronze Age settlements, with encampments on hilltops controlling passing features, like Medellín and the ford over the Guadiana Valley (fig. 26). It

is undeniable, nevertheless, that, whether some sites remain unchanged and unscathed, there were new foundations by the new settlers, like Cancho Roano or El Palomar, for instance. Those sites supposed a drastic change to the construction techniques and patterns altogether.

Following the main sites from this period in the area (fig. 25) (Medellín, Oliva de Mérida, El Carrascalejo, La Guarda, Alange, Badajoz, Cerro de la Muela, Cogolludo, etc.), some scholars have proposed the theory that this typology of settlements would not be mere gatherings of agricultural centres, but rather microstates managed by local hierarchies or monarchies (Almagro-Gorbea, 1990; Enríquez Navascués, 2003; Jiménez Ávila and Ortega Blanco, 2008: 253). Almagro-Gorbea (2014) even provides a pattern in the distribution of settlements similar to Jiménez Ávila (2008; 2018), with *Dipo* (uncertain location, possibly between Talavera la Real and Guadajira), *Conisturgis* (Medellín) and *Lacimurga* (Navalvillar de Pela) separated by 50km on an east-west axis following the course of the Guadiana River. The establishment of a Roman colony, whether it was a Republican outpost or an Augustan foundation, on the location of *Emerita* does not seem an unreasonable hypothesis. *Emerita* lays in the centre of both the axis of Tartessian settlements proposed east-west by Jiménez Ávila and Ortega Blanco (2008), and the north-south axis suggested by Almagro-Gorbea (1990; 2014). However, the lack of archaeological features does not support that conclusion.

There is a gradual switch towards the oriental political status quo as the small city-states gathered all the economic and political control and developed as centres for the region. The example of the Attic kylix (fig. 26) found in *Conisturgis* (Medellín) demonstrates not only the existence of a grander economic hub in the mid Guadiana Valley in the 6th century BC but also the result of the Tartessian influences towards what has always been believed to be a backwards region. There is also evidence of more local contacts, with sherds of pottery coming from Cástulo, in modern-day Jaén, with a similar chronology to the kylix, ca. 560 BC (Almagro-Gorbea, 2005; Almagro-Gorbea *et alii*, 2006; 2008a; 2008b).

One of the two paradigmatic sites from this period in the mid Guadiana Valley is Medellín/*Conisturgis* (fig. 26). It was established as a Tartessian nucleus in the 7th century BC, and it had an estimated population around 1,500-2,000

inhabitants by the year 600 BC, divided among the hill of the castle and the peneplane below where the suburban area was located. Although the foundation of the site was not during the First Iron Age, Jiménez Ávila and Guerra Millán (2012: 65–110) have successfully proven the continuous occupation of the area at least from the 14th century BC, although there is Chalcolithic pottery and some features that expand the occupation span further back until the 3rd millennium BC.



Figure 26. Top: Medellín (right-hand side of the image) with Castle Hill and the Guadiana river. Photo: Turismo de Extremadura. Bottom left: Cinerary urn 86H/18 from the Tartessian necropolis of Medellín (Almagro-Gorbea *et alii*, 2006: 325. Fig. 460). Bottom right: Cinerary urn with grave goods artefacts from the Tartessian necropolis of Medellín (Almagro-Gorbea *et alii*, 2006: 285. Fig. 400b).

The evidence of an even earlier settlement is supported by a loose amalgamation of sherds of pottery without any specific strata and a silo largely destroyed by the Roman foundations of the theatre (Jiménez Ávila and Guerra Millán, 2012: 94). The Bronze Age horizon is broad and refutes the theory of a Tartessian element with the establishment of a settlement in Medellín in the 7th century BC altogether. The Early Bronze Age entails the first consistent and documented occupation of the slope of the hill. The hilltop has not yet provided any data to a pre-Tartessian settlements. The excavations of the Early Bronze Age and Late Bronze Age features, the largest gathering of evidence, have provided numerous organic materials that have allowed for radiocarbon dating. The chronology is consistent from the 14th century BC towards the 1st millennium BC and is only disrupted by 200 years between the 12th and the 10th centuries BC (Jiménez Ávila and Guerra Millán, 2012: 65–110). This might imply a decrease of the size of the settlement or the complete disruption of the settlement in Medellín, to be reoccupied in the 1st millennium BC.

The entire site of *Conisturgis* was approximately 10ha during the First Iron Age (Almagro-Gorbea, 2008: 84). The study of the necropolis (fig. 27) suggests that at least one third of the population was lost by the end of the First Iron Age (Almagro-Gorbea *et alii*, 2006; 2008a; 2008b; Schattner, 2010: 1180–182). The countryside was controlled by small farming centres with their own funerary areas. From 500 BC, when Tartessos collapsed, the area would be managed by the utilisation of small, fortified towers or fortified palaces, according to the previous Phoenician style. Said facilities would defend the area from the *Vettones* and Lusitanians, who were settled in gatherings of domestic structures in rural areas.

The location of the *oppidum* facilitated the control over the ford in the Guadiana River at the foothill of the site, along with the route towards the Baetic System on a northwest-southeast axis, a pathway which will later become *Via XII* of the Antonine Itinerary, as it will be further analysed in Chapter 7.1.3. Alongside the large number of natural resources and fertile land, this route transformed this settlement into one of the most important nuclei of the northern Guadalquivir basin (Almagro-Gorbea *et alii*, 2005).

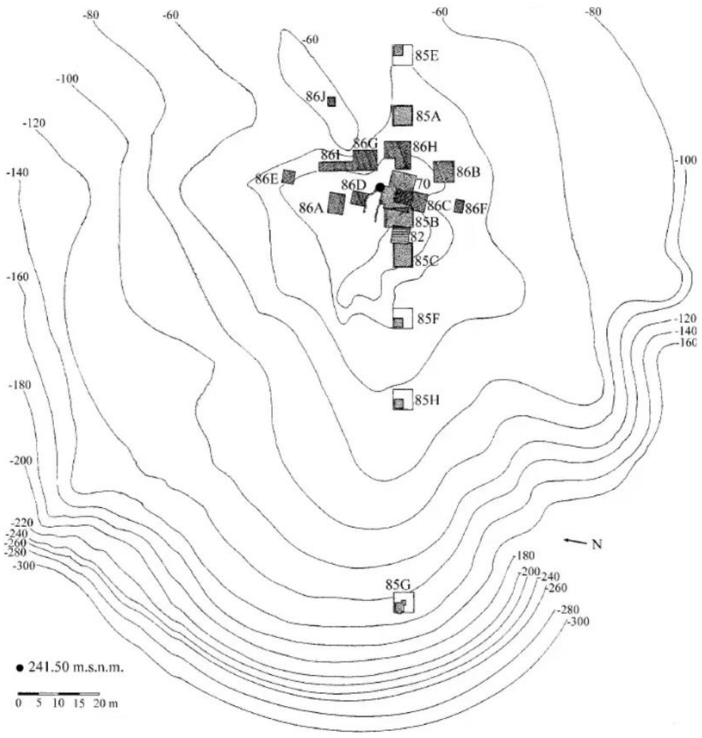


Figure 27. Layout of the necropolis of Medellín. Map: Almagro *et alii*, 2006: 29. Fig. 18.

The different excavation campaigns (1969–1971, 1982, 1985–1986) in the necropolis of Medellín have revealed the importance of this site in the Iron Age horizon (fig. 27). It was situated atop an alluvial terrace overlooking at the Guadiana River, which surrounds the area; therefore, it is, *de facto*, an island most of the year. It is 1ha in size and ca. 2,000 funerary structures (Almagro-Gorbea *et alii*, 2006) have been identified on the site. It extends over the peripheral suburban area on an approximate size of 5000 m^2. The typology of the funerary practice is cremation in its entirety, but the cremation place is unknown. The ashes were later placed in clay urns (fig. 26) and deposited in cists dug into the ground and then surrounded by pebbles. The urns in the necropolis of Medellín can be compared in style to those in Mengabril (Almagro-Gorbea, 1977b: 280–84) and Aljucén (Enríquez Navascués and Domínguez de la Concha, 1991: 35–52). Almagro-Gorbea *et alii* (2005: 1219) have suggested the hypothesis of a collective *ustrinium* for the necropolis. The grave goods present in the cists were mostly formed by pottery recipients. The ceramic artefact belonged to a local hand-made typology, plus wheel-thrown grey pottery and 'Cruz del Negro' urns alongside lids, brooches and imported grave goods such as ivory combs (Almagro-Gorbea *et alii*, 2006). The artefacts found during the

excavation were placed in the funerary pyres, which could possibly mean this is early evidence of ritual feasts by the graves of the deceased (fig. 26). The chronology established for this initial phase expands from 675 BC to 600 BC. The rite was still in use by the 450–425 BC (Almagro-Gorbea *et alii*, 2008a: 913), where the 10th hypothetical generation was the ultimate one to be recorded. Further layers of cremation cists were probably disrupted by successive urban developments.

Whereas in other *necropoleis* in southern Iberia, like in Sevilla or Huelva, the evidence points towards an elite cremation centre, the evidence from the funerary complex in Medellín suggests it was a more egalitarian complex; Almagro-Gorbea *et alii* (2005: 1220) explain this with the urban renaissance occurring at this stage. The excavation had also provided evidence of six different pottery workshops, with a chronological range spanning from the 8th century BC to the 6th century BC (Almagro-Gorbea *et alii*, 2005: 1217–233).



Figure 28. Layout of the complex of Cancho Roano. Photo: Carlos Cáceres-Puerto.

The second site in importance, not from the funerary rites point of view but due to its singularity, is Cancho Roano (Zalamea de la Serena, Badajoz). The discovery and excavation of the Tartessian palace (figs. 28, and 29) took place in the 1970s in an allotment in the vicinity of Zalamea de la Serena and Quintana

de la Serena (Badajoz), and the project was under the direction of Maluquer de Motes (1981: 225–409; 1983; Maluquer *et alii*, 1987: 36–50) and Sebastián Celestino (2003) after Maluquer's passing (Pavón *et alii*, 2009: 44).



Figure 29. Southeast corner of the complex. Photo: Carlos Cáceres-Puerto.

The initial thoughts of a sanctuary (Maluquer de Motes, 1981: 225–409; Blanco Freijeiro, 1981: 225–242; Blázquez, 2001: 83–88; Celestino, 2001: 17–56; Celestino, Fernández and Sbeinati, 2003: 299–366) were later disproved by the material culture and features unearthed during the excavation. The finds concur more with the idea of a palatial complex (Almagro-Gorbea, 1992: 95–103; 1998: 113—137; Almagro-Gorbea and Domínguez de la Concha, 1989: 339–382; Almagro-Gorbea *et alii*, 1990: 251–308). Currently both interpretations are valid, as evidence of a sanctuary within the palatial facilities is being confirmed, along with the ritual feast and burning of the complex. This is similar to what the current research at the site of Casas del Turuñuelo (fig. 30) is providing in the vicinity of Mérida. However, even though Cancho Roano was catalogued as a palace-sanctuary (Maluquer de Motes and Pallarés, 1981: 1–34), due to the complexity of the building, the large quantity of votive offerings made it clear that it was a sanctuary. Celestino (1997: 359–390) described this area of the region of La Serena as a sacred space, putting Cancho Roano in relation to the Cave

Del Valle (Zalamea de la Serena) and the votive offerings found there (Celestino Pérez *et alii*, 2010: 83–84).

Two different rituals have been documented: a ceremony reserved for the higher status of the Tartessian society, involving the placement of offerings inside the main building and the surrounding chambers (fig. 29) where these offerings had great symbolic and economic value (Celestino, 2003), and a second ritual for the unprivileged classes. Outside the moat votive deposits have been found, with poor materials like handmade pottery. This is a clear indicator of the importance of the sanctuary at the time but also the existence of a stratified society. According to the reports of different campaigns in La Serena (Rodríguez Díaz, Pavón and Duque, 2004: 497–569; Walid and Nuño, 2005: 977–984; Duque, 2007: 45–69), we can affirm the unprivileged classes would have been the inhabitant of small farming complexes, supplying the sanctuary (Celestino Pérez *et alii*, 2010: 85). These people might have been the 280 workers on the fields, based on the estimations by Almagro-Gorbea *et alii* (2011: 163–90): 90 gardeners, 50 farmers, 50 shepherds and 90 workers for vineyards and olive groves.



Figure 30. 3D Modelo of Casas del Turuñuelo. Image: Marín-Aguilera *et alii*, 2019: 934.

Cancho Roano has been compared to the small fort of La Mata, also in the province of Badajoz (Rodríguez Díaz *et alii*, 2004; Pavón *et alii*, 2009: 44; Sánchez Hidalgo *et alii*, 2013: 1097–1132). Almagro-Gorbea (2009: 55–78) and Almagro-Gorbea *et alii* (2011: 163–90) also compare it to fortified palaces in Syria-Palestine that served as an that element controlled of the agricultural areas surrounding the mound. Cancho Roano has also been compared to the Homeric palaces mentioned by Homer (Od. VII, 80–132). Celestino Pérez and Rodríguez González (2018: 172–180) suggest than a nearby site, Cerro Borreguero, which is near Zalamea de la Serena as well, might have acted as the antecedent for Cancho Roano, as the occupation has been confirmed for the 8th to the 6th centuries BC, when Cerro Borreguero was ceremonially abandoned and Cancho Roano founded.

In Casas del Turuñuelo (fig. 30) near Mérida, there is evidence of a palatial complex, similar to Cancho Roano (Rodríguez González *et alii*, 2020: 425-457). It was constructed in the 6th century BC, and, as well as Cancho Roano, it was intentionally set on fire in a ritual destruction during the 5th century BC. During the excavations in Cancho Roano, it was believed that the complex was a unique phenomenon in the mid Guadiana Valley, although the discovery of El Turuñuelo in the 1990s has opened new research lines towards a more populated Tartessian horizon in the region. Despite our knowledge that Cancho Roano and El Turuñuelo were intentionally destroyed prior to their abandonment, in the latter there is archaeological evidence of the process.

The palatial complex, which consisted of a residential area, ritual facilities, agricultural buildings, and storehouses, is unique in its typology due to the amount of zooarchaeological remains found on site. The remains of 52 horses, 4 cows, 4 pigs and 1 dog found in the main courtyard in front of the main staircase accessing the complex and the analysis of the bones demonstrated that none of the animals were used for human consumption. This is remarkable in the study of ritual sacrifices in western prehistory (Marín-Aguilera *et alii*, 2019: 933–53). The combination of the animal remains and the local pottery productions, besides *amphorae* and imported fine wares, apart from a vast number of resources that are being cut out of circulation, suggests a large gathering of people for the ritual fire. The site of El Turuñuelo has also moved the research to the west, past

Mérida, and complements the east-west axis, present since the Chalcolithic, along the course of the Guadiana River.

Nearby Mérida there is also an orientalising presence, although it is not as important nor as rich as on the eastern side of the mid Guadiana Valley described above. One of the bigger sites lays in Oliva de Mérida; it is known as El Palomar. Its size, 4ha, and the organised layout mark a turning point in the urban development of the region. It counted on domestic areas with industrial spaces and separated warehouses, as well as a public space with communal facilities and a 7m wide building, with a circular layout. Enríquez Navascués (2003: 140) and Jiménez Ávila and Ortega Blanco (2008: 251–82) have both catalogued this circular building as a ritual practice facility. Some of the streets possessed an archaic sewage system (Jiménez and Sánchez, 2001). Equally surprisingly is the site's relatively short span of occupation, as the earliest evidence of settlement is from the 6th century BC, but then it was abandoned by the end of the 5th century BC; This concurs with the phenomenon occurring in Cancho Roano and El Turuñuelo and, in essence, with all the main Tartessian nuclei in the region. The principal economic use was through agriculture. The organisation of the domestic spaces raises the question of social organisation in the mid-1st millennium BC, as the majority of the houses, which had a regular rectangular layout and were subdivided into two spaces, coexisted with bigger and more complex houses (Enríquez Navascués, 2003: 140).

In northern Mérida, in the vicinity of Aljucén, an excavated necropolis has been related to the site in El Chaparral (Jiménez, Ortega and López, 2002: 457–485), between El Carrascalejo and Aljucén (fig. 32). The funerary complex relied in its entirety on cremation rituals, with similar practices to those in Medellín. It has been identified as the funerary facility of a gathering of small agricultural settlements in use between the 7th and the 6th century BC (Enríquez and Domínguez, 1991: 35–52; Enríquez Navascués, 2003). The implications of the coexistence of two typologies of settlements within the same region and chronology has led to multiple hypotheses and contributed to Almagro-Gorbea's (1977a: 159-194) theory of small monarchies organising the territory.

Within the limits of Mérida city itself, the presence of Iron Age material is purely symbolic, with the presence of three small kilns found on the allotment of

the School of Hospitality, in the same location of the Neolithic-era site (Jiménez Ávila, 2011: 35–58) on the left bank of the Guadiana River (Jiménez Ávila and Sánchez Barrero, 2001: 329–354; Jiménez Ávila, 2011: 51; Jiménez Ávila and Barrientos Vera, 2018: 209–268). The sherds recovered pointed to the Orientalising period, with Phoenician style vessels and 'Cruz del Negro' pots like those found during the excavation of the necropolis of Medellín.



Figure 31. Left: 'Chariot of Mérida'. Photo: Museum of Saint-Germain-en-Laye. Right: Egyptianised Reshef (piece D958). Photo: Hispanic Society of America.

Another significant, and exceptional find is the 'Chariot of Mérida' (Mélida, 1900: 173–181; García y Bellido, 1947: 137–195; Almagro-Gorbea, 1977a). This object (fig. 31), property of the Museum of Saint-Germain-en-Laye in France, has been classified as an Iron Age find, although Jiménez Ávila (2011: 35–58) and Jiménez Ávila and Barrientos Vera (2018: 209-268) agree with the hypothesis that it is a Bronze Age object catalogued as Orientalising due to the Romantic element that the mythical Tartessian kingdom has always had in the Spanish historiography. The last finding is a small bronze figuring representing a warrior

with a remarkable Egyptian resemblance (fig. 31), property of the Hispanic Society of America, and it is certainly taken as an Iberian production from the 8th to the 7th century BC. The motifs follow the style of Phoenician deities present in the Levant and the coasts of Greece and Italy (Bisi, 1980: 5–14; Jiménez Ávila and Barrientos Vera, 2018: 209–268).

4.2.2 Second Iron Age (5th century BC – 1st century BC)

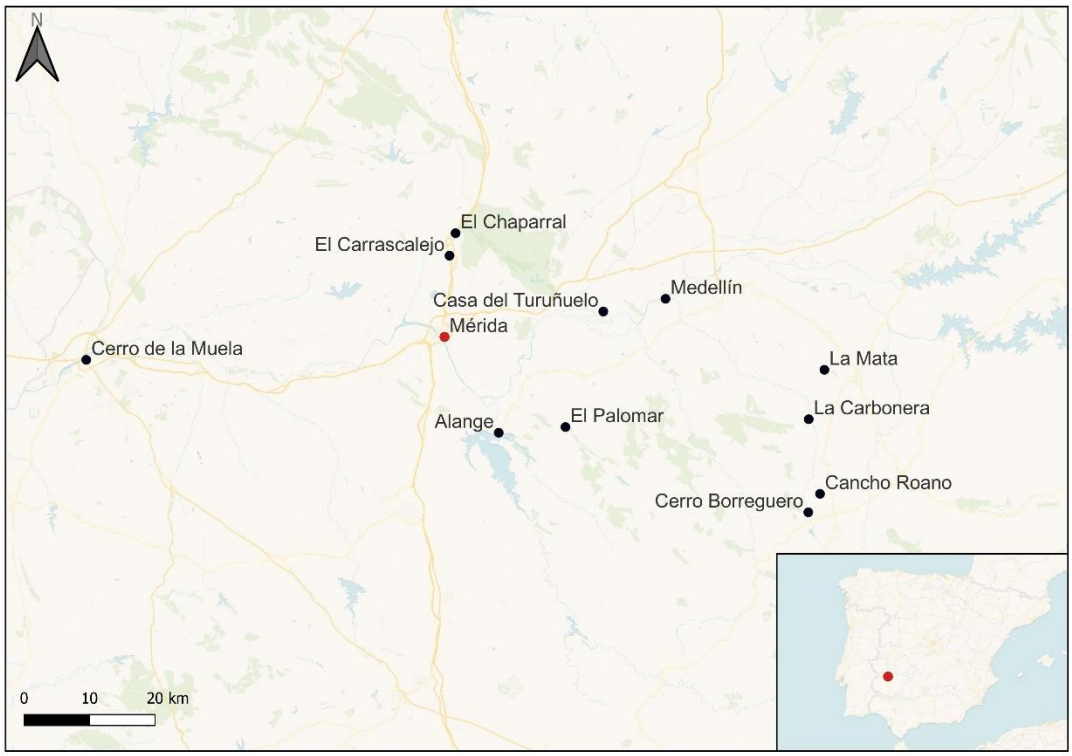


Figure 32. Map of the main Second Iron Age sites in the region. Map: Carlos Cáceres-Puerto.

The Second Iron Age in Extremadura is characterised by the collapse of the Tartessian settlements and a transition towards contact with Mediterranean civilisations culminating in the arrival of Rome in the 2nd and 1st centuries BC. The disappearance of Tartessos in the region left a void occupied by different Iberian peoples (Pavón *et alii*, 2009: 46); other scholars, however, have proposed a continuous line from the withdrawal of Tartessos until the arrival of Rome, with a culture of *oppida* spread around the area, following the Bronze Age tradition (Berrocal Rangel, 1992; Martín Bravo, 1999; Almagro-Gorbea *et alii*, 2008b). Whether it was an economic crisis (Enríquez Navascués, 2003) or a total collapse (Pavón *et alii*, 2009), the Tartessian sites in the mid Guadiana Valley did not

recover from this event in the 6th to 5th century transition. The necropolis in Medellín experienced a change in the funerary practice, with a disappearance of evidence happening around 425 BC (Almagro-Gorbea *et alii*, 2006; 2008a; 2008b); whether if it was due to a lack of cremation or a destruction of the upper layers by successive settlements in the area is unclear (Enríquez Navascués, 2003). Other sites, like El Palomar (Jiménez Ávila and Ortega Blanco, 2008: 251–282) or Cancho Roano (Almagro-Gorbea, 2011: 59–92), were completely abandoned, whereas in Medellín and on the site on the hill of the Alcazaba in Badajoz (fig. 32) the urban pattern was modified, with the eventual moving of the population to different areas within the same settlement.

The typology of settlement from the post-orientalising horizon in Extremadura can also be observed in Cancho Roano (Celestino Pérez, 2001: 17–56), La Mata (Rodríguez Díaz and Ortíz Romero, 2004: 77–98), the phase IIIB–C of the 'Cerro del Castillo' in Medellín (Almagro Gorbea, 1977a; 1977b; 2005: 29–34; Almagro-Gorbea *et alii*, 2006; 2008a; 2008b) and the phase III of the Alcazaba of Badajoz (Enríquez Navascués *et alii*, 1998: 157–199). The phenomenon of palatial residences and monumental architecture which Jiménez Ávila and Ortega Blanco (2008: 251–282) describe is gradually abandoned by the 5th century BC. The area of Mérida is populated by small scale sites (fig. 32), like Las Mesillas in Alange, although Jiménez Ávila and Barrientos Vera (2018: 209–268) described a further Iron Age population on the Castle Hill where the Bronze Age site stood. In the hills of Mirandilla, northern Mérida, there is a Second Iron Age period site which some scholars have argued is related to a possible pre-Augustan foundation of Mérida. Hence, the colony set in 25BC would have been a refoundation, like the case of Medellín with Q. Caecillius Metellus.

The paradigmatic cases of study for this period must be observed between Aljucén and Mirandilla, 10km north of Mérida. In Aljucén, in the aforementioned settlement of 'El Chaparral' (fig. 32), the recovered structures are characteristic of a peripheral section of an agriculture-oriented settlement. There are two types of urban development present: domestic and production. The production facilities have provided more information, as the five ovens for bread production show. There were not many people to feed in the settlement, as the structures found do

not correspond to a large site, but there was a vast population around the area (Sanabria Murillo, 2008: 100–101). Sanabria Murillo directs his hypothesis towards the presence of a hamlet rather than a village *per se*, due to its small size: 0.5ha. The site was abandoned at some point during the 5th century BC due to unknown reasons; however, it was not through warfare.

Besides El Chaparral, surveys from the area nearby Aljucén have identified 14 possible prehistoric settlements, some with artefacts from Chalcolithic period but most of them with a similar chronology to 'El Chaparral' (fig. 32) (Sanabria Murillo, 2008). Enríquez Navascués (2003) suggests the presence of Republican Roman materials in the vicinity of Mirandilla, and he points out the possibility of a fortified encampment, which concords with the finding of a large Roman military camp near the dolmen in Lácara (Cordobilla de Lácara) in 2017 (Cordero Ruiz, Cerrillo Cuenca and Pereira, 2017: 197–201).

The end of Cancho Roano and other tumulus-based settlements, in ca. 400 BC, or the necropolis of Medellín (Almagro-Gorbea *et alii*, 2008a, 2008b), was the beginning of the end of the orientalising culture in the mid Guadiana Valley. It marked the change of importance between settlements prior to the Roman conquest. Places like *Conisturgis*, *Dipo* or the *oppidum* in Magacela would retain power until the foundation of *Emerita* (Celestino Pérez *et alii*, 2010: 83–100).

To conclude with this section, there has been an increasing amount of research on pre-Roman religion in the region in the past decade, with a special focus on *Ataecina*, a deity identified with *Feroniae*, who is intrinsically related to *Emerita* and its *ager publicus* and with the Roman *Proserpina* (Cáceres-Puerto, 2019: 135–151). Approximately 30 artefacts have been found distributed around the Alentejo region, in Portugal, and Extremadura. The bronze figurines represent a goat (fig. 42), and they have been found in places like Mértola (Portugal), Medellín (province of Badajoz), Castro del Esprimillo (nearby Trujillo), in Aliseda and nearby Alcuéscar (province of Cáceres) (Almagro-Gorbea, 2018: 397–436). The main area of the cult to *Ataecina* is the triangle formed by *Norba* (Cáceres)-*Turgalium* (Trujillo)-*Emerita*, as 70% of the finds come from this area (Almagro-Gorbea, 2018: 401). Abascal (1995: 31–106; 2002: 53–60), García-Bellido (2001: 53–71), Méndez Grande (2005: 15–32) and other scholars, like Pérez Vilatela

(2000), extend the area of influence to the land comprising the Tajo and Guadalquivir Rivers as well.

The Roman assimilation *Proserpina-Ataecina* has been argued as implausible by certain scholars as the inscriptions with Proserpina are in the southern bank of the Guadiana River while inscriptions consecrated to *Ataecina* are only present on the northern bank (Pérez Vilatela, 2000; Prósper, 2002). Other scholars, like Abascal (1995: 31–106), argue that the bronze representations of *Ataecina* are on both banks of the Guadiana River and the Proserpina Dam, Salvatierra de los Barros and La Garrovilla. Thus, the bronze statuettes are a representation of the duality of *Proserpina-Ataecina*. García-Bellido (2001: 53–71) puts forward *Lucus Feroniae* as a case study. *Feronia* would be the Roman interpretation of *Ataecina*, as the protector of the waters, forests, and cattle.

Since the urbanism in the Second Iron Age in the mid Guadiana Valley was less significant than in other areas of *Hispania,* it is plausible to consider the Roman assimilation of rural deities which would not have a great acceptance in the urban centres. The cult of *Ataecina* was based on little shrines scattered throughout the Iberian southwest, although the presence of a main religious centre in *Turibriga* (unknown location, traditionally placed nearby Alcuéscar) cannot be discarded yet (Sabio González, 2021: 21-51). The traditional association between *Proserpina* and *Ataecina* nearby *Emerita* has its origin in the *stela* (fig. 43) found in the Proserpina Dam in 1832 (Balmori, 1935: 214-15; Álvarez Sáenz de Buruaga, 1957: 247). Some scholars even assumed the reservoir as the centre of this cult in the region, although those assumptions are mistaken. Considering I have listed epigraphic and sculptural evidence in both banks of the Guadiana River, I must conclude that the cult of *Ataecina* was widespread in the mid Guadiana Valley, especially in the rural communities.

In Alcuéscar, in the vicinity of Mérida, 15 *arae* were found in the precinct of the archaeological site of St Lucía del Trampal; three bronze figurines were located in a sanctuary in Malpartida de Cáceres, two of which had inscriptions, and a final example in Herguijuela (Cáceres). The bronze goat figurines can be dated to between 3rd century BC and the 3rd century AD, and most of them come from unknown archaeological contexts. The vast number of figurines suggests a

widespread cult in the region which will be used to the advantage of the Roman settlers as a means of cultural cohesion, which I will compare to the same use of coinage in Chapter 6.

4.3 *Emerita* and *Lusitania* in ancient sources.

Just as Herodotus spoke of Egypt as the gift of the Nile, we can also state that *Emerita* was the gift of the river *Anas* (Morgado Portero, 2006: 243). There was, and still is, a strong link between the river and the foundation of the city by Augustus' veterans in ca. 25 BC. Like Rome, or Paris, the current city of Mérida was conceived as a city-bridge. Unlike many other Roman settlements in Europe, *Emerita's* Roman bridges kept the city alive after the Roman withdrawal.

Authors[6] such as Strabo, Livy, Pytheas, Dio, Polybius, Homer, and many others mentioned the Hesperides, *Iberia*, or *Hispania* in their writings. Written references to *Lusitania*, however, had a different treatment within Greek and Roman historiography, as the province was an Augustan creation. Therefore, the references from Roman Republican authors refer to either the Lusitanian Wars or the Second Punic War (Polybius, III) or to the tribe itself (Martín Bravo, 1999). Nonetheless, the level of importance of a settlement is often visible in the archaeological record rather than looking at the bigger picture. *Augusta Emerita* has been depicted multiple times within the writings of classical authors, from trivial affirmations like Pliny's olives to the description of the large capital by Ausonius (Ausonius, *The order of the famous cities*, 11).

However, it is mandatory to draw attention to the political and military context in which those authors based their writings. The consequences of the aftermath of the Cantabrian Wars (Torres-Martínez *et alii*, 2017: 149-164; Fernández-Götz, Torres-Martínez and Martínez-Velasco, 2018: 127-140), whether they were beneficial for Augustus or not, drew the military attention out of the frontiers of Iberia and with them the public interest altogether. *Hispania* was not the unknown territory which inspired Polybius to narrate the defeat of

[6] The classical texts referenced in this chapter are available in Annex II.

Carthage (Pol. III), and in the literary scope it was reduced to the minimal expression; sometimes it is only referred to in geography treatises.

4.3.1 *Lusitania* in ancient sources

The Roman State always attempted to promote urban development politics as a pragmatic means to favour “Romanisation” among the conquered territories (Hopkins, 1996: 18). Therefore, the rural areas, like the hinterlands of *Hispania* or *Britannia,* needed more effort from the central state to have an equal relationship with the rest of the provincial centres of economic and political control. This was done through ‘*romanitas*’, an ideological principle of unity which provided cohesion and strength above regionalisms and lesser peoples (Guzmán Armario, 2005: 255). Following the previous principle, several classical authors proceeded to neglect the different tribes’ names in their writings (fig. 33). The Roman historiographies, which provided a large amount of information about pre-Roman communities in different parts of Europe, failed to develop a complete human geography of the Iberian Peninsula with a special emphasis in *Lusitania*, according to the works that have been preserved.

In Polybius’ texts, geography served to raise awareness of military campaigns, as he could attract the interest of the reader by writing about military campaigns. Therefore, the content would be predominately topographic, ignoring the different tribes in the region or the geographical features he considered irrelevant. He mentioned *Lusitania* as a vague, unsubstantial concept, as he described the *Celtiberia* as a compendium of territory from northern *Baetica* towards the northern part of the *Tarraconensis* (Polybius, XXXIV, 4.4; Athenaeus, VIII, 330d; Cruz-Andreotti, 2005: 193–212). Strabo (III, 3.3) mentions Polybius when writing about *Gallaecia* and distinct peoples from northwestern Iberia, saying, ‘some authors had called this tribes Lusitanians’. One element is key to understand Polybius’ perspective: while both Pliny and Strabo write once *Lusitania* already existed as a Roman province, Polybius mentions the beneficial components to consider from an administrative perspective ahead to a plausible future conquest of the region.



Figure 33. Main pre-Roman ethnic groups, 200 BC. Map: Carlos Cáceres-Puerto.

On the other hand, Strabo neglected the pre-existence of indigenous communities, reducing them to one main group. He justified himself by not naming the lesser tribes because of their 'lack of repute':

> […] *Lusitania, is the greatest of the Iberian nations* […].
>
> (Strabo, *Geography*, III. 3.3)

The void in Strabo's work about the *Vettones* (Álvarez-Sanchís, 2003), for instance when he formally described the provincial boundaries, and his ambiguous use of the term *Lusitani*, prevent any certain inference (McElderry, 1919: 92). Strabo, nonetheless, did portray other aspects concerning the Lusitanians, in a writing style which resembles profoundly to Caesar's *De Bello Gallico*. In such a way that he described the Lusitanians' lack of trade, sedentary life, coinage, and their inclination to warfare (Strabo, Geography, III.3.7), a great skill at breeding horses and other aspects of their physical appearance (Strabo, Geography, III.3.6). Strabo, like other ancient sources, constructs his discourse by differentiating between 'us and them', Roman/Greeks and barbarians. His *Geography* is a continuous opposition between civilised and uncivilised (Van del

Vliet, 2003: 261). The depiction of *Lusitania* is a combination of the accounts written by Polybius. Polybius mentioned *Lusitania* as a military asset, Pliny as a Roman province. Strabo addressed the Lusitanian Wars and described their main characteristics perfunctorily, but he does not cover the continuity of the Lusitanian people after the conquest and political reform during the Principate, which some scholars hypothesise is a purposeful omission as a manner of portraying a new beginning under Augustus rule.

Regardless of how Strabo depicted *Hispania*, Pliny described a territory which was in full control of the Roman state, and his *Naturalis Historia* offers a depiction of the province, *conventus* and the administrative division between *civitates, populi* and *oppida* (table 1, fig. 34)*,* which constitutes the basic structure of the Roman imperial power (Ciprés, 2014: 15). The first geographical interests in *Iberia*, whether Greek or Roman, was the pursuit of knowledge related to maritime expeditions or military campaigns (Castillo Ramírez, 2008: 31). The main complication with Pliny's *Naturalis Historia* is the level of cohesion he granted to Iberian peoples. He defined it as a conquered, pacified, and integrated province of Rome altogether, and it was, to a certain level, although there was a long path to undertake towards a full political and social integration within the Roman scheme, if there ever was any. Therefore, Pliny eliminated a vast quantity of *oppida* he regarded as unimportant, referring to the Roman established settlements in his work. In addition to the lack of tribal communities mentioned in his work, Pliny admitted he only wrote about the communities in Hispania whose names were easily pronounced in Latin (Ciprés, 2014: 18):

> *Worthy of mention in this district, or easily expressed in Latin, are: on the ocean coast beginning at the river Guadiana* […]
>
> (Pliny, *Naturalis Historia*, III, 7).

In the manner of Strabo, Pliny also refers to unimportant matters such as the wool in *Lusitania* (Pliny, *NH,* VIII, 73. 191), the red dye from the vicinities of *Augusta Emerita* used for the cloaks of the general of the army (Pliny, *NH,* IX, 65, 141; *NH,* XXII, 3. 3) and different crop and cattle techniques from this territory (Pliny, *NH*, XV, 4, 17; *NH,* XV, 30. 103; *NH,* XXI, 43. 73).

4.3.2 Lusitanian geography in ancient source

According to Strabo, *Lusitania* is surrounded by the Atlantic Ocean in the north and the west; to the south lay the *Tagus* River and to the east, mountains, with the *Carpetanians, Vettonians, Vaccaeans* and *Gallaecians* (Strabo, Geography, III. 3. 3). This refers to the pre-Roman 'boundaries' of *Lysitané* (Pérez Vilatela, 2000: 19), as before the Augustan reform, *Lusitania* was a wide, vague, unknown, and non-depicted region located somewhere in western Iberia (Montón Broto, 1983).

Even if the corpus of Pliny the Elder's *Naturalis Historia* is heterogeneous; the main subject can be easily regarded as a geographical compendium, as it entails one of the most complete descriptions of Roman Iberia. Other authors, like Mela (*De Chorographia*, II), for instance, limited himself to writing an account of the southern Iberian coast; Mela's work has been consulted by other authors, like Pliny the Elder, as one of his main sources for his *Naturalis Historia*.

Similar to Mela, Pliny described *Lusitania* without concentrating on the native population. He described *Lusitania* as one of the two parts of *Provincia Hispania Ulterior*, alongside *Baetica* (Pliny, *NH*, III; Castillo Ramírez, 2008: 50); this encompassed *Gallaecia* and the mines in Cástulo (modern day Jaén) as part of *Lusitania* (Pliny, *NH*, III, 17). This was a misconception common in the Augustan period when the borders among the three Iberian provinces were not drawn entirely (fig. 1). He established the *Flumen Anas* as the frontier for both, as it will be seen in Chapter 5.2, but different scholars (Canto 1989: 149–53; Ariño Gil and Gurt Esparraguera, 1992–1993: 45–66; Ariño Gil, Gurt Esparraguera and Palet Martínez, 2004; Ariño Gil, 2005: 95–112; Cordero Ruiz, 2013) have argued this as a mistaken borderline for *Lusitania*, as has been proven by multiple researchers (Ariño Gil, Gurt i Esparraguera and Palet Martínez, 2004; Cordero Ruiz, 2013).

For the distance among rivers, Pliny used Varro's writings as a reference (Pliny, *NH*, IV, 22. 115), which might serve as an explanation of his misconception in physical geography of the Iberian Peninsula. The settlements mentioned are an amalgamation of what he considered remarkable; for example, *Olisipo Felicitas Iulia* (Lisbon, Portugal) and a fleet of cargo ships which lasted less than

three years due to the strong winds (Castillo Ramírez, 2008: 51), and *Myrtilis* (Mértola, Portugal) or the River *Tagus* because its waters contain a high percentage in gold (Strabo, *Geographia*. III, 3. 4.; Mela, *De Chorographia*, II, 87).

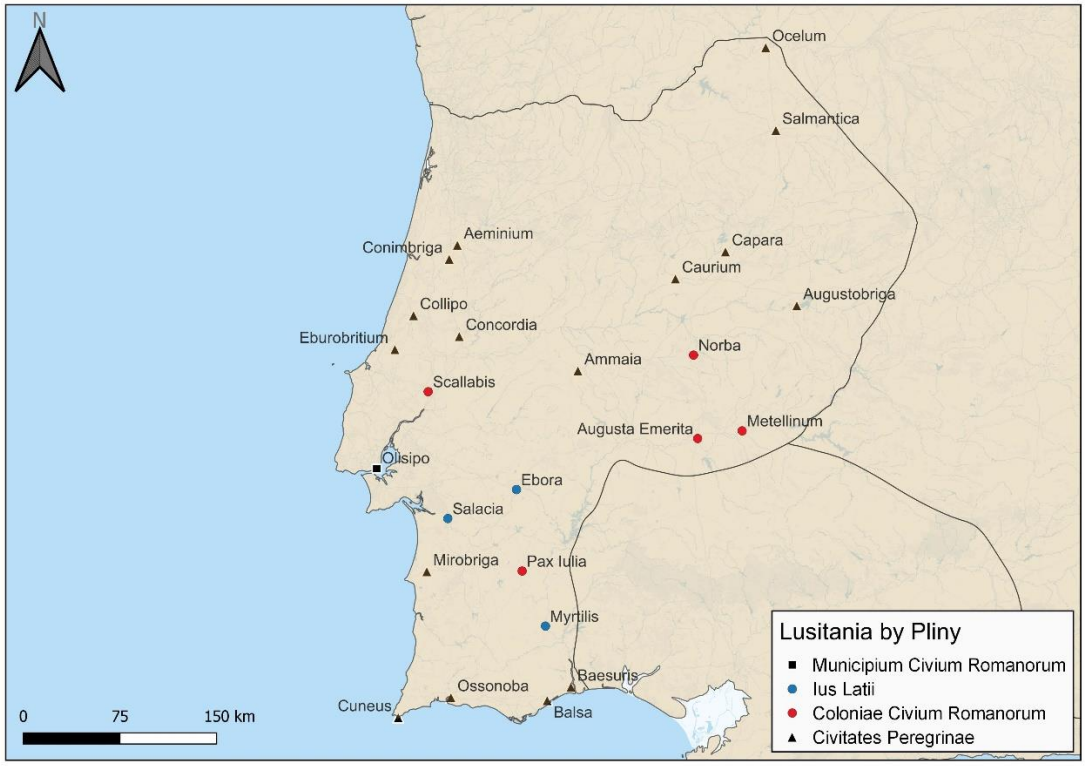


Figure 34. Map of the *Lusitanian* province and the sites mentioned in Pliny, *NH*, III. Map: Carlos Cáceres-Puerto.

Perhaps the use of Mela's *De Chorographia* and Varro as a main source influenced his misplacement of the main sources of water in the region. Mela, for instance, placed the border between *Lusitania* and *Baetica* on the Guadiana River, which is partially true as it is the frontier line in the southern coast. The course of the Guadiana and the establishment of a frontier has been a constant debate in local historiography, as is discussed further in Chapter 5. Prudentius' accounts of the martyrdom of Eulalia from *Emerita* in the late 4th century AD have been broadly studied. However, it provides certain statements which allow us to determine, to a certain extent, the southern border with the *Baetica* province, at least for the late 4th century AD. Even though Prudentius must have been aware of the provincial limits as he was governor twice, the limits had probably changed since the 1st century AD (Arce, 1992: 12). Prudentius described the runaway of Eulalia, crossing the river *Anas* towards a villa, as remaining in Lusitanian territory

(Prudentius, *Peristephanon*, Hymn III; Petruccione, 1990; Mateos Cruz, 2000: 491–517).

Pliny is not free from inconsistencies, as he better described the pre-Roman communities in the *Tarraconensis* province than those in *Lusitania*. If he had drawn his account of the Lusitanian province upon similar lines to that of *Tarraconensis*, we would have a better understanding of the situation of the indigenous communities in the newly created province (McElderry, 1919: 93). He seems to refer to *Lusitania* only as a coastal province, which is something that tends to be a recurring topic for most ancient authors who neglect the hinterland communities. Both Pliny and Strabo also fail on this matter, whereas Polybius refers to the interior only when warfare occurred in the area.

Pliny's work is a human geography as he focussed on mentioning the 45 *municipia* (fig. 34, and table 1), although he did not provide all the names. Polybius mentioned in *The Histories* (II, 14. 1.) how he decided to name some native communities in his work, as he did in the depiction of Italy. He argued that his lack of attention to the local inhabitants was his belief that simply accounting the names of unknown places and peoples, by themselves, adds nothing to the geographical knowledge, and this absence does not prevent him from achieving the purpose of the description of the *orbis terrarium* (Ciprés, 2016).

Municipium	***Conventus***	**Legal Status[7]**	**Current nomenclature**
Emerita Augusta	*Emeritensis*	*Coloniae Civium Romanorum*	Mérida (Spain)
1 *Colonia Metellinensis*	*Emeritensis*	*Coloniae Civium Romanorum*	Medellín (Spain)
2 *Norbensis Caesarina*	*Emeritensis*	*Coloniae Civium Romanorum*	Cáceres (Spain)[8]
3 *Colonia Pacensis/Pax Iulia*	*Pacensis*	*Coloniae Civium Romanorum*	Beja (Portugal)

[7] All the *municipia* refer to the pre-Flavian reforms.

[8] *Castra Servilia and Castra Caecilia* act as *oppida contributa* (Castillo Ramírez, 2008).

Municipium	***Conventus***	**Legal Status**[7]	**Current nomenclature**
4 *Scallabis Praesidium Iulium*	*Scallabitanus*	*Coloniae Civium Romanorum*	Santarem (Portugal)
5 *Olisipo Felicitas Iulia*	*Scallabitanus*	*Municipium Civium Romanorum*	Lisbon (Portugal)
6 *Ebora Liberalitas Iulia*	*Pacensis*	*Ius Latii*	Évora (Portugal)
7 *Myrtilis*	*Pacensis*	*Ius Latii*	Mértola (Portugal)
8 *Salacia*	*Pacensis*	*Ius Latii*	Alcácer do Sal
9 *Aeminium*	*Scallabitanus*	*Civitates Peregrinae*	Coimbra (Portugal)
10 *Collipo*	*Scallabitanus*	*Civitates Peregrinae*	Leiria (Portugal)
11 *Eburobritium*	*Scallabitanus*	*Civitates Peregrinae*	Ebora de Alcobaza (Portugal)
12 *Conimbriga*	*Scallabitanus*	*Civitates Peregrinae*	Condeixa-a-Nova (Portugal)
13 *Cuneus*	*Pacensis*	*Civitates Peregrinae*	Punta de Sagres (Portugal)
14 *Ossonoba*	*Pacensis*	*Civitates Peregrinae*	Estombar (Portugal)
15 *Balsa*	*Pacensis*	*Civitates Peregrinae*	Tavira (Portugal)
16 *Baesuris*	*Pacensis*	*Civitates Peregrinae*	Castro Marim (Portugal)
17 *Augustobriga*	*Emeritensis*	*Civitates Peregrinae*	Talavera la Vieja (Spain)
18 *Ammaia*	*Pacensis*	*Civitates Peregrinae*	Sao Salvador de Aramenha (Portugal)
19 *Capara*	*Emeritensis*	*Civitates Peregrinae*	Cáparra (Spain)
20 *Caurium*	*Emeritensis*	*Civitates Peregrinae*	Coria (Spain)
21 *Concordia*	*Scallabitanus*	*Civitates Peregrinae*	Tomar (Portugal)
22 *Mirobriga Celticorum*	*Pacensis*	*Civitates Peregrinae*	Santiago de Cacém (Portugal)
23 *Salmantica*	*Emeritensis*	*Civitates Peregrinae*	Salamanca (Spain)

Municipium	***Conventus***	**Legal Status**[7]	**Current nomenclature**
24 *Ocelum*	*Emeritensis*	*Civitates Peregrinae*	Zamora/Fermoselle (Spain)

Table 1. List of sites mentioned in Pliny, *NH*, III. Carlos Cáceres-Puerto.

According to G. Traina (2007) and V. Naas (2002) there is a clear distinction among the settlements with a Roman legal status, described thoroughly with great number of supporting details, and the brief enumeration of some local native communities:

> *The peoples are the Celtici, the Turduli, and on the Tagus the Vettones; and between the Guadiana and Cape St. Vincent the Lusitanians. The notable towns on the coast, beginning at the Tagus, are: Lisbon, famous for its mares which conceive from the west wind; Alcazar do Sal, called the Imperial City; Santiago de Cacem; Cape St. Vincent, and the other promontory called the Wedge; and the towns of Estombar, Tavira and Mertola.*
>
> (Pliny, *Naturalis Historia*, IV, 22. 116.).

Pliny made an account of the main settlements in *Lusitania*, basing his choice on the legal status the different *civitas* had and the three *conventus* the province was divided into:

> *The province is divided into three conventus, Emerita, Pax Iulia and Scallabis. It consists of 45 peoples, among whom there are five colonies, one municipality of Roman citizens, three with the old Latin rights and 36 that pay tribute. The colonies are Merida on the river Guadiana* […].
>
> (Pliny, *Naturalis Historia*, IV, 22. 117)

The previous table is a graphical representation of the settlements provided by Pliny. Even though there are a few misconceptions in his account, like including *Lancia* as a Lusitanian settlement when it is northern the Douro River, therefore being a *municipium peregrinae* from the *Tarraconensis* province, and the hypothetical location of *Ocelum*. I have located it in modern day Zamora, but other

scholars, like De Francisco Martín (1996: 251), suggest that it is not clear which location Pliny refers to when he mentions *Ocelenses* (Pliny, *Naturalis Historia*, IV, 22. 118). Ptolemy mentions two *Ocelum*, one among the *Vettonians* (Ptolemy, II, 5, 7) and a second one between the *Vaccei* (Ptolemy, II, 6, 49).

4.3.3 *Emerita* as the Lusitanian centre

> *Upon the conclusion of this war Augustus discharged the more aged of his soldiers and allowed them to found a city in Lusitania, called Augusta Emerita.*
>
> (Dio, *Roman History*, LIII, 26, 1)

The only reference in a classical text concerning the foundation of *Colonia Augusta Emerita* corresponds to Cassio Dio (*Roman History*, LIII, 26, 1), although Strabo (*Geographia*, III, 4, 20) argues that at the time of its foundation, *Emerita* was in *Baetican* territory (Pérez Vilatela, 1990: 107), as the provincial limits had not yet been established. Strabo's statement would support Le Roux (2006) and his theory of an earlier foundation and a later occupation of the assigned territory, after the Lusitanian province was created. Strabo also provides a confusing pre-Roman identity for the area where *Augusta Emerita* was founded, as he first stated that *Emerita* was settled among the *Turdetani* (Strabo, *Geographia*, III, 2, 15), and on a different occasion he referred to *Emerita* as a colony among Lusitanians (Blázquez Martínez, 2006: 244–45). Regardless of the geographic dichotomy, the Greek author did describe *Augusta Emerita* as '*synoekismenai*' which could be translated to a settlement founded with both Roman citizens and indigenous people (Edmondson, 2011: 32). Therefore, the indigenous element mentioned in Chapters 2, 3, and 7.2 would be supported by classical sources.

Finally, Ausonius, in his *Ordo Urbium Nobilium*, provided an account of the most influential settlements within the Roman Empire in the 4th century AD. There is a historiographical debate whether *Emerita* is included or not. Guzmán Armario (2005: 257) argues that the most important cities mentioned in Ausonius' work are either located on main courses of water or the coast, favouring commerce or in an advantageous defensive location, such as Milano or Treveris. The 11th *civitas* mentioned by Ausonius says as follows:

> *After these thou shalt be told, beloved Emerita, name Iberian, by whom glides a River like the sea, to whom all Spain subjects her magistrates.*
>
> (Ausonius, *The order of the famous cities*, 11. Translated by Evelyn-White, 1919)

Although it is worth noting that there are some versions of the text where *Hispalis* replaces *Emerita,* some authors, like Arce, attributed it to the poor knowledge of the Iberian Peninsula by those who translated the text after Prudentius. According to Arce's (2002) re-evaluation of Ausonius' writings, the lack of references to *Augusta Emerita* and the misunderstanding *Hispalensis* might have been caused by the lack of knowledge of the Iberian geography, as, in fact, Paulinus (*App*. B. 3) reproached Ausonius. There is no other logical explanation for why in the 4th century AD document *Corduba* (Córdoba) and *Hispalis* (Sevilla) were mentioned and *Carthago Nova* (Cartagena) and *Emerita* were not. Furthermore, the *Laterculo Polemii Silvii*, an administrative document concerning the Iberian Peninsula during the 4th century AD, indicates as follows:

> *The names of the Provinces in Hispania* […] *Lusitania, where Emerita is.*
>
> (Seeck, 1876).

The evidence of an original document from the 4th century AD stating that *Emerita* was the capital of the *Diocesis Hispaniarum* has been seen as an irrefutable proof of the prevalence of the Augustan colony over the other settlements in the Iberian Peninsula.

5 Boundary assessment and territorial management of a provincial capital

In order to be able to research the urbanism of a Roman settlement, it is important to comprehend the limits of the territory administered by a colony, *Emerita* in this case. Both *urbs* and *ager* were intrinsically linked within the urban mind. Considering that *Emerita* was granted a territory big enough to be used as a paradigmatic case of study in texts by Roman land surveyors, it is important to understand the magnitude of said *ager publicus* prior to focusing on the urbanism of the colony itself.

5.1 Ager publicus. General configuration of Roman land planning

The relationship between *urbs* and *ager* within the Roman world is that of symbiosis, therefore it is not completely possible to comprehend the *pars urbana* without looking at the rural component. As Bendala Galán and Abad Casal (2008: 20) wrote, the *civitas* is the core of a universe formed by the *ager*. If considering the Roman conception of *civitas* as a combination of city and countryside, we can prove that this traditionally established dichotomy, set up to explain the alleged animadversion between *urbs* and *ager*, was non-existent (Cordero Ruiz, 2013: 77). *Urbs* and *ager* were thus part of a common universe, a duality conforming to a sacred space. The arteries of the Roman settlement were the main roads of the *territorium* (Rykwert, 2002). As Ariño Gil and Gurt i Esparraguera (1992–1993) have discussed, the location of the settlement in the centre of the *ager*, as if is referenced in Copernicus' Heliocentrism, was only possible when both *urbs* and *ager* were established at a similar date. This was not a common scenario as settlements founded during republican times, like *Metellinum* (Medellín, Badajoz), would have had their *territorium* increased at a much later date, during the Flavian dynasty, when the *ager publicus* of the colony was increased (Canto, 1989: 153–56). Therefore, this case does not follow this 'rule' when the settlement does abide by the colonial status.

Laying beneath the cosmological view of the municipal grid planning was a more practical scenario: the delimitation of the territory was to be managed and exploited by the colony located at the centre, as well as the delimitation of the area of influence-authority of the magistrates of said settlement (Cordero Ruiz, 2013). This is not a unique theory among archaeologists. As Morris (2016: 127) pointed out, centuriation was not only the division of the countryside assigned to a settlement into smaller plots to share with the new settlers. It is necessary to look into the land distribution as a bigger picture. Although there are not many traces of redistribution, or reorganisation, of the landscape by the new Roman authorities, it involved the creation of infrastructures to guarantee the prevalence of the new Roman order. This implied the creation of road grids, man-made structures to signal borders where there were none beforehand. It was another component of the use of the landscape around a colony. Tarpin (2002) and Gárgola (2004), among others, argued that centuriation was an administrative tool rather than a form of extensive control of the territory, although the second one is implicit in the first assumption. They discuss the former idea of distribution of land, claiming it was rather an instrument for facilitating the settling of veterans, payment of taxes and recruiting of new soldiers (Morris, 2016: 127–28). This could apply to some cases throughout the Roman Empire, but it could not be extended to all cases.

According to Dilke (1971: 88), Romans favoured a system of squares in which to draw surveys. In an urban context those squares were named *insulae*, while in rural areas the squares were known as *centuriae*. They most commonly consisted of 2,400ft by 2,400ft squares. Each *centuriae* was formed by 100 allotments approximately, and each allotment was 200 *iugera* – 50.5ha – (fig. 35). The main difference with the case of *Emerita* is that the Lusitanian colony was granted allotments of double the size of a regular *centuriatio*. This phenomenon has been discussed among scholars, and their theories have varied from a compensation from Augustus to the veterans to an alternative approach of extending the settlers throughout the whole *territorium emeritensis* (Ariño Gil and Gurt i Esparraguera, 1992–1993). However, this practice would die out within a few decades after the widespread process of Augustan foundations in *Hispania*, probably due to the lack of territory prior to the campaigns in *Germania*.

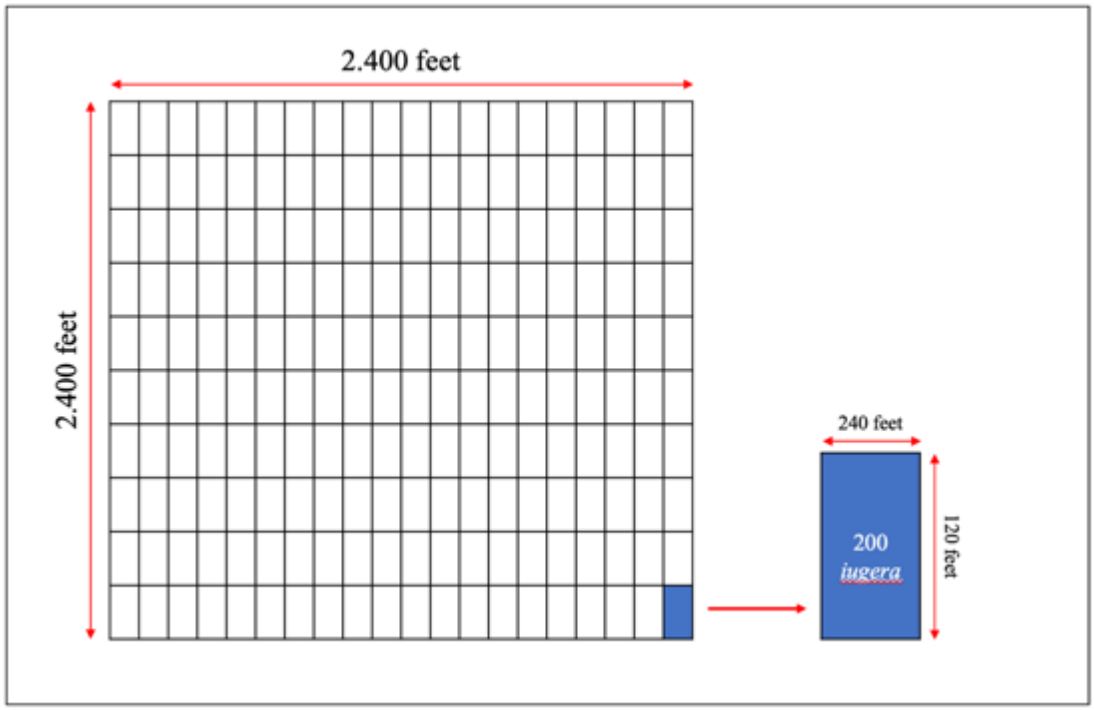


Figure 35. *Centuriae* system. Image: Carlos Cáceres-Puerto, based on Dilke, 1971: 88–90.

The difference between urban and rural *limitatio* would be a paved road instead of a line to separate ploughed fields. Land distribution in the Roman Empire began to be studied and analysed after Dane C. T. Falbe became aware of a rectangular pattern on the fields surrounding Carthage in Tunisia in 1833 (Dilke, 1971). Since then, the main problem archaeologists have found throughout the process of researching the land distribution policy followed by Rome, not only in *Hispania*, but in the Empire as a whole, is the lack of homogeneity. They do not follow the same pattern, as each model pursues the best exploitation of the land surrounding a settlement. The paradigmatic case of Roman land distribution is the example of the North African city of *Ammaedara* (fig. 36) where the beginning of the *pertica* is the node formed by the city's *decumanus maximus* and *kardo maximo*, consequently dividing the *ager publicus* of the settlement into four areas with a similar size (Dilke, 1971; Ariño Gil and Gurt I Esparraguera, 1994a: 34). But as multiple studies demonstrate, this was the exception, not the rule. As a matter of fact, *Emerita*, the most documented case by Roman land surveyors, with the city itself placed in the in the northern bank of the Guadiana River, has over 75% of its territory in the northern valley of the river. It is in the allotments situated in the southern bank, however, where most studies have taken place, as it is the only portion of the *pertica* with a

consistent archaeological record. It does not concur in other *Hispanic* settlements, with *Caesaraugusta* (Zaragoza), another Augustan colonial foundation, being the most similar case. Hence, the aforementioned case of *Ammaedara* does not occur in *Hispania*.

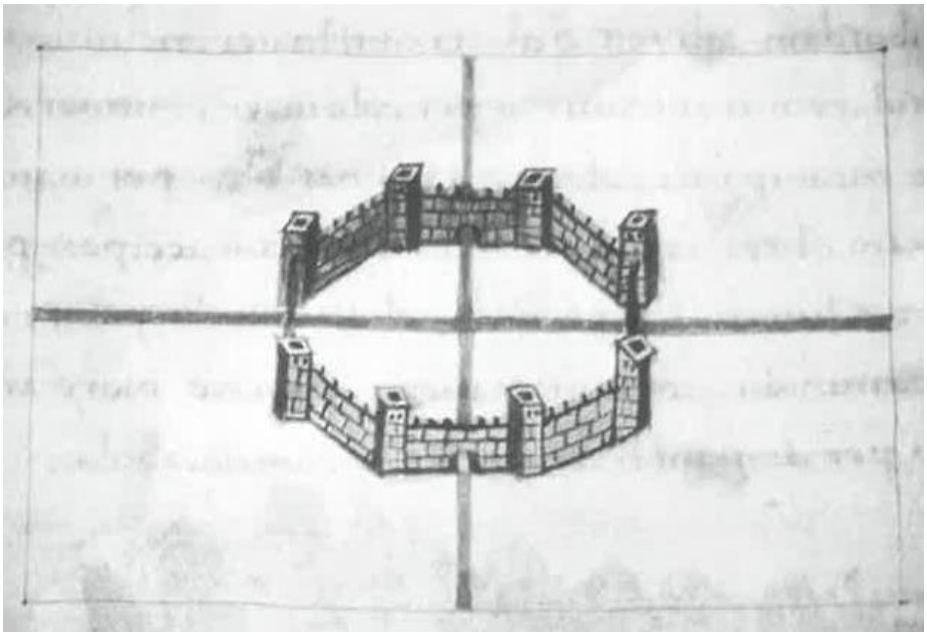


Figure 36. Beginning of the *pertica* of *Ammaedara* (Thulin, 1913: 22, fig. 93).

The only common factor shared by the successive distribution processes is the dispossession of the previous landowners after the Roman state decided to develop a reorganisation of the field grid. Such as *Capua* (Italy), where the settlement had the land confiscated and turned into *ager publicus* under the state's management as revenge for supporting Hannibal against Rome; or like *Mantua* (Italy), after the defeat in the battle in 42 BC, the Roman troops took over the *ager publicus* of the city and distributed it among new settlers. This example is notorious because Virgil's father lost his allotment during the new *deductio.* One of the most famous cases is Carthage: after its defeat in 146 BC, Rome took Carthage's land possessions as the *ager publicus*, dispossessing the former owners from the proprietorship of the *territorium* (Dilke, 1971).

The grid of the territory of a settlement does not obey the pre-existent ethos but tends to adapt to the terrain to obtain the most efficient model for the city and its inhabitants, regardless of the previous settlers. Therefore, regardless of the implementation of the centuriation in order to control the territory, settlers, the surveyors or both looked for the most beneficial system. As a matter of fact,

in Terracina (Italy), founded in 396 BC, each of its 300 settlers were granted two *iugera* — 0.5ha — complemented with public pasture lands. Hyginus Gromaticus refers to this aspect:

> *In some colonies they set up the decumanus maximus in such a way that it contained the trunk road crossing the colony, as at Anxur in Campania; the cultivable land has been centuriated; the remainder consists of rugged rocks, bounded as unsurvey land by natural landmarks*
>
> (*Corpus Agrimensorum Romanorum* -Thulin, 1913: 144-, Dilke, 1971: 93).

Gromaticus also mentions how the inhabitants chose the locations, hinting that maybe the work of the surveyors was to divide the land where the settlers had already settled and not the opposite case:

> *'Men of old, because of sudden dangers of war, were not content to wall cities, but also chose rugged, hilly land to provide a natural defense. Such rocky areas could not be centuriated, but were left either as state forests or, if barren, unoccupied'.*
>
> (*Corpus Agrimensorum Romanorum* -Thulin, 1913: 143-, Dilke, 1971).

5.2 Ager Publicus Emeritensis in classical sources

Although it is not common to have references about a settlement's *ager publicus*, *Colonia Augusta Emerita* is an unusual case within the study of Roman surveying system due to various references from different classical authors[9]. Authors such as Iulius Sextus Frontinus, Hyginus Gromaticus, Aggenus Urbicus and Siculus Flaccus (Thulin, 1913) depict, with great amount of detail, the system the *gromatici*, or surveyors, developed at this specific settlement. They described the dimensions of the *ager*, the length of the *pertica*, the size and extent of *centuriae* and even an indigenous-Roman sanctuary located on one of the edges of the *territorium* of *Augusta Emerita*. However, the exceptionally good number of sources are not matched by the archaeological record. Little carved evidence has

[9] Whether or not the Roman scholars did have their own texts, I will be following C. Thulin's 1913 edition of *Corpus Agrimensorum Romanorum*.

been found relating to the limits of the territory of *Emerita*, and, when found, it all belongs to the southern stream bed of the Guadiana River. Thus, it has not been easy to establish the limits of the territory of *Emerita*, especially in the northern Guadiana valley, due to the lack of strong archaeological features signalling evidence of land distribution. However, new approaches like the use of LIDAR are enabling new finds of the rural structure of *Colonia Augusta Emerita*.

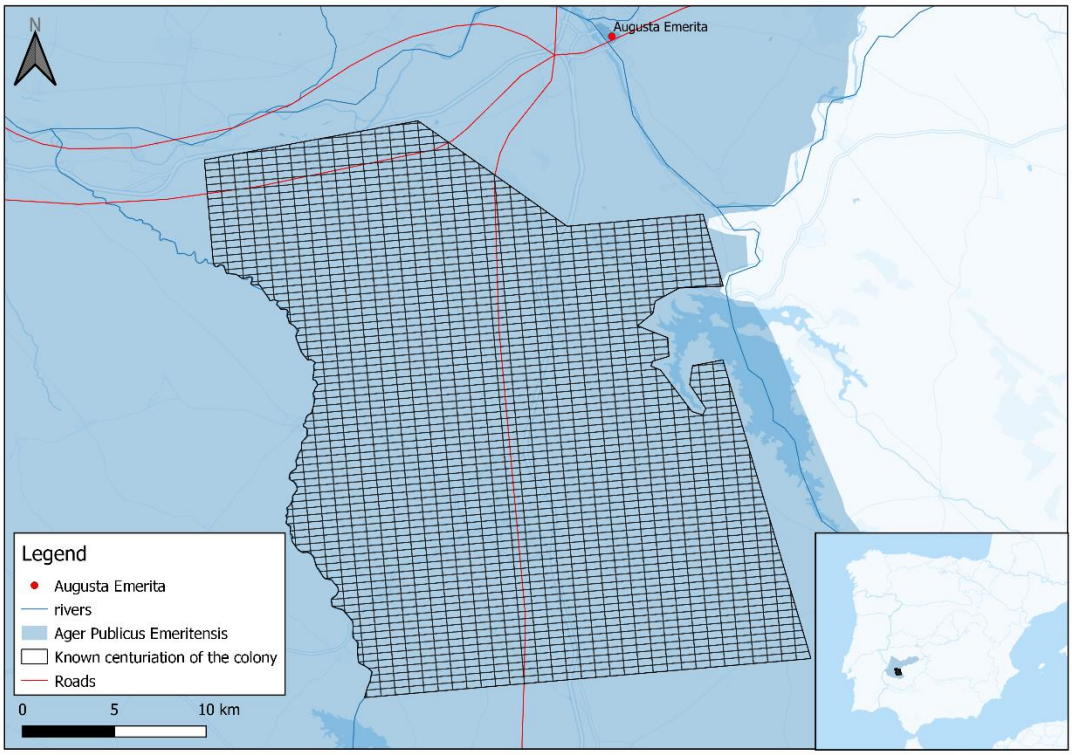


Figure 37. Grid of the centuriation of *Emerita*, according to Ariño Gil *et alii*, 1994; 2004, and Cordero Ruiz, 2013. Map: Carlos Cáceres-Puerto.

The extension of the area held and controlled by *Emerita* is given by Frontinus (Th., 9). He described the territory being of 'great extension and length'. Because of him we know that the entire area of public land was not distributed to the settlers[10]. The *ager publicus emeritensis*, as will be seen further on, was large enough to have three different processes of land distribution. Even after the third *deductio,* during the reign of Otho, there were still allotments to be assigned to new settlers (Cordero Ruiz, 2013: 78). The size of each plot was favoured by the abundance of territory in the mid Guadiana Valley, rather than a specific

[10] *Multis enim locis adsignationi agrorum inmanitas superfuit, sicut in Lusitania finibus Augustinorum*. (Th., 9).

Augustan policy of over rewarding the veterans from the Cantabrian Wars. This hypothesis is supported by López Melero (1984: 84–86) and Saquete Chamizo (1997: 49–50), among other scholars. Besides Frontinus, Tacitus also mentions the extent of the land granted to the colony and its settlers as well as the Roman citizenship (Tacitus, *Hist.*, I, 78).

Regarding to the size of the allotments of *Emerita's territorium*, and the orientation and limits of the *ager publicus* (fig. 37), it is described by Hyginus Gromaticus (Th., 135–36). Gromaticus' explanations have been proven right by different scholars, especially E. Ariño Gil and J. M. Gurt (1993; 1994) and Ariño *et alii* (1994). Various archaeological features prove H. Gromaticus right, such as different parts of the *Via X* connecting *Emerita* and *Italica*, where the path of the roads coincide at some points with the layout of the *decumanus maximus* of the colony (fig. 38) (Gorges, 1986; Cerrillo, 1988; Ariño Gil and Gurt, 1993; 1994b: 45–66). One aspect that is discussed further on in this chapter is the reason why the entire layout of the grid does not align perfectly with the urban grid, especially considering that the countryside belonging to the city, *ager*, an extension of the *urbs*. Gromaticus also described the size of each allotment: 'Augustus granted 400 *iugera*[11] to *Emerita* Following this division, the *decumanus* are 40 *actus* long, and the *kardines* are 20 *actus* width[12]' (Th., 135–36, Gorges and Germán Rodríguez, 2004: 95).

Gromaticus also mentions the existence of *'limitem novum et veteres'*, old and new frontiers, either meaning the existence of previous landowners, or later adjustments to the *ager publicus* of the colony. This has been a matter of discussion among scholar, setting a date for the different processes of distribution of land. This is consistent with the theories of Cordero Ruiz (2013), among other scholars, and with the writings of Frontinus, who states that the vast territory belonging to the colony was not distributed all at once. Gromaticus discusses a common feature within *centuriation*, otherwise unlikely to be corroborated by archaeological record: *praefecturae*. According to him, parts of the territory of

[11] 100ha approximately

[12] *'Divus Augustus in Veturia Emeritae iugerum CCCC, quibus divisionibus decimani habent longitudinis actus XL, kardines actus XX* […]'.

Emerita used to belong to other settlements, and therefore its orientation does not concur with the grid of the capital. We have two names for the *praefecturae*, '*Turgaliensis'* and '*Mullicensis*' (Th., 136), both with equal allotments of those areas belonging to *Emerita* originally.

The location of the first *deductio* among the veterans is described by Aggenus Urbicus (Th., 44). According to him, the first wave of veterans would have been settled on the edges of *Emerita*'s *ager publicus* to set the borders of the colony's territory. Only a few allotments were given near the colony and the River *Anas* (Cordero Ruiz, 2013: 82). A. Urbicus also disproved Pliny and Mela with this comment: 'the River Anas flows through the middle of the *pertica* of the colony' (fig. 37). Both Pliny and Mela had established the limits of the Lusitanian province at the River *Anas* (Pliny, *NH*. IV, 22, 115; Mela, *De. Chor.* II. 87).

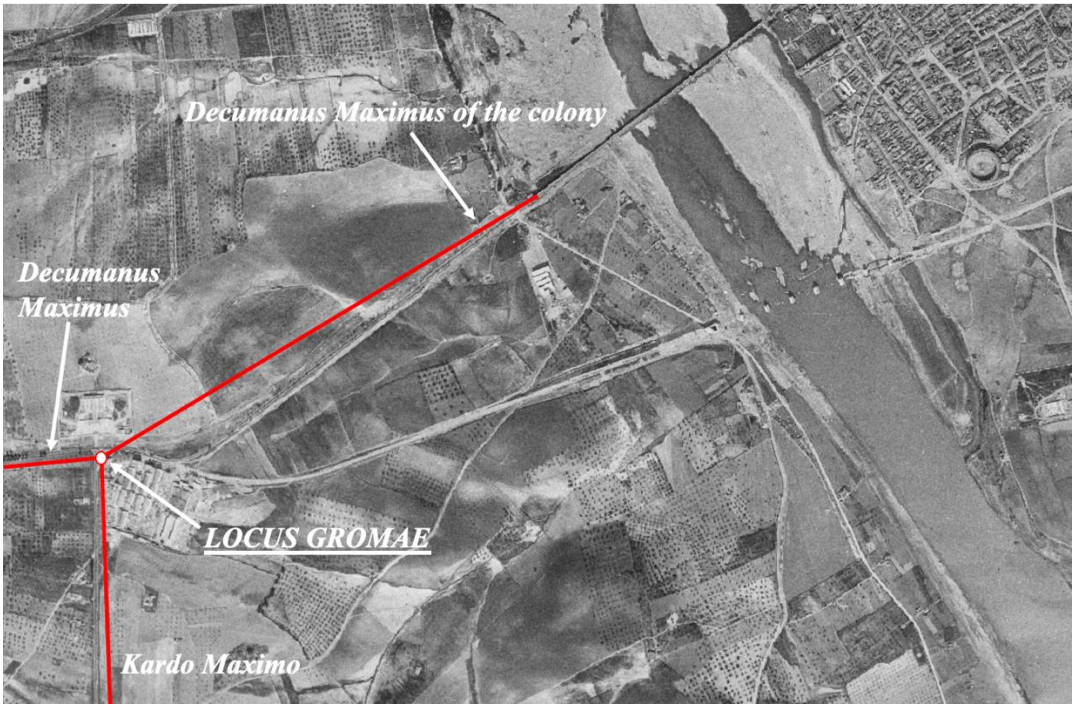


Figure 38. Location of the *Locus Gromae*, beginning of the *pertica* of *Emerita.* Photo: IGN, Vuelo Americano (Serie B, 1956–1957). Map: Carlos Cáceres-Puerto, after Gorges and Rodríguez Martín, 2004.

Aggenus Urbicus also mentions the existence of a sacred forest — *Lucus Feroniae* — in the vicinity of *Emerita*, with an area of 1,000 *iugera* (Th., 37). This has been misplaced in various locations: Rodríguez Bordallo and Ríos Graña (1976) in Medina de las Torres (Badajoz) and Álvarez Martínez (1988) in the Proserpina dam. Cordero Ruiz (2013: 83–84) indicates that the most probable

location is in the area that nowadays is occupied by the early medieval church of Santa Lucía del Trampal, where a shrine consecrated to *Ataecina*, commonly identified with the deity *Feroniae*, was found. More evidence points at this location as the most probable, as will be discussed further on, for example two *termini augustalis* found near the church that establish the edges of the territory of *Emerita*.

Finally, comments written by Siculus Flaccus confirm the existence of *praefecturae* (Th., 124–25). *Praefecturae* were those territories incorporated into the area administrated by a *civitates* but that belonged to a second city beforehand. It was a different from the area assimilated during the *centuriationis* process, although the determined area was under the administration of the colony with no distinction from its *ager publicus*. It was a separate unit created when the land assigned to a city was not enough to settle its inhabitants. It usually happened when the city did not have enough plots to divide between its inhabitants; this was not the case for *Emerita* whatsoever (Ariño Gil and Gurt, 1992–1993: 46). As the segregated land would remain named after the city to which it originally belonged, different scholars have argued about which areas could have been *praefecturae*, like *Lacimurga* in western *Emerita*.

5.3 Provincial limits: the frontier among Lusitania and Baetica

The frontier between *Lusitania* and *Baetica* was placed along the Guadiana River, according to Pliny the Elder and Mela, even though Aggenus Urbicus located it in the south, as '*per mediam coloniae perticam ire flumen Anam, circa quod sunt adsignati qua usque tunc solum utile uisum est*' (Th., 44). A. Urbicus was referring to the *pertica* of the colony.

By defining the territory controlled and managed by *Colonia Augusta Emerita* we are also referring to the frontier of *Lusitania* and *Baetica* as well, on its south and southeastern side at least. Although ancient sources, such as Mela and Pliny, mentioned above, and also in Chapter 4.3, refer to the limit among provinces, it has been a substantial debate regarding whether both references were accurate enough to be taken into consideration or not. During the past 30 years, there has been an increasing number of research projects on the southern *Lusitania-Baetica* border (Canto 1989: 149–53; Ariño Gil and Gurt I

Esparraguera, 1992–1993: 45–66; Ariño Gil, Gurt Esparraguera and Palet Martínez, 2004; Ariño Gil, 2005: 95–112; Cordero Ruiz, 2013), favoured by the epigraphical study of the *termini augustales*. The boundary marker of Montemolín, province of Badajoz, for instance, signals the southernmost point of the Lusitanian province. It marks the boundary 100km south of *Emerita*, surpassing *Baetica* settlements such as *Nertobriga Concordia Iulia* (Fregenal de la Sierra, Badajoz)*, Contributa Iulia Ugultunia* (Medina de las Torres, Badajoz) and *Regina Turdulorum* (Casas de Reina, Badajoz) (Pliny, *NH*, III, 1. 13–14; Canto, 1989: 150).

Ariño Gil, Gurt i Esparraguera and Palet Martínez (2004: 139) also established typology of areas in the Lusitanian province. This indicates an uneven level of both integration and population that can explain the dichotomy between the southern and western side and the hinterland. It is the reason why there is an imbalance between both sides, and more archaeological features have been identified in the past in some places, while in the hinterlands we are lacking a substantial amount of evidence backing up the theories some scholars have about the frontier between *Lusitania* and *Tarraconensis*. In southern *F. Tagus*, up until the border with *Baetica*, there are fertile lands that contain the majority of settlements of the province; and in northern *F. Tagus* there are colonies scattered throughout the hinterland. Those settlements are slightly bigger on the coastline. *Olisipo* (Lisbon, Portugal), the main harbour of the province, was in the division between bigger coastal settlements and the scattered populations in the hinterland. Meanwhile, the hinterland is inhabited by remnants of pre-Roman population, *Vettones* and Lusitanian*s* mostly, with a lower degree of integration among the new Roman order.

Therefore, this epigraphical evidence does not reflect the real boundary with the *Baetica* province; although it needs to be taken into consideration that the boundaries did probably change throughout the 400 years. It is possible that the Montemolín boundary mark was right in an earlier stage of the process but was outdated when the cadastre was modified, such as during the last centuriation in *Emerita,* accomplished during Vespasian's reign (Hinrichs, 1974; Ariño Gil and Gurt i Esparraguera, 1992–1993: 49). However, this last centuriation would have been initiated by Otho when he was governor of

Lusitania for nearly a decade, subsequently being completed under Vespasian since Otho's emperorship was noticeably short. As has been pointed out before, Pliny and Mela set the border along the River *Anas*, even though this statement was disproved by *Prudentius* (*Peristephanon*, Hym. III) when he described Eulalia running away from *Emerita* and crossing the *Anas* towards *Metellinum* but remaining in Lusitanian territory (Arias, 1967: 370). However, *Prudentius'* accounts cannot be trusted any more than Pliny or Mela's; academics tend to consider this text more accurate as it concords with the archaeological records. Some scholars have even used *Peristephanon* as evidence in their attempt to clarify *Emerita's* — and therefore the southern border of *Lusitania's* — limits. García Iglesias (1972), Sillières (1982) and Arias (1967) himself adduced that *Prudentius* proved that the border between *Lusitania* and *Baetica* was 30 to 38 miles southern *Emerita* (Canto, 1989: 195).

Though, as Alicia Canto de Gregorio argues, by using Prudentius' hymns we can only establish the borders at the 4th century AD. Hence, it might be perfectly possible that Pliny and Mela's texts were correct if they were taking into consideration the first stages of the colony, when the Lusitanian province had not been yet created and the *territorium* of the colony could have been smaller that it was as a provincial capital. However, this theory refutes the postulate proposed by Le Roux (1982) and Ariño Gil (1993; 1994; 2004). They argued that the colony was officially founded by 24 BC, according to the first *deductio* and election of the first *duumviri,* but *de facto* established when the Lusitanian province was set up. Ariño Gil and Gurt i Esparraguera (1993) argued that the relationship between the foundation of *Augusta Emerita* and the establishment of *Lusitania* as a province is so strong that one cannot be understood without the other. Though *Emerita* would have had a large *ager* from the moment it was founded, as it was conceived as a provincial capital from the start.

The frontier would have been placed 50km to the south of *Emerita*, in the area comprising Villafranca de los Barros, Zafra and Los Santos de Maimona. Other scholars, such as Gorges (1982; 1983a), Sillières (1982) and Enrique Ariño Gil and J. M. Gurt i Esparraguera (1993; 1994) locate the frontier between both provinces 45km southern *Emerita*, where they have distinguished a change in the pattern of construction in the road from *Emerita* to *Italica* (Santiponce).

Regardless of this lack of consensus, the scope of the limit line has been narrowed down consistently, along with the border of the *ager publicus* of *Emerita*, as both share the border line in the southern part. However, as Alicia Canto (1989) argues, it is unlikely that a colony like *Emerita*, consisting of such an extensive territory, was not affected by the political, economic, and demographical crisis Rome underwent from the end of the 2nd century until the beginning of Diocletian's reign. Therefore, the extension of its *ager publicus*, often unpopulated, would have definitely been affected. *Emerita* and its *ager publicus* did not stay untouched and unchanged, possibly rearranging the deserted allotments after the third *centuriation*, even if that implied reducing the territory of the colony when the colony experienced difficult times.



Figure 39. Limits of *ager publicus emeritensis,* according to Ramírez Sádaba, 2004: 111, fig. 1.

In order to comprehend the urbanism of *Augusta Emerita* as a Roman *civitas* colony and provincial core, it is crucial to understand the surroundings, the territory directly administered not just by the city but by its inhabitants themselves. *Emerita Augusta*'s *ager publicus* has been broadly studied not only by scholars nowadays (fig. 39), but also by the Roman *gromatici*. It constitutes the best case to understand the land distribution system applied by Rome throughout the Empire, as authors like Frontinus or Aggenus Urbicus described it thoroughly, as has been covered earlier in this chapter. According to López Melero (1984)

Saquete Chamizo (1997) and Cordero Ruiz (2013), the reason for such a large *territorium* must be looked for in the magnitude of the land within reach rather than as a form of compensation for the veterans. Although the existence of a *praefecturae* in such a big area, where authors like Frontinus (Th., 9) commented that after three different *deductiones* there was still land available, is still an unknown feature for researchers. So, is it the location of those *praefecturae* comprised in the *ager publicus* of *Emerita* or in a separate administrative unit depending on the colony?

Although it has been an historiographic debate during the past decades (Canto, 1989; Ariño Gil, 1993; Ariño Gil *et alii*, 2004), Aggenus Urbicus (Th., 44) pointed out that the *pertica* crossed the River *Anas*, despite what Pliny (*NH*,IV, 22, 115) and Mela (*De Chor*, II, 87) had stated. This is proved by the *termini augustales* as will be detailed in the following section 5.4.

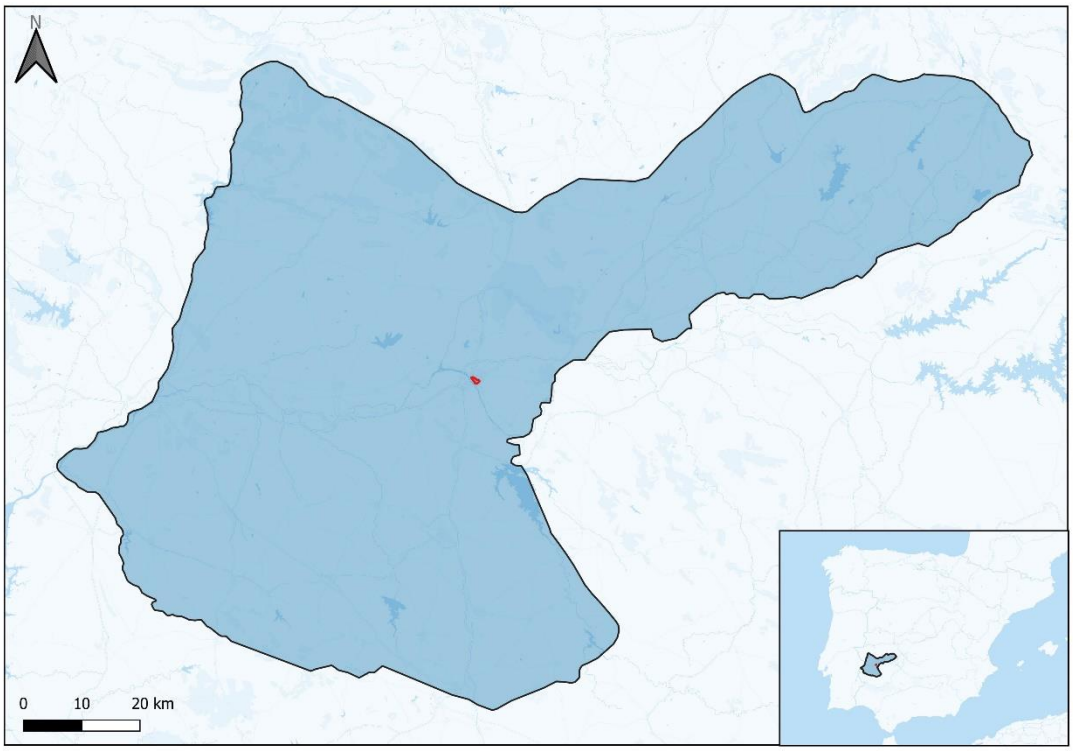


Figure 40. Proposed limits of the *pertica* of *Augusta Emerita*, according to Cordero Ruiz, 2013. Map: Carlos Cáceres-Puerto.

The foundation of *Colonia Augusta Eme*rita, according to the textual evidence in 25 BC (Dio, *Roman History*, LIV, 25, 5), is intrinsically related to the establishment of the Lusitanian province (Ariño Gil *et alii*, 2004; Cordero Ruiz,

2013); for this reason, the limits of both territories are linked, especially in the southern border of *Lusitania*. Without getting into much detail about *who* occupied this territory — though it will be discussed in the following chapters — it is important to establish the occupation of the area by the first settlers in order to determine the magnitude of the task of establishing new boundaries in an area with no previous major Roman settlements. The first inhabitants were responsible of determining the frontiers of both the colony and its *ager publicus* as well as the province and its *territorium*. According to Le Roux (1982; 2006), the status of the colony was already set by the end of the 1st century BC along with the borders of the city and the province.

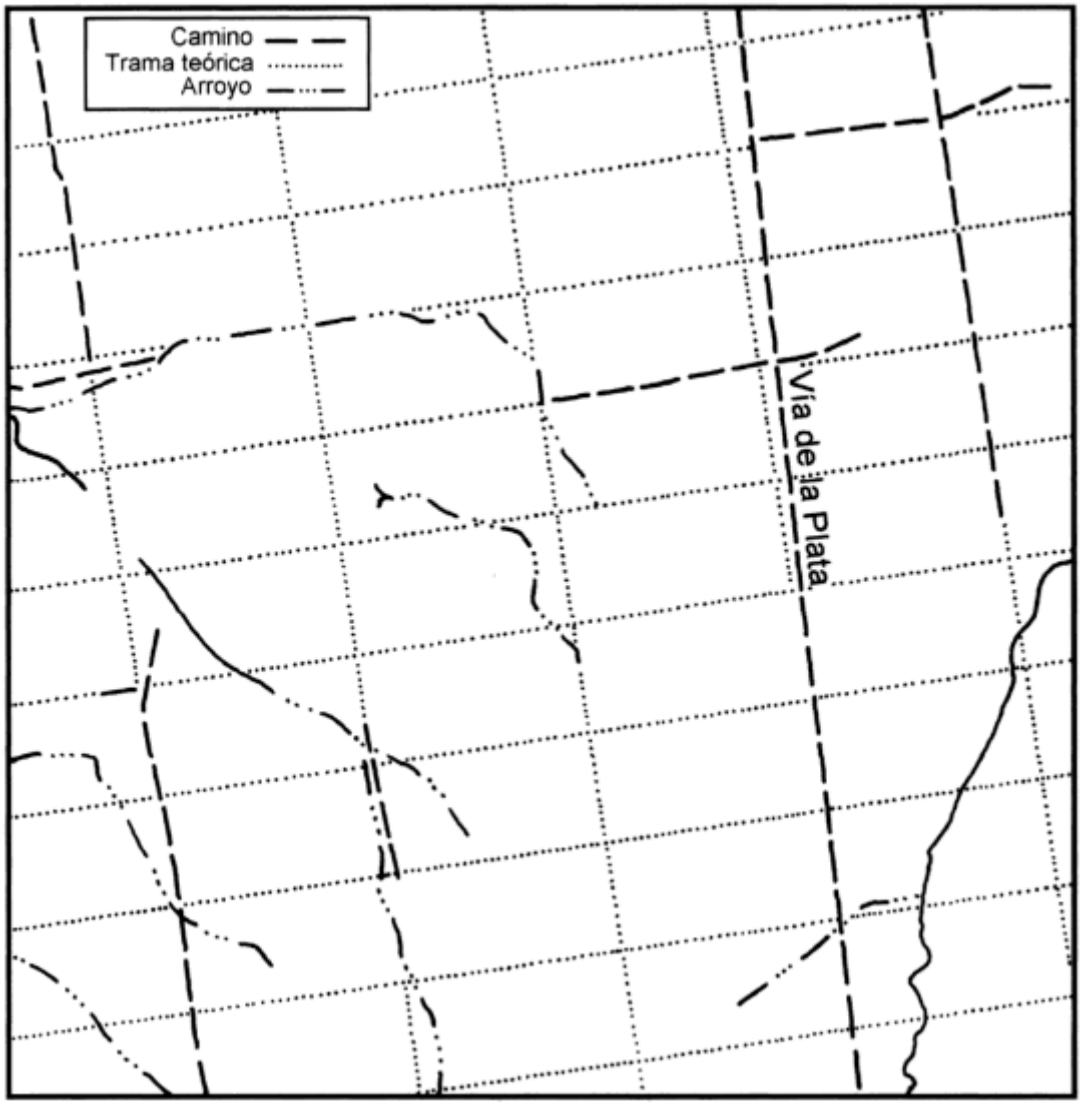


Figure 41. *Iter ab emerita asturicam* in relation to centuriation next to modern-day Almendralejo (Badajoz), in the Tierra de Barros region. Image: Ariño Gil *et alii*, 2004: 71.

The limits of *Augusta Emerita* (fig. 40) are unclear in the northern area, regarding whether a *praefecturae* surrounding *Turgallium* (Trujillo, Cáceres) exists or not. The southern limits have been set by different researchers, like Alonso Sánchez *et alii* (1992-1993), Ariño Gil and Gurt i Esparraguera (1992–1993) and Ariño Gil *et alii* (2004).

Hyginus Gromaticus' reference to the orientation of the grid allows us to unveil the limits of the centuriation. As stated beforehand, Ariño Gil and Gurt i Esparraguera (1994b: 51–57) determined a change of pattern in the stonework of the road from *Emerita* to *Italica* (Santiponce, Sevilla), in what appears to be the border mark between *Lusitania* and *Baetica*. Some parts of this road follow the same orientation as the *decumanus maximus* of the colony (Gorges, 1986; Cerrillo, 1988; Ariño Gil and Gurt i Esparraguera, 1994a: 34–36; Cordero Ruiz, 2013).

Therefore, this is the southern edge of the *ager publicus emeritensis*. The border would follow and arch-line in the region of Tierra de Barros (fig. 41), among the Arroyo of St. Serván Sierra and the Guadajira River to the west, Sierras of Calera, Feria, María Andrés and Los Santos on the southern side and the Matachel River on its eastern area (Cordero Ruiz, 2013). The River Zapatón is the westernmost frontier of the colony (fig. 22). From this river, the border would flow along until reaching the mouth of the River Gévora, which nowadays marks the border between Spain and Portugal near Badajoz (Spain) at the Guadiana River. The *F. Anas* would be the frontier as it currently is with Spain-Portugal; the border line is where the *Anas* meets the River Olivenza.

5.4 Praefecturae

Hyginus Gromaticus mentions the existence of *praefecturae* that were under management of the colony. He did not specify the quantity nor the location, although he provided names for at least two of them. Those administrative units, under control from *Emerita* but technically different from the *ager publicus*, had the same size as the allotments included in the colony's *pertica*: 400 *iugera*; hence it is rather difficult to establish their location by focussing on the different typology (Cordero Ruiz, 2013).

According to Siculus Flaccus (Th., 124–25), a *praefecturae* is a territory incorporated into the area managed by a settlement, although this territory already belonged to a different community beforehand. This type of *ager* was taken, whether it was in a conflict-free way, a donation from a third community or by warfare, and added to a colony whose *territorium* was not sufficient for the settlement of its inhabitant (Ariño Gil and Gurt i Esparraguera, 1992–1993: 46). A *praefecturae* was also created if the conditions for establishing an *ager publicus* would not be sufficient with the optimal requirements. As H. Gromaticus wrote, 'to bring the land of such cities up to the size required by colonies they were given territory of neighbouring communities' (Dilke, 1971: 94). The *praefecturae* would be named after the community it originally belonged to and had to be created as a separate unit from the *pertica* of the colony. Hinrichs (1974) did suggest that the area conforming *praefecturae* could also have been donated by a settlement, like in Capua in 36 BC. Although when this happened it was not free; in the aforementioned example Capua gained the construction of an aqueduct paid for by the Roman State as compensation.

As Frontinus (Th., 9) mentioned, the *ager publicus emeritensis* was of great size, and it went through three different processes of distribution of allotments among the settlers, still having unassigned territory at the end of the third *deductio*. Gorges and Rodríguez Martín (2004) have discussed the hypothesis of an enlargement of the already substantial *territorium* by adding *praefecturae* to increase the importance of the colony. Therefore, *Emerita* would have acted as a bridgehead in Romanising an area poorly integrated in the Roman scheme. The main question is the chronology of the establishment of the different *praefecturae*. The logical answer is between the first *deductio*, in 24 BC (Dio, *Roman History*, LIV, 25, 5) and the third *deductio*, that, according to Hinrichs (1974), took place during the reign of Vespasian; although this has been later re-evaluated, and we know that it occurred under the brief rule of the emperor Otho, as Edmondson (2011) documented. According to different scholars such as Le Roux (1982; 2006), Ariño Gil and Gurt (1992–1993; 1994b: 45–66), Ariño Gil *et alii* (2004) and Cordero Ruiz (2013), if the *territorium* appointed to *Emerita* was set from foundational times, then the *praefecturae* could have been established during the reign of Augustus, although they could have also been additions in a

later date. For instance, when the surroundings colonies saw their *ager publicus* modified and slightly enlarged, like at *Metellinum* (Medellín, Badajoz) or *Norba* (Cáceres) (Canto, 1989).

Ariño Gil and Gurt (1994a: 58) also stated that those *praefecturae* would be the territory contained between the *Anas* and the border with *Baetica*, following Pliny and Mela's references that *territorium emeritensis* had the *Flumen Anas* as its limit.

Two names are provided in the text by the S. Flaccus along with a reference to another *praefecturae* with no name. *Praefecturae Turgaliensis* was identified as *Turgalium*, modern-day Trujillo (Cáceres, Spain), the main settlement of a *conventus* of the Lusitanian province. Álvarez Martínez (1988) identified it with the *Mansio Turcalium* mentioned in *Ravennatis Anonymi Cosmographia*. During the 1980s, several surveys found evidence scattered around the area, but there was not enough to make such a conclusive statement (Cordero Ruiz, 2013: 80). Some scholars argue that H. Gromaticus was referencing the administrative unit of a *conventus* rather than a *praefecturae*.

The second name provided is *Praefecturae Mullicensis*. It has been located as crossing the *Flumen Anas* towards the south, close to *Baetica*. It was identified with the boundary marker found in Montemolín (Badajoz) by a farmer in the 19th century. Fita (1918) catalogued is as a *terminus*, according to its translation. This identification was not plausible since it occupies a territory managed by the *Baetica* province. Continuing with this theory, some scholars such as Canto (1989: 176) contended that it would have been a *praefecturae* within another province. Ramírez Sádaba (1993) pointed out the inconsistency of Canto's thesis, which was proved right after González (1996) reviewed Fita's translation (1918). González catalogued the inscription as a private commission from a citizen from *Emerita* who was serving as a magistrate in the neighbouring province (Cordero Ruiz, 2013). Rodríguez Martín (2012: 445) argues that due to the richness of the soil southern Villafranca de los Barros, and the proximity to the marble quarries of Alconera and Zafra-Los Santos, this land would have been associated, somehow, with the jurisdiction of the *Conventus Emeritensis*, maybe in the shape of a *praefecturae*.

The other *evidence* for the location of *Praefecturae Mullicensis* further south the colony corresponds to a second inscription: the boundary marker of Valencia del Ventoso (Badajoz, Spain). According to Ramírez Sádaba's translation (1993: 302), *Terminus Augustalis finis emeritensium*, it was one of the *termini augustales*, a frontier marker dividing the *ager publicus* of *Emerita* from other colonies. However, this alleged boundary post is too far south and is already in the territory controlled and managed by *Baetica*. *Praefecturae Mullicensis* was located in one of the southern two settlements depending on the *Conventus Hispalensis* (Ariño Gil *et alii*, 2004): *Contributa Iulia Ugultunia* (Medina de las Torres, Badajoz) and *Segida Restituta Iulia* (Burguillos del Cerro, Badajoz). The hypothesis of a *praefecturae* in this situation was plausible until archaeologists from the Institute of Archaeology of Mérida successfully found *Contributa Iulia Ugultunia* in 2007 (Mateos Cruz *et alii*, 2009). As Ariño Gil *et alii* (2004) and Cordero Ruiz (2013: 80) pointed out, it is contradictory to support a hypothesis that locates a *praefecturae* among two different settlements in a province that it is not *Lusitania*. Some scholars, like Berrocal Rangel (2004), however, claimed that it would have been a *Praefecturae Celtica Emeritensis* to settle the *auxilia* from *Legio V* and *Legio X*. However, there is not enough evidence pointing in that direction.

J. G. Gorges and F. G. Martínez (2004: 111–113) defended the existence of a *praefecturae emeritensis* in the vicinity of Elvas-Campo Maior (Portugal) and in Valdecaballeros (Badajoz, Spain). They adduced the inhabitants of this territory and the inhabitants of *Emerita* belonged to the same tribe: *Papiria*, to support their theory. This area was outside of the *pertica* of the colony, where, in theory, it is valid to assume the presence of a *praefecturae*. However, the argument of establishing parallels for the occupation of this area by only supporting it with the evidence of the population's tribe seems slightly weak.

6 Early coinage series from *Emerita*. Iconography as a means of "Romanisation"

Despite what occurred in other areas of the Empire like Britain, where the level of coinage upon the arrival of Claudius was substantial, in *Lusitania* the extremely reduced number of mints is significant. The situation in other areas of the Iberian Peninsula differs enormously from the Lusitanian province; in both *Baetica* and *Tarraconensis* mints were created fluidly and consistently across time and local communities within *Lusitania* relied on bartering for economic transactions. This is directly linked to the lack of main Roman settlements in the area where the future province of *Lusitania* would be until the mid-first century BC. Therefore, all coinage entering the region prior to the foundation of the province, *per se*, were produced and controlled by non-indigenous groups (Blázquez Cerrato, 2010: 405–406). The fact that *Lusitania* was lacking imperial mints by the end of the reign of Tiberius, whereas in *Baetica* and *Tarraconensis* mints were flourishing until Caligula, is symptomatic of the mints in the area (García-Bellido and Blázquez Cerrato, 2001a: 30). Those mints were circumstantial, advantageous and transitory; once they accomplished their main purpose, they were dismantled. However, provincial mints in *Hispania* were subsequently dismantled during reign of Claudius, with residual series minted in *Tarraco* by *Galba,* and *Vespasian* in the context of the Civil War in AD 69 but were swiftly interrupted after the conflict came to an end. The imperial agenda created a certain number of main minting centres like Rome, or *Lugdunum* (Lyon, France), which legally prevented the provincial mints from producing currency. Nevertheless, this did not effectively stop the issuing of coinage in the provinces. Counterfeits were the norm, as evidence suggests, with early examples like the fake *quinarius* found in Cáceres, imitating motifs from *Colonia Augusta Emerita* (Martínez Chico, 2015: 15–17).

Augustus had the urgency of minting coinage outside of military contexts, whether it was to effectively control the issuing of coins or to establish new centres of dominion. In the case of *Hispania*, García-Bellido (2013: 220) assumes it is the latter one. I do believe, however, according to the lack of findings of coinage from the first five series in or around *Emerita*, that the establishment of

mints is separate from a warfare context, but also further from Senate elements. It constituted a long-term strategy for controlling the military component to ensure larger military campaigns, as in *Germania*. The need for preventing further internal military conflicts within the Roman society led Augustus to set official mints in newly founded settlements, which ultimately supported him in the effort of Romanising new groups of populations within the Roman sphere. This assimilation process was achieved by using a hybrid approach of Roman motifs and indigenous idiosyncrasies. The syncretism of local deities resembling members of the Roman pantheon in the colonial series would serve this purpose. Hence, my reference to "indigenous motifs" in this chapter, and in Chapter 1.3 while discussing the theoretical framework of this dissertation.



Photo: Museo Nacional de Arte Romano (Mérida)
Inventory: CE12117
Other publications: RIC I (Second Ed.) Augustus 9a
Type/Material: *Denarii* (Ag)
Chronology: 25–23 BC
Obverse: Bare head of Augustus, l. (AV[GVST] IMP CAESAR
Reverse: Gate of the city with 'EMERITA' inscribed above the gate, circular wall perimeter (P CARISIVS [LEG])

Table 2. *Denarii* (RIC I Augustus 9a), Series 1–2. Photo: MNAR[13], image: Carlos Cáceres-Puerto.

[13] I would like to thoroughly thank Dr José María Murciano Calles, curator in Museo Nacional de Arte Romano of Mérida, for granting me access to the dataset of coinage of the museum. I would also like to express my gratitude to the museum's director, Dr Trinidad Nogales Basarrate, and Agustín Velázquez Jiménez for allowing me to include in this thesis photographs and images property of the Museo Nacional de Arte Romano de Mérida.

Under Augustus, only three settlements in *Lusitania* were granted the privilege of holding a mint: *Augusta Emerita*[14]*, Pax Iulia* (Beja, Portugal) and *Ebora Liberalitas Iulia* (Évora, Portugal) (García-Bellido & Blázquez Cerrato, 2001: 33). The mint of *Pax Iulia* consisted mostly of *asses*, found almost in their entirety in the southwestern part of Iberia due to trade. However, the mint in *Ebora*, although it had a short series (*dupondii* and *asses*), resembles the coinage of *Colonia Patricia* (Córdoba, Spain)*,* which was effectively the model for the majority of mints in southwest Iberia at the end of the 1st century BC. Additional similar models imitating the effigy of Augustus can be dated to after 12 BC (Blázquez Cerrato, 2010: 421). However, in *Augusta Emerita* coins had represented Augustus on the obverse since Series 1 and 2 under Publius Carisius issues (tables 2, and 3), and it was the recurrent obverse with few exceptions that depicted local deities in Series 3, 4 and 5 (table 4).

Emerita's first settlers had a 'sense of dignity', as described by Trillmich (2018: 87), that can be recognised by observing the themes used for their first issues, although this excludes Series 1 and 2, as they depict the military origin of the colonists. The propaganda employed on Series 3, 4 and 5 can be argued to be a two-way strategy. The pre-Roman elements in the coinage might include a component of pride in defeating the Cantabrians. Despite those events not occurring near the colony, it was the heroic past of the settlers, similar to *Aeneas* and his arrival to western Italy. Therefore, it can be seen as having a twofold propagandistic element, as it served Augustus to enhance his military campaign even though it was not yet concluded, and this propaganda also links the settlers with the land and pre-Roman communities. However, this is not the only example, as it also occurs with coins depicting local deities, like *Feronia/Ataecina-Proserpina*, which corresponds to the widespread distribution of the bronze figurines of *Ataecina* around *Emerita* and the mid Guadiana Valley since the First Iron Age (figs. 42, and 43), as it has been further analysed in Chapter 4.2.1., and 4.2.2 (Almagro-Gorbea, 2018; Cáceres-Puerto, 2019: 135–151).

[14] For a detailed list of the dispersion of coins minted in *Emerita Augusta* within *Hispania* see Blázquez Cerrato (1992) and Soria Sánchez (2002: 365–370). For the *limes* in *Germania* see García-Bellido (2004; 2005).

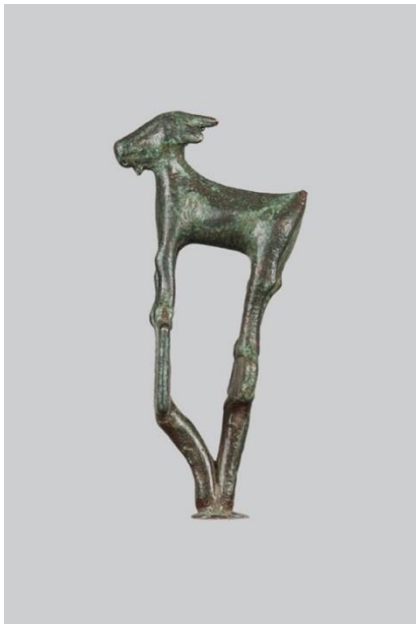


Figure 42. Bronze figurine representing *Ataecina*. Photo: Museo Arqueológico Nacional. Piece 1943/54/1.

However, this is not a unique case, as the depiction in Series 3, 4 and 5 of the river *Anas* as a deity can also be seen as an assimilating mechanism with the territory (tables 4, and 6). Although the mint of *Emerita* was not too prolific in relation to the time it was in use, the number of series, twelve in total, demonstrates that it had an extensive use until the beginning of the reign of Caligula. I will only cover the series related to motifs with a marked 'pre-Roman' background and coins minted without following the official propaganda scheme dictated by Rome after 2 BC, when the first coins appeared with the legend 'P P' — *PATER PATRIAE* — on the obverse. Coinage after Serie 6, including number 6 itself, rapidly adopted the imperial propaganda (Blázquez Cerrato, 1992: 285ff) and, therefore, is irrelevant for the topic of my research on the urbanisation process and the settlement of colonists in the area, as they depict the Imperial family and religious elements.



Figure 43. *Stelae* consecrated to *Ataecina Turbrigensis Proserpina*. Proserpina Dam, Mérida, 2nd century AD. Photo: Museo Nacional de Arte Romano. Piece. CE10302.

Here I follow the typology established by Cebrián Sánchez (2005: 835–37; 2012: 32; 2013) among other scholars, which distributes the twelve series into three patterns, cataloguing them according to their ulterior iconographical theme. Series 1 and 2 (Imperial), minted by Publius Carisius, relate to the founders of the colony and the colony's military background (25–23 BC); Serie 3–5 (Colonial), issued by the local senate, enhances the indigenous component with local deities and depicts the Guadiana River as a deity itself (23–13 BC); and Series 6–12 (Provincial), minted by the local and provincial senate once the Province of *Lusitania* has been established, spans until the reign of Tiberius. The last six series depict the Imperial family, motifs related to the province and the well-known southwestern gate (RIC I/9a, RIC I/9b, RIC I/10, RPC I/10, RPC I/12), a symbol of the colony thereafter (table 2). However, this classification should be slightly modified. Cebrian (2012: 32) catalogued Series 1 and 2 as 'imperial', but I consider both Series as 'transitional', since they preserve Republican features, were minted in mobile mints in a warfare context, and they feature elements from the Augustan coinage reform of 2 BC with the legend P P -PATER PATRIAE- in the obverse. As I will mention along this chapter, one of my main hypotheses to modify Cebrián's classification of Series 1-2 is the using of 'P P' prior to 2 BC.

Furthermore, it is not clear whether the first two series were entirely minted in the colony, hence my suggestion of a mobile mint until the third series, as it will be further analysed and discussed along this chapter.

Iconographical motifs in Series 1-2



Legend (P. CARISIVS LEG AVGVSTI). MNAR CE27569	Victory standing crowning a trophy (P CARISI LEG). MNAR CE36396	Kneeling captive and trophy (P CARISIVS LEG PRO PR) British Museum. RIC I 6	Trophy (P CARISIVS LEG PRO PR). MNAR CE37431
Helmet, dagger, and *bipennis (*P CARISIVS LEG PRO PR). MNAR CE36856	Round shield, falcata, and spear (P CARISIVS LEG PRO PR). American Numismatic Society, RIC I 2a.	Gate with circular wall perimeter (P CARISIVS). MNAR CE12117	

Table 3. Iconographical motifs in Series 1-2 of the mint of *Augusta Emerita.* Photo: MNAR/ANS/BM, image: Carlos Cáceres-Puerto.

The main difference between the Transitional/Imperial, Colonial, and Provincial series would be the iconographical motifs. General Roman motifs will be the rule in the Transitional/Imperial Series (1-2) (table 3): spoils if war, military equipment, or prisoners of war with trophies. However, Series 1-2 also depict certain differentiating motifs that emphasise the uniqueness of *Colonia Augusta Emerita* among other provincial settlements. The depiction of the main entrance to the colony, flanked by two towers, and the layout of the walls (RIC I 9a) is unique within the Iberian Peninsula (Cebrián, 2013). The motifs depicted in the Colonial Series (3-5) (table 4) will have images and symbology enhancing the

Romanitas, the colony, and the founding legions. This series will imitate motifs employed by other mints in the *Baetica* province, like *Colonia Patricia* (Córdoba).

Iconographical motifs in Series 3-5



River-goddess, spitting water (EMER). MNAR CE31631



Aquila among two *signa* (CO A E LEG V X). MNAR CE30792



Silenus/*Anas* River (PERMIS RIS AVGVSTI). MNAR CE31680



Priest ploughing (VSTA EMERITA). MNAR CE31680



Laurel wreath (IMP CAE). MNAR CE36438

Table 4. Iconographical motifs in Series 3-5 of the mint of *Augusta Emerita.* Photo: MNAR, image: Carlos Cáceres-Puerto.

Finally, the Provincial Series (6-12) (table 5) praise the figure and the image of the emperor, delving into the theme of *Romanitas*, which was being used since the 3rd Series, and the imperial cult. The mint of *Colonia Augusta Emerita* imitated provincial models, mostly from *Baetica* and *Colonia Patricia*, but also from *Tarraco* (Tarragona, Spain), *Narbo* (Narbonne, France), and *Cartago Nova* (Cartagena, Spain). The models used by *Emerita* in the Provincial series were subsequently imitated by other colonies founded by Augustus, like *Caesaraugusta* (Zaragoza, Spain), or *Pax Iulia* (Beja, Portugal).



Table 5. Iconographical motifs in Series 6-12 of the mint of *Augusta Emerita.* Photo: MNAR/RPC, image: Carlos Cáceres-Puerto.

Some motifs from Series 6-12 were also imitated in other Lusitanian settlements, like the depiction of religious objects (*patera, lituus*, and jug) used as a recurrent motif by the mint of *Ebora Liberalitas Iulia* (Évora, Portugal). The Provincial series were minted under Tiberius, but the 6th series includes the last Augustan coinage from *Emerita*, which includes the legend PATER PATRIAE in the obverses, and have been dated after 2 BC. The depiction of the gate flanked by two towers and the city walls is the only motif used in all series of the mint of *Emerita*. The depiction of the gate and the walls is a unique casuistry within the Iberian Peninsula, which I associate to the Augustan propaganda on the urban

infrastructure, rather than a proud depiction of a mighty defensive ensemble, as I further commented in Chapter 3 while discussing the walls, their functionality, and the theories on this regard.



Photo: Museo Nacional de Arte Romano (Mérida)
Inventory: CE31680
Other publications: RPC 1/11
Type/Material: *Aes* (CuSn)
Chronology: 25–2 BC
Obverse: Facing face of Silenus with amphorae pouring water in front of him (PERMIS[SV CAESA]RIS AVGVSTI)
Reverse: Priest ploughing, l. ([AVG]VSTA EMERITA)

Table 6. *Aes* depicting the River *Anas*. Photo: MNAR., image: Carlos Cáceres-Puerto.

Regardless of the iconography of the series, the length of the mints in *Lusitania* is symptomatic of their purpose. The imperial mint of *Emerita* is the longest lasting in *Lusitania* (Blázquez Cerrato, 2010: 405–35), whereas other minting centres, like *Ebora* (Évora, Portugal) only produced a small amount of series under Augustus. In consequence, the reason of the existence of the mint of *Colonia Augusta Emerita* must have been dissimilar than just covering foundational costs or the salaries of the soldiers. The main undefined problem is the date of Publius Carisius' issuing. Notwithstanding the fact that the majority of scholars have agreed on 25 BC as the 'official' coining date for the first and second issues of Carisius, other researchers, including myself, think otherwise. However, the belief that Carisius' coins were minted prior to 25 BC, perhaps in 27 BC, contravenes the first hypothesis of an Imperial Mint being displaced to a provincial town. At least it contravenes this first hypothesis in such an early stage, along with the example of *Emerita* as bridgehead of the new Augustan coinage policy. It is, however, plausible that Carisius issued coinage prior to the foundation of *Emerita*, and that the colony was abiding by the Imperial coinage

policy even before 23 BC. Cebrián Sánchez (2012; 2013) does not agree with my postulates, as he supports the theory that Carisius' coins are issued in *Emerita*, although Ripollés *et alii* (2015: 3) think otherwise, as stated in the last update of the *Roman Provincial Coinage*. They support their theory with the scarcity of coinage found in Mérida and its surroundings; as most of the collection at the National Museum of Roman Art was purchased in the last 150 years, the origin of said pieces is mostly unknown. This factor biases all academic papers written after said collection without mentioning this hindrance, as some of the publications do not take into consideration the lack of local findings for the series of the mint of *Emerita*.

Villaronga (1968: 22), however, defended the argument that the coinage minted by Carisius belonged to a mobile mint whose chronology could be set in 26–25 BC, which for the author makes its later presence in northern *Hispania* plausible. Therefore, Villaronga (1968: 22) proposes a combination of the aforementioned theories, where Series 1 and 2 were, in fact, minted in *Emerita* and later distributed in northern *Hispania*, even though this argument locates the foundational date a year before the *official* date, when most scholars tend to postpone the foundational date to 20–16 BC. However, the author ambiguously described a *Moneta Castrensis* (table 7) attributing some of the features of Series 1 and 2, which invalidates their hypothesis.

6.1 Publius Carisius' Series 1 and 2. Transitional, Colonial or both?

Prior to addressing the matter of this part of the chapter, there is an ongoing debate among the academic community that should be discussed. Academics studying numismatics from *Emerita* do not agree to whether Publius Carisius' coins can be considered Late Republican or Early Imperial. I consider this of the utmost importance regarding the classification of the coins of *Colonia Augusta Emerita*, therefore, I will dedicate a few lines to clarify and discuss this matter. Since the scholars tend to disagree on the typological and chronological classification, Burnett, Amandry and Ripollés (1992: 67) conceived an intermediate term to catalogue coinage minted in the second half of the 1st century BC: *moneta castrensis* (table 7) (RPC I/1–4). They argued it could not be

considered municipal or colonial since it lacks an ethnic background to support the minting (Villaronga, 1970: 591–600; Beltrán, 1978: 157–68), and the name of a magistrate. Hence the difficulty in cataloguing Carisius' coins, as they do not mention a place in some cases, as with the *caetra* examples, but they do include his name and rank. Therefore, Series 1 of *Augusta Emerita* does comply with some of the aspects proposed by *Roman Provincial Coinage*; even though they include Carisius' coins as an example of *moneta castrensis*, they refrain from cataloguing Series 1 as Imperial (although they *de facto* held that status when minted) due to the aforementioned proposals. Series 1 and 2, nonetheless, cannot be classified as Imperial since they feature elements from Republican, Imperial, and warfare contexts, as I mentioned in the introduction to this chapter.



Photo: *Roman Provincial Coinage*
Inventory: -
Other publications: RPC 1/4
Type/Material: *Moneta Castrensis* - Caetra (CuSn)
Chronology: 27–23 BC
Obverse: Bare head of Augustus, l. (IMP AVG DIVI F)
Reverse: Round shield enclose din two concentric circles connected with straight lines amongst them. No legend

Table 7. *Caetra* (RPC 1/4). Photo: RPC, image: Carlos Cáceres-Puerto.

Therefore, *Augusta Emerita* was the first Imperial mint — despite the discussion regarding the typology of Series 1 and 2 — established in *Hispania* by Augustus. Although Augustus took measures to ensure his troops were being paid in a timely manner in 27 BC by the so-called *caetra* (RPC I/1-4), those issues were coined in mobile mints, following the *legatus augusti* throughout northwestern Iberia (García-Bellido, 2013: 220–21). This is a key point regarding the origin of *Carisius*' Series 1 and 2, as their poor quality has often been associated with the involvement of a peripatetic mint, although the involvement

of a mobile mint along with a permanent mint in *Emerita* cannot be discarded entirely. The introduction of a mobile mint can be extrapolated to other colonial settlements created by Augustus, like *Segisama* (Sasamón, Spain), *Caesaraugusta* (Zaragoza), or *Pax Iulia* (Beja, Portugal), since they all shared a common foundational casuistry, where the veterans were being settled after their participation in the Cantabrian Wars and needed to be paid in time. However, opposite to the general conception, neither did they arrive to the new colonies at the same time, nor did the colonies have the infrastructures to accommodate the veterans. Thus, in my opinion, a mobile mint concurs with the context of mutability and change in the Iberian political, military, and urban landscape at the end of the 1st century BC.

The name 'caetra' was adopted for the image of a characteristic shield used by the Cantabrian tribes (Núñez Meneses, 2014: 92–117). The *caetra* did not have the place of minting engraved on them, nor did they have the name of the person who coined them. They were issued by a special permit from Augustus, hence the inscription 'IMP AVG DIVI F'/'PERMISSV AVGVSTI' appearing on the obverse (García-Bellido, 2013: 222; Núñez Meneses, 2014: 92–117). However, *caetra*, as issued by the emperor, could not possibly be minted by the province, which at this stage did not exist. Therefore, these coins should have been included in *Roman Imperial Coinage* rather than in the *Roman Provincial Coinage* (Burnett, Amandry and Ripollés, 1992; García-Bellido and Blázquez Cerrato, 2001a; 2001b; García-Bellido, 2013: 220–22).

Núñez Menendez (2014) provides a general chronology matching the issues of Carisius in *Emerita*: 27–23 BC. Although he predominately studies the issuing and distribution of *caetra* in the territory around *Lucus Augusti,* in Lugo, northwestern Iberia, he compared the issuing of *caetra* with the first two series in *Emerita*. There are a great number of similarities between *caetra* and the issues of Carisius to be dismissed, notwithstanding the fact that there is one key difference: the inclusion of Carisius' name on the coins allegedly minted in *Emerita* between 25 and 23 BC.

The appearance of the name 'P CARISIVS' alongside the legend 'LEG PROPR' or 'LEG AVGVSTI' (table 8) does not occur in any other place in *Hispania* (Blázquez Cerrato, 2005: 77). It constitutes a strange hybrid between

consular Republican coinage, stating the name and rank alongside a visual representation of military prowess and early Imperial minting, with the permission granted by the emperor. It comprises a mechanism of self-praise that matches other examples in *Hispania Citerior*, like the mint of *Caesaraugusta* (RPC I 150-156), for example. These provincial mints subsequently followed the Republican tradition of magistrate self-propaganda in the coinage of Rome (Cebrián, 2013: 102). Therefore, I believe Series 1 and 2 to be a minting with a mixed background of *caetra*, Republican consular coinage and pre-Augustan coinage reform issues that correlate with the payment of the legions. Simultaneously they form one of the earliest examples of the Augustan coinage reform prior to 23 BC. The legend 'PERMISSV AVGVSTI', thus, might imply not a permit from the imperial entity to mint coinage but the ability to reproduce the effigy of the head of the emperor (García-Bellido, 2013: 222) as it was used on the majority of coins from Series 1 to 5. Certainly, Series 1 and 2 were produced at the same time, as the evidence suggest dies were shared among them (Cebrián Sánchez, 2013).



Photo: Museo Nacional de Arte Romano (Mérida)
Inventory: CE30875
Other publications: RIC I (Second Ed.) Augustus 14
Type/Material: *Aes* (CuSn)
Chronology: 25-23 BC
Obv.: Bare head of Augustus, r. (TRIB P[OTEST CAE]SAR AVG)
Reverse: Legend in three lines (P CARISI[VS] / LEG / [A]VGVSTI)

Table 8. *Aes* (RIC I Augustus 14). Photo: MNAR, image: Carlos Cáceres-Puerto.

Consequently, the end of references to Carisius in 22 BC ought to be linked to the discontinuation of Series 1 and 2 (Alföldy, 1969; Volk, 1997). Considering that five years was the average length of a magistracy under Augustus, this does coincide with the minting period of the *caetra* and Series 1

and 2 in *Emerita*. Notwithstanding the fact that the absence of 'TRIB POTESTAS' in the legends of Series 1 and 2 can be argued as minted prior 23 BC (Burnett, Amandry and Ripollés, 1992). However, said authors do not provide an exact date, rather they made an estimation: 25–2 BC. Although it is not incorrect, the date given combines Series 1–6, which includes issues by Publius Carisius and the colony itself. They do, however, specify the date for Series 1 as 25–23 BC (Burnett, Amandry and Ripollés, 1992: 69), concurring with the majority of scholars nowadays.

Despite what has been already mentioned, García-Bellido (2008) argues that Publius Carisius' issues were minted in *Emerita*, where he created a military treasury to guarantee the later deployment of troops to Germania, ordered by Augustus and carried out by Agrippa. She argues that *Augusta Emerita Raurica* (Augst/Kaiseraugst, Switzerland), on the Germanic *limes*, shares not only the name but also *Legio V Alaudae* as its founding settlers (García-Bellido, 2008). The debate is endless, as both hypotheses are plausible. I tend to agree with the opposite theory, as the coinage from Carisius was minted in northwest Iberia and reached *Emerita* in the pockets of the veterans, despite this, the theory of a double mint in both northwest *Hispania* and *Emerita* is also worth considering. I base this hypothesis on various factors. The most important one is the lack of findings in the vicinity of Mérida, whereas northwest Spain comprises the second largest collection of Carisius' *denarii, asses, quinarii* and *dupondii*. Blázquez Cerrato (2010: 405–35), however, argues alongside García-Bellido (2008) as they think the main purpose of the mint of *Emerita* was the issuing of coinage for the payment of the veterans. Although a distribution map of the findings of Carisius' series demonstrate a clear pattern within the German *limes*, as it entails the largest gathering of coins from Series 1 and 2 of *Emerita*. The main problem with this argument is the lack of quality of the first two series, to which Trillmich (2018: 87) had adduced a mobile mint under a context of a constant military movement. According to Cebrián Sánchez (2006: 51–68), 300,000 silver coins were minted under Carisius, notwithstanding that Cebrián himself (2013: 24–30) corrected the amount to 455,000–460,000 silver coins, including *denarii, asses, dupondii* and *quinarii*. The silver found in the province of *Raetia* suggests that the military component sent by Agrippa post 19 BC (García-Bellido and Blázquez

Cerrato, 2001a; Blázquez Cerrato, 2005: 65–102; 2010: 424) departed from *Emerita*, as *Legio V Alaudae* was the foundational element in *Emerita Augusta Raurica* (García-Bellido, 2004: 78).

According to Wolters (2000–2001: 579–88), the metal employed, copper and silver, cannot be argued to be a payment to the veterans, as gold and silver were the preferred metal for the remuneration of the soldiers. But Cebrián Sánchez (2013: 87) differs that the use of said materials might signal a need of coinage for the upfront payment for infrastructure and the salary of the military elements being discharged. *Denarii* and *quinarii* would be minted for that purpose, meanwhile *asses* and *dupondii*, coinage with a lower proportion of metal and therefore value, were minted for the daily economic transactions. On the other hand, Blázquez Cerrato (2010: 425) argued that a distribution map could be drawn within the Iberian Peninsula, in which *asses* were more commonly found in northern Spain, whereas *denarii, quinarii* and *dupondii* were evenly distributed throughout *Lusitania* and *Baetica*. Nevertheless, the majority of bronze and copper coins found in northwestern Iberia were located around military encampments (Blázquez Cerrato, 1992: 285; 2005: 78; García-Bellido, 2013: 220ff). However, Carisius' Series 'B' tends to gather most of the authors' approval; I include myself in this belief that the military expenditure was favoured by the mineral richness in gold[15], silver and copper of the recently incorporated areas (Volk, 1997: 59–90; Trillmich, 2018: 92–97).

6.2 Indigenous (?) themes as a sense of belonging

Although there is no 'indigenous' iconography *per se*, some of the motifs employed on the dies refer to the idiosyncrasies of the colonists. Therefore, despite the lack of a Roman past, the colonists followed the pre-Roman custom of minting the image of local deities on the reverse (Cebrián Sánchez, 2013: 92). Thus, by associating local deities to the new Roman colony, the veterans were using what I have called 'indigenous' iconography as a means of "Romanisation".

[15] By the first half of the 1st century AD Domergue (1990) estimated a production of 6.5 metric tonnes of gold a year in the north-west region of *Hispania*, including *Lusitania* (Volk, 1997: 61).



Photo: Museo Arqueológico Nacional (Madrid)
Inventory: 1954/55/-1
Other publications: CNH (1994), 211, nº 2
Type/Material: *Denarius* (Ag)
Chronology: 175–126 BC (Bolskan, Huesca, Spain)
Obverse: Bearded head, r. ([Iberian characters] BON)
Reverse: Horseman holding a spear, r. With inscription below ([Iberian characters] BOLSKAN)

Table 9. Motif of the horseman. Photo: MAN, image: Carlos Cáceres-Puerto.

Roman-ness was imposed by religion and urbanism, but was also enforced by military superiority (Revell, 2009: 191). The Province of *Lusitania* never had a permanent military unit garrisoned within its borders, although the mid Guadiana Valley was colonised by discharged soldiers from the Augustan army in northern *Hispania*. However, the presence of veterans never played an important role within the Augustan agenda in this area of *Hispania*. The military background of the veterans might have influenced Augustus to settle them in the mid Guadiana Valley, but it was never a main factor. As a matter of fact, during the reign of Tiberius the military background of the first settlers had probably died out, since most of the first colonists had probably passed, and those still in military service were sent to the *limes* in *Germania* under Augustus. Coinage highly praises motifs of the army and the founding legions, connecting the military past of the veterans to the territory. Coinage and the military background of the colonists of *Colonia Augusta Emerita* suggest a certain degree of improvisation, arbitrariness, and adaptation.

The iconography of the first issues of Publius Carisius has been questioned, as I have pointed out before, considering whether they belong to a Republican or an Imperial context. I tend to agree with both, although I would catalogue them as ‘Augustan’ due to the prevalence of elements from both sides

of the scale, but a key component of furthermost importance is the *auctoritas* under which they were coined. Despite this, the Republican component seems stronger at first sight, as they share similarities with Roman issues in *Hispania* after the Second Punic War. As a matter of fact, García-Bellido and Blázquez Cerrato (2001a: 29–30) catalogue coinage between *Sertorius* and Augustus, at least until 23 BC, as 'transitional'.



Photo: Museo Nacional de Arte Romano (Mérida)
Inventory: CE31631
Other publications: RPC 1/6
Type/Material: *Aes* (CuSn)
Chronology: 27–2 BC
Obverse: Head of river-goddess spitting water, r. ([AVGVSTA] EMERI[TA])
Reverse: Priest ploughing, l. (AV[G])

Table 10. River-goddess. Photo: MNAR, image: Carlos Cáceres-Puerto.

After this, the pre-Roman symbology disappeared from coinage, substituted by Latin characters and symbols used to spread the Roman propaganda approved by the Roman senate. Minting on the Iberian Peninsula upon the arrival of the Romans followed the motif of the horseman (table 9) (Blázquez Cerrato, 2011: 981); whereas, if it follows the patterns of other regions, it does not comply with the iconography in coinage related to *Emerita*. The southern part of *Hispania*, however, the image of a female figure is the paradigm of iconography, which is significant as Series 3, 4 and 5 copy this pattern with the figure of a female river-goddess (table 10) attributed to *Ataecina/Proserpina* (RPC I/6). Some scholars (Beltrán, 1976), however, argue this figure refers to the hydraulic works at the incipient colony.

However short-lived the mint in *Emerita* was in existence (25 BC–AD 37), the division into three minting process is very noticeable in the iconographical

motifs. Series 1 and 2 promulgate the Roman military past and the victory against the *Cantabri* as the foundational myth, Series 3–5 portray indigenous patterns as a sense of belonging to the land they are inhabiting, whereas Series 6–12 claim the *Romanitas* and the adhesion and loyalty to the figure of the emperor (Cebrián Sánchez, 2005: 836).

Moreover, the traditional numismatic approach has been above the historical components which form the ethos of a community, whereas this is not always the case. For instance, the usage of military image is greater between AD 235 and AD 476 than in the Early Empire, when the military success ratio was higher. Therefore, the iconography was carefully selected by the ruling elite when the past of the community was non-existent or scarcely glorious. This might explain why the first issues minted in *Emerita* reflected a desire of merging with the pre-Roman part of the territory, whether there was a consistent presence of indigenous communities within the area of *Emerita*. This phenomenon differs from the state policy and resembles the Romantic movement in the 19th century, as it seems the settlers wanted to achieve a sense of identity by emulating certain iconographical motifs. Said themes, well studied by different scholars (Gil Farrés, 1946; Beltrán, 1953; 1976; 1978; Burnett, Amandry and Ripollés, 1992; Blázquez Cerrato, 1992; 2005; 2011; Blázquez Cerrato and Gómez Barreiro, 2006; García-Bellido and Blázquez Cerrato, 2011; Cebrián Sánchez 2006; 2013; Trillmich, 2018), do utilise a characteristic iconography and symbolism that does not appear in any other part of the Empire as an ensemble. García-Bellido and Blázquez Cerrato (2001a: 33) do believe, as has been mentioned, that the disappearance of the mints in *Lusitania* was related to the withdrawal of the troops to *Germania* under Augustus and *Tiberius*. Therefore, the military component, essential for the creation of said mints, was no longer present.

Besides the *caetra*-like models minted by Carisius, the most significant iconography is present on Series 3, 4 and 5, as the combination of pre-Roman deities and the Augustan portrait becomes the standard image until after 2 BC. Though some scholars have alleged that the depiction of a river-goddess is, in fact, a representation of the hydraulic construction being developed in the early stages of the colony (Beltrán, 1976). Therefore, RPC I/11 (table 6) would not be a representation of the river *Anas*, as the majority of scholars have agreed.

However, the resemblance is very clear in other iconographical representations, as the ‘Dintel de los Ríos’ — depicted in figure 44 — shows.





Photo: Museo Nacional de Arte Romano (Mérida)
Inventory: CE36396
Other publications: RIC I (Second Ed.) Augustus 1a
Type/Material: *Quinarii* (Ag)
Chronology: 25–23 BC
Obverse: Bare head of Augustus, r. (AVGVST)
Reverse:’ Victory standing crowning a trophy. Base formed by dagger and curved sword (P CARISI LEG)

Table 11. Victory placing wreath on trophy. Photo: MNAR, image: Carlos Cáceres-Puerto.

As the majority of authors agree, the first two issues originated in Rome, as they were ordered by Augustus. Hence, Series 3 to 12 were minted under the command of the local senate. The typology of images is very diverse, which makes *Augusta Emerita* a unique case for study for coinage in *Hispania*. Despite the variety, there are common factors with other Roman foundations in *Hispania*, like *Colonia Patricia* (Córdoba)*, Acci* (Guadix, Granada) *and Caesaraugusta* (Zaragoza). The element of the plough (RPC I/5/6, RPC I/6, RPC I/11) depicted on coins can be traced back to Rome itself (table 10) (Cebrián Sánchez, 2005: 836). Series 1 and 2 were issued by Carisius, then Series 3, 4 and 5 were minted by the local or provincial *senatus* following previous Republican standards but adding the new Augustan coinage policy. Although local issues share the poor quality of the *caetra*, they do not copy Roman motifs until 2 BC (Cebrián Sánchez, 2012).





Photo: American Numismatic Society
Inventory: -
Other publications: RIC I (Second Ed.) Augustus 2a
Type/Material: *Denarii* (Ag)
Chronology: 25–23 BC
Obverse: Bare head of Augustus, r. (IMP[ERATOR] CAESAR AVGVST[VS])
Reverse: Round shield with decorations, a spear-head to its left, a curved sword to its right (P[VBLIVS] CARISIVS LEG[ATVS] PRO PR[AETORE])

Table 12. Falcata. Photo: ANS, image: Carlos Cáceres-Puerto.

In Carisius' series, the most significant iconographical motif, the Victory (table 11), is placing a laurel wreath atop the panoply on both *quinarii* and *denarii* (RIC I/1a). The spear, falcata and *caetra* (table 7) depicted may correspond to the Cantabrian tribes, although when they were minted, the war had barely started. Hence Cebrián Sánchez (2013: 24) suggesting the possibility of a local deity embedded within the military symbology. However, these warlike depictions would evoke not only the existence but also the presence and a military process towards local indigenous groups. Such a historical event is not mentioned in classical sources, and we have not yet documented it in the archaeological record. Ancient sources do refer to some indigenous communities included in the centuriation process as *'incolae'* -indigenous people included in the centuriation process- (Strabo, III. 2. 5; Edmondson, 2011: 32-33), which would suggest a peaceful transition/"Romanisation" of this native populations in the mid Guadiana Valley. However, as I mentioned in Chapter 1.3, the lack of evidence for a violent conflict does not discard the possibility of one.

Besides, as has been broadly discussed, these depictions might portray an offering to the local deities by Augustus. The typology of weapons, moreover, is unique in the Roman conquest. As a matter of fact, the falcata (table 12) was not characteristic of northern Iberia, although it might have been used as a

Hispanic symbol due to the familiarity of the Roman people with the object (Cebrián Sánchez, 2013: 87). Therefore, the iconography of Series 1 and 2 were the precedent for the motifs used after the campaign in *Germania* by Augustus. Trillmich (1990; 2018) and Zanker (1992) argued that the Augustan reform also affected iconography, with the discourse: 'war, victory and peace'. This can also be observed with the example of the theme of the *aquila* surrounded by *signa* (table 13), with the name of the founding legions of the colony (RPC I/16). This supposes the only representation of the founding legions in coinage in *Emerita*. The obverse of the coin depicted in table 13 shows a lark – *Alaudae* in Latin –, in clear reference to one of the legions involved in the settlement process – *Legio V Alaudae* –.



Photo: Museo Nacional de Arte Romano (Mérida)
Inventory: CE30792
Other publications: RPC 1/16
Type/Material: (CuSn)
Chronology: 2 BC
Obverse: Laureate head, r. (PERM CAES AV[G])
Reverse: *Aquila* amongst two *signa* (CO[LONIA] A[VGVSTA] E[MERITA] / LEG[IO] V X)

Table 13. *Aquila*. Photo: MNAR, image: Carlos Cáceres-Puerto.

A similar example can be observed within the theme of the spoils of war. This depicts a trophy with a full armour display standing above a mound of shields, surrounded by captives kneeling as a sign of defeat (RIC I/4a (table 15) for the spoils of war without captives; RIC I/6 (table 14) for the depiction with captives). The resemblance with eastern European motifs is substantial, as RIC 427/1 and RIC 452/5, for instance, show. Some scholars have argued the symbology beneath the ensemble formed by the shield, helmet and sword might represent the emblem of the *Cantabri* (Cebrián, 2013: 99–100). However, it could

also represent a legionnaire emblem for *Legio V Alaudae* or *Legio X Geminae* (RIC I/2a).

Traditional paradigm of being Roman is often associated to free, male, and wealthy individuals of the native communities incorporated into the Roman political sphere (Revell, 2009: 189). However, coinage involves and incorporates a wider spectrum of the provincial, and imperial, society. Thus, the availability of currency, even the lowest weighs and values, to the general public became a powerful tool of domain and "Romanisation". Those controlling the minting system also controlled the official discourse, the propaganda. Augustus, alongside his subordinates in the new colonies in *Hispania*, achieved a cohesive iconographical policy to create a sense of attachment to the territory. Coinage, especially the first six series of *Emerita*, would act as a propagandistic tool towards the recently established colony. The union of both Iron Age deities and members of the Roman pantheon in coinage facilitated the incorporation of the native communities from the mid Guadiana Valley to the new Roman political and social landscape. It supposed a brilliant example of syncretism in a seemingly vacant area of Iron Age-Roman interactions. This "indigenous" element I referred to at the beginning of this chapter, allowed the native inhabitants and the Roman colonists a sense of belonging, as their religious ethos was intertwined in the iconographical motifs on the coins they used on a daily basis. In this case, the theory of Cebrián (2013) regarding the weapons symbolising a local deity has another interpretation. In this context, the spoils of war might be honouring a local deity, which is a recurrent phenomenon in the area. The main *incognita* is which deity: the most probable one is *Ataecina*, although she was represented with different symbology (García-Bellido, 1991; Cáceres-Puerto, 2019).

The bearded figure (RPC I/11) is clearly a representation of a water deity, most likely the river *Anas*, as can be observed on the so-called 'Dintel de los Ríos' (fig. 44) (Canto, Bejarano, Palma, 1997: 247–94). We can discard the outdated theory of the resemblance of a hydraulic construction as the factions of the figure are very similar to the aforementioned lintel.



Figure 44. RPC 1/11 (obverse) and Dintel de los Ríos. Photo: MNAR, image: Carlos Cáceres-Puerto.

Beltrán (1976) argued that the image of a bearded man spitting water ought to be a praise of the aqueducts that were being built in the colony. He suggested that by 12 BC the construction works might have been advanced, which contradicts Grant (1969), who's hypothesis considered the river *Anas* as the most probable depiction on the obverses. Despite the date of Serie 5 (25–18 BC) and its correlation with the construction works, I tend to agree with Trillmich and García-Bellido, as the local deity fits more into this specific context. Series 3 and 4 could never surpass the mark of 12 BC, as far as dies and the study of the series indicate. Some scholars have argued that the ear of the bearded man directs the debate towards a Silenus, although Trillmich is convinced that the image depicted on some coins is of reed canes (Trillmich, 2018: 95). The author compares the canes to the coins in Rome or Virgil's texts mentioning the Tiber surrounded by this plant in *Ars Amatoria*. Trillmich does not agree with M. P. García-Bellido and her considerations of the image depicting *Ataecina Turbrigensis* (Trillmich, 2018: 96).





Photo: Museo Nacional de Arte Romano (Mérida)
Inventory: CE37431
Other publications: RPC 1/4a
Type/Material: *Denarii* (Ag)
Chronology: 25–23 BC
Obverse: Bare head of Augustus, l. (IMP[ERATOR] CAESAR AVGVSTVS)
Reverse: Trophy of helmets, javelins, shields on heap of shields, spears and javelins. (P[VBLIVS] CARISIVS LEG[ATVS] PRO PR[AETORE])

Table 14. Spoils of war without captives. Photo: MNAR, image: Carlos Cáceres-Puerto.

However, García-Bellido (1995) does see a clear pattern between the feminine figure depicted in Series 4 and the local deity *Feroniae*, who was represented as *Proserpina* by the Romans but can also be seen to be referred to as *Ataecina* (fig. 42). García-Bellido (1991) and Cebrián (2013: 95–96) also mention the possibility that the spoils of war in Series 1 and 2 are, in fact, a votive offering made in name of Augustus to the local deities, hence the feminine figure's characterisation as a nymph. Therefore, the use of pre-Roman ideology and religion ought to mean a substantial effort by the Augustan propaganda campaign to signify the new political order within previous *status quo*, as it might have been observed as the substitution of the native figure of the horseman in norther Iberia or the figure of the female deity in southern Iberia[16]. This phenomenon is clearly observed in the coin depicting a feminine figure, a river goddess spitting water on the obverse, with the legend 'AVGVSTA EMERITA', and a priest ploughing, with the legend 'PERM CAES(A) AVG' on the reverse. Hence, if the river-goddess does refer to a local deity, it constitutes tangible evidence of the correlation established among Augustus and the territory (RPC 1/5/5, RPC 1/5/6, RPC 1/6).

[16] See more about the figure of the horseman in Blázquez Cerrato, 2011: 981.




Photo: British Museum
Inventory: -
Other publications: RIC I (Second Ed.) Augustus 6
Type/Material: *Denarii* (CuSn)
Chronology: 25–23 BC
Obverse: Bare head of Augustus, r. (IMP[ERATOR] CAESAR AVGVST[VS])
Reverse: Trophy resting over the head of a kneeling captive (P[VBLIVS] CARISIVS LEG[ATVS] PRO PR[AETORE])

Table 15. Spoils of war with captives. Photo: British Museum, image: Carlos Cáceres-Puerto.

Besides foundational motifs, Augustan propaganda played a crucial role in the minting of *Augusta Emerita*, almost to perform the colony's rightful place within the Roman *Orbis*. Instead of portraying the lack of indigenous past of the colony, the settlers reshaped the iconographic discourse, enhancing the local deities and relating themselves to them, as with Augustus, Venus, and the *Aeneid*, which compares strikingly to the Series 3–5 of *Emerita.* The iconographical themes are the tangible evidence that *Augusta Emerita* descends from Augustus himself, and of him from the Divine (Burnett *et alii*, 1992). Therefore, the importance of the first issues of *Emerita*, beside their propagandistic and iconographical assets, was the perception by the locals as a safe-conduct towards *Romanitas*. The early alien imitations of coinage from *Emerita* might be related to this social phenomenon, as the fake *quinarius* found in the province of Cáceres might imply (Martínez Chico, 2015: 15–17) a self-mechanism of assimilation. The combination of such a variety of themes within Augustus' *auctoritas* was a manifestation of local patriotism from the colonial government first and the provincial elites afterwards, without forgetting the permit was granted by the emperor himself (Trillmich, 2018: 94).

The immediacy of coinage also facilitated the Romanising role. Material culture like *terra sigillata*, oil lamps, and glass vessels, which are widely present

in my database of funerary contexts I analysed in Chapter 9, did imitate Italic models. But the arrival of those artefacts was not sudden. Trading routes and networks took time to establish themselves, even if we are talking about to legionary craftsmen. Currency, whether it was minted in the colony or using mobile mints reached the veterans faster. This early Transitional coinage was later circulated by the colonists in their daily economical transactions.

Material culture was the physical embodiment of a shared identity, and coinage played a main role in creating and shaping this common ethos. Coinage played a crucial role in creating a sense of identity within the communities of the newly incorporated territories to the Roman Empire, with motifs and themes evoking common beliefs to those involved, both the colonised and the colonists. Augustus was a master in taking advantage of symbology to create shared identities among the Romans and the incorporated Iron Age communities. Motifs like the crocodile with the legend AEGYPTO CAPTA (RIC I 545), syncretic motifs combining Roman and local deities, or the motif of the galley to commemorate his victory in *Actium* (RRC unnumbered), are excellent examples of common, recognisable, symbols widespread over Roman territories, and beyond. These motifs shaped the “Romanisation” process towards the creation of hybrid, shared identities: Augustus, *Romanitas*, the Empire.

7 The Lusitanian hub: suburban roads and lesser paths to and from *Augusta Emerita*, and peripheral settlements

Colonia Augusta Emerita has been studied with the preconceived assumption that it was founded in the chosen location because of its strategical importance, due to its situation as a crossroads connecting the Northern Plateau with the Guadalquivir Valley in the south of Iberia. It is true, however, that some scholars have studied the pre-existent communication ways and advantageous geographical features, like fords, around the Lusitanian capital (Álvarez Martínez, 1981; 2004; Canto de Gregorio, 1989; Alba Calzado, 1997b: 397–424; Sánchez Barrero, 2008: 635; 2010; Rodríguez Marín, 2012). Although it cannot be denied that the crucial location was a reason for establishment, further questions appear regarding other possible places. As I have mentioned in Chapters 2 and 3, there was already an established and flourishing colony 30 miles eastwards at *Metellinum* (Medellín, Badajoz) (Edmondson, 2011), with a functioning paved road connecting *Colonia Patricia/Corduba* (Córdoba) with *Norba Caesarina* (Cáceres) and the Northern Plateau (fig. 2). *Metellinum* also counted on a ford to cross the River *Anas* as well as a bridge, whose foundations are the only tangible evidence nowadays. The bridge crossing the Guadiana in *Metellinum* (fig. 45) has been identified as the location of the current bridge, dating back to the 17th century, though some scholars are not too confident of this assumption as they claim the foundations of the bridge seem too modern to be Roman. According to Rodríguez Marín (2012: 415), the foundation of *Colonia Augusta Emerita* was set to change the urban — and the rural — order of Midwest *Hispania*.



Figure 45. 17th century bridge. Medellín (Badajoz, Spain). Photo: Turismo de Extremadura.

Further explanation can be searched for in the foundation of nearby colonial settlements, as mentioned above. Traditionally, it was believed that *Norba Caesarina* (Cáceres) was established in 75 BC, thou there are different theories regarding the founder and the year of foundation. Hübner himself (1899: 153), for instance, assumed that it was a Caesarean foundation, as was clearly pointed out by the *cognomen* '*Caesarina*'. Floriano Cumbreño (1931), nonetheless, thought that it was a much later foundation. He argued that it was established by L. Cornelius Barbo in ca. 20 BC, as his name does appear on an inscription, which bestows the honour of *patronus* upon Barbo himself. The most widespread theory was promulgated by García y Bellido (1966b: 280–84) as C. Norbanus Flaccus, proconsul of *Hispania Ulterior* among 36–34 BC was well connected with Augustus, and he held magistracies in the Iberian Peninsula. Finally, Callejo Serrano (1981: 48), argued that as the remains of the colony were and still are unexcavated, and the evidence is scarce; the colony was founded somewhere between 43–27 BC by an unknown person. Regardless of the chronology, all evidence indicates an earlier chronology than *Emerita*, as does the case of *Metellinum*. The latter colony is clearer as it was *Q. Caecilius Metellus Pius* who founded the settlement in 79 BC. Therefore, the change of location for the new Augustan colony would have been a bold statement of change within the

province and of the Roman ethos as a new emperor seized power (fig. 46). The shifting of territorial power in the mid Guadiana Valley would imply an assertion of power by the new Roman emperor in the provinces, which would be followed by a territorial reorganisation in the shape of a new province: *Lusitania*.

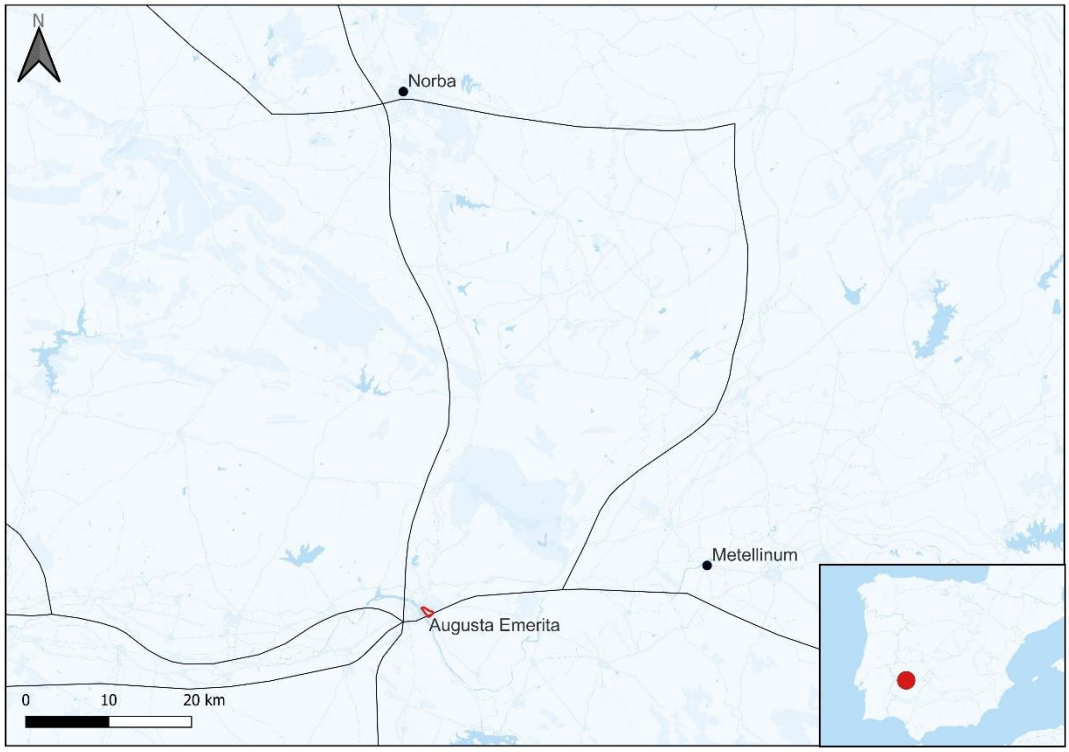


Figure 46. Location of *Norba* and *Metellinum* in relation to *Emerita*. Map: Carlos Cáceres-Puerto.

However, *Metellinum* had been, since its foundation, the main settlement in the communication system of the Guadiana basin until the foundation of *Emerita* (Rodríguez Martín, 2012: 420). *Metellinum* was a late Republican refoundation of the pre-Roman settlement *Conisturgis*, which, alongside *Dipo* –western *Emerita*– (fig. 2), formed an east-west communication axis following the course of the Guadiana River, as mentioned in Chapter 4.2.

7.1 Road grid as an element of territorial cohesion

As it has been discussed in chapter 4.2, prior to the Roman occupation of the Lusitanian country, there were clear pathways through the territory. However, those routes did not possess the monumentality and an ulterior motive of perpetuity (Sánchez Barrero, 2010). Upon the arrival of the Romans during the

Second Punic War, those itineraries were already shaped, and they considered the paths too widespread throughout the area. This can be seen in the *miliarium* of Q. Fabius Labeo (CIL I 1485) from the 2nd century BC, signalling the Roman action in the Ebro Valley (Álvarez Martínez and Nogales Basarrate, 2004: 255–56). The indigenous routes followed faults, enabling them to cross through the mountainous area south of the *Anas* River and the fluvial courses. The Romans mostly used the same routes with the only difference being the setting of those paths in stone or mortar. Regardless of any pre-existent Roman settlement in the location occupied by the Augustan colony (Canto, 1989), the assimilation of those routes by the Romans until the end of the 2nd century BC. However, besides the main axis of communication, lesser paths would have organised the territory prior to the Roman occupation, as has been discussed in Chapter 7.1. Hence, the pre-Roman settlements would been founded nearby sources of water, and main communication routes, albeit some of those routes have not thrived.

The foundation of *Emerita* had a crucial role in the road mapping of the province. Ancient sources mention roads, often blended with a pre-Roman background, but this was not applicable to all cases. Before 25 BC the location of *Emerita* was already a crossing point (Jiménez Ávila and Sánchez Barrero, 2001; Almagro-Gorbea, 2011), as lack of large geographical features made so that the River *Anas* was only a problem when the river flooded during the final weeks of winter and at the beginning of spring a few times a year. The strategic location can be demonstrated from Chalcolithic period with the settlement found on Calvary Hill (Barrientos Vera, 2002: 135–171) and during Bronze Age with a later settlement on the site of Morerías, on the southern side of the Roman colony, parallel to the course of the river (Jiménez Ávila and Barrientos Vera, 1997: 223–44; Alba Calzado, 1997a: 285–316). The latter was an outpost overlooking the *Anas* River, while the position of the site on Calvary Hill (fig. 9) allowed control of the crossing of both the *Anas* and the *Barraeca* (Sánchez Barrero, 2008: 635). Both pre-Roman fords were subsequently cemented when the two bridges over the *Anas* and the bridge over the *Barraeca* were constructed, to which we should add the small bridge of Alcantarilla (fig. 67), consolidating a westwards route towards *Olisipo*.

Therefore, the main route in the area since Neolithic times, at least, shaped the territory of the colony and thus *Emerita*'s *ager publicus* as well. Even though it was the capital of the province, during the first stages of the history of the colony it would also serve as an enlarged *mansio,* connecting the recently conquered area of Asturias and Cantabria in northern Iberia with the province of *Baetica* in the south. *Emerita* became the most important crossroad in the Iberian Peninsula (Álvarez Martínez and Nogales Basarrate, 2004), with nine major roads heading into the colony, starting in *Emerita,* or having the Augustan colony as a main stopover, as can be observed in the itineraries listed further on in this chapter. Following the popular saying, in this case, all roads (fig. 47) lead to *Emerita* rather than to Rome, in the Iberian scenario.



Figure 47. Roman roads in the Iberian Peninsula, minor roads (red) and major roads (blue). Map: Carlos Cáceres-Puerto after McCormick *et alii*, 2013.

The roads inside the perimeter of the walled enclosure have been widely studied over the past decades, especially after the excavations during the late 1990s and the first decade of the 2000s. Most of the scholars have dedicated their time to the study of the roads inside the walled enclosure. Thus, Mélida

(1915: 22) and Álvarez Sáenz de Buruaga (1982: 310), for instance, described the roads surrounding the theatre and amphitheatre complex, while Macías (1913; 1929) and Floriano (1944: 173) dedicated more space to the study of the roads in other parts of the colony. Since the late 1990s, numerous excavations have uncovered patches of the road grid of the colony in various places, allowing us to complete the empty spaces of the urban street layout of *Emerita* gradually but steadily.

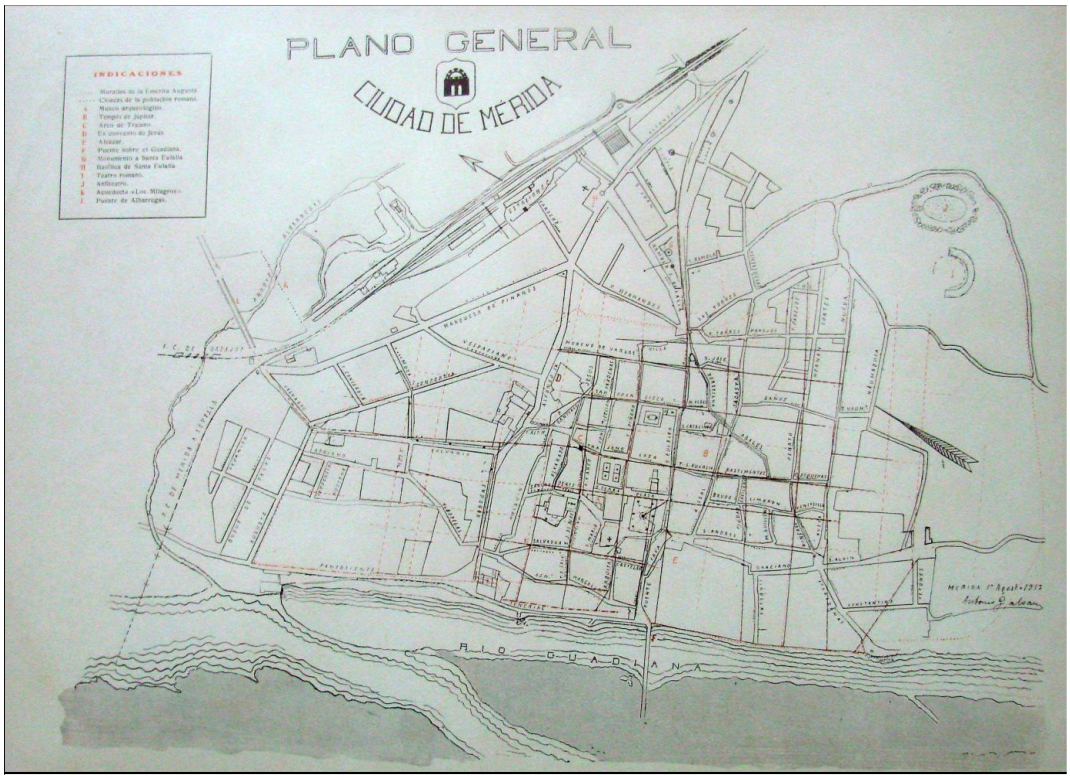


Figure 48. Map of *Augusta Emerita*'s *cloaca* by Antonio Galván. Image: Maximiliano Macías, 1913.

Emerita's grid was easily mapped by following the sewage system of the Roman colony, which was published by Maximiliano Macías in 1913. A relatively easy task since some of the Roman sewage system is still in use nowadays (figs. 48, and 49). Although the orientation of some of those roads was slightly different when excavated, thus following the orography of *Emerita*. It is the same case for the walls of the colony. Miguel Alba Calzado (2001: 401) established, following the work of several researchers, García y Bellido (1966a: 3–9) and Álvarez Martínez (1981) among them, an estimation of the size of the road grid inside the city walls. He set 20km of paved roads inside the walls divided into a grid of 12 x

18 on a northwest-southeast by northeast-southwest axis. In the map (fig. 48), it is noticeable that the line of the sewage system follows the dotted red line.



Figure 49. Example of a *cloaca* still in use. Dike next to the Roman bridge over the River Guadiana. Photo: Carlos Cáceres-Puerto.

The suburban space entails a merger of the *urbs* and *ager*, a transitional buffer zone combining the urban living space with the exploitational element intrinsically related to the countryside (Fernández Vega, 1994: Sánchez Barrero and Marín Gomes-Nieves, 2000). It features both the urban and the rural element but with the impossibility of classifying them as either of the above. In the suburban habitat, scattered living spaces cohabitate with funerary-oriented spaces and industrial farming facilities. It is not urban, but neither is it entirely rural either. In the *Emerita* context, this buffer zone can be set between the walls to the end of the funerary space, two miles away from the *pomerium*.

The roads were the bridgehead of *Romanitas*; they allowed the swift propagation of the 'Roman' concept throughout conquered land, and the determination of the emperor is noticeable. Along the *Via XXIV*, traditionally referred as 'Vía de la Plata', there is no *milliarium* with a reference to the Flavian

emperors, evidence that the preceding dynasty kept the road in perfect maintenance order (Blázquez Martínez, 2002).

The location as a crossroad has been the cornerstone argument for scholars like Canto de Gregorio (1987; 289–98; 1989: 149–206; 2017: 341–92), who argued for the prior existence of a Caesarean settlement controlling the crossing of the river. Even though the existence of this settlement cannot be dismissed, unlike the pre-Roman sites found in Morerías and Calvary Hill, the archaeological record is non-existent for this matter. Other scholars, like Sánchez Barrero (2008), see the lack of evidence from the Caesarean period fortlet as proof that the main interest, path-wise, for the Romans was the northwest-southeast axis of the *Norba-Metellinum-Corduba*. This route, cemented by Augustus and Tiberius with the *Via XI* in the Antonine Itinerary (Roldán Hervás and Caballero Casado, 2014), was the main way in and out of *Baetica* since Republican times, and it coincidentally was one of the earlier areas to be occupied with funerary evidence after the foundation of *Emerita*.

In the vicinity of the village of Alange, southern Mérida, a similar phenomenon occurs. On the top of a hill, whose occupation has been documented prior the Roman conquest, the two river crossings can be controlled (Sánchez Barrero, 2008: 636).

Hence, I can differentiate two main axes of communication (fig. 50) in *Lusitania*, with *Augusta Emerita* as its centre:

- The ‘A’ axis, which is a line of communication between the province of *Baetica* and the hinterlands of the peninsula: the areas of *Salmantica* (Salamanca), *Capara* (Cáparra) and *Norba* (Cáceres). This is the area that was fully Romanised from the beginning, with major inhabited urban centres. On the opposite side of this area is the northeastern part, the *Vaccei* area, which is scarcely populated and poorly integrated in the new Roman scheme from the starting point, with some cores resisting the assimilation.
- The ‘B’ axis: the east-west axis. It links the area of *Metellinum* (Medellín) and *Turgallium* (Trujillo) and provides access to older Roman cities like *Toletum* (Toledo), in *Tarraconensis*, or *Castulo*

(Linares) and *Corduba* (Córdoba) in *Baetica*, along with the Atlantic coast. It communicates with the hinterland and the Lusitanian harbour, *Olisipo* (Lisbon), and the main settlements of *Evoracum* (Évora), *Pax Iulia* (Beja) and *Scallabis* (Santarem).

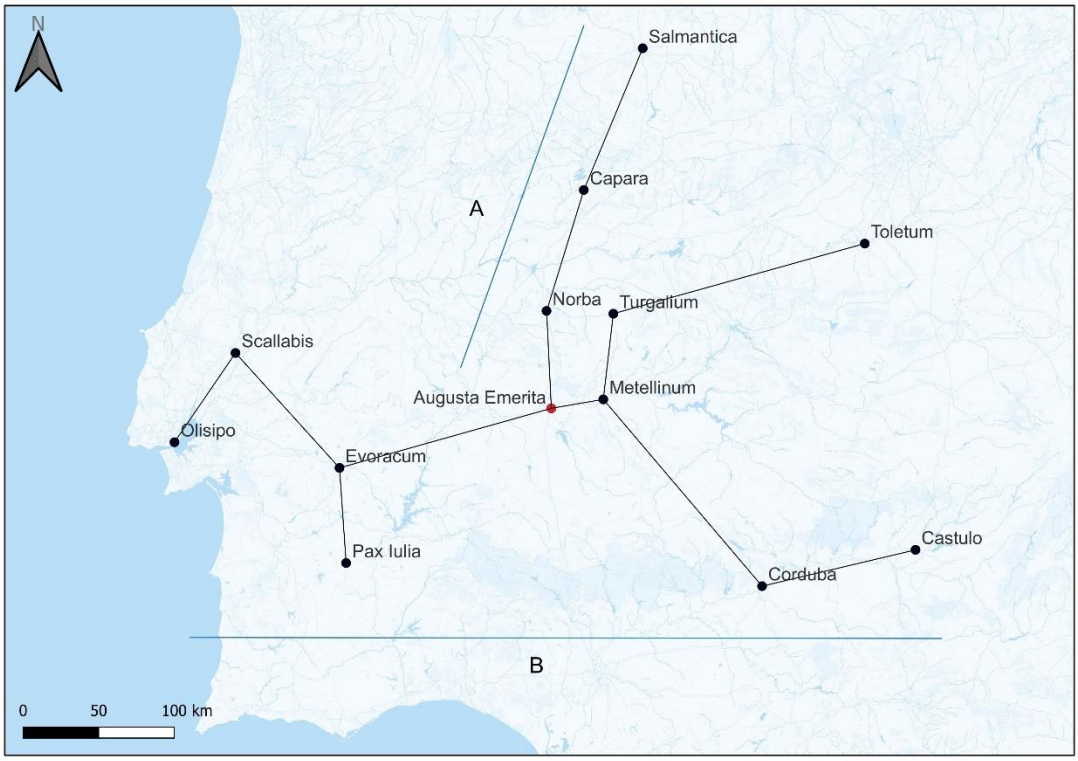


Figure 50. Main axis of communication in *Lusitania*. Map: Carlos Cáceres-Puerto.

Since the publication of Roldán Hervás thesis project in 1971, the model of study of the Roman roads in the Iberian Peninsula follows his research, although his study only referred to the *Via XXIV* (Abásolo, 1994: 57). It entailed the first time an academic work compiled ancient sources, maps, and aerial photography. It is not rare that Roldán Hervás did include in his PhD (1971) *Colonia Augusta* Emerita, as according to both the archaeological record and classical sources, like the Antonine Itinerary, nine major roads traversed the *Territorium Emeritensis*. Different scholars have studied the roads, cataloguing them in various ways (Roldán Hervás 1973; Sánchez Barrero and Marín Gómez-Nieves, 2000; Sánchez Barrero, 2010; Rodríguez Martín, 2012; Roldán Hervás and Caballero Casado, 2014). I will follow the numeration system given by the Antonine Itinerary.

For the study of the roads, I have used aerial photography, and LiDAR images. The aerial photographs mostly belong to the USAF aerial coverage from 1956, which was carried over the entire Iberian Peninsula by the US Navy. These photographs, with a 1:30,000 scale, have much better definition than the 1946 Aerial Coverage photographs, where the scale fluctuates between 1:40,000 and 1:44,000 (Sillières, 1990: 412). However, the Series A from 1946, belonging to the Spanish National Geographic Institute (IGN) as well as the 1956 Series B, are better sources for understanding the centuriation process. Following Sillières' work (1990: 412), focussed mainly on Andalucía, the mid-20th-century aerial photography is ideal for research on the landscape, as in neither Andalucía nor Extremadura have there been major construction projects in the countryside. On a more local scale, aerial photography is a great manner of studying the *Via XI*, as it was later destroyed with the Badajoz Plan a decade later, during the late 1950s and early 1960s. Besides aerial photography, both old and new, owned as I mentioned by the Instituto Geográfico Nacional, I used the archaeological reports by the Consortium of Mérida for the suburban roads and specialised monographies for the road grids of Iberia.

I have also used LiDAR (laser imaging, detection and ranging) images in the environs of *Colonia Augusta Emerita* to elucidate the presence of the roads where the historiography of *Emerita* has traditionally located them. However, the use of LiDAR is not always possible, as figure 55 demonstrates. Even though the outskirts of Mérida have not been substantially altered due to construction in the past, Mérida experienced a development surge during the second half of the 20th century. Thus, rendering LiDAR images for the desired stretches of suburban roads fruitless. As it can be seen in figure 51, I have selected an area covering the *pomerium* of the Augustan colony, and different areas where I considered the roads to be most visible. Nevertheless, in some places the LiDAR imagery was futile, since the outskirts of Mérida have been heavily modified in the last 50 years, albeit some parts were still visible, providing interesting data concerning how the communication nodes were shaped around *Emerita*.

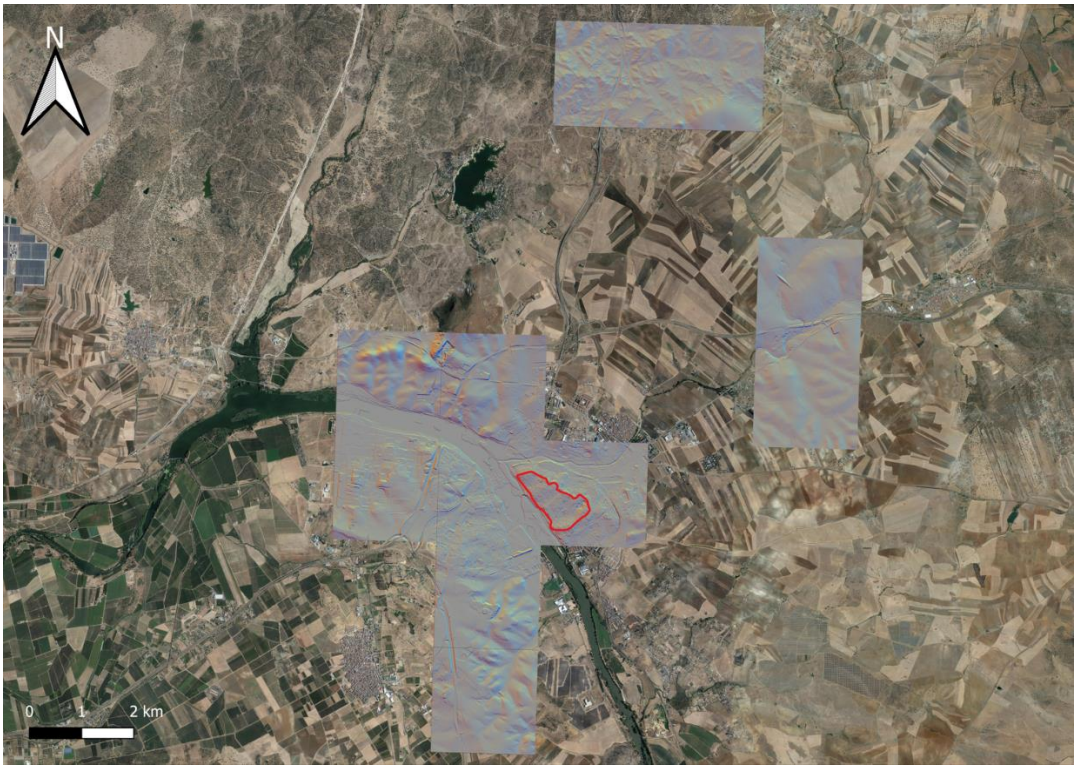


Figure 51. LiDAR images of the suburban spaces of *Emerita*. Map: Carlos Cáceres-Puerto.

7.1.1 *Via X, Item ab Hispali Emeritam CLXII MP.*

VIA X			
Wess.	***Mansio***	**Distance**	**Variations**
414,1	*Item ab Hispali Emeritam*	m.p. CLXII	CLXI
2	*Carmone*	m.p. XXII	XXVII
3	*Obucula*	m.p. XX	
4	*Astigi*	m.p. XV	
5	*Celti*	m.p. XXXVII	
415,1	*Regiana*	m.p. XLIIII	XLIII
2	*Emerita*	m.p. XXIIII	

Table 16. *Mansiones* on the *Via X*. Carlos Cáceres-Puerto after Roldán Hervás, 1973; Roldán Hervás and Caballero Casado, 2014.

This road corresponds to an indirect way of getting to *Hispalis* (Sevilla) from *Emerita* (table 16). It forms a union of three branches corresponding to two roads. The route runs from *Hispalis* to *Astigi* (Écija, Sevilla), the capital of a *conventus* in the province of *Baetica* and is also a section of *Via Augusta*. From *Astigi* it goes towards *Emerita*, with a north-east direction, crossing through *mansio Perceiana* and joining the second road coming up north from *Italica*, and enters the city passing over the bridge over the River Guadiana.

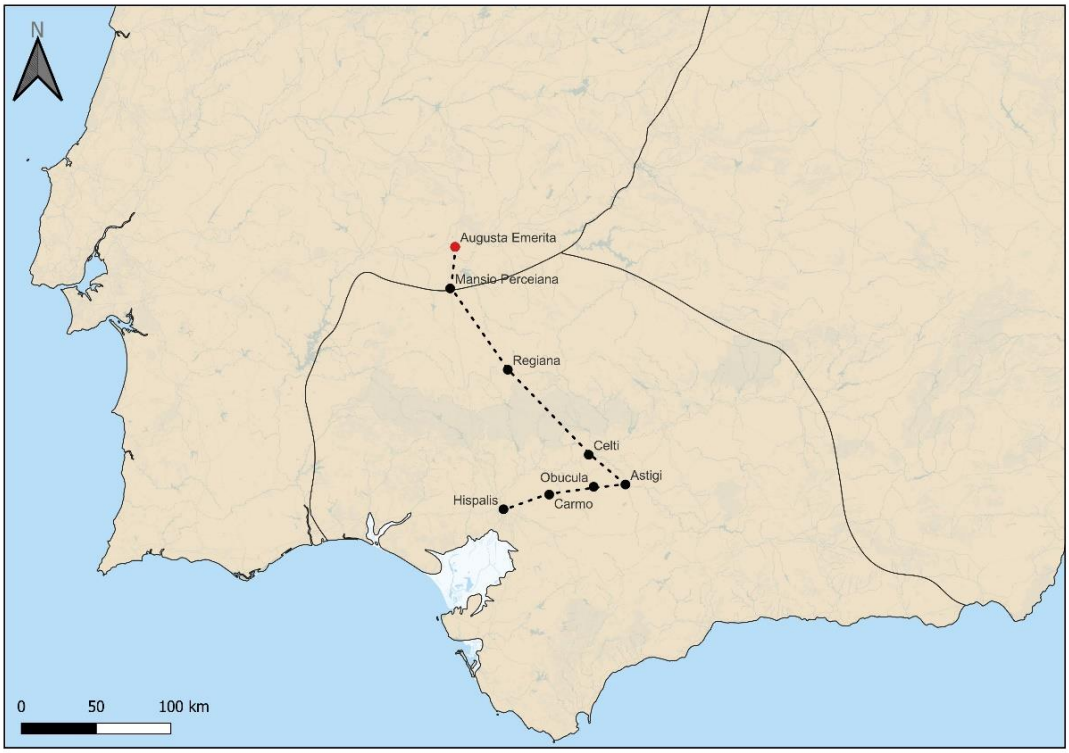


Figure 52. *Via X* and the main milestones mentioned in the Antonine Itinerary. The route is an approximation. Photo: Carlos Cáceres-Puerto

The location of *Mansio Perceiana* is unclear, as I have already mentioned in Chapter 4.3, since this settlement is of the utmost importance to follow the steps of *Eulalia* when hiding from the Rome persecutions in the 4th century AD. Hence, I used the location that I deem most plausible, which a combination of the hypothesis suggested by Sillières (1990) and Ramírez Sádaba (1994: 131-147), locating the *mansion* between Almendralejo and Villafranca de los Barros (Badajoz), closer to Almendralejo since it was still located in the Lusitanian province. I consider this location as the most suitable since, of all the suggested places by the researchers in the last couple of decades, since is the closest one to *Via X* as it is seen in the aerial photography. Hence, its location in the map (fig.

52) is approximate, since we do not possess solid archaeological evidence to set a specific place, but I can make a solid estimation based on the aforementioned research.

As mentioned earlier in this chapter, the diversion of roads and routes from western *Metellinum* to *Emerita* forced a change in the road system, creating new routes where pre-Roman roads crossed the landscape through fords and valleys. The first one was the road connecting *Hispalis* with *Emerita* through the *municipium* of *Regina* (Casas de Reina, Badajoz).



Figure 53. Mausoleum excavated by García y Bellido (1966a: 3–9) next to the *Via X*. Photo: Carlos Cáceres-Puerto

Three roads converged into one that crossed the bridge: *Via X*, *Via XII* and *Via XXIII*. García y Bellido (1966a: 3–9) excavated parts of this road, providing scarce information regarding its composition or location. Various excavations carried out in 1998 (Sánchez Barrero, 2000b: 413–459) at the start of the bridge on its southwestern side, however, did not uncover any archaeological features containing remains of a paved road, probably due to the constant changes of the area in the past centuries. It has been excavated in Portugal Avenue, where it is a straight street occupying the same itinerary as the former *Via X*, to a certain

extent cementing this route on its way to *Hispalis* from the River *Anas* towards the southwest. Although no major excavations have been completed in this area, different surveys have uncovered, 1m below the surface, an unpaved road with a surface of rammed earth and medium-large inclusions, like the other roads excavated one mile outside the colony. The *statumen* is missing along with all remnants of its Roman construction (Rodríguez Martín, 2012: 445). It shares, however, the same route as the Roman road.

The *Via X* exits *Emerita* through the bridge over the Guadiana River and heads towards the southwest, following what nowadays is the Avenue of Portugal. Some funerary elements (fig. 53) are still present in the area, as documented by García y Bellido (1962; 1966).

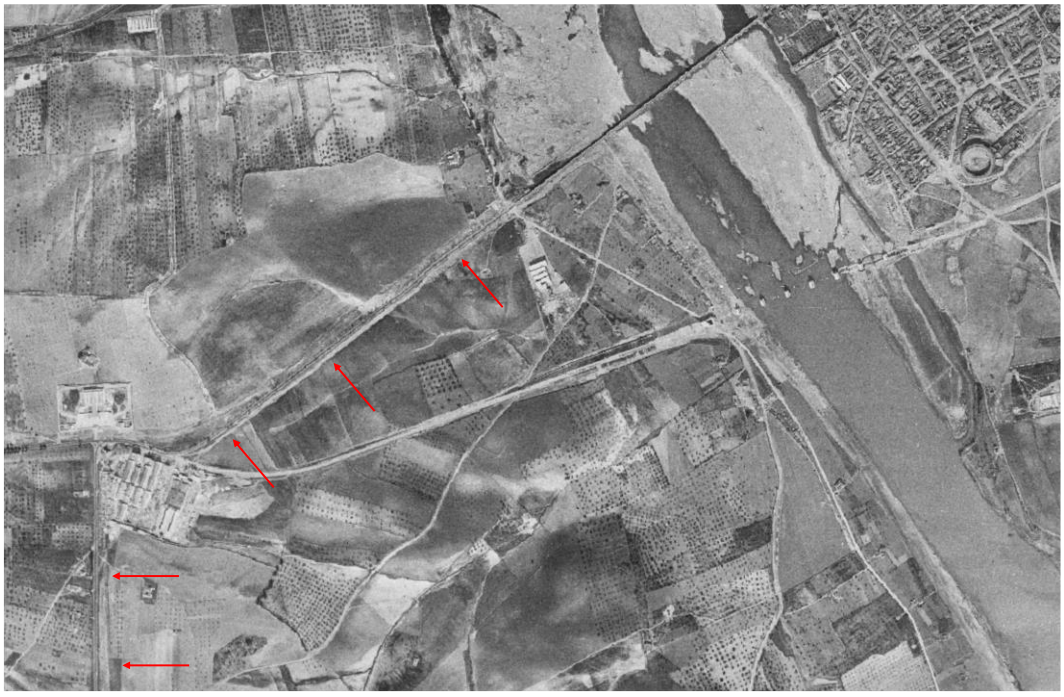


Figure 54. Exit of the *Via X*, *Via XII* and *Via XXIII* from *Emerita*. Photo: IGN, Vuelo Americano (Serie B, 1956–1957), image: Carlos Cáceres Puerto.

It keeps passing over a plain until reaching Sierra de San Serván and Sierra de la Moneda. It crosses through the modern-day village of Torremejía, where it coincides with the trace of a primitive road eastwards of the city of Almendralejo with a north-south orientation, which has been identified as evidence for *Emerita*'s centuriation (Ariño Gil and Gurt i Esparraguera, 1994a: 34–36; Ariño *et alii*, 2004). As one of the main four edges of the urban grid, this was also the *decumanus maximus* of the *territorium emeritensis*, organising the

pertica in the southern region of the *ager*. The US Air Force mapped the entire Iberian Peninsula in 1946, 1956 and 1968; in the first two series, the exit of the *Via X*, the bridge over the *Anas* River and the path which will develop into the aforementioned Avenida de Portugal are all visible (figs. 54, and 55). Unfortunately, the LiDAR images are less revealing in Avenida de Portugal, since the area was highly developed in the 1960's, albeit the stretch of *Via X* observed in the aerial photography are perfectly visible.



Figure 55. Exit of the *Via X*, *Via XII* and *Via XXIII* from *Emerita*. In the highlighted red square, the location of the *Locus Gromae,* which is not visible with LiDAR. Map: Carlos Cáceres Puerto.

After Torremejía it heads towards the city of Almendralejo. *Mansio Perceiana*, the first *mansio* in Lusitanian territory, was located on *m.p. XXIII*. Further south, next to Villafranca de los Barros and los Santos de Maimona, the *pertica Emeritensis* encounters the border with the *Baetica* province. Although the *Via X* only bifurcates from the *Via XXIII* after entering *Baetican* territory, it counts as one of the nine roads heading towards *Emerita*. It heads south, crossing Fuente de Cantos, Llerena and Casas de Reina to face Sierra Morena. Near *Astigi* (Écija) it joins the *Via Augusta* (Rodríguez Martín, 2012: 445–46).

The mileage shown in the Antonine Itinerary, however, does not concur with the actual distance between *Hispalis* and *Emerita*. Some scholars (Roldán Hervás and Caballero Casado, 2014: 56) claim that at least one *mansio* has been omitted from the text, probably *mansio Carmone* (near Carmona, Sevilla) according to a widespread consensus among scholars (Roldán Hervás, 1975; Sánchez Barrero, 2010; Rodríguez, 2012), though for an unknown reason. *Mansio Perceiana* would have had a crucial importance as it is the joint between the *Via X* and *Via XXIII*. Sillières (1990) proposed a variation of the route around *Regina* (Casas de Reina), although as it is within the limits of *Baetica,* it is outside of the scope of this thesis project. A key point, however, is the proposal by Sillières (1990) which provides a solution to the mileage problem. He argued that the 24 miles from *Regiana* to *Emerita* would refer to the distance between the first *mansio* and the *Via XXIII* rather than to *Emerita Augusta*, which makes more sense considering Mérida and Casas de Reina is 66.5 *Mille Passum* (98.2km).

Although the distance mentioned in the Antonine Itinerary does not make sense for the real length, most of the road is known due to milestones. The only three *mansio* corroborated are *Italica* (Santiponce, Sevilla), *Ilipa Magna* (Alcalá del Río, Sevilla) and *Emerita*, although Curiga (Monesterio), *Contributa* (Medina de las Torres) and *Perceiana* (between Almendralejo and Villafranca de los Barros) have been accepted (Pastor Muñoz, 2004: 202; Rodríguez Martín, 2012).

Archaeological evidence of the first section of this road has been uncovered inside the *pomerium* near modern-day Plaza de España (Sánchez Barrero, 1997a: 61–91) (fig. 56). There are the remains of a *cloaca* 3.7m below the street level, which followed the southwestern verge of the *Decumanus Maximus* on its way to the main gate over the Guadiana River. Therefore, this is the last section of not only the *Via X* but also the *Via XII* and *Via XXIII* in their urban context. Even though no major evidence of roads from this side of the river had been uncovered, with the exception of the archaeological site of Morerías (Alba Calzado, 1997a: 285–316; 2001: 397–423), the reuse of material from Visigoth and Moorish contexts in allotments nearby has made it possible to identify blocks of diorite belonging to the *decumanus maximus* and associated contexts.



Figure 56. Stratigraphical Unit 200. Section of *decumanus maximus* in Plaza de España, near the main Southern gate to the bridge over the Guadiana River. Photo: Sánchez Barrero, 1997a: 74, Plate 9.

The pavement, despite being from a context from the 10th to the 11th century, is evidence of the Moorish occupation of Marida, the Islamic name given to *Emerita*, and it included reused marble, bricks and small pieces of diorites. This patching of the road, if developed in a later chronology, demonstrates how crucial this axis was for the functioning of the colony.

7.1.2 *Via XI, Item ab Corduba Emeritam.*

Similar to the case of the *Via X*, the *Via XI* shares the exit route from the colony with the other two roads heading towards the east: *Via XXV* and *Via XXIX*, both of which go to *Caesaraugusta* (Zaragoza). This road originates at the eastern edge of the *decumanus maximus*, where nowadays a square known as ‘Puerta de la Villa’ (fig. 57), which could be translated as ‘Gate of the City’, is located (Chamizo de Castro, 2019a: 155–70). It heads towards the park on Santa Eulalia Boulevard and then turns to the right, adjoining the suburban residences excavated in the former military complex (Sánchez Hidalgo, Sanabria Murillo and Rosa, 2019: 425–84). Before the occupation of areas further away from the walls,

like the area next to the Santa Eulalia Basilica, the park on Santa Eulalia Boulevard, which space was in use as suburban residences and funerary facilities (Aranda Cisneros, 2017a: 365–412) in the first stages of the colony. This road cluster would later become one of the biggest gatherings of funerary presence during the late 1st century AD and the 2nd century AD, as seen on my dataset. However, the level of funerary evidence was altered in Late Antiquity with the construction, and subsequent alteration, of the area comprehended between 'Puerta de la Villa' and the Valley of the *Barraeca* with the construction of the Basilica of St. Eulalia in the 5th century.



Figure 57. Section of *decumanus maximus*, near the location of the main Northeast entrance of the colony (behind the kiosk), are the last remains of this path before it heads to *Corduba*. Photo: Francisco Luis Cáceres Ruiz.

At 21 Santa Lucía Street, Bejarano Osorio (1999a: 109–124) documented a paved road using diorite, like the image above, although the road excavated by Bejarano was already outside the walled enclosure (fig. 58). As aforementioned, the beginning of the *Via XI* is a mixture of funerary complexes and residence buildings abandoned at the end of the 1st century AD (Mateos, 1995) for still unknown reasons. After the houses were abandoned, grand *domus* were built,

as the example of the ‘House of the Amphitheatre’ or the two *domus* from the former military complex show. Along this road, still fairly close to the *civitas*, Floriano (1944) describes the presence of cremation tombs and several foundations of funerary buildings; as does Mélida (1925: 125) who, at an earlier date, wrote about and underground burial complex near the train tracks in the vicinity of the Santa Eulalia Basilica.



Figure 58. Section of *Via XI* excavated in 21 Santa Lucía Street. Photo: Consorcio de Mérida.

After the military complex, in what we can classify as a suburban road, the main road started. Its origin was the aqueduct of San Lázaro, which acted as a monumental gate. Then it crossed the Avenida Juan Carlos I towards the circus and the church of ‘La Antigua’, where it kept adjacent to the left bank of the *Barraeca* until Trujillanos. After San Pedro de Mérida, and before reaching the ford of the River Búrdalo, the road bifurcated in two branches: the *Via XXV* and *Via XXIX* on one side and the *Via XI* on the other.

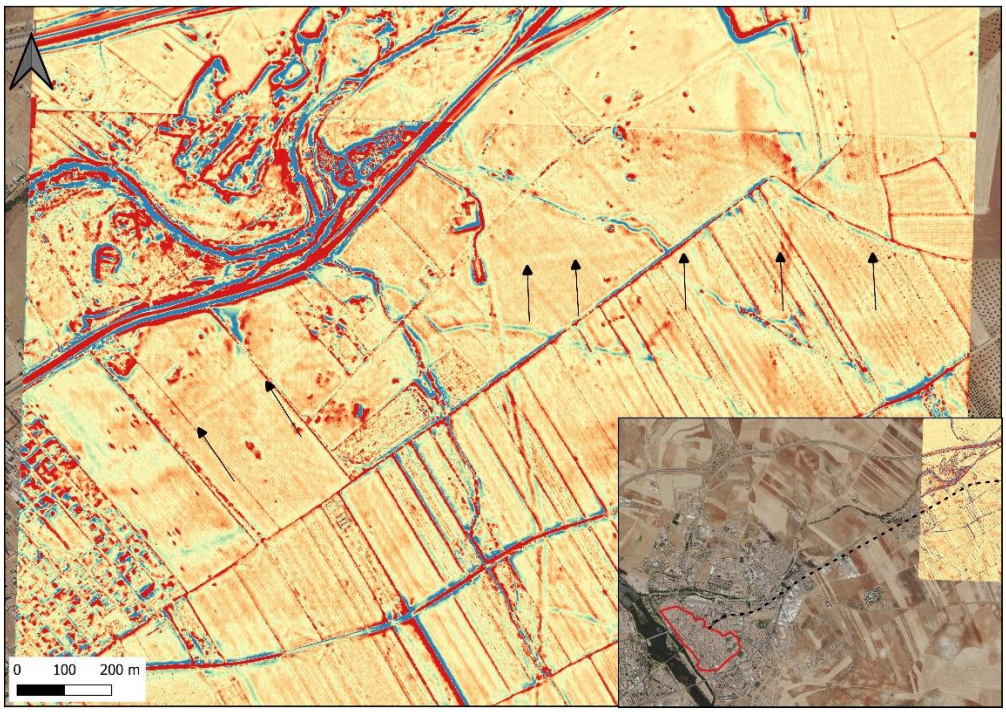


Figure 59. Section of *Via XI* as seen on LiDAR. Map: Carlos Cáceres-Puerto.

Via XI is not visible on the LiDAR images, since the area has been highly altered, which unfortunately will affect the viewing of the remaining roads exiting *Emerita*. However, a small section of *Via XI* can be observed southern Trujillanos, 2 miles northeastern Mérida, as shown in Figure 59.

VIA XI			
Wess.	***Mansio***	**Distance**	**Variations**
3	*Item a Corduba Emeritam*	m.p. CXLIIII	
4	*Mellaria*	m.p. LII	LI
416,1	*Artigi*	m.p. XXXVI	Var. pr. *Astigi*
2	*Metellinum*	m.p. XXII	
3	*Emerita*	m.p. XXIIII	

Table 17. *Mansiones* from the *Via X*. Carlos Cáceres-Puerto after Roldán Hervás, 1973; Roldán Hervás y Caballero Casado, 2014.

As the *centuriatio* grid of *Metellinum*, this road was destroyed when the Badajoz Plan began in the 1950s and 1960s. The landscape of nearby *Metellinum* is, therefore, altered from what it would have looked like in Roman

times, which in its own right complicates the research of any archaeological ensemble in this part of the mid Guadiana Valley, as do the rural settlements further discussed in Chapter 7.3. Considering the remains of other roads near *Emerita*, especially the *Via XXIII* and *Via XXV*, it has been assumed that the width of this road was also 6m, and that its composition was of rammed earth with medium to large sized inclusions (Rodríguez Martín, 2012). After crossing the Búrdalo River, which has been traditionally established the border between the *pertica* of *Metellinum* and *Emerita* (table 17), it continues to Sierra Morena, passing *Iulipa* (Zalamea de la Serena, Badajoz) and *Arsa* (Campillo de Llerena, Badajoz). However, the Antonine Itinerary does not refer to such sites. I include them in the map as I consider the route of *Via XI* describe in the Itinerary as implausible. It is not logical to set a route crossing Sierra Morena ignoring main regional settlements that were used by the Republican nodes of communication heading to the northwest from *Colonia Patricia* (Córdoba).

Nevertheless, considering places like *Arsa* were important pre-Roman communication nodes, that the Itinerary did not include them as they were not part of the main communication nodes after the Augustan provincial reorganisation. Rodríguez Martín's (2012) theory coincides with Sillières' (1990), who argued that *Mansio Mellaria* must have referred to *Iulipa* (Zalamea de la Serena), maybe substantiating this on the toponymical similarities (Pastor Muñoz, 2004; Roldán Hervás and Caballero Casado, 2014). However, it is clear that *Mansio Mellaria* refers to a site near Fuente Obejuna, in Córdoba, as it can be seen in Figure 60. Due to the impossibility of establishing a concrete route in the San Pedro de Mérida-Zalamea de la Serena section, plenty of different theories have been prospered in an attempt to find a theoretical answer when archaeological evidence cannot be found. Finally, the Itinerary mentions *Artigi*, whose location has been attributed to multiple town southeastern Extremadura, but it is yet to be located. I have placed *Artigi*, with caution, between Quintana de la Serena and Castuera since it is the most plausible theory for me. However, time will tell if this location happens to be correct. I do believe that *Artigi* and *Iulipa* lay very close, but in *Via X* we also observe *Obulcuna* and *Astigi* at a similar distance, hence it is not unplausible.

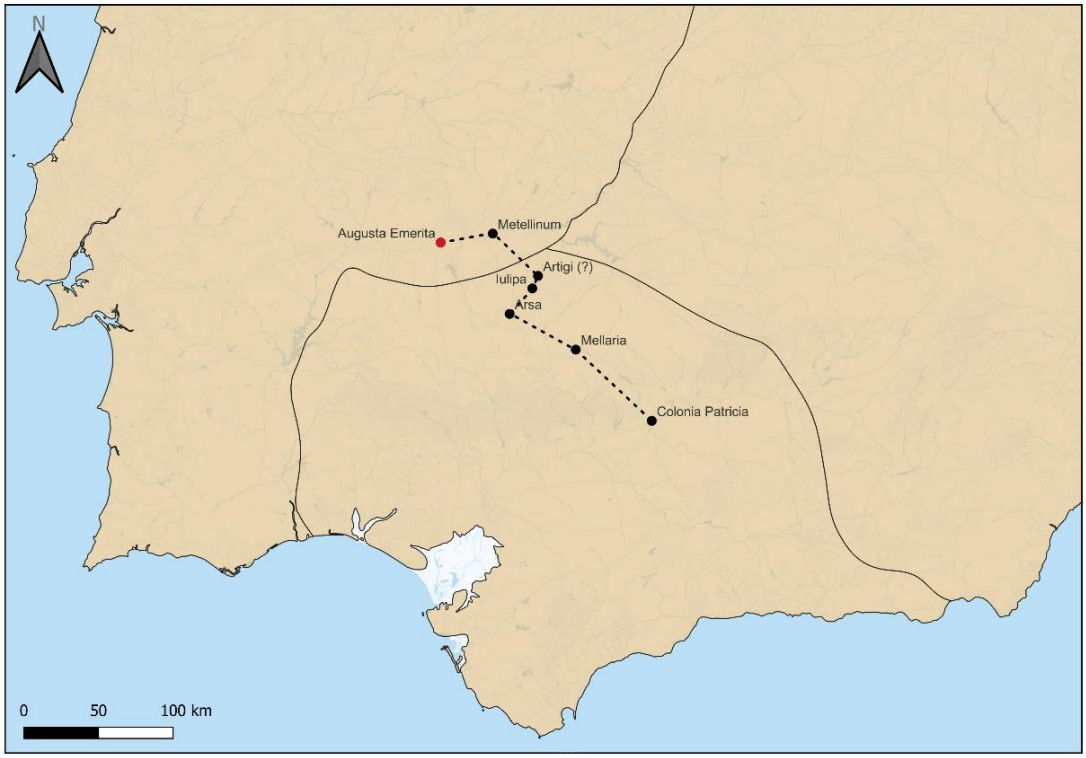


Figure 60. *Mansiones* on *Via XI*. Simplified route. Map: Carlos Cáceres-Puerto.

This path, adjoining the *Via XI*, left *Emerita* exiting through the southeastern edge of the *kardo maximo*, leaving the structure known as 'House of the Mithraeum' on its right side (Pérez Maestro, 2017a: 45–51). Even the *cloaca* underneath the road has been documented (Feijóo Martínez, 2017: 123–30). Likewise, along the rest of the major axis, it had plenty of funerary presence as the evidence (Nodar Becerra, 1999: 267–83) recalls, unlike the *Via X, Via XII* and *Via XXIII*, due to the natural barrier of the River *Anas*. Those funerary complexes, not extended sideways over the territory, but present along the road for 2 miles approximately, were composed of both cremations and inhumations, with a main group of graves dating back to the 1st and 3rd centuries AD (Márquez, 1998: 296). The industrial complexes (fig. 61) along this route have been excavated and studied by Sánchez Barrero and Alba (1998a: 211). The main complex that has been found along this secondary route to the *Via XI* consists of a *villa* from the 1st century AD in Anas Street, that is entirely surrounded by a large funerary complex known as the 'Los Bodegones' necropolis (Márquez, 2000: 8).



Figure 61. Part of the kiln excavated in the *villae* in Anas Street. Photo: Sánchez Barrero and Alba Calzado, 1998a: 223, plate 3.

The *villae* dates to the change of era, more probably to the first years of the 1st century AD, to later be abandoned further on the same century, according to the debris found thereof. As a matter of fact, evidence of early rural settlements nearby the colony is the opposite of what the classical sources mention (Aggenus Urbicus, Th., 1913: 44) regarding the first wave of settlement at the edges of the *pertica*. However, as far as I have documented in my database, the suburban occupation whether it was for funerary, industrial, or residential purposes was substantial. It is comprehensible that a certain amount of infrastructure was required for the necessary development of the provincial capital. That is the case with this complex; as the number of artefacts points out, it was built using very poor materials. This might suggest the purpose of the complex and evidence of a planned expiry date for an early abandonment (Sánchez Barrero and Alba Calzado, 1998a). According to some artefacts found at the site, the date can be narrowed to at least Tiberius; a bronze coin with the legend: *TIB CAESAR AUG PONT MAXIMUS* was found, as was *terra sigillata* from the late 1st century AD and the early years of the 2nd century AD. This site will be further analysed and contextualised in Chapter 7.3, alongside other suburban and rural sites nearby *Emerita*.

The *Via XI* had a crucial role in pre-imperial *Hispania*. During the Republic this road was the route to access the northern Plateau from the *Baetica* province; therefore, its use as a military road eclipsed other use. It reached its peak when Q. Caecilius Metellus founded *Metellinum* in 79 BC. With a colony established at the other end of Sierra Morena, it acted as an enlarged *mansio* on the way to *Norba Caesarina*, the end of this road in republican times. From the time of Augustus, it lost its military purpose which then was replace by an economic factor because it connected *Emerita, Colonia Patricia* and the mining complex of the mountains (Pastor Muñoz, 2004: 199).

7.1.3 *Via XII Ad Olisippone Emeritam.*

This road has been in use until relatively recently, as it was the one route joining Mérida and Badajoz. The Marquess of Valdeflores, for instance, informed to the Spanish Royal Academy of History of 'visible remains of a road with Roman traces' on his expeditionary journey to Extremadura between 1782–1783 (Sánchez Barrero, 2010). It is the most easterly way to *Olisipo* of the three different ways mentioned in the Antonine Itinerary (Roldán Hervás, 1975: 63). After the *Via XII's* departure from *Emerita*, it advanced until reaching *Salacia* (Alcácer do Sal, Portugal) to the east, prior to heading up north until its destination: *Olisipo* (table 18).

In what it seems to be a generalised mistake in the Itinerary, the miles given are substantially scarce considering that, even though there are no milestones ascribed to this road, there are four settlements that we are certain of: *Olisipo* (Lisbon)*, Salacia* (Alcácer do Sal)*, Ebora* (Evora, Portugal) and *Emerita*. Therefore, 161 *m.p*. is not enough to travel that route from the Lusitanian capital (Roldán Hervás, 1975). The widespread theory among different scholars (Roldán Hervás, 1975; Sánchez Barrero and Marín Gómez-Nieves, 2000; Sánchez Barrero, 2010; Roldán Hervás and Caballero Casado, 2014) is that there must be a lack of *mansio*, *mille passum* or both, as the distance between places is, overall, insufficient. Rather than assuming the mistake made by the copyist during the transcription, Rodríguez Martín (2012: 425), for instance, believes that all the three ways from *Emerita* to *Olisipo* coincide at the *mansio*

and miles shown. The latter makes more sense when comparing it to the first version, given that there is no major toponymical nor archaeological problem allocating any of roads.

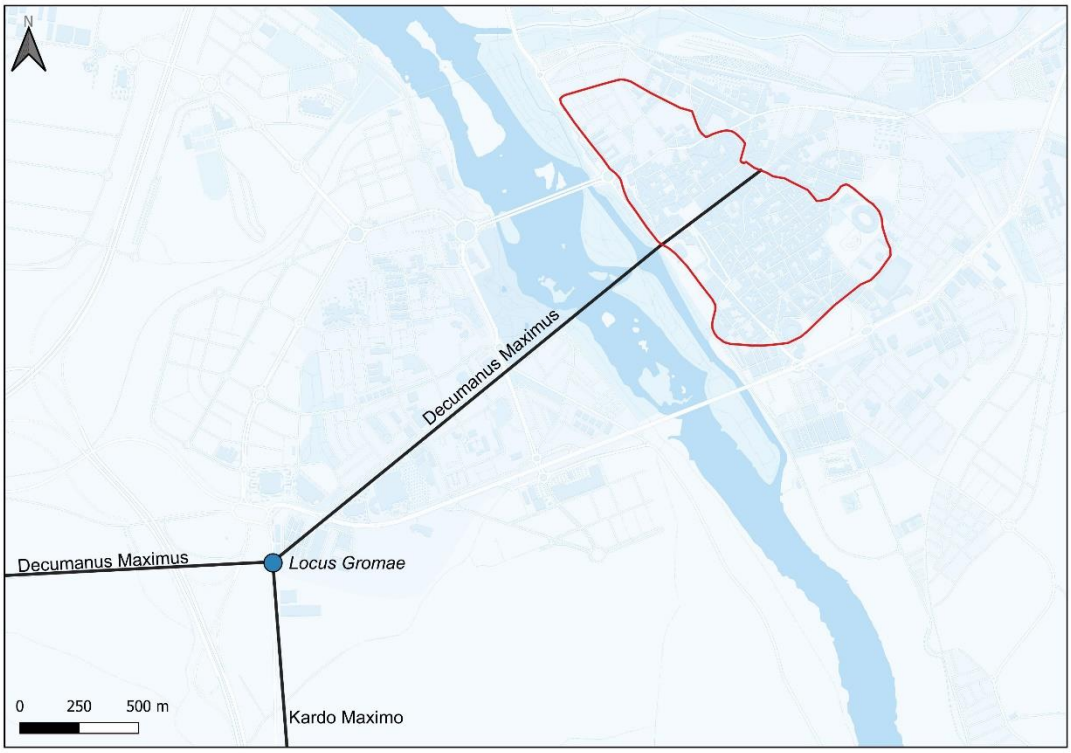


Figure 62. Orientation of the *centuriatio* of the southern part of the *territorium emeritensis*, after Gorges and Rodríguez Martín, 2004. Photo: IGN, Vuelo Americano (Serie B, 1956–1957), image: Carlos Cáceres-Puerto.

The main difficulty could be *Dipo* (fig. 2). The pre-Roman settlement, once one of the main settlements alongside *Conisturgis*, modern-day Medellín, has been located nearby *mansio Budua,* modern-day Bótoa, between Mérida and Badajoz (Fernández Corrales, 1987: 95–96; Estevez Morales, 2002: 304; Rodríguez Martín, 2012; Cordero Ruiz, 2013). Thus, I have deliberately omitted *Dipo* in figure 63. since its location is unknown. One hypothesis is to start counting from the limit of the *pertica* rather than from the colony itself, although without knowing exactly where the *pertica* finished on its westward edge makes it rather difficult to take a stance. It would be worth studying the case of *Olisipo*. The milestones and the Antonine Itinerary differ, albeit traversing the road from *Olisipo* to *Emerita* grants us with different results.

On this road there is less funerary evidence than along the roads on the northern area of the colony. The absence of funerary evidence can be adduced

to the substantial construction work undertaken in the 1960s in what now is Avenida de Portugal, which is the section of *Via X* and *Via XII* after they exited the bridge over the Guadiana River. As I will later analyse in Chapter 8.1, García y Bellido (1962; 1966a) documented over 100 medium-sized *mausolea* comparing this stretch of *Via X* and *XII* to *Via Appia* in Rome (figs. 101, and 102). The presence of agricultural and industrial facilities as well as suburban villas is more widespread in this area (Bejarano Osorio, 2000a: 25–38). There is clearly a correlation in the amount of exploitation in the area in southern *Emerita,* while the northern part is where the main funerary areas are located. Maybe it is in relation to the closeness of the *Locus Gromae* (fig. 62) (Gorges and Rodríguez Martín, 1997; 2004), the beginning of the *centuriatio* of the *ager publicus emeritensis*, which is approximately 1 mile to the southwest of the bridge over the Guadiana River. However, it could also be because of the more extensive research on the southern bank of the Guadiana River.

There is no physical evidence of the construction methods used on the road, although it would not have been too variant from the rest of the *viae publicae* (Rodríguez Martín, 2012). Evidence of the construction maintenance process can be observed in S. Flaccus' catalogue of the expenses of public roads defrayed by the State (Beltrán, 1990: 47).

VIA XII			
Wess.	***Mansio***	**Distance**	**Variations**
4	*Item a Olisipone Emeritam*	m.p. CLXI	
5	*Aquabona*	m.p. XII	
6	*Caetobriga*	m.p. XII	
2	*Caeciliana*	m.p. VIII	XII
3	*Mazateca*	m.p. XXVI	
4	*Salacia*	m.p. XII	
418,1	*Ebora*	m.p. XLIIII	
2	*Ad Adrum Flumen*	m.p. VIIII	
3	*Dipone*	m.p. XII	
4	*Evandriana*	m.p. XVII	
5	*Emerita*	m.p. VIIII	

Table 18. *Mansiones* on the *Via XII.* Carlos Cáceres-Puerto after Roldán Hervás, 1975.

Emerita's *ager publicus* was divided by using carriageways as extensions of the *decumanus maximus* and *kardo maximo*. The extensive *territorium* of the

Lusitanian colony was spread along one north-south axis — *kardo maximo* — and one east-west axis — *decumanus maximus*. On the east-west axis there were two carriageways, one on each bank of the river, parallel to each other and to the River *Anas*. On the north bank of the river were the *Via XIV* and *Via XV* and on the southern bank the *Via XII* (Ramírez Sádaba, 2004). This road, like its 'twin' on the northern bank, delimitated the terrain subject to being flooded during the swelling of the river, along with the division among public land and the beginning of the centuriation (Rodríguez Martín, 2012: 424).

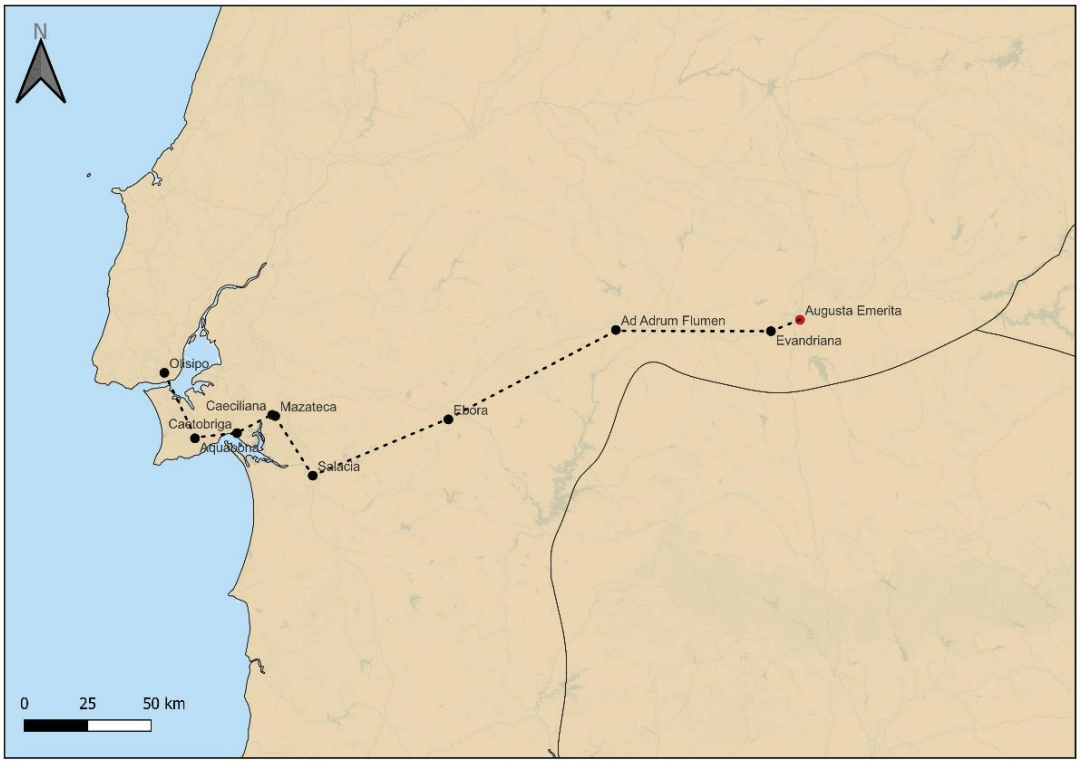


Figure 63. *Mansiones* on the *Via XII.* Simplified route. Map: Carlos Cáceres-Puerto.

The *Via XII* exited *Emerita* by crossing the bridge over the *Anas*, then it turns to its right to follow the left bank of the river towards the west. It shared the way with the *Via X* and *Via XXIII*, turning to the west a few miles down the road, although Ramírez Sádaba's (2004) postulates that an east-west axis delimitating the *territorium* of the colony ruins this alternative route, proposed, and also refuted, by Rodríguez Martín (2004; 2012). Roldán Hervás and Caballero Casado (2014), on the contrary, critique the theory given by Rodríguez Martín (2009; 2012). They argue that the road, if following Rodríguez's proposal of Mérida, Calamonte, Lobón, Talavera la Real and Badajoz would have been exposed to

the swellings of the river, as *Via XII* would have been laying on the edge of the river. However, Rodríguez (2012) argues that the landscape of the river has changed substantially in the past centuries, and therefore we do not see the same banks that the Romans did. Regarding the theory of choice, this is not related to the Antonine Itinerary whatsoever from the milestones and miles point of view. Roldán Hervás (1975; 2014) also states that as the miles from Mérida to Évora are mistaken, and so the location of the three *mansio* between both cities will also be mistaken.

Another problem appears when crossing the modern Portuguese border. The course of the River *Anas* flows south towards the Atlantic Ocean, so there is a feasible option of the carriageway splitting in two: one branch heading to *Olisipo,* with the continuation of the road, and the second branch, following the River Sado towards *Myrtilis* (Mértola, Portugal) via boat, arriving at the coast. This route exceeds the purpose of this section, as it is located too far away from the limits of the *pertica* of *Colonia Augusta Emerita*, hence I will leave this debate to other researchers.

As well as the industrial complex described on the *Via X* (Nodar Becerra, 1999), another industrial/agricultural complex has been found along the *Via XII* (Sánchez Barrero and Alba Calzado, 1998a: 211–36), which is related to the one excavated by Nodar Becerra (1999; 2001: 267–84); it has been identified as a possible *fundus*. In this case a kiln has been found, with stamped materials, such as a *tegulae* with '*Officinae E P P*', which had been transcribed as '*Officinae Emerita Pecuniae Publicae'*. This was an attempt to identify the first materials and factories supplying the colony in an earlier stage, such as the kiln found underneath the football stadium (Márquez Pérez, 1997a: 80–93). It belongs to the same typology of the kiln excavated in the 'Los Bodegones' funerary complex by Sánchez Barrero and Alba Calzado (1998b: 237–65).

7.1.4 *Via XIV Alio itinere ab Olisippone Emeritam and Via XV Item alio itinere ab Olisippone Emeritam*

Both carriageways follow the same first stages of exiting the colony from the northwestern gate, and they also follow the same route towards *mansio Plagiaria*

(Novelda del Guadiana, Badajoz) (fig. 65). As a result of the roads following the same route along *territorium* emeritensis, I will consider them as a single unit then separate them divert both roads at the edge of *ager publicus* emeritensis. The distance is also mistaken, as it is written as shorter than it actually is (Arias, 1965; Sánchez Barrero, 2010: 49; Mantas, 2012); 158 miles is not long enough to cover the distance between Mérida and Lisbon (Roldán Hervás and Caballero Casado, 2014). The *Via XIV* and *Via XV* have their origin in the northwestern gate of the *kardo maximo*, crossing the valley of the *Barraeca* (Albarregas River), first through a ford until the completion of the bridge (fig. 64), until they reach *Mansio Plagiaria*. Another road coming from the south of the colony joined the path before crossing the bridge.



Figure 64. Exit of *Via XIV*, *Via XV*, and *Via XXIV.* Bridge over the Albarregas River. Photo: Turismo de Extremadura.

This path, as a ring road, would circumvallate the settlement to divert traffic and prevent it from entering the colony when not necessary (Alba Calzado, 1997b: 397–424). Leaving the bridge over the Barraeca behind, the route would head towards the area known nowadays as ‘Las Abadías’, where the Roman pavement lies beneath the modern one (Sánchez Barrero, 2010). It then proceeded to cross the bridge known as ‘Alcantarilla’ (fig. 67) to head to *mansio Plagiaria* (Rodríguez, Martín, 2012). This bridge, poorly preserved, was built on

a later chronology than the bridges over the *Barraecas* and *Anas*, probably during the reign of the Hispanic emperors.

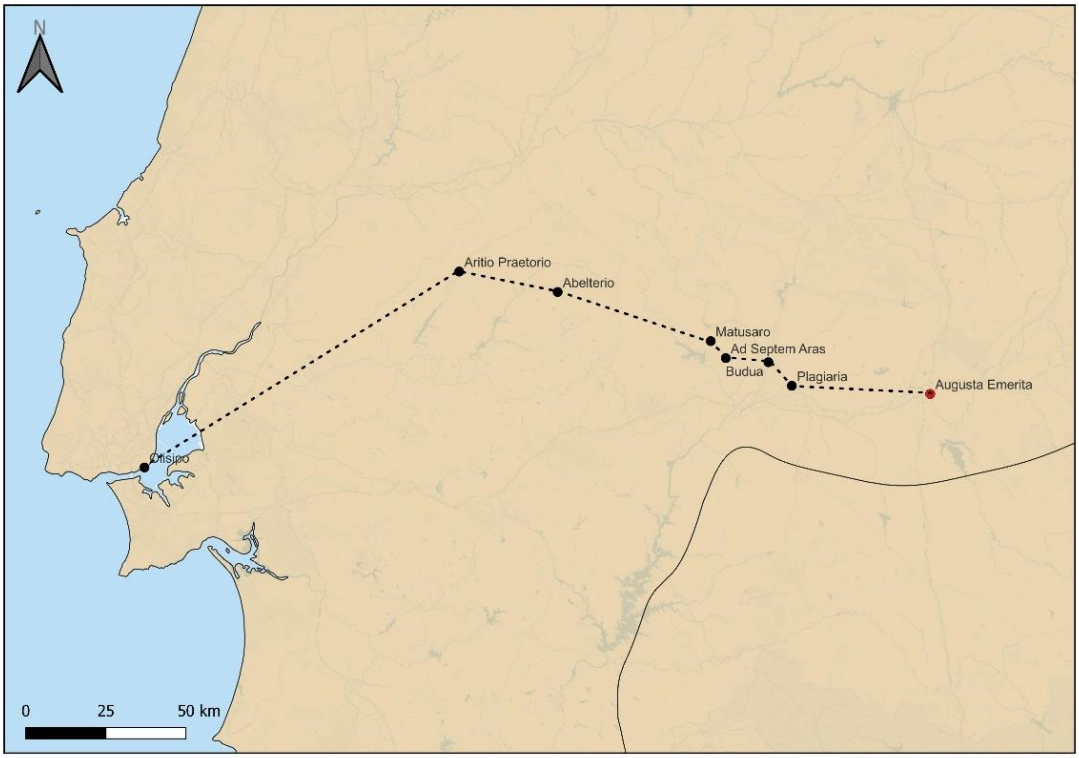


Figure 65. *Mansiones* on the *Via XIV*, and simplified route. Map: Carlos Cáceres-Puerto.

After the second bridge, the road followed the right bank of the Guadiana River to make a turn to the north that coincided with the Villa of Araya (fig. 66).



Figure 66. Section of the *Via XIV* and *Via XV* at the location of 'Villa de Araya'. Photo: IGN, Vuelo Americano (Serie B, 1956–1957), image: Carlos Cáceres-Puerto.

This complex, dated to around the 3rd to 4th century AD, might have been the reason why the road headed so far north of the river for a couple of miles (Rodríguez Martín, 2012; Cordero Ruiz, 2013, 2018). It continues to modern-day Aljucén and then to the Montijo reservoir, where a section of the road has since sunk into the river. Following the research of various authors, they follow both roads through modern towns that support their theory on the presence of words related to 'road-calzada' in the toponyms: Puebla de la Calzada, Valdelacalzada, etc. (Rodríguez, 2012). The road passes by the Guerrero River, leaving behind *mansio Plagiaria* (Novelda del Guadiana), atop a hill that divides the road into the Via XIV and the Via XV (Gorges and Rodríguez, 2000).



Figure 67. Bridge of 'Alcantarilla' (left), *statumen* of *Via XIV* and *Via XV* (right). Mérida. Photo: Carlos Cáceres-Puerto.

After *mansio Plagiaria*, the road bifurcated in two routes, one heading to *Scallabis*, capital of *Conventus Scallabitanus* (modern day Santarem in Portugal), and the second one to *Oppidum Aritiense* (Sánchez Barrero, 2010). Ponz (1778: 102) catalogued this road as a military pathway. Like the *Via XII* and the controversy regarding its probable location, *Via XV* lies too close to the course of the *Anas* nowadays due to the river being dammed up in past decades. Upon its construction the road was located close enough to the river to act as a natural dike to protect nearby fields but was still on non-flooding terrain. Sánchez Barrero (2010: 129), following Roldán Hervás (1975) with the *Via XII*, also suggests that the route followed by this carriageway must have been subject to the swelling of the river during certain times a year due to its location.

VIA XIV			
Wess.	***Mansio***	**Distance**	**Variations**
7	*Alio itinere ab Olisippone Emeritam*	m.p. CLVIII	CXLVIII CXLIIIII CXLV
8	*Aritio Praetorio*	m.p. XXXVIII	
419,1	*Abelterio*	m.p. XXVIII	
2	*Matusaro*	m.p. XXIIII	
3	*Ad Septem Aras*	m.p. LX+	VIII
4	*Budua*	m.p. XII	
5	*Plagiaria*	m.p. VIII	
6	*Emerita*	m.p. XXX	

Table 19. *Mansiones* on the *Via XIV.* Carlos Cáceres-Puerto after Roldán Hervás, 1975.

However, Sánchez Barrero (2010) admits that the change in the morphology of the terrain during the past 50 years might have influenced in the concept we currently have of the area. The *Via XIV* (table 19), following Roldán Hervás' postulation, crosses nearby the *mansio Budua* (Bótoa), distancing itself from the river, *towards Ad Septem Aras* (Campo Maior), where different scholars place the third *praefecturae* of *territorium emeritensis* (J. G. Gorges and F. G. Martínez, 2004: 111–113). Rodríguez (2010; 2012: 429) argues that the road follows the pre-Roman path through *Dipo* towards Campo Maior, crossing the River Gévora at a ford. Arias (2004) affirms that after *mansio Budua* (Bótoa, Badajoz) the path headed towards *mansio Matusaro* (Nosa Senhora da Graça dos Degolados) instead. Rodríguez maintains that the presence of this triangle in the Spanish-Portuguese border was due to the rush to create the road and to the fact that the ford of the River Gévora was not passable during the rainy season, therefore necessitating the establishment a second path for those times of the year (Rodríguez, 2009; 2012). Although the road lies a mere 3 miles north of *Scallabis*, the Antonine Itinerary does not mention the capital of the *conventus*. Maybe because of the road did not cross through the settlement.

The aforementioned widening of the Guadiana River, the construction of dams, and, above all, the construction of the railroad network between Mérida and Badajoz have ended up damaging both roads at their exit from *Emerita*. The railroad system was mostly placed on top of the Roman road; hence, only small segments are visible using either aerial images or LiDAR (fig. 68). The PNOA images from 1956 (fig. 66) contains the best evidence of this roads, since when

those images were taken there were no railway system, nor dams flooding this part of the Guadiana River.



Figure 68. *Via XIV* and *Via XV* on LiDAR. Map: Carlos Cáceres-Puerto.

The *Via XV* (table 20, fig. 69), however, has a more complicated route, which is reliant on the difficulty and traditional theoretical dispute of the most probable location of *Scallabis*. *Scallabis* has been traditionally placed in modern-day Santarem (Andrade, 1987; Mantas, 1997; Arias, 2004; Roldán Hervás and Caballero Casado, 2014). Although Rodríguez Martín (2012) and Sánchez Barrero (2010) tend to redirect the route further north, through *mansio Matusaro* (Nosa Senhora da Graça dos Degolados, Portugal). It is the longest road to the coast that has *Emerita* as a starting point. It did share the route of the *Via XIV* to *Olisipo*, but in the last 50 miles it diverted to *Scallabis* (Roldán Hervás, 1975).

There are only a few sections of the carriageway in an acceptable preservation condition from *mansio Plagiaria* (Novelda del Guadiana, Badajoz) to *Ad Septem Aras* (Campo Maior, Portugal). While crossing through the province of Badajoz, as with the *Via XI*, the road has been modified due to the Badajoz Plan during the Francoist dictatorship.

VIA XV			
Wess.	***Mansio***	**Distance**	**Variations**
7	*Item Alio itinere ab Olisippone*		
8	*Olisipponem*	m.p. CCXX	CCL
9	*Ierabrica*	m.p. XXX	
420,1	*Scalabin*	m.p. XXXII	
2	*Tabucci*	m.p. XXXII	
3	*Fraxinum*	m.p. XXXII	XXXIII
4	*Montobrica*	m.p. XXX	
5	*Ad Septem Aras*	m.p. XIIII	XL
6	*Plagiaria*	m.p. XX	
7	*Emerita*	m.p. XXXX	

Table 20. *Mansiones* on the *Via XV*. Carlos Cáceres-Puerto after Roldán Hervás, 1975.

From *mansio Plagiaria* the road's course is predominately across flat areas through *mansio Budua* (Bótoa, Badajoz), and what nowadays is the city of Badajoz, towards the River Gévora, with scarce water streams until reaching said river; this is where the widespread consensus of the border line of *territorium emeritensis* is (Cordero Ruiz, 2013; 2018).

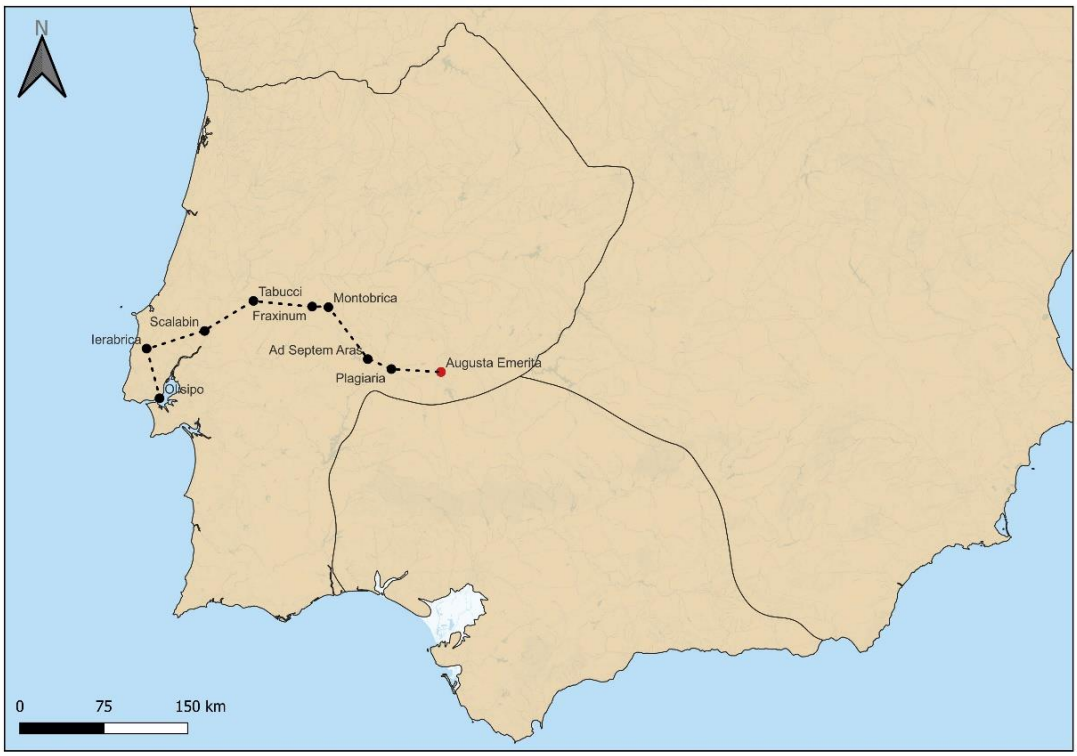


Figure 69. *Mansiones* on the *Via XV*, and simplified route. Map: Carlos Cáceres-Puerto.

At this point it would join the *Via XII* near *Ad Atrum Flumen*, which is modern Ribeira de Machede, Portugal (Rodríguez Martín, 2012). Roldán Hervás (2014) considers this *mansio* already in Portuguese territory, although Rodríguez

Martín (2012: 430) states that both the *Via XII* and *Via XV* share a common route for a few m.p. until reaching the Spanish-Portuguese frontier. In any case, after *mansio Ad Septem Aras* both roads divert and the *Via XV* heads northeast towards *Scallabis*. This road must have been one of the main routes at the first stages of the colony and the province, following pre-Roman routes to link the Atlantic coast with the hinterlands. The reason why this road was named after *Olisipo* when it actually heads towards *Scallabis* is unknown. The *Via XV* is, in fact, a path linking two of the three capitals of the *conventus* of *Lusitania* (Roldán Hervás, 1975).

7.1.5 *Via XXIII Item ab ostio fluminis Anae Emeritam usque.*



Figure 70. Satellite image and historical map of the route followed by the *Via XXIII* in southwestern Mérida. Image/map: Map: IGN, image: Carlos Cáceres-Puerto.

This road follows the same route exiting the colony: through the bridge over the Guadiana River, heading southwest to 'Cerro del Lorito', the same way that the *Via X* and *Via XII* travel (Sánchez Barrero, 2010; Rodríguez Martín, 2012). The colony was placed at 224m above the sea level. The *Via XXIII* (table 21), alongside the *Via X* (Fernández Corrales, 1988: 66-68) and *XII*, had to overcome a slight uphill gradient athwart the Cerro del Lorito (fig. 70) to reach 256m before diverting towards the south, following the current road E-803 that runs parallel to the A-66.

This route linked the Lusitanian capital with the mines in the current province of Huelva, and thus, with the Atlantic Ocean to the south (Roldán Hervás and Caballero Casado, 2014).

After the second mile it heads south, crossing through Sierra de Sevilla to end in the shire known as 'Tierra de Barros'. The first *mansio* after leaving *Emerita* is *mansio Perceiana* (between Almendralejo and Villafranca de los Barros, Badajoz) (Montalvo and Cerrillo, 2008; Mateos, Pizzo and Delgado, 2009; Roldán Hervás and Caballero Casado, 2014). The technical features of the road are vastly unknown as excavations have not revealed any crucial details. We must base our knowledge of the road following García Bellido's (1966) study of the area located on the Cerro del Lorito and on the surveys carried by the Consortium in 1998 at the southernmost entrance of the bridge (Sánchez Barrero, 2000b: 413–59). However, we do know that *Via X, XII*, and *XXIII* shared the same route exiting *Emerita* crossing what it is now Avenida de Portugal, which García y Bellido (1962; 1966a) once compared to the Roman *Via Appia* due to the vast number of funerary buildings flanking this main communication axis (fig. 101).

VIA XXIII			
Wess.	***Mansio***	**Distance**	**Variations**
8	*Item ab ostio fluminis Anae Emeri-*		
9	*tam usque*	m.p. CCCXIII	
10	*Praesidio*	m.p. XXIIII	XXIII
11	*Ad Rubras*	m.p. XXVIII	XXVII
12	*Onoba*	m.p. XXVIII	
432,1	*Ilipa*	m.p. XXX	
2	*Tucci*	m.p. XXII	
3	*Italica*	m.p. XXVIII	
4	*Monte Mariorum*	m.p. XLVI	
5	*Curica*	m.p. XLVIIII	XLVIII
6	*Contributa*	m.p. XXIIII	XXIII
7	*Perceiana*	m.p. XX	
8	*Emerita*	m.p. XXIIII	XVIII

Table 21. *Mansiones* on the *Via XXIII*. Carlos Cáceres-Puerto after Roldán Hervás, 1975.

The first section of the road was constructed with solid foundation on the slope of the hill; after the summit, on its way to Tierra de Barros, the pavement was made with rammed earth and quartz inclusions. Sánchez Barrero (2010:

154) argues that the stones had to be brought in from a different area, as this part of the *ager* of the colony was rich in river deposit soil, and different surveys have not shown any evidence of lithic material nearby. Sánchez Barrero suggests Sierra de Cabrerizas, southern *Emerita*, not far from where the road is placed, although the quarry of 'Berrocal' (fig. 88) might be a good candidate as the supplier for the road, as it will be further analysed in Chapter 7.3. The structure of the road itself is known from Sillières' (1990) work in the outskirts of Mérida. Like the main part of the suburban roads through the *territorium emeritensis*, the 'pavement' consists of a ditch on flat ground with a slate board foundation, followed by a small-medium sized pebble surface on which a final layer of rammed earth sits. Sillières (1990) measured the road at 4.7m wide, which concords with the average measurements of between 4.5m and 6m wide for the suburban roads of the colony (Sánchez Barrero, 2010; Rodríguez Martín, 2012).



Figure 71. The *Via XXIII* after Cerro del Lorito. Photo: IGN, Vuelo Americano (Serie B, 1956–1957), image: Carlos Cáceres-Puerto.

The road then heads south towards *mansio Perceiana*. Nowadays the road is a rural trail which crosses the entire shire of 'Tierra de Barros' (Roldán Hervás and Caballero Casado, 2014). To the west of Villafranca de los Barros,the change in the features of the pavement is visible (fig. 71); as Ariño Gil (1994, 2004) pointed out, this coincides with the edges of the province and the territory

of *Augusta Emerita* altogether, among Sierra de St. Cristobal and Sierra del Castillo (Roldán Hervás, 2014).

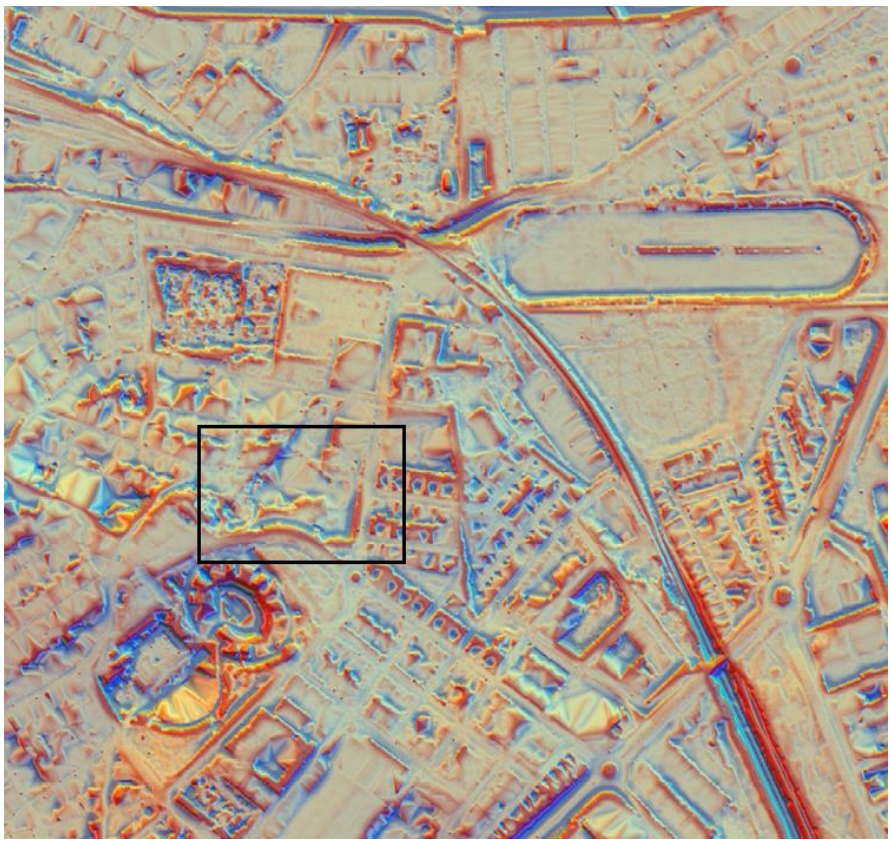


Figure 72. Absence of traces in the SE corner of 'Casa del Anfiteatro' archaeological site. Image: Carlos Cáceres-Puerto.

The *Via XXIII,* along with the *Via X* and *Via XII*, have a 'ring road' connection with the *Via XI*, with the continuation of the road connecting both bridges. This route did follow the walls and dike along the Guadiana, to turn left and run parallel to the walls and the southeastern gate of the *kardo maximo*, finally ending up at the small gate behind the amphitheatre (Sánchez Barrero, 1999: 255–65). The pavement consisted of rammed earth using mud as concrete and is 50cm thick and 4.7m wide, preserving a consistent pattern alongside the walls (Sánchez Barrero, 1999: 259). I analysed LiDAR images of this area hoping to discern a section of this secondary road connecting the colony to the circus through a *Via Sepulchralis,* further discussed in Chapter 8.1, in Part II. However, the only area in that part of the city that has not experienced major construction works, the southeastern corner of the archaeological site of 'Casa del Anfiteatro', did in fact suffer major soil movements in the past. Hence, the LiDAR analysis was futile, as it can be seen in figure 72. More examples of ring roads can be

observed, although not necessarily on the same route, in 21, Santa Lucía Street (Bejarano Osorio, 1999a: 109–24), along the north-eastern necropolis (Ayerbe and Márquez, 1998), and also in Sánchez and Marín (2000) and Sánchez Barrero (2010).

This carriageway is crucial for the understanding of the development of both the colony and the border between *Lusitania* and *Baetica*. The *Via XXIII* has been key to establishing a common ground regarding the frontier between both provinces according to different construction features (Ariño Gil, 1994; Ariño Gil *et alii*, 2004; Rodríguez Martín, 2012). This road also coincides in some sections with the orientation of the *kardo maximo* of the *pertica* and, therefore, is set as the main hub of the southern roads of the colony (Sánchez Barrero, 2000b; 2010).

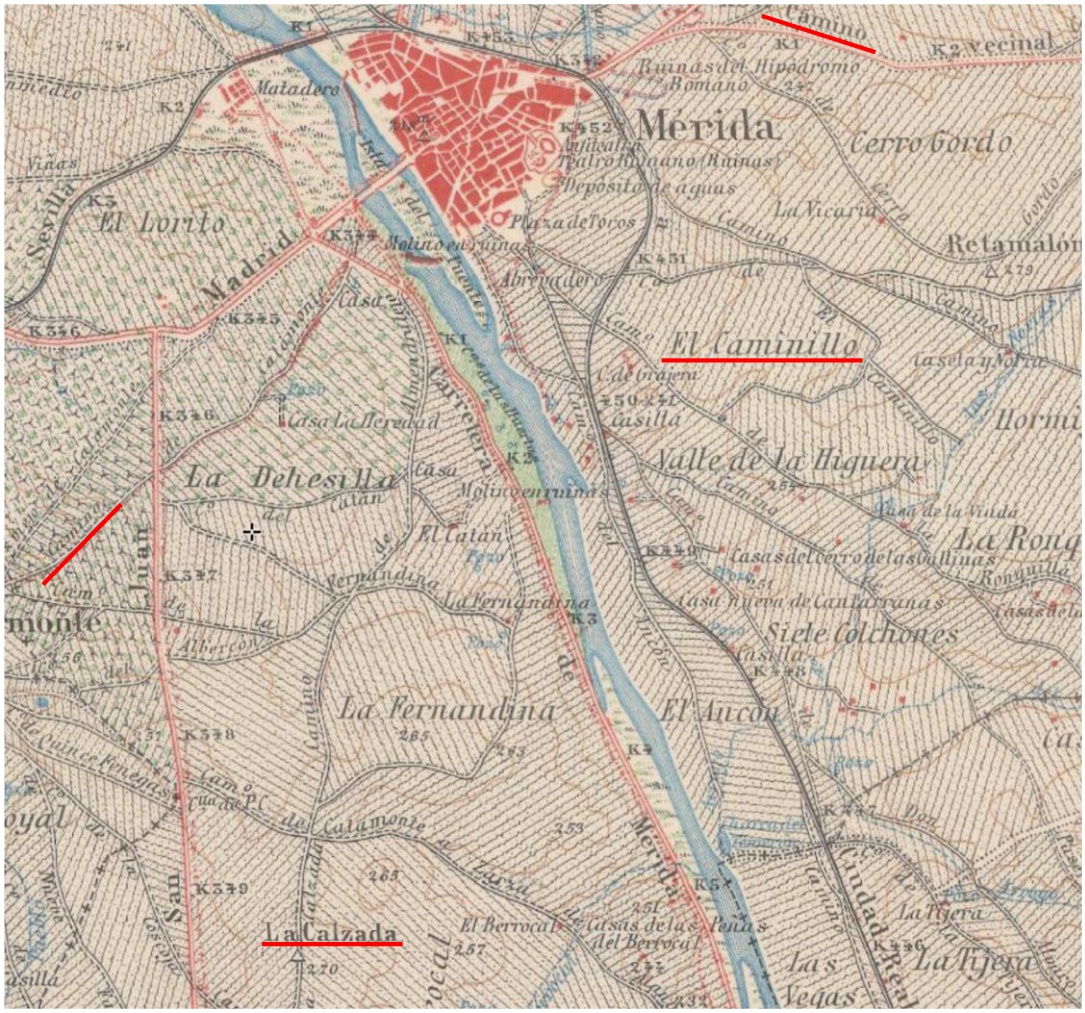


Figure 73. Toponymics related to Roman roads. Map: IGN, image: Carlos Cáceres-Puerto.

As can be seen in figure 73, the toponyms in historical maps are helpful for locating possible pathways following names related to roads, for example

‘camino’, ‘calzada’ and ‘caminito’. In this case, for instance on map 777 of the first edition of the historical map of the Instituto Geográfico Nacional de España (1946), at least four different toponyms are related to the road grid of the Roman colony. Regarding the *Via XXIII*, following Cerro del Lorito, La Dehesilla and La Fernandina, we find ‘La Calzada’ in the bottom left corner (fig. 73). This road crossed through this area heading towards *mansio Perceiana*.

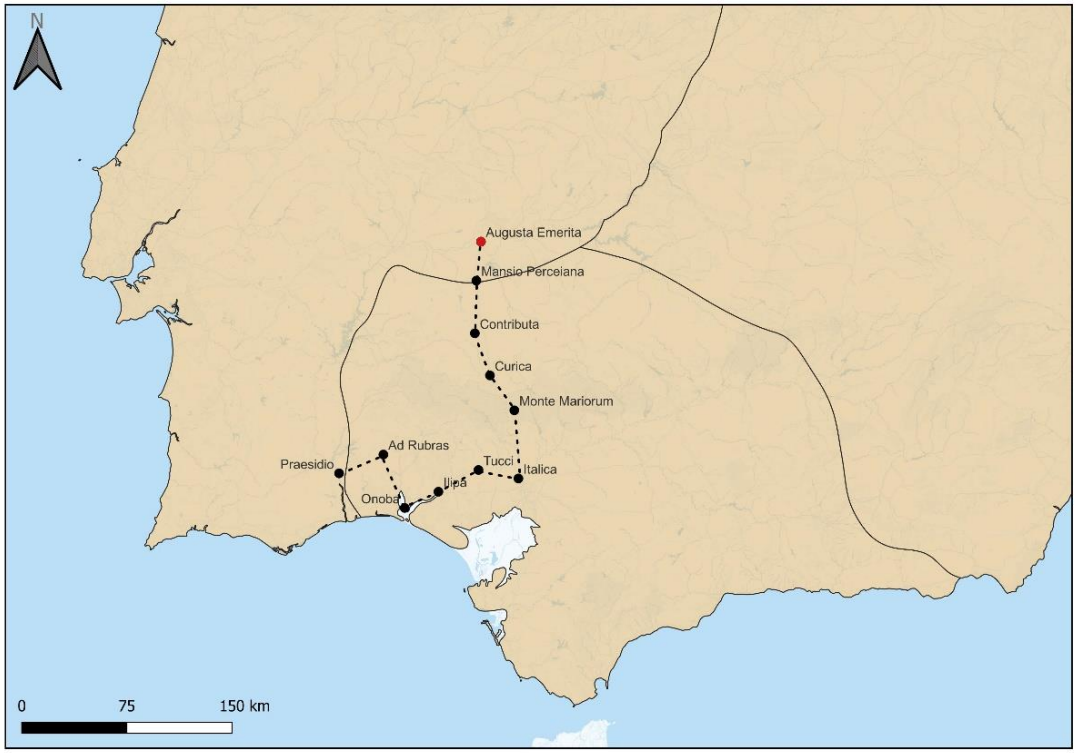


Figure 74. *Mansiones* on the *Via XXIII*, and simplified route. Map: Carlos Cáceres-Puerto.

To conclude with the *Via XXIII*, the diversion towards *Italica* happens at *Lacunis* (Fuente de Cantos, Badajoz). This route (fig. 74) was not suitable for the transportation of goods due to the steepness of the ground. As Rodríguez Martín (2012: 447) argues, during the Moorish invasion of the Iberian Peninsula in AD 711, the Moorish caudillo Musa ibn Nusayr had to withdraw and follow the route north through the *Via* passing by *Regina* towards *Emerita*. This reason opens the debate about whether it was a reliable transportation route connecting the mines in the south with the Lusitanian capital in the north.

7.1.6 *Via XXIV Item ab Emerita Caesaraugusta.*

According to Roldán Hervás (1975) and Roldán Hervás and Caballero Casado (2014), almost every scholar who has researched this route agrees that it is one of the most controversial carriageways of the *territorium emeritensis*. This route, from *Emerita* to *Caesaraugusta*, follows a zigzag route towards the north until it reaches *Ocelo Duri* (Zamora, Spain), then it turns to the southeast to Complutum (Alcalá de Henares), before finally heading northeast until reaching *Caesaraugusta* (Zaragoza) (fig. 75).

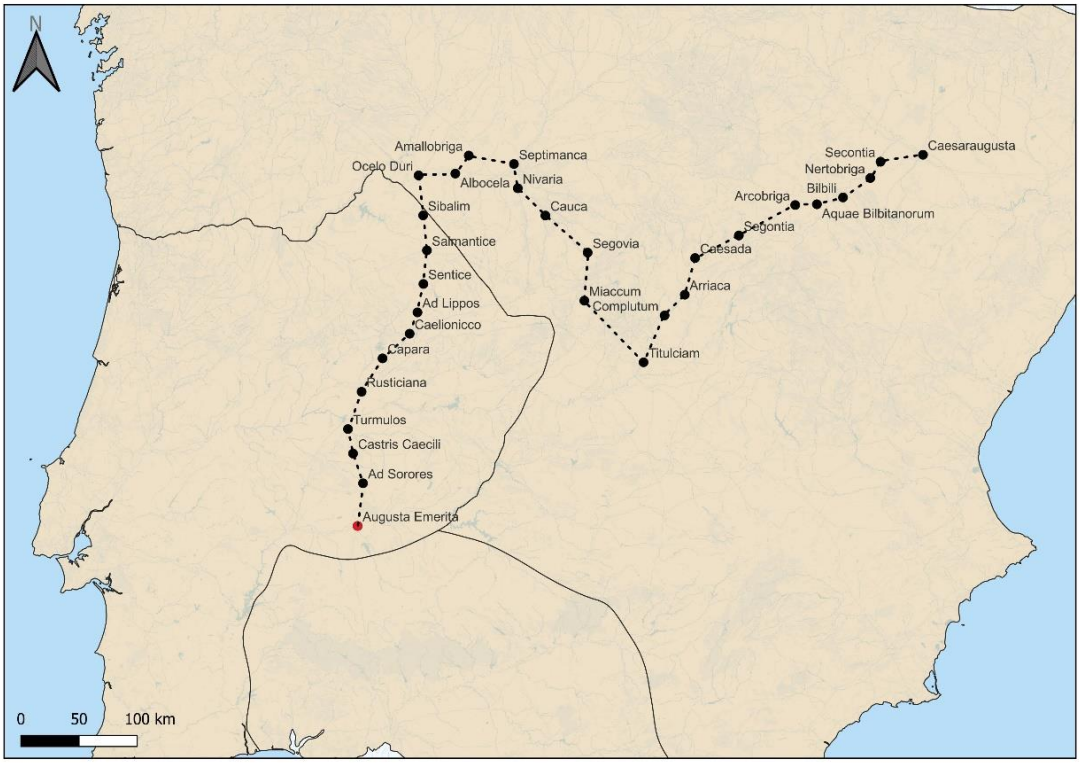


Figure 75. *Mansiones* on the *Via XXIV*, and simplified route. Map: Carlos Cáceres-Puerto.

The *Via XXIV* (table 22) is better known nowadays, as it is part of what was, during the Renaissance, named the 'Vía de la Plata', a route crossing Spain from north to south, from Gijón to Sevilla. However, Roldán Hervás (1975; 2014) did notice an important change in the construction patterns of the road at *Ocelo Duri*, comparing it to the features observed by Sillières (1990) and Ariño Gil *et alii* (2004) on the *Via XXIII* at the southern *mansio Perceiana*, near *Contributa Iulia Ugultunia* (Sánchez Barrero, 2010).

VIA XXIV			
Wess.	***Mansio***	**Distance**	**Variations**
433,1	*Item ab Emerita Caesaraugus-*		
2	*ta*	m.p. DCXXXII	
3	*Ad Sorores*	m.p. XXVI	
4	*Castris Caecili*	m.p. XX	
5	*Turmulos*	m.p. XX	*Turmulas*
6	*Rusticiana*	m.p. XXII	XXIII
7	*Capara*	m.p. XXII	
434,1	*Caelionicco*	m.p. XXII	
2	*Ad Lippos*	m.p. XII	XXII
3	*Sentice*	m.p. XV	
4	*Salmantice*	m.p. XXIIII	
5	*Sibarim*	m.p. XXI	
6	*Ocelo Duri*	m.p. XXI	
7	*Albocela*	m.p. XXII	XVI
435,1	*Amallobriga*	m.p. XXVII	
2	*Septimanca*	m.p. XXIIII	
3	*Nivaria*	m.p. XXII	XVI
4	*Cauca*	m.p. XXII	
5	*Segovia*	m.p. XXVIIII	XVIII
6	*Miaccum*	m.p. XXIIII	
436,1	*Titulciam*	m.p. XXIIII	
2	*Complutum*	m.p. XXX	
3	*Arriaca*	m.p. XXII	
4	*Caesada*	m.p. XXIIII	
5	*Segontia*	m.p. XXIII	
437,1	*Arcobriga*	m.p. XXIII	
2	*Aquae Bilbitanorum*	m.p. XVI	XV
3	*Bilbili*	m.p. XXIIII	
4	*Nertobriga*	m.p. XXI	
5	*Secontia*	m.p. XIIII	XVIIII
438,1	*Caesaraugusta*	m.p. XVI	

Table 22. *Mansiones* on the *Via XXIV*. Carlos Cáceres-Puerto after Roldán Hervás, 1975.

Its origin point lies after the bridge over the River Albarregas, sharing part of the first mile with the *Via XIV* and *Via XV*. It heads north, passing over the aqueduct coming from Proserpina, which is already buried in the shape of a channel (Bejarano Osorio, 2000b: 305–31). On the northern side of the colony, along with the one found between the amphitheatre-theatre complex and the circus, are the main funerary areas of the colony, at least until the 2nd century AD (Ayerbe Pérez and Márquez Pérez, 1997b; Bejarano Osorio, 1997; Gijón Gabriel, 2004; Silva Cordero, 2004a; 2004b; Sánchez Barrero, 2006; Chamizo, 2006; Chamizo de Castro, 2007; Sánchez Barrero, 2010; Cáceres Puerto and García Sánchez, 2020: 53–67). The junction of the three main carriageways encouraged the appearance of great funerary monuments and structures along the first two miles of the itinerary.

The construction features change depending on the scholar, with Sánchez Barrero (2010: 114) providing a width of 8m and Rodríguez Martín (2012: 442) a consistent width of 6m for the same section of the road. The lack of pavement is noticeable after exiting the bridge, where it switches from large quartz paved stones to a rammed earth surface delimited by a medium sized quartz stone in the *margines*. The structure of this road is consistent with the characteristics of the other main roads exiting the *pomerium* of the colony: the continuation of paved roads from the city until crossing both rivers, then a dramatic change to tamped down soil. The main difference with this path is that it follows a fault on its way north.

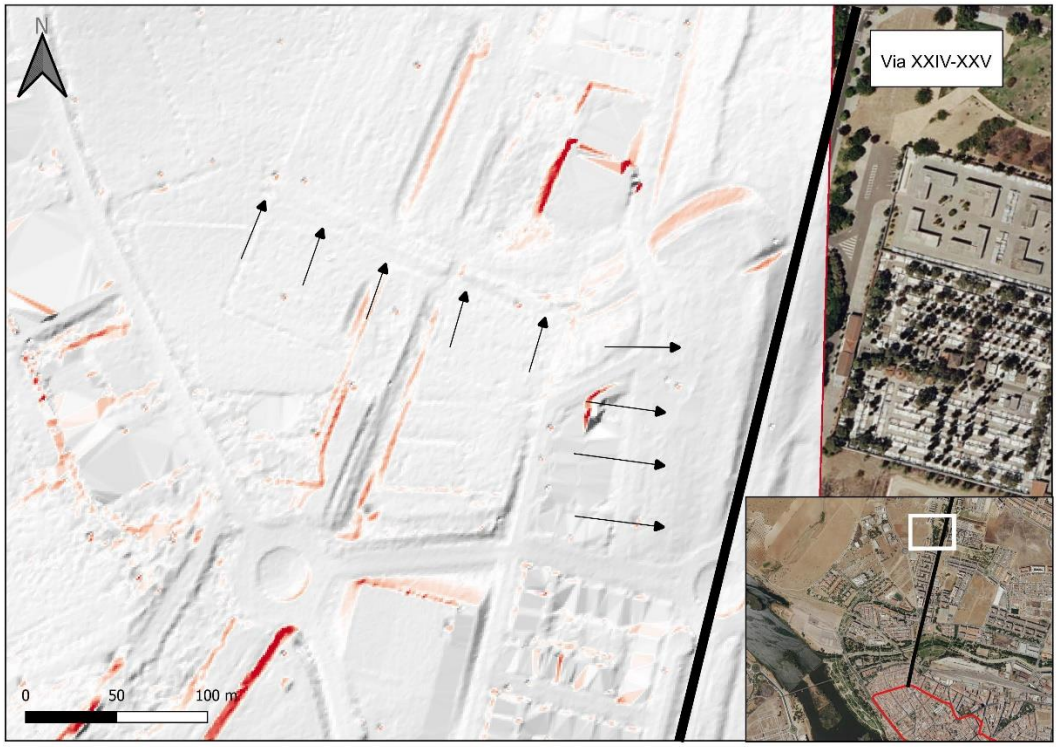


Figure 76. Aqueduct from Proserpina, with *Via XXIV* and *Via XXV*. Map: Carlos Cáceres-Puerto.

The road passed underneath Avenida Vía de La Plata, with the crossing point between the aqueduct 'de los Milagros' and the road underneath the roundabout, as can be seen in the LiDAR image in figure 76. Unlike the *Via XXIII*, the gradient is never over 2%, from 215m above sea level after passing the bridge over the *Barraeca* to 293m when passing along the modern graveyard (Sánchez Barrero, 2010). The presence of funerary evidence is consistent along the road,

but it does not extend its width a lot. Behind the necropolis, suburban buildings for mostly industrial purposes have been found during different excavations.

After the necropolis, the road turns to the northeast, moderating the slope and adapting to the contour lines, towards the crossroads of N-630 and the road to Mirandilla, where part of the surface of the Roman road can be observed. The road acts as a limit for the towns of Mérida, El Carrascalejo and Mirandilla (fig. 3) (Rodríguez Martín, 2012: 444). It crosses the River Aljucén through a missing bridge (fig. 77) (Álvarez Martínez, 2005; 2010; Cerrillo and Montalvo, 2008) to continue up to the crossroads of 'Las Herrerías', already in the province of Cáceres, passing along the church of St. Lucía del Trampal, which Cordero Ruiz (2013: 83-84) identified with A. Urbicus' *Locus Feroniae* (Th., 37). Cerrillo and Montalvo (2008) argue that the disappearance of the bridge forced the route to divert towards Aljucén in medieval times and to then join the Roman road a mile north of this town (Roldán Hervás and Caballero Casado, 2014). They also support the theory of the *Via XXV* sharing the same route until the 'Pass of Las Herrerías' (Cerrillo and Montalvo, 2008). The first *mansio*, already on an area outside the limits of the Roman colony, is *Ad Sorores,* Casas de Don Antonio, Cáceres.



Figure 77. Remains of the bridge over the Aljucén River. Photo: Álvarez Martínez, 2010: 383. Fig. 3.

7.1.7 *Via XXV Alio itinere ab Emerita Caesarea Augusta.*

The *Via XXV* (table 23) is the direct route from *Emerita* to *Caesaraugusta* (Roldán Hervás, 1975: 86). The description of this path will be shorter than the other roads as it follows the same route that the *Via XXIV* follows beyond the limits of the *pertica* of the colony (fig. 78)

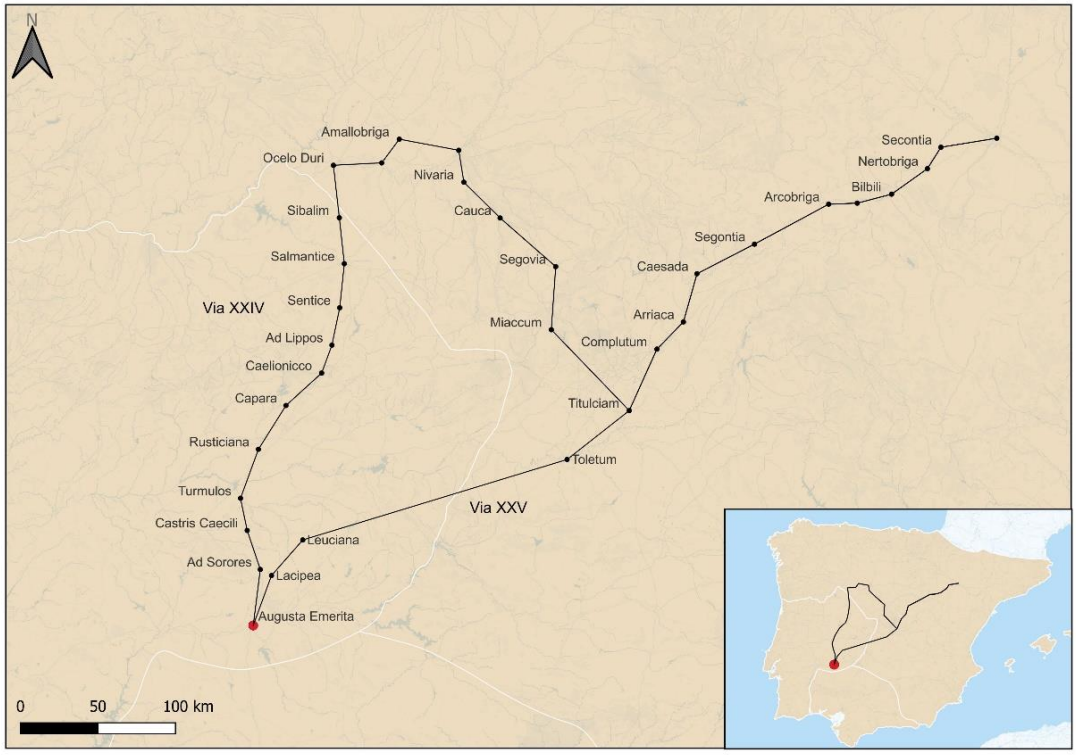


Figure 78. *Mansiones* on the *Via XXIV*, and *Via XXV*, and simplified route. Map: Carlos Cáceres-Puerto.

The lack of milestones on both edges and the probably mistaken distance in the Antonine Itinerary, however, complicate the establishment of a unique path arriving both in *Emerita* and *Caesaraugusta* (Roldán Hervás and Caballero Casado, 2014). Arias (2004) and Rodríguez Martín (2012) think the road headed north alongside the *Via XXIV*, to then divert eastwards after m.p. VIII. On the contrary, the other theory claims that the road followed the same path as the *Via XI* and *Via XXIX*, crossing Avenue Juan Carlos I in Mérida and leaving the circus on its left, looking towards the road to Madrid. Thus, the *Via XXV* would have been underneath the A-5 Madrid-Mérida (Sánchez Barrero, 2010, Roldán Hervás, 1975; 2014).

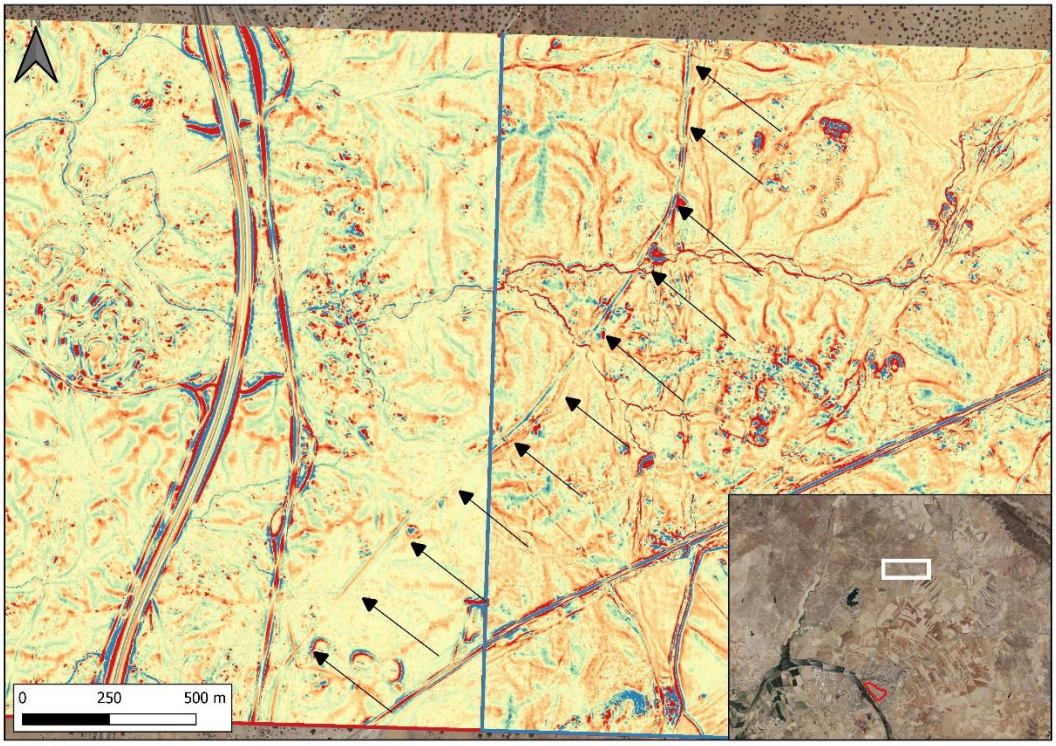


Figure 79. *Via XXV*. Map: Carlos Cáceres-Puerto.

Thus, making it impossible to discern its course using LiDAR, although *Via XXV* follows the same route than *Via XI* (fig. 79).

VIA XXV		
Wess.	***Mansio***	**Distance**
2	*Alio itinere ab Emerita Caesarea Au-*	
3	*gusta*	m.p. CCCXLVIII
4	*Lacipea*	m.p. XX
5	*Leuciana*	m.p. XXIIII
6	*Augustobriga*	m.p. XII
7	*Toletum*	m.p. LV
8	*Titulciam*	m.p. XXIIII
9	*Complutum*	m.p. XXX
10	*Arriaca*	m.p. XXX
11	*Caesada*	m.p. XXIIII
12	*Segontia*	m.p. XXIII
13	*Arcobriga*	m.p. XXIII
14	*Aquae Bilbilitanorum*	m.p. XXIIII
439,1	*Bilbili*	m.p. XXIIII
2	*Nertobriga*	m.p. XXI
3	*Secontia*	m.p. XIIII
4	*Caesaraugusta*	m.p. XVI

Table 23. *Mansiones* on the *Via XXV*. Carlos Cáceres-Puerto after Roldán Hervás, 1975.

Estévez Morales (2000a: 369–83; 2000b: 385–411) excavated a 7–8m wide road built with large-sized stone blocks near the Church of La Antigua in the outskirts of Mérida, and Sánchez Barrero (2004) documented it beneath the Mérida-Trujillanos Road. Sánchez Barrero (2010: 137–38) argues that the possibility of two different routes joining together around *Augustobriga* (Talavera La Vieja, Cáceres. Fig. 80) has been inexplicably denied by researchers. In my opinion, if we consider the suburban paths of the colony, not only the main routes mentioned in the Antonine Itinerary, but it is also plausible that one road began in two different points depending on your origin. In this case, from the north or the east, for instance.

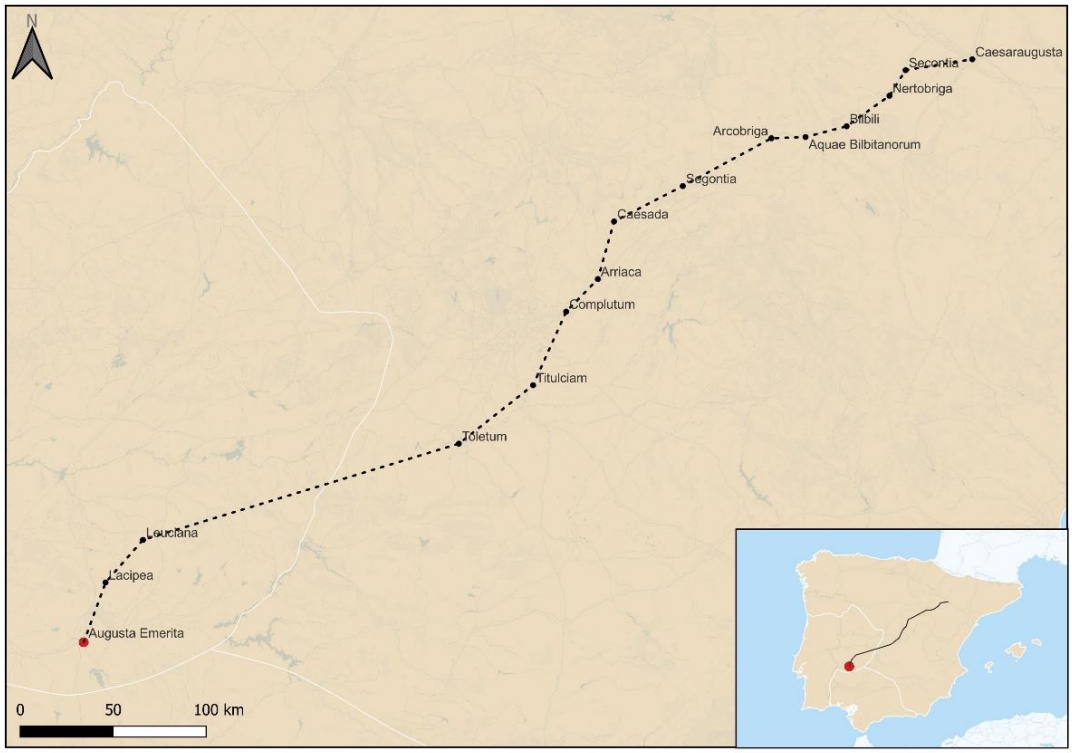


Figure 80. *Mansiones* on the *Via XXV* , and simplified route. Map: Carlos Cáceres-Puerto.

There is a suburban path not mentioned in the Antonine Itinerary, known as the 'Camino de Mirandilla', that joined the *Via XXV* and *Via XXIV*. It is the continuation to the north of the *decumanus maximus*, but it is separate from the *Via XXIV* until reaching the neighbourhood of Montealto in northwards Mérida. It continues to the east, also connecting to the *Via XI* after the reservoir of Cornalvo (Sánchez Barrero, 2010). The distance between the *Via XXIV* and this path is merely 730m, which probably means 'Camino de Mirandilla' was one of the axes of the centuriation of the colony belonging to the non-assigned land and used for

funerary purposes, at least along the first mile. Sánchez Barrero (2000a: 203–28; 2010) has argued for the possibility of a different orientation in the northern basin of the Guadiana River for the *pertica*, considering the scarce information we possess for the *centuriatio* on this side of the river.

7.1.8 *Via XXIX Per Lusitaniam ab Emerita Ceasarea Augusta.*

VIA XXIX			
Wess.	***Mansio***	**Distance**	**Variations**
3	*Per Lusitaniam ab Emerita Caesarea*		
4	*Augusta*	m.p. CCCCLVIII	
5	*Contosolia*	m.p. XII	
6	*Mirobriga*	m.p. XXVI	
7	*Sisalone*	m.p. XIII	
445,1	*Carcuvium*	m.p. XX	
2	*Ad Turres*	m.p. XXVI	
3	*Mariana*	m.p. XXIIII	
4	*Lamini*	m.p. XXX	
5	*Alces*	m.p. XL	
6	*Vico Cuminario*	m.p. XXXIIII	*Cominario*
446,1	*Titulciam*	m.p. XXVIII	
2	*Caesaraugusta mansionibus supra*		
3	*Scriptis*	m.p. CCXV	

Table 24. *Mansiones* on the *Via XXIX.* Carlos Cáceres-Puerto after Roldán Hervás, 1975.

This road is not mentioned in either Rodríguez Martín's (2009; 2012) or Sánchez Barrero's (2000; 2010) work about the road grid of the Augustan colony (fig. 47). This route (fig. 81), the third one between Mérida and Zaragoza, followed the same path as the *Via XI* until the ford of Alange, where it diverted to the northeast towards *Conisturgis/Metellinum* and *Mirobriga* (Ciudad Rodrigo, Spain) (table 24). A different theory proposed by Arias (2004) argues that the first *mansio* should be searched for nearby Aljucén instead of Magacela, as Roldán Hervás (1975; 2014) suggests. The discussion has been traditionally focussed on the beginning of the name: '*Per Lusitaniam*', with scholars trying to prove that the road followed this terminology and crossed through Aljucén and Lácara (Arias, 2004), even though this implies changing the location of some *mansio* that are already placed on the map. Roldán (2014) follows the most recent investigation (Rodríguez Morales, 2007) that suggests a route of: Mérida-Alange-Medellín-Magacela-Móstoles-Zaragoza.

Funerary evidence can be observed along the first two miles of the itinerary and throughout a secondary path complex (Márquez Pérez, 2017: 187–203), like the one excavated by Gijón Gabriel (2004: 73–125). This funerary evidence corresponds to an early chronology, as the pottery found within the tombs never date beyond AD 50 (Márquez Pérez, 2017).

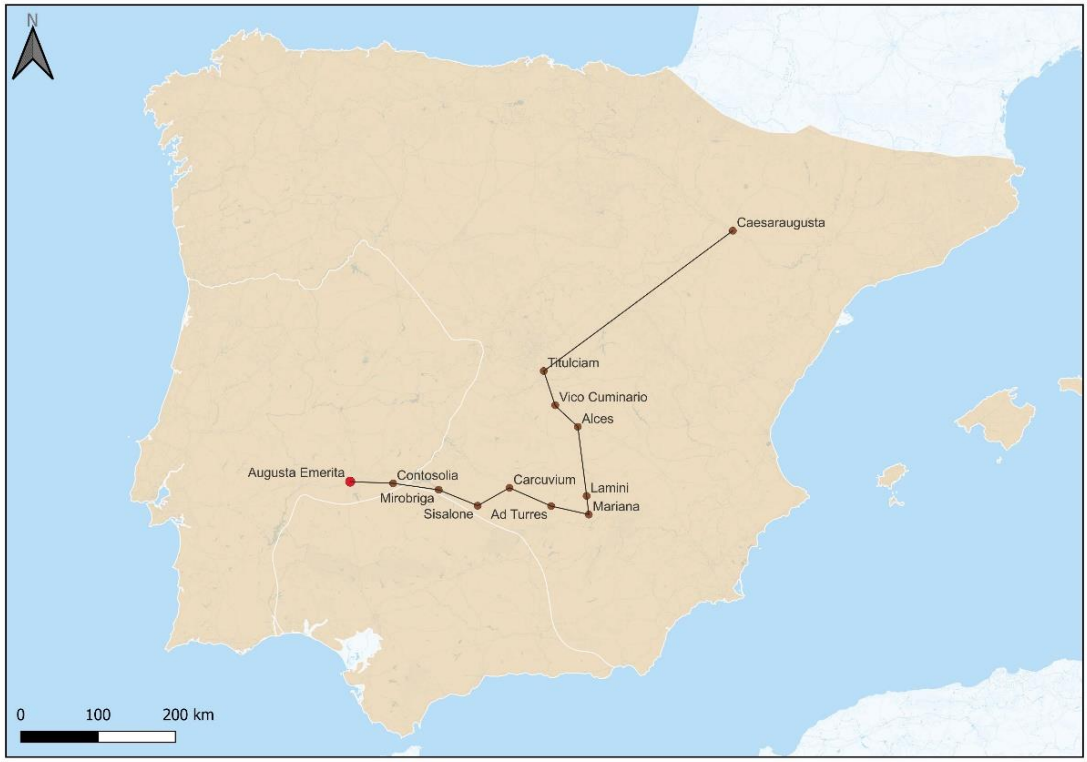


Figure 81. *Mansiones* on the *Via XXIX*, and simplified route. Map: Carlos Cáceres-Puerto.

7.2 Suburban roads and lesser paths to and from *Emerita*

The main purpose of my research is to acknowledge, study, and analyse the occupation of the suburban spaces of *Colonia Augusta Emerita* in the Early Roman period. I intend to discuss the effects of this occupation and the use of those spaces on the urbanism of the Augustan colony, the transactional relationships with other Roman territories and the connections between *Emerita* and its environs. Besides the funerary evidence and the grave goods contained within those contexts, the land distribution process, and the pre-Roman occupation of the mid Guadiana Valley, the communication nodes played a crucial role in shaping the *territorium emeritensis*. Hence, I have not overlooked the main communication nodes farther from *Emerita* using LiDAR or aerial

photography, since my interest remains with the suburban areas and the periphery of the urban environment of *Emerita*. I have included examples of LiDAR images when possible, considering the excessive construction development that the environs of Mérida had experienced in the past 50 years, making the usage of technologies like LiDAR futile.

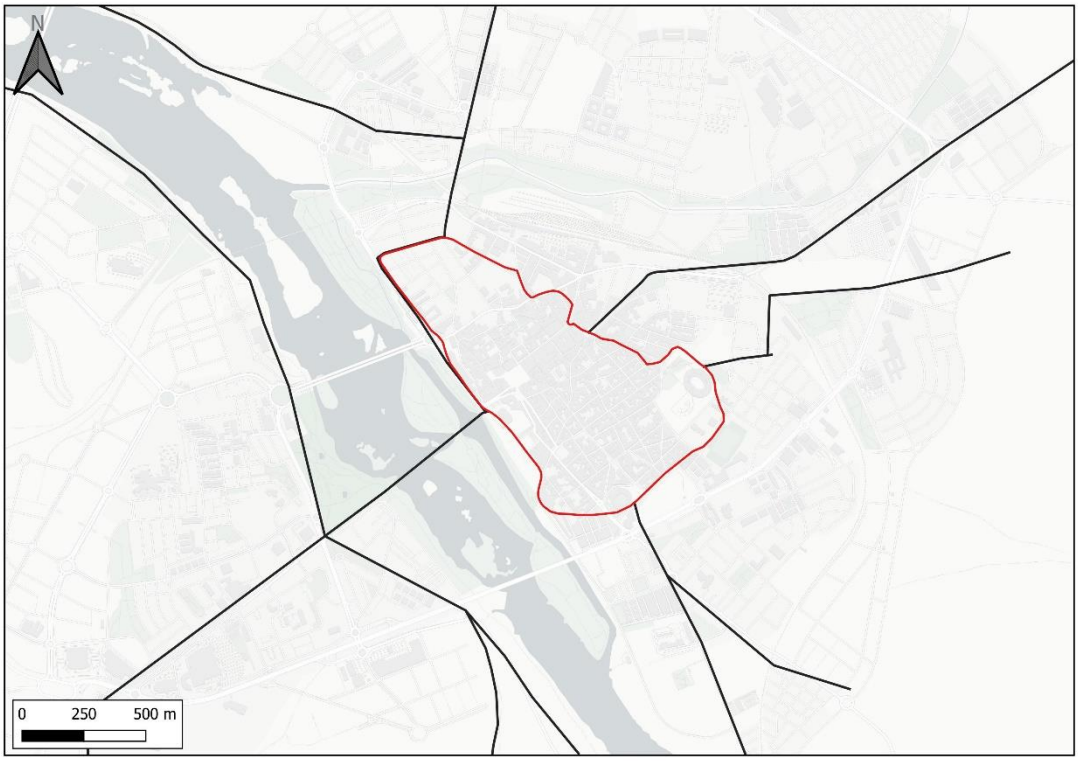


Figure 82. *Emerita* and the suburban network of roads. Map: Carlos Cáceres-Puerto.

The Lusitanian capital and the provincial hinterland were connected by the road grid system around *Emerita* (fig. 82), which truly supposed a bridgehead of '*Romanitas'* They conveyed the influence of the colony in rural areas, whereas the rural settlement, favoured by the centuriation process, supplied the colony with raw materials. The road system was intrinsically linked to the land distribution process of *Colonia Augusta Emerita*. Some of the lesser roads, both in the southern and the northern side of the colony, seem to have a certain pattern coinciding to the plausible grid of the centuriation proposed by Ariño and Gurt (1992–1993). Although there are not many traces of redistribution, or reorganisation, of the landscape by the new Roman authorities, it involved the creation of infrastructures to guarantee the prevalence of the new Roman order. This implied the creation of road grids, man-made structures to signal borders

where there were none beforehand. It was another component of the use of the landscape around a colony.

As Sánchez Barrero (2010) have stated, these suburban areas entail a merger amongst the *urbs* and *ager*; a transitional buffer zone combining the urban living place with the exploitational element intrinsically related to the countryside component (Fernández de la Vega, 1994: Sánchez Barrero and Marín Gomes-Nieves, 2000). The arteries of the Roman settlement were the main roads of the *territorium* (Rykwert, 2002), connecting the rural areas with their urban counterpart, and having a key element within the Roman ethos as the organising factor to the funerary areas, located in the suburban spaces of the colony. The presence of funerary evidence alongside the communication nodes and the role of the suburban road grid in organising the funerary areas will be further analysed in chapter 8.



Figure 83. *Emerita* and the nine roads crossing through the Augustan colony. Simplified route. Map: Carlos Cáceres-Puerto.

This road grid system cemented major pre-Roman communication nodes connecting the Northern Plateau with the mines in Sierra Morena and the

Guadalquivir Valley, both in the province of *Baetica*. *Emerita* was at its centre (fig. 83), acting as the major crossroads in southwestern Iberia since its foundation.

The establishment of *Emerita* in this area was heavily influenced by this strategic location in the mid Guadiana Valley, despite of the presence of a Roman colony nearby: *Metellinum* (fig. 2). *Colonia Augusta Emerita* and the road grid system supported each other in mapping the Lusitanian province. The political, social, economic, and religious influence of *Emerita* could not have been conveyed towards the provincial hinterland without the supporting role of the communication system. 9 major road converged in *Emerita*, hence, following the popular saying, all roads did lead to *Emerita*, rather than Rome, in southwestern *Hispania*.

7.3 The environs of the colony: the peripheral settlements

Colonia Augusta Emerita, as a provincial capital and economic centre, enjoyed and administered a substantial amount of land, granted by the emperor, starting with its foundation. I have already discussed the historiographical problems concerning its limits and the *deductio* process, with the extraordinary proportions of the allotments distributed among the colonists, in Chapter 5.1. Nevertheless, I considered it necessary to have a general understanding of the rural population surrounding the Lusitanian capital prior to concluding with Part I. However, even though the precise location of the rural settlements is not the main purpose of this research, I shall mention that the accuracy with which the sites are located in the Archaeological Inventory of the province of Badajoz[17] could be substantially improved, as some sites are listed kilometres away from their pinpointed location After a thorough research on those sites, I propose an accurate location for the sites analysed in my thesis (fig. 84).

In addition to this, the majority of sites mentioned have not yet been excavated and have been identified merely by surveys or accounted for by

[17] I would like to thank the Heritage branch of the Government of Extremadura and Dr. Jesús García Sánchez (Archaeological Institute of Mérida), director of the 'Re-Rom project: Romanización y Resiliencia en *Lusitania*', for granting me access to the Archaeological Inventory for the province of Badajoz.

neighbours to the regional authorities. Hence the approach ought to be changed, as there are no complete surveys related to rural population of the mid Guadiana Valley and taking into account the few excavated cases to have a general understanding should be considered. I will focus on the typology of the habitat and the main population patterns observed in the dispersion of the sites.

7.3.1 Typology and distribution of rural settlements

The rural landscape has been studied by various researchers across different survey projects. Navarro del Castillo (1975) developed a historiographical discourse on the foundation of Mérida and the archaeological presence of the surrounding towns. Cerrillo Martín de Cáceres (1984) and Fernández Corrales (1988) evaluated the situation of the rural settlements of the colony, whereas Gorges (1986) has developed the most complete survey available for the mid Guadiana Valley, studying and cataloguing Early Imperial Roman sites in the surrounding landscape of *Augusta Emerita*. In addition, Teichner (2008; 2018: 235–254) has studied the rural settlements in the context of the province of *Lusitania* and in the Iberian Peninsula. Other scholars, as I partially mentioned in Chapter 5.1, have debated, and published several papers in relation to the distribution of the allotments and the rural land planning policy of *Emerita* after its foundation. Corzo (1976), Silliéres (1982), Gorges (1982; 1983a: 199–206; 1983b: 413–24), Gurt and Ariño (2003), Barroso *et alii*, (2003: 93–103), Cordero Ruiz (2013) and Cáceres-Puerto (2019: 135–51) are a small number of publications concerning the layout of the allotments and the limits of the *ager publicus* of the colony (fig. 37), and therefore they also study the rural population of the territory. As I mentioned in Chapter 5, the assigned *ager publicus* of the colony was distributed among the colonists in three different procedures. As stated in Chapter 2, even though some scholars defended this as a political procedure (García y Bellido, 1958: 18), even as a punitive act (Saquete Chamizo, 1997), others deem this methodology as merely an agricultural organisation measure (Le Roux, 1982: 82; 2006), as it most certainly was.

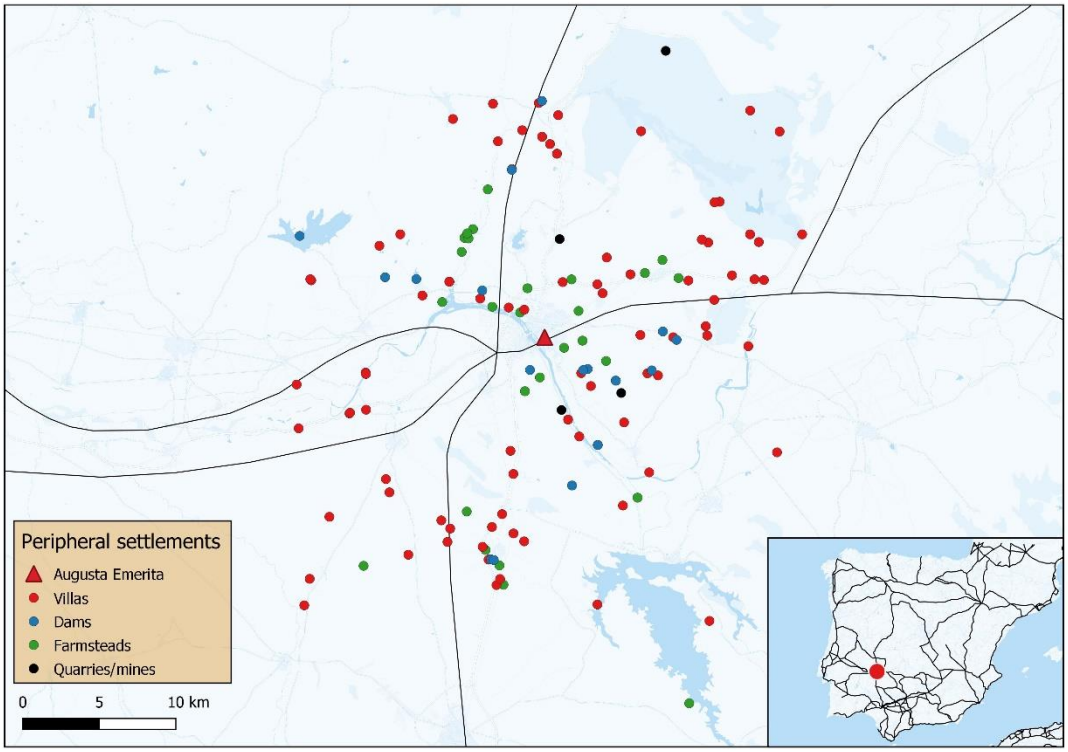


Figure 84. Proposed area of study. Map: Carlos Cáceres-Puerto.

In this chapter, I refer to rural settlements (fig. 84) where the typology of the site is unclear, however, I describe them as a villa, or farmstead, if the utilisation of the constructions and the surrounding territory has been demonstrated as such.

Most scholars have used the *villae* as the basis for the analysis of Roman territorial occupation and economical exploitation, as they are often seen as making up the area of influence of a city (Villanueva Acuña, 1991: 321–22). Hence the inhabitants of *Emerita* would manage the surrounding rural areas, as we will further discuss in this chapter. The *villae* system has been used to study the process of occupation of rural landscapes for decades. Here, my proposed study area comprises a 15km radius from *Emerita*, covering the territory belonging to the current municipalities of Mérida, as can be observed in fig. 85: Arroyo de San Serván, Calamonte, Don Álvaro, Valverde de Mérida, Trujillanos, Aljucén, El Carrascalejo, Mirandilla, Esparragalejo, La Garrovilla, Alange, Torremayor, Villagonzalo, Torremejía and San Pedro de Mérida.

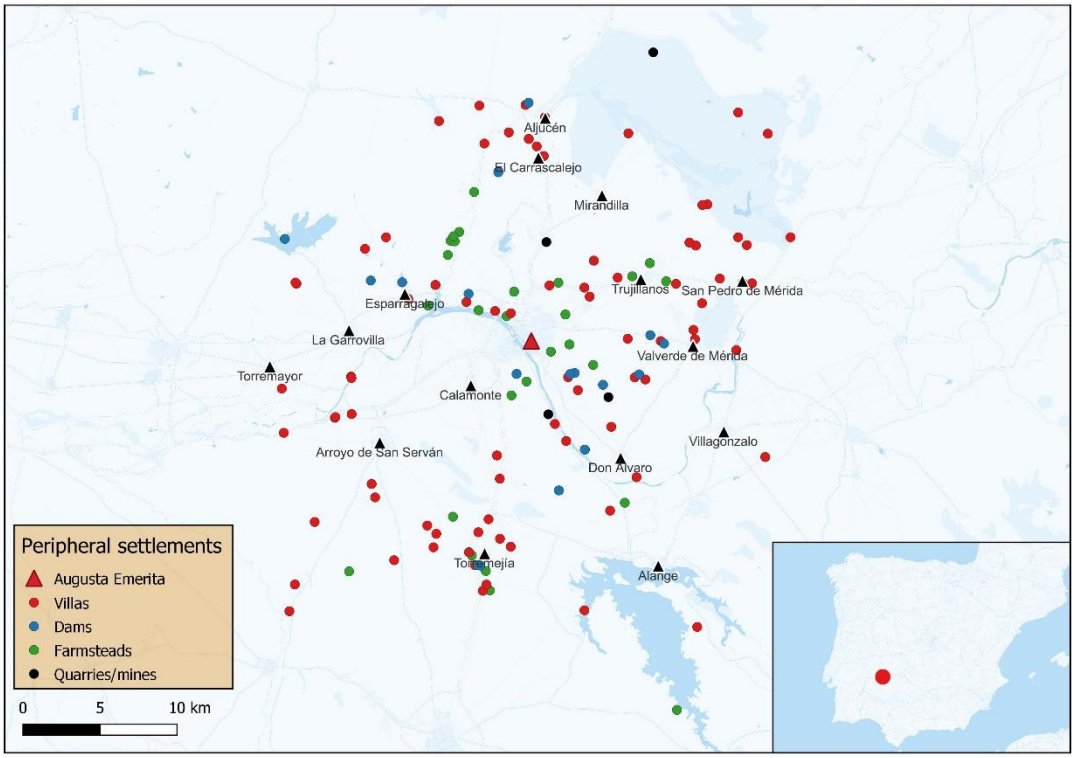


Figure 85. Peripheral settlements and modern-day cities. Map: Carlos Cáceres-Puerto.

The distribution pattern of rural settlements around *Emerita* follows the traditional parameters and necessities of a settlement of this nature: richness and fertility of the terrain, easy access to communication nodes (see more in Chapter 7.1), the existence of a main hub from which distribute their surplus and easy access to a source of water. The area surrounding *Emerita*, following the course of the river *Anas*, was very fertile. However, its periodic flooding process until the construction of consecutive reservoirs in the second half of the 20th century would have substantially affected the territory and the course of the river. Some rural settlements were destroyed, whereas other had their assets considerably affected, like the *villae* of Cubillana, Pesquero or Las Termas in the vicinity of Talavera la Real, eastern *Emerita*, or the *villa* of Torre Águila in Barbaño (fig. 86) (Rodríguez Martín, 1999: 122).

This is interesting to consider while studying the former course of the river, as some villas might nowadays be located on the opposite bank, hence we must approach the landscape we observe from an entirely different perspective. In addition to the change of the course of the river, the terrain has been substantially altered, as I mentioned before in this thesis, due to the Badajoz Plan in the 1950s.

However, there are a certain number of vestigial allotments where evidence of ancient crops can be observed and the limits between different plots of land can be distinguished, mostly thanks to old aerial photography (fig. 87). It occurs in the villa of Torre Águila in Barbaño (Rodríguez Martín, 1993: 144; 2005). In those areas, crops of vines, olive trees and wheat-based cereal can still be attested (Ariño Gil and Díaz Martínez, 1999: 187–88); this concurs with the study I developed on pottery vessels in Chapter 9.1, 9.2, 9.3, and 9.4.

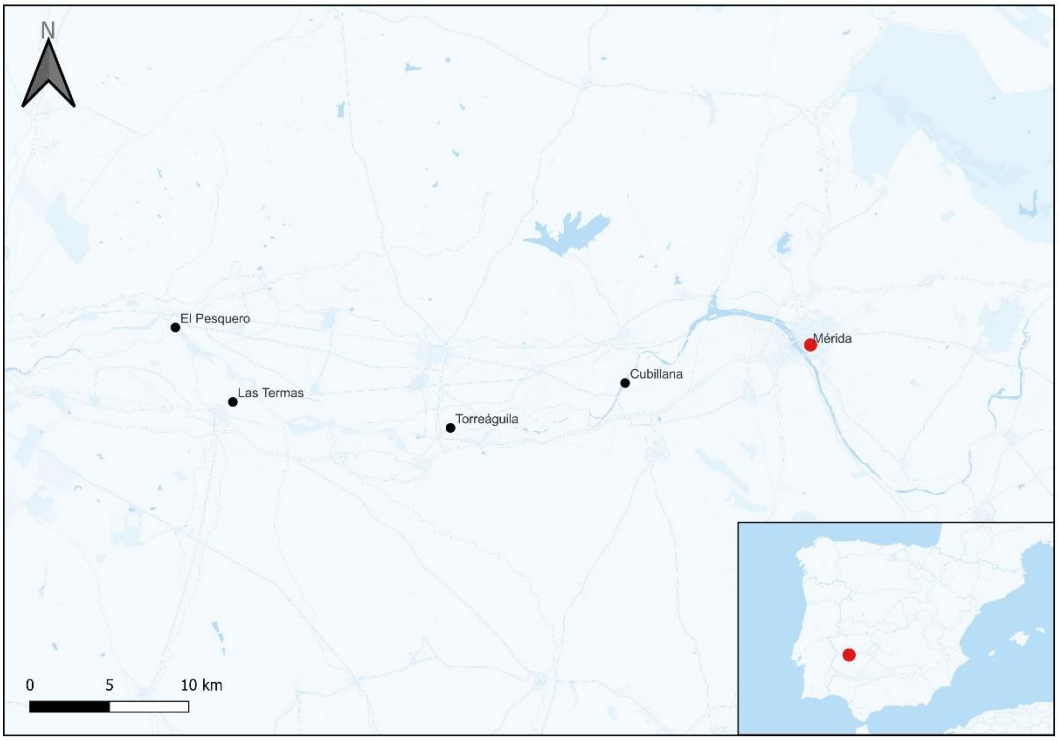


Figure 86. Location of *villae* altered by the course of the Guadiana river. Map: Carlos Cáceres-Puerto.

The question of the location of the rural settlements has been a constant issue for the researchers, as traditionally there have not been many *villae* located on the right bank of the Guadiana River. Furthermore, the rural sites located in the right bank do not follow the pattern marked by the *locus gromae* (fig. 38) and the allotments around Torremejía and Trujillanos, visible through aerial images. The Spanish National Geographical Institute, through the PNOA cartographical source, includes three series of aerial photography developed by the US Navy between 1945 and 1968. Series A (1945–1946) and B (1956–1957) are a crucial source of information, especially Series A, as the images were taken before the Badajoz Plan started.

Thus, the organisation scheme on the northern side of the Guadiana River might have differed from the southern area, as we can observe in the alignment of the plots. Unlike the north-south axis suggested by Ariño Gil and Gurt (1994a: 34–36), Gorges and Rodríguez Martín (2006: 172) contemplated a main east-west axis following the course of the river *Anas*. However, the alignment of the allotments with the *pertica* coincides with the consideration argued by Ariño and Gurt (Gorges and Rodríguez, 2004; Cáceres-Puerto, 2019: 135–51).

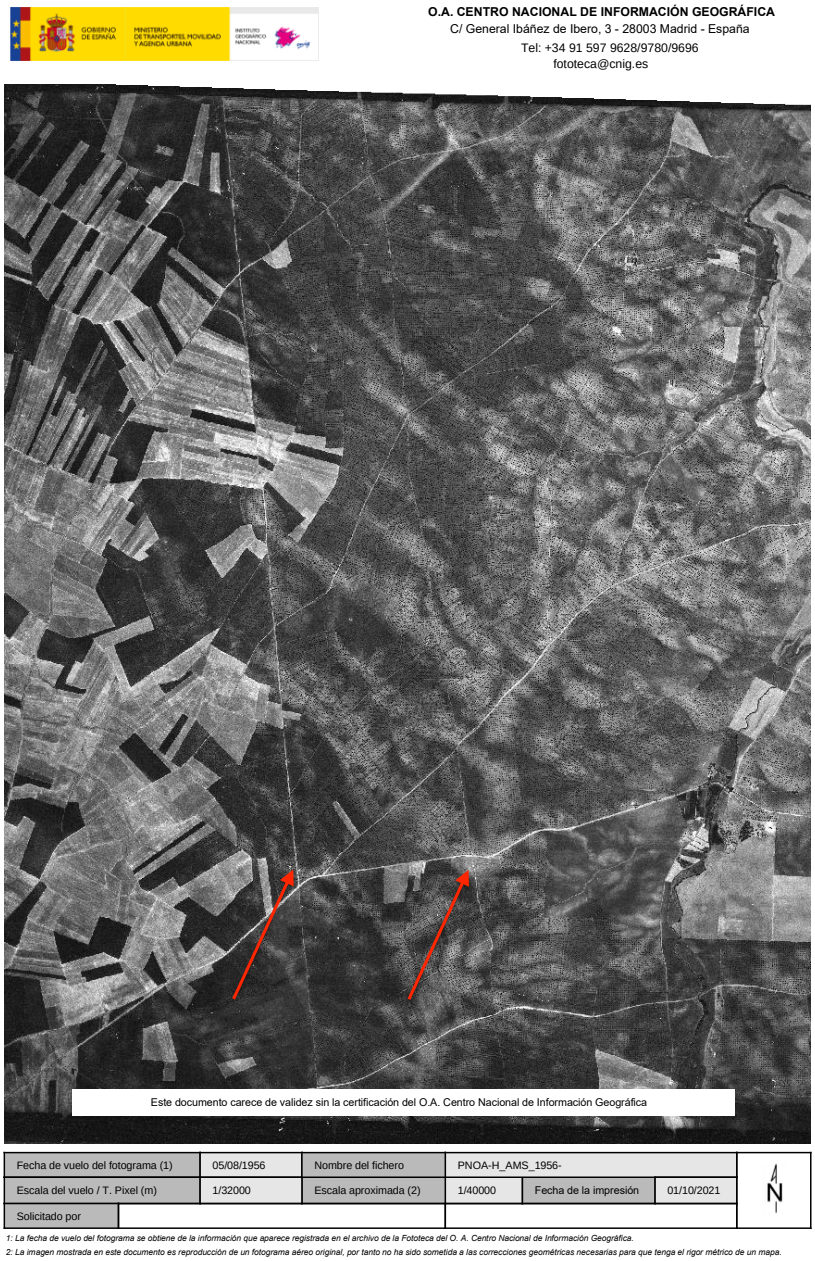


Figure 87. Pertica between Almendralejo and Torremejía. Photo: IGN, Vuelo Americano (Serie B, 1956–1957), image: Carlos Cáceres-Puerto.

Gorges and Rodríguez (2006: 171–91) support a more consistent *villae* occupation of the territory to the south and west of *Augusta Emerita*; however, there are *villae* complexes on the northern and eastern side of the colony as well. It is correct, nonetheless, that there is a higher concentration of villas in the Tierra de Barros region southwards, although this could be attributed to a better understanding of the centuriation process and a higher appearance of said sites in aerial photography in this area. The consensus seems to be a main route marked by both roads leaving *Emerita* westwards on both banks of the Guadiana River. The evidence suggests its plausibility, however altered, is the course of the river over the past two millennia.

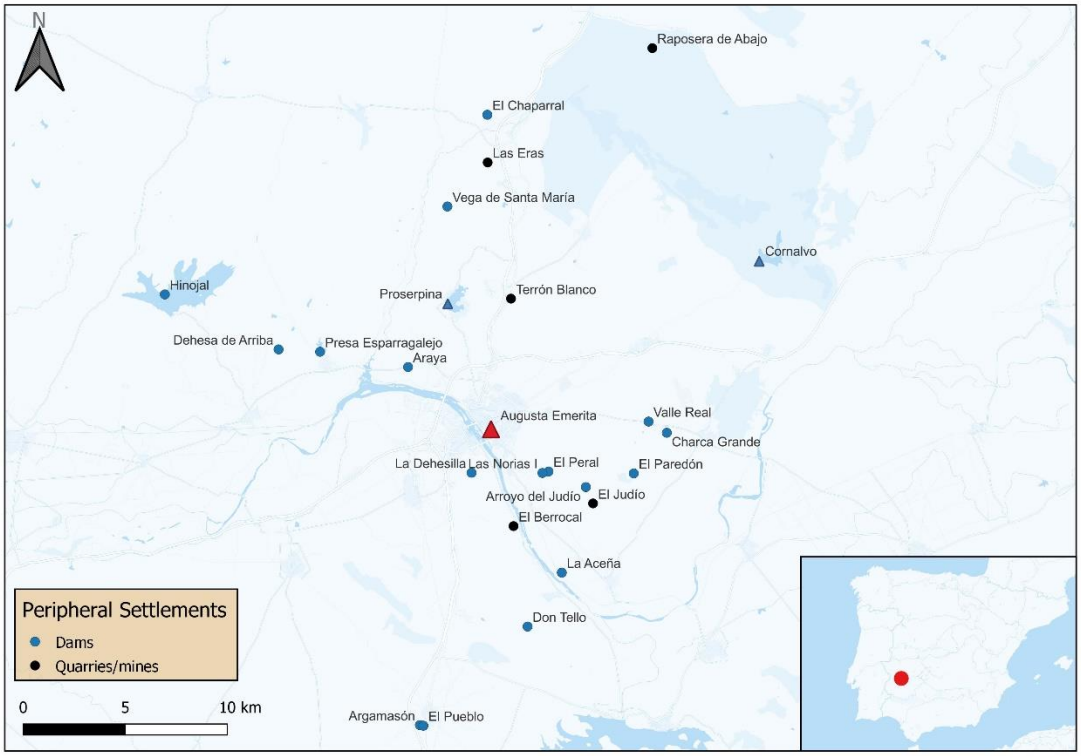


Figure 88. Quarries and Dams in the environs of *Emerita*. Map: Carlos Cáceres-Puerto.

The area can be then divided into fertile land and land not suitable for agricultural purposes. We can observe quarrying sites on the latter, mostly for the extraction of granite used in the first stages of the colony (Pizzo, 2010; Russell, 2013). These are usually located far from water streams, although there are some exceptions, like Proserpina and Raposera de Abajo to the northwest of the colony (fig. 88). These sites are located near *Emerita*; the vast majority of them are situated within the current limits of the city of Mérida. Those industrial facilities in the peripheral areas of the colony supplied raw materials for the basic

infrastructures of the colony. They included a marble quarry, which is the only one documented near *Emerita*, in Sierra de Carija (Nogales Basarrate, 1997; 176–84; 1999; Russell, 2008: 107–26). There is also one silver mine on the site of El Judío (Domergue, 1987). However, the main part of the mining complex was obtaining granite, like at the sites of Berrocal, Royanejos, Mirandilla, Carretera de Don Álvaro, Garrovilla, Carija, La Albuela, Esparragalejo and Raposera de Abajo by the Aljucén river and Proserpina, near the Roman dam.

7.3.2 The chronology of rural occupation

In the case of *Emerita*, the rural settlements would have originated from foundational times, when the territory was segmented and distributed to the settlers in three consecutive colonising schemes. The chronology for these settlements is usually set between the end of the Augustan reign and the end of Tiberius, or the beginning of the Claudian era; that is, the chronology is very early considering the relatively slow advance of some of the public infrastructure of *Emerita*. Rodríguez Martín (1999) corroborated the chronology of some sites by comparing them to the survey developed by Gorges in 1986. As a matter of fact, there is evidence for the occupation of the peripheral areas of the territory of the colony since the reigns of Tiberius and Claudius (Mayet, 1990: 209). Hence, the settlement process of the *ager publicus* that I defended in Chapter 5.1, from the edges towards the hinterland, does coincide with the archaeological record. Moreover, some arguments that consider the amount of land granted as a 'bribe' to the unwilling settlers, as defended by Balil (1965) and Cerrillo Martín de Cáceres (1984), seem refuted. The third *centuriatio* under Otho contradicts the idea of fleeing settlers, or unwilling colonists being given the allocated plots, as there is evidence of land gathering throughout trading and accumulation of rural properties, forming *fundi* (Sánchez and Alba, 1998a: 211–36; Nodar Becerra, 2001: 267–83, Sanabria Murillo, 2008). Thus, three land distribution process would have been performed on account of the size of the territory of *Emerita*, rather than due to unwilling settlers. The very nature of the distribution of the land throughout the *pertica* facilitated the variation in size of the allotments granted, hence favouring the creation of said *fundi* by richer owners. Sánchez Barrero (2004: 70) estimates this process became active within the first two generations.

The foundational process of the colony was designed to either claim the ownership of the land for Roman colonists, disowning the indigenous communities, which should have happened at a lesser scale around *Emerita* considering the small indigenous component, or to populate a vacant land. However small the pre-Roman presence was, some settlements were seized and re-occupied under Roman rule despite their alleged scarcity, as these areas were not as populated as the *Baetica* or *Turdetania* territories. Some examples can be found in the rural settlement of El Chaparral, between the villages of El Carrascalejo and Aljucén (fig. 89), northern *Emerita* (Navarro del Castillo, 1975; Gorges, 1986; Sanabria Murillo, 2008), or Miraflores in Mérida. Other sites with remarkable pre-Roman occupation, farthest away from *Emerita*, are located in Hornachuelos in Rivera del Fresno (Rodríguez Díaz, 1992) and in Cerro del Castillo in Alange (Pavón, 1996). Therefore, the distribution of the area and the study of its sites often neglect the Second Iron Age component and its inhabitants. Nevertheless, the area surrounding *Emerita* is still unknown when considering its pre-Roman occupation (Jiménez Ávila, 2011: 35–58), as I discussed in Chapter 4.2.1, and 4.2.2.

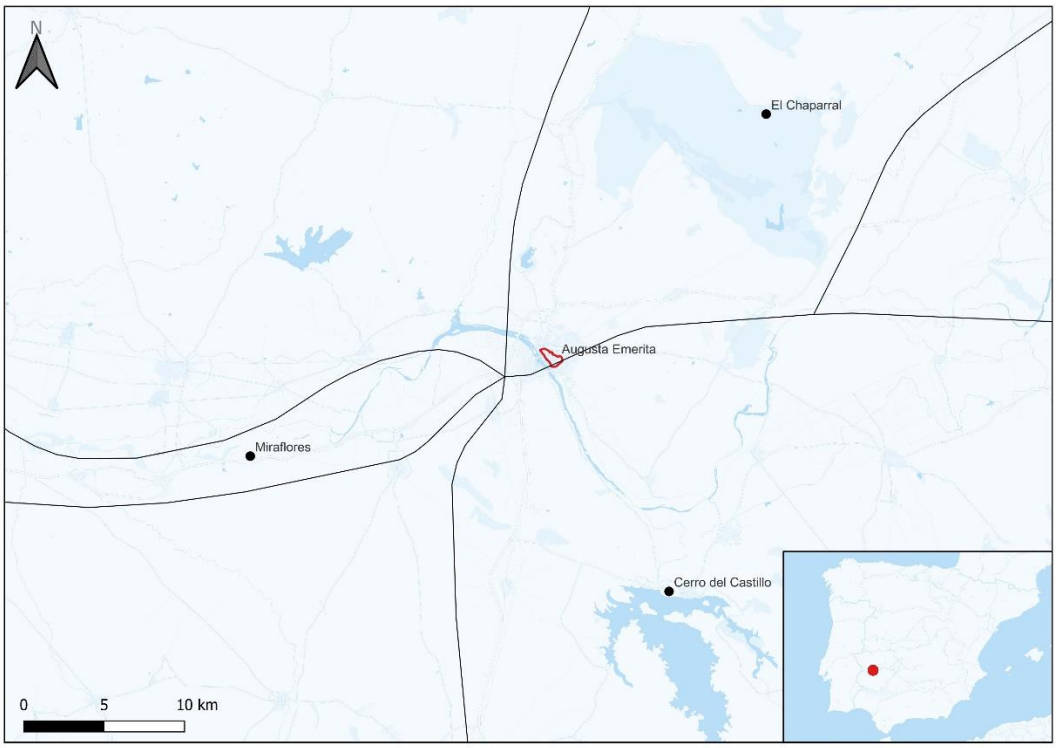


Figure 89. Location of settlements with pre-Roman occupation. Map: Carlos Cáceres-Puerto.

The chronological range of the rural occupation near *Emerita* varies substantially considering which author we study. Sánchez Barrero (2004: 86), as a matter of fact, considered that the occupation of the rural spaces in *Lusitania* did not happen until the 3rd century AD, when bigger and sometimes more sumptuous complexes were created. He considered that the spaces excavated, or studied, belong to earlier chronologies, and functioned as small and modest production centres to supply the colony with the basic goods needed in a newly founded settlement. It is correct that most constructions from the 1st century AD do not show the commodities appearing in later complexes, but there are examples of early *villae* that both enjoy the infrastructure typical of urban life and are destined to agricultural purposes. The Roman villa of Floriana in Arroyo de San Serván (Gorges, 1986), or Cerro de Pilas, in Torremejía (fig. 90) (Gorges, 1986: 230) for instance, are both dated to early chronologies and preserve remnants of *tesserae*, marble and stucco, and a coin from the mint of *Emerita* was found in the Villa of Cerro de la Herradura, thus, its chronology can be set between 25BC and AD37.

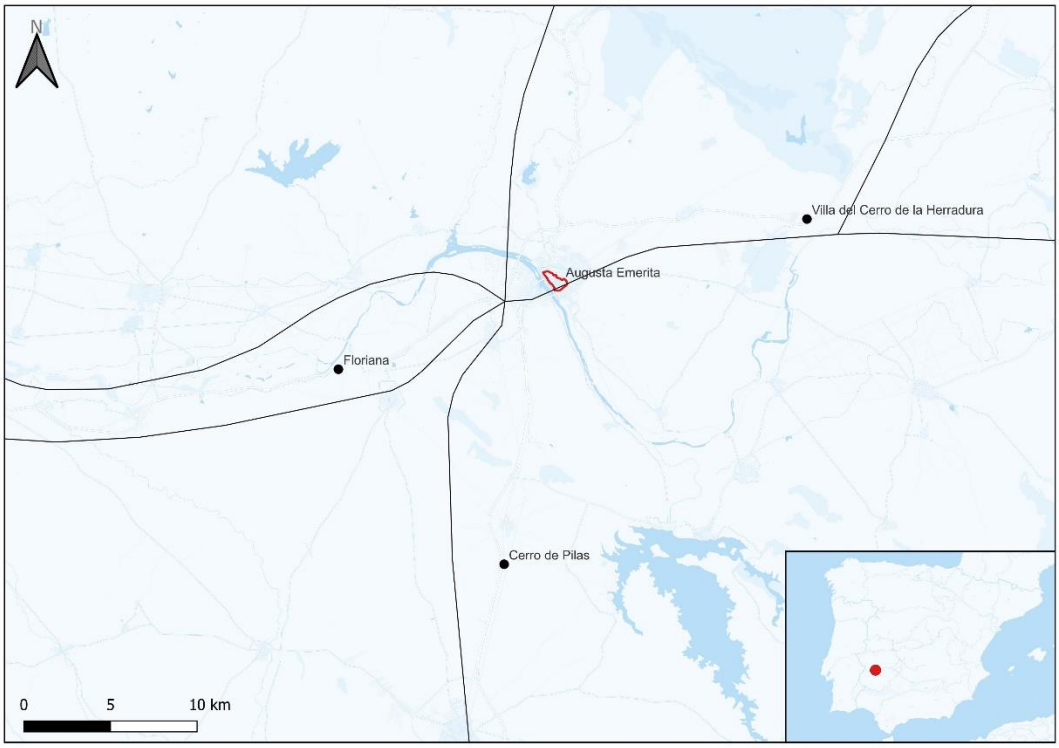


Figure 90. Location of early villas near *Emerita*. Map: Carlos Cáceres-Puerto.

Despite the hypothesis suggested by Sánchez (2004), Rodríguez Martín (1999: 125–26) mentioned various remains belonging to at least 25 plausible *villae* with an area greater than 10000km^2, documenting a great percentage of them existing until the 3rd century AD (fig. 91). However, the lack of ceramic material prior to 10 BC does not facilitate the elucidation of rural population processes near *Emerita* from its foundation (Cordero Ruiz, 2018: 456). Traditionally, the settlements rate was considered lower in the 1st century AD (Villanueva Acuña, 1991: 342), which is what surprised Gorges (1986) in his study of the mid Guadiana Valley. Nevertheless, the catalogue of archaeological settlements of the province of Badajoz, and research projects focussed on rural settlements of the mid Guadiana Valley, prove otherwise. There is immense archaeological evidence in rural areas of settlements, regardless of their importance, size, and production, suggesting an earlier occupation from foundational times. The chronology does not abide by the location of the site, with Roman settlements seizing pre-Roman habitats in El Carrascalejo, northern *Emerita*, or by Lobón, eastern *Emerita*, from similar dates. As a matter of fact, the majority of villas documented are located between the Guadajira river and the Matachel river (fig. 91), a tributary water source to the south of the colony (Cordero Ruiz, 2018: 445–88), which concurs with the *locus gromae* (fig. 38), as I mentioned above.

The establishment of settlement in the surroundings of *Emerita* was immediate to the foundation of the colony and the materials employed were somewhat poor, concurring with the quality of the materials used in the colony at the same time. Although some settlements seemed to be constructed with an expiry date, for allegedly very specific purposes, and were abandoned by the first half of the 1st century AD. Nodar Becerra (2001: 267–83) excavated one example corresponding to the *pars urbana* of a villa in the southeastern part of suburbs of the colony. The excavation reports the presence of structures for the manufacturing of ceramic materials employed during the construction of the colony, which could explain its short span of existence. This site is related to another kiln excavated by Sánchez and Alba (1998a: 211–36) nearby. In fact, Sánchez Barrero (2004: 84) has documented plenty of examples of early rural sites abandoned within decades in a 15km radius of Mérida.

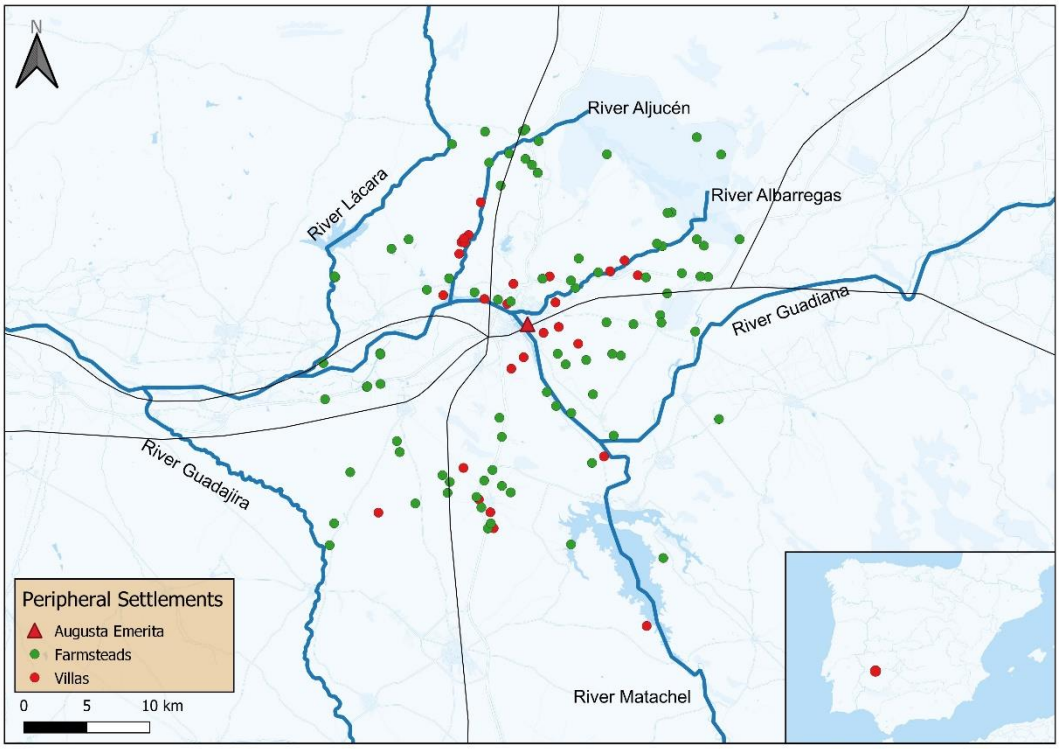


Figure 91. Rivers Matachel and Guadajira. Map: Carlos Cáceres-Puerto.

Though there has been some debate about the location and the chronology of the villas depending on said location, I must hold the lack of extensive surveying responsible for this misassumption. I have consulted 14 towns/files from the Archaeological Inventory of the province of Badajoz (fig. 3) (Spain), and I have evidence of at least 80 *villae*/*fundi*/lesser rural settlements. The majority of those sites match chronologically with the timeframe of my research, since the first decades of the 1st century AD. Most of the villas studied and excavated are located to the west of *Emerita*, following the course of the Guadiana River. This is the case with the villas of El Prado (Bejarano Osorio, 2000a: 25–38), El Escobar, Cubillana, Floriana, Araya, Los Hornos, Las Viñas and Casas de la Confederación. All the aforementioned sites are located within the 15km radius established for this study.

Gorges (1986) and Rodríguez Martín (2006: 174) were surprised about the closeness of the remains to the river, although we must consider the course shifting over the past centuries. It seems to coexist a duality on the specialisation of the banks of the Guadiana River. Whereas on the northern bank there were industrial facilities such as chalk kilns and mining complexes, on the southern

bank the usage of the settlements is focussed on pottery production, like at the site of El Prado where Bejarano Osorio (2000a: 25–38) documented kilns and remains of industrial pottery production. Other sites that were destined to the mass production of ceramic materials, construction ceramic materials in this case, were documented by Palma García (2002: 79–92) 1km to the southeast of the colony. Those complexes have in common a brief existence, with abrupt endings by AD 40–60. Further usage of the suburban areas of the colony by industrial complexes can be found in Sánchez Barrero (2000a: 209–210; 2010), where he analysed the construction of the peripheral areas of the colony based on communication nodes and industrial complexes attached to rural settlements.

The presence of rural settlements with a heavy pottery component increases during the late 1st century BC and early 1st century AD, although the quantity tends to decrease over time as the specialisation level rises throughout the 2nd and 3rd centuries AD. There have been some debates when considering a main *terra sigillata* production centre in the mid Guadiana Valley, mostly defended by Fernández Miranda (1970), Mayet (1970; 1984: 237) and Jerez Linde (1996: 127; 2004; 2005: 15; 2006) and Bustamante Álvarez (2011), in opposition to the workshops and the evidence around *Tritium Magallum* (Tricio, La Rioja) in northern Spain, as I mentioned in Chapter 9.4. The relation between the rural settlements and the industrial production of *Sigillata* shapes will be further analysed in the discussion.

To conclude, the rural settlement in *Emerita* between the late 1st century BC and the beginning of the 3rd century AD follows clear patterns of occupation. The earlier sites have a remarkable utilitarian purpose, based on supplying the colony with the raw materials needed for the completion of the first urbanism process of the Augustan colony. The main feature in those settlements appears to be kilns that were clearly abandoned by mid-1st century AD, which might implicitly suggest not an early occupation but an early utilisation of the suburban areas of *Emerita*. However, there is evidence of a late abandonment of some rural sites by the 3rd century AD, with an ulterior funerary occupation of those spaces, like at an industrial complex located 7km south of *Emerita,* which was studied by Nodar Becerra and Olmedo Grajera (2004: 209–230). This concurs with the occupation patterns as analysed in Chapter 10.2 in some parts of the

suburban areas of *Augusta Emerita* (Cáceres-Puerto and García Sánchez, 2020: 53–67).

I shall add that the evidence available originates in surveys from the late 1980s and from past projects that did not seek the research of the mid Guadiana Valley as an entity, rather focussing on lesser geographical units. Besides, the main part of the prospected area was the southern bank of the Guadiana River, hence the scarcity of rural settlements known in the northern part of the valley. Some scholars, like García Sánchez, are currently developing a GIS-based survey of the rural population of the mid Guadiana Valley, although the conclusions are still preliminary. Further studies and analysis are still required, including the archaeological excavation of some key rural settlements surrounding *Emerita*.

PART II

8 Reassessing the state of funerary archaeology research in *Augusta Emerita*

During the symposium commemorating the bimillenary anniversary of the foundation of *Emerita*, Manuel Bendala Galán (1976: 141) issued a statement that still resonates nowadays: 'to reduce the *necropoleis* from *Emerita* to a simple scheme of chronological process and geographical mapping is not a simple task, and I doubt it can be even achieved whatsoever'. 47 years after this publication, there is still a necessity for a scientific plan that studies the funerary areas from a new perspective. A different approach that does not only focus on the monumentality of the structures but rather the hidden facts beneath the deposits for a further understanding of the history of the colony and its first inhabitants.

There is a paper, nonetheless, which aims to compile the complexity of the funerary grounds near *Augusta Emerita* by organising it chronologically. Márquez Pérez's (2008: 443–70) article 'Las áreas funerarias de *Augusta Emerita* entre los siglos I y III d.C.' expounds the different areas around the Roman colony but fails to go further into the typology of artefacts or provide a deeper insight into the chronology and the distribution of the funerary grounds within *Emerita*. It is, nevertheless, a good starting point to the study of the funerary areas of *Augusta Emerita,* as Márquez Pérez summarises the various projects developed by the local archaeological consortium. In order to glimpse the main funerary areas around *Emerita*, their chronology and distribution patterns, I published the latest paper on the topic alongside Jesús García Sánchez (Cáceres-Puerto and García Sánchez 2020: 53–67).

Roman funerary monuments are a potential source of information about the cultural background. It is necessary to look into the entire funerary context, not just the tombstones, which, in their own right, can be useful too. Jonathan Edmondson (1994: 135–37) referred to epigraphy while defending a change in the paradigm of researching funerary sites in *Lusitania*. Although his hypothesis can be extrapolated to other branches within the archaeological tree, as 'they [funerary monuments] allow us to perceive the extent to which Roman artistic culture spread into peripheral regions of the Empire and how regional artistic traditions of funerary art developed' (Edmondson, 1994: 135). This is especially

useful when considering that, prior to 1910, the mainstream expression of funerary art — *stelae*, *cupae*, etc. — were uprooted from their original context and transferred to private collectors (Márquez Pérez, 2008: 443–45), or directly taken to be repurposed in other buildings (figs. 4, and 5). But what can grave goods present in funerary contexts of *Emerita* reveal about the development of a flourishing provincial centre? Cultural ethos, social history and social relationships, the main foundations of provincial economics and the basic forms of "Romanisation", conveyed towards the peripheral communities. *Augusta Emerita* fulfilled the role set by Rome as a *caput Mundi*, almost performing the duty of serving as a cultural beacon for the Lusitanian hinterland (Álvarez Martínez, 1983, 2004; Edmondson, 1994: 135; Nogales Basarrate and Álvarez Martínez, 2018: 13–52). Hence, we must assume that by studying the funerary evidence of a Roman colony of the political and administrative importance of *Emerita*, the result will encompass a wide sample of materiality and identity from the Roman settlers and other peripheral communities involved in the creation of a new provincial capital.

Some scholars have addressed the suitable terminology for the different funerary monuments existing in *Colonia Augusta Emerita*. Researchers like Márquez Pérez have highlighted that using terms like *necropolis* and *cemetery* might lead to further misinterpretation of the archaeological reality (Nogales Basarrate and Márquez Pérez, 2002: 113–44). She believes those terms are not well employed, as there was not a defined space in Roman urban planning especially designed to serve a funerary purpose. There were buildings purposefully designed, like *columbaria*, but not explicit spaces in the suburban areas have been documented. There are examples in *Colonia Patricia* (Córdoba, Spain), for instance, where at least two areas have been documented as enclosure specifically built to be rented/sold for the deposition of the deceased (Vaquerizo Gil, 2020: 160). The use of those areas might be related to the *columbarium* documented in the military compound in Mérida by Floriano Cumbreño (1944, 151–86).

However, I believe these are appropriate terms to define the space, as they have been used by most scholars assessing funerary archaeology in Roman times. Those words transcend their alleged cultural meaning, having been

established as commonly used vocabulary. We must demystify the conception of a ‘city of the death’ (necropolis) or a walled enclosure containing the remains of the deceased population of a settlement (*cemetery*) that abides by the rules and traditions of the Christian faith.

Furthermore, a terminological debate ought to be addressed regarding the so-called “Romanisation”. Since the Roman colonists were in a position of dominance over the socioeconomic processes of the colony and its territory, one must wonder about the appropriate terminology and conception concerning the relationship between conqueror and conquered if such terms shall be applied to this case. The traditional models explaining “Romanisation” as a linear transfer of ideas, knowledge, culture, and idiosyncrasies (Mommsen, 1968; Kalenderian, 2020), or Haverfield’s conception of ‘“Romanisation” as progress’ (Haverfield, 1912; Webster, 1996: 12) have long been proved to be obsolete. It is a mistake, however, to associate modern political terminology with former political and military entities, and it is an error most of us tend to subconsciously commit. We shall not compare, for instance, Rome with modern examples of imperialism, as the ethos and socioeconomic aspects of Rome’s dominance differ from modern politics, even if the outcome was very similar. However, “Romanisation”, and Rome altogether, have been widely utilised terms for cultural, political, and military reasons in the past, which do not help to prevent the association between “Romanisation” and modern politics.

Modern models, like those developed by Webster (2001) and Dietler (2005), advocate for a hybrid approach in which both parts adopted and appropriated foreign elements. In any case, as occurred with Mommsen and Haverfield’s approaches, the association of *Romanitas* as civilization and native elements as barbarian has also long been refuted (Webster, 1996; Mattingly, 2013; Alston, 2013). However, the dichotomy ‘civilisation’ and ’barbary’ had have a profound impact on the “Romanisation” debate on the Iberian Peninsula, but also in other regions of the Empire. This debate presents theories and arguments cataloguing the conquered people as inferior, while assuming that the Romanising concept was a one-way transmission of certain cultural aspects. This entire idea, surging from the academic community in the European countries in the first half of the 20th century, sought to study the transmission of knowledge,

customs, and ideas to the colonies by the colonial entities, and has been long refuted (Jiménez Díez, 2008: 40). As a matter of fact, this top-down approach towards the “Romanisation” process bestows a greater level of influence upon the elites, removing the agency from the indigenous communities. The main misconception lays in the pre-assumed concept of a cultural clash between two homogeneous cultures, when the conqueror and conquered were, in fact, substantially different (Stewart, 1951: 249-263; Jiménez Díez, 2008: 40). The phenomenon of the *cupae*, later discussed on this chapter, would entirely refute this top-down approach since it entails a territorial adaptation to a cultural phenomenon from the North Africa regions. Hence, the “Romanisation” would effectively entail a combination of cultural approached resulting in a hybrid society.

Roman-ness was imposed by religion and urbanism, but was also enforced by military superiority (Revell, 2009: 191). The Province of *Lusitania* never had a permanent military unit garrisoned within its borders, although the mid Guadiana Valley was colonised by discharged soldiers from the Augustan army in northern *Hispania*. However, the presence of veterans never played an important role within the Augustan agenda in this area of *Hispania*. The military background of the veterans might have influenced Augustus to settle them in the mid Guadiana Valley, but it was never a main factor. The lack of evidence and mentions in classical references of any conflict in the territory of the mid Guadiana Valley when *Emerita* and other colonies, such as *Pax Iulia* (Beja, Portugal), were founded might imply a peaceful ‘transition’ where all the communities were involved, not only the elites, although the lack of evidence prevents me from jumping into further conclusions. Nonetheless, the early funerary monuments in *Augusta Emerita* represent the military past of the settlers. There might have not been a legion stationed in the Augustan colony, but the military component upon its foundation by its settlers was very much present.

Furthermore, material culture was the physical embodiment of a shared identity, as coinage seen in Chapter 6 played a similar a role in creating and shaping this common ethos. However, the lack of material culture typically classified as ‘Roman’, does not imply a later contact between Rome and the indigenous community. This would simply mean that the “Romanisation” process

was developed touching different aspects of the native idiosyncrasy. Nearby *Emerita*, for instance, in the Alentejo region (Eastern Portugal, next to the Portuguese frontier with Extremadura), the common ware shapes from funerary contexts suggest a widespread presence of the Smit Nolen typology, like the shapes found in *Emerita*. The incorporation of more commonly considered Roman shapes, like *Sigillata*, did occur as well in rural areas. The material culture present in the rural settlements analysed in Chapter 7.3, implies that commercial links were not fully formed yet, but also the existence of peripheral sites whose focus was set on the construction of the colony and its critical infrastructure. The Romanising framework cannot be seen as a top-to-bottom approach by the Roman power. Local communities left their trace on the Roman colonists, since the shared the territory, community, and landscape. The transmission of identity created hybrid communities, and this hybridisation explains the diversity and multiculturality of the Roman provinces since every territory provided singularities in their incorporation process to the Empire. However, locating the presence of local communities within the funerary contexts in the suburban areas of *Augusta Emerita* has been futile. I do consider that the process of hybridisation was the cause for this lack of 'local' material culture. Although the presence of Smit Nolen shapes seen in Chapter 9.1 might have been wrongfully considered as part of the "Romanisation" process, whereas it constitutes a crucial example of native communities being buried/cremated with a representative element of their cultural background.

8.1 Funerary practices as evidence for hybridisation in the mid Guadiana Valley. *Augusta Emerita*, *stelae*, and funerary crowns

The areas surrounding *Augusta Emerita*, like any other settlement of the time in the Roman sphere, were densely populated outside the city walls. Furthermore, alongside the communication nodes funerary structures, industrial complexes and other types of infrastructures needed for the maintenance of the colony converged. Any cluster of funerary architecture in the same area was seen as a coincidence rather than a compartmentalisation of the suburban space, as has been observed many times by a succession of scholars researching the topic.

There was, however, a certain level of organisation within that ‘chaos’, as the data suggests an ordered use of the peripheral landscape rather than an arbitrary usage of the space (Nogales Basarrate and Márquez Pérez, 2002: 115). Nonetheless, as will be seen further on this chapter, there are as many theories regarding the level of urban planning in funerary areas as researchers who work on the topic.

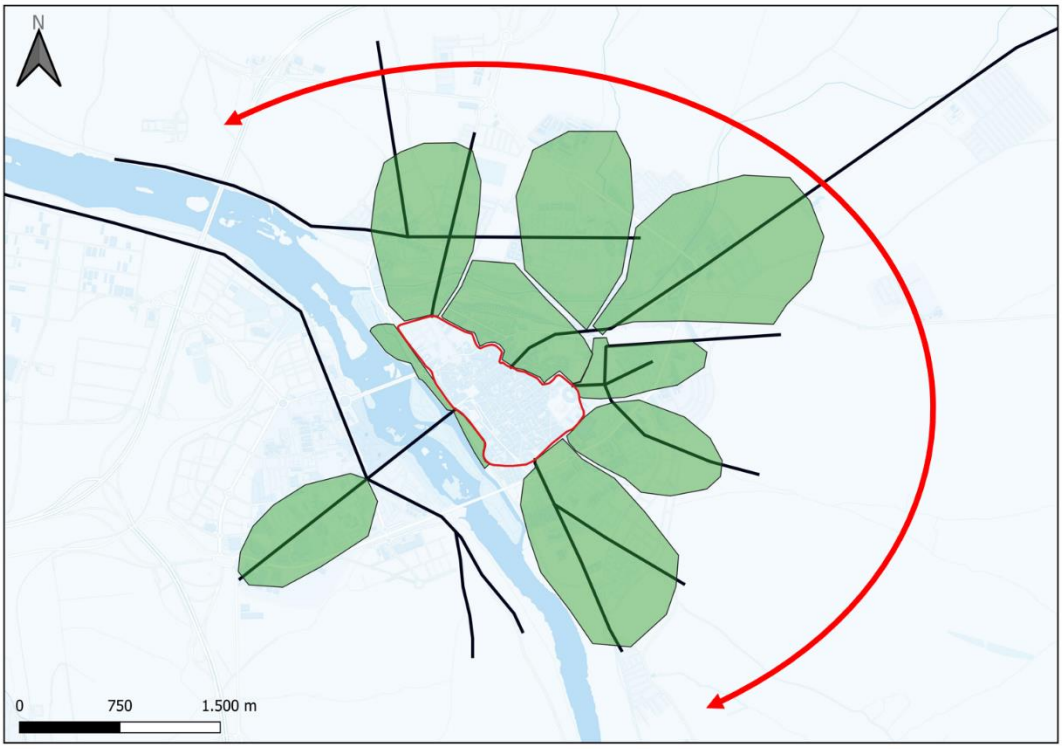


Figure 92. Funerary evidence in *Colonia Augusta Emerita*, 1st cent. BC to the 3rd cent. AD. Blue arrow marking the ‘funerary crown’ as described by Floriano (1935) and Marcos Pous (1961). Map: Carlos Cáceres-Puerto.

The dispersion of the funerary evidence — 1st century BC to the 3rd century AD — follows a particular but practical pattern. Considering that funerary monuments were placed near nodes of communication, so much so that they were considered small temples (Nogales Basarrate and Márquez Pérez, 2002: 113–44), the vast majority of evidence remains in the northern bank of the Guadiana River. The only gathering of funerary evidence across the river *Anas* is located along the *Via X* and *Via XII* on their shared course beneath Portugal Ave. Therefore, and on account of the sparsely located archaeological evidence available at the time, Marcos Pous (1961: 90) referred to *Augusta Emerita* as ‘surrounded by a funerary crown’ (fig. 92). Although, this description was

influenced by the description of the ‘eastern necropolis’ in the account of Antonio Floriano (1935). He described the *arched* shaped funerary area, partially for a lack of archaeological evidence at the time, which formed a semi-circular perimeter surrounding Mérida. Other authors believe, however, that funerary areas grew without a clear pattern, although they might have followed a certain level of urban planning, thus making any systematisation futile (Bendala Galán, 1976: 141–61). Nowadays we appreciate that the dispersion, and extension, of the funerary areas do not form an arch around the colony but rather are only the result of the number of roads and secondary roads shaping the suburban landscape (Sánchez Barrero, 2010).

Despite Marcos Pous (1961) urging for the study of the funerary areas of the colony more than 50 years prior, the principle and objective are not obsolete, as the funerary areas have not been studied in a broader sense of unity. Even though Pous was encouraging further research on the matter principally due to the increase of urban planning in Mérida in the second half of the 20th century, it is still a valid principle, as archaeology in Mérida lacks a reference work studying the funerary areas altogether. Despite Hidalgo Martín *et alii* (2019) recently publishing a compendium of funerary archaeology, this research work put the focus on epigraphical factors rather than providing substantial insight on tangential funerary evidence, like grave good contexts. However, the aim of the authors was to establish a complete catalogue of funerary inscriptions within the territory of *Emerita* during the Roman occupation and late antiquity, and that has been outstandingly achieved. In any case, whereas funerary areas have been broadly studied, it is the absence of multidisciplinarity research that is the concerning factor. A recurring topic within funerary archaeology in Mérida is the forming of clusters of funerary evidence that are divided into smaller geographical units, despite different scholars pointing out the error in said premises (Bendala Galán, 1976: 141–61). Thus, archaeologists tend to categorise the funerary areas in artificial constructs that were not applied by the colonial society. But the data reveals the axiomatic evidence of the futility of a grid reference system based on the cardinal points. The organising system is the road network, as analysed in Chapter 7.1. But considering there is no apparent classification of the funerary grounds, the main problem is determining the chronology of the area to establish

an ordered pattern of occupation for a better understanding of the urbanism of *Augusta Emerita* in the Early Imperial Roman contexts.



Figure 93. Mausoleum found in Carmona, Sevilla. Entrance (left), chamber (right). Source: LaVanguardia (left), Diario de Sevilla (right).

Although the systematic excavations in Mérida started in 1910, Floriano (1935: 4–5) records the excavation of a mausoleum-like structure in the northern part of the city near the St. Eulalia Basilica and the Albarregas River in 1908. This structure, nowadays buried, was later compared to the structure to other funerary areas in Southern Spain, like *Carmo*[18] (Carmona, Sevilla), by other scholars like Bendala Galán (1972: 223–54, 1976: 141–61), following sketches made upon its discovery. Figure 93 depicts the mausoleum found in Carmona, as there is no photographic evidence of the funerary structure mentioned by Floriano. In 1927, Mélida and Macías (1929) began the excavation of the biggest funerary ground in *Emerita*: 'Columbarios', on the southeastern edge of the Roman colony. This is the largest ensemble of Roman funerary evidence in the Iberian Peninsula, and

[18] Larrinaga Bidegain, N. 2019. Hacen obras en su casa y encuentran un mausoleo funerario romano de hace dos milenios. *El Mundo*. [Online]. 29/08/2019. [Accessed 27/02/2021]. Available from: https://www.elmundo.es/andalucia/2019/08/29/5d680fe621efa07a0e8b4597.html

it contains one of the earliest pieces of evidence of the population of the colony from the late Republican period (Murciano Calles, 2010; 2019).

In the eulogy Floriano dedicated to Mélida, his professor, he described the main three *mausolea* present in the area, in a continuation of Mélida and Macías' report from 1929. He also hypothesised about the possible division of the suburban space of the colony. He argued that the external layer belonged to inhumation graves and the inner layer was composed of cremation pits, with the aqueduct dividing both spaces, accounting for a ritual component played by the canal (Floriano Cumbreño, 1935). This perspective is not dissimilar to the theory developed by Beltrán (1976: 141–61), who defended an earlier depiction of the aqueducts in the first two series of the coinage of *Augusta Emerita*, as I have discussed in Chapter 6. Nevertheless, this theory has largely been disproven. The consensus among scholars has been to establish a chronological division for the typology of the funerary practice not the proximity to the defensive compound.



Figure 94. Mausoleum in '*Domus* of the amphitheatre'. Photo: Presentación Puerto Pino.

Marcos Pous (1961: 90–103) describes the general landscape of the funerary ground while documenting a cremation pit excavated in 1956 in Columbarios. The author explained how the entire precinct was backfilled with rubble in the 3rd century AD, although the *mausolea* belong to an earlier chronology — end of 1st century BC to AD 50. This phenomenon is certainly not uncommon in the area of Mérida, as various *mausolea* from the 1st century AD

were swiftly backfilled later that century, like in Corralón de los Blanes (fig. 95) (Heras Mora *et alii*, 2017: 707–45), the mausoleum of the *domus* of the amphitheatre from the 3rd century AD (fig. 94) (Bejarano Osorio, 2004) or various funerary buildings on the eastern side of the colony (Bejarano Osorio, 2000b: 305–31; 2001; 2002; Delgado Molina, 2017: 547–78). The first example concurs with the 'methodology' explained, as both *mausolea* were buried by the end of the 1st century AD. The problem of the disruption of the soil surface in Columbarios, however, has already been studied by Serra Rafols during the excavation in the 1930s, but there is not a published report of said campaigns. Bendala Galán (1972: 223–53; 2008: 99–105) published several thorough papers on the matter. Incidentally, Bendala Galán and Márquez Pérez had access to the unpublished excavation reports of the excavation run by Rafols in 1943, and both authors published their own accounts based on Rafols' notes (Bendala Galán, 1976: 141–61; Márquez Pérez, 2006).



Figure 95. *Mausolea* in Corralón de los Blanes. Photo: Heras Mora *et alii*, 2017: 707; 715; 718.

In addition to the discussion regarding the chronology of the site itself, some scholars have raised an unlikely hypothesis discussing the chronology of the three main *mausolea* discovered by Mélida and Macías in 1927 (Bendala Galán, 1972: 223–54; 1976: 141–61; Von Hesberg, 1992; 1993; Trillmich, 1993: 115–24; Márquez Pérez, 2006; Nogales Basarrate and Márquez Pérez, 2002: 113–44). Bendala Galán (1972; 1976) adduced a late Republican chronology,

concurring with the mainstream hypothesis, while Trillmich (1993) and Von Hesberg (1992; 1993) discussed the possibility of a much later date, locating the *mausolea* in the late Augustan period. Bendala Galán refuted those principles in a later paper in 2008, supporting his theory on the latest postulations of Márquez Pérez's (2006) publication: *Los columbarios, arquitectura y paisaje funerario en Augusta Emerita*. The theory supported by Bendala Galán abides by the latest archaeological findings in Mérida, as the architecture of the mausoleum of the *Voconii* in Columbarios resembles the mausoleum discovered in Corralón de los Blanes by Heras Mora *et alii* (fig. 96) (2017: 707–45). The chronology of the site itself is more self-explanatory, as the artefacts uncovered made Serra Rafols argue that the necropolis of Columbarios was abandoned by the end of the 3rd century AD (Bendala Galán, 1976: 147; Murciano Calles, 2010: 71). However, more up-to-date studies suggest that the site was not fully abandoned when Rafols and Bendala argued (Cáceres-Puerto and García Sánchez, 2020: 53–67).



Figure 96. Mausoleum in Corralón de los Blanes (Photo: Heras Mora *et alii*, 2017: 718), left. Mausoleum of the *Voconii* (Photo: Carlos Cáceres-Puerto), right.

The morphology of the structures, however, presents different questions, especially regarding the chronological process of the organisation of the area. Mélida and Macías (1929) do agree on an earlier construction date for the triangular building present in the cluster of *mausolea*: the mausoleum of *Niger*. It has been demonstrated that the mausoleum, belonging to the *Iulii* family, used the northern wall of the *Niger*'s building to support of structure (fig. 97). The usage and funerary rites occurring within the complex have also been object of study among scholars, with published research by Molano Brías and Alvarado Gonzalo (1994: 321–50), Bejarano Osorio (2020: 69–96), and Murciano Calles (2010; 2019). The latter specifies the purpose of the inner space of the triangular

mausoleum as *ustrina*, or funerary pyres (Murciano Calles, 2010: 58). Bendala Galán (1976: 141–61) also discussed whether the funerary pyre was inside the *mausolea* or outside. The absence of fire and smoke marks on the stucco suggest the ceremonial pyre, the *ustrinum*, was placed in another location outside of the funerary monument.



Figure 97. Mausoleum of the *Iulii* (left image, top left), and triangular mausoleum of *Niger* (left image). The image on the right demonstrates how the mausoleum of the *Iulii* took advantage of the mausoleum of *Niger*, as the granite blocks are visible through the masonry arch of the *Iulii* funerary building. Photo: Carlos Cáceres-Puerto.

Various studies in Columbarios thus demonstrate the organisation of funerary grounds as tangible 'cities of the death' alongside axes of communication. These 'city of the death' formed funerary streets, or *Gräberstrassen* (Bendala, 2008: 101), whose size was researched by Ramírez Sádaba (1995: 257–68). There are tangible examples of *gräberstrassen* in Mérida, cemented throughout time in the main arteries of the modern city. The utilisation of the main communication nodes as organisational arteries for the funerary areas was not exclusive of *Augusta Emerita* since it was the norm in Roman settlements. In *Segobriga* (Saelices, Cuenca), there is solid evidence of aligned funerary structures on both sides of the main roads exiting the settlement (Cebrián and Hortelano, 2016). Those buildings were probably shared funerary buildings, as they share features observed in funerary clusters in *Barcino* (Barcelona) (Hinojo and Ribas, 2017), and *Colonia Patricia* (Córdoba), for instance. The distinguishing factor of the funerary areas of *Colonia Patricia*, however, is the attested organisation of the spaces, with plausible economical transactions occurring as it would happen in a modern cemetery. The high density of the funerary areas led to some scholars (Vaquerizo Gil, 2020: 147-72) to research the appreciation in value, economic and social, of the lots closer to the

city walls. According to the excavations of various allotments, this reorganisation of funerary buildings, areas, and usage was well-defined in plots of land of dissimilar size, which I must assume were distributed with varying prices.

This centuriation, so to speak, would have also been common in other areas of *Hispania*, especially in administrative centres with increasing, exponential, urban growth, such as *Tarraco* (Tarragona), or *Augusta Emerita*. This reorganisation of the funerary areas would have not been exclusive to the capital of the provinces (fig. 1), although the level of preservation of the remains in *Colonia Patricia* are remarkable (fig. 98).

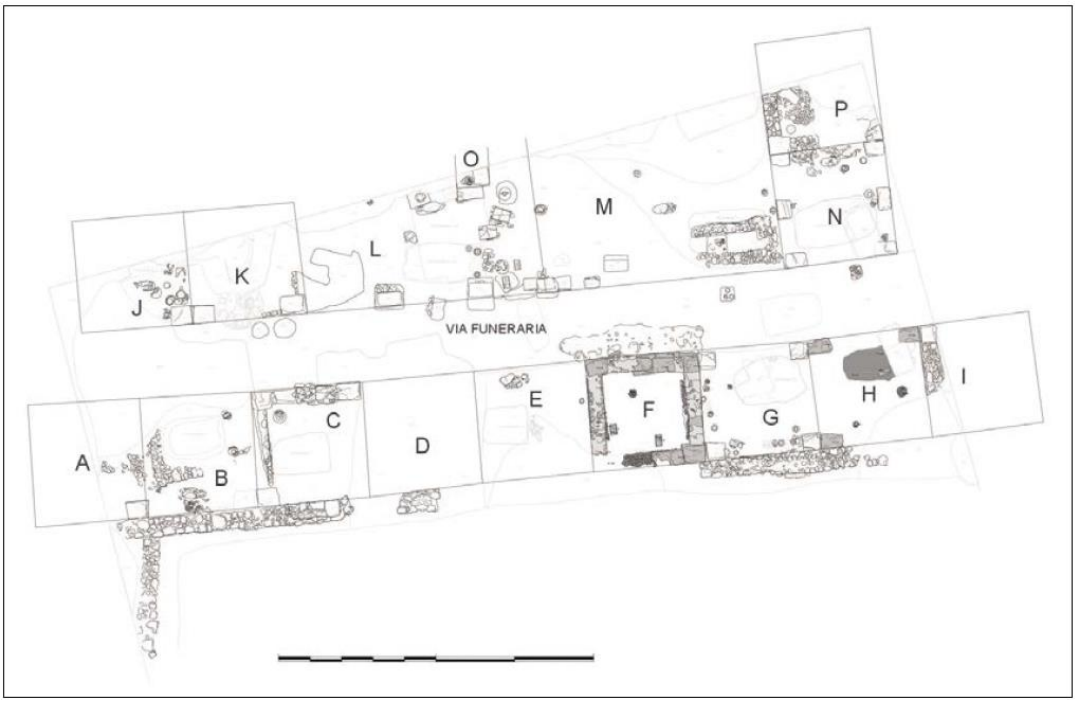


Figure 98. Example of systematisation of funerary areas in *Colonia Patricia.* Image: Vaquerizo Gil, 2020: 156, fig. 7.

However, during the first stages of systematic archaeological excavation within Mérida, there was a considerable lack of evidence to presume such a hypothesis. Until the 1930s, the only remains attributed to funerary archaeology outside of the site of Columbarios were small clusters of burials whose monumentality was merely symbolic. Therefore, the incapability of the researchers to establish bigger patterns that considered the funerary areas of the colony was futile beyond theoretical assumptions borrowed from similar sites in the Italian peninsula. Archaeologists excavated exceptional allotments, favoured by the incipient urban development which encouraged their research, although

the evidence gathered was not yet significant. The scarcity of sites with funerary connection was worsened with the looting performed by some citizens. Gil Farrés (1945: 45), director of the Archaeological Museum of Mérida in 1944, mentioned these incidents along with the increased artefact collection of the museum.

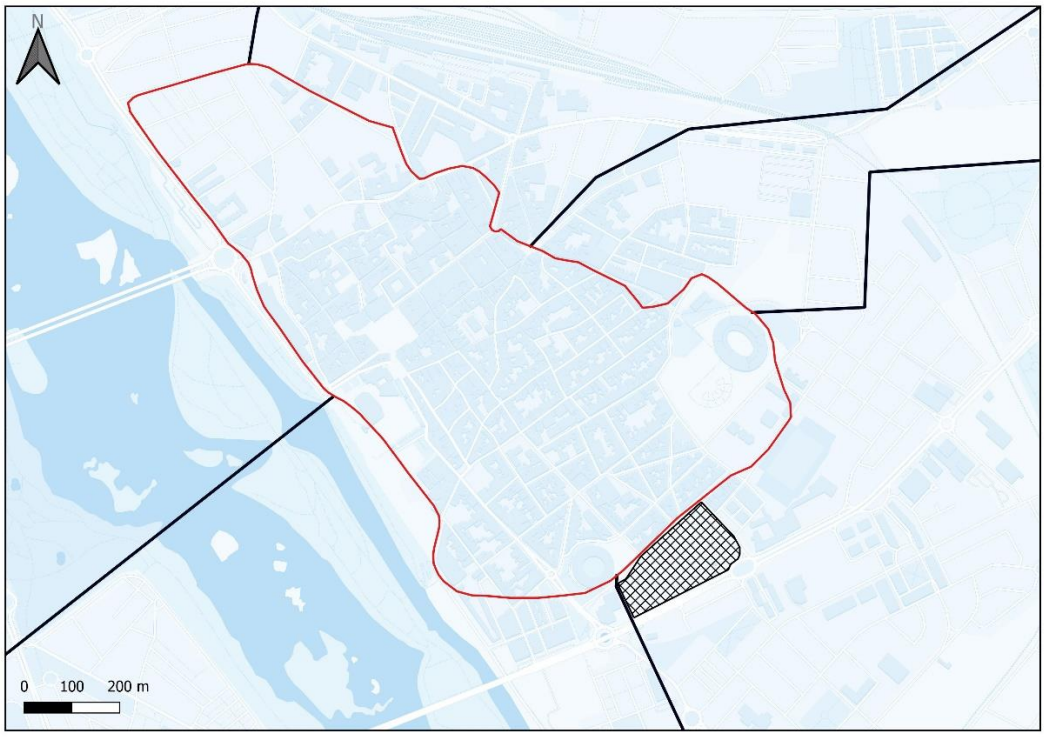


Figure 99. Location of 'Columbarios' funerary area. Map: Carlos Cáceres-Puerto.

As a matter of fact, Mélida and Macías (1929) affirmed that the funerary elements uncovered throughout the outskirts of the colony were isolated elements, with scarce or non-existent grave goods, not recognising any larger funerary area near the colony except for Columbarios (fig. 99). However, there were certain clues indicating towards major funerary grounds as has been later proven. Murciano Calles (2010: 59) reports unusual findings of diverse marble sculptures on Constantino street, near the southern edge of the walled enclosure. This assortment of iconographic idols was identified as a temple, considering the allotment was within the walled perimeter, but no remnants of foundations were discovered in the 100m^2 allotment. The remains are not distant from the rubbish deposit associated with a ceramics workshop also located on Constantino street (Sánchez Sánchez, 1992; Rodríguez Martín, 1996a). As will be discussed further over Chapter 9, the coexistence of funerary structures and production centres

was a constant core principle within the suburban territory of the Augustan colony, as I mentioned in Chapters 7.2, and 7.3.

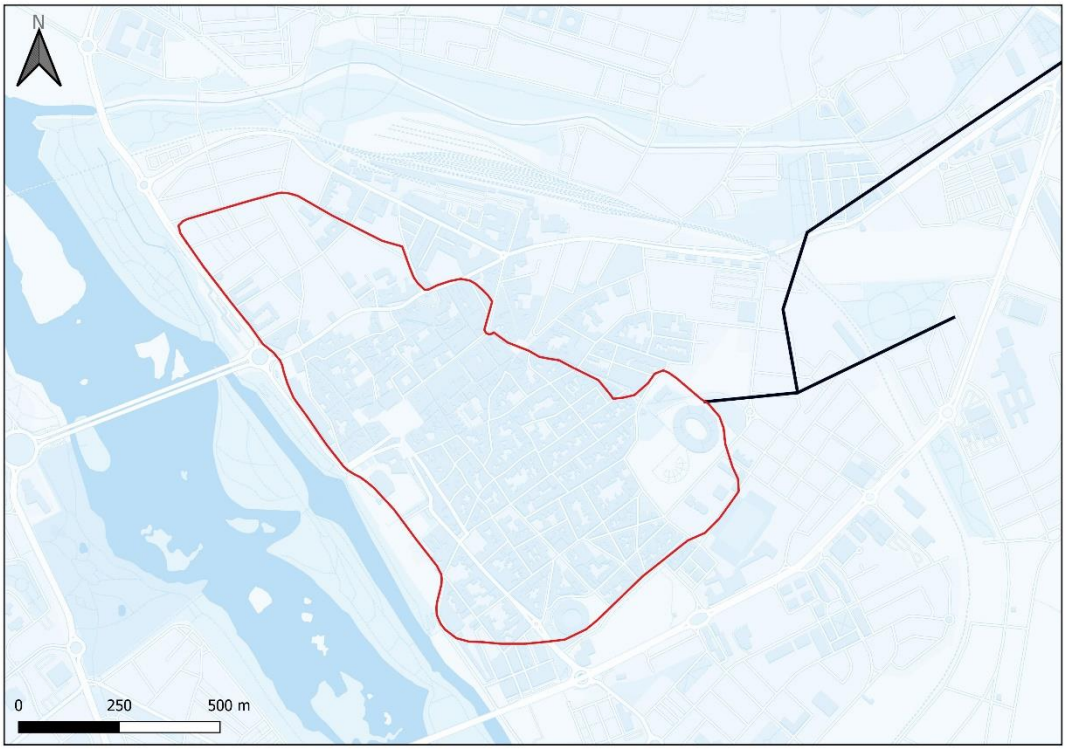


Figure 100. Location of the northeastern *Via Sepulchralis*. Map: Carlos Cáceres-Puerto, after Palma and Bejarano, 1997: 44–53; Sánchez Barrero, 2010; Hidalgo Martín *et all*, 2019: 26.

Considering the lack of archaeological evidence produced during the first decades in Mérida that indicated funerary activity in the surroundings of the colony, researchers focussed on various aspects of the phenomenon (Murciano Calles, 2010: 62–63). Floriano (1944: 164–66) catalogued the inscriptions contained in the collection of the Archaeological Museum of Mérida that were obtained from funerary contexts. He discovered that most of the funerary activity originated in the area between the circus and the area of the theatre-amphitheatre (fig. 100). By using aerial images, he studied the terrain and the topography of the possible funerary area, identifying a 600m long strip conforming to what Bendala called the *Gräberstrassen* (Bendala Galán, 2008: 101). This *Via Sepulchralis* was later studied by Bejarano and Palma (1997: 44–53) and has been corroborated in various areas of *Augusta Emerita,* like the area between the amphitheatre and the circus, the southern edge of the bridge over the *Anas* and the northern edge of the bridge over the *Barraeca*, to mention a few examples.

The then director of the archaeological museum of Mérida, Álvarez Sáenz de Buruaga, published an account of the funerary evidence in Mérida in 1943. His work was very similar to the research of Floriano, although he did not think the funerary areas of the colony had any rational, or purposeful, organisation. According to Álvarez Sáenz de Buruaga, the various clusters of archaeological evidence excavated suggested, 'a deliberate placement alongside nodes of communication and far away from the urban core' (Murciano Calles, 2010: 73). This phenomenon has also been studied by Sánchez Barrero (2010) alongside with his work researching the nodes of communication around the Lusitanian colony. However, unlike Álvarez Sáenz de Buruaga, Bendala Galán (1976: 141) believed in the existence of some degree of urban planning in the organisation of the funerary areas, although its growth and development must have been merely accidental and unmethodical. Other scholars have later agreed on the hypothesis suggested by Bendala, like, for example, Sánchez Hidalgo (2020: 29–52). He believes in the existence of a bigger programme of urban planning that distributed funerary areas around the colony, although this has not yet been proven. The only area where a purposely avoidance of funerary practice can be discerned is the left bank of the Guadiana River. However, that circumstance can be easily attributed to the titularity of the land (Cáceres-Puerto, 2019: 135–51).

Based on what has been shown above, I would argue that the funerary areas around *Emerita* had, to a certain extent, a relative organisational scheme shaping the suburban landscape of the colony. It is obvious that the funerary areas followed the communication routes, as it was the general practice in Roman settlements. However, taking into consideration the example of *Colonia Patricia* I mentioned earlier, we must assume that this systematisation of the funerary allotments also occurred in the Lusitanian capital. Even if the economical exploitation of the funerary spaces was unique to *Colonia Patricia*, which seems unlikely, *Emerita* imitated its Baetican counterpart in many ways, as I have discussed the assimilation of iconographical models minted by *Colonia Patricia* by the mint of *Emerita* in Chapter 6. Hence, as it occurs in *Augusta Emerita*, the area with the earliest occupation is the southern part. However, in *Emerita* this probably occurred as it was the beginning of *Via XI* (to *Corduba* -Córdoba, Spain- but also connecting with *Via Augusta* in the Baetican capital), and *Via XXIX* (to

Caesaraugusta -Zaragoza, Spain-), as seen in Chapter 7.1.2, and 7.1.8. In *Corduba,* this occurred as the roads leading to the mining system in Sierra Morena were situated in the southeastern part of the colony. The level of occupation of the funerary allotments was substantial, mostly in the 1st-2nd centuries AD, as it is suggested by the cremations inside, but more importantly, outside of the funerary structures (Vaquerizo Gil, 2020: 149). This might imply an abandonment of this compartmentalised system of enclosures, or the beginning of an arbitrary occupation of the suburban spaces. This concurs with the case of *Emerita*, as seen in Chapter 7.3, and 10, when by the end of the 2nd century AD the traditional funerary areas were subsequently abandoned in favour of a more chaotic occupation of the suburban spaces. Hence, were the funerary areas organised or arbitrary? In *Colonia Patricia* there are, at least, two areas specifically designed as funerary areas (Vaquerizo Gil, 2020: 160). Those structures were subdivided and sold/rented afterwards (fig. 98).

In *Augusta Emerita* there are some comparable examples, particularly the structures documented in Safo St (Aranda Cisneros, 2017c: 787-800), which could have also been built with similar purposes, although instead of plots they would have had niches to sell/rent. There are not, however, comparable examples since there are no documented examples in *Augusta Emerita* following the same pattern of occupation and exploitation as the ones excavated in *Segobriga, Barcino,* or *Colonia Patricia*. However, due to the similar political, social, and economical status of *Emerita* with the latter, it is very plausible their existence. If so, they were probably located in modern-day Portugal Avenue, following the *Via Sepulchralis* excavated by García y Bellido in the 1960s (García y Bellido, 1962; 1966a) (fig. 101), or in the *Via Sepulchralis* connecting the amphitheatre and the circus. Unfortunately, funerary remains in those areas were documented during the 20th century but are not very well preserved nowadays. Perhaps their poor degree of conservation has prevented the archaeologist from making such hypothesis. I do consider that the area surrounding Portugal Avenue was comparable to the case of *Segobriga*, as the drawings by García y Bellido (1962) (fig. 101) show a similar scenario. Hence, the revaluation of the funerary evidence around *Augusta Emerita,* as it was my intention with my Ph.D. dissertation, is deemed crucial to discern and assess similarities, and differences,

between the Lusitanian capital and other Roman settlements in the Iberian Peninsula.

During the first half of the 20th century, the assessment and management of the site of Mérida and its artefacts was problematic and somewhat chaotic. As a matter of fact, objects presumably belonging to the excavations by Antonio Floriano between 1934 and 1936 were not deposited within the premises of the museum of Mérida until 1948 (Murciano Calles, 2010: 77). The artefacts were held in barracks by the Roman theatre, which facilitated the misplacing and disappearing of said pieces. In fact, Álvarez Sáenz de Buruaga (1950: 20–27) mentioned the uncertainty of origin of the ensemble.

Since 1956, the self-evident theory of an Augustan foundation of *Emerita* has withstood many alternative theories regarding the foundational date of the colony. Whether it was a re-foundation in times of Augustus of a previously established settlement, or a newly founded colony. In this year a cinerary pit appeared underneath one of the concrete slabs of the *cavea media* in the southeastern sector of the amphitheatre (fig. 11). The casual finding of this cremation during the restoration works of the building was a cause of surprise for the scientific community of the time, considering that it was quasi axiomatic that the area belonged inside the *pomerium*. Marcos Pous (1961: 95) studied the artefacts present in the pit, setting their chronology between the foundation of the colony and the inauguration of the amphitheatre, 25–8 BC. Marcos Pous compared the artefacts with those found in *Emporiae* (San Martín de Ampurias, Spain), which helped him to establish a clear chronology in the Augustan reign (Marcos Pous, 1961: 95–96). However, Alba Calzado *et alii* (2014: 1735) had revaluated the artefacts, dating them between the 7th and the 8th century AD. Nevertheless, further evidence suggests a more thorough funerary presence in the allotment of the amphitheatre in an earlier stage of the urbanism of the Roman colony, as it has been proven that the area was excavated prior to the construction of the amphitheatre and that the soil was subsequently removed 400m northeastwards. Therefore, we find ourselves in the most interesting location to study both the urbanism and funerary rites in *Augusta Emerita*, although unfortunately the successive transitions throughout history make this

site difficult to unravel and to interpret, as the LiDAR image from *Via XXIII* seen in Chapter 7.1.5 demonstrate (fig. 72).

During the 1960s there were not as many published works regarding archaeological excavations. However, significant discoveries were still achieved. Álvarez Sáenz de Buruaga (Murciano Calles, 2010; 2019) reported a small funerary area in the left bank of the Guadiana River alongside the surface of the rampart. Because of coincidental discoveries, the presence of funerary structures was attested in an area where it was thought by the first scholars that was too adjacent to the walls to coexist.

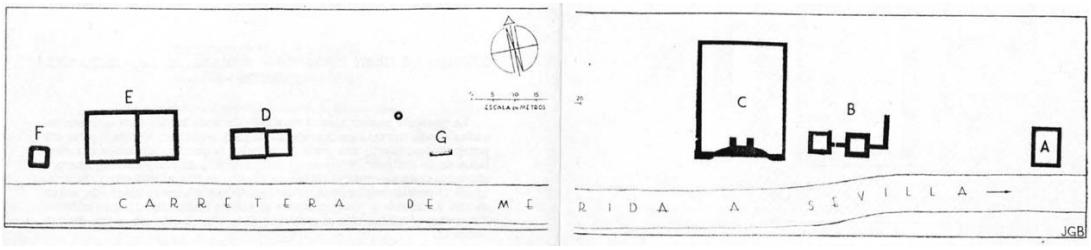


Figure 101. Necropolis at the southern edge of the bridge over the *Anas* River, documented by García y Bellido (1962: 4–5).

The most significant archaeological project of the decade was García y Bellido's work in the funerary area at the southern end of the bridge over the Guadiana River. This area has not been as well preserved as other accumulations of funerary monuments in the colony, which he adduces to two main reasons: construction of roads that altered the level of the surface and the poor quality of the construction material employed (García y Bellido, 1966a: 3). During the excavations, his team noticed a remarkable lack of density in funerary monuments (fig. 101), although the Roman road is still preserved underneath the modern avenue, and the limits are well defined along the 500m long funerary boulevard. He estimated the number of 100 medium-sized *mausolea*, beside a smaller gathering of lesser-grandeur funerary facilities. García y Bellido (1962, 1966a) compared it to the *Via Appia* in Rome insomuch as it was the first evidence in the Iberian Peninsula of a funerary avenue moulded with noteworthy funerary monuments. Despite the monumental character of the seven *mausolea* discovered during the excavations of 1963, this comparison has been largely outdated. Since this statement was published, it has been proven that all the main communication nodes departing *Emerita* functioned as 'funerary avenues', or *Via*

Sepulchralis, especially the minor road exiting from the amphitheatre towards the circus. This 'funerary avenue' is, coincidentally, also one of the earliest examples of funerary architecture in *Augusta Emerita* according to the archaeological evidence (Bendala Galán. 1976: 148; Bejarano Osorio, 2004; Márquez Pérez, 2008: 443–70; Murciano Calles, 2010; Hidalgo Martín *et alii*, 2019).

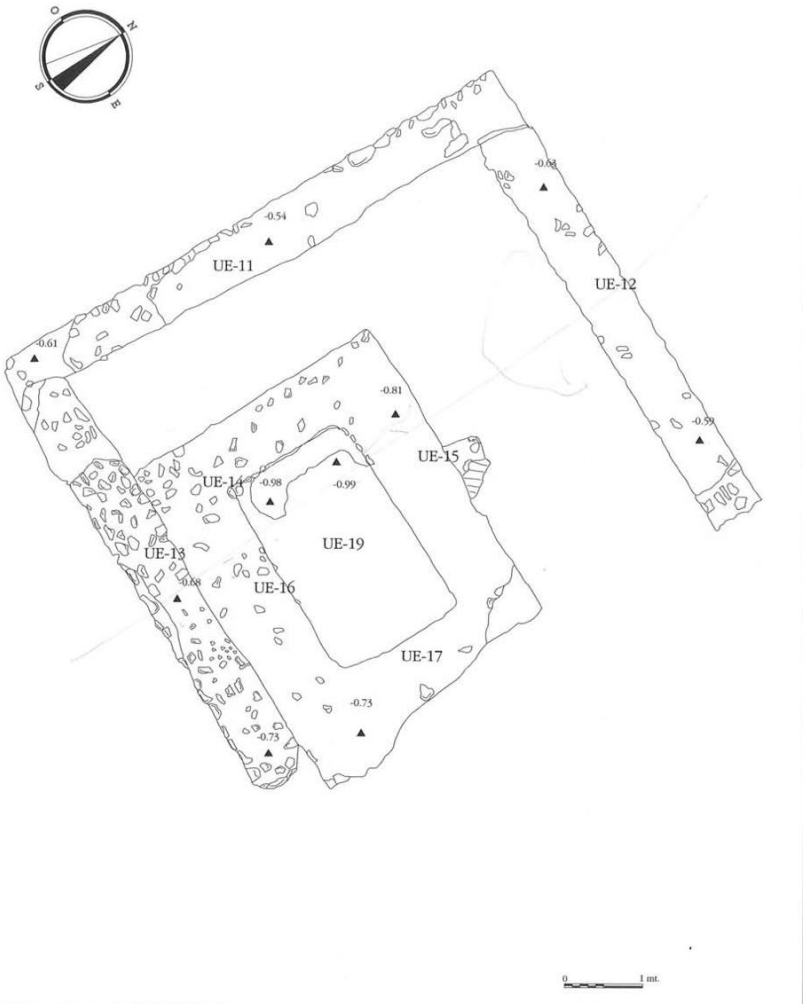


Figure 102. Building 'N' documented by García y Bellido and re-excavated by Sánchez Barrero. Image: Sánchez Barrero, 1998: 273.

One of the buildings documented by García y Bellido's team, building 'N' (fig. 102), was re-excavated by Sánchez Barrero in the 1990s (Sánchez Barrero, 1998: 272–77). The excavation reports show an *aes* dated during the Roman Republic, ca. 50 BC, which was very eroded. However, considering the chronology of the building and various grave goods that were established to date between the Flavian period and the 2nd century AD, it could certainly be an earlier

deposition or evidence of an earlier occupation of the area. However, the report and a different published work on the matter by Murciano Calles consider it part of the ensemble, acting as a token or an amulet (Sánchez Barrero, 1998: 272–77; Murciano Calles, 2020: 97–111).

This standstill on main excavation projects allowed the study, cataloguing and publication of former research projects forgotten in various warehouses around the city. Bendala Galán (1972; 1976) published a series of articles which became the reference book for funerary studies in *Colonia Augusta Emerita*. His review of the funerary areas of the colony, *Las Necrópolis de Mérida* (1976: 141–61), published in the proceedings of the bimillenary of the foundation of the Roman colony, is still considered a reference book nowadays. This remarks on both the singularity of his work and the necessity of a new, updated compendium in funerary archaeology in *Augusta Emerita* that serves as a reference work.

Manuel Bendala Galán considered, resuming the 'debate' on the correct terminology I mentioned at the beginning of this chapter, that the name of 'Columbarios' was wrong. He rejected the given name as it does not concur with the typology of the structures. They were family *mausolea* rather than communal precincts (Bendala Galán, 1972: 223–53).

Two decades followed with no major archaeological discoveries regarding funerary evidence in the area. By the late 1980s there was an attempt for a systematisation of archaeological research in Mérida. Various public administrations made several steps towards the creation of a local scientific consortium which researched and preserved archaeological sites. The Consorcio de Mérida was formally established in 1990. The new institution brought studies into new areas of the city; about funerary archaeology the centre of attention was drawn to the margins of the Albarregas River and the necropolis of 'El Disco' in the northeastern part of Mérida. Enríquez Navascués and Gijón Gabriel (1987) studied the necropolis of the Albarregas Basin. It is located on the northern side of the city, mostly in the right bank of the river, although there are a few cases of burials in the margins closer to the colony. Ramírez Sádaba and Gijón Gabriel (1994: 117–67) studied the inscriptions recovered from funerary contexts in this area.

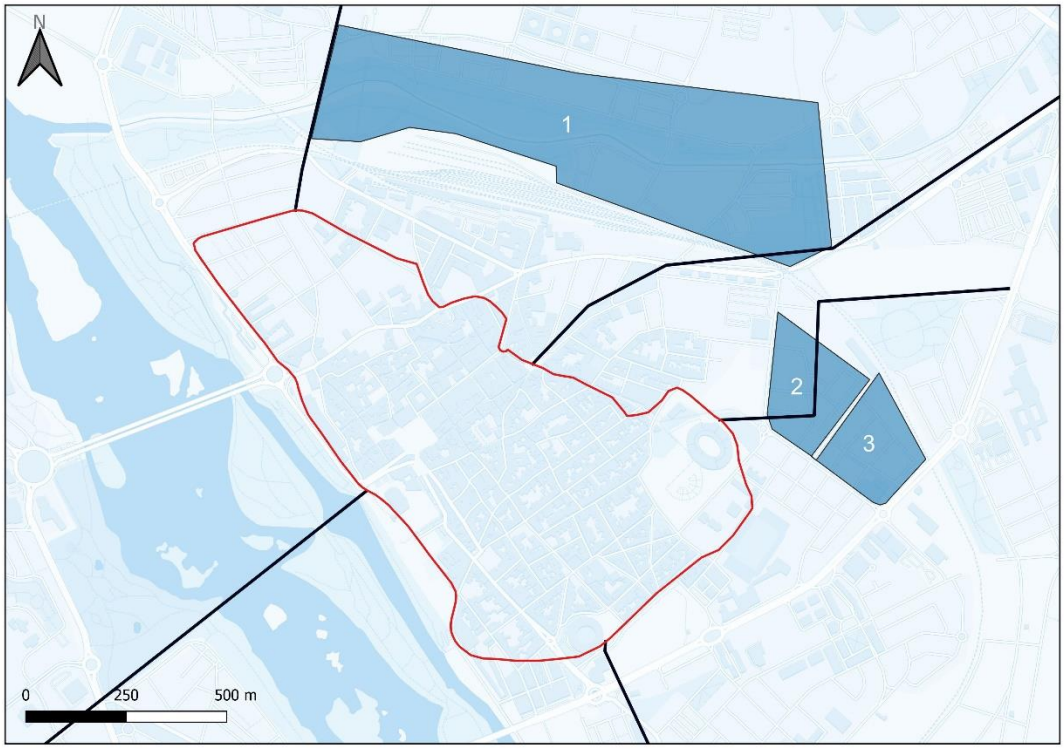


Figure 103. Approximate location of the main eastern funerary areas. 1. Albarregas necropolis. 2. Necropolis of 'El Disco'. 3. Necropolis of 'La Campsa'. Map: Carlos Cáceres-Puerto.

The funerary site of 'El Disco', often known in Mérida as 'La Campsa', was a large surface in the north-northeast quadrant outside of the colony (fig. 103). It is located between St Albín Hill, where the theatre-amphitheatre compound lies, and the circus by the Albarregas Valley. The first archaeological evidence was gathered in 1988 in Av. Juan Carlos I (Murciano Calles, 2010: 108), although the area was subject to excavation prior to being catalogued as a funerary area. The area has already been mentioned by Mélida and Macías (1929: 32–33). Besides, in 1944, Floriano (1944, 151–86) excavated a columbarium in the military compound, on the western edge of the funerary area. Some of the structures were studied, to a certain extent, by García y Bellido in the 1960s. A series of key articles analysing the sociological ethos and the religious and cultural changes and patterns within the funerary world in *Colonia Augusta Emerita* were published by Molano Brías and Alvarado Gonzalo (1993: 161–63; 1994: 321–50), with a particular focus on the necropolis of 'El Disco'. They analysed the grave goods through considering the funerary areas a diverse social, cultural, and economic ethos (Márquez Pérez, 2020: 18). José Luis de la Barrera, curator of the National

Museum of Roman Art of Mérida, also published some early work focussed on the recently catalogued funerary area (1991: 229–48).

Ana Bejarano Osorio (1999b: 262–68; 2000b, 305–21) has worked extensively on the area as well. Sánchez Hidalgo published the reports of a thorough intervention in the military compound uncovering an important hub of funerary presence cohabitating with industrial facilities and suburban residences (Sánchez Hidalgo *et alii,* 2019: 425–84; Sánchez Hidalgo, 2020: 29–52).

8.2 Roman funerary archaeology in 21st century *Emerita.* Reassessing connectivity and revaluating theories

During the past twenty years, Mérida has seen an increase in the scientific publications evaluating funerary evidence from new perspectives. Academics who published crucial papers in the past reassessed their work and the new discoveries and archaeological theories to bring their former publications up to date. This is the case with Manuel Bendala Galán, who published a re-elaboration of his famous paper from 1975, including the new archaeological findings from 'El Disco' and the Albarregas Valley (Bendala Galán, 2004: 85–100). In *'Arquitectura funeraria'* he evaluates various hypothesis regarding the shape of the funerary contour around the Roman colony and examines the amalgamation of funerary structures, industrial complexes and suburban residences merging outside of *Emerita* (Velázquez Jiménez, 2011: 56). Meanwhile, Juana Márquez Pérez (2006) published a report examining the 1940s excavations in Columbarios with the data from the original reports, as I have mentioned earlier in this chapter. She has also published different updates about the funerary evidence in *Emerita* as a result of her career as an archaeologist for the Consortium of Mérida (Márquez Pérez, 1998: 291–301; 2008: 443–69, 2020: 13–27). Hidalgo Martín, Edmondson, Márquez Pérez and Ramírez Sádaba (2019) published an extensive multidisciplinary study evaluating the funerary epigraphy in *Augusta Emerita* in '*Nueva epigrafía funeraria de Augusta Emerita: Tituli sepulcrales urbanos (ss. I–VII) y su contexto arqueológico*'. In addition to the latter, Murciano Calles (2019) published the results of his Ph.D. thesis in the following monograph: '*Monumenta. Tipología monumental funeraria en Augusta Emerita. Origen y desarrollo entre*

los ss. I a.C. – IV d.C.' He addressed the funerary monuments around the Roman colony (fig. 104).



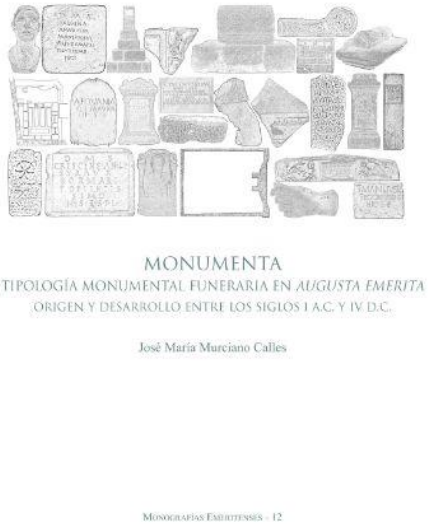


Figure 104. (Left) *Nueva epigrafía funeraria de Augusta Emerita*, Hidalgo Martín *et alii*, 2019. Photo: Consorcio de Mérida. (Right) *Monumenta*, Murciano Calles, 2019. Photo: MNAR.

Various research has been published taking into consideration the unusual phenomenon of the funerary presence inside the *pomerium*. It had already been evaluated by Marcos Pous (1961: 90–103), with mentions of uncommon and unparallel archaeological findings beneath the foundations of the amphitheatre, as has already been mentioned in this chapter. The consensus among scholars is a variation on the walled perimeter throughout the first stages of occupation of *Emerita*, to explain the funerary presence within the walled enclosure. This theory, to which I give complete credit, refutes the traditional theory that the foundational outline of the ramparts remained immutable. Any alternative hypothesis would suggest the presence of funerary elements within the walled enclosure, which is automatically rejected by both the literary sources (*Digest* 47, 12. Mommsen *et alii*, 1985) and a lack of archaeological evidence. The funerary presence inside the Roman walled enclosure has also been studied by Márquez Pérez and Mateos Cruz (Márquez Pérez, 2000: 543–47; 2021: 20; Mateos Cruz and Márquez Pérez, 1999: 301–20).

Although several ancient sources mention the liability of those who violate a burial (Márquez Pérez, 2020: 20–21), there is evidence of soil disruption at the early stages of *Colonia Augusta Emerita*. Part of the northeastern bank of St Albín Hill was reportedly displaced approximately 400m to the east when the construction of the amphitheatre began ca. AD 40–60. It might explain why both burials reported by Marcos Pous and Almagro Basch were the sole evidence of late Republican cremations in an area that might have serve as the primitive funeral ground for the incipient Roman colony.

Within *Emerita* there have been abnormalities regarding the rightful deposition of mortal remains. According to the Roman law, it was strictly forbidden to plant trees or build any structure, including buildings used for funerary purposes, less than fifteen *pedes* (4.44m) away from the walls or an aqueduct. In *Emerita* we have examples of burials nearby aqueducts. However, the relative chronology of the funerary remains and the structures might elucidate which features were there in the first place. Murciano Calles and Sabio González (2020: 155–81) reported funerary *fossae* in close proximity to a branch of the aqueduct of San Lázaro. Both scholars agree on a successive construction of both structures around the second half of the 1st century AD (Murciano and Sabio, 2020: 180). There is also evidence of a burial between two pillars of the aqueduct of Los Milagros, excavated by Bejarano Osorio (2006: 389–99).



Figure 105. ‘Dintel de los Ríos’ (Lintel of the river). Photo: MNAR. Piece. DO2012/2/3.

Besides the level of organisation of the funerary presence in the urbanism of *Colonia Augusta Emerita*, I shall also address foreign links of connectivity. By assessing those links, I will then be able to elucidate the cultural exchange between the first inhabitants of the Roman colony and the external influence which shaped the growth of *Emerita*. One of the main pieces of evidence is iconography, which, applied to the funerary world, is present in inscriptions and

architecture. Canto, Bejarano and Palma (1999: 247–94) have analysed a symbolic artefact within the site of Mérida, known as the ‘Lintel of the Rivers’ (fig. 105). It was discovered during the excavation of a mausoleum in the northeastern exit of the amphitheatre. Although its chronology, 3rd century AD, barely corresponds to the time frame of my research, I considered it a significant piece as it draws parallels with Rome and Egypt. It depicts the rivers *Ana* and *Barraeca* as deities breathing life into the Roman colony, equivalent to the river Tiber in Rome, or the Nile, in Egypt.

Alongside iconographical examples, remnants of the ceremonial procedures are evidence of external inputs in the traditional Roman ritual of the deposition of the deceased. During the excavation of an allotment in Pontezuelas street, archaeologists discovered a brick box with a marble lid. The marble covering had a circular-shaped aperture in the middle of the piece, connecting the ‘funerary chamber’ with the outside (fig. 106). The role of the clay tube crossing the marble lid was to facilitate libation ceremonies (Murciano Calles, 2010: 60). This example of funerary ritual, which draws parallels with similar constructions in the province of Africa, is also present in another example discovered in the military compound (Sánchez Hidalgo *et alii,* 2019: 425–84; Sánchez Hidalgo, 2020: 29–52).



Figure 106. Libation tomb from Pontezuelas St. Photo: MNAR. Piece CE29800.

To conclude with this section of the eighth chapter, it is necessary to briefly discuss the phenomenon of the *cupae* (fig. 108). This barrel-shaped carved stones marked the location of cremations throughout the landscape around the

Lusitanian colony. Bendala Galán (1976: 149–53) was the first author to study *cupae* in *Emerita*. Most examples were found embedded in the surface of the walls of the Moorish citadel (fig. 107), dated to the 8th century AD. At least 200 *cupae* were used in the construction of the fortification, although the number might have been higher as the core of the walls is not exposed.



Figure 107. *Cupae* embedded in the Moorish citadel. Image: Murciano Calles, 2019: 270.

Regardless of how out of contexts the artefacts are, the pure number in the colony is outstanding. Only one *cupa* appeared in its original location (Murciano Calles, 2010; 2019). The main consensus among the academic community is that there is a North African origin for this funerary practice. Authors like Bejarano Osorio (1996: 37–58), however, have contemplated whether the *cupae* originated in *Emerita* or whether the expression in carved granite was the adaption of an eastern pattern to the local materials available. I consider the phenomenon of the *cupae* as an ethnographical utilisation of a funerary ritual. Self-identification came into play as a very specific social, and cultural group, adapted their traditional funerary practices to a new land, using local material and implementing changes to the original rite. Caldera de Castro (1978) also considered the *cupae* to have a remarkable North African influence, defending the existence of a particular Northern African funerary area in the suburban spaces of *Emerita*. Unfortunately, this cluster of North African funerary archaeology has been challenging to prove, since all the *cupae* were uprooted from original archaeological contexts and placed within the walls of the Moorish

citadel. Thus, it is very plausible, but even more difficult to demonstrate with the data we currently have.



Figure 108. *Cupa* in MNAR. Photo: MNAR. Piece CE17240.

Despite the consideration of the *cupae* as 'local' creation, they originated in the context of period of amalgamation of cultures in a very determined location, so I tend to agree with Bendala Galán. Considering the appearance of the *cupae* in the 2nd to 3rd centuries AD, the more logical explanation would be a form of cultural adaptation by a migrant population. The earliest case in *Emerita* belongs to the late 1st century AD, which concurs with the hypothesis suggested. The main researchers on this topic are Ana Bejarano (1996: 37–58; 2020: 69–96), Trinidad Nogales Basarrate *et alii* (2012: 349–68) and José María Murciano Calles (2010; 2019). However irrelevant the origins, characteristics and ethos might appear for the development of my research, it is remarkable that the existence of funerary monuments with a considerable eastern influence, like the *cupae* mentioned by García y Bellido and Menéndez Pidal (1963: 66), are found in the vicinity of Zalamea de la Serena (Badajoz), 80km east of *Emerita*.

Cupae were also found in *Colonia Patricia*, with many similarities with *Emerita,* since only one case was found in its original location, as Vaquerizo Gil (2020: 164-167) described. He suggested a cheap and easy method to bestow dignity, and monumentality for the lower classes. I do think differently, since it is clear, due to their Punic influence, its foreign origin. However, it is interesting how in *Emerita*, with no Punic influence, we have the Roman settlement with most

documented cases, similar to the amount of *cupae* documented in the entire *Baetica* Province (Ceballos Rufino, 2012: 271-299).

However, regardless of the phenomenon of the *cupae* in places like *Colonia Patricia*, *Baelo Claudia* (Bolonia, Cádiz), or *Italica*, where the pre-Roman population and the aforementioned Punic influence were substantial, the presence of *cupae* in *Emerita* must be looked at differently. In my dataset I have correlative influence from North Africa with African Red Slip Ware vessels, which can be temporally recontextualised comparing the chronology of the ceramic typology to the *cupae*'s. Therefore, I do consider the *cupae*, as I have already mentioned in this chapter, as a regional adaptation to a cultural phenomenon from Northern Africa, and the Eastern Mediterranean, regardless of their Punic origin.

To conclude with this chapter, I consider the particularities of the *cupae* phenomenon at a provincial, and a regional level. They convey the necessary elements of cultural hybridisation since the *cupae* unite Roman and foreign funerary practices into a very specific, unique, ritual phenomenon in the Western Provinces.

9 Grave goods from Early Imperial Roman contexts: analysis of typological varieties, differentiation in shapes, and local copies of imports

I have compiled 200 typological varieties divided in four main artefact categories: common ware shapes (63), fine ware vessels (44), glass containers (64) and oil lamps (29). I have identified two shapes of *amphorae*, *Camulodunum* 184 and Dressel 3, which are included in the common ware classification. As for their established chronology, for some artefacts it was impossible to assign a valid chronological value, as the span is too wide for the purpose of this research. As a matter of fact, a great percentage of the dataset of grave goods is composed of common ware shapes, which provide a limited time frame value due to their high chronological prevalence. In these contexts, I tried to assign a chronological value considering other factors present in the funerary context, although it was not always possible. Most of the time when this happened, the archaeological context of the ensemble did not allow for a specific dating either.

Therefore, those elements that failed to provide a certain chronological value were still taken into consideration merely for statistical purposes. A particular example that is often recurrent throughout the database is the case of shells, or tokens, or any other artefact with more than one fragment. The chronological frame given is a span of various centuries, concurring with the chronology of the site. In most of the cases the approximate time frame is the 1st to 3rd centuries AD.

On the other hand, I have artefacts that, due to their singularity, are prone to adjust the chronology to a particular decade or, in the case of coinage, to a specific period during the reign of a certain emperor. However, metal objects possess a singularity which is often difficult to manage. Besides coinage, I have analysed various jewellery pieces whose chronological range is unknown, as they only occur with the nails present in the ensemble. For said pieces, further chemical analysis is needed to determine their time frame, although for the purpose of my thesis I assigned the chronology that was given to the particular ensemble. I consider that those typologies of artefacts would have had an average timespan of one or two generations for the case of the goldsmithing

pieces. Whereas other metal artefacts shaping the funerary ensemble, like nails present in an inhumation for instance, would have been produced within a short period of time before they were used. Therefore, their chronological value admits a marginal error of a small number of years that is acceptable for the general statistical value of my dataset.

The typologies used, and the chronologies set within the contexts, were provided by the reports of the 77 interventions by the Consortium of Mérida. Hence the variety of typological classifications present in this study.

9.1 Common ware vessels

This comprises the most frequent typology of artefacts within the grave good contexts. The most employed typology is given by Smit Nolen (1985), which is crucial to understanding the connectivity with the Lusitanian hinterland, as this typology is widely present in the Alentejo region in nearby Portugal (Sánchez Sánchez, 1992). The presence of Smit Nolen shapes draws parallels with similar shapes found in *Emerita* in and out of the funerary contexts. I also documented shapes belonging to the typologies established by Vegas (1973), Mezquíriz (1956; 1958) and Sánchez (1992).

The more local classification of common ware vessels belongs to the latter, whose typologies are composed of regional shapes developed around *Augusta Emerita*. Other typologies, like Vegas' for instance, are the result of a more generic study of common ware ceramics in the western Mediterranean (Vegas, 1973). The typological classification developed by Sánchez was assembled by studying the context of a possible pottery workshop placed in Constantino St, southern *Emerita*, between the perimeter of the walls and the river *Anas*. It is remarkable that this study, made prior to the start of my dataset, and published in 1992, already mentioned the scarcity of published materials referring to common ware typologies. Unfortunately, it is still a recurring phenomenon, as the studies are limited to the excavation where the sherds are discovered, but we are lacking studies comprising a more interdisciplinary approach in the area of Mérida.

Coarse Ware	Number	Deposit	Local copies	Chronology
Smit Nolen jar	1	8024		AD 1 - 200
Smit Nolen 1 A	2	8117, 8139		AD 69 - 200
Smit Nolen 1 B	5	10066, 8117, 8176, 8206		AD 69 - 200
Smit Nolen 1 C	5	8111, 8117		AD 69 - 200
Smit Nolen 1 D	5	8024, 1018, 8117		AD 69 - 125
Smit Nolen 1 F	1	10066		AD 41 - 150
Smit Nolen 1 J	1	8139		AD 50 - 300
Smit Nolen 1 K	3	8024, 2510, 8117		AD 101 - 400
Smit Nolen 2	1	8024		AD 50 - 200
Smit Nolen 2 A	1	663		AD 50 - 200
Smit Nolen 2 B	9	8024, 7505, 8176, 8139, 654, 8206		AD 50 - 100
Smit Nolen A 2 B	1	8137		AD 1 - 200
Smit Nolen 2 C	1	8176		AD 50 - 150
Smit Nolen 2 D	1	8176		AD 50 - 120
Smit Nolen 2 E	1	8206		AD 1 - 100
Smit Nolen 2 F	2	10066, 8117		AD 75 - 220
Smit Nolen 2 K	1	8111		AD 41 - 200
Smit Nolen 2 T	3	8176		AD 50 - 200
Smit Nolen 3 A	1	8139		AD 50 - 120
Smit Nolen 3 B	4	8117, 8137, 8206		AD 50 - 120
Smit Nolen 4 A	1	8137		AD 101 - 200
Smit Nolen 4 B	2	7505, 8206		AD 101 - 200
Smit Nolen 4 C	2	8137, 8176		AD 101 - 200
Smit Nolen 4 D	1	8137		AD 50 - 150
Smit Nolen 4 T	1	8176		AD 50 - 100
Smit Nolen 5G	1	8135		AD 201 - 300
Smit Nolen 6	1	3017		AD 75 - 400
Smit Nolen 6 A	5	8024, 8117, 8176		AD 75 - 400
Smit Nolen 6 B	7	3017, 8117, 3503		AD 50 - 150
Smit Nolen 7 A	1	8206		AD 1 - 400
Smit Nolen 7 B	1	8206		AD 175 - 300
Smit Nolen 7 E	4	7505, 8086, 8104, 2646, 2716, 8137, 8206	8137	AD 1 - 150
Smit Nolen 21	2	8117		AD 75 - 200
Smit Nolen 39	1	8039		AD 25 - 75
Smit Nolen 78	1	8004		AD 101 - 300
Smit Nolen 105	1	8004		AD 101 - 300
Vegas 1	2	8026, 10066		50 BC - AD 400
Vegas 15	1	8176		300 BC - AD 200
Vegas 19,1	1	8057		AD 350
Vegas 27	1	8206		50 - 1 BC
Vegas 28	1	10066		50 BC - AD 14
Vegas 38	1	8067		200 BC - AD 100
Vegas 46	1	8117		AD 1- 100
Vegas 48	1	8190, 8212		100 BC - AD 100
Ostia 1	1	8117		AD 1 - 200
Mezquiriz 129/3	1	8117		AD 150 - 300
Amphorae Camulodunum 184	1	1018		AD 1 - 300
Amphorae Dressel 3	1	8176		100 BC - AD 300
Sánchez I	4	10066, 8117, 8137, 8176		Pot: AD 41 - 120 Jar: AD 1 - 120 Cup: AD 1 - 250
Sánchez I A	1	8176		Jar: AD 1 - 150
Sánchez I B	1	8206		Lid: AD 1 - 150
Sánchez I F	1	3503		Jar: AD 69 - 250
Sánchez 1,44	1	8117		Jar: AD 1 - 150
Sánchez II	19	3017, 10026, 8055, 8117, 8137, 8139, 8026		Ovoid bowl: AD 1 - 100 Jar: AD 69 - 200 Lachrymm.: AD 14 - 117 Pot: AD50 - 150
Sánchez II B	3	8067, 8206		Pot: AD 1 - 150 Bowl: AD 1 - 100 Urn: AD 41 - 150
Sánchez II C	1	8206		AD 50 - 300
Sánchez II D	1	8206		Pot: AD 150 - 300
Sánchez III	5	10066, 8117, 8137, 8139, 8206		2 Bowls: AD 175 - 300 Cup: AD 25 - 160
Sánchez III F	1	8086, 8104, 2646, 2716		Jar: AD 50 - 250
Sánchez IV	1	10066		Jar: AD 101 - 200
Sánchez VII	3	8055, 8117		2 jars: AD 75 - 250 Bottle: AD 75 - 250
Sánchez VII A	1	8206		Jar: AD 75 - 250
Sánchez VIII A	1	8086, 8104, 2646, 2716		Jar: AD 75 - 250
	138			

Table 25. List of common ware typologies present in the grave goods database. Carlos Cáceres-Puerto.

Similar studies have been developed in the Alentejo region by Portuguese scholars, or using the research set by Smit Nolen (1985), for instance. The regionality of mass-produced shapes is a shared phenomenon studied by other scholars within other parts of my dataset. Caldera de Castro (1991), for instance, studied local varieties of glass vessels associated to Isings' (1957) shapes. It coincidentally marks the biggest ensemble of pottery vessels in funerary contexts and yet it is the least studied group.

The study developed by Sánchez Sánchez (1992) comprehends the area between the theatre and the bullring compound towards the southeast of the colony. This area is widely represented in my study with the research of Mélida and Macías in Columbarios (1929), as well as Serra Rafols, Márquez (2008), and the different excavations in the military compound, such as Sánchez Hidalgo *et alii* (2019: 425–84) and Sánchez Hidalgo (2020: 29–52). Throughout various research it is attested that common ware vessels' usage was intertwined with funerary purpose, which is widely represented over my dataset.

The study of common ware vessels in the mid Guadiana Valley has been broadly discussed in key archaeological sites, mostly funerary gatherings, rather than a as bigger picture of the usage of said shapes by the indigenous societies. Therefore, to comprehend the idiosyncrasy of common ware ceramics in *Colonia Augusta Emerita*, we have to draw comparisons among regional funerary hubs from similar chronologies, like the necropolis of El Pradillo in Medellín (Del Amo y De La Eras, 1973), the domus of El Pomar in Jerez de los Caballeros (Badajoz) (Álvarez Sáenz de Buruaga, Álvarez Martínez and Rodríguez Martín, 1992) or the Roman villa of Torre Águila, in Barbaño (Badajoz) (fig. 86) (Rodríguez Martín, 2005), to name a few examples. Local references are more valuable in this particular context as the import-export ratio is substantially low. Common ware shapes had an important local component and were produced in or around *Emerita*. Even if we consider similar shapes from other regions, like the Alentejo area for instance, the area of influence of the shapes was remarkably reduced to the peripheral areas of the production centre (Sánchez Sánchez, 1992: 75). Unlike other ceramic shapes, like the *Sigillata* forms, common wares did not distribute throughout the territory far away from their production centre.

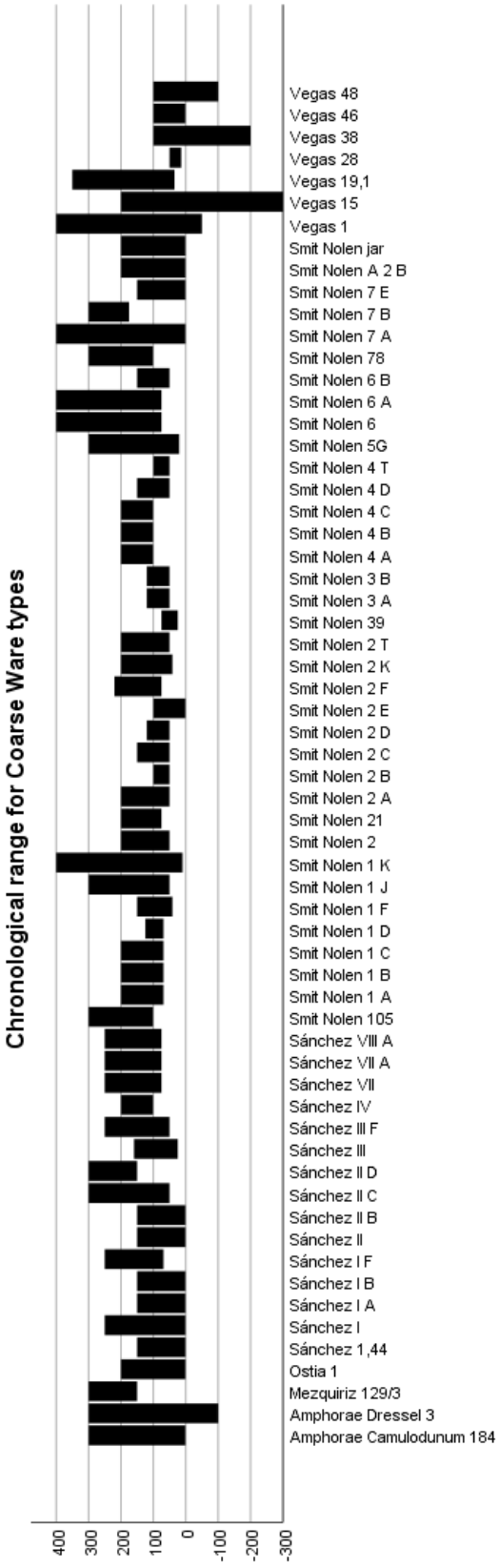


Table 26. Chronological range for coarse ware shapes present in the grave goods database.

This can be attested in various rubbish deposit uncovered around *Emerita*, like the example of Constantino St (Rodríguez Martín, 1996a). These vessels have a marked regional component, with a geographical range encompassed by the mid Guadiana Valley. However, like the other shapes that might appear between the different regions, I shall attribute this to the connectivity of the populations rather than to the export system of common ware shapes. As can be observed in table 25, the chronology established by Smit Nolen for the common ware vessels coincides with the chronology I set for the funerary contexts (table 26). It is significant that considering the regionality of the shapes, that the artefacts were produced in local workshops shortly before they were used as grave goods in funerary contexts. As a matter of fact, common ware vessels are present in a substantial percentage of grave goods. The large number of artefacts found in the dataset, the immediacy of the production and the closeness between the fabrication process and the usage clearly points towards the quintessential article with a special emphasis in the earlier stages of the colony, when the import routes were not yet set.

The regionality of the productions has been broadly assessed by taking into consideration the analysis of the clay. Considering the work of Sos Baynat (1965) as the principal work on geological analysis of the area of Mérida, as I mentioned in Chapter 4.1 (fig. 23), various scholars (Sánchez Sánchez, 1992; Bustamante Álvarez, 2012a: 407–33) have addressed the typological variation between different clays in the vicinity of Mérida. Therefore, according to Sos Baynat's analysis (1964: 43–47), I can be sure of the local provenance of the material employed in the production of common ware shapes. As a matter of fact, the model set by Sos Baynat, which was subsequently improved by Sánchez Sánchez (1992: 13–14), distributes clay employed in common ware shapes in four geographical areas. The furthest clay-obtaining region lies along the Guadiana River, with the closest areas being in the outskirts of the colony, in places like El Carrascalejo, Mirandilla or Aljucén (fig. 85). Those places present a wide variety of farmsteads from pre-Roman times to the late Roman period, as can be seen in Chapter 7.3. However, certain typologies call for an exception in the regionality axiom. The distribution of the shapes depends on the piece itself. More commonly used items, such as pots and other cooking vessels, had a local

origin as they were more frequently used. Therefore, their presence beyond the limits of the production centres was very rare. Other shapes, especially fine wares and common ware shapes imitating fine wares, had a wider exportation range, but they were always within the mid Guadiana Valley area (Sánchez Sánchez, 1992: 75).

I have noticed a certain number of common ware vessels imitating fine ware shapes, distributed over various contexts and areas of the colony. For instance, Márquez Pérez (1997c: 150–56) documented various common ware bowls imitating fine ware shapes contained within 19 cremations on Medea St, nearby the basin of the Albarregas river (fig. 109). A similar example was found near the excavation by Sánchez Barrero (2019: 547–56) on Medea St In the excavation code 1506, within the grave goods belonging to cremation A2, a common ware vessel imitation of a fine ware shape was found. However, this artefact was dated to between the 1st and the 2nd centuries AD, unlike the example documented by Márquez which was dated within the 1st century AD. Feijóo Martínez (2000a: 333–57) documented a case of local production of a shape Mayet LII, also in the basin of the Albarregas River. Bejarano Osorio (2007: 131–51) has documented further copies of Mayet shapes in the Albarregas Valley. During some refurbishment work in a local park to the southern edge of the Roman circus, in cremation A28 of the excavation code 10066, she documented one bowl imitating a shape Mayet XLIII. Although this shape has been dated between AD 41 and 100, the contents of this grave good were dated to within the 1st and the 2nd centuries AD. This implies either an incorrect chronology of the cremation or a continuation in the production of copies of this shape although the original shape was no longer in production. Considering that all artefacts have been dated to between the 1st and the 2nd centuries AD, with a special emphasis on the artefacts studied by Márquez (1997c: 150–56) and Feijóo (2000a: 333–57) which have been dated within the 1st century AD, there is some degree of systematisation in the imitation of fine ware shapes in *Augusta Emerita* since the relative early stages of the history of the colony. The most interesting artefact I have documented in the grave goods dataset is a copy of a *Terra Sigillata Africana* contained within the grave goods of the inhumation A155 of the excavation codes 8086, 8104, 2646, 2714. Vargas Calderón and Plasencia

Sánchez (2015: 157–78) documented one common ware bowl Form I Plaster C imitating the shape Hayes A14 B, dated between AD 75 and 125. However, this shape of African Red Slip ware is dated between AD 160 and 200. This is the earliest example of a *Terra Sigillata Africana* vessel, or copy of the shape, to be found in *Emerita*.

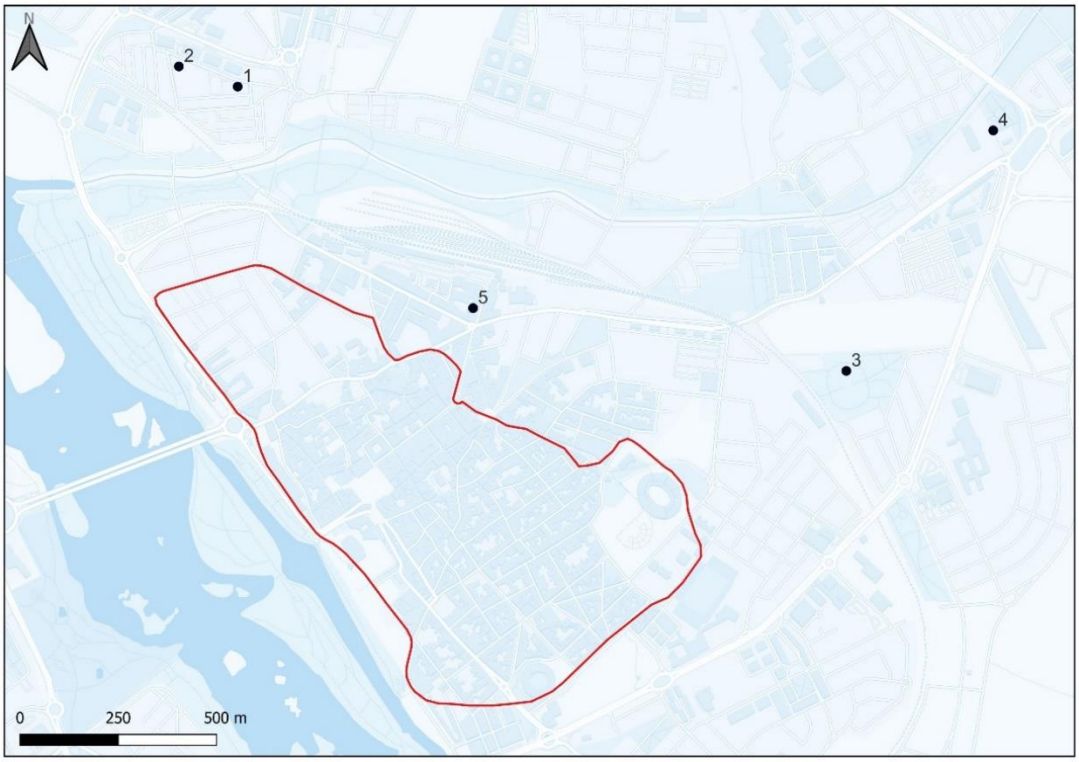


Figure 109. Location of coarse ware vessels imitating fine ware shapes. 1) Márquez, 1997c: 150–56, 2) 1506, 3) 10066, 4) 8007, 5) 8086, 8104, 2646, 2714. Map: Carlos Cáceres-Puerto.

In general, the lack of regional distribution of common ware shapes was not an obstacle for the pragmatism of local workshops, whose kilns accommodated both fine wares and common wares, as has been demonstrated by different studies (Rodríguez Martín, 1996b: 181–204; Bustamante Álvarez, 2012a: 411).

Despite their origin, the artefacts present in the grave good contexts belonged to domestic horizons used for the normal development of a colony in its first stages of existence. As a matter of fact, I have also documented a wide variety of transportation and dedicated storage vessels, which will be referenced further on this chapter while discussing the role of *amphorae* in funerary ensembles. However, storage vessels, common ware vessels and ceramic

building material, either present in grave goods or in rubbish deposits scattered around the colony, coincide with an earlier chronology, signalling the purposefulness of the first ceramic productions in *Colonia Augusta Emerita*.

Bustamante Álvarez (2012a: 407–33) documented early imports from the *Baetica* province which will not be the standard trading route. The absence of large number of imports from *Baetica* seems surprising considering the closeness with the Guadalquivir River basin. However, when comparing different rubbish deposits from the second half of the 1st century AD, the level of "Romanisation" among the colonists was very similar to their neighbours in *Baetica*. The local consumers demanded productions with a marked *Italic* character that often resembled the archaic shapes that were fashionable in the Italian Peninsula in the same period (Alvarado and Molano, 1994: 283). This factor or identification of 'quality' and 'Italic', beyond the status, *Romanitas* and prestige value, can be observed in other shapes like oil lamps. It might serve as an explanation of the lack of imports from the province of *Baetica*, a well-established centre of ceramic production with a *Romanitas* that was further developed than the Lusitanian capital. As the lack of workshops suggests, *Colonia Augusta Emerita* imported their vessels directly from the Italic manufacturer while producing their own supply of more mundane pottery shapes. The production adapted to the Roman population accustomed to the Italian ethos, which also suffered a certain level of hybridisation with the pre-existing population to create S-shaped vessels, a typical from the mid Guadiana Valley (Alvarado and Molano, 1994). On the other hand, another factor explaining the lack of trading interchange with *Baetica* is linked to the level of competition with *Baetican* workshops. The production from *Emerita* was distributed following the axis set by the *Anas* River, either westbound to *Olisipo* (Lisbon), or eastbound to *Lacimurga* (Puebla de Alcocer-Navalvillar de Pela, Badajoz), where *Emerita* had the commercial monopoly (Rodríguez Martín, 1996a: 163). While in contrast, the level of competition increased as *Baetica* approached in the north-south axis, especially regarding the *amphorae* trade, where *Emerita* could not compete with the *Baetican* production.

In the research by Bustamante Álvarez (2012a), at least 30 common ware production centres were mentioned. The workshops have been discovered entirely since 1990 (Sánchez Sánchez, 1992; Alvarado and Molano, 1994),

although there are certain rubbish deposits that were discovered in the second half of the 20th century which hinted possible workshops, though the kiln was never documented on those sites (Barrantes, 1877; Mélida, 1925: 336–37; Álvarez Sáenz de Buruaga, 1960; Mayet, 1975; 1990: 209). Therefore, *Emerita* functioned as an economic generator for the region since foundational times, with transactional routes within the immediate population in its vicinity. Jerez Linde (1996: 127) also refers to this phenomenon while studying fine ware productions in the mid Guadiana Valley, but this will be discussed further on this chapter, as the fine wares casuistry is diametrically different to the common ware shapes.

As a matter of fact, most of the common ware shapes found in my dataset coincide with the chronology given for the contexts of the workshops. Therefore, the common ware shapes belong to the same chronological range as the funerary contexts. This supports my hypothesis of a mass produced, local common ware supply sufficient to provide the colony and its surrounding settlements with ceramics for their daily life. It does not occur in the same manner with other shapes, such as *Sigillata*, or glass vessels, whose chronological range often varies enormously between contexts. However, as those typologies were more subject to importation, the shapes differ largely between contexts, whereas the common ware shapes are consistent within the vast majority of my dataset, considering some regional varieties or typological modifications within local components.

Unfortunately, even though I have obtained the time frame for each shape, as I mentioned before, sometimes this is not enough to narrow the chronology of a context. In the dataset I have identified some artefacts of interest, considering both *ante quem* and *post quem* chronological value of the piece. However, the circumstances of the funerary ensemble have been established according to general criteria considering other artefacts of the context. For example, the jar Vegas 48, found in the unit A7 of the excavation number 8190/8212, has a typological chronology set between 100 BC and AD 100, whereas the ensemble has been dated between the 1st and the 2nd centuries AD. But, once again, this does not refute my theory of immediacy between the production process and the usage of the piece. I analysed other examples of common ware vessels whose chronological value concurred with the funerary context. The calibration of the

chronological factor sometimes offers certain level of inaccuracy within the dataset, especially with common ware ceramics, which tend to have wider temporal range than other typologies, like fine wares or glass vessels. Therefore, those inaccuracies are overcompensated with more precise typologies. Nevertheless, I must specify that the chronological range of common ware vessels coincides with the temporal span I selected for the study of "Romanisation" around *Augusta Emerita*. In this case, 91.94% of the typologies have a chronological range that goes up to the 3rd century AD. This suggests a coetaneity among the shapes and the funerary rites until the 3rd century AD for most of the shapes.

The inspiration for the shapes from the second half of the 1st century AD onwards seems to be influenced by *Baetican* examples. It follows the same pattern than the Alentejo region follows as a model-producing centre (Bustamante Álvarez, 2012a: 431). This concurs with the register I obtained from funerary contexts. In these contexts, the production in the first stages of the colony had a marked northern Hispanic character, as the legionnaire workshops had an important influence in the production and typological models. As the colony develops, the imitation of models from different parts of the Empire varies. It is normal that the Alentejo region shares the influence and models of *Emerita*. The Lusitanian colony was the capital and the Alentejo region was the hinterland with a remarkable level of population, as the hypothesis suggested by Dr. Monica Rolo (2018) in her PhD thesis has proven. On the other hand, the similarities of the typologies from the colony with the shapes of the southwestern of Portugal and the *Baetican* region might disguise a problem with the surplus of production or the imports and supply altogether (Alba Calzado, 2005b: 367; Bustamante and Bello, 2007: 533–37; Bustamante Álvarez, 2012a: 410–11).

In addition, as has occurred with the similarity of shapes, the traceability of the regional distribution routes shall be studied by comparing common ware shapes found in lesser regional centres. The exportation routes followed a grid based on the *ager publicus* of the colony and the communication nodes with a north-south axis (Bustamante Álvarez, 2012a: 407–33); both have been thoroughly described in sections 5.1 and 5.2 respectively. However difficult it might seem to draw parallels with the distribution patterns, there are similar

common ware shapes in the villa of Sao Cucufate, Portugal (Pinto, 2006: 167–84); various *necropoleis* of the Alentejo region, also in Portugal (Smit Nolen, 1985; Rolo, 2018); in the villa of Torre Águila (Barbaño, Badajoz) (Rodríguez Martín, 2005); and even in *Contributa Iulia Ugultunia* (Medina de las Torres, Badajoz) (Mateos Cruz, Pizzo and Mayoral, 2014: 109–32).

The study of ceramic materials within funerary contexts would be inconclusive if I neglected the role played by the workshops around the colony. The study of the production centres was widely neglected as a result of the absence of tangible evidence. It was presumed that *Emerita* ought to accommodate pottery workshops as a main provincial hub, but archaeologist did not manage to find remnants of one until the 1990s. The first references to a pottery workshop were made by Vicente Barrantes (1877) in his work 'Barros Emeritenses. Estudios sobre los restos de cerámica romana que pueden hallarse en las ruinas de Mérida'. The studied material originated from a possible workshop located in San Salvador St in which Barrantes suggested that he identified the *tabernae* where the pieces would have been sold. The materials analysed by Barrantes, mostly composed of oil lamps, were referenced by Mélida (1925: 336–37) while discussing the production of pottery in *Emerita* and were subsequently studied by Mayet (1990: 209). However, taking into consideration his description of the material culture and structures, it might as well have been a rubbish deposit.

The misplacement of pottery workshops in *Augusta Emerita* is not unique to common ware shapes. The Marquis of Monsalud (1897: 51–52) mistakenly identified a sealed example of *terra sigillata* with the stamp VAL PATERNI EM, attributing the 'EM' with EMERITENSIS, hence locating an artisan workshop in the colony. This was later rejected by Mayet herself, Jerez Linde, and the majority of researchers on the topic (Bustamante Álvarez, 2011: 17). However, the fine ware scenario will be further developed in the corresponding section in this chapter.

Álvarez Sáenz de Buruaga (1960) encountered a similar problem while documenting a plausible workshop (fig. 110) in Oviedo St. he faced a substantial number of disposed ceramic vessels, but he was uncapable of finding any kiln. This hypothetical workshop, which is crucial for the understanding of pottery

making in *Emerita* due to the shapes present in the ensemble, is not dissimilar to the remains uncovered in Constantino St nearby, studied by Sánchez Sánchez (1992). There was no evidence of a plausible potter workshop besides Barrantes' (1877) hypothesis, already mentioned, and the possibility developed by Mayet (1975), until the discovery of the rubbish deposit in Constantino St (Rodríguez Martín, 1996a: 162).

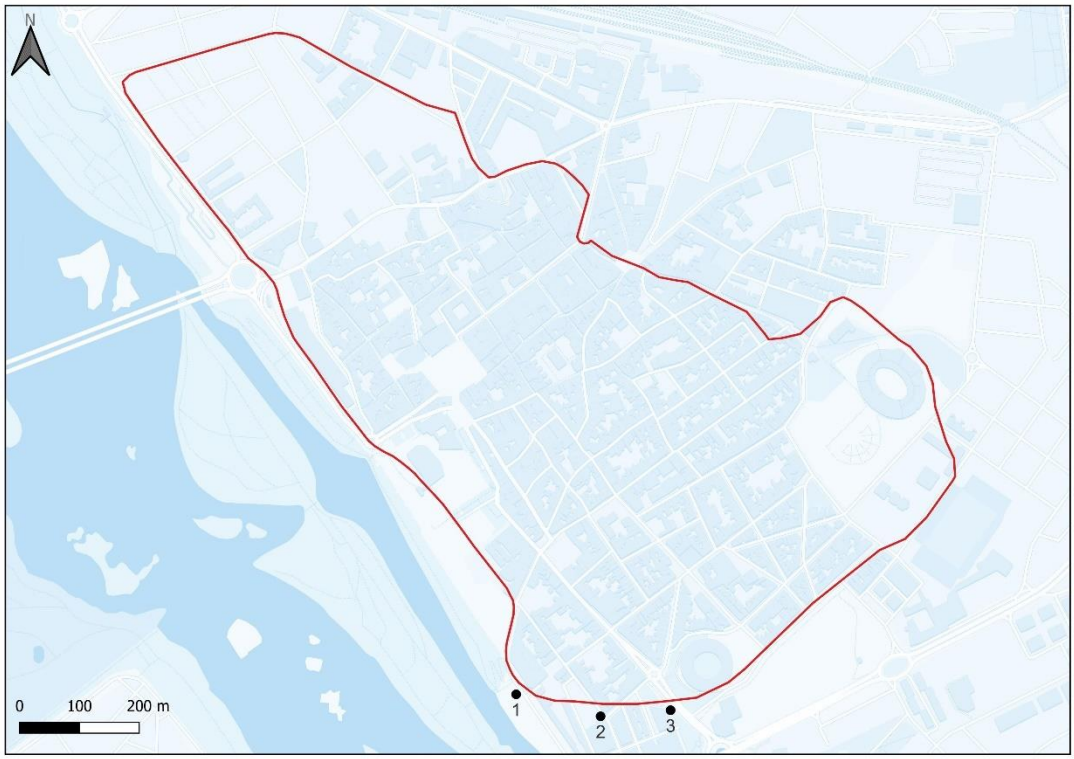


Figure 110. Workshops in 1) Atarazanas St., 2) Constantino St., 3) Oviedo St. Map: Carlos Cáceres-Puerto.

However, when this site was excavated it generated a certain level of incredulity and suspicion, as a potter's workshops could not be located inside the walled perimeter according to the Roman law, and the area was then regarded as within city walls (Márquez Pérez and Palma García, 1994; Rodríguez Martín, 1996a: 162). Nevertheless, it has since been proven that the area was immediately outside of the walled enclosure, hence invalidating the mistrust its presence had within the scientific community at the time of its finding. The kiln, however, was not located in this excavation, and it has not yet been located as of 2023; therefore, it has become the first pottery production centre ever documented in *Emerita*, but it has no kiln associated with it. Despite the lack of a documented furnace, the hypothetical chronology can be attested by the

timeframe of the shapes uncovered within the rubbish deposit. The level of production might suggest an early settlement of workshops that accommodated the first settlers, but the lack of imported pieces in the first stages also suggest that the production in the workshops was sufficient to avoid massive level of imports.

Similar features in the production record can be observed in more recent archaeological findings. Bejarano Osorio *et alii* (2019: 660) have documented an industrial facility across the river *Anas*, dated to the first decades of the 1st century AD. The production centres were destined to manufacture ceramic building material and storage vessels, including Haltern 70 amphorae (fig. 111), of which I do not possess any example in my grave goods dataset. The authors have linked the production of this workshop to the supply of the Roman army in the German frontier, which would imply an early chronology of the site. If this hypothesis is confirmed, the connectivity between *Colonia Augusta Emerita* and the German *limes* would be strengthened, considering that one of the theories explaining the absence of coinage minted in the colony itself suggests that they were brought to the German scenario alongside the troops. However, the utility of these workshops was short-lived, as I have documented a shifting pattern of occupation of the suburban areas where those industrial facilities were located. Workshops that produced ceramic building material and storage vessels were gradually replaced by funerary structures by the end of the 1st century AD (Bello Rodrigo, 2007: 433–56). This explains why I do not have single example of Haltern 70 in my dataset: they were fabricated with the ulterior motive of being exported.

9.2 *Amphorae*

There are specific typologies within common ware vessels that, due to their importance, have the right to be analysed individually: this is the case with *amphorae*. However, I must include in this category all vessels produced with the aim of storing goods, like *dolia*, for instance. Although the latter are not easily identified within the contexts and therefore is not always specified in the reports, with all probability there are some pieces catalogued as unidentified common ware. There are various sherds belonging to two small *dolia* from Tiberian reign

in excavation number 8206, within a funerary context. Although both are used for the storage of goods, the *amphorae* proportionate mobility.

I have identified fragments corresponding to at least 18 *amphorae*, contained in contexts recognised as grave goods, although I have only been able to set a clear typology for 2 out of the 18 cases. This typology responds to the necessities of the colony in the earlier stages of its existence. According to the studies by Bustamante Álvarez (2012a: 407–33), this requirement implied storing goods and a primitive establishment of trading routes. It is clear with both typologies I have identified in the grave goods contexts, *Camulodunum* 184 and Dressel 3, besides the other 16 artefacts with unclear typologies whose approximate chronologies coincide with the two types mentioned above (Cáceres-Puerto and García Sánchez, 2020: 57).

The main problem with the study of ceramic production in *Colonia Augusta Emerita* is the uncertainty of the location of the workshops. This is a shared difficulty with the remainder of typologies. Most of the time, the 'evidence' of a workshop comes from an accumulation of debris, whether it was accidental or deliberate. As I mentioned in the previous section, the publication by Vicente Barrantes (1877) of 'plausible' workshops around the city of Mérida is notable. The author was not present during the so-called 'excavations', but instead he wrote about them following accounts of witnesses. Such an absence did pay its toll by misplacing some of the workshops he mentioned (Bello Rodrigo, 2007: 434). Moreover, other 'workshops' did not exist altogether, or the ensembles contained ceramic material belonging to different historical periods. As a matter of fact, the workshop he assured was on 'one edge of San Salvador St' (Barrantes, 1877) has never been documented by modern excavations; only medieval and post medieval pottery workshops were found in the excavations developed by the Consortium of Mérida (Barrientos Vera, 1998: 103–33). The location of new workshops has been the outstanding issue for the local archaeologists, although during the 1990s they started to uncover possible ceramic workshops, like the one studied by Alvarado and Molano (1994) in Constantino St. In addition, further evidence of pottery workshops has been published in the past decades (Márquez Pérez, 1997a; Alba Calzado, Márquez Pérez and Saquete Chamizo, 1997; Sánchez Barrero and Alba, 1998a; 1998b;

Bejarano 2000a; Estévez 2001; Alba 2005a; 2005b; Méndez Grande and Alba 2004; Palma García, 2004b: 139–54).

The earliest examples of ceramic production centres had complementary facilities attached, forming small farmstead complexes in the allotments given to the first settlers (Bello Rodrigo, 2007: 435), as I have already analysed in Chapter 7.3. There are several examples in the southern part of the colony and towards the northwest. It is worth mentioning the shifting distribution pattern of the kilns destined to fabricate ceramic building material and other bulk ceramics used for trade and storage. Immediately after the foundation, the facilities were placed nearby the *pomerium*, as the pottery workshop located in the Football Stadium suggests (Márquez Pérez, 1997a: 80–93). This kiln is similar to another one documented by Alba *et alii* (1997: 94–103) in 'Camino del Peral' in the southeastern part of the colony perimeter. Thus, the pottery workshops continue to distance themselves from the colony. Sánchez Barrero and Alba Calzado (1998a: 211–36) documented remains of a pottery workshop one mile to the south of the southeastern gate of the *Kardo Maximo*, alongside what Sánchez Barrero (2008) catalogued as 'pathway 4' parallel to the Guadiana River. On the other hand, Bejarano Osorio (2000a: 25–38) documented an industrial facility in the allotment for the Hospitality School on the left bank of the Guadiana River, one mile to the northwest of the colony. This complex had more kilns associated with the *pars rustica* of a *villae*, like the one documented by Nodar Becerra and Olmedo Grajera (2004: 209–30) in the Las Rozas neighbourhood (Bello Rodrigo, 2007: 433–56). Furthermore, in the latter area some authors tend to suggest an ulterior usage for the area for funerary purposes. There were, indeed, various burials nearby, but such a remote location tended to be void of funerary presence which ceased to exist in favour of industrial facilities such as the kilns mentioned beforehand.

Calderón Fraile (2002: 361–70), who organised the first study of *amphorae* within *Emerita*, counted 211 artefacts upon the writing of her research in 2001 (Calderón, 2002: 361). She had already mentioned that due to the lack of a chemical analysis of the pastes, the typological classification is the only valid method to establish a preliminary catalogue of the storage vessels in the Lusitanian colony. Coincidentally it is the same methodology I employ in the study

of the distribution patterns of occupation of funerary areas in *Emerita*. After Calderón's study, much more evidence of *amphorae* has been added to the archaeological knowledge of the Augustan colony, as the ensemble of 530 sherds of *amphorae* from the excavation of the former military compound demonstrate (Sánchez Hidalgo, Sanabria Murillo and Rosa, 2019: 425–84).

Whereas the evidence analysed by Calderón was composed of artefacts from the colony with no production centre attached, Alba Calzado and Méndez Grande (2005: 375–409) documented the first evidence of an *amphorae* production centre on Lusitania Avenue. This kiln was also associated with the unlikely production of *Sigillata* (Alba and Méndez, 2005: 389), and was located near the southeastern exit of the colony. In spite of another production centre being in the vicinity, documented by Méndez and Alba (2004: 307–32) and suggesting the presence of a bigger workshop, the small size of the kilns suggest a small business or a production in an epoch where a smaller quantity was needed.

However, considering the data I possess, and after comparing the chronological ranges of the typologies with the chronological ranges of the contexts where the artefacts were found, I do not have any clear typology of *amphorae* belonging to foundational process. The main classification of *amphorae* for Augustan epoch is the Haltern 70 (fig. 111), also considered by some authors a typology on its own: *Mérida I* (Bustamante Álvarez and Heras Mora, 2013: 331–45). This type of *amphorae* has been documented thoroughly in early contexts in *Augusta Emerita* and was documented and correctly catalogued for the first time by Alba Calzado and Méndez Grande (2005: 389–90). According to Bustamante and Heras (2013: 331–46), the model copies shapes of *amphorae* from the *Baetica* province, which, considering the chronology assigned to the artefact, mid-1st century BC to the Flavian era, corresponds to one of the earlier cases of the imitation of foreign goods within the colony. Due to the earlier chronology of the type, it is often associated with the early military presence in *Emerita*, and it has been established a in long-lasting military relation, as it has been found in archaeological sites with a strong military presence. As a matter of fact, the site found by Bejarano Osorio *et alii* (2019: 625–64) on the left bank of the river Guadiana during the excavation of

the Hospitality School confirms this assumption. The authors linked the production of Haltern 70 vessels to the supply of the Roman army in the German *limes* during the Augustan reign.

Further evidence of Haltern 70 was documented during the excavation of the former military headquarter in Mérida with the excavation code 8206. This complex summarises the occupation process that I will further develop in Chapter 10. It encompasses an early funerary occupation of the area, at the beginning of the 1st century AD. Then, by the beginning of the 2nd century AD, the funerary presence was reduced as residential and industrial facilities appeared in the area (Roberto de Almeida and Sánchez Hidalgo, 2013: 49). This process, unlike at other settlements throughout the Roman Empire, is very tangible in the suburban spaces of *Colonia Augusta Emerita.* Hence, the sequence of occupation in the area is the perfect example of the historical discourse in the suburban areas of the colony, where the funerary presence decreases from its height in the 1st century AD to the 3rd century AD, when in some areas it completely disappears. In some areas, however, as is the case with the workshop in Constantino St. (Alvarado and Molano, 1995: 281–96), the production centre would have shifted towards the southern side of the colony, between the walls and the river Anas. Both examples concur with the shift northwards of the funerary presence which I have documented in my database; the industrial complexes tended to intertwine with the funerary ones until they eventually prevail (Cáceres Puerto and García Sánchez, 2020).

Roberto de Almeida and Sánchez Hidalgo (2013: 49–58) suggest a distinctive feature in the great number of *amphorae* recovered in the allotment, which includes over 530 fragments. They imply that the *amphorae* were mainly a maritime transportation vessel and point towards the high costs of their production and movement in the hinterland (Roberto de Almeida and Sánchez Hidalgo, 2013: 51). This economic dichotomy is related to the hypothesis of the usage of *amphorae* for the troops and their distribution to the German *limes*. The mobility in Roman times was much greater that we sometimes appreciate, as is evident in coinage minted in the colony, or in this case, within deposits of discarded Haltern 70 *amphorae* (fig. 111).

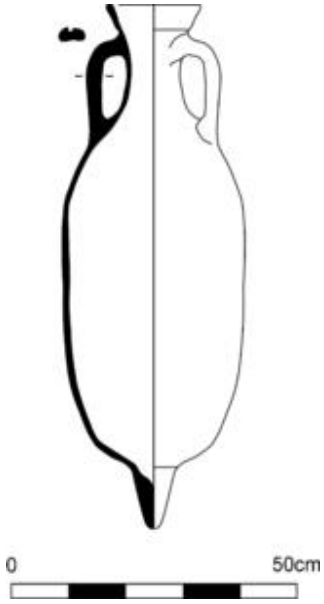


Figure 111. *Amphorae* Haltern 70, after Martin-Kilcher, 1994.

However, one of the pivotal questions that lies beneath the content of the *amphorae* is whether they were copies of foreign models to supply the local and regional chain of production or authentic foreign productions brought into the colony by trade. Regarding to the origin of the piece, the *amphorae* Haltern 70 encompassed the entirety of the western Mediterranean basin, besides the western coast of *Lusitania*, with a set chronological range of between 80 and 60 BC and the Antonine period (Tchernia, 1980: 305–12). Therefore, the presence of this piece within the area of *Emerita* draws attention to the connectivity of the Lusitanian capital with all surrounding provinces from the late 1st century BC. It also strengthens the military component as they have been located in various military settlements, especially in northern and northwestern Iberia (Morais, 1998). Nevertheless, this shape of *amphorae* has been broadly studied in peripheral regions, and scholars have not been able to locate a workshop producing this shape within *Emerita*'s territory, which suggests one of the earlier imitating processes taking place throughout *Augusta Emerita*.

Perhaps, as the location of workshops producing this shape in Northwestern Iberia during the Cantabrian Wars demonstrates, the military influence was substantial. As a matter of fact, it is plausible the appearance of Haltern 70 typologies in the earliest contexts of the colony due to the familiarity of the *emeriti* with the shape in military encampments in northern Iberia. In later

chronologies, *Lusitania* followed the patterns implemented in other regions of the Empire by modifying certain typologies of *amphorae* to adapt them to their particular necessities, especially after the 3rd century AD. As a matter of facts, models Almagro 50, Almagro 51 A and B, Almagro 51C and 51C Variant, and Keay 78 are among the most significant examples of vessels covering the main production centres of the Lusitanian hinterland (Alarcão and Mayet, 1990; Raposo, Fabião, *et alii*, 2005: 37–54; University of Southampton, 2014). The crucial factor in researching the typological origin of the vessels destined to storage goods lies in reviewing evidence beyond the urban centres towards the production nodes. There, within *amphorae* production industries, we should focus on the subsidiary industrial facilities, such as wine production centres. There are examples of Lusitanian produced *amphorae* in Villa de Clavellinas in Torremejía (Badajoz) (Bustamante Álvarez, 2011: 33–34), although they are more present in settlements, mostly in the coastal areas and the Alentejo region, both in modern day Portugal.

The correlation between the consolidation of communication nodes, the establishment of trading routes with the hinterland and external actors, and the creation of workshops near *Emerita* altered the pre-existent trading scene in the Lusitanian territory (Calderón Fraile, 2002: 361–70). Also, the temporality of the vessel supposes that the fabrication took place near the production centre of the goods to be stored. We, therefore, need a comparison of the relationships between artisans and farmers and the role played within the provincial trading system.

Since foundational times there is a clear component of supply from the Atlantic ports of the province, with a special emphasis in *Olisipo*. The supply products came from the Italian peninsula and partially from *Baetica*, but we cannot forget the supply from the north of Hispania in the first decades. Across the 1st century AD there is evidence of the progressive management of the needs of the province from the province itself, with less signs of imports and a progressive enforcement of imitating shapes, a constant throughout all the typologies covered on this chapter. However, the dissimilar correlation between Haltern 70 and Dressel 2-4 (Haltern 70 being the most numerous) in the 1st century AD is significant. In the dataset of funerary context depicted in section

9.3 and in other locations over the suburban area of *Emerita*, however, this situation is diametrically opposite. As a matter of fact, in the excavation code 8206, in the former military compound, the correlation between Haltern 70 and Dressel 2-4 is substantially higher for the latest typology (Roberto de Almeida and Sánchez Hidalgo, 2013: 49–58). This might be explained by the social and economic status of the inhabitants of the colony and the preference for the imported vessels containing supposedly better wine. Although different approaches can be asserted and question whether the origin of the shapes was really foreign or if it was an assortment of copies from the hinterland of the province. In addition to wine, Haltern 70 was also used to transport local goods throughout export routes. Pliny mentioned:

> [A] *very sweet variety* [of olive]*, which is merely dried by itself and is sweeter than a raisin; this last kind of olive is rather rare, and is grown in Africa and in the vicinity of Augusta Emerita in Lusitania.*
>
> (Pliny the Elder, *Naturalis Historia*, XV.4.17).

There is evidence of export of this variety of olives from *Lusitania* using local copies of Haltern 70 (Morais, 1998: 44–45).

As I mentioned at the beginning of this section, I only possess two clear typologies of *amphorae* within my dataset: 1 Dressel 3 (excavation number 8176) and 1 *Camulodunum* 184 (excavation number 1018). The typology Dressel 3 corresponds to a variation of the typology Dressel 2-4 developed in the *Baetican* province. The chronological range in my dataset date for this typology is between 100 BC and AD 300; this dating probably compiles with the chronological range of the different typological variations of the piece. However, thanks to the context provided by the other grave goods present in the funerary context, the approximate date has been set to around AD 75–125.

The Dressel 2-4 shape originated in the south of the Italian peninsula, near Pompeii and Brindisi (University of Southampton, 2014), in the first half of the 1st century BC. This shape was largely copied, hence the vast amount of this typology in the suburban areas of *Emerita* (Bustamante Álvarez, 2011: 35). The variation of the shape present in the dataset might belong to either the typology

of Dressel 2-4 that originated in the coastal areas of the *Baetica* province or in the Guadalquivir Valley. Considering the closeness, the most likely is the latter option. Various authors have confirmed its production in some Lusitanian settlements, in context dating from Augustan reign to the Claudian era (Almeida, 2008: 138). The research developed by CEIPAC[19] (Remesal, Berni and Aguilera, 2008) in Rome set the latest date for this shape in the last stages of Nero's reign, although in Sevilla there has been evidence of various contexts containing this shape in a later chronology. The excavation in Plaza de la Encarnación (Rizzo, 2003: 141–82), proved that a vessel catalogued as Dressel 2-4 belonged to the late Flavian or early Trajanic period. This matches the only example of Dressel 3 present in my catalogue, which is dated to between the same chronological range, from the end of the 1st century to the beginning of the 2nd century AD. A common problem is the difficulty with distinguishing the variety from the Guadalquivir Valley from the coastal variation. There are various examples of the latter in different centres around *Lusitania*, however, it has not been predominant within *Emerita*.

On the other hand, there are multiple examples of *amphorae* destined to be transported with wine to different parts of the Mediterranean Sea. This is the case of *amphorae Camulodunum* 184. This shape, with a Rhodian style, had an origin in the Aegean Sea and Asia Minor, although it was well distributed all over the Empire. Peacock (1977) suggested that the high number of *amphorae* with this shape within military settlements was the result of a tribute placed by the Emperor Claudius on the people of Rhodes. However, the chronology of the context it was found in does not contribute to this theory, as it has a set chronological range between AD 51 and 100.

There is one particular case, however, of *amphorae*, that does not match with any trading purposes. During an excavation in 1992 (excavation number 159), in the then outskirts of the Roman colony in the southeastern end of the city, archaeologists found a deposit containing 3 cremation pits. One of them had an unusual funerary deposit for the site of Mérida: a clear quartz *amphora*. This is the only case identified in *Emerita* in a funerary context or in any other

[19] http://amphorae.icac.cat/amphorae

archaeological setting. This is a particular interesting case as the quartz amphorae was accompanied by the remnants of a wicker basket which housed the remains of an egg, which was later identified as a hen's egg, and four walnuts. The ensemble was in a perfectly preserved condition. Unfortunately, I could not obtain any further information relating to this ensemble as the archaeological report was never published and I was only granted access to the field log. However, both the location, 500m outside the southeastern edge of the colony (Luis Buñuel, St), and the chronological range, 25–1 BC, convert this finding into one of the most remarkable features in my grave goods dataset.

To conclude, the most significant feature observed with *amphorae* is their use as libation tubes or structural support within the funerary structures. In excavation number 8175, in the cremation A17 the *amphora* was used as a cinerary urn (Méndez Grande, 2017: 579–638), whereas in excavation number 8219, *amphorae* were used as libation tubes in the cremations A719 and A708, and in the cremation A715 the neck of the *amphora* was used as a libation tube (Chamizo de Castro, 2019b: 557–68). The chronology of A17 in 8175 and A719 in 8219 coincide, as 8175 has a chronological range of AD 1–100 and A719 in 8219 of AD 51–100. Both A708 and A715 possess a broader chronological range of AD 1–200.

9.3 Oil lamps

The typological varieties cover the entire timeframe of my research, as occurs with coarse ware typologies. I have identified 88 pieces that are catalogued as 29 shapes (table 27). The typologies used are Dressel, Menzel, Loeschcke, Sotomayor, Leibundgut, Bailey and Deneauve. The typological variation depends on the person writing the reports, hence the different shapes used to catalogue the pieces.

The study of oil lamps in *Augusta Emerita* started to develop, briefly, after Barrantes (1877). However, his research of oil lamps could be considered as a groundwork, as Barrantes' work was on standby until the publication by Amaré Tafalla (1989–1990: 135–172) of a state of the issue study of oil lamps in the Iberian Peninsula. Amaré's study broadened the multidisciplinarity of this branch of research expanding it towards new focal points. Whereas the main researchers

during the 20th century have mostly focussed on the decorative motifs, Amaré's (1989–1990: 135–172) work centred on the research of craftsmen stamps, production centres and the distribution of known shapes within the Iberian Peninsula (Bello Rodrigo, 2007: 442).

Oil lamp	Number	Deposit	Stamp	Date
Dressel 5	1	2481		AD 75 - 200
Dressel 5C	1	8007	FORTIS	AD 75 - 200
Dressel 9	1	8101, 8101, 8123		27 BC - AD 75
Dressel 9C	1	8060		AD 50 - 75
Dressel 11	1	8206		AD 1 - 100
Dressel 11B	1	8010		27 BC - AD 96
Dressel 20	1	8020		AD 75 - 150
Dressel-Lamboglia 30A	1	8117		AD 201 - 400
Menzel 390	1	8086, 8104, 2646, 2716		AD 75 - 200
Loeschcke IB	2	8019, 2510		AD 25 - 54
Loeschcke IC	1	8067		AD 54 - 96
Loeschcke IV	9	8039, 8067, 2510, 8111, 8176, 8206		AD 1 - 100
Loeschcke V	1	8043		AD 50 - 120
Loeschcke X	1	2835		AD 75 - 100
Loeschcke XK	1	8043	FORTIS	AD 75 - 100
Sotomayor D-1	1	8117		25 BC - AD 96
Leibundgut XVII	2	8057, 8117		AD 150 - 200
Deneauve D III	1	8206		90 BC - AD 25
Deneauve IV D/VE	1	2510		AD 14 - 50
Deneauve V-A	32	8024, 1018, 8057, 8058, 10066, 8117, 8137, 8177, 8139, 8175, 8206, 8219	GABINIA (8058)	AD 14 - 117
Deneauve V-G	6	8043, 10066, 8117, 8176, 8206		AD 51 - 150
Deneauve VI-A	3	8055, 8137		AD 75 - 200
Deneauve VII-A	3	10066, 663		AD 69 - 150
Deneauve VII-B	1	8117		AD 50 - 150
Deneauve VIII-A	1	8117		AD 101 - 300
Deneauve VIII-B	10	8024, 10066, 8117, 8177		AD 101 - 300
Deneauve VIII-C	1	8206		AD 201 - 300
Deneauve XIII	1	10066		AD 51 - 117
Bailey P-I	1	3017		AD 51 - 100

Table 27. Oil lamp shapes present in my database. Carlos Cáceres-Puerto.

Yet, the main researcher in oil lamps of the Augustan colony is Rodríguez Martín. He is a curator in the National Museum of Roman Art of Mérida, and he

has spent decades studying various rubbish deposits associated with pottery workshops (1996b) and the production, distribution and decorative motifs of the oil lamps present in the collection of the Museum of Mérida (Rodríguez Martín, 1995: 269–83; 1996a; 1996b: 181–204; 2002; 2005). Other scholars have dedicated time and publications to the study of oil lamps in Mérida, despite of centring their research on other aspects of Classical Archaeology. Jerez Linde, for instance, has published reports concerning fine ware, his speciality, oil lamps found during the excavation of the Villa de la Tiesa in Lobón (Badajoz) (Jerez Linde, 2002: 11–29) and in the so-called Temple of Diana in Mérida (Jerez Linde, 2003: 339–350). Other scholars have centred their research on the iconography depicted in the *discus*, like Ayerbe Vélez (2002: 423–35) who published a paper assessing the iconographic models in oil lamps from funerary contexts in the 3rd century AD. However, this study encompasses a time frame that exceeds the chronological range of my research. Bustamante Álvarez (2012b: 727–34) has also published a study of iconographic singularities discovered in *Emerita* throughout various excavations reports, along with anthropological studies concerning the manufacturers, which she identified as women and children according to the fingerprints discovered on some of the pieces.

A shared methodology with other typologies of ceramic vessels within *Emerita* is the study of discarded sherds of pottery from the main rubbish pits in Constantino St, Atarazanas St, and Oviedo St on the southeastern edge of the colony (fig. 110). The chronology is set by the presence of all shapes of fine wares developed by Mayet in Mérida (Mayet, 1975: 143) and oil lamp shapes (Dressel 11B, 12 and 13). The sparse presence of Deneauve V-G, which was fashionable by the first half of the 1st century AD, but present in some levels in sites like Conimbriga until Flavian and Trajan chronologies (Alarcão *et alii*, 1976: 99), and oil lamps Dressel 9B and 9C, suggest a second half of the 1st century AD chronology. (Alvarado Gonzalo and Molano Brías, 1995: 283). Those deposits, previously studied by Sánchez (1993), will be used to discern typological variation in multiple shapes present in Mérida, which is the reason why they are mentioned often in the discourse of my thesis. Before the discovery of such rubbish pits, the study of the oil lamps in *Emerita* was developed following the pieces deposited in the National Museum of Roman Art (Mérida, Badajoz), often with an unknown

origin (Rodríguez Martín, 1995; 1996a; 2002; Bustamante Álvarez, 2012b: 727–34); therefore, the analysis had to be undertaken by comparing the shapes to other models from different institutions and sites in order to provide a clear typological frame for the local findings. This is also the case for coinage studied by the Museum of Mérida; the entire collection was deposited in the Museum in the 20th century with no clear origin, decontextualised.

The oldest shapes present in my database correspond to the typologies Deneauve V-A and Deneauve IV. They are dated between the Augustan period and the reign of Tiberian. However, it is worth mentioning the shapes Dressel 3, Dressel 9 and Dressel 11B. Those typologies could be related to the first settlers according to their chronological range, which is set approximately between 90 BC and AD 75. Prior research studying the collection of oil lamps held in the National Museum of Roman Art in Mérida did not find such an early shape that was fabricated in *Emerita*. Regardless, until the discovery of a shape Ricci E by the theatre compound, the earliest shapes ever to be found in Mérida belonged to the shapes Dressel 5B and Deneauve IV (Rodríguez Martín, 2002: 210; Bustamante Álvarez, 2012b: 728).

Coincidentally, the most numerous shape in my database corresponds to the shape Deneauve V-A, with a chronological range set between AD 14 and 117, although some local copies have appeared in 2nd century AD contexts. There are multiple pieces of evidence that suggests a fabrication of this shape, and other typologies that were not considered to be produced in *Emerita*, within the peripheral area of the colony and even in the immediate territory outside the *pomerium*. Although as it occurs with the workshop in *Via Nocera*, in *Pompeii*, the existence of oil lamp workshops inside the *pomerium* cannot be rejected (Bustamante Álvarez, 2012b: 728).

As some oil lamps from the rubbish deposits discovered in Oviedo St and Constantino St have proved, the uniformity of the fabrics suggests a unified workshop with shapes such as Deneauve V-A, Deneauve V-G, Sotomayor A-1, and Sotomayor D-1 being mass produced in mid-1st century AD. The Sotomayor shapes were made in Andújar, in the *Baetica* province. Although not the ones present in the debris collection and the nearby deposit in Atarazana St (Rodríguez Martín, 1996b: 203) as there is evidence supporting the theory of a

local fabrication of the shape. The fact that both rubbish deposits belong to the same time frame, between the reigns of Tiberius and Nero, possibly until Vespasian (Rodríguez Martín, 1996b: 203–04), corroborates a mass production of those shapes for local consumption, whether they were produced with the consent of the *officinae* in *Baetica* or were counterfeit. There are multiple copies within the archaeological records, especially from Italy, Gaul and *Baetica* province, which, like the shape Sotomayor D-3, were highly imitated in *Emerita*. As a matter of fact, some oil lamps produced in *Lusitania* are in the collection of the Museo Archeologico Nazionale di Napoli, which suggests some degree of specialisation and export since the second half of the 1st century AD. Despite of the general assumption of low-quality production in specialised goods, such as fine wares and oil lamps, in *Emerita* at the beginning of its existence, there is plenty of evidence supporting an early establishment of workshops. Whether those workshops were legitimate, or counterfeit is a matter for further research. Menzel catalogued a piece that originated in *Emerita* but is currently in the collection of the Römisch-Germanisches Zentralmuseum, in Mainz (Germany), dated in the 2nd century AD (Menzel, 1969, abb. 61, n. 4-6). This model was similar to an earlier example of oil lamp depicting a Northern African person on the *discus* found in a rubbish deposit in *Emerita* which was studied by Bustamante Álvarez (2012b: 727–734). In the museum catalogue there are further examples of oil lamps fabricated in *Emerita*, therefore the connectivity between *Lusitania* and Central Europe was strong since foundational times, as we have observed with the *amphorae* Haltern 70 and as it had been covered with the coinage minted in the colony under the reign of Augustus in Chapter 6.

However, considering the production centres that have been studied, there is not enough evidence supporting the production of oil lamps in *Emerita* upon the arrival of the first colonists (Bustamante Álvarez, 2012b: 728). Rodríguez Martín (2002; 2009), for instance, dated the beginning of fabrication of the earliest models (Deneauve VA and Deneauve VG) to during the mid-1st century AD, coinciding with the chronological range for the rubbish deposit in Atarazanas St. As a matter of fact, except for the workshop established in *Pisoraca* (Herrera de Pisuerga, Palencia), which has been traditionally associated to *Legio IIII Macedonica*, no other workshop seems to have been functioning in the Iberian

Peninsula prior to mid-1st century AD (Morillo Cerdán, 2015: 383). As we will see with the case of the Hispanic *Sigillata* shapes, the relationship between the legionary production centres in northern Iberia and the workshops developed in *Augusta Emerita*, if not directly linked by the chronological range, are associated by the similarity of shapes produced. Hence, this production of similar shapes both in *Pisoraca* and *Emerita* indicates the exceptional connectivity between military settlements and the Lusitanian colony even decades after its foundation.

Imitating foreign models was a common practice not just in the Lusitanian capital. Although not present in the database, it is a significative finding the seal OPPI in various sherds during the excavation of the rubbish deposit in Atarazana St (Rodríguez Martín, 1995: 269–83; 1996b: 203–204). I will not analyse the origin of the *officinae*, nor the problem with the other seal depicting a similar *nomen* (C.OPPI.RES), as it is beyond the purpose of my research. But the clear imitation of the seal to be used in local copies is remarkable for the early chronology of the deposit. It is almost certainly clear that the piece did not originate in a subsidiary workshop. However, the origin of the workshop either in Campania (Bonnet, 1988: 181) or Rome (Balil, 1968: 175) certainly suggests a counterfeiting of the piece. As Rodríguez Martín, the main researcher of oil lamps in *Augusta Emerita*, has suggested multiple times (Rodríguez Martín, 1995; 1996a; 2002), the vast amount of bad quality copies produced within the colony were developed to saturate the local market with artefacts of low quality, and potentially low price as well; these were oil lamps destined towards a non-demanding target audience.

Therefore, the oil lamps dated to before AD 1 must have been imported to the colony as there is no documented workshop in *Emerita* at least until the first half of the 1st century AD (table 28). The evolution of the oil lamp workshops is very similar to the manufacturing of fine wares in the area, as is it to the workshops destined to produce common ware vessels and ceramic building material or storage vessels.

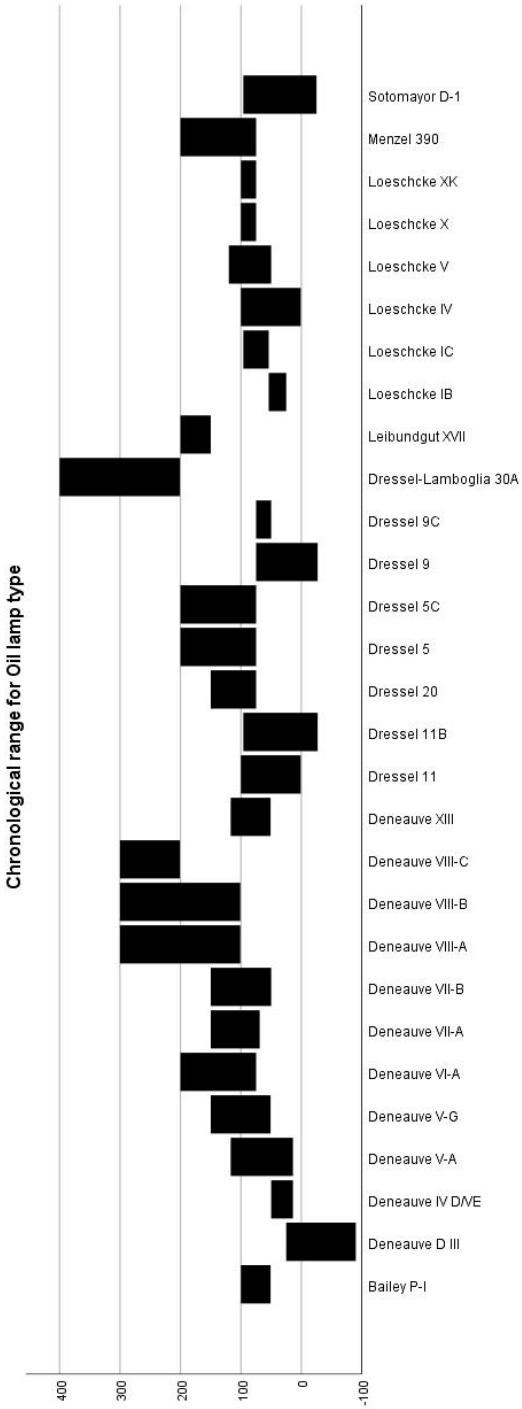


Table 28. Chronological range of Oil lamp shapes present in my database. Carlos Cáceres-Puerto.

The main component within oil lamps is present in the trading process. A vast majority of oil lamps with an identified stamp were produced outside of the colony, hence they were introduced by commercial transactions, especially the earliest models. Some of the artefacts, though, were produced within the colony

as an attempt to fill the marketing void developed by an increasingly wealthy society who longed for the commodities of a more Romanised settlement during the first decades of existence. Further stamped artefacts have been located in grave good contexts. An oil lamp with the seal ‘FORTIS’ was located within the cremation A34 from excavation number 8007 (Feijóo Martínez, 2000a: 333–57). It was associated with a vessel imitating a Mayet LII shape, which does not prove *per se* that the oil lamp was a copy, especially considering the chronological range of the ensemble (AD 1–100) and the chronological range of the oil lamp (Dressel 5C: AD 75–200).

Another piece with the same stamp, a Loeschcke XK with the seal ‘FORTIS’ stamped at its base (fig. 112), was located within the cremation A10 in excavation number 8043 (Nodar Becerra, 2005: 33–43). The origin of this piece is the workshop of this artisan in Savignano sul Panaro (Modena, Italy) (Morillo Cerdán, 2015: 376). Although this shape was mass-produced, its production stopped at the main workshop in Modena during the first half of the 2nd century AD. However, it was still being produced in the provinces and was often copied until the 4th century AD. This specific example was dated to during the Flavian dynasty and the beginning of the Trajanic reign. It is worth mentioning that this oil lamp comes from the same archaeological excavation as the one Deneauve VG (cremation A8) with the stamp ‘CARMO’. The shape was assigned a chronological range between AD 50 and 75. It was produced in the workshop in *Carmo* (Carmona, Sevilla) in *Baetica* province.



Figure 112. Oil lamp with ‘FORTIS’ seal from A10, excavation number 8043 (Nodar Becerra, 2005: 39 (left), 2005: 40 (right).

Other shapes started to be produced elsewhere and ended up being mass produced in the colony. Imported pieces of older shapes like Loeschcke IB tend to concentrate near valleys of key rivers that were suitable for navigation, like the Guadiana Valley (Morillo Cerdán, 2015: 382–82). One particular example depicts a sphinx stamped on its *discus* and was discovered in excavation number 8019, (Hernández Carretero, 2002: 37–56). It was located near one of the workshops studied by Méndez and Alba (2004: 307–32) and Alba Calzado and Méndez Grande (2005: 375–409). Other workshops, besides *Emerita*'s, producing these shapes have been located in *Pisoraca* (Morillo Cerdán, 1992) and *Tarraco* (Rodríguez Martín, 1996a: 143–47).

One interesting example is an oil lamp contained within the grave goods of cremation A1, in excavation number 8002. The oil lamp (fig. 113), with no identified typology and with an assigned chronological range between AD 1 and 25, depicted an imperial figure with a toga and a priest next to an altar on the *discus* (Ayerbe Vélez and Márquez Pérez, 1998: 135–66). The decorative motifs, potentially representing a rite in the context of the foundation of the colony or a priest offering at an altar, could be linked to the foundational motifs depicted in series 6–12 of the municipal minting policy developed during the later phases of Augustus and during Tiberius, as can be observed in Chapter 6. The location is also crucial to understanding the settlement process, as it was located on Cabo Verde St alongside a *Via Sepulchralis* connecting St. Albín Hill with the circus compound. This was one of the earliest areas of occupation for funerary evidence, almost exclusively in the suburban area of *Emerita*. Another example of a regional motif depicted in an oil lamp is a fine ware oil lamp with a stork on its *discus*, discovered by Rodríguez del Mazo (2019: 593–624) in the inhumation A5 of the excavation numbers 8190/8212, with a chronological range set between AD 1 and 200. In the allotment of the former military compound, Sánchez Hidalgo, Sanabria Sánchez and Rosa (2019: 425–84) documented one of the earliest oil lamps found in *Emerita* and the earliest shape of oil lamp present in my database. It is an oil lamp with Republican motifs, possibly with Hellenistic influence, located within the cremation A2097 in excavation number 8206. It has been assigned a chronological range between 200 BC and AD 14, partially coinciding with the grave good chronology of a nearby cremation, A2100, containing a Claudian coin

that has a chronological range set between 31 BC and AD 54, as I assigned the earliest, and the latest plausible chronological value for the shapes.

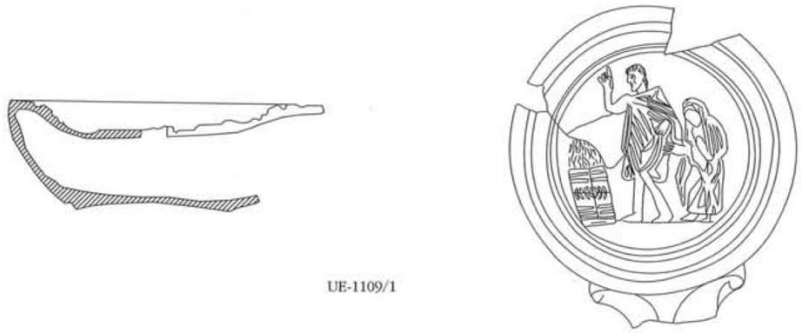


Figure 113. Oil lamp from A1, excavation number 8002. Image: Ayerbe Vélez and Márquez Pérez, 1998: 166, plate 6.

Finally, the last main seal present in this dataset belongs to the workshop of the artisan 'GABINIA', whom Bailey (1980, 96) considered to be a woman in charge of an *officinae*. The amount of oil lamps with this stamp found in Mérida, although not within funerary contexts, has arisen the hypothesis of a possible *officinae* in *Emerita* (Rodríguez Martín, 2002: 160). It could be, however, similar to the case of the productions by 'FORTIS', which stopped being fabricated in the main workshop but remained being copied in the provinces. Some scholars have suggested a plethora of subsidiary production centres in the western provinces, but it occurs with *Emerita* that archaeologists tend to assign multiple subsidiary centres to *Emerita* simply because there are a substantial number of shapes with a particular stamp. It is plausible, then, that this specific example, a Deneauve VA, was probably a local copy following foreign models. It was found contained within the grave goods of the cremation A2 in excavation number 8058 with an assigned chronological range set between AD 1 and 150 (Sánchez Sánchez, 2006: 409–25).

9.4 Fine ware shapes

The typologies used in this category, once again, depend on the classification of the piece. However, for the study of fine ware typologies the vast majority, apart from the *Sigillata* shapes, belong to the classification established by Mayet

(1975). This has been the preferred classification in Mérida after the study developed by the author on local fine ware varieties, and it has been the classification referenced in the main studies regarding fine ware shapes within the colony (Sánchez Sánchez, 1992; Rodríguez Martín, 1996b; Sánchez Barrero and Alba Calzado, 1998a: 211–36; Alba Calzado and Méndez Grande, 2005: 375-409). In the database I have identified Spanish *Terra Sigillata* (Dragendorff, 1895; Mayet, 1975; Lamboglia, 1950: 257–330; Mezquíriz Irujo, 1958), African Red Slip Ware (Hayes, 1972; Lamboglia, 1950: 257–330), Arretine Ware, South Gaulish *Terra Sigillata* and Central Gaulish *Terra Sigillata* (Dragendorff, 1895). For the remnants of the fine ware vessels, I utilise the typology developed by Mayet (1975) (table 29).

Before analysing the *Sigillata* typologies, I ought to focus on the shapes produced in the colony that copy foreign typologies. It is the recurring theme of this chapter, although the problem lies in the difficulty of establishing whether a piece is legitimate or a counterfeit. It is a different phenomenon than the other classification process for ceramic vessels, as the workshops are not as easily to identify, as we are going to observe. These typologies can be ascribed to the category Bustamante Álvarez (2011: 39) named 'fine ware counterfeit vessels from *Emerita*', and they have a starting point during the reign of Claudius. The gap between the foundation of the colony, in 25 BC, and the start of the production of copies for the local market can be explained by the process of settlement and occupation in the area as well as the constant movement of population during the reigns of Augustus and Tiberius. Besides, the workshops might have been working since an earlier date, but the data does not yet support an earlier beginning.

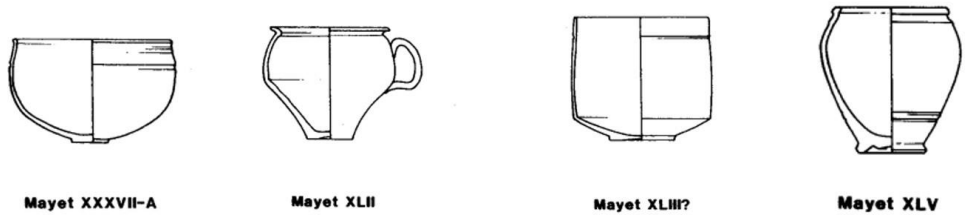


Figure 114. Local copies of fine ware shapes. Image: Mínguez Morales, 1992: 464–65.

I have evidence of local copies of typologies, such as Mayet XXXVII, XLII, XLIII, and XLV (fig. 114) (Mínguez Morales, 1992: 464–65; Bejarano Osorio, 2002; 2007: 131–51; Pérez Maestro, 2007: 153–70; Aranda Cisneros, 2017c: 787–800; Pereira Ramos, 2017a: 479–508; Sánchez Hidalgo, Sanabria Murillo and Rosa, 2019: 425–84). Thus, we have a constant stream of research re-evaluating the *Sigillata* and the fine ware productions and analysing their pastes and production processes to assert their origin and authenticity. The opposite phenomenon might occur in the future as well when shapes catalogued as counterfeit might be reassessed and attributed to different workshops.

The main source for the study of fine ware shapes is the rubbish deposits associated to workshops around *Emerita*. The most significant ceramics workshops are in Atarazanas St, and the workshop located between Constantino St and Oviedo St. Due to these excavations we have been able to obtain experimental models using local clays to produce vessels based on fine wares but with thicker walls, as studied by Pérez Outeriño and Villaluenga Garmendia (1992: 103). The experimental shapes must have been destined for a local target audience with very specific necessities, although their level of presence in the deposit is not substantially high. Therefore, I can argue for a poor level of acceptance by the local population or unfruitful attempts by the artisans to improve a shape. Those experimental shapes have been studied by Alarcão *et alii* (1976) and Rodríguez Martín (1996a: 9), among other scholars. The lack of publications in the past decades, except for the compendium on pottery vessels from *Augusta Emerita* by Macarena Bustamante (2010: 39–48), suggests a low impact on the local and regional market based on the low quantity of vessels from this particular shape recovered during the excavations in Mérida. Bustamante Álvarez (2012b: 39–48) also studied a particular variety of fine ware shapes that originated within the *Conventus Bracarensis* in northwestern Iberia, usually mistaken with a local production of fine ware shapes from within *Emerita*. Sometimes the production techniques, artisans and facilities were highly similar, and the mobility of artisans was relatively high, such that the permeability between workshops, settlements and provinces creates problems in identifying local varieties. Perhaps what we consider a copy was merely a foreign model

brought into the colony by an outsider involved in the permeable Roman provincial economics.

Fine Wares	Number	Deposit	Local Copies	Stamp	Chronology
TSA A Lamb 34	1	8086, 8104, 2646, 2716	1 jar		AD 180 - 250
TSA A14 B Hayes	1	8086, 8104, 2646, 2716	1 bowl		AD 160 - 200
TSA A Lamb 4/36 B	2	8086, 8104, 2646, 2716	2 plates		AD 75 - 150
TSH Drag 15/17	3	10066			AD 25 - 300
TSH Drag 24/25	3	10066, 8002, 3017			AD 14 - 96
TSH Drag 27	4	8002, 8026, 8043, 8176			AD 25 - 300
TSH Drag 35	4	2076, 8086, 8104, 2646, 2716, 8176		CANTABRI (2076)	AD 50 - 150
TSH Drag 37	1	8024			AD 50 - 100
TSH Lamb 33	1	2619		TIMACI	AD 101 - 200
TSH Mezquiriz II	2	8175			AD 50 - 250
TSH Mezquiriz 51	1	8020		Inkwell with Italic tradition	AD 51 - 100
TSH Mayet 2	1	3002			AD1-50
TSG Drag 27	1	8043			AD 15 - 200
SGTS Drag 24/25	1	3002			AD 15 - 200
SGTS Drag 35	1	3002			AD 60 - 200
TSI	1	8135		OILI (Arezzo)	40 BC - AD 50
Quartz Amphorae	1	159			50 - 1 BC
Pyx	1	8057			AD 1 - 100
Skyphos	1	8057			AD 51 - 100
Mayet VIII	1	8137			50 BC - AD 14
Mayet XX	1	8117			AD 14 - 54
Mayet XXVI	1	8055			AD 14 - 37
Mayet XXVII	3	8010			AD 14 - 69
Mayet XXXII	1	8137			AD 14 - 96
Mayet XXXIV	3	8117, 8137			AD 41 - 69
Mayet XXXVII	6	8043, 8057, 2510, 663, 8206	XXXVII A		AD 14 - 96
Mayet XXXVIII	6	8043, 8057, 2510			AD 14 - 96
Mayet XL	2	8043, 654			AD 14 - 96
Mayet XLIII	16	8024, 2481, 2510, 8137, 8176, 8175, 654, 8206, 8190, 8212	10066, 8067, 630, 8206		AD 41 - 100
Mayet XLIII A	1	8111			AD 41 - 100
Mayet XLIV	4	8050, 8065, 8137, 8176			AD 41 - 100
Mayet XLV	3	8176, 8206	8176		AD 69 - 220
Mayet XLVII	1	8176			AD 50 - 100
Mayet XLVVV	1	2510			AD 25 - 75
Mayet LI	6	8111, 8117, 8137, 8101, 8102, 8123, 8206			AD 50 - 100
Mayet LI B	1	8111			AD 50 - 100
Mayet LII	1	2835			AD 50 - 100
Mayet LIII	4	8065, 2481, 8117, 8137			AD 50 - 100
Mayet LXIII	2	8024	8024		AD 41 - 100
Mayet LXV	1	8057			AD 41 - 100
Mayet LXXXIV	1	8057			AD 1 - 100
Mayet CCVIII	1	2076		PATERNIO (2076)	AD 50 - 100
Mayet CCX	1	2076			AD 50 - 100
Mayet 285	4	3002, 8020			AD 1 - 100
	103				

Table 29. Fine ware shapes present in my database. Carlos Cáceres-Puerto.

The study of the shapes indicates a certain level of demand and refinement among the colony from a very early date. The shape Mayet XXXIV, for instance, is considered by Mayet (1975: 148) to appear during the reign of Claudius, in the workshops of *Baetica*. The chronological range of the piece provides some certainties, as it is set between AD 41 and 69, but Mayet does not provide a maximum chronological range in which the shape was still produced. Other scholars, like Alarcão *et alii* (1976), documented the piece in Flavian contexts in Conimbriga. In the Roman villa of Torre Águila (Barbaño, Badajoz) the shape appeared in contexts from the 2nd century AD (Rodríguez Martín, 1993; 2005). This might imply a further change in the preferences of the local population, with the local trading patterns rapidly shifting towards more popular models. However, the chronological range of some of the contexts where this shape appeared might differ. Whereas the Mayet XXXIV is present in the inhumation A34 from the excavation number 8117 (Bejarano Osorio, 2017c: 291–329) and there was one found within the cremation A40 in excavation number 8137 (Vargas Calderón and Plasencia Sánchez, 2017: 437–50). Both forms agree with the typological classification by Mayet, however, there is one shape that does not concur. This shape of Mayet XXXIV, documented in the excavation 8137 in cremation A41, has a chronological range set between AD 75 and 200. This might imply an imported good from the workshops where it was still in production, or it may suggest a continuation of the shape that was not contemplated when the deposits were analysed. Nonetheless, this is not the most in demand shape within the colony. Mayet considered the shape XXXVIII among the most popular within *Emerita* between Tiberius and Vespasian (Rodríguez Martín, 1996a: 15).

The counterfeit produced in the colony tend to imitate *Sigillata* typologies, either with pastes or in shape. The copies of Gaulish and Italian models of *Sigillata* suggested, according to Rodríguez Martín and Jerez Linde (1995), a foreign origin of the first craftsmen of the colony. I observe that the artisan might have been following the military productions, at least in the early stages of the Lusitanian colony. It is plausible that both a foreign origin and a legionnaire background are possible if I contemplate the relationship between *Emerita* and the workshops studied in Northern Iberia along with their shapes and artisans. It

is a recurrent question, as I mentioned beforehand, as the archaeologists do not agree on the presence of a subsidiary *officinae* or local workshops copying other shapes. It is also possible that I am analysing fine ware shapes that the local workshops produced in the liking of a *Sigillata* shape, although in the rubbish deposits throughout Mérida there are several defective sherds which were conceived as *Sigillata* shapes but had plenty of production defects (Méndez Grande and Alba Calzado, 2004; Alba Calzado and Méndez Grande, 2005: 375–409).

However, the early origin of some shapes, especially the ones considered to be of Italian background, might not have been subjected to an early process of trade. As a matter of fact, and as it will be seen further on in the *Sigillata* section, there is a shape Mayet XXXVII located in the deposit A5 from the excavation code 663 (Pereira Ramos, 2017b: 801–809) with a set chronology of 25 BC. This does not imply that the vessel was imported upon the foundation of the colony, or, at least, it is highly unlikely. With all probability, this date means that it arrived in the mid Guadiana Valley alongside its owner, someone involved in the foundational or colonial process.

9.4.1 *Hispanic Terra Sigillata.*

This comprises the most common typology within the *Sigillata* shapes (table 30). There are fragments of 20 identified pieces. 15 of those forms are classified according to the Dragendorff typology (Dragendorff, 1895), 3 belong to Mezquíriz (1958), 1 Lamboglia 33 (1950: 257–330), and 1 Mayet 2 (1975).

There is no evidence supporting the local origin of this pieces, as there has been no evidence of an *officinae* within *Emerita*, despite the numerous attempts to locate one. However, in the suburban area of *Emerita* there is enough data confirming that local workshops were copying *Sigillata* typologies, with a particular example with a ‘GE’ stamp found inside the Alcazaba in Mérida (fig. 115) (Jerez Linde, 2004: 161–78). These forms were at first attributed to the Spanish Samian Ware typologies until further studies were done comparing the *sigillum* and the clear manufacturing defects.

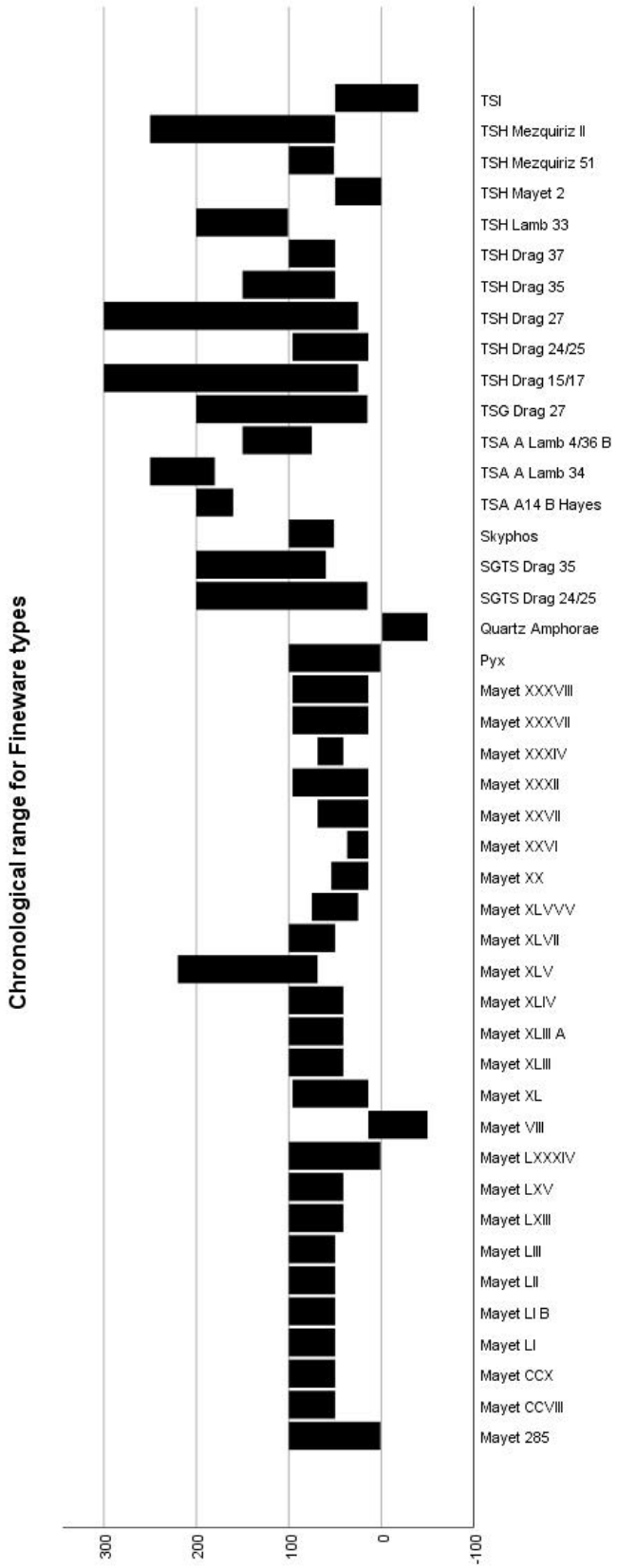


Table 30. Chronology of fine ware shapes present in my dataset. Carlos Cáceres-Puerto.

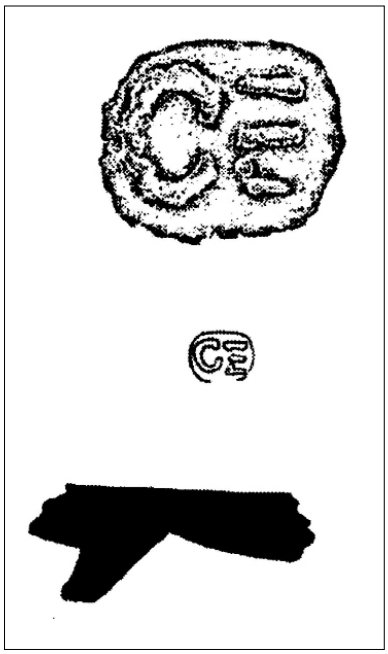


Figure 115. *terra sigillata* counterfeit with seal ‘GE’. Image: Jerez Linde, 2004. Plate 3.6.

There is a continuous influence in the *Hispanic Terra Sigillata* within *Emerita*, from more formal models to local adaptations like the Peñaflor type, studied by Jerez Linde (2004). There is also an early aim towards the copying of the original models being produce in the workshops of Northern Iberia, mostly in *Tritium Magallum* (Bustamante Álvarez, 2012b: 727–34). Those *officinae* were substantially linked to the legions present in the Cantabrian Wars, as the workshop producing Italian shapes of *Sigillata* within *Legio VI Victrix* demonstrates (Sáenz Preciado and Sáenz Preciado, 2015. 203–22; Simón Cornago, 2016: 613–28; García Queipo, 2018: 392–408). However, there is a duality with the treatment of the Italian shapes and the Iberian shapes of *Sigillata* within research. They treat the Italian shapes as a product of the movement of population and the personal belongings of the settlers, but they consider that workshops with commercial purposes were being created in *Emerita* in the early decades of the 1st century AD to copy *Hispanic* shapes. As a matter of fact, in my dataset there is plenty of evidence supporting the early counterfeiting of fine ware vessels, including *Sigillata* shapes. There is one particular example within A27 in excavation number 10066 (Bejarano Osorio, 2007: 131–51) where a *Hispanic Terra Sigillata* vessel was found alongside a coarse ware vessel imitating a fine ware vessel. The ensemble has been dated to between AD 1 and

200. Considering the counterfeit, further analysis ought to be done in order to determine whether the *Sigillata* shape is original or a copy.

Another good example of material culture demonstrating the connectivity between *Emerita* and other areas of the Empire is shown in one particular context. One of the deposits excavated in excavation number 2076 contained a significant amount of *Hispanic Terra Sigillata* with preserved stamps (Sánchez Barrero, 2000b: 413–59). This funerary context was located on the southeastern edge of the colonial walls near the theatre-amphitheatre compound. Next to the skeletal remains of an adult human, two vessels were deposited. One of them, a Dragendorff 35, had the seal 'CANTABRI', whereas the other shape, a Mayet CCVIII, had the seal 'PATERNIO' (fig. 116). The ensemble has been dated in the second half of the 1st century AD. This corresponds to the beginning of the set chronology of both typologies, which span between AD 50 and 150.

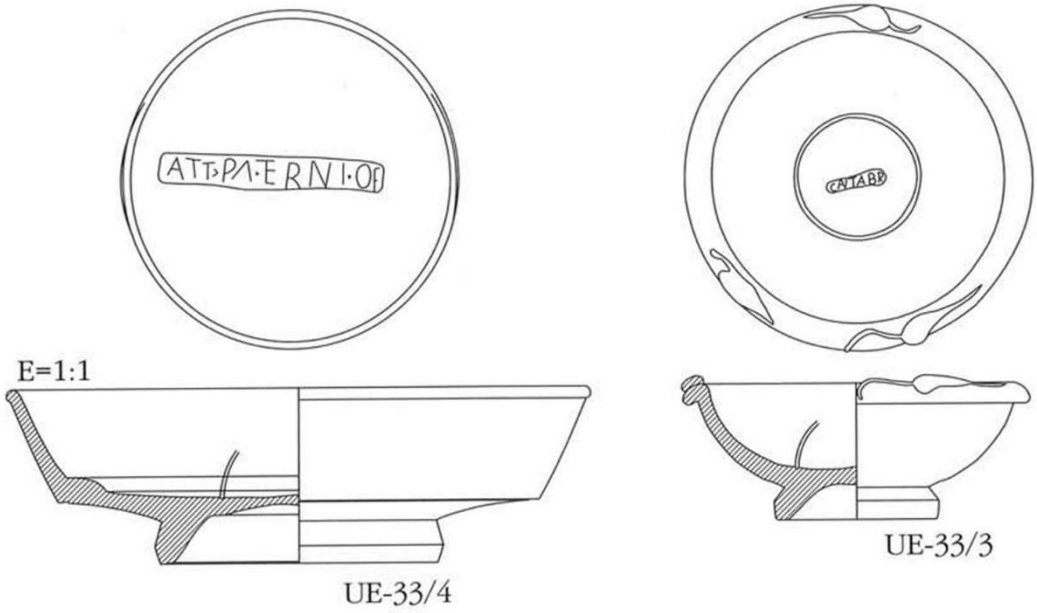


Figure 116. Seals 'PATERNIO' and 'CANTABRI'. Image: Sánchez Barrero, 2000b: 427.

The shape Mayet CCVIII is one of the most significative artefacts within this dataset. Regardless of the shape, what it is remarkable is the stamp 'PATERNIO' (Sánchez Barrero, 2000b: 427). But who was this person and where was the workshop located? Scholars do not tend to agree in either of those questions. Although different research has tried to elucidate the full name of this artisan and the location, there is not a common answer for either of them. However, there seems to be a consensus on the location. The productions from

this artisan were most certainly manufactured in a workshop belonging to Fulvius Paternus or Fulvius Paternus Fertus in *Tritium Magallum* (Tricio, La Rioja, Northern Iberia) (Jerez Linde, 1996: 2004; 2005; Bustamante Álvarez, 2012a: 407–33; 2014: 137–50; Sáenz Preciado and Sáenz Preciado, 2015: 203–22). Abascal (1984: 251) has already mentioned that the majority of *cognomina* originated from this area. The connectivity between the first craftsmen trading with *Emerita* and the military component can be observed once again, as there is an epitaph from *Tritium Magallum* depicting Lucilia Paterna, the wife of a veteran who settled within *Tritium* (Simón Cornago, 2016: 108; *CIL* II 2888). There are different theories regarding this connectivity. Bustamante Álvarez (2011; 2012: 18) has dedicated part of her work to study the different theories regarding the *origo* of the artisans in *Emerita* and the fact that the artisans from *Tritium* are the only ones in signalling their place of origin in both funerary evidence and products (Mayet, 1984: 237).

There have been some differences, however, in the location of subservient *officinae* in other parts in *Hispania*, with *Emerita* being one of the hypotheses suggested by Mayet (1970). The hypothetical workshop would be supported by the strong imperial connections of the new colony, its status as a provincial capital and the nine communication routes which started or ended their courses in *Augusta Emerita*, as has been discussed in Chapter 7.1. Furthermore, Mayet (1970) mentioned the possibility of *Emerita* hosting a regional distribution centre as a branch of the main hub in Northern Hispania. It is plausible considering the amount of stamped *Sigillata* vessels found in the area. Paternus would distribute his goods to the coastal parts of Northern Africa through *Emerita* and the communication routes Emerita enjoyed as a provincial capital. Mayet alleged the lack of *Baetican* imported products in *Emerita* as evidence for the subsidiary workshops. As a matter of fact, the same phenomenon of scarcity of fine ware shapes occurs with *amphorae*. During the first stages of the colony the imports from *Baetica* supposed an important share within the colonial imports, but as the Italic shapes of Arretine ware began to vanish, the imports from *Baetica* stopped as well. After approximately AD 51, the evidence suggests an increase of the copied models at the expense of the former fashionable shapes. However, after

the Hadrian's reign there is an increase of imports of fine ware vessels from Northern Africa (Bustamante Álvarez, 2012a: 407).

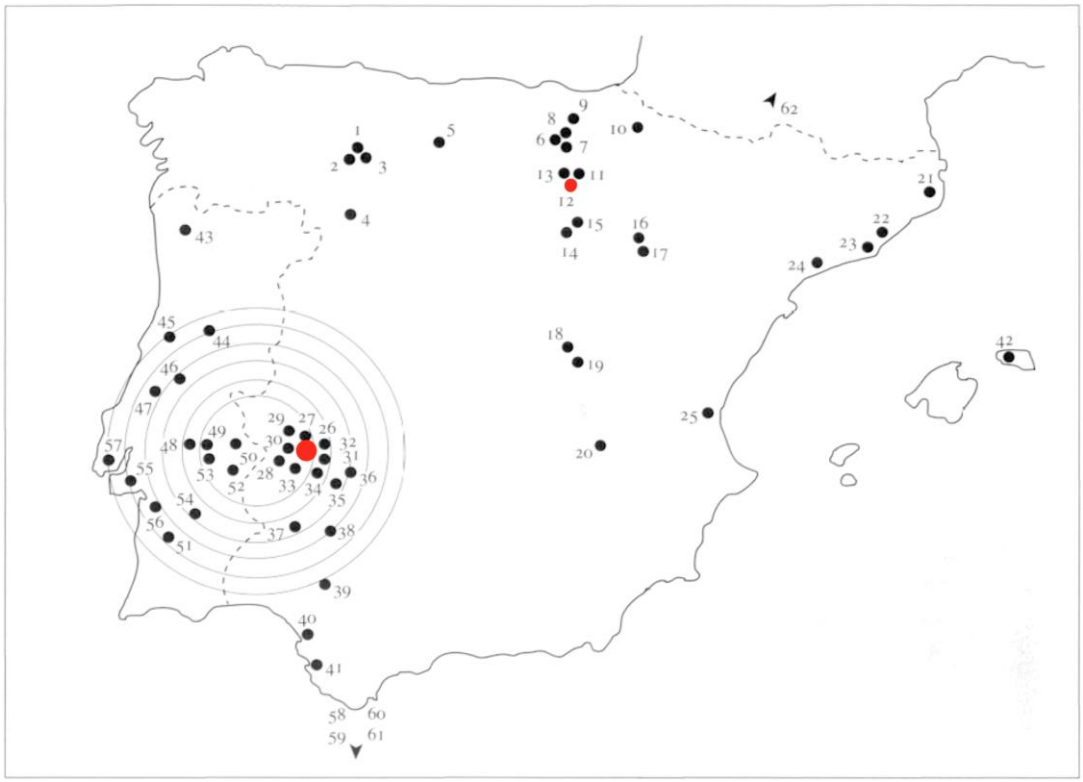


Figure 117. Findings of *Sigillata* shapes from the workshop of Fulvius Paternus. Map: Jerez Linde, 1996: 127, image: Carlos Cáceres-Puerto. In red: bottom-left, *Emerita*, top-centre, *Tritium Magallum*.

In addition to the latter, Blázquez Cerrato (1992: 269) and Bustamante Álvarez (2011: 18–19) drew a comparison between coinage and ceramics produced and imported to the colony. They argue a high presence of stamped *terra sigillata* and ceramics from *Tritium* in the Guadiana Valley (fig. 117) and the highest presence of coinage from *Emerita* in the Iberian Peninsula has been located in this area of the *Tarraconensis* province. *Hispanic Terra Sigillata* shapes with 'PATERNIVS' stamps are widely present throughout the Iberian Peninsula, Balearic Islands, Northern Africa, with a special emphasis in the coastal frame of Morocco, and, remarkably, several sites in Germany. Its presence in Germany is widely linked with the movement of troops from *Lusitania* to the Rhine region during the reign of Augustus. It is the same phenomenon occurring with the coins minted in *Emerita*. However, as I have discussed throughout Chapter 6, none of the coinage minted in *Emerita* has ever been found

in Mérida, and the biggest gathering of coinage from *Emerita* is located in the Rhine area.

Other authors, like José Manuel Jerez Linde (1996: 127; 2005: 15), not only think that the location of the workshop in *Tritium Magallum* cannot be proven, but also believe that the number of shapes with Fulvius Paternus' seal in the area must signal a major presence of this artisan within the mid Guadiana Valley. He argues that due to the high density of stamped shapes present in the mid Guadiana Valley, especially on the *Emerita-Olisipo* (Lisbon, Portugal) axis, the workshop would have been established within the territory managed by *Emerita*. This theory would imply the first *officinae* allocated in *Emerita*. Despite of the number of sherds attributed to Paternus in the mid Guadiana Valley, there have been no positive results in finding a possible workshop. Past theories, like the one supported by Fernández Miranda (1968–69) and Mayet (1970), suggested that the workshop would have been near *Emerita*. However, neither of them was aware of the workshops with attested moulds and seals discovered in *Tritium* that were excavated in a later stage. The artefact contained within my dataset, albeit unique, corroborates the study of the grave good contexts excavated in Columbarios in 1956 by Serra Rafols, published by Bello Rodrigo and Márquez Pérez (2010: 409–410). In Columbarios, except for one *Sigillata* shape produced in the workshops of Andújar, in *Baetica* province, the remainder of productions originated in the *officinae* of *Tritium*, or perhaps, in one of the regional distribution centres. The study of the ceramic materials from the rubbish deposit in Constantino St also provided further evidence towards the study of the Spanish shapes of *Sigillata* vessels, indicating that the entirety of the *Hispanic* shapes was produced in the workshop in *Tritium* with a Claudian chronology (Rodríguez Martín, 1996a: 155).

Chronologically there are shapes coinciding with earlier productions, for example the so called 'Peñaflor' type, an early production of *Hispanic Terra Sigillata* shapes. In excavation number 8002 (Ayerbe Vélez and Márquez Pérez. 1998: 135–66) a Drag. 24/25 and a Drag. 27 were found, dated to between AD 1 and 25, although the typological chronology is established as between AD 14 and 96 for the Drag. 24/25 and AD 25–300 for the Drag. 27 shape. They were located

alongside Cabo Verde St, the *Via Sepulchralis* connecting the St. Albín Hill with the circus, one of the first funerary areas of the colony.

Despite of the ´late' chronology of the shapes, mid-1st century AD, they show the links *Emerita* had with Northern Iberia, which was the place of departure of the first settlers. Other vessels attributed to the same workshop have been found along the route connecting *Emerita* with northern Iberia, like in *Caparra* in northern Cáceres (Río-Miranda Alcón, 2012). I can argue for the existence of two commercial routes: a provincial one directed east-west by the course of the Guadiana River and a peninsular route following the north-south axis towards *Gades* (Cádiz, Spain) and the North African settlements.

Unfortunately, I have not found *Sigillata* shapes from the workshop of Lucius Terentius within funerary contexts in *Emerita*, although their presence in the colony is well known because of the shapes held in the National Museum of Roman Art (Mérida, Badajoz). L. Terentius was the owner of one of the best-known *officinae* in Northern Hispania, fabricating *terra sigillata* in *Tritium Magallum* as well. The presence of wares from this workshop within the troops deployed after the Cantabrian Wars in *Pisoraca* (Herrera de Pisuerga, Palencia) explains the presence of these pieces in *Emerita* since foundational times, in spite of the lack of findings in funerary contexts. This *officinae*, associated to the *Legio IIII Macedonica*, had a crucial influence in the colonial workshops (Sáenz Preciado and Sáenz Preciado, 2015: 214).

On the other hand, I have the shape Dragendorff 35 with the seal 'CANTABRI' (fig. 64) (Sánchez Barrero, 2000b: 427). It belongs to the workshop of a very well-known artisan whose name suggests an indigenous background: CANTABER (Simón Cornago, 2018: 163–84). Unlike Paternus, the workshop of *Cantaber* has been identified in Arenzana de Abajo (La Rioja, Spain), near the production centre of *Tritium Magallum*.

9.4.2 Arretine Ware

As I mentioned before with the fine ware typologies, the earlier chronology of the shapes I have found within my dataset are present because they were probably brought by someone involved in the foundational or colonial process. Trillmich

(2004: 277) has already debated the early shapes present in the colony and their role as *luggage* for the first inhabitants of the colony. As a matter of fact, the priorities within the first decades of the colony would have been focussed on infrastructural issues, rather than in the establishment of commercial links with *officinae* overseas. Rodríguez Martín (2004: 365–405) and Jerez Linde (2005: 116), for instance, pointed towards the difficulty in setting up an *officinae* of Italian *Terra Sigillata*, as the chronology of the shape began to vanish by the reign of Claudius. In addition to this, we know that crucial parts of the urban features were not yet completed by AD 41. Palma García (2004a: 35–53) documented a coin with the legend, TI CLAVDIVS CAESAR AVG P M TR P IMP, dated to AD 41, within the mortar of the wall of the colony in the northern part of *Emerita*. Nonetheless, there is other evidence refuting a plausible trade with the Italian peninsula during the Augustan and Tiberian reigns. As a matter of fact, the deposits excavated in the foundational levels of a temple on Viñeros St (Aquilué and Bello, 2009; Bustamante Álvarez, 2014: 137–39) contained a level of Italian *Sigillata* from the workshop in Arezzo dated in the first decades of the 1st century AD. There are also missing key shapes of Italian forms present in *Emerita*, not only within my dataset but in the general archaeological context. Gorges (1986) has already pointed out the void in the vessels from Campania in early contexts of the colony, and despite the time that has passed since the publication of this paper, there has been no change within the findings of new Italian shapes.

Although there is only one artefact allocated to this category, the chronology provided by this shape is highly valuable. The piece, an Italian *Terra Sigillata* shape, contains the seal 'OILI' (fig. 118.), which is attributed to the workshop belonging to CNEUS ATEI ZOILI from Arezzo (Italy). The artefact, contained within the cremation A5 in excavation number 8135, has a typological chronology set between 40 BC and AD 50, although this particular case has been dated to between 25 BC and AD15–20 (Méndez Grande, 2017: 579–638). I have at least eight documented cases of Arretine ware artefacts with this seal within the area of *Emerita*. Although this is the only case which has been found in a funerary context. It is remarkable that all of them were recovered in areas near the walled perimeter of the colony. This shape was excavated approximately 1km away from the colony to the northeast, in a necropolis situated beside the road

heading to *Corduba* (Córdoba), or *Metellinum* (Medellín), connecting the mid Guadiana Valley with the *Baetica* province. A millefiori vessel (fig. 120) with a chronological range set between 100 and 1 BC, and an origin in the Bay of Naples, was found in an excavation nearby (Delgado Molina, 2017: 547–77). Its placement on the southeastern side of the suburban area of the colony increases the plausibility of a funerary use of this area within the immediate time frame after the foundation of the colony (Cáceres-Puerto and García Sánchez, 2020: 63–65).



Figure 118. Arretine ware shape with seal ‘ZOILI’. MNAR. Piece. CE25727.

A preliminary hypothesis could be the arrival of the piece alongside the soldiers-settlers, considering there is evidence of a workshop producing Arretine ware within *Legio VI Victrix* near León, in Northern Spain (Sáenz Preciado and Sáenz Preciado, 2015. 203–22; Simón Cornago, 2016: 613–28; García Queipo, 2018: 392–408).

9.4.3 African Red Slip Ware

I only have four cases of African Red Slip Ware documented in funerary contexts. The chronology of the artefacts and the contexts they were found in does not

provide much information besides the fact that they must have been imported to the colony in a later stage. They are dated to between the 2nd century AD and the first half of the 3rd century AD. But, as a matter of fact, by studying the typologies, as I will further discuss, I realised that the chronological range is provided by the original shapes, whereas the four examples present within funerary contexts are counterfeit.

However, the African classification of *terra sigillata* is very present throughout the archaeological register in *Emerita* between the late 1st century AD and the 5th century AD (Vázquez de la Cueva, 1985: 12). They eventually filled the entirety of the market in the mid Guadiana Valley, from the second half of the 3rd century AD, once the late *Hispanic* shapes of *terra sigillata* were being gradually replaced. Although, as I mentioned before, they shared space and time with the 'Peñaflor' typology, studied by Jerez Linde (2004). This presence must be observed in relation to other north African connections present in *Emerita* from the late 1st century AD, as also occurs with the *cupae* in the territory of the colony in the field of funerary studies. The shapes present in my dataset are studied following the classifications of Lamboglia (1941: 7–22) and Hayes (1972).

The location of African Red Slip Ware in funerary context is remarkably rare. Out of the 2,255 grave goods elements I have analysed there are only three cases. For the study of the shape prior to 1991, I have consulted Vázquez de la Cueva (1985), which is the main research on the typology within *Emerita*'s findings. The author also corroborates the sparsity of the shape in funerary contexts before 1986, with casual findings in the eastern and southeastern necropolis with a chronological range of late 1st century to 2nd century AD. Vázquez de la Cueva suggested (1985: 29–31) a low level of African Red Slip Ware within funerary contexts. I consider that it might be explained by the low level of systematicity of the early 20th century excavations, as most of the early results were studied by Mélida and Macías (1929), or due to the scarce knowledge of this typology at the time. However, now that I have analysed contemporary contexts, I am able to corroborate Vázquez's hypothesis. The low level in my database probably depends on the early chronology, as the author also suggests, implying that in later contexts the level of African *Sigillata* was substantially higher.

The presence of African Red Slip Ware in my dataset can be catalogued as *partial*, as the four artefacts are possible local copies of African *sigillata*. Besides their typological classification, the counterfeits can be observed by the presence of local copies of coarse ware vessels alongside contexts of alleged African Red Slip Ware. All appeared in the same excavation (codes 8086, 8104, 2646, 2716) within cremation A155 (fig. 119) and inhumations A151 and A156 (Vargas Calderón and Plasencia Sánchez, 2015: 173–75).



Figure 119. Grave goods from A155, counterfeit of African *Terra Sigillata*, left. Photo: Vargas and Plasencia, 2015: 173, fig. 24.

The two counterfeit plates imitating a shape Lamboglia A 4/36 B (cremation A156) have been given a chronological range between Claudius and the end of the 2nd century AD. However, considering that the date of the original shape lies between AD 75 and 150, the temporal ascription shall be later. Although we cannot discard an earlier copy of the shape, as the common ware vessels decrease in the time frame until AD 41, I have assigned a chronological range set between AD 75 and 150, following Lamboglia's study of the shape. However, further research is needed on this shape to elucidate an appropriate chronology. The shape imitating a Hayes A14B has been dated to between AD

75 and 125, although the original shape was set between AD 160 and 200. This either suggests the earliest example of African Red Slip Ware in a funerary context in my dataset or a wrongful association with the materials in the grave good context. Considering the materials associated with the imitation vessel, an oil lamp Menzel 390 with a typological chronology between AD 75 and 200, both hypotheses are plausible. However, Smit Nolen has already studied common ware vessels imitating African *Sigillata* shapes in the Alentejo region and established earlier chronological ranges coinciding with the proposed date in the report (Vargas and Calderón, 2015: 157–78).

The last shape can be considered a mixture of common ware and a *Sigillata* vessel, as the artefact imitating a Lamboglia A 34 can also be catalogued as a Smit Nolen 7e. I account for this hybridisation of shapes by the mobility and dynamism of a local, and provincial, economy which is in constant search of new inputs and imports to supply an increasing demand of fine ware shapes. Considering the later chronology of African Red Slip Ware from the collection of the National Museum of Roman Art analysed by Vázquez de la Cueva (1985), the workshops in *Emerita* might have started the production of counterfeit earlier to supply the population based on a particular demand, a demand that saw itself decreasing as the original shapes reached the colony from the late 1st century to 2nd century AD. This demonstrates a flourishing settlement. Nevertheless, we cannot discard the possibility of different workshops establishing subsidiary *officinae* within *Emerita* suburban territory.

9.4.4 Central and South Gaulish *Terra Sigillata*

I have only documented two cases of South Gaulish *Terra Sigillata* (SGTS) and one shape of Central Gaulish *Terra Sigillata*. Both pieces of SGTS appeared in a very rich grave good context containing bone and bronze artefacts as well as one *Hispanic Terra Sigillata* vessel (Sánchez Sánchez, 1998: 167–91). The chronology of the *Hispanic Terra Sigillata* vessel has been set in the early stages of the Augustan reign. Despite this, the chronology of the ensemble has been set to the first half of the 1st century AD. On the other hand, the shape catalogued

as CGTS is a Dragendorff 27 that appeared alongside a very particular shape of oil lamp (Deneauve V-G) with a known production centre in *Carmo*, near Sevilla (Nodar Becerra, 2005: 33–43). The date of this context did not differ too much from the previous context, set between AD 50 and 75. However, the typological chronology set for the three shapes spans beyond the time frame of both grave good contexts, with all typologies reaching into the 2nd century AD and some of them, as a deposit found in 41 Almendralejo St in Mérida, suggests, with residual appearances in contexts from the late 2nd and 3rd centuries AD (Bustamante Álvarez, 2009: 150). The presence of Gaulish *sigillata*, produced in the workshops of La Graufesenque, is widely attested in the Lusitanian colony since Claudian times. The location of the artefacts present in my dataset, near the Albarregas valley, concurs with the shift in the placement of the funerary areas in ca. the mid-1st century AD, as we will see in the distribution pattern section.

The context of the appearance of the Gaulish shapes in *Emerita* occurs within a complex trading system that existed during the first decades of the colony. In the first half of the 1st century AD, the Arretine ware shapes, either counterfeit or legitimate shapes as a result of trade, started to decrease in their consumption. At the same time, the first shapes imitating the *Hispanic Terra Sigillata* shapes begin to appear in the archaeological record, although the copies belong to the 'Peñaflor' typology, an earlier production of the Hispanic typology, as Jerez Linde (1996) suggested. The Gaulish typologies would fill a void left by the Italian shapes in the interprovincial, or better referred to as non-peninsular trade, whereas the Hispanic shapes would not be developed enough outside of the military production centres to be present in the consumption circuits of *Augusta Emerita*. Nevertheless, the absence of any seal within the substantially small sample within this typology in my dataset prevents me from establishing further parallels with workshops in other areas of the Empire. The chronology seems to adjust to the consensus of an arrival of approximately AD 41, with another rise in the import of this shape occurring by the Flavian dynasty (Bustamante, 2009; 2012a). However, as I only possess three shapes in my dataset, I must concur with the established historiography and research on the matter, focussing on the information valid for my research, which is the

chronology and the location to determine the occupation pattern of the funerary areas in the suburban areas of *Colonia Augusta Emerita*.

9.5 Glass vessels

Glass				
Typology	Number	Deposit	Foreign Imports	Chronology
Ising 3B	1	8176		27 BC - AD 85
Ising 5	3	8004, 8026		AD 1 - 200
Ising 8	18	8019, 10066, 2510, 8111, 2835, 8139, 8175, 8148, 630, 663, 8219		27 BC - AD 150
Ising 8A	1	2510		AD 1 - 100
Ising 8B	2	2510		AD 14 - 100
Ising 10	1	8176		AD 14 - 100
Ising 15	5	8057, 10066, 8111, 8139		AD 14 - 100
Ising 22	3	8039, 8137		AD 25 - 80
Ising 26	5	1018, 7017, 8135, 8206		AD 50 - 200
Ising 26A	1	8175		AD 50 - 200
Ising 27	2	3002, 7017		AD 54 - 200
Ising 28	24	3002, 3017, 8019, 8020, 2481, 10066, 8117, 8137, 8176, 630, 663, 8206, 8190, 8212		AD 41 - 200
Ising 28B	3	8024, 8057, 8058		AD 41 - 200
Ising 30	2	8111, 8117		100 BC - AD 100
Ising 32	3	3501, 3503		AD 30 - 250
Ising 34	1	8117		AD 1 - 220
Ising 35	1	3017		AD 1 - 100
Ising 36B	4	1018		AD 1 - 105. AD 105 - 200
Ising 41	4	3017, 10066		AD 30 - 100
Ising 42	4	10059, 8086, 8104, 2646, 2718, 2510		AD 69 - 200
Ising 42A	4	1018		AD 69 - 200
Ising 48	3	8019, 8039, 10066		AD 50 - 100
Ising 49	10	3002, 8019, 1018		AD 1 - 100
Ising 50	9	3017, 8024, 10066, 8117, 8176, 8148		AD 41- 250
Ising 50A	1	8175		AD 41- 250
Ising 51	8	3017, 1018, 8117, 3501, 8148		AD 150 - 200
Ising 51A	1	8137		AD 50 - 150
Ising 51B	3	1018, 8117		AD 69 - 250
Ising 52A	1	1018		AD 41 - 80
Ising 53	4	8137		AD 50 - 100
Ising 54	1	8148		AD 1 - 100
Ising 55	2	10066, 8139		AD 50 - 125
Ising 57	3	8139		AD 1 - 102
Ising 58	4	8057		AD 150 - 200
Ising 60	1	10066		AD 50 - 300
Ising 61	2	8057, 2835		AD 30 - 100
Ising 64	1	8137		AD 41 - 150
Ising 65	1	8057		AD 80 - 200
Ising 67	1	8176		AD 49 - 200
Ising 68	2	8057, 10066		AD 69 - 150
Ising 74	1	10066		AD 1 - 100
Ising 82	4	8024, 10066, 8176, 654		AD 75 - 200
Ising 82A	1	8139		AD 75 - 200
Ising 82A1	4	1018, 8057, 8137, 654		AD 75 - 200
Ising 82B	11	8024, 8139		AD 100 - 250
Ising 82B1	1	8057		AD 175 - 250
Ising 84	1	156		AD 1 - 125
Ising 86	1	8117		AD 175 - 250
Ising 88	1	8137		AD 150 - 250
Ising 90	1	2510		AD 120 - 200
Ising 93	1	8176		AD 150 - 250
Ising 96B2	1	8117		AD 150 - 350

Ising 97A	1	2510		AD 175 - 275
Ising 101	1	7017		AD 150 - 350
Ising 103	1	8117		AD 201 - 400
Caldera 1	2	8206		Bottle: AD 50 - 220 Jar: AD 14 - 50
Caldera 2	2	8206		Bottle: AD 69 - 200 Lachrymatory: AD 41 - 250
Caldera 4	1	8206		Lachrymatory: AD 75 - 125
Caldera 14C	1	10066		14 BC - AD 50
Caldera 71	6	10066, 8117, 8206		AD 1 - 300
Caldera 85	1	8020		Bottle: AD 1 - 250
Oberaden 29	3	2510		AD 1 - 50
Scatozza 32	1	8111		AD 1 - 200
Millefiori	1	2810	2810	100 - 1 BC
	199			

Table 31. Glass shapes present in my database. Carlos Cáceres-Puerto.

The glass containers belong to a common, albeit in a certain way strange, phenomenon within the funerary contexts. Unlike the rest of the typologies of artefacts, glass shapes follow almost in their entirety the classification made by Clasina Isings (1957). Besides Isings, three typologies are used, Scatozza (Scatozza Höricht, 1986), Oberaden and Caldera (1983; 1991). The classification developed by Caldera is the most remarkable one as it includes local varieties of shapes found in *Augusta Emerita*. I have identified 64 typologies within my dataset of grave good contexts (table 31). 55 of the typologies belong to Isings shapes, while others can also be catalogued within Isings classification, although they follow the classification system of the different archaeologists, hence the typological variety. However, this is to a lesser extent than other artefacts like fine wares or oil lamps.

The main evidence for glass vessels is provided by artefacts originating from domestic horizons and funerary contexts. As a matter of fact, Corbacho Hipólito (2005: 487–512) has already developed statistical research to study the distribution of the glass shapes within grave good contexts up to 2003 in *Emerita*. The distribution of glass became successfully accessible as production techniques improved during the beginning of the Empire. My dataset contains some examples of earlier productions, with established chronologies in both the late Republican period and the beginning of the Augustan reign, where glass production was not widespread within Rome. This might suggest these items were belonging of wealthy citizens who took part in the foundational and colonial process or who maybe even had an important role in the process. Artefacts like the millefiori vessel (fig. 120) identified in the context A10 from the excavation

2810 (Delgado Molina, 2017: 547–77) were produced in the Bay of Naples-Vesuvius area and have a set chronology between 100 and 1 BC. The most significant feature of this millefiori vessel was the nearby Arretine ware vessel with the seal ‘OILI’ (fig. 118) with similar chronology and place of origin, as it can be observed in the catalogue in the annex.

Some Isings shapes have been catalogued in previous chronologies before the standardisation of the production. The shape Isings 30 contained within context A5 of excavation 8111 (Pérez Maestro, 2017b: 271–78) has been set to date between 100 BC to AD 100. However, in this particular case, the oil lamp Loeschcke IV sets the chronology to between AD 1 and 100. Nonetheless, both examples have a much earlier chronological range than the remainder of my dataset.



Figure 120. Millefiori vessel from context A10, excavation 2810. Photo: Delgado Molina, 2017: 566.

It is worth considering the difficulty in establishing appropriate the origin for the piece, as we do not usually possess seals or marks indicating the workshops where they were made. Even though there are a few artefacts with seals of known artisans (Caldera de Castro, 1983), none of them are present in my dataset. Therefore, the study must establish parallels with similar shapes in other areas of the Roman Empire.

The production of glass objects became standardised by the second half of the 1st century after the Claudian reign, and until the 3rd century AD the production of shapes became regular with regional variations (Palomar *et alii*, 2012: 194). In contrast to coarse ware shapes, the production of regional varieties did not start as an extended phenomenon until the 3rd century AD, which is beyond the time frame of my research. Furthermore, the level of preservation of the artefacts hinders the assignation to known typologies and complicates setting an appropriate origin and chronology. This also occurs with the metallic objects, whose level of corrosion and general poor conservation leaves the pieces as merely for statistical purposes.

The first evidence of glass in the colony comes from the excavation studied by Marcos Pous (1961: 91–96) underneath the foundations of the amphitheatre. Within two cremation pits he documented glass vessels which have been dated in the early Augustan period, 25–8 BC (Corbacho Hipólito, 2005: 505), which, according to Caldera, originated in the workshops in *Aquileia* (Italy) (Caldera de Castro, 1991: 240). This case would imply the first documented case of glass shapes in the colony, besides the millefiori vessel, and the earliest known import, as the other shapes were likely brought by the first settlers.

Since the first decades of the 1st century AD *Augusta Emerita* was fully integrated into the typology and chronological features of the Roman glass making industry. Some production centres have been identified within the colony, adapting popular shapes from Central Europe and the Po Valley, although the import of artefacts from Northern Italy supposes a strong source of non-peninsular glass vessels (Alonso and Caldera de Castro, 2014: 127). There were workshops in *Augusta Emerita* at least from the Julio Claudian dynasty (Caldera de Castro, 1983: 7–80; Corbacho Hipólito, 2005: 504–05). However, it is attested that the most used shapes within my dataset, Isings 28, 42, 48, 49, 50, 103, Caldera 41 and 70, were produced by local workshops within the colony (Alonso and Bejarano, 2013: 615; Alonso and Caldera de Castro, 2014: 127). Nevertheless, there is a shortage in glass findings within funerary contexts after the 2nd century AD, whereas Alonso and Méndez (2013: 1679) documented a decrease of glass shapes during the reigns of Trajan and Hadrian.

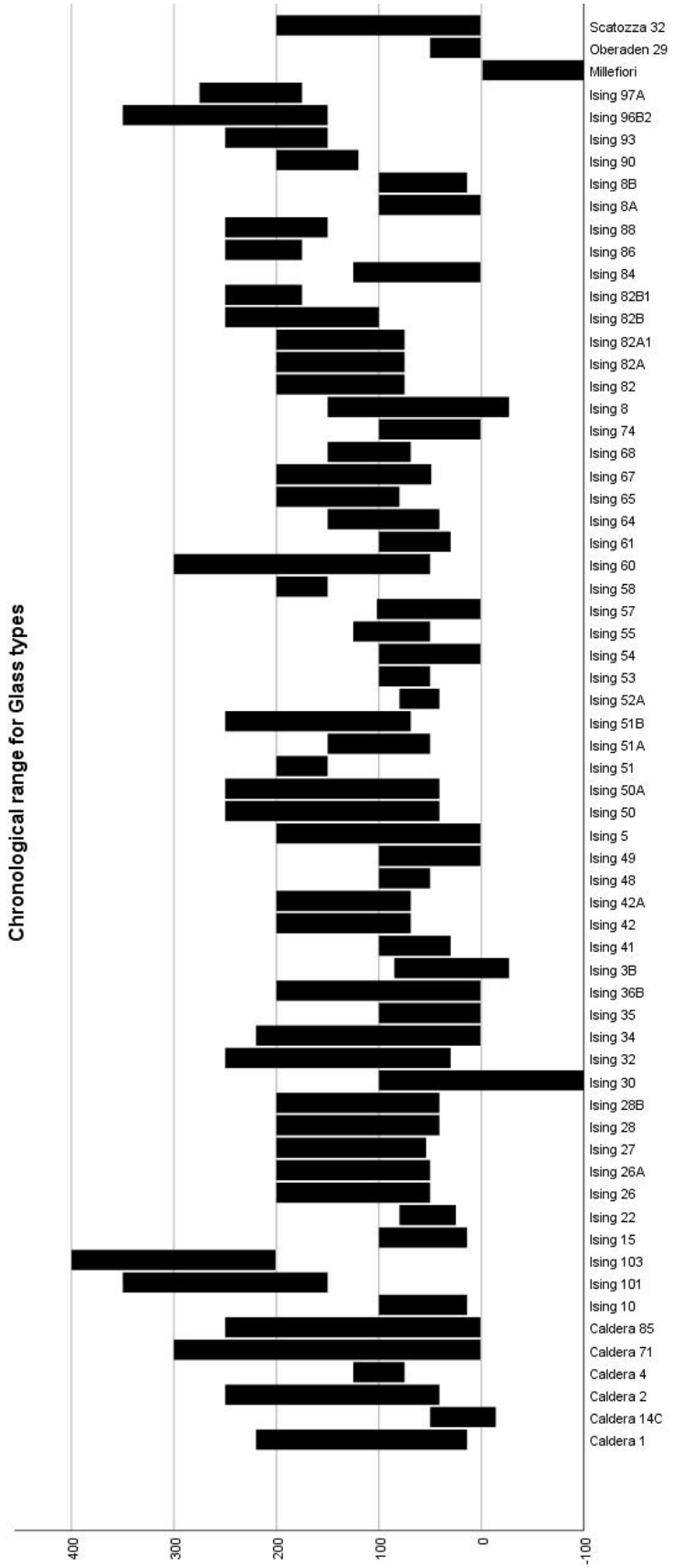


Table 32. Chronology of glass shapes present in my database. Carlos Cáceres-Puerto.

Although the usage of glass vessels in *Emerita* was not fully widespread until Claudian times, the willingness of the population to use fashionable shapes favoured the use of clay lachrymatory which would fill the market void. Some examples have been found in excavation 2076 (A7, Sánchez Barrero, 2000b: 413–62) and 2510 (A10, Heras Mora, 2017: 171–85), both with a set chronological range between AD 1 and 200, although it most certainly belongs to the first half of the 1st century AD. The market niche was supplied by artisan copying models from the Eastern Mediterranean (Syria), the Italian Peninsula and the Po Valley, which might have implications for the origin of the artisans (Alonso and Caldera de Castro, 2014: 130). Despite of the origin of the shapes and craftsmen, the colony had been in a position to establish commercial relationships with foreign workshops since Claudian times.

In relation to my dataset, the most common shapes are Isings 8 (18 cases) and Isings 28 (24 cases). The chronology of both shapes is highly similar (27 BC–AD 150, Isings 8; AD 41–200 Isings 28). This might entail the early stages of imports to the colony. Unlike the phenomenon of the coarse ware vessels, the typology of findings is highly disproportionate, with the most common artefact being the *lachrymatorium*. This is related to the contexts of usage: domestic and funerary horizons. For some shapes, however, some scholars (Caldera de Castro, 1983; 1991) suggest an earlier production. This is the case of the shape Isings 28A, which as I mentioned beforehand is set between AD 41 and 200. Alonso and Bejarano (2013: 594) considered that a more appropriate date for the productions of the colony would be between AD 51 and 125, although I possess examples of Isings 28, 28A and 28B spanning further than AD 125 from excavations 8020 (Nodar Becerra, 2002: 123–34), 8024 (Bejarano Osorio, 2002: 217–40), 2481 (Sánchez Barrero, 2006: 409–25) and 8058 (Sánchez Sánchez, 2006: 409–25), to name a few examples (table 32). I even possess one case of Isings 28 dated to between the 2nd and 3rd centuries AD in excavation 8117 (Bejarano Osorio, 2017c: 291–329).

On the other hand, there are some shapes which, despite the popularity in other areas of the Empire, do not appear as often as we would expect within funerary contexts. One example is the shape Isings 10, which has only been

documented in one excavation from 1991 (Alonso and Caldera de Castro, 2014: 127–30) and in excavation number 8176 (Pereira Ramos, 2017a: 479–508).

To conclude with the glass section, we can securely affirm that the glass production in *Emerita* matches the funerary appearance of these shapes within grave goods. The process of production and their usage in funerary contexts follow similar patterns, and we can observe when the presence decreases within grave good contexts, by the end of the 2nd century AD; the presence of glass vessels in my dataset after the 2nd century AD is not as widespread as it was in the 1st century AD.

9.6 Various typologies of metal artefacts

Most of these artefacts found in funerary contexts are pieces that, due to their corrosion and state of preservation, are not only impossible to date, but also impossible to classify. As I have done with undefined ceramic or glass shapes, I kept them in the catalogue for merely statistical purposes. However, I do have some pieces that provide substantial information, like coinage.

Most of the coins discovered during the excavation process were impossible to identify, as they were cremated with the deceased. Nevertheless, some coins provide a *terminus post quem*, as we can associate the coin with an established minting date. This is the case with two *denarii* from the reign of Claudius, dated to AD 41 (excavation 8036) and AD 42 (excavation 8057) and extracted in two different contexts in the northern bank of the Albarregas River, although in different locations (Silva Cordero, 2004a: 269–77; Chamizo de Castro, 2006: 15–35). Although the most interesting evidence are the two bronze *aes* dated to 41 BC, found in excavation 10066 by the circus (Bejarano Osorio, 2007: 131–51) and one bronze coin depicting Agrippa, found in excavations 8190 and 8212 on the right bank of the Albarregas River and dated to between the end of the 1st century BC to AD 15–20 (Rodríguez del Mazo, 2019: 593–624).

The most common artefact contained in funerary contexts, however, is iron nails, supposedly from wooden boxes and/or coffins. It is also worth mentioning the household items placed next to the deceased which provide anthropological information in relation to the society in the early stages of the colony. As a matter

of fact, in excavation 156 (Ferreira López, 1991. Unpublished), there was a bronze mirror and a blue glass *lachrymatorium* alongside Inhumation 1, next to the skeletal remains of a female skeleton.

10 Grave goods from Early Roman contexts: patterns of occupation in the suburban spaces of *Colonia Augusta Emerita*.

Colonia Augusta Emerita was founded, according to the writings of *Cassius Dio*, in 25 BC as the war against the *Cantabri* was coming to an end (*Cassius Dio*, Roman History, LIII, 26, 1). Despite what occurs at other sites with a more disputed foundational chronology, most scholars support this paradigm. The accounts of *Carisius* and his proposed date are also strongly corroborated at least partially by the archaeological record. We must consider an inscription from the theatre, dated in AD 105 (Trillmich, 1989-1990: 87-96) (fig. 6), commemorating the restoration works by Trajan, which coincides with the proposed date by the Roman historian. However, other scholars tend to disagree with the foundational date being established in 25 BC. Stylow and Ventura Villanueva (2009: 453–524), for instance, have suggested a somewhat later date for the *deductio*, setting it around 20 BC, instead of 25–24 BC. As a matter of fact, they based their research and conclusions on epigraphical evidence, not accepting the inscription of the theatre at AD 105, which most scholars acknowledge. On the other hand, Le Roux (2006) suggested that a later foundation coinciding with the establishment of the province of *Lusitania*, between 16 and 13 BC, would make more sense. Other scholars, nonetheless, support the theory of an Augustan refoundation over a pre-existent Caesarean settlement. Authors like Canto (1989: 149–206; 1997: 253–82; 2017: 341–92) supports this hypothesis. However, despite of the lack of agreement on the foundational date and the political figure responsible for the existence of *Augusta Emerita*, there is tangible evidence that has been largely used to elucidate these hypotheses: funerary evidence (Cáceres-Puerto and García Sánchez, 2020: 54). However, funerary presence in *Emerita* has traditionally been neglected, or partially analysed, without contemplating the whole scene. Thus, some authors had looked at the epigraphy (Hidalgo Martín *et alii*, 2019), others had written about the osteoarchaeological point of view (Márquez, Cortesâo and Santos, 2008), but no research had considered the study, analysis, model, and interpret

the grave good ensembles and the funerary context to study the urbanism of *Emerita*.

In relation to funerary evidence, as it occurs with the rural land planning mentioned in section 5.1 and 5.2, the case of *Colonia Augusta Emerita* is atypical, as it serves as a case study for multiple theories. Despite the legal prohibition of placing any type of funerary ritual and facilities (*Digest*, 47, 12. Mommsen *et alii*, 1985), there are various cases in the Lusitanian colony. As I mentioned before in section 8.1, and 8.2, Marcos Pous (1961: 90–103) documented the presence of two cremation pits underneath the foundations of the eastern quadrant of the amphitheatre, excavated in 1956. He also documented the presence of coetaneous cremations in other areas of the colony (Murciano Calles, 2010: 88–89). Bello Rodrigo and Márquez Pérez (2010) also mentioned a third cremation pit in the northern part of the colony, near the gate directing towards the bridge over the *Barraeca*. This brief recapitulation represents the most representative cases of where funerary research is crucial to determining certain presumptions regarding the borders and evolution of the colony. In any case, I will further analyse the cases I mentioned above, as I dissect the patterns of occupation based on the analysis of the grave goods contexts. As a result of the introductory summary, we can conclude there is a necessity for a study with new inputs on the development of new approaches towards a better understanding of the suburban usage of the space of the colony.

10.1 Introduction and methodology applied to the research

In order to analyse the foundational process of *Emerita* in the broadest possible scope, I settled on a multiproxy approach. I intended to assess the connectivity of the Augustan colony with its environs, and with other areas of the Roman Empire, which I did in Chapters 6, 7, and 9, but one the main aims of this dissertation was to unravel the occupation process of the suburban areas of the colony, to study its urbanism. To study this process in *Colonia Augusta Emerita*, I needed archaeological evidence to use in my analysis and comparison. I needed tangible evidence rather than theories based on anthropological or subjective principles. I consider that the perspective given by the artefacts contained within funerary contexts is a very good starting point for the

development of my research. However, I study these contexts by putting them in perspective with other variables, such as rural settlements in the surroundings of *Emerita*, iconography applied to coinage minted in the colony, and the distribution of the rural territory of the colony, for instance. The artefacts and their insight into the funerary contexts seemed a good focal point as they provide meaningful and different approaches: cultural ethos, social history, social relationships, the main foundations of provincial economic, and the basic forms of Roman/Iron Age hybridisation. Therefore, I intended to recontextualise the assimilation process and the role played by the Lusitanian colony in shaping a new Roman province from its centre.

As archaeologists, we are in a constant search for the best approaches, techniques, and methodologies to analyse the archaeological data more efficiently, creating new knowledge with the data we already possess (Sharafi *et alii*, 2016: 206). Thus, I decided to compile a large database of Early Imperial Roman funerary evidence in *Emerita* to prove my hypothesis concerning to the connectivity of the colony with its environs and other areas of the Empire, and its urbanism. This dataset, innovative on its own since a database of funerary evidence had never been elaborated in *Emerita*, granted me a large amount of information to assess an analysis never attempted before in the study of the foundation of *Colonia Augusta Emerita*.

The research on grave goods contexts is based on a systematic revision of 77 archaeological interventions developed by the Consortium of Mérida between 1991 and 2011. The excavations between 1991 and 1993 were unpublished, allowing me to examine original data from those excavations. Unfortunately, the results obtained after systematising those interventions -3, in total- were not significant, although I kept them in my dataset for statistical purposes. Combining the 77 reports provided me with over 1600 pages of information referring to funerary evidence, encompassing multiple states of preservation, across the second half of the 1st century BC and the second half of the 3rd century AD. For my database, I did a quantitative study of the funerary evidence present in *Colonia Augusta Emerita*. The data I gathered was later processed and distributed in a spreadsheet using Microsoft Excel (fig. 121), organising the data systematically into a catalogue with multiple variables, which

can be consulted in the appendix I. I then decided to run the database of funerary contexts, selecting the fields that interested me the most, using "R" language[20]. This is a programming language that allows to elaborate, analyse, and model large amount of data, providing invaluable support and tools for the statistical analysis of information, whether it is linear or non-linear. This modelled data is then represented using cartographic software, such as ArcGIS, or in the case of this thesis, QGIS. Thus, I was able to obtain insightful and innovative results of the patterns of occupation of the suburban areas of *Augusta Emerita* in the Early Imperial Roman period.

Reference	Intervention	Location	Sector	Area (M²)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Imports	Chronology
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A7	-	1	-	-	-	-	-	1 fragment of fine ware Mayet XXXVII, fragment of glass jar, fragment of Mayet XL	Mayet XXXVII (from *Baetica*), Mayet XL	Second half I AD - II AD
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A8	-	1	-	-	-	-	-	Calcined oak wood, nail, 2 fragments of oil lamp (1 Loeschcke V, 1 Deneauve V-G), TSH and TSG Drag. 27	1 Loeschcke V, 1 Deneauve V-G (from a workshop in *Carmo*), TSG Drag. 27	AD50-75
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A10	-	1	-	-	-	-	-	Calcined oak tree, 1 oil lamp Loeschcke XK (seal: FORTIS)	1 oil lamp Loeschcke XK (seal: FORTIS), from Modena (Italy)	I - II AD

Figure 121. Example of fields included in my database of funerary Early Imperial Roman funerary contexts.

Prior to modelling the data, I elaborated a preliminary dataset following general criteria such as geographical location, deposit, artefacts catalogued as imports and chronological range. Since I wanted to be able to utilise it in further research, I also catalogued the data with more thorough and in-depth criteria, such as osteoarchaeological specifications (fig. 121). My ultimate aim is to achieve a dataset as complete as possible, however, the Consortium of Mérida has not yet published reports for any excavation campaign after 2011[21]. I intend to pursue this research further for as long as the archaeological entity continues to publish the reports, though these will have to be included in future research work aside from this thesis. I then elaborated specialised databases including the data I intended to model with "R" programming language (fig. 122). For this study, I used the most probable chronological range of the recognisable shapes my

[20] See more about "R" programming language at https://www.r-project.org/about.html

[21] Nearly upon completing the corrections of my dissertation, Consorcio de Mérida published the excavation reports between 2012 and 2014. They will be incorporated to my dataset, and analysed, in due course, but those reports have not been included in this work.

database of grave good typologies contains. Some of the chronological values, as I will further discuss later in this chapter, were more precise than others, depending on how well the shape could be identified during the excavation process, and later in the lab by Consorcio de Mérida.

The catalogue includes a comprehensive dataset and description of the 1,015 funerary structures I am studying. 361 contexts belong to the inhumation rite and then the 654 remaining are cremation structures. In total, I have identified 2,255 elements of grave goods, which have been classified according to their typology. I include the typological classification in Chapter 9, whereas the main database can be accessed in the catalogue, in the Appendix I. The database of raw data used for the "R" modelling can be consulted in the Appendix III. The typological distribution of the funerary rites coincides with the traditional correlation of cremation being early Roman and burial being late Roman, although recent research suggests this typology is not accurate and other external factors, such as the socioeconomical status and geographical location, ought to be considered (Márquez Pérez, 2008). The aim of my research is to study the process of "Romanisation" of the area surrounding *Colonia Augusta Emerita* by analysing different factors, funerary elements being one of them. I am also studying the urbanism of the Roman colony in the early stages of its existence, between the foundation and the end of the 2nd century AD.

There have been recent research projects related to funerary evidence around *Colonia Augusta Emerita*, although none of those studies cover the grave goods contexts and their spatial distribution. I have already mentioned in Chapter 8.2 the compendium published by Hidalgo Martín *et alii* (2019), which follows a thorough research of funerary epigraphy in *Emerita*, or older publication like Márquez Pérez (2006) publishing results of the 1930s excavation by Serra Rafols in Columbarios. Juana Márquez Pérez has published various papers enumerating the funerary presence (Márquez Pérez, 2008: 443–70; 2020: 13–27). However, those publications consisted of a list of funerary evidence ordered chronologically, with no spatial distribution theories or statistical approach whatsoever.

The methodology employed combines various key aspects of the archaeological science: the stratigraphic information concerning the funerary

context in the suburban areas of the colony, the study of the typological varieties of artefacts in the funerary contexts, and probabilistic and cartographical representation. Moreover, I consider the different variables distributed over my dataset to establish distribution patterns in the suburban areas of *Colonia Augusta Emerita*. Hence, this combined methodology of statistic, probabilistic and cartographical representation allowed me to display, and analyse the information easier, and clearer.

	SiteID	Material	Start	End	-300	-250	-200	-150	-100	-50	0	50	100	150	200	250	300	350	400
2	134	Pottery	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
3	134	Pottery	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
4	134	Pottery	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
5	134	Bone	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
6	134	Bone	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
7	134	Bone	1	100	0	0	0	0	0	0	0,494949	0,505051	0	0	0	0	0	0	0
8	134	Bone	1	200	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0	0	0
9	134	Bone	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
10	134	Bone	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
11	134	Bone	1	300	0	0	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0
12	134	Pottery	1	300	0	0	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0
13	134	Glass	1	300	0	0	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0
14	134	Pottery	1	300	0	0	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0
15	134	Pottery	1	300	0	0	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0
16	134	Glass	1	300	0	0	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0
17	134	Pottery	1	300	0	0	0	0	0	0	0	0	0,246231	0,251256	0,251256	0,251256	0	0	0
18	134	Glass	1	100	0	0	0	0	0	0	0,494949	0,505051	0	0	0	0	0	0	0
19	134	Glass	1	100	0	0	0	0	0	0	0,494949	0,505051	0	0	0	0	0	0	0
20	134	Pottery	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
21	134	Glass	101	100	0	0	0	0	0	0	0,494949	0,505051	0	0	0	0	0	0	0
22	134	Pottery	101	100	0	0	0	0	0	0	0,494949	0,505051	0	0	0	0	0	0	0
23	134	Glass	101	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
24	134	Pottery	101	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
25	134	Glass	101	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0
26	134	Pottery	101	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0	0	0

Figure 122. Database of set chronological values prior to “R” modelling.

My approach aims to being a combination of the typological classification of the piece and the stratigraphical dating obtained from the archaeological reports. However, I am aware of the ambiguity of the chronological value provided by some typologies, since I depend on the classification stipulated in the field, with a total absence of radiocarbon dating such as 14-C.

Although the artefacts analysed in my dataset belong to specific contexts, with a known location and date of finding, it is important to take into consideration the value that the study of decontextualised artefacts bring to the archaeological research. Some of the grave goods in my dataset were decontextualised in antiquity and appeared as such in the archaeological interventions. I kept them merely for statistical purposes. They provide an insightful material for future research on soil movement and funerary disruption in *Augusta Emerita* with, I am sure, promising results in the future. But the study of these artefacts presents its own challenges, as it is to temporally frame certain typologies based on similarities with other known pieces, as it is the case with coarse ware shapes in my dataset, as seen in Chapter 9.1.

I have used the aoristic model developed by Crema and Nishino (2012) and Willet (2014: 39-69). Those models assign a probabilistic value to the artefact within a predetermined chronological range. Thus, the artefacts were given a chronological value set by their typology, establishing a *terminus ante-quem* and a *terminus post-quem* (Cáceres-Puerto and García Sánchez, 2020: 60). Hence, the artefacts in figure 123, for instance, have a set chronology of AD 1-300, as there are coarse ware shapes. Since the range of probabilistic disruption has been set in 25 years, the wider the chronology, the lower the probability in setting a chronology. Then, by calculating the probability the remaining elements of the context, I can obtain a total value of the probabilistic distribution on each period, to calculate the most probable occupational date for each funerary context. As it can be observed in figure 123, the probabilistic distribution for each period between AD 1 to AD 300 is substantially low, comparing it to the probabilistic distribution of other shapes with a better defined chronological value, like the *millefiori* vessel in figure 124.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
SiteID	Material	Start	End	-300	-250	-200	-150	-100	-50	0	50	100	150	200	250	300
134	Pottery	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0
134	Pottery	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0
134	Pottery	1	300	0	0	0	0	0	0	0,16388	0,167224	0,167224	0,167224	0,167224	0,167224	0

Figure 123. Example of wide chronological range.

Therefore, the dates for some artefacts are more precise than others. Thus, the shape of Arretine ware (*Terra Sigillata Italica*) found in report number 8135, for example, would be given a 40 BC to AD 50 range. This implies a probabilistic distribution each 25 years, providing a higher probability in the chronological range of 25 BC – AD 50. Other artefacts, however, provide more accurate chronological values and can be narrowed down to a very specific range due to external factors or typological features. The Claudian coin found in excavation number 6019, for instance, was dated in AD 41. Another example, as seen in figure 124, is the *millefiori* vessel found in the excavation 2810 (fig. 120). In this case, the chronological range oscillates between 100 – 1 BC, hence allowing a very accurate dating of certain funerary contexts, since my database starts in 50 BC, hence dividing the probability by 50% as I discard two chronological ranges -100-75 BC, and 75-50 BC-. Although examples like the

millefiori vessel are not the best case study to illustrate this statistical modelling, since we know their precise chronology, as it also occurs with the coins mentioned in this chapter.

	SiteID	Start	End	-300	-250	-200	-150	-100	-50	0	50
396	2810	-100	-1	0	0	0	0	1	0,494949495	0	0

Figure 124. *Millefiori* vessel is one of the most precise typologies in my dataset.

Once I had the database with selected data to be modelled using the "R" algorithm, I later assigned a series of chronological ranges of 50 years starting in 50 BC. The starting date was deliberately set earlier than the established foundational date, 25 BC, to allow for the inclusion of possible indigenous artefacts present in the grave goods.

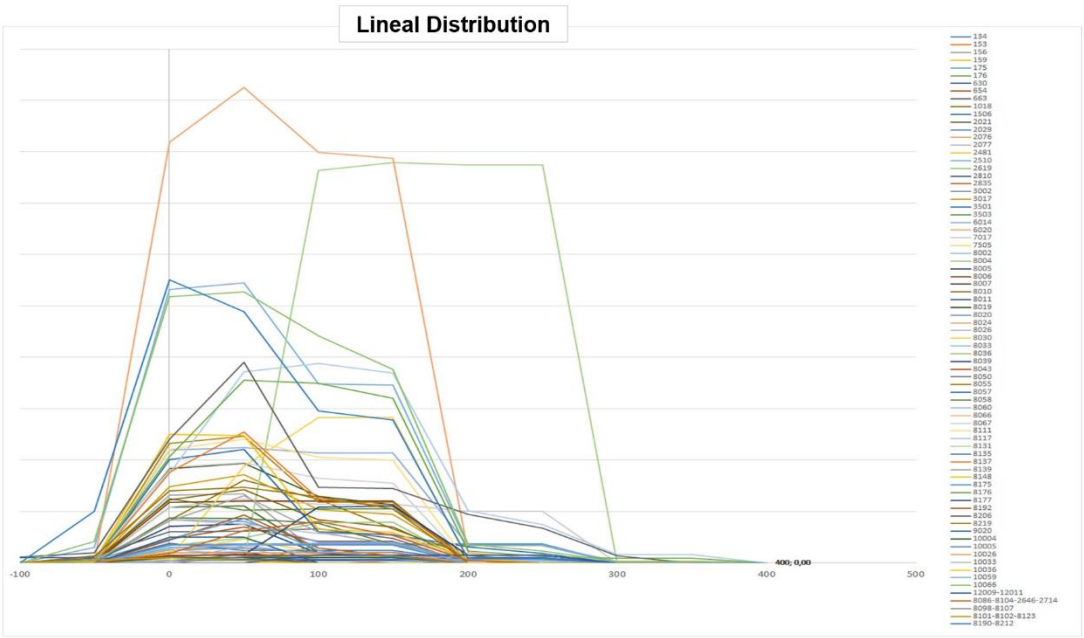


Figure 125. Lineal distribution. Graph: Carlos Cáceres-Puerto, after Cáceres and García, 2020.

Nevertheless, the earliest chronology obtained was around the mid-1st century BC; these items were probably deposited after the foundation of the colony, as was probably the case with the *Terra Sigillata Italica* example mentioned above. As a final note in the chronology methodology, it is worth mentioning that the precision setting up the chronological range was variable. I

was managing some artefacts with very accurate and specific time frame, whereas other shapes had a wider chronological range, therefore the establishment of chronological span was not always ideal, as I will develop further in the common ware part. The outreach of some chronological ranges presents interesting hypotheses considering the continuity of certain shapes in the Lusitanian territory after the proposed timeframe for this research. Some shapes, concerning common ware shapes in their entirety, possessed a chronological span reaching beyond the time frame of my proposed date. It usually occurs with common ware shapes that were still in use in the mid Guadiana Valley throughout late antiquity and medieval times.

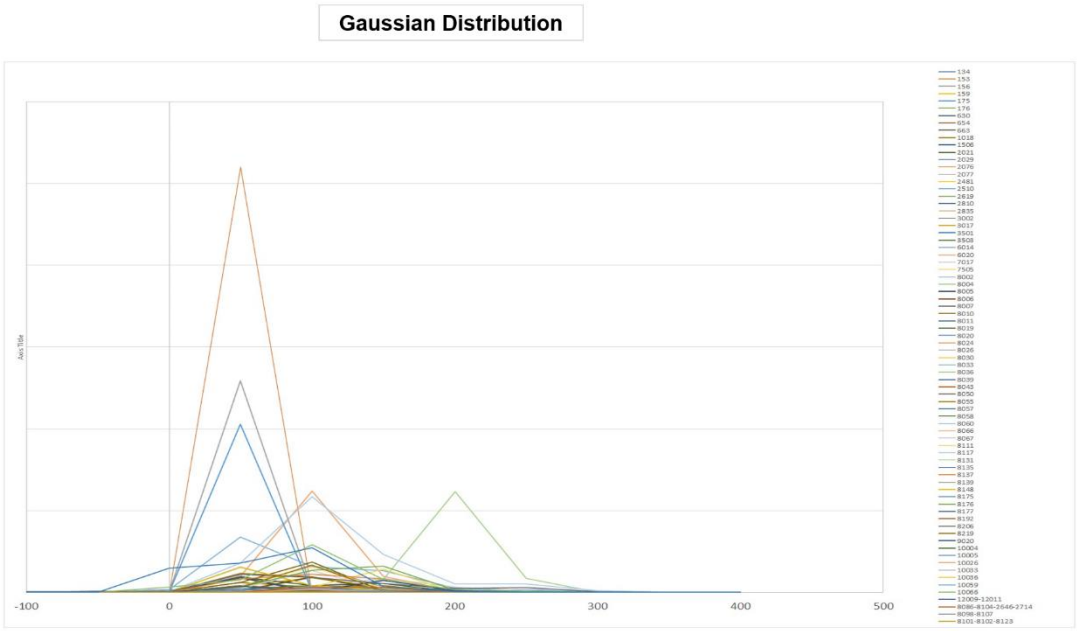


Figure 126. Gaussian distribution. Graph: Carlos Cáceres-Puerto, after Cáceres and García, 2020.

The results where then modelled using R Project time2aoristic[22] algorithms[23] to obtain the distribution patterns I will analyse in the next part of this chapter. The models proposed to represent the distribution of the funerary elements in the suburban areas of *Colonia Augusta Emerita* are lineal (fig. 125)

[22] https://www.r-project.org/about.html

[23]I would like to thank Dr. Jesús García Sánchez (Instituto de Arqueología de Mérida-CSIC) for his suggestions on improvements to my dataset and for his contribution towards the completion of modelling using 'R' algorithms with his knowledge of the programming language.

and Gaussian (fig. 126) distribution (Cáceres-Puerto and García Sánchez, 2020: 60–63). In the latter, the artefacts tend to concentrate in the middle of the graph (1st and 2nd centuries AD). Therefore, the earlier typologies are not as well represented as they should be. Hence, I will be referring to the lineal distribution which seems more accurate considering the dataset I possess. For the Gaussian distribution I followed Willet's (2014: 54) methodology following the Normdist algorithm in Excel.

To conclude, Bayesian statistics have been broadly used in the past for multiple purpose within archaeological science. Sharafi *et alii* (2016: 206-215), for instance, described its usefulness as part as a predictive methodology to locate site. The methodology employed in my analysis combines various approaches, focusing on a statistical modelling of the data followed by a cartographical representation of the information using GIS. Following Lloyd and Atkinson (2004: 151-165) definition of Geostatistics as a set of tools used for characterising spatial distribution of archaeological information, I have modelled the data going one step further than the traditional statistical analysis. Thus, I have been able to develop a series of theories and hypotheses to answer some key questions in the study of the suburban areas of *Augusta Emerita* in the Early Imperial Roman period. However, I shall note that the aim of this analysis was not to provide an exact chronological value for each grave good context, but to consider each funerary context as a piece of a greater puzzle. This puzzle allowed to study the correlation between the grave good contexts among them, and to explore the exact moment when certain typologies appear, coexist, and vanish, in order to model the patterns of occupation of the suburban areas of *Emerita*.

10.2 Distribution patterns of the funerary presence in suburban *Colonia Augusta Emerita*

The aim of this database, included in the catalogue in the Appendix I, and III, and the study of the materials contained within is the development of a spatial distribution pattern of the funerary areas and their evolution throughout the first centuries of occupation of the colony (fig. 127). Therefore, by analysing the statistical process, the 'R' modelling results and the chronological ranges of the

shapes present in my dataset I can establish clear typologies in the evolution of the suburban spaces of *Colonia Augusta Emerita*. As I have mentioned beforehand, the level of accuracy of these preliminary conclusions depends on the level of accuracy and precision of the chronological ranges of the typologies for the artefact studies. Hence, most pieces did not provide precise enough dates to shape the urbanism of a specific area. However, I have been fortunate enough to discover certain typological features that allow me to configure the suburban spaces to follow clear chronological processes and shifts between shapes of artefacts and trading patterns. On the other hand, there are materials that allow me to continue the study beyond my current time frame in future research, such as with coarse ware vessels, for instance, as their chronological range spans over centuries up until the late antique or medieval periods. However, the abundance of well-defined typologies, like *terra sigillata* -especially Italic and Hispanic shapes-, does allow me to be more accurate in the dating of some funerary contexts, subsequently guaranteeing a more precise distribution pattern of the suburban areas of the colony.

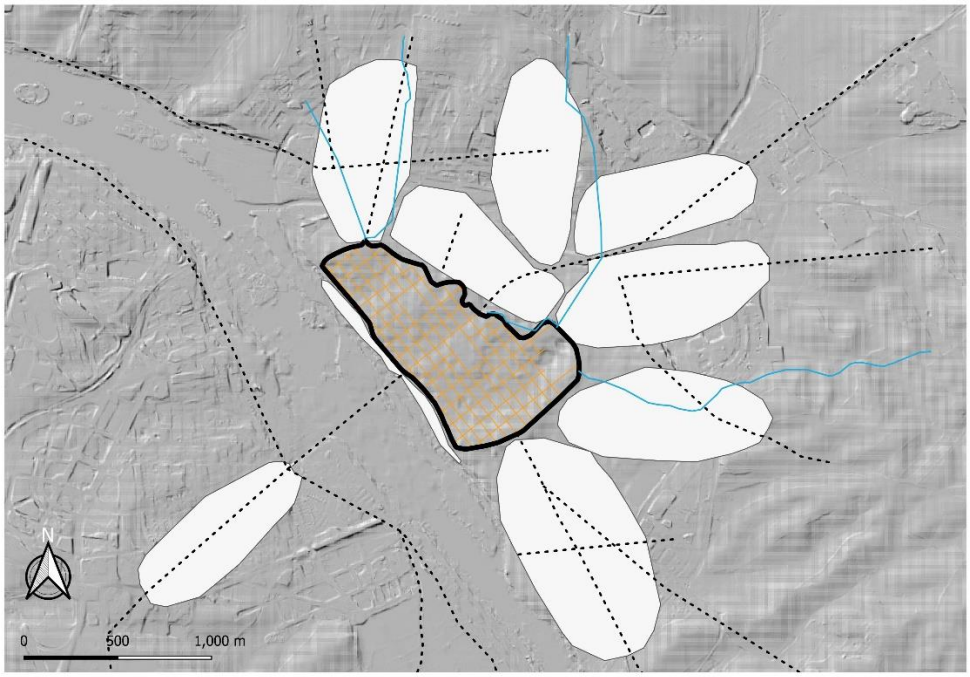


Figure 127. Funerary areas of *Augusta Emerita*. Map: Carlos Cáceres-Puerto after Cáceres and García, 2020.

Besides the patterns of occupation of the suburban areas, the study of grave goods is a fantastic manner of researching the “Romanisation” process.

This “Romanisation” process was achieved by using a hybrid approach of Roman motifs and local idiosyncrasies, as it can be clearly seen in the coarse ware typologies, on which the Roman influence coexisted with local varieties and other typologies incorporated from nearby areas, like the Alentejo region, in modern-day Portugal. The “Romanisation” process throughout material culture can be also observed in coinage, as I already discussed in Chapter 6. Therefore, the syncretism of local deities resembling members of the Roman pantheon in the colonial series would serve this purpose. Hence, my reference to “indigenous motifs” in the coinage chapter.

The special emphasis placed upon the ceramic materials is not casual. The study of seals, stamps and other marks of a determined workshops provides tangible evidence of cultural interchange, commercial transaction between two or more regions and the mobility of populations. Therefore, the presence and the absence of certain typologies indicates a chronological time frame for the “Romanisation” process of the mid Guadiana Valley. The immediacy of certain typologies also facilitated the Romanising role of the Augustan foundation, as it occurred with the first series minted in *Colonia Augusta Emerita*, or elsewhere but under its name and the *auctoritas* of the emperor, in the case of a mobile mint, as seen in Chapter 6. Material culture like *terra sigillata*, oil lamps, and glass vessels, which are widely present in my database of funerary contexts, did imitate Italic motifs. But the arrival of said materials was not sudden, hence the importance of assessing those earlier materials, especially all considered of Italic origin, as “luggage” of the colonists, rather than very early imports. Trading routes were not formed yet, even considering legionnaire craft men’s networks.

Material culture was the physical embodiment of a shared identity, and coinage played a main role in creating and shaping this common ethos since it was the fastest product to be distributed between the population, as the payment of the soldiers. Coinage played a crucial role in creating a sense of identity within the communities of the newly incorporated territories to the Roman Empire, with motifs and themes evoking common beliefs to those involved, both the colonised and the colonists. But this phenomenon did not only apply to coinage. Italic shapes and workshops were fashionable in a new settlement whose inhabitants were eager to demonstrate their Roman origin, and they also wanted to benefit

from the lifestyle they were accustomed to in their homeland. *Lusitania* was part of the Empire, but its level of 'Romanity' did not equate to other provinces. However, common, recognisable shapes, were the symbols of *Romanitas*, and shaped the "Romanisation" process towards the creation of a hybrid, shared, provincial identity.

Other authors, like Ventura (2008: 60), developed similar studies to establish cultural markers within the grave goods contexts in the settlements of the *Baetica* province, like *Astigi* (Écija, Sevilla)*, Colonia Patricia* (Córdoba)*, Ucubi* (Espejo, Córdoba) and *Salaria* (Úbeda la Vieja, Jaén). This reinforces the idea of certain artefacts as spearheads for cultural change, and hybridisation, like the presence of Arretine ware vessels immediately after the foundation or the arrival of African Red Slip ware alongside the arrival of *cupae* as a new foreign funeral rite from Northern Africa by the end of the 1st century AD. However, some areas of the funerary field are yet to be analysed within the Iberian context.

The role of coinage, often seen merely as an obol, has obscured ulterior purposes in Roman funerary practices. *Gades* -Cádiz- (Arévalo González and Moreno Pulido, 2017: 3-19), *Ebusus* -Ibiza- (Campo, Costa *et alii*, 2016: 27-74), or *Colonia Patricia* -Córdoba- (Arévalo González and Moreno Pulido, 2021: 77-92) are rare examples of settlements in the Iberian Peninsula where coinage and its relation to grave good contexts from the Early Imperial Roman period has been thoroughly studied, a field of study which settlements in *Lusitania* are lacking.

The materials from the first chronological range, 50–0 BC (fig. 128), demonstrate an uneven distribution. There is a big gathering of material culture in the southern part of the colony, coincidentally the area where Alba Calzado and Méndez Grande (2004) documented workshops producing ceramic building material in early stages of the colonial process, as seen in Chapter 7.3. The southeastern part of the colony where lesser suburban roads converged into *Via XI* heading to *Colonia Patricia*. As I already mentioned in Chapter 8.1, this funerary area is one of the first one around *Emerita*. It concurs with the communication nodes, since the capital of the Province of *Baetica* played a crucial role in shaping the first stages of the colony, since it was situated not far away. Besides the southeastern funerary area, which was also densely occupied by lesser rural sites as seen in Chapter 7.3.

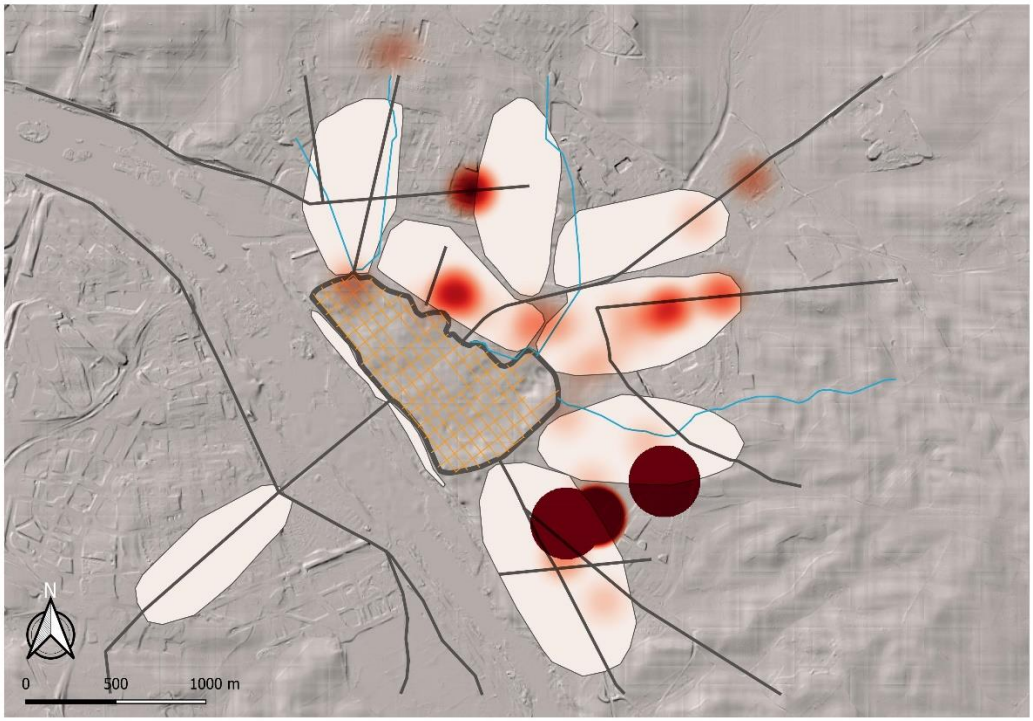


Figure 128. Occupation of the funerary areas in *Emerita*. Linear distribution. Chronological range 50-0 BC. Image: Carlos Cáceres-Puerto after Cáceres and García, 2020.

The axis north-south begins to be occupied although the presence of funerary evidence around the Valley of the *Barraeca* had not yet flourished, as it will happen in the 1st century AD. Some particularities we have in the northern edge of the colony, in Cerro del Calvario, the northern gate of the *Kardo Maximo*. The probabilistic correlation shows evidence of funerary contexts within the *pomerium* of the colony, albeit the funerary ensemble of both interventions does not allow me to analyse any further. The grave goods had poor degree of preservation, and considering both funerary ensembles -intervention 149, and 165- were dated to the early 1st century AD, they might have been misplaced within my ensemble (Sánchez Sánchez, 1997: 128-134).

This concentration of funerary evidence matches the archaeological reports prior to 1991, as this area was the first proper necropolis of the colony. As a matter of fact, both Late Republican and Early Augustan cremation pits documented by Marcos Pous (1961: 91–96) within the precinct of the amphitheatre were located in this area. It is believed that this area underwent an important transformation in the first half of the 1st century AD, considering the major construction efforts needed in order to build the amphitheatre. During this

transformation phase the funerary structures were moved to the northeast, which will be one of the main funerary hubs in the next chronological range (fig. 129).

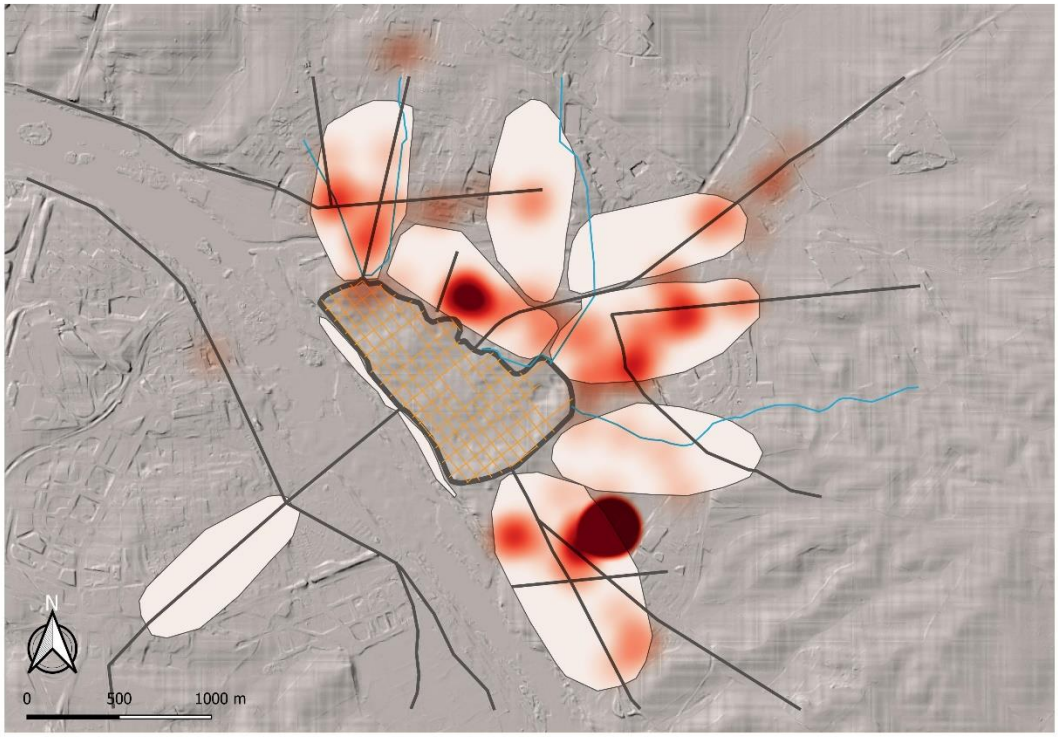


Figure 129. Occupation of the funerary areas in *Emerita*. Linear distribution. Chronological range AD 0-50. Image: Carlos Cáceres-Puerto after Cáceres and García, 2020

However, this is not the only area with substantial funerary evidence. In the northeastern side of the colony, alongside the pathways connecting *Emerita, Metellinum* and *Colonia Patricia*, I have documented a shape of Arretine ware with the seal 'OILI' (excavation number 8135, fig. 118, Méndez Grande, 2017: 579–638). This *sigillata* shape was near a millefiori vessel found in excavation number 2810. The similarity between both chronological ranges suggests an early occupation of the area for funerary practice by the end of the 1st century BC, possibly by the first settlers of the colony, since the funerary ensemble was also dated to the end of the 1st century BC.

The next chronological range, AD 0-50 (fig. 129) saw an exponential growth in other area of the city, somewhat neglected during the first years of *Emerita*. Other areas, like the southeastern side begun to lose funerary presence, at the same time as the rural sites start to occupy the area. The area of the theatre-amphitheatre, as I mentioned before, will stop being used as a funerary

area by the end of the 1st century AD. By that time, the activity in this area has already moved towards the road connecting the amphitheatre and the circus. This road will develop into a *Via Sepulchralis* during the 1st century AD, as the findings of the *Sigillata* shapes Drag. 24/25 and Drag. 37 within excavation number 8002 in Cabo Verde St suggests (Ayerbe and Márquez, 1998: 135–66). This move was perhaps motivated by the construction of the amphitheatre and the subsequent soil movement.

There is a radial distribution of the remains and a surprisingly empty area on the southern edge of the bridge past the Guadiana River, although this 'emptiness' might be due to the destruction of the funerary monuments on Portugal Avenue during the second half of the 20th century to allow space for the construction of residential buildings. The location of funerary monuments tends to be arbitrary besides intentionally placing them near communication nodes. We have evidence of burials and cremations inside the current wall perimeter, as we have seen, but we also observe funerary presences attached to aqueducts, in the allotment of the National Museum of Roman Art (Murciano Calles and Sabio González, 2020: 155–81), although we can assume that the funerary presence was there prior to the construction of the aqueducts. The *Via Sepulchralis* between the amphitheatre and the circus is beginning to take shape, irradiating along *Via XXV*.

In the third range (AD 50-100) (fig. 131) we have more funerary presence in the left bank of the Guadiana River, as the construction of funerary monuments flourishes in this area. However, this area will not be as important as the right bank of the river, perhaps due to the ownership of the land and its usage (Cáceres-Puerto, 2019: 135–51). I assessed the funerary area in the left bank of the Guadiana River with caution since there is no evidence after its destruction in the 1960s.

In the Albarregas Valley the occupation decreases, and some funerary monuments were abandoned and buried, like the case of two mausolea from Almendralejo St (fig. 130). These two *mausolea*, were backfilled with rubble and debris by the first quarter of the 1st century AD, which I understand implies a swift pattern of utilisation of that area, very close to the city walls, even in the Augustan period. After the abandonment of the *mausolea*, there is no evidence of further

funerary occupation in this allotment, replaced by a few industrial facilities and a lesser suburban road.



Figure 130. *Mausolea* in Corralón de los Blanes, Almendralejo St. (Left, Cáceres-Puerto and García Sánchez, 2020: 53–67; right, Heras Mora *et alii*, 2017: 707; 716).

There is residual presence on both sides of the Guadiana River, although the most significant is the excavation 8192 in the industrial complex 'El Prado' (Bejarano Osorio *et alii*, 2019: 625-664). This excavation is one of the first places in *Emerita* where funerary presence and industrial complex connect. The complex, already mentioned in Chapter 7.3, was composed of various kilns. Some of the kilns were abandoned and seized for funerary purposes, whereas the remaining kilns continued the production. It is one of the earliest signs of a pattern of use and occupation of the suburban areas that will be developing within the next two chronological ranges.

In addition to this, the workshops destined to the production of ceramic building material and early shapes of *amphorae*, like Haltern 70, were gradually replaced by funerary structures at the end of the 1st century AD in other areas of *Emerita* (Bello Rodrigo, 2007: 433–56), as we have seen with the workshop in the Hospitality School (Bejarano *et alii*, 2019).

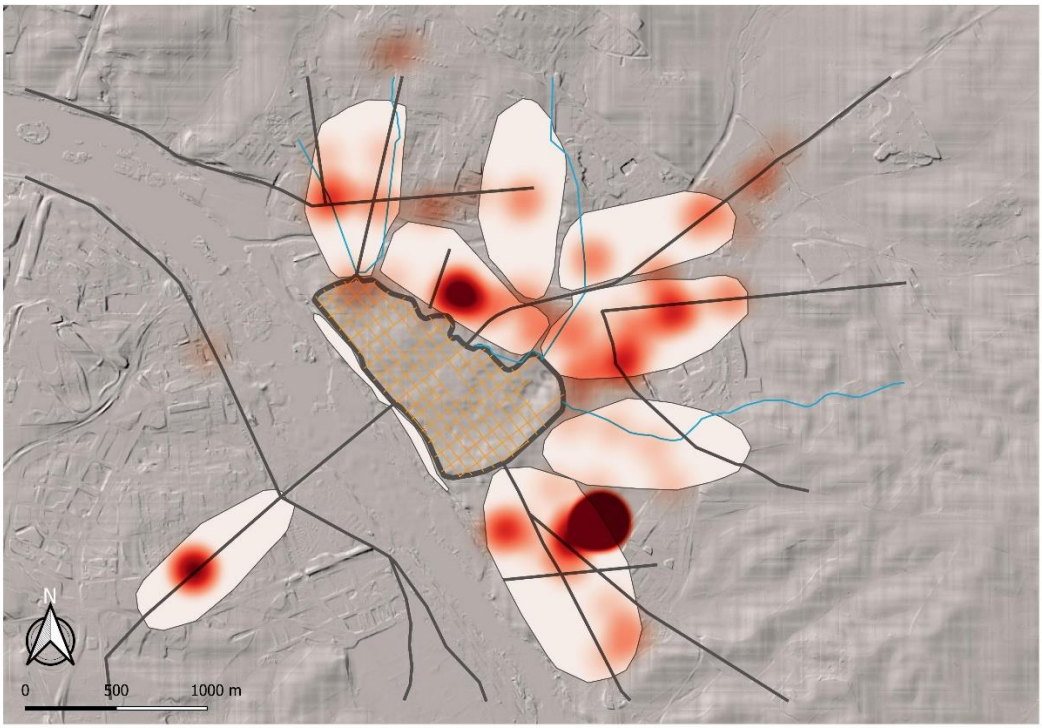


Figure 131. Occupation of the funerary areas in *Emerita*. Linear distribution. Chronological range AD 50-100. Image: Carlos Cáceres-Puerto after Cáceres and García, 2020

In the fourth chronological range -AD 100-150- (fig. 132) we can see an exponential growth in the Albarregas Valley, to the north of the colony, the emerging funerary presence will steadily grow until the 2nd century AD. The consolidation of this necropolis is attested by the location of different artefacts spanning from the early 1st century AD to the 3rd century AD. As a matter of fact, Bejarano Osorio (2007: 131–51) documented a fine ware vessel copying a Mayet XLIII in excavation number 10066 by the circus, near the Albarregas River. This shape has been dated to between AD 1 and 200, although this particular copy was dated to between AD 41 and 100. During the second range, AD 0–50, the sequence of occupation of the military compound can be seen as the perfect example of the historical discourse in the suburban areas of the colony. The funerary presence decreases from its peak in the 1st century AD to the 3rd century AD, when in some areas it completely disappears.

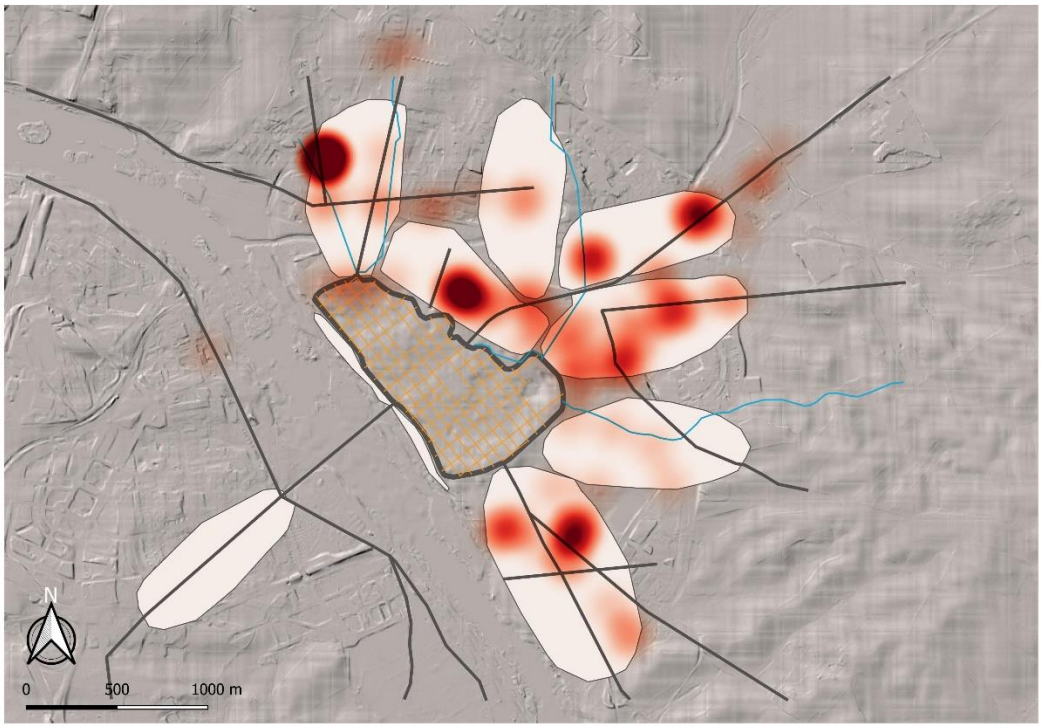


Figure 132. Occupation of the funerary areas in *Emerita*. Linear distribution. Chronological range AD 100-150. Image: Carlos Cáceres-Puerto after Cáceres and García, 2020

By the beginning of the 2nd century, we can observe an increase of the occupation around the aqueduct of San Lázaro by the Albarregas River. There is also a decrease of funerary activity on the left bank of the Guadiana River. in the same period, the area surrounding the circus experienced a steady increase in the occupation of funerary structures. Meanwhile, the area known as 'El Disco', to the south of the circus, will steadily lose its former importance. The abandonment of glass containers in this area from the late 2nd century AD suggests an intentional movement of the funerary area to other nearby places, like the area of the circus or the Albarregas Valley (Alonso and Caldera de Castro, 2014: 130). We start to observe a stabilisation in the funerary areas of the colony, with a slight decline in some areas over the next chronological range -AD 150-200- (fig. 133), like the necropolis of the bridge over the *Barraeca* River, and on the right bank of the Guadiana River following the route towards *Colonia Patricia*. The funerary presence in the Valley of the Albarregas is still strong, although it will rapidly change in the next two chronological ranges.

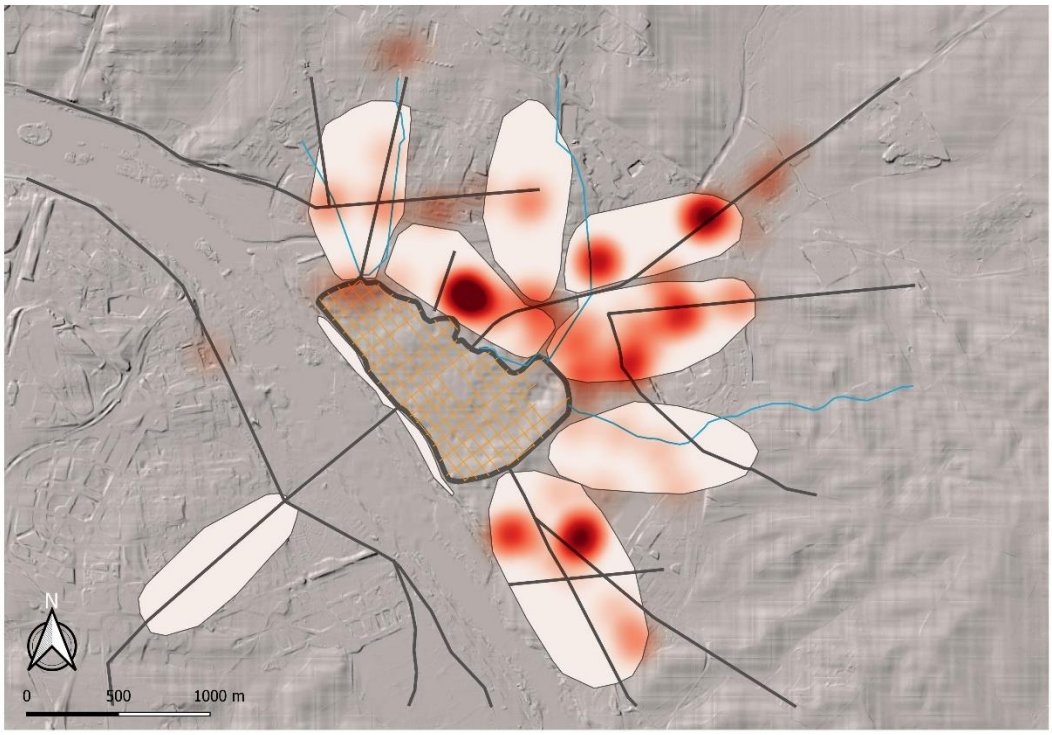


Figure 133. Occupation of the funerary areas in *Emerita*. Linear distribution. Chronological range AD 150-200. Image: Carlos Cáceres-Puerto after Cáceres and García, 2020

The sixth (AD 200-250) and seventh (AD 250-300) chronological ranges (fig. 134) corroborate with a residual presence in the south and southeastern sides of the colony, whereas the Albarregas Valley maintains part of its importance during the 1st and 2nd centuries AD. The usage of the rest of the eastern area will, however, begin a process of decline, with a special emphasis by the circus (northeast) at the end of the 3rd century AD. There is a correlation between peripheral sites and the use of suburban areas in *Emerita* between the late 1st century BC and the beginning of the 3rd century AD. They do follow clear patterns of occupation. The earlier farmsteads have a remarkable utilitarian purpose, supplying the colony with the necessary materials for the completion of the early urbanism process. The main feature in those settlements appears to be the kilns that were clearly abandoned by mid-1st century AD, at the same time the funerary presence near *Emerita* reached its summit. The early chronologies for most of the peripheral farmsteads of *Emerita* suggest an expiry date of said structures. Hence, I can assume not an early occupation but an early utilisation of the suburban areas of *Emerita*. However, there is evidence of a late

abandonment of some rural sites by the 3rd century AD, with an ulterior funerary occupation of those spaces.

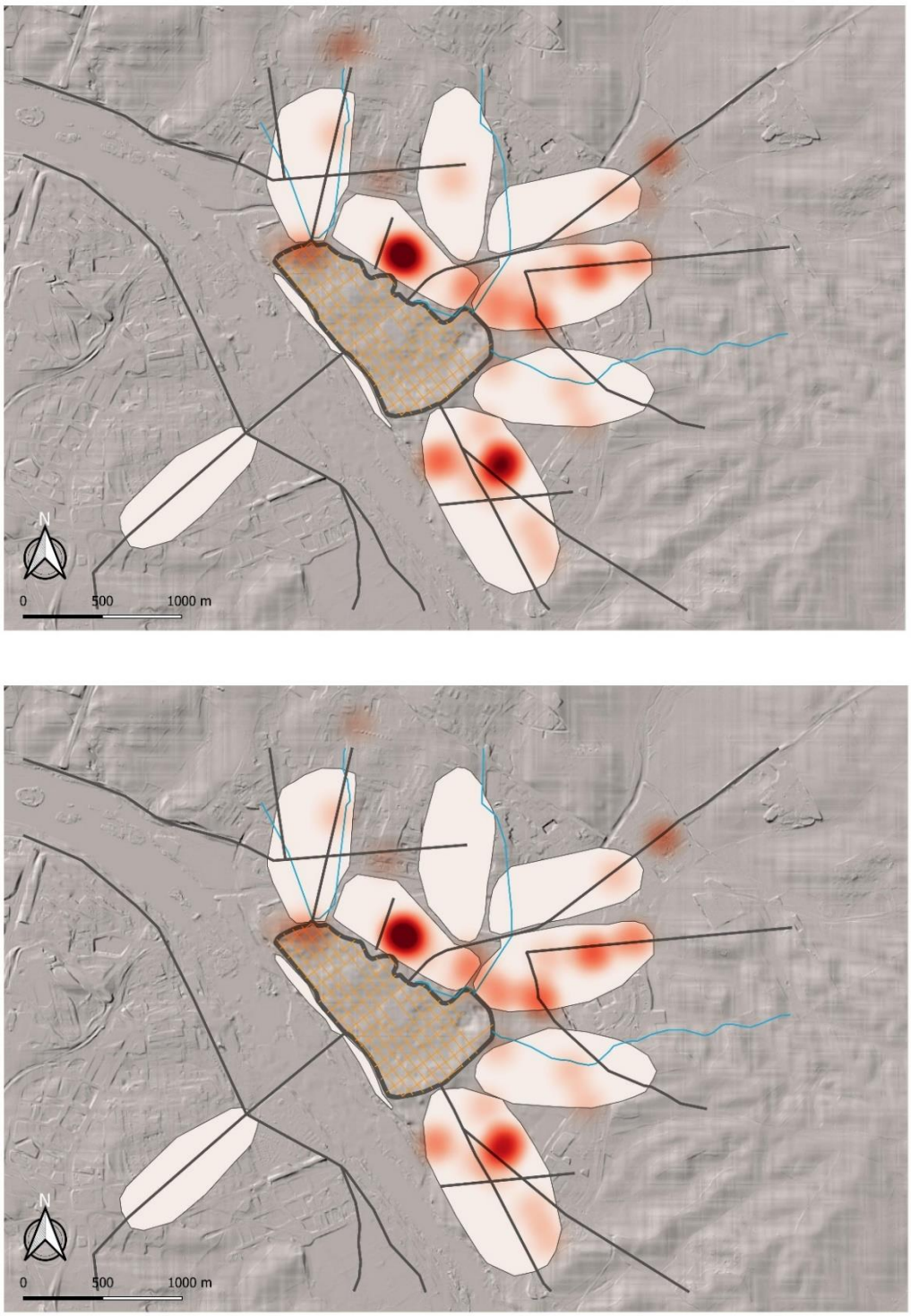


Figure 134. Occupation of the funerary areas in *Emerita*. Linear distribution. Chronological range AD 201-250 (Top), AD 251-300 (Bottom). Image: Carlos Cáceres-Puerto after Cáceres and García, 2020

11 Discussion

11.1 Summary of key aspects developed during my research

Colonia Augusta Emerita was a Roman settlement which followed the average process of a colonial foundation developed by Augustus in the Iberian Peninsula at the beginning of his reign. However, it also possesses some unique characteristics that allow *Emerita* to stand out, not only in the contexts of the Augustan foundations in *Hispania*, but also as a case study for various socioeconomical aspects within the Imperial context. In this chapter I will summarise the evidence I have collected for my research in relation to the analysis of the urbanism of the colony and the connectedness between *Emerita,* functioning as a provincial hub, and the surrounding Lusitanian hinterland.

The purpose of my Ph.D. thesis is to re-evaluate some major aspects of the colonial process to improve the current understanding of the context of the Augustan foundation in Early Imperial Roman chronologies. One of the major goals of my research is to explore whether the funerary contexts excavated in the suburban areas of *Emerita* could elucidate various chronological problems concerning the early urbanism of the colony. Besides the dataset of funerary contexts, I developed a multivariate approach to study and analyse *Colonia Augusta Emerita* and its foundation process in a broader context.

My research can be categorised in the analysis of four additional datasets that I considered essential to the appropriate fulfilment of this thesis: the study of the distribution of the allotments among the colonists and the configuration of the Roman land planning, the usage of funerary archaeology evidence to establish patterns of occupation, the use of iconographical discourse in the mint of *Emerita*, and the relationship set between *urbs* and *ager* in Early Imperial Roman contexts. The study of the occupation patterns also serves its purpose as an additional way to study the suburban landscape of the colony as well as to develop a further understanding of its urbanism.

Thus, one of the focal points of my work was the assessment of the urbanism of the colony in the Early Imperial Roman period and the inherent development and transformation processes undertaken by any urban settlement

in a growth phase. My research covered a variety of archaeological and historiographical sources, although one of the most crucial aspects was addressing the study of the dataset provided by the major funerary evidence available for the Roman colony. I developed an extensive database and studied the material throughout a quantitative analysis of funerary contexts from suburban areas of *Emerita* between the 1st century BC and the 3rd century AD. The database can be consulted in the catalogue, in the Appendix I of this thesis. I regarded the grave good elements as a focal feature as they provided meaningful and different approaches: cultural ethos, social history, social relationships, the main foundations of provincial economics, and the basic forms of “Romanisation” in the determined territory.

In addition to the funerary contexts, I also explored other variables that allowed to assess the connectivity of the urban spheres with the rural landscapes surrounding *Emerita*. In order to achieve this purpose, I explored the colonial land planning and *centuriatio* process in the rural and peripheral areas of the Lusitanian capital. The development of the provincial settlement was favoured by various factors, like the substantial communication network developed around the Augustan colony, the dimensions of the allotments and the early establishment of farmsteads controlling the Lusitanian hinterland. Finally, I evaluated the role of iconography in coinage as an assimilation enhancer for the first colonists, utilising the depiction of pre-Roman deities and Roman assimilation of these deities to create an iconographical discourse linking the Roman colonists to the Lusitanian territory.

The relationship between the urban spaces and the rural areas within the Roman orbit is that of symbiosis. In consequence, it is not possible to completely understand the *pars urbana* without contemplating the rural hinterland as well. I analysed the distribution process of the *ager* granted by Augustus to the colony and the division of allotments for the colonists. The *civitas* was the core of a universe formed also by the *ager*, which would complement and supply the urban areas. Thus, we must look at both components from a unique perspective: with a unified approach. I also take into consideration the various historiographical theories considering hypotheses for the frontiers of the territory of the colony along with the communication nodes connecting the different areas, with a

special emphasis on the suburban spaces. *Emerita* was the nucleus of a provincial hub, and thus the road system acted as arteries, maintaining the influence of the colony in rural areas, whereas the rural settlements supplied the colony with raw materials. In addition, I examined the iconographical discourse applied to the first coinage series minted in the colony. The coins were designed to develop a political discourse implementing a sense of continuity between the pre-Roman population and the Roman settlers through identifying indigenous deities with Roman gods.

Traditionally, the urban organisation of *Emerita* has been seen as an immutable fact since foundational times, ca. 25 BC, especially regarding the perimeter of its defensive wall, although there are multiple pieces of evidence suggesting otherwise. The urban development of the Augustan colony can be corroborated by the analysis of the chronology of the funerary contexts to establish certain pattern attested by the archaeological record.

In order to carry out my research concerning the funerary evidence, I needed tangible evidence with which support my theories, analysis, and comparisons regarding the spatial distribution of the colony, its connectivity with the surrounding areas and some hybridisation aspects relating to the first colonists of *Augusta Emerita*. As the data I was searching for existed but was not systematised, I created a dataset compiling the information from 77 excavations from the archaeological reports written by the Archaeological Consortium of Mérida between 1991 and 2011. I intend to continue developing my research further beyond this year as the local archaeological entity updates its dataset and allows access to such information. The information provided by the 77 interventions where Early Imperial Roman funerary evidence is present was certainly overwhelming; I gathered 1,015 funerary structures and identified 2,255 elements of grave goods. Of those 1,015 structures, 361 belong to the inhumation rite and the 654 remaining are cremation pits, although the statistical analysis of the typology of the structure is not covered by this research project. The selection of these reports was not arbitrary; I carefully selected them from the entire dataset, available in the Catalogue in the Appendix I, as they contain proof of funerary presence between the end of the 1st century BC and the beginning of the 3rd century AD.

I present the statistical analysis of the funerary contexts and their grave goods as the key contribution of this PhD. Despite the enormous amount of data gathered over two decades of continuous archaeological work in Mérida, the study of the Early Imperial Roman funerary evidence has not been given enough attention by the scientific community. The material culture from the funerary deposits provides crucial data which allow us to understand the settlement process, the suburban urbanism of a Roman provincial capital, the connectivity between *Emerita* and its environs, and the distribution of the first inhabitants in the public land granted to the Augustan colony.

Finally, the last analysis belongs to the connectivity between the colony and the peripheral farmsteads, *villae* and rural settlements located in the mid Guadiana Valley, the area of influence of the colony. I examined the material culture that I gathered from the archaeological reports, analysing various hypotheses regarding the distribution of certain goods and the role *Emerita* would have within its territory.

Overall, the data suggests a greater connectivity than was previously assessed between various areas of the Mediterranean sphere in the earlier phases of the colonial process. In addition, the chronological study of the grave goods contexts points out a possible variation of the *pomerium* between foundational times, ca. 25 BC, and the beginning of the 3rd century AD. Furthermore, the study of the rural areas surrounding *Emerita* agrees with the results obtained in suburban areas, thus proving evidence of an early usage of the land for industrial purposes, with a later stage of abandonment by the beginning of the 3rd century AD prior to being utilised as funerary spaces.

In what follows, I will present my findings by dividing them into the seven research questions that I proposed on the introductory chapter, to facilitate the exposition and interpretation of my results.

11.2 Main research questions and interpretation of the results

11.2.1 How did the land distribution process shape the environs of *Augusta Emerita* in Early Imperial Roman contexts?

A new Roman society was in a position of power, dominating the socioeconomical processes of the colony and its territory. This also affected the indigenous presence; however small it was, it was attested in Strabo's accounts (III, 2.15). But one must wonder about the appropriate terminology and conception concerning the relationship between conqueror and conquered if such terms shall be applied to this case. The traditional models explaining "Romanisation" as a linear transfer of ideas, knowledge, culture, and idiosyncrasies (Mommsen, 1968; Kalenderian, 2020), or Haverfield's conception of '"Romanisation" as progress' (Haverfield, 1912; Webster, 1996: 12) have long been proved to be obsolete. It is a mistake, however, to associate modern political terminology with former political and military entities, and it is an error most of us tend to subconsciously commit. We shall not compare, for instance, Rome with modern examples of imperialism, as the ethos and socioeconomical aspects of Rome's dominance differ from modern politics, even if the outcome was very similar. Modern models, like those developed by Webster (2001) and Dietler (2005), advocate for a hybrid approach in which both parts adopted and appropriated foreign elements. In any case, as occurred with Mommsen and Haverfield's approaches, the association of *Romanitas* as civilization and native elements as barbarian has also long been refuted (Webster, 1996; Mattingly, 2013; Alston, 2013). As a matter of fact, this top-down approach towards the "Romanisation" process bestows a greater level of influence upon the elites, removing the agency from the indigenous communities.

The lack of evidence and mentions in classical references of any conflict in the territory of the mid Guadiana Valley when *Emerita* and other colonies, such as *Pax Iulia* (Beja, Portugal), were founded might imply an improbable peaceful 'transition' where all the communities were involved, not only the elites. However, these changes were swiftly implemented when the first settlements were established, allowing the socioeconomical status-quo to be altered in favour of

the Roman ethos. This was, nonetheless, facilitated by the scarce and segmented Iron Age population in the mid Guadiana Valley. The connectiveness between the urban centres and the rural settlements in the mid Guadiana Valley was already thriving during Iron Age, as it has been discussed in Chapter 4.2. The east-west axis set between *Dipo* (uncertain location, traditionally situated between Guadajira and Talavera la Real, Badajoz) and *Conisturgis/Metellinum* (Medellín, Badajoz) implied a certain level of occupation. This was complemented by the farmstead complexes between El Carrascalejo/Aljucén, to the north, and Alange, to the south (fig. 3).

In the case of *Emerita*, it can be attested by Strabo's (III. 2.15) accounts of the inclusion of native inhabitants as *incolae* in the foundational process, which has been proved by Edmondson (2011: 32–33) throughout the study of epigraphy in the limits of the *pertica* of the colony. In this case, inscriptions demonstrate a modification of their names for more 'Romanised' ones. I can only assume they estimated the benefits they could obtain by adapting to the new political power and privileges they gained as they were, allegedly, part of the centuriation of the colony. Thus, I shall enquire what the natives did to be associated and assimilated with the Roman settlers rather than how the elite differentiate from the local communities. This process must have been swift and successful, as besides some indigenous names in certain inscriptions, I have not documented any pre-Roman component within my dataset of funerary evidence in *Augusta Emerita*.

Regardless of the reflection concerning the reason of the foundation, this process has been broadly discussed by scholars like Álvarez Martínez and Nogales Basarrate (2013: 53–73; 2018: 13–52), Le Roux (2010), Álvarez Sáenz de Buruaga (1976: 19–32) and Palma García (2018: 311–53), among many others, with a special emphasis on the cultural and scholarly conception of the term '"Romanisation"'. The *Ager Publicus* belonging to the Lusitanian colony has been subject of study since Roman times, being analysed as a case of study by authors like Aggenus Urbicus, Sicculus Flaccus, Iulius Sextus Frontinus and Hyginus Gromaticus (Thulin, 1913), due to the exceptional the size of the allotments and the amount of available land that allowed for three different centuriation processes. *Emerita* was placed at the centre of its *ager publicus*

unlike other Republican foundations, like *Tarraco* (Tarragona, Spain) for instance, occupying territory formerly exploited by other Roman settlements, as I have mentioned. This process of distribution of the land can be seen as a means of "Romanisation" of the rural areas, alienating the Lusitanian hinterland from their previous indigenous owners by being granted to the colonists. The Lusitanian territory granted to the Augustan colony was not enormously populated by pre-Roman communities, although there is evidence suggesting a bigger presence that was previously considered, as I mentioned with the discussion of Strabo's accounts and Edmondson's research. Further evidence of native-Roman relationships has been assessed by Hidalgo *et alii* (2019), who analysed funerary epigraphy belonging to *Emerita*. López Melero (1994: 84–86) and Saquete Chamizo (1997: 49–50) supported the theory of the size of the *ager publicus emeritensis* alluding to the availability of land. However, the corroboration of pre-existent communities and Roman colonies nearby would mean the foundation of *Emerita* subtracted from these areas by favouring the Augustan colony, which I believe influenced the objective of Augustus to break with the Republican past in *Hispania*.

However, as the establishment of new settlements encourages the arrival of native groups of population (Mateos, 2011: 128), which facilitated the "Romanisation" process in the new provinces, the native element in *Emerita* is yet to be proven by archaeological evidence despite of the accounts of Strabo. This is a phenomenon already studied by Ventura (2008: 60) in certain settlements in *Baetica* province: *Salaria* (Úbeda la Vieja), *Colonia Patricia* (Córdoba)*, Ucub*i (Espejo) and *Astigi* (Écija) are only a few examples. Evidence of these indigenous elements could be sought after in early *domus*, as I mentioned in Chapter 7.3. The materials employed in the first stages of the colony were somewhat modest and were later substituted by richer elements once the colony began to thrive economically after the 1st century AD. As such there is not enough evidence of early households besides some examples in Morerías (Alba Calzado, 2001: 403), southern *Emerita*.

Nevertheless, the centuriation process would remove the native inhabitants from their property in order that they could be granted to the new colonists. Tarpin (2002) and Gárgola (2004) argued that the centuriation was an

administrative tool rather than a form of extensive control of the territory, although the second one is implicit in the first assumption. I differ. The centuriation process implied an effective control of an area by a new socioeconomic, military, and political entity regardless of its previous occupant. The settling of veterans/colonists on these allotments was an advantage, but they were also an instrument of the "Romanisation" of the area. The centuriation process was not homogeneous in all Roman settlements, nor was it within the Augustan colonial settlement process. As a matter of fact, the only common factor shared by the successive distribution processes is the dispossession of the primitive landowners when the Roman state decided to develop a reorganisation of the field grid. This grid of the *ager publicus* (fig. 37) adapted to the existent land, avoiding natural features such as forests, quarries, mountains, and all other areas unsuitable for agriculture. In *Emerita* there is a certain degree of specialisation, with agricultural allotments on the southern bank of the Guadiana River and quarries and a sacred forest in the northern bank (Cáceres-Puerto, 2019: 131–51). Sánchez Barrero (2010) studied the delimitation of the *ager publicus* and the suburban areas of the colony whereas Márquez Pérez (2008) did so with the funerary occupation of those areas.

11.2.2 What was the relationship between *urbs* and *ager*, and the role of communication nodes as arteries connecting rural and urban spaces?

The connectiveness between the urban centres and the rural settlements in the mid Guadiana Valley was already thriving during Iron Age, with the east-west axis between *Dipo* and *Conisturgis* and the north-south axis with sites in El Carrascalejo/Aljucén (Enríquez Navascués and Domínguez de la Concha, 1991: 35–52) and Alange (Pavón, 1996). This previous occupation is tangible with evidence of indigenous toponymics such as *Ataecina*, *Feroniae*, *Ana* and *Barraeca* remaining in the territory of *Emerita*. The idiosyncrasy of *Ataecina* will be further discussed in section 11.2.6, although it is worth mentioning the influence it might have had within local pre-Roman communities, which

encouraged its utilisation, as evidence suggests, by the Romans as a cohesive mechanism towards the indigenous communities.

Nevertheless, the Roman State always attempted to promote urban development politics as a pragmatic means to favour “Romanisation” among the conquered territories (Hopkins, 1996: 18). Therefore, the rural areas, like the hinterlands of *Hispania*, needed more efforts from the central state in order to have an equal relationship with the rest of the provincial centres of economic and political control through ‘*Romanitas’*, an ideological principle of unity which provided cohesion and strength above regionalisms and lesser peoples (Guzmán Armario, 2005: 255). These ‘efforts’ are tangible in the centuriation of the colony discussed in section 11.2.1 and suppose a key aspect in the relationship between rural communities and the urban centre.

As previously discussed in Chapters 4.2 and 7.1, the selection of the location for the foundation of the colony was not accidental. Its position in the mid Guadiana Valley granted a key advantage in the southwestern Iberian communication node, taking into consideration the pre-Roman routes connecting the Northern Plateau with the Guadalquivir basin through *Metellinum* (Medellín, Badajoz), a pre-existent Roman colony which would remain subservient to *Emerita* after the foundation of the latter. The Augustan colony would be located equidistant from the main pre-Roman and Republican settlements in the mid Guadiana Valley: *Norba* (Cáceres) to the north, *Conisturgis*/*Metellinum* to the east and *Dipo* to the west (fig. 2).

Although the location of *Dipo* is still unknown, and it could have been possibly destroyed when Augustus founded *Emerita*, there are various theories on the matter discussed in Chapter 4.2 (Almagro Gorbea, 2011: 59–92; Jiménez Ávila, 2011: 35–58). However, other theories suggest the existence of *Emerita* had to be sought due to the presence of the Guadiana River rather than its location nearby other Roman settlements. I agree to both, although I remark that the political situation superseded the strategical geographical location. Therefore, considering the background of both pre-existent settlements, the selection of this location for *Emerita* would have been a bold statement of change by Augustus towards the status-quo of the territory and the Roman ethos. As the new emperor seized power, he established a new territorial power in a different location,

separated from the Republican aura in *Metellinum*, the past civil conflicts involving *Sertorius* in *Dipo* and the *Caesarean* past in *Norba*. He also took part of the *ager publicus* of *Norba* and *Metellinum* in a successful attempt of establishing dominance and power, as both colonies would now be tributaries of *Emerita,* and both had progress and expansion cut off by the presence of *Emerita* as the capital of a new province. This scenario would concur with Häussler's (1998: 11) description of the "Romanisation" process. He adduced that this process not as an intrinsic key point within the Roman political science but a justification for the expansion and political changes which transformed the Republic into the Principate, and later the Roman Empire.

The land distribution process and the occupation of the rural territory nearby *Emerita* was facilitated by the communication nodes. They conveyed the influence of the colony in rural areas, whereas the rural settlements, favoured by the centuriation process, supplied the colony with raw materials. The suburban spaces entailed a merger among the *urbs* and *ager* (Sánchez Barrero, 2010); this is a transitional buffer zone combining the urban living place with the exploitational element intrinsically related to the countryside (Fernández de la Vega, 1994: Sánchez Barrero and Marín Gomes-Nieves, 2000). The urban sphere was then linked to the suburban and rural areas by the communication system which truly acted as a bridgehead of '*Romanitas'*. Some of the lesser roads, both in the southern and the northern side of the colony, seem to have a certain pattern coinciding to the plausible grid of the centuriation proposed by Ariño and Gurt (1992–1993). However, the entire grid does not concur with the communication system as Gromaticus mentioned that part of the *ager publicus* did belong to other settlements granted to the colony as *praefecturae*, hence preserving their original *pertica* and orientation.

Considering said *praefecturae,* there is a certain correlation between the debate of the frontiers of *Emerita* and *Lusitania* and the *pomerium* of the colony. Canto (1989: 195) argues for the unlikely possibility of immutable frontiers throughout early stages of both the colony and the province of *Lusitania*. Hence the limits depicted in the *Peristephanon* by Prudentius (Hym. III) are the borders existing in the 4th century AD; therefore, it might be very plausible that a previous

border was set, considering the permeability and change allowed by a territory of new creation.

Archaeological research in *Emerita*, nevertheless, has a discrepant component, as the southern bank of the Guadiana River has been thoroughly analysed to the detriment of the northern bank. It also occurs with the rural settlements but to a lesser scale, as I discussed in Chapter 7.3. The problem with the centuriation is that we know the *pertica*, the limits of the allotments and even the *locus gromae* (fig. 62); however, the northern bank has not been that well studied. In any case, the grid has been extrapolated towards the northern bank, where the frontier between the territory of *Norba* (Cáceres) and *Emerita* appears to converge. My study supports the studies of Cerrillo (1988), Gorges (1988), Ariño Gil and Gurt (1992–1993, 1994a: 34–36) and Ariño *et alii* (2004) concerning the remnants of the *pertica* in southern *Emerita*, as I published a paper on the topic (Cáceres-Puerto, 2019: 135–51).

11.2.3 What is the role of the funerary contexts in shaping the suburban areas of *Emerita*?

Prior to assessing the urbanism part of my research, I should begin with one of the main problems in the study of the colony: the specific date of its foundation. The traditional date has been set to 25 BC according to the scripts of *Cassius Dio* (Roman History, LIII, 25. 2); however, multiple scholars have suggested otherwise. The accounts of Dio are the only textual reference from a classical author accounting for a foundational date. We also have to consider that this reference originated in the 2nd to 3rd centuries AD. In any case, as Dio tells us, the foundation of the Augustan colony was a part of a greater settlement scheme in the Iberian Peninsula as a result of the end of the war against the *Cantabri*, as mentioned in Chapters 2, 3, 5, and 6. According to the Roman author, the *deductio* took place on the 21st of April 24 BC, and the first *duoviri* were elected in 20 BC. This date does concur with the Annals of the colony and one inscription from the theatre commemorating a restoration sponsored by Trajan from AD 105 (fig. 6). On the other hand, various scholars defend a different chronological process for the Roman colony. Le Roux (2006), for instance, supports a slight

variation in the foundational date to between 16 BC and 13 BC, matching the establishment of the province of *Lusitania*. He contended that both colony and province were set up at the same time. Whereas Stylow and Ventura Villanueva (2009: 453–523) argue a foundational date closer to 20 BC, after an epigraphic study of some inscriptions from the theatre compound. Other scholars, however, support the theory of a previous foundation by Caesar at the same place, therefore the Augustan colony would be a re-foundation (Canto de Gregorio, 1987: 289–98; 1989: 149–206; 2017: 341–92).

There is always the possibility of a pre-Roman settlement in *Emerita*, although I do not possess any evidence in my grave goods database that would support this argument. The lack of archaeological evidence altogether points to negative conclusions, despite a futile hypothesis of a total destruction of previous settlements during the Augustan foundation. If that would have been the case, the Palaeolithic evidence in Morerías (Alba Calzado, 1997a: 285–316) or the Chalcolithic remains on Calvario Hill (fig. 9) (Barrientos Vera, 1997: 25–40; 2002: 135–71) would have also been destroyed. Exceptional findings from Iron Age chronologies have been made, analysed by Jiménez Ávila (2017: 1434–441), although such artefacts appeared decontextualised and, therefore, provide little information about their origins.

One of the pieces of evidence that supports different theories, like the plausibility of a pre-Roman foundation (Canto de Gregorio, 1987: 289–98; 1989: 149–206; 2017: 341–92), is the funerary elements. Although what can grave goods present in the funerary record of *Augusta Emerita* reveal about the development of a flourishing provincial centre and its urbanism? Cultural ethos, social history, social relationships, the main foundations of provincial economics and the basic forms of “Romanisation” radiated towards the peripheral communities. But more importantly, by analysing the chronologies of the funerary evidence in the suburban areas of *Emerita* we can establish patterns of occupation and urbanism in Early Imperial Roman contexts.

The study of the urbanism of the colony has had a remarkable ethnographical component. As a living archaeological site, the inhabitants of Mérida have coexisted with the Roman remains for centuries, and, as one can assume, popular culture adopted the historical buildings in the city as their own,

providing numerous legends and tales to explain their history. Thus, the remaining part of *cavea summa* of the theatre became seven thrones for seven Moorish kings when they decided the future of the city after its capture in AD 713, and the amphitheatre was, in the collective imagination, the location of the recreation of the bloodiest naval battles. Thankfully, due to the archaeological research, we have been able to exile some of the traditional visions of the city, more suitable for the Romantic period in the 19th century than to a proper archaeological site as Mérida is nowadays. However, there is still a certain degree from which the archaeological research must escape from the collective imagination. In Mérida, as I mentioned in Chapter 2, there is still the belief between certain sectors that the colony was built within a couple of decades, hence the entire ensemble is Augustan, even where evidence suggest otherwise. It is often adduced that the colony was founded in 25 BC, therefore everything Roman *must* be from that period.

Unfortunately, this is extrapolated towards certain Roman infrastructural features that were, in fact, started during the Augustan reign but not at all completed under the first Roman emperor. As a matter of fact, some archaeologists like Alba *et alii* (2014: 96–97) have suggested that structures like the walls, the bridge over the Guadiana River and the *forum* were conceived in Augustan times, therefore they ought to be defined as Augustan, regardless of the construction's chronology.

This amalgamation of the collective imagination, scarce archaeological approach for non-monumental structures until the 1920s–1930s and a low knowledge of certain areas we now deem essential for the understanding of the Roman site, allowed various theories which are already overcome to flourish. As a matter of fact, theories developed by Mélida (1921), Schulten's *Emerita Quadrata* (1922) or Richmond's appreciations on Schulten's hypothesis (1930: 99–116) are a good sample of archaeological approaches attempting to solve historiographical dichotomies for which they did not possess enough data. Hence certain areas of the urbanism of *Augusta Emerita* needed a critical analysis and an update from a different perspective, which is what I intended to do by studying the funerary contexts applied to urbanism.

The funerary spaces intertwined with industrial facilities and residential areas, hence, there was not an established division in the suburban areas of the colony. There was, however, a certain level of organisation among that chaos (Nogales and Márquez, 2002: 115) that allowed a certain degree of systematisation. The data does suggest an ordered utilisation of the peripheral spaces, with planning not dissimilar to the land distribution system present in the rural territory. Bendala Galán (1976), nonetheless, considered futile a systematisation, as the urban planning for the funerary presence was chaotic, with a minimal degree of organisation. I disagree, as various studies in the necropolis of Columbarios demonstrate the organisation of funerary grounds as tangible 'city of the death' alongside axes of communication forming funerary streets or 'Gräberstrassen' (Bendala, 2008: 101). This level of organisation was also evident in the 'funerary street between the theatre/St. Albín Hill and the circus, with industrial facilities, suburban *domus* and funerary structures distributed in the area. Regardless of the amount of data available, a recurring topic within funerary archaeology in Mérida is the forming of clusters of funerary evidence divided into smaller geographical units, despite different scholars pointing to the error in said premises. Thus, archaeologists tend to categorise the funerary areas in artificial constructs that were not applied by the colonial society. But the data reveals the axiomatic evidence of the futility of a grid reference system based on the cardinal points. The organising system is, evidently, the road network. Thus, I considered the funerary evidence as an entire unit.

The study of the funerary areas of *Colonia Augusta Emerita* allowed me to re-evaluate various aspects concerning the urbanism of the colony in Early Imperial Roman contexts. I did not only utilise the funerary contexts and the grave goods artefacts to establish patterns of occupation of the suburban areas, but also to assess different aspects of the colonial urbanism which have been subjected to hypotheses and theories in the past.

The main analysis ought to be made concerning the defensive walled perimeter, as the data I collected strongly suggests significant alterations of the urban limits in early stages of the colony. I did not intend to modify the current discourse of the encirclement of the walls, as I considered appropriate the current course. However, as I previously mentioned regarding the limits of the colonial

territory and provincial limits, the *pomerium* layout was subject to change in the early stages of existence of the colony, especially considering the addition of new public buildings as the province of *Lusitania* was created, as with the Provincial *Forum* (studied by Álvarez and Nogales, 2003; Edmondson, 2011: 35; Nogales and Álvarez, 2018: 28–30, among many other researchers).

Prior to discussing my research on the pattern of the shifting layout of the *pomerium*, I should firstly address the alleged purpose of its construction, whether it had a defensive component or rather was merely a symbolic feature of the colony. Álvarez Martínez (1984) considers that it was a defensive element and was never altered; however, I tend to disagree. Considering the lengthy process of construction, of at least 75 years, I do not consider it as a defensive element. There are, however, some architectural elements differing from my consideration, for example the ditch recently excavated in the northeastern sector between the amphitheatre and the allotment of the National Museum of Roman Art (excavated by Murciano Calles and Sabio González, 2020: 155–81). This feature, from Late Republican/Augustan chronologies, might therefore imply a defensive purpose early on and then a change to its utility, and as this ditch was not needed, it was later backfilled. However, I also consider the possibility of an early construction of such a defensive feature, like the structures present in Roman military camps, as this area did not have a proper wall until the mid-1st century AD. Hence the ditch would serve as a provisional defence and was subsequently backfilled after the wall was constructed.

Regarding the construction date, Le Roux (2015: 102), for instance, suggests an early construction of the defensive wall, but there is evidence also suggesting it was a long ongoing process, like a Claudian *Aes* dated in AD 41 found embedded in the mortar of the wall in the northern area, near the Albarregas Valley (Palma García, 2004a: 38). Further evidence can be observed with the current location of the walls and the amphitheatre, with both main eastern entrances to the building blocked by the walls, which indicates an earlier construction of the amphitheatre, as the masonry is as detailed as the other gates. This phenomenon, alongside the Late Republican cremation pits documented by Marcos Pous (1961) and Lequement (1977: 150) in the southeastern part of the amphitheatre, does support the theory of an occupation

shift in the late 1st century BC or early 1st century AD. Other earlier cremations in Columbarios and the Albarregas Valley defend my hypothesis of an unfinished urban perimeter during the Augustan reign, with a permeable *pomerium* which would not be entirely set in stone until at least the Claudian reign.

The general consensus among scholars is a variation on the walled perimeter through the first stages of occupation of *Emerita*, a theory I fully support. This refutes the traditional theory that the foundational outline of the ramparts remained immutable. Any alternative hypothesis would suggest the presence of funerary elements within the walled enclosure, which is automatically rejected by both the literary sources, like the Digest (Mommsen *et alii,* 1985) and a lack of archaeological evidence.

11.2.4 What connectivity can be determined by quantitative analysing the funerary contexts and their grave goods artefacts?

Besides the level of organisation of the funerary presence in the urbanism of *Colonia Augusta Emerita*, I shall also address foreign links analysed by the study of the 200 typologies present in my dataset. By assessing those links, I have been able to elucidate some cultural exchanges between the first inhabitants of the Roman colony and external influence which shaped the growth of *Emerita*. For such purposes, the remnants of the ceremonial procedures are evidence of external inputs into the traditional Roman ritual of the deposition of the deceased. My research suggests a greater connectivity with Northern African influences from the late 1st century AD, as the funerary structure with a libation tube discovered in northern *Emerita* corroborates (Murciano Calles, 2010: 60). This example of funerary ritual which draws parallels with similar structures in the North African provinces is also present in another example discovered in the military compound nearby (Sánchez Hidalgo et alii, 2019: 425–84; Sánchez Hidalgo, 2020: 29–52). Further North African influence can be observed in the *cupae*, although there has been a certain debate about whether they supposed a connection with the Mediterranean province or a representation of local North African ethos utilising local materials. I am inclined towards the latter, and *cupae*

would be a cultural adaptation of a foreign population. This is supported by my dataset as I documented late 1st century AD to the early 2nd century AD imitations of African Red Slip Ware. Thus, the local market was demanding such products, or there was a significant North African community for which such typologies were produced.

Further connectivity patterns have been assessed using material culture belonging to known and catalogued shapes of artefacts present in my dataset. My research does lean on common ware shapes for local interactions, rather it employs fine ware shapes to study further connections and counterfeiting of said pieces to understand the assimilation process with other parts of the Empire. Smit Nolen's typologies are widely present within my dataset, which are similar to the shapes found in the Alentejo region in Portugal and in other areas of the mid Guadiana Valley. However, local varieties were also produced within the colony, which suggests a higher degree of specialisation and a thriving economic hub, with local varieties of glass vessels studied by Caldera (1984) and coarse ware shapes by Sánchez (1992).

Distribution patterns of coarse ware vessels shall be sought in lesser regional centres. Similar common ware shapes have been documented in the villa of Sao Cucufate, Portugal (Vaz Pinto, 2003); various *necropoleis* of the Alentejo region, also in Portugal (Smit Nolen, 1985); in the villa of Torre Águila (Rodríguez Martín, 2005); and even in *Contributa Iulia Ugultunia* (Mateos Cruz, Pizzo and Mayoral, 2014: 109–32). The mention of *Contributa* is not insignificant as the settlement, south of *Emerita* in the *Baetica* province, would have been influenced by the Lusitanian capital due to its relative geographical closeness. Hence, even if commercial links were not substantially large between *Lusitania* and *Baetica*, this indicates a degree of interprovincial connectivity and influence radiating from *Emerita*. *Baetica* was not an established trading route for *Emerita*, as the colony developed relationships with commercial hubs in Northern Iberia, considering the colonist's legionnaire's past, and with the Alentejo region.

11.2.5 What was the role of the typologies of grave goods artefacts in the development of *Augusta Emerita*, its suburban areas, and its environs?

As I mentioned in 11.2.3, the suburban areas were not compartmentalised, as funerary spaces intertwined with industrial facilities and residential areas. There was, however, a certain level of organisation among that chaos (Nogales and Márquez, 2002: 115). The data does suggest an ordered utilisation of the peripheral spaces, with a similar planning to the land distribution process in the territory of the colony. Other academics, like Bendala (1976), considered futile a systematisation, as the urban planning for the funerary presence was chaotic, with a minimal degree of organisation. I do not agree with said approach, as it is refuted by evidence in the funerary areas of Columbarios and the *Via Sepulchralis* connecting the circus with St. Albín Hill. Regardless of the amount of data available, a recurring topic within funerary archaeology in Mérida is the forming of clusters of funerary evidence divided into smaller geographical units, despite different scholars pointing to the error in said premises. Thus, it is not possible to understand the funerary areas of *Augusta Emerita* if the *necropoleis* are divided into artificial constructs that were not applied by the Roman colonial society.

The vast majority of evidence lies on the northern bank of the Guadiana River, following main communication nodes, which were the elements organising the funerary areas. The exception would be the route exiting the bridge over the Guadiana River, which was covered by funerary structures until the 1960s when they were backfilled or destroyed by modern construction. The scarcity of the material present in my dataset in this area is explained by the lack of evidence in the excavations between 1991 and 2011. The excavation number 2029 belongs to a re-excavation by Sánchez Barrero (1998: 273) of the mausoleum ‘N’ documented (fig. 102) by García y Bellido (1962: 4–5). This is the only sample I obtained from the main funerary area, which was documented by García y Bellido. He described the area as the Iberian *Via Appia* (1962; 1966a), considering the level of preservation of the original communication route and the

number of funerary buildings, around 100, still standing when the excavation occurred.

The main problem is determining the chronology of the area to establish an ordered pattern of occupation for a better understanding of the urbanism of *Augusta Emerita* in the Early Empire. To achieve that, it was important to analyse some axioms that have been widely exceeded, like the artificial compartmentalisation of the space in cremation and inhumation areas suggested by Floriano (1944: 164–66) or the refuted 'funerary crown' adduced by Marcos Pous (1961: 90), without considering the necropolis in the southern bank of the Guadiana River. The study of the grave goods context helps elucidate traditional problems within the local archaeological community. I have evidence supporting, for instance, a longer occupation span and a later abandonment of the site of Columbarios, although some scholars defended an earlier desertion, like Bendala Galán and Serra Rafols (Bendala Galán, 1972: 223–54; 1976: 141–61; 2004: 85–100).

Therefore, the occupation of the suburban spaces tends to differ between the foundation of the colony, with a more 'populated' southern area in the right bank of the Guadiana, and in later chronologies, when the funerary presence shifted towards the Albarregas Valley. This indicates adjustments in the distribution of the funerary areas once the colony was founded, which would later change and establish near communication nodes once they were set in the territory, connecting important suburban areas such as the amphitheatre and the circus, for example.

11.2.6 What was the role of coinage from the mint in *Augusta Emerita* in creating a sense of attachment to the territory for the first colonists?

The new settlers utilised the coinage from the Augustan colony to develop a varied iconographical discourse, achieving both the praise of a past military grandeur – the alleged '*Romanitas'* of *Emerita* – and advocating for Augustus and the new political order. This alleged glorious past is present in Series 3–5 of the coinage minted in *Emerita*, as I consider the depiction of the defeat of the

Cantabri as part of those Series as a manner of attaching the colonists to the land, even though if that event did not occur near *Emerita*. In fact, Series 3–6 enhanced the pre-Roman component regardless of the erroneous geographical location.

Instead of portraying the lack of indigenous past of the colony the *emeriti* reshaped the iconographic discourse, enhancing the local deities and relating themselves to them, as Augustus would achieve with *Venus* in the *Aeneid*, which strikingly compares to the Series of *Emerita*. They did the same with the depiction of the spoils of war; inasmuch as if they had defeated the previous occupants of the area of *Emerita*, the colonists also managed to assimilate the local deities to members of the Roman pantheon. Examples of the association of *Proserpina* with the local deity *Ataecina*, for instance, are very representative. This goddess, represented by a goat, had a sacred forest, *Lucus Feroniae*, in northern *Emerita* (Cáceres-Puerto, 2019: 135–51). Researchers have documented bronze figurines representing a goat in multiple places around the mid Guadiana Valley, from chronologies as early as the 5th century BC (as studied by Pérez Vilatela, 2000 and Almagro Gorbea, 2018). The worship of this deity, allegedly very well distributed throughout the territory, was employed by the Romans to their own benefit as a means of cultural cohesion.

The epitome of this search for establishing a Roman past in the territory can be observed in the depiction of the female river deity spitting water on the obverse and a priest figure ploughing on the reverse (RPC 1/5/5, RPC 1/5/6, RPC 1/6). These images constitute tangible evidence of the correlation established between Augustus and the territory.

11.2.7 What was the nature and chronology of rural settlements in the immediate environs of *Emerita*?

In addition to the typological classification of the artefacts, I have also considered the study of farmsteads, *villae* and lesser rural settlements to understand the occupation of the suburban spaces of the colony. Evidence suggests certain established patterns, such as more allotments being documented on the southern bank of the Guadiana River, including ceramic building material and pottery

industrial facilities, and mining complexes and chalk kilns on the northern bank. The better understanding of the southern bank is probably due to a better knowledge of that area, as it has been less disrupted throughout the years, not that in the northern bank there were not allotments and industrial facilities.

The rural settlements were located around the main communication routes within the province and did follow the traditional centres of influence of the mid Guadiana Valley, like *Lacimurga* (Puebla de Alcocer–Navalvillar de Pela, Badajoz) and *Conisturgis/Metellinum* (Medellín) to the east and the settlements inheriting the influence of *Dipo* (uncertain location, traditionally located between Guadajira and Talavera La Real, Badajoz) to the west. However, the main cluster of rural settlements, containing lesser dams, farmsteads and major *villae* complexes, was situated between the Rivers Guadajira and Matachel on the southern bank of the Guadiana River (fig. 91). This correlation between the consolidation of communication nodes, the establishment of trading routes with the hinterland and external actors, and the creation of workshops nearby *Emerita* altered the pre-existent trading scene in the Lusitanian territory, as was further analysed by Calderón (2002: 361–70).

Evidence suggests lesser farmsteads in Late Republican/early 1st century AD chronologies, when the rural sites in the vicinity of *Emerita* were destined towards mass production of ceramic construction material for the colony, whereas workshops located in suburban areas oversaw producing pottery vessels for the colonists. The location of the workshops in earlier stages and their position in relation to the wall perimeter points out to a diffused *pomerium*, supporting my theory of a vague urban limit during the first stage of existence of the colony. These workshops, according to various analyses (Sánchez, 1992; Rodríguez Martín, 1996a), suggest a sufficient level of production to supply alongside the production centres of the suburban areas and the demand of the inhabitants of the colony. It did prevent major import procedures towards the colony, although evidence of ceramic materials present in my dataset corroborates a reliance on the North Iberian market, especially from workshops associated with legionnaire contexts, like *Tritium Magallum* (Tricio, Spain) or *Pisoraca* (Herrera de Pisuerga, Spain), for example. However, the utility of these workshops was short-lived, as I have attested a shifting pattern of occupation of

the suburban areas where those industrial facilities were located. Workshops destined to the production of ceramic building material and storage vessels were gradually replaced by funerary structures by the end of the 1st century AD, with most of them turning into funerary areas by the 3rd century AD.

11.3 Limitations and weaknesses of my study. Recommendations for future research

Despite of the extensive bibliographical collection regarding *Augusta Emerita* and its territory, the lack of research concerning some key aspects of the Lusitanian capital is remarkable. I encountered difficulties in accessing publications covering funerary contexts beyond the grave location, chronological range, import-export ratio, etc. As I mentioned in Chapter 8.1, and above in section 11.2.3 and 11.2.5, the recurring topic within funerary archaeology in Mérida is categorising funerary areas forming clusters, somewhat unrelated to the other *necropoleis*. These artificial constructs were not applied by the colonial society. Artefacts are not usually compared among contexts unless they belong to similar typologies. In addition, there is a scarcity of published materials in certain aspects related to ceramic wares, for instance. They only tend to focus on the production centre, not in the typological differences. However, there are plenty of studies concerning fine ware shapes and glass vessels. Notwithstanding that this scarcity of publications, and even the lack of available materials, are accounted for the low systematicity in the early 20th-century excavation processes, when researchers were more inclined towards the monumentality of the structures rather than the material culture itself. This might explain the low presence of some typologies in my dataset, like African Red Slip Ware shapes, although their absence might have to be adduced to a later chronology of the shape which does not match the timeframe of my research.

One major aspect missing from the entire bibliographical compendium of Mérida is osteoarchaeological science. There is little research concerning the study of the skeletal remains of the colony, with the analysis of a small sample performed by Márquez, Cortesão and Santos (2008) being one of the most complete cases. This was complemented by the publications by Cortesâo *et alii* (2014: 218-222) and Cortesâo and Márquez (2020: 129-136). I was surprised to

discover the skeletal remains are still very much awaiting study and analysis in various depositories in the city of Mérida; however, the cremation process and the organic procedure in which the body was cremated have been studied by various scholars. Osteoarchaeological research has proved to be essential while studying human funerary practice (Kalenderian, 2020: 262), although it has had little impact in the research of the vast amount of funerary evidence around *Augusta Emerita*.

It is necessary to develop a unified discourse, as authors like Márquez Pérez (2020: 13–27) have previously done, with funerary archaeology in *Emerita*. I would also suggest the publication of the archaeological reports by the Consorcio de Mérida in other languages beside Spanish in order to facilitate the access to this valuable source of information concerning to the Lusitanian capital and territory to non-Spanish speaking researchers.

In relation to the publication of findings, the Consortium of Mérida has achieved a big task in publishing the reports of every excavation carried out by the entity as well as making them accessible online. However, one of my major setbacks in my research was discovering that the last year in which reports were published was 2011[24]. Hence, my dataset and therefore my research is not as updated as I would have wanted it to be. I did request the materials from unpublished excavations, although the results were not positive. Thus, I had to develop a dataset ending in 2011; however, the span of 20 years of published reports allows me to present significant results with a substantial dataset. Nonetheless, I will keep updating the dataset as soon as the archaeological entity keeps making their results public.

The survey of archaeological sites in the mid Guadiana Valley area needs to be updated, including major excavation projects in some of the sites with potential key information for the understanding of the hinterlands of *Lusitania*. Despite of past projects carried out by Gorges (1986), or current research like the Re-Rom project mentioned in Chapter 7.3 by Dr. Jesús García Sánchez from the Institute of Archaeology of Mérida-CSIC, further research is needed. When I

[24] Consorcio de Mérida recently published the reports between 2012-2014, albeit they still have 9 years of archaeological reports unpublished.

started my research of rural settlements around *Emerita* I was overwhelmed by the inaccuracy of the Archaeological Inventory of the province of Badajoz. Most of the cartographical data provided was consistently mistaken, often by more than 5km. In addition to the accuracy issue, I also encountered difficulties in accessing to the information contained within the Inventory, which I finally have access to but not to its entirety. Thus, I have completed thorough research on the rural settlements around *Augusta Emerita* but not including as many rural settlements as I would have liked to cover.

As a result of this summary, I can conclude that there is a necessity for a study with new inputs for the development of new approaches towards a better understanding of the suburban usage of the space of the colony, where funerary presence ought to play a major role.

12 Conclusions

During the course of this thesis, I have discussed multiple pieces of evidence that assess the relationship between *Emerita* as an urban centre and the influence it radiated towards the rural settlements. I have also developed a thorough research on the funerary contexts of *Emerita* to expand our knowledge of the occupational sequence of the suburban spaces of the colony. Summarising the aims of this research project, I have analysed a provincial capital in its territorial contexts, in plural. I have assessed various research currents differing evidence, and approaches towards a better understanding of the colonial status-quo in Early Imperial Roman chronologies. I proposed seven research questions, summarised in Chapter 11 (Discussion); although they are further developed throughout the course of my thesis, I chose to compartmentalise them for a better presentation of my results. Hence, I present my results, hypothesis and theories taking into consideration the evidence collected.

I advocate for a certain degree of improvisation with the settlement process. Not with the foundational procedure, which was perfectly envisaged by Augustus and his advisors, but with the construction phases of the colony. As a matter of fact, this is proved by the adjustments needed within the colony with its proclamation as a capital of *Lusitania*, when 24 *domus* had to be demolished to accommodate the ensemble of the Provincial *Forum* (as discussed in Mateos and Pizzo, 2012: 195). Thus, the normal shifting patterns in the usage of certain areas of the colony would differ from the foundational chronologies of later dates. In this scenario, the funerary evidence located in the allotment nowadays occupied by the amphitheatre would have been moved to the northeast. This area would have been a *Via Sepulchralis* and has been analysed by Bejarano Osorio and Palma García (1997: 44–53). The funerary areas in *Emerita*, that I compared to other settlements in *Hispania* in Chapter 8.1, like *Colonia Patricia*, open new lines of research for future projects. Many hypotheses are yet to be proved or refuted using new, multivariate approaches, like geophysics, to obtain results where other methodologies failed, like LiDAR detecting roads in suburban *Emerita*, as seen in Chapter 7.1.

I therefore refute some of the traditional views of the general population and some proposals of certain scholars. The ascription of the Roman walls to the Augustan period is correct in some areas but mistaken in others. The conception of the walled perimeter as a unique entity points towards these misconceptions. It is not logical to assume that the entire perimeter of the walls, the bridges over the *Barraeca*, and *Ana*, the *fora* complex, and the theatre and amphitheatre compound were all built during the reign of Augustus. Especially considering that *Emerita* did not have sewage system until the mid-1st century AD. There is architectural evidence and artefactual proof supporting my claims. The Claudian *aes* located by Palma (2004a: 38) in the northern area of the walls, dated in AD 41, immediately suggests a later chronology of this stretch of the walls. In addition, the mere architectural analysis of the northeastern façade of the amphitheatre and its position in relation to the walls also prove this theory. The chronology of the amphitheatre has been set between AD 40 and 60. However, this façade was thoroughly completed prior to the construction of the wall behind it. Then, as the wall blocks three main entrances to the building, the wall must have at least a mid-1st century AD chronology. I advocate for a permeable *pomerium* during late 1st century BC and early 1st century AD, not for an incomplete one. This is also demonstrated by the existence of pottery workshops in the southeastern area, where excavations have corroborated the perimeter of the wall is located beyond this industrial facility.

Thus, it has been proven that the walls endured various strengthening processes and probable layout shifts. These changes in the occupation patterns were also transferred to the suburban spaces, as certain areas were destined to be necropoleis prior to being claimed by said urban spaces in early stages of the foundation of the colony.

As a matter of fact, I do not consider the wall as a defensive feature, which is opposite to what Álvarez Martínez (1984) primarily supported. I endorse this claim with the extensiveness of the construction period, which was at least 70 years. However, I do consider that there was a necessity for the first settlers to establish some sort of defensive features, like the ditch documented by Murciano and Sabio (2020: 155–81) in the northern part of the colony. Other authors, like Le Roux (2015: 102), would be partially mistaken, as they suggested an early

process for the construction of the walls, although there is plenty of evidence suggesting otherwise. The construction process did begin in foundational times, but the completion would have taken place much later.

I can establish patterns of occupation in the suburban areas of *Emerita* supported by the evidence obtained from the funerary contexts. The general pattern is a slowly but steady process of distancing the funerary areas from the urban centre, which peaks in the late 2nd century AD. It does concur with the normal development process of a growing settlement, with vacant or non-productive areas substituted by industrial facilities or domestic structures.

During the last quarter of the 1st century BC, there is an uneven distribution of grave goods artefacts, but they generally tend to distribute around the southeastern part of the colony. This area was densely populated during Augustan chronologies not only by funerary structures, but also by small rural settlements and industrial pottery facilities. The evidence from Columbarios seems to coincide with this, as the contexts analysed in my dataset were located farther south from this necropolis; however, the chronologies do concur. There is also evidence of funerary occupation within the amphitheatre compound and the northwestern edge of the *kardo maximo*, thus supporting my theory of a permeable *pomerium* in early foundational chronologies.

I attested a shift within the first half of the 1st century AD in the southeastern necropolis and the amphitheatre compound. The funerary areas were displaced towards the Valley of the *Barraeca*, probably as the urban centre begins to take shape, and the urbanisation project of the vacant allotments within the colony started. The main *Via Sepulchralis* connecting the theatre and the amphitheatre was formed, thus becoming one of the crucial gatherings of funerary presence in the colony until the late 2nd century AD. The areas closer to the *pomerium* were swiftly displaced by other uses, such as domestic horizons or industrial facilities. This is the opposite phenomenon when compared to the rural areas, where the funerary presence started to play a main role within farmsteads from the 3rd century AD, as occurs in the rural settlement documented by Nodar Becerra and Olmedo Grajera (2004: 209–30) in southern *Emerita*. In the urban areas, they main necropoleis did peak in use in the 1st

century AD to then steadily merge with suburban industrial facilities, decreasing both presence and importance of the funerary areas.

There is a certain correlation between rural settlement near *Emerita* and the usage of suburban areas in the Augustan colony between the late 1st century BC and the beginning of the 3rd century AD. They do follow clear patterns of occupation. The earlier farmsteads have a remarkable utilitarian purpose, based on supplying the colony with the raw materials needed for the completion of the first urbanism process. The main feature in those settlements appears to be the kilns that were clearly abandoned by mid-1st century AD, at the same time the funerary presence near *Emerita* reached its summit. The early chronologies for most of the peripheral farmsteads of *Emerita* suggest an expiry date of said structures. Hence, I can assume not an early occupation but an early utilisation of the suburban areas of *Emerita*. However, there is evidence of a late abandonment of some rural sites by the 3rd century AD, with an ulterior funerary occupation of those spaces.

The inclusion of indigenous components within the settlement process, as mentioned by Strabo, discard the traditional conception of an empty space in the territory of the colony. However, the origin of said population has not been elucidated, and the influence in the urban centre must have been merely testimonial, as evidence proves they were settled in the limits of the *pertica* of the territory of the colony. I do not possess any evidence supporting the presence of pre-Roman populations within my dataset, if they are present. The assimilation process was remarkable in earlier chronologies of the native component since there is little evidence of their cultural background in the Early Imperial Roman funerary evidence in *Emerita*.

Finally, the study of seals, stamps and other marks of a determined workshops supposes tangible evidence of cultural interchange, commercial transaction between regions and the mobility of populations. Therefore, the presence of certain typologies, though mainly their absence, indicates a chronological timeframe for the “Romanisation” process of the mid Guadiana Valley. The local consumers first demanded products with a remarkable Italic influence, often with substantial archaic features which were not fashionable at the time in the Italian Peninsula. I consider there is a clear association between

the ‘Italic’ product and quality, although I cannot discard the usage of said artefacts as prestige elements, signalling the Italic origin of the first settlers. In addition to the Italic imports, the input of products from Northern Iberian workshops had a substantial impact within the Lusitanian capital in earlier chronologies, especially from workshops associated with legionnaires encampments, like *Tritium Magallum* (Tricio, La Rioja) or *Pisoraca* (Herrera de Pisuerga, Palencia). There are also considerable absences. In earlier chronologies there is evidence of input of *amphorae* from the Lusitanian hinterland, with a particular shortage of *Baetican* imports in this regard.

The Italic component remained, as I have analysed the imports of oil lamps from Italic workshops; however, local artisans were swiftly producing counterfeits of these shapes by the late 1st century AD. Thus, the analysis of the materials suggests a sufficient level of local ceramic production to avoid a great reliance on imports, with the rural settlements playing a key role in guaranteeing a constant supply to the capital. Most of the common ware production had a local component, and the examples found in my dataset possess the same chronological range as the funerary contexts to which they are associated. 91.94% of common ware typologies have a chronological range up to the 3rd century AD; this suggests a coetaneity between the shapes and the funerary contexts for most typologies. It also implies a mass produced, local common ware ceramic material within *Emerita*.

The lack of findings concerning to *Sigillata* workshops is noticeable. I consider it difficult to believe that there was an absence of an *officinae* within the territory of *Emerita* as Jerez Linde (2004) does, when accounting for the number of sealed wares documented in the mid Guadiana Valley and considering it was the capital of a province and an economic hub. Whether they were subservient workshops to the main *officinae* in Northern Iberia or there was a prominent *officinae* supplying locally, I believe we have not located the workshops yet. This is supported by experimental shapes produced throughout the first half of the 1st century AD, which imply a local consumer market demanding specific necessities and local workshops manufacturing these products.

To conclude, *Colonia Iulia Augusta Emerita* was a dynamic and evolving settlement since its foundation in ca. 25 BC. The sacred urban perimeter must

have been permeable during the first decades as the urban centre was forming, changing, developing, and adapting to the new territorial power as it entailed the designation as a provincial capital. The new settlers used the land, communication nodes, coinage, symbolism, and trade to develop a sense of belonging and attachment to an area whose nearest Roman neighbour had to be sought 25 miles eastwards in *Metellinum* (Medellín), or 45 miles northwards in *Norba* (Cáceres) (fig. 1). The new colony rapidly associated with the land by adopting and adapting regional deities, toponyms, and communication nodes, and by using the coinage as a bridgehead for cultural and economic assimilation, they developed an iconographic discourse depicting a grand past with which to identify the new urban and rural spheres. The suburban funerary evidence, the distribution of the allotments and the rural settlements corroborate a vibrant social, economic, and political hub in constant change, radiating its influence towards the Lusitanian hinterland. As stated by Richmond (1930: 99–116), we can conclude that *Emerita* was, and in many ways still is, a colony in constant growth.

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Appendix. Catalogue of funerary evidence in *Augusta Emerita*. Late 1st century BC - Beginning 3rd century AD.

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Ferreira López, 1991. Unpublished	156	Madrid Rd (Campsa)	NE	-	Cremation 1	-	1	-	-	-	-	-	Lead urn, 1 glass lachrymatory	-	I - II AD
Ferreira López, 1991. Unpublished	156	Madrid Rd (Campsa)	NE	-	Cremation 2	-	1	-	-	-	-	-	2 coarse wares plates, 2 coarse ware mould imitating fine wares, 1 fine ware bowl, 1 oil lamp, fragments of a glass lachrymatory	-	I AD
Ferreira López, 1991. Unpublished	156	Madrid Rd (Campsa)	NE	-	Cremation 3	-	1	-	-	-	-	-	1 glass lachrymatory	-	I AD
Ferreira López, 1991. Unpublished	156	Madrid Rd (Campsa)	NE	-	Cremation 4	-	1	-	-	-	-	-	1 coarse ware pot and plate	-	I AD
Ferreira López, 1991. Unpublished	156	Madrid Rd (Campsa)	NE	-	Inhumation 1	1	-	1	-	-	-	F	1 blue glass lachrymatory, fragment of mirror	-	II AD
Ferreira López, 1991. Unpublished	156	Madrid Rd (Campsa)	NE	-	Inhumation 2	1	-	1	-	-	-	-	1 coarse ware plate and fragments of lachrymatory	-	I - II AD
Ferreira López, 1991. Unpublished	156	Madrid Rd (Campsa)	NE	-	Inhumation 3	1	-	-	-	-	-	-	1 blue glass lachrymatory (Isings 84), 1 glass plate	-	II - III AD
Ferreira López, 1992. Unpublished	159	Luis Buñuel St	S	-	Cremation 1	-	1	-	-	-	-	-	1 small coarse ware	1 small coarse ware	I BC - I AD
Ferreira López, 1992. Unpublished	159	Luis Buñuel St	S	-	Cremation 2	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Ferreira López, 1992. Unpublished	159	Luis Buñuel St	S	-	Cremation 3	-	1	-	-	-	-	-	1 wicker basket with a hen egg and 4 walnuts inside, fragments of a quartz *amphorae*	1 quartz *amphorae*	End I BC

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Ferreira López, 1993. Unpublished	134	Cataluña Av. - Adelardo Covarsí St	S	-	Cremation 1	-	1	-	-	-	-	-	Bottom half of an *amphorae*	-	I - II AD
Nodar Becerra, 1997: 20-30	-	11 Carderos St	N	-	UE43	-	1	1	-	-	-	-	Calcined coarse ware	-	I - III AD
Nodar Becerra, 1997: 20-30	-	12 Carderos St	N	-	UE44	-	1	1	-	-	-	-	Calcined coarse ware	-	I - III AD
Palma and Bejarano, 1997: 44-54	-	Domus of the amphitheatre	E	-	Inhumation 1	1	-	1	-	-	-	-	6 bone *acus crinalis*, 1 goat skull	-	II - III AD
Palma and Bejarano, 1997: 44-54	-	Domus of the amphitheatre	E	-	Inhumation 2-4	3	-	3	-	-	-	-	No Deposit	-	II - III AD
Palma and Bejarano, 1997: 44-54	-	Domus of the amphitheatre	E	-	Inhumation 5 and 8	2	-	-	-	-	2	-	Looted	-	II - III AD
Palma and Bejarano, 1997: 44-54	-	Domus of the amphitheatre	E	-	Inhumation 6-7	2	-	2	-	-	-	-	No Deposit	-	II - III AD
Márquez Pérez, 1997a: 80-93	-	Villafranca St (Football Stadium)	SE	-	Inhumation 1-31	31	-	-	-	-	31	-	No Deposit	-	I - III AD
Márquez Pérez, 1997a: 80-93	-	Villafranca St (Football Stadium)	SE	-	Cremation 1-18	-	18	-	-	-	-	-	No Deposit	-	I - II AD
Márquez Pérez, 1997b: 116-121	-	50 Augusto St	NW	-	Cremation 1	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Sánchez Sánchez, 1997: 128-135	-	3 Augusto St	N	-	UE5/1	1	-	-	-	Stillborn	-	-	No Deposit	-	I - II AD
Sánchez Sánchez, 1997: 128-135	-	3 Augusto St	N	-	UE5/2	1	-	-	-	-	Foe-tus	-	No Deposit	-	I - II AD
Márquez Pérez, 1997c: 150-156	-	2 Medea St	N	-	Cremation 1	-	1	-	-	-	-	-	Sherds of coarse ware and fragments of glass	-	I AD
Márquez Pérez, 1997c: 150-156	-	2 Medea St	N	-	Cremation 2-21	-	20	-	-	-	-	-	Oil lamps, coarse ware bowls imitating fine wares, 1 glass lachrymatory	-	I AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 0-12	12	-	-	-	-	12	-	Coarse ware sherds and fragments of glass	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 13	1	-	-	-	-	1	-	Pink glass token	-	I - III AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 14-16	3	-	-	-	-	3	-	Coarse ware sherds and fragments of glass	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 18	1	-	-	-	-	1	-	Coarse ware sherds and fragments of glass	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 19	1	-	1	-	-	-	-	No Deposit	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 20	1	-	-	-	1	-	-	No Deposit	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 21	1	-	-	-	-	1	-	Coarse ware sherds and fragments of glass	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 22-25	4	-	-	-	-	4	-	No Deposit	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 26-31	6	-	-	-	-	6	-	Coarse ware sherds and fragments of glass	-	I - III AD
Bejarano Osorio, 1997a: 188-197	-	Bodegones (Columbarios - N-V)	SE	-	Inhumation 32-33	2	-	-	-	-	2	-	No Deposit	-	I - III AD
Ayerbe Vélez and Márquez Pérez, 1998: 135-166	8002	Cabo Verde St	NE	-	A1	-	1	-	-	-	-	-	Oil lamp with a figure depicting an emperor with a priest during a ritual	-	Beginning I AD
Ayerbe Vélez and Márquez Pérez, 1998: 135-166	8002	Cabo Verde St	NE	-	A13	-	2	-	-	-	-	-	1 Bronze handle, 1 sherd TSH Drag. 25, 1 sherd TSH Drag. 27, various lachrymatories	-	Beginning I AD
Ayerbe Vélez and Márquez Pérez, 1998: 135-166	8002	Cabo Verde St	NE	-	A20	-	1	-	-	-	-	-	No Deposit	-	I AD
Ayerbe Vélez and Márquez Pérez, 1998: 135-166	8002	Cabo Verde St	NE	-	A53	-	1	-	-	-	-	-	No Deposit	-	I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sánchez Sánchez, 1998: 167-191	3002	P.E.R.I. (Corchera)	N	-	Cremation 1-33	-	33	-	-	-	-	-	Fine wares Mayet 285, oil lamps, South Gaulish *Terra Sigillata* Drag. 24/25, SGTS Drag. 35, TSH Hispanique Mayet 2, glass vessels (Isings 27, Isings 28, Isings 49 and bottles). Remnants of a bronze box, bronze needle and mirror, iron knife blade. Bone *acus crinalis* Beal XX-15	South Gaulish *Terra Sigillata* Drag. 24/25, SGTS Drag. 35, TSH Hispanique Mayet 2	First half I AD
Sánchez Sánchez, 1998: 167-191	3002	P.E.R.I. (Corchera)	N	-	Inhumation 1-6	6	-	6	-	-	-	-	Fine wares Mayet 285, oil lamps, South Gaulish *Terra Sigillata* Drag. 24/25, SGTS Drag. 35, TSH Hispanique Mayet 2, glass vessels (Isings 27, Isings 28, Isings 49 and bottles). Remnants of a bronze box, bronze needle and mirror, iron knife blade. Bone *acus crinalis* Beal XX-15	South Gaulish *Terra Sigillata* Drag. 24/25, SGTS Drag. 35, TSH Hispanique Mayet 3	First half I AD
Sánchez Barrero, 1998: 267-288	-	Portugal Av	SW	-	Cremation 1	-	1	-	-	-	-	-	Bronze mirror, brooch, necklace, earring and part of a box	-	Second half I AD
Bejarano Osorio, 1997: 109-124	8005	21 Santa Lucía St	N	-	Cremation 1	-	1	-	-	-	-	-	Coarse ware pot as urn	-	I - II AD
Sánchez Barrero, 1997b: 229-262	-	Madrid Rd - Valverde Rd - Cáceres Rd	NE	-	A5	-	1	-	-	-	-	-	No Deposit	-	I AD
Sánchez Barrero, 1997b: 229-262	-	Madrid Rd - Valverde Rd - Cáceres Rd	NE	-	Cremation 2	-	1	-	-	-	-	-	Calcined coarse ware and glass vessels. Oil lamp, fine wares and lachrymatory	-	I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sánchez Barrero, 1997b: 229-262	-	Madrid Rd - Valverde Rd - Cáceres Rd	NE	-	Cremation 3	-	1	-	-	-	-	-	Coarse ware sherds	-	I AD
Sánchez Barrero, 1997b: 229-262	-	Madrid Rd - Valverde Rd - Cáceres Rd	NE	-	Cremation 4	-	1	-	-	-	-	-	Bone *acus crinalis*, iron spatula, token and dice	-	I AD
Sánchez Barrero, 1997b: 229-262	-	Madrid Rd - Valverde Rd - Cáceres Rd	NE	-	Cremation 5	-	1	-	-	-	-	-	Calcined coin	-	I AD
Sánchez Barrero, 1997b: 229-262	-	Madrid Rd - Valverde Rd - Cáceres Rd	NE	-	Cremation 6	-	1	-	-	-	-	-	TSH plate and calcined coin	-	II AD
Gijón Gabriel, 2000: 137-159	8004	Valley of the Albarregas river	N	3,605	UE17-18	-	1	-	-	-	-	-	68 sherds of a jar Smit Nolen 78, 35 shells, calcined coin, oil lamp, 15 iron nails	-	II - III AD
Gijón Gabriel, 2000: 137-159	8004	Valley of the Albarregas river	N	3,605	UE45	-	1	-	-	-	-	-	Small bones, iron nails, 1 glass plate (Isings 5), sherds of 1 jar Smit Nolen 105	-	II - III AD
Gijón Gabriel, 2000: 137-159	8004	Valley of the Albarregas river	N	3,605	UE12-15	-	1	-	-	-	-	-	22 fragments of terracotta, 2 glass plates, 1 lachrymatory, 1 glass bottle as the urn, 1 bracelet, 2 bronze *stili*	-	II - III AD
Gijón Gabriel, 2000: 137-159	8004	Valley of the Albarregas river	N	3,605	UE46-49	-	1	-	-	-	-	-	No Deposit	-	II - III AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	UE14	-	1	-	-	-	-	-	Iron *acus crinalis*, fragmented bronze plaque, bone dice cup	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A33	1	-	1	-	-	-	-	2 *acus crinalis*, 1 glass *lachrymatorium*	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A34	1	-	1	-	-	-	-	No deposit	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A36	1	-	1	-	-	-	-	No deposit	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A37	1	-	1	-	-	-	-	Fragments of oil lamp	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A35	-	1	1	-	-	-	-	1 green glass lachrymatory, 1 yellow glass lachrymatory, sherds of a coarse ware vessel with globular shape	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	Cremation 1	-	1	-	-	1	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	Inhumation 1	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	UE86	-	1	-	-	-	-	-	Fragments of 3 glass plates and 2 lachrymatories, calcined coin and nails	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	UE49	-	1	-	-	-	-	-	1 marble plate, 1 oil lamp with pearl decoration, 2 double-handled cup imitating fine wares	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A4	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A3	-	1	-	-	-	-	-	Coarse ware sherds	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A6-7	-	1	-	-	-	-	-	Coarse ware sherds	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A5	-	1	-	-	-	-	-	Calcined glass buttons	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A8	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A13	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2000b: 305-331	8006	Marcial St - N-V	E	-	A17-18	-	1	-	-	-	-	-	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Feijóo Martínez, 2000a: 333-357	8007	Nerja St	NE	145	A34	-	1	-	-	-	-	-	1 oil lamp (Dressel 5C) with stamp (FORTIS), 1 coarse ware jar, 1 local production coarse war jar imitating Mayet LII	-	I AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A8	-	-	-	-	-	-	-	Looted	-	-
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A13	1	-	1	-	-	-	-	1 coarse ware vessel	-	II - III AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A15	1	-	1	-	-	-	-	1 oil lamp (Dressel 20), 1 coarse ware bottle, metallic plaque, fragments of glass. Metallic fragments (blade), 1 illegible coin	-	End I AD - beginning II AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A16	-	1	-	-	-	-	-	Glass jar, 1 gold earring, fragment of glass lachrymatory, 4 lachrymatories, sherds of coarse ware, iron nails	-	I - II AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A17	-	1	-	-	-	-	-	1 *amphorae*	-	I - II AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A18	-	1	-	-	-	-	-	3 glass vessels, 1 coin (Domitian)	Domitian coin	End I AD - beginning II AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A19	-	1	-	-	-	-	-	Sherds of fine wares and fragments of glass	-	Second half I AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A20	-	1	-	-	-	-	-	1 glass vessel (lachrymatory), oil lamp and sherds of coarse ware	-	I - II AD
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A21	-	1	-	-	-	-	-	Iron nails, sherds of coarse ware, fragments of amphorae, fine ware bowls (Mayet XXXVII) and 1 oil lamp (Dressel 11B)	-	second half I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Estévez Morales, 2000a: 359-383	8010	Juan Carlos I Av - N-V Rd	NE	-	A22	-	1	-	-	-	-	-	1 fine ware bowl (Mayet XXXVII), fragment of oil lamp, fine ware and coarse ware vessels, 1 copper coin	-	I AD
Estévez Morales, 2000b: 385-411	8011	N-V Rd María Auxiliadora Neighbourhood	SE	-	A11	-	1	-	-	-	-	-	2 coarse ware vessels	-	I - II AD
Sánchez Barrero, 2000b: 413-459	2076	Villafranca de los Barros St - Octavio Augusto St - Estudiantes Av	E	-	A1	-	1	-	-	-	-	-	Looted	-	I - II AD
Sánchez Barrero, 2000b: 413-459	2076	Villafranca de los Barros St - Octavio Augusto St - Estudiantes Av	E	-	A7	-	1	-	-	-	-	-	1 clay lachrymatory, 1 oil lamp, glass plate and cup	-	I - II AD
Sánchez Barrero, 2000b: 413-459	2076	Villafranca de los Barros St - Octavio Augusto St - Estudiantes Av	E	-	A8	1	-	1	-	-	-	-	7 pottery vessels, 1 glass vessel, 1 TSH bowl (Drag. 35), 1 TSH Drag. 35 with the stamp CANTABRI (Mayet CCX), 1 TSH bowl (Mayet CCVIII) with the stamp PATERNIO, clay bottle	1 TSH Drag. 35, 1 TSH Mayet CCX, 1 TSH Mayet CCVIII	Second half I AD
Sánchez Barrero, 2000b: 413-459	2076	Villafranca de los Barros St - Octavio Augusto St - Estudiantes Av	E	-	UE16-17	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Barrero, 2000b: 413-459	2077	Plantonal de la Vera Neighbourhood	S	-	Cremation 1-2	-	2	-	-	-	-	-	1 iron nail, coarse ware vessels, 1 TSH beacon	-	I AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A3	-	1	-	-	-	-	-	1 plate Smit Nolen 6B, ovoid pot Sánchez II (Coarse ware), 1 Isings 28, 2 Isings 41, 1 Isings 51, 1 metallic spoon, 1 bronze *acus crinalis*	-	Tiberius/Claudius - beginning II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A4	-	1	-	-	-	-	-	1 Isings 50 (glass jar with square base)	-	I AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A5	-	1	-	-	-	-	-	1 bottle (Isings 51), 1 bowl (Isings 41), 1 lachrymatory (Isings 28), 1 coarse ware jar (Sánchez II), bronze spoon	-	Flavian - II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A6	-	1	-	-	-	-	-	fragmented glass and 2 nails	-	I - II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A7	-	1	-	-	-	-	-	1 lachrymatory (Isings 28)	-	I - II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A8	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A9	-	1	-	-	-	-	-	1 oil lamp Bailei P-I, Amare IV 3B, a	-	End I AD - beginning II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A11	1	-	1	-	-	-	-	Pottery vessel	-	End I AD - beginning II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A12	1	-	1	-	-	-	-	1 bowl Smit Nolen 6, 1 illegible coin, 2 wide-mouth pitchers (Sánchez II)	-	Claudian - II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A13	1	-	1	-	-	-	-	TSH Drag. 25	TSH Drag. 25	Flavian
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A14	1	-	-	-	1	-	-	1 lachrymatory (Isings 28)	-	Second half I AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A15	1	-	1	-	-	-	-	Illegible coin	-	I - II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A16	1	-	1	-	-	-	-	Illegible coin	-	I - II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A17	1	-	1	-	-	-	-	1 *acus* Beckmann 48, 1 cup Isings 35	-	End I AD - beginning II AD
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A55	1	-	-	-	1	-	-	1 coarse ware plate (Smit Nolen 6b)	-	Second half I AD - III AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sánchez Sánchez, 2001: 49-84	3017	Marquesa de Pinares St	N	1,344	A100	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2000: 243-254	8026	CAMPSA	E	-	A1	-	1	-	-	-	-	-	*acus crinalis*, gold wire	-	I - II AD
Bejarano Osorio, 2000: 243-254	8026	CAMPSA	E	-	A2	-	1	-	-	-	-	-	Coarse ware pot (Vegas 1) as urn, 2 pottery lachrymatories Sánchez II	-	I - II AD
Bejarano Osorio, 2000: 243-254	8026	CAMPSA	E	-	A5	-	1	-	-	-	-	-	1 Isings 5, fragments of Isings 5, bronze *acus*, TSH Drag. 27 bowl, 4 glass beads, 1 oval-shaped glass fragment	-	I - II AD
Hernández Carretero, 2002: 37-56	8019	Lusitania Av	E	1,457	Inhumation 1	1	-	1	-	-	-	-	Lachrymatory (very fragmented), oil lamp, white pot	-	I - III AD
Hernández Carretero, 2002: 37-56	8019	Lusitania Av	E	1,457	Inhumation 2	1	-	-	-	1	-	-	No Deposit	-	I - III AD
Hernández Carretero, 2002: 37-56	8019	Lusitania Av	E	1,457	Cremation 1-7	-	7	-	-	-	-	-	Vespasian coin, TSH, glass vessel, iron nails and bird bones	Vespasian coin	Second half I AD - II AD
Hernández Carretero, 2002: 37-56	8019	Lusitania Av	E	1,457	Cremation 8	-	1	-	-	-	-	-	Bronze box, 1 oil lamp (Loeschcke IB) decorated with a sphinx, bone *acus crinalis*, 3 lacrymatories (Isings 8), 2 coarse ware pots	-	I AD
Hernández Carretero, 2002: 37-56	8019	Lusitania Av	E	1,457	Cremation 9	-	1	-	-	-	-	-	1 Isings 28, 2 lacrymatories partially melted, 1 sectioned coin, sherds of pottery, bone comb and remnants of bronze box	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Hernández Carretero, 2002: 37-56	8019	Lusitania Av	E	1,457	Cremation 10	-	1	-	-	-	-	-	6 glass plates (Isings 49) partially melted, 2 lacrymatories (1 of them Isings 48), bronze box with circular shape, iron chisel and bone plaque	-	II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 1	-	1	-	-	-	-	-	1 oil lamp	-	I AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 2-7	-	6	-	-	-	-	-	No Deposit	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 8-9	-	2	-	-	-	-	-	TSH	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 10	-	1	-	-	-	-	-	Fragmented *amphorae*, 2 fine ware pots, 1 fine ware lid, 1 bone dice cup with a lid. 3 glass bottles, 2 glass plates, 2 glass vessels, 3 small glass bowls. 1 bronze spoon, iron nails from *lectus*	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 11	-	1	-	-	-	-	-	2 coarse ware pots and 1 glass vessel	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 12-13	-	2	-	-	-	-	-	No Deposit	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 14	-	1	-	-	-	-	-	2 coarse ware pots and 1 fine ware	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 15	-	1	-	-	-	-	-	1 coarse ware vessel and 1 oil lamp	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 16	-	1	-	-	-	-	-	12 glass vessels, 1 fine ware pot	-	I - II AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Cremation 17	-	1	-	-	-	-	-	1 fine ware pot, 1 oil lamp, 1 coarse	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
													ware vessel (fragmented)		
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Inhumation 1-4	4	-	4	-	-	-	-	No Deposit	-	I - III AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Inhumation 5	1	-	-	-	1	-	-	No Deposit	-	I - III AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Inhumation 6	1	-	1	-	-	-	-	2 coarse ware pots	-	I - III AD
Palma García, 2002: 79-92	6014	Tomás Romero de Castilla St	S	800	Inhumation 7	1	-	1	-	-	-	-	1 coarse ware pot and 1 oil lamp	-	III AD
Estévez Morales, 2002a: 93-102	7504	Tomás Romero de Castilla St	S	300	Cremation 1-5	-	5	-	-	-	-	-	No Deposit	-	II AD
Estévez Morales, 2002a: 93-102	7504	Tomás Romero de Castilla St	S	300	Inhumation 1	1	-	-	-	-	1	-	No Deposit	-	II AD
Silva Cordero, 2002: 103-109	6015	Tomás Romero de Castilla St - San Pedro de Alcántara St	S	-	Cremation 1-5	-	5	-	-	-	-	-	No Deposit	-	I AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Inhumation 1	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Inhumation 2	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Cremation 1	-	1	-	-	-	-	-	1 pottery bead	-	I - II AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Cremation 2	-	1	-	-	-	-	-	Bone *acus crinalis*, fragments of lachrymatory	-	I - II AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Cremation 3	-	1	-	-	1	-	-	2 Mayet 285, bronze spindle whorl	-	I AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Cremation 4	-	1	-	-	-	-	-	3 white clay jars	-	I - II AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Cremation 5	-	1	-	-	-	-	-	1 Isings 28	-	I - II AD
Nodar Becerra, 2002: 123-134	8020	Reina Sofía Av	E	2,633	Cremation 6-17	-	12	-	-	-	-	-	Bronze buckle, TSH inkwell with Italic tradition (Mezquiriz 51), metallic compass and graver, 2	-	Second half I AD

Reference	Intervention	Location	Sector	Area (M²)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
													silvers stamps, 1 Mayet 285, 1 bottle Caldera 85		
Sánchez Sánchez, 2002: 173-184	3018	15 Mariano José de Larra St	N	98	Cremation 1	-	1	-	-	-	-	-	No Deposit. Presence of fragmented TSH points towards looting in antiquity	-	I - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A2	1	-	1	-	-	-	-	1 glass jar Isings 50, 1 oil lamp	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A5	-	1	-	-	-	-	-	1 *amphorae*, glass plates, 1 bronze *stilo*, clay bowl and oil lamp	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A6	-	1	-	-	-	-	-	Very fragmented pot, oil lamp Deneauve V-A, bowl Mayet XLIII	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A7	-	1	-	-	-	-	-	1 Smit Nolen 2b, cup Smit Nolen 6a	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A8	1	-	-	-	1	-	-	4 clay looms	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A9	-	1	-	-	-	-	-	Sherds of coarse ware	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A10	-	1	-	-	-	-	-	Calcined pot, oil lamp Deneauve V-A	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A11	-	1	-	-	-	-	-	1 oil lamp Deneauve V-A, a probable *sestertius*, 1 Smit Nolen 2	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A12	-	1	-	-	-	-	-	1 Isings 82, 1 Smit Nolen 2k, 2 iron staples, nails	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A13	1	-	1	-	-	-	-	No Deposit	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A14	-	-	-	-	-	1	-	No Deposit	-	Beginning I AD - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A15	-	1	-	-	-	-	-	2 pottery bowls and 1 coin	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A17	1	-	1	-	-	-	-	1 glass jar, 2 silver spoons, lachrymatory, 1 glass *amphorae*, bowls, plates, white glass tokens, calcined coin, 1 oil lamp Deneauve VIII B, glass fragments	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A18	-	1	-	-	-	-	-	Plate Drag. 37, plate Ritt. 8, vase Mayet XLIII, lachrymatory Isings 82B	Plate Drag. 37, plate Ritt. 8, vase Mayet XLIII, lachrymatory Isings 82B	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A19	-	1	-	-	-	-	-	1 oil lamp Deneauve V-A, jar Smit Nolen, calcined *acus crinalis*	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A20	-	1	-	-	-	-	-	Fragments of 1 *amphorae*	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A21	-	1	-	-	-	-	-	Looted	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A22	-	1	-	-	-	-	-	1 jar, 1 calcined coin	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A23	1	-	1	-	-	-	-	No Deposit	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A24	-	1	-	-	-	-	-	2 calcined coins	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A25	-	1	-	-	-	-	-	1 oil lamp	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A26	-	1	-	-	-	-	-	2 coarse ware pots, 1 oil lamp	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A27	-	1	-	-	-	-	-	1 coarse ware pot, 1 plate, 1 coarse ware jar	-	Beginning I AD - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A28	-	1	-	-	-	-	-	1 oil lamp Deneauve V-A, coarse ware pottery	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A29	-	1	-	-	-	-	-	1 oil lamp, 1 coarse ware pot	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A30	1	-	-	-	1	-	-	Bronze coin	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A31	1	-	-	-	1	-	-	2 golden earrings	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A32	-	1	-	-	-	-	-	1 jar Smit Nolen Id, bronze appliqué, 39 game tokens, 2 dice, 32 nails, 1 oil lamp Deneauve V-A, 1 Isings 28b	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A33	-	-	-	-	-	1	-	No Deposit	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A34	1	-	1	-	-	-	-	No Deposit	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A35	-	1	-	-	-	-	-	1 glass vessel, glass token, clay pot and oil lamp	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A36	1	-	1	-	-	-	-	1 bowl Mayet LXIII (local copy of the original piece), a real Mayet LXIII	1 Mayet LXIII	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A38	-	1	1	-	-	-	-	Calcined *acus crinalis*, nails, bronze tokens, glass plate, oil lamp-	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A39	-	1	-	-	-	-	-	Tweezers, fragments of bone adornments for furniture, bronze box. Glass bottle, plate, oil lamp	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A43	-	1	-	-	-	-	-	1 jar and 1 glass plate	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A44	-	1	-	-	-	-	-	No Deposit	-	Beginning I AD - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A45	-	1	-	-	-	-	-	4 clay bowls, 1 double-handled pot, 1 coarse ware jar	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A46	-	1	-	-	-	-	-	No Deposit	-	Beginning I AD - II AD
Bejarano Osorio, 2002: 217-240	8024	CAMPSA	E	-	A47	-	1	-	-	-	-	-	Sherds of coarse ware vessel	-	Beginning I AD - II AD
Sánchez Barrero, 2002: 241-256	2261	6 Verlaine St	N	-	Inhumation 1	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Sánchez Barrero, 2002: 241-256	2261	Pontezuelas St - Diego María Crehuet St	NE	-	Inhumation 2	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Silva Cordero and Pizzo, 2002: 275-285	-	Corchera, allotment 14	N	1,700	A8	-	1	-	-	-	-	-	26 tokens (*latrunculi*), 1 lachrymatory, 1 bronze *strigilis*, 2 iron bars with bronze adornments, 3 Isings 42a	-	Flavian - II AD
Silva Cordero and Pizzo, 2002: 275-285	-	Corchera, allotment 14	N	1,700	A10	-	1	-	-	-	-	-	Slate board with geometric motifs, 1 base of Isings 50, 1 *acus discriminalis* Beal A-XX 15, 1 *acus crinalis*, 1 handle (silver)	Slate board with geometric motifs	Half I AD- II AD
Estévez Morales, 2002b: 297-317	10004	Abadías Av - Zeus St	NW	-	Cremation 1	-	1	-	-	-	-	-	1 coin, 1 lachrymatory	-	I - II AD
Estévez Morales, 2002b: 297-317	10004	Abadías Av - Zeus St	NW	-	Cremation 2	-	1	-	-	-	-	-	No Deposit	-	End I AD
Estévez Morales, 2002b: 297-317	10004	Abadías Av - Zeus St	NW	-	Cremation 3-4	-	1	-	-	-	-	-	Ivory decorative element	Ivory decorative element	End I AD
Estévez Morales, 2002b: 297-317	10005	Lolino St	NW	-	Cremation 1	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Estévez Morales, 2002b: 297-317	10005	Lolino St	NW	-	Cremation 2	-	1	-	-	-	-	-	Silverware, glass vessel	-	I - II AD
Estévez Morales, 2002b: 297-317	10005	Lolino St	NW	-	Cremation 3	-	1	-	-	-	-	-	1 glass jar, 1 coarse ware vase, 2 lachrymatories	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Estévez Morales, 2002b: 297-317	10005	Lolino St	NW	-	Cremation 4	-	1	-	-	-	-	-	1 oil lamp	-	I - II AD
Palma García, 2004b: 139-154	6020	44 Augusto St	NW	138,73	A2	1	-	1	-	-	-	-	1 oil lamp	-	II - III AD
Palma García, 2004b: 139-154	6020	44 Augusto St	NW	138,73	Inhumation 2	1	-	1	-	-	-	-	Pottery vessel	-	II - III AD
Barrientos Vera, 2004: 155-176	1018	Plantonal de la Vera Neighbourhood	S	30,886	A5	-	1	-	-	-	-	-	1 *amphorae* Camulodunum 184, 1 round jar Isings 52a, 1 jar Isings 51, 2 cups Isings 36b, 2 bowls Isings 42a, 1 plate Isings 49, 1 lacrymatory Isings 82 A1, 1 coarse ware jar Smit Nolen 1d	1 *amphorae* Camulodunum 184	Second half I AD
Barrientos Vera, 2004: 155-176	1018	Plantonal de la Vera Neighbourhood	S	30,886	A6	-	1	-	-	-	-	-	1 lachrymatory Isings 26, 1 oil lamp Deneauve V-A, 2 plates Isings 49, 1 coarse ware jar Smit Nolen 1d, 4 bowls Isings 42a, 2 cups Isings 36b, 2 jars Isings 51b	-	Second half I AD
Departamento de Documentación del Consorcio, 2004: 247-256	8039	Medea St	NW	-	Inhumation 1	1	-	1	-	-	-	-	1 jar similar to Smit Nolen 39 (local production), oil lamp Loeschcke IV, base of glass vessel Isings 22/23 or 48/49, bronze coin	-	Mid I AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A5	-	1	-	-	-	-	-	Glass bottle with square base	-	I - II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A11	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A12	-	1	-	-	-	-	-	Coin (Claudius AD41)	Coin (Claudius AD41)	Mid I AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A27	-	1	-	-	-	-	-	Calcined bone ring	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A30	1	-	1	-	-	-	-	3 glass lachrymatories	-	II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A13	1	-	1	-	-	-	-	Iron key	-	I - II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A16	1	-	1	-	-	-	-	Bronze ring	-	I - II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A19	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A4	1	-	1	-	-	-	-	4 coarse ware vessels, 1 oil lamp	-	AD25 - II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A18	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A10	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Silva Cordero, 2004a: 269-277	8036	Los Milagros Neighbourhood	N	1,200	A14	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Silva Cordero, 2004b: 295-305	10026	Left bank of the Albarregas river, by the Roman bridge	NE	-	A4	-	1	-	-	-	-	-	2 glass plates, 1 fine ware cup, 1 coarse ware bowl	-	I - II AD
Méndez Grande, 2005: 15-32	8050	SUP-NO-01	NW	3,498	A5	-	1	-	-	-	-	-	1 coarse ware pot Sánchez II, 1 jar	-	Second half I AD - II AD
Méndez Grande, 2005: 15-32	8050	SUP-NO-01	NW	3,498	A4	1	-	1	-	-	-	-	1 fine ware cup Hayes XLIV	1 cup Hayes XLIV	Second half I AD
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A5	-	1	-	-	-	-	-	3 vessels Mayet XXXVIII	3 vessels Mayet XXXVIII	I - II AD
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A9	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A6	-	1	-	-	-	-	-	Sherds of coarse ware	-	I - II AD
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A11	1	-	-	-	-	1	-	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A7	-	1	-	-	-	-	-	1 fragment of fine ware Mayet XXXVII, fragment of glass jar, fragment of Mayet XL	Mayet XXXVII (from *Baetica*), Mayet XL	Second half I AD - II AD
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A8	-	1	-	-	-	-	-	Calcined oak wood, nail, 2 fragments of oil lamp (1 Loeschcke V, 1 Deneauve V-G), TSH and TSG Drag. 27	1 Loeschcke V, 1 Deneauve V-G (from a workshop in *Carmo*), TSG Drag. 27	AD50-75
Nodar Becerra, 2005: 33-43	8043	Ruiz Azorín St - Los Milagros Av	N	300	A10	-	1	-	-	-	-	-	Calcined oak tree, 1 oil lamp Loeschcke XK (seal: FORTIS)	1 oil lamp Loeschcke XK (seal: FORTIS), from Modena (Italy)	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A1	-	1	-	-	-	-	-	Calcined bones	-	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A82	1	-	-	-	1	-	-	No Deposit	-	II - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A104	1	-	1	-	-	-	-	No Deposit	-	II - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A93	1	-	-	-	-	1	-	Broken glass vessel	-	II - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A76	1	-	1	-	-	-	-	No Deposit	-	II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A106	1	-	1	-	-	-	-	No Deposit	-	II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A89	1	-	1	-	-	-	-	No Deposit	-	II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A20	-	1	-	-	-	-	-	No Deposit	-	End I AD - beginning II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A95	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A86	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A99	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A3	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A103	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A105	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A67	-	1	-	-	-	-	-	No Deposit	-	Second half I AD - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A79	-	1	-	-	-	-	-	No Deposit	-	Second half I AD - II AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A101	1	-	-	1	-	-	-	No Deposit	-	I AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A70	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A75	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A81	1	-	-	-	1	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A85	1	-	-	-	1	-	-	No Deposit	-	III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A90	1	-	1	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A93	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A97	1	-	1	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A100	1	-	1	-	-	-	-	No Deposit	-	III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A81	1	-	-	-	1	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A85	1	-	-	-	1	-	-	No Deposit	-	III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A90	1	-	1	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A93	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A97	1	-	1	-	-	-	-	No Deposit	-	I - III AD
Márquez Pérez, 2005: 281-308	8033	Leonor de Austria St	SE	443	A100	1	1	-	-	-	-	-	No Deposit	-	III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A1	1	-	-	-	-	1	-	No Deposit/Looted	-	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A11	1	-	-	-	-	1	-	No Deposit/Looted	-	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A26	1	-	-	-	-	1	-	No Deposit/Looted	-	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A32	1	-	1	-	-	-	-	1 coarse ware bottle, 1 coarse ware cup, 1 coarse ware oil lamp, 1 iron nail	-	I - III AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A35	1	-	1	-	-	-	F	2 coarse ware plates, 1 coarse ware bottle, 1 bone needle	-	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A36	1	-	1	-	-	-	-	3 coarse ware vessel, 1 glass cup, 1 nail	-	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A52	-	1	-	-	-	-	-	1 Isings 26, 1 Isings 27, 5 bone pins, 1 bronze mirror, 1 bone spindle, 3 shells, 1 coin (AD270), 1 coarse ware oil lamp	1 coin AD270	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A58	1	-	1	-	-	-	-	Iron nail, coarse ware oil lamp	-	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A33	1	-	1	-	-	-	-	1 coarse ware bottle, 1 Isings 101, 1 iron nail, 1 I AD *dupondius*	1 I AD *dupondius*	I - III AD
Alba Calzado, 2005a: 309-342	7017	Lusitania Av - La Albuera St	SE	530	A37	1	-	1	-	-	-	-	2 iron nails	-	I - III AD
Silva Cordero, 2005: 411-430	10033	Near the Roman bridge in the Albarregas river	N	-	Cremation 1	-	1	-	-	-	-	-	2 glass lachrymatory, 1 calcined coin	-	First half I AD
Silva Cordero, 2005: 411-430	10036	San Lázaro Park	N	-	Cremation 1	-	1	-	-	-	-	-	Fragments of a glass lachrymatory	-	AD75 - II AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A12	-	1	-	-	-	-	-	2 Mayet XXXVIII, 1 Mayet XXXVII, 1 glass bottle, 1 bronze needle, 2 Claudian coins (AD41-50)	2 Mayet XXXVIII, 1 Mayet XXXVII, 2 Claudian coins (AD41-50)	Second half I AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A13	-	1	-	-	-	-	-	1 skyphos, 2 glass vessels, 1 coarse ware vessel, 1 bronze plaque, 1 jar, iron remnants from a wooden box	1 skyphos	Second half I AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A14	-	1	-	-	-	-	-	1 small jar, 2 black-burnished cups, 1 calcined lachrymatory	-	Second half I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A16	-	1	-	-	-	-	-	Fragments of a calcined of *acus crinalis*	-	Second half I AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A15	1	-	-	-	-	1	-	1 oil lamp Leibundgut XVII, 1 large iron nail	1 oil lamp Leibundgut XVII	Mid-Late II AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A17	1	-	-	-	-	1	-	1 large coarse ware vessel, 1 pot, 1 oil lamp Deneauve V-A	1 oil lamp Deneauve V-A	Tiberius-Claudius
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A18	-	1	-	-	-	-	-	Fragment of coarse ware cup. Looted	-	I - II AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A19	-	1	-	-	-	-	-	1 small pot and various sherds of coarse ware pottery	-	I - II AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A22	1	-	-	-	-	1	-	Looted	-	I - II AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A21	-	1	-	-	-	-	-	1 Isings 82a1, 1 Claudius coin inside a bone dice cup, 2 nacre necklaces with the shape of grape leaves, 1 Aryballos Isings 61, 1 glass cup, mirror, nacre tokens, token and bone dice, 1 carved bone dice cup, 6 nails	1 Claudian coin, 2 nacre necklaces with the shape of grape leaves, 1 Aryballos Isings 61, nacre tokens	First half I AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A24	-	1	-	-	-	-	-	1 large coarse vessel, 1 coin (Claudius AD42)	1 coin (Claudius AD42)	First half I AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A28	1	-	-	-	-	1	-	1 coarse ware cup imitating a glass vessel with glaze	-	II - III AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A26	1	-	-	-	-	1	-	No Deposit	-	II - III AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A10	-	1	-	-	-	-	-	Blue glass fishbowl, 4 jars Isings 58, 1 jar Isings 65, Isings 15, 1 glass spoon, 1 spindle whorl, 3 *acus crinalis*, 3 *acus discriminalis*, 1 bone spoon, 1 coarse ware bowl, 1 lachrymatory Isings 82b1, 1 Isings 68, 1 Isings 28b	-	Second half I AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A33	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A34	-	1	-	-	-	-	-	1 coarse ware pot Vegas 1975, 19.1, 1 bronze bracelet, 2 nails	-	I - III AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A35	-	1	-	-	-	-	-	Looted	-	I - III AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A37	-	1	-	-	-	-	-	Ceramic pot, 1 Mayet LXV	-	End I AD - beginning II AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A38	-	1	-	-	-	-	-	Cinerary urn	-	I - III AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A39	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Chamizo de Castro, 2006: 15-35	8057	Vía de la Plata Av - Albañiles St	N	220	A25	-	1	-	-	-	-	-	Pottery Pyx with lid Mayet LXXXIV, bowl, spoon, fragment of lachrymatory, fragment of glass vessel, 1 scallop shell	1 Scallop shell, pottery Pyx	I AD
Silva Cordero and Sánchez Sánchez, 2006: 61-84	7505	43 Muza St	N	800	A74	1	-	-	-	-	1	-	Double-handled fairing pottery vessel Smit Nolen 2b, beacon Smit Nolen 7e, plate Smit Nolen 4b	-	I - III AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Picado Pérez, 2006: 91-108	8066	51 Extremadura Av	NE	330	A36	-	1	-	-	-	-	-	1 Coarse ware pottery	-	I - II AD
Picado Pérez, 2006: 91-108	8066	51 Extremadura Av	NE	330	A38	-	1	-	-	-	-	-	1 Coarse ware pottery	-	I - II AD
Delgado Molina, 2006: 285-312	8060	Arias Montano St - Reina Sofía Av	E	6,000	A35	-	1	-	-	-	-	-	1 oil lamp Dressel 9C, TSH	1 oil lamp Dressel 9C, TSH	Second half I AD - II AD
Delgado Molina, 2006: 285-312	8060	Arias Montano St - Reina Sofía Av	E	6,000	A36	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8060	Arias Montano St - Reina Sofía Av	E	6,000	A45	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8060	Arias Montano St - Reina Sofía Av	E	6,000	A46	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8060	Arias Montano St - Reina Sofía Av	E	6,000	A49	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8060	Arias Montano St - Reina Sofía Av	E	6,000	A50	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8060	Arias Montano St - Reina Sofía Av	E	6,000	A54	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A38	-	1	-	-	-	-	-	Bronze mirror, 1 Mayet XLIV, 1 Mayet LIII	1 Mayet XLIV, 1 Mayet LIII	Second half I AD - II AD
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A115	-	1	-	-	-	-	-	Bronze mirror, 1 Mayet XLIV, 1 Mayet LIII	1 Mayet XLIV, 1 Mayet LIII	Second half I AD - II AD
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A119	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A120	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A130	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A148	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A149	-	1	-	-	-	-	-	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Delgado Molina, 2006: 285-312	8065	Arias Montano St - Reina Sofía Av	E	6,000	A184	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Méndez Grande, 2006: 357-382	8055	José de Echegaray St - Barcelona St - Lusitania Av	S	1,044	A8	1	-	-	-	1	-	-	Fragment of oil lamp	-	
Méndez Grande, 2006: 357-382	8055	José de Echegaray St - Barcelona St - Lusitania Av	S	1,044	A9	1	-	-	-	1	-	-	1 Mayet XXVI, 2 oil lamps Deneauve VI A	1 Mayet XXVI, 2 oil lamps Deneauve VI A	Second half I AD - II AD
Méndez Grande, 2006: 357-382	8055	José de Echegaray St - Barcelona St - Lusitania Av	S	1,044	A20	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Méndez Grande, 2006: 357-382	8055	José de Echegaray St - Barcelona St - Lusitania Av	S	1,044	A12	1	-	-	-	-	-	-	No Deposit	-	I - II AD
Méndez Grande, 2006: 357-382	8055	José de Echegaray St - Barcelona St - Lusitania Av	S	1,044	A13	-	1	-	-	-	-	-	1 bronze coin (CAES R AUG IMP), 1 fine ware cup, bronze fragments, 1 lachrymatory, 4 shells, glass fragments, 1 iron burin, 1 glass token, 1 *acus crinalis*, 1 bone needle	1 bronze coin (CAES R AUG IMP)	I AD
Méndez Grande, 2006: 357-382	8055	José de Echegaray St - Barcelona St - Lusitania Av	S	1,044	A14	1	-	1	-	-	-	-	1 jar Sánchez VII, 1 ovoid bowl, 1 small Sánchez II pot, 19 iron nails, 1 bronze coin	-	I - II AD
Bejarano Osorio, 2006: 383-408	10059	Albarregas Valley	N	-	A2	-	1	-	-	-	-	-	Fragments of glass object (Isings 42), iron nail, 2 glass tokens	-	I - II AD
Bejarano Osorio, 2006: 383-408	10059	Albarregas Valley	N	-	A6	-	1	-	-	-	-	-	Fragment of coarse pot	-	I - II AD
Bejarano Osorio, 2006: 383-408	10059	Albarregas Valley	N	-	A8	-	1	-	-	-	-	-	Animal bones, coarse ware fragments	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2006: 383-408	10059	Albarregas Valley	N	-	A9	1	-	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2006: 383-408	10059	Albarregas Valley	N	-	A10	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Sánchez, 2006: 409-425	2481	Vía de la Plata Roundabout	N	-	UE15	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Sánchez Sánchez, 2006: 409-425	2481	Vía de la Plata Roundabout	N	-	A4	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Sánchez, 2006: 409-425	2481	Vía de la Plata Roundabout	N	-	A5	-	1	-	-	-	-	-	Mayet LIII, Mayet XLIII, oil lamps Dressel 5 and Deneauve VA, Isings 28, *acus crinalis*, coin	Mayet LIII, Mayet XLIII, oil lamps Dressel 5 and Deneauve VA (workshop in *Sexti*)	Second half I AD - II AD
Sánchez Sánchez, 2006: 409-425	2481	Vía de la Plata Roundabout	N	-	A6	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Sánchez, 2006: 409-425	8058	27 Hipódromo St	N	-	A1	-	1	-	-	-	-	-	2 coarse ware cups imitating fine wares, 2 coarse wares bowls, 1 Isings 28b, 1 glass lachrymatory	-	I - II AD
Sánchez Sánchez, 2006: 409-425	8058	27 Hipódromo St	N	-	A2	-	1	-	-	-	-	-	5 cups imitating fine wares, 1 jar, 1 oil lamp with stamp (GABINIA) Deneauve V-A	1 oil lamp with stamp (GABINIA) Deneauve V-A	I - first half II AD
Sánchez Sánchez, 2006: 409-425	8058	27 Hipódromo St	N	-	A3	-	1	-	-	-	-	-	1 coarse ware bowl imitating fine wares	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A1	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A2	-	1	-	-	-	-	-	2 bottles Isings 50, glass plate and fragments of third bottle	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A3	-	1	-	-	-	-	-	Half dolium as a cinerary urn	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A4	-	1	-	-	-	-	-	1 coarse ware pot, 1 vessel imitating	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
													fine wares, 1 oil lamp		
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A5	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A8	-	1	-	-	-	-	-	Fragments of bone bowl	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A9	-	1	-	-	-	-	-	Plate and small cup, fragment of local production imitating fine wares	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A10	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A13	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A14	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A15	-	1	-	-	-	-	-	1 illegible coin, calcined nails, 1 pot Sánchez I, 1 jar Sánchez III, 1 oil lamp Deneauve VG	Deneauve VG	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A16	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A17	1	-	1	-	-	-	-	Fragments of 1 Smit Nolen 1b	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A18	-	1	-	-	-	-	-	Half Deneauve VIII B, *acus*, sherds of pottery	Deneauve VIII B	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A19	-	1	-	-	-	-	-	Fragmented coarse ware	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A20	1	-	-	-	1	-	-	Iron nails, 1 Isings 82	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A22	-	1	-	-	-	-	-	1 Deneauve V A, 2 iron nails, 1 pottery handle	1 Deneauve V-A	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A23	-	1	-	-	-	-	-	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A24	-	1	-	-	-	-	-	1 nail, coarse ware pot, 1 Deneauve XIII, 1 jar Sánchez IV, 1 pot Smit Nolen 1f with lid	1 Deneauve XIII, 1 jar Sánchez IV, 1 pot Smit Nolen 1f	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A25	-	1	-	-	-	-	-	Bronze mirror, fragment of *acus crinalis*	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A26	-	1	-	-	-	-	-	1 jar Vegas 28, bronze coin, 2 calcined Deneauve V-A, neck and edge of Isings 28, iron nails	2 Deneauve V-A	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A27	-	1	-	-	-	-	-	TSH and coarse ware bowl imitating fine wares	TSH	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A28	-	1	-	-	-	-	-	1 bowl imitating fine wares Mayet XLIII, 3 TSH Drag. 15/17, Drag. 24/25, Drag. 17, 1 shell, fragments of 1 glass object	Mayet XLIII, 3 TSH Drag. 15/17, Drag. 24/25, Drag. 17	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A30	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A31	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A32	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A33	-	1	-	-	-	-	-	Bronze spoon, various unidentified iron objects	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A34	-	1	-	-	-	-	-	9 glass objects (Isings 15, Isings 60, Isings 41, Isings 48, Isings 55, Isings 68, Isings 74, Isings 8, Caldera 14c), 1 mirror, 2 bronze *asses* (41BC), 1 silver coin (*Denarius*, Tiberius), 1 silver *acus*, 2 glass lachrymatories	9 glass objects (Isings 15, Isings 60, Isings 41, Isings 48, Isings 55, Isings 68, Isings 74, Isings 8, Caldera 14c), 2 bronze *asses* (41BC), 1 silver coin (*Denarius*, Tiberius)	41BC - AD50

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A36	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A37	-	1	-	-	-	-	-	1 nail, 1 fragmented coarse ware pot and small pot	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A38	-	1	-	-	-	-	-	3 coarse ware pots, 1 jar Smit Nolen 2f, 1 coarse ware plate	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A39	-	1	-	-	-	-	-	Glass plate, very fragmented	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A40	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A41	-	1	-	-	-	-	-	1 small coarse ware pot, 1 bottle Isings 50, 1 bowl, 1 TSH Drag. 17	1 TSH Drag. 17	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A42	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A43	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A47	1	-	-	-	-	-	-	Iron nails, 1 jar, 2 fragmented shells, 1 lachrymatory Caldera 71, 1 coin, 1 Deneauve VIII B, 2 Deneauve VII A	1 Deneauve VIII B, 2 Deneauve VII A	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A48	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A49	-	1	-	-	-	-	-	1 coarse ware pot Vegas 1	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A50	-	1	-	-	-	-	-	1 calcined oil lamp, 1 coarse ware pot, iron nails	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A51	-	1	-	-	-	-	-	1 Deneauve V-A	1 Deneauve V-A	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A52	-	1	-	-	-	-	-	Bone spindle, bronze plaque, 1 coin	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A53	-	1	-	-	-	-	-	1 oil lamp, various sherds of pottery	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A54	-	1	-	-	-	-	-	2 sherds of coarse ware	-	I - II AD
Bejarano Osorio, 2007: 131-152	10066	Jardines del Hipódromo	NE	863	A55	-	1	-	-	-	-	-	Sherds of 1 coarse ware pot	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE35	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE36	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE37	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE42	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE47	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE48	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE50	1	-	-	1	-	-	-	2 lachrymatories, 1 small glass jar, 1 coarse ware pot, 1 coarse ware jar	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE60	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE61	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE62	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE63	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE64	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE67	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE68	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE69	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE70	1	-	1	-	-	-	F	Spoon (Beal AXXIV-2, b-c), fragment of bronze pin	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE71	1	-	1	-	-	-	M	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE72	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE75	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE76	1	-	-	1	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE77	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE78	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE79	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE81	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE82	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE83	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE84	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE85	1	-	1	-	-	-	M	Fine ware bowl (Mayet XLIII), oil lamp (Loeschcke IV)	Mayet XLIII, Loeschcke IV	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE86	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE87	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE88	1	-	1	-	-	-	M	Boar jaw	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE89	1	-	-	1	-	-	F	1 coarse ware pot, bone needle, rooster bones	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE90	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE93	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE95	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE96	1	-	-	1	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE97	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE98	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE101	1	-	1	-	-	-	-	Donkey jaw	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE102	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE103	1	-	1	-	-	-	-	Fragment of jar Vegas 38, beads for necklace (nacre, bone, amber)	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE104	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE105	1	-	1	-	-	-	M	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE106	1	-	1	-	-	-	F	Boar jaw	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE107	1	-	1	-	-	-	F	1 coarse ware pot (Sánchez BII), 1 Loeschcke IC, 1 lid	1 Loeschcke IC	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE109	1	-	1	-	-	-	-	Bronze phallus figurine	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE110	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE111	1	-	1	-	-	-	-		-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE112	1	-	1	-	-	-	F		-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE114	1	-	1	-	-	-	-	Front leg's bones of a bovine	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE116	1	-	1	-	-	-	F	1 coarse ware pot, 2 fine ware vessels, animal bones, token, bronze tweezers, bronze case	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE118	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE119	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE120	1	-	-	1	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE121	1	-	-	1	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE122	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE123	1	-	1	-	-	-	-	3 Illegible coins, bronze object, fine ware vessel	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE125	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE126	1	-	1	-	-	-	F	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE127	1	-	1	-	-	-	F	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE128	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE129	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE130	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2007: 153-170	8067	Cabo Verde St	N	1,200	UE131	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A1	-	1	-	-	-	-	-	No Deposit	-	II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A2	-	1	-	-	-	-	-	No Deposit	-	I AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A3	-	1	-	-	-	-	-	No Deposit	-	Mid I AD - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A4	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A5	-	1	-	-	-	-	-	No Deposit	-	II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A6	-	1	-	-	-	-	-	No Deposit	-	Mid I AD - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A7	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A8	-	1	-	-	-	-	-	No Deposit	-	Mid I AD - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A9	-	1	-	-	-	-	-	No Deposit	-	I AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A10	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A11	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A12	-	1	-	-	-	-	-	No Deposit	-	End I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A13	-	1	-	-	-	-	-	No Deposit	-	I AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A14	-	1	-	-	-	-	-	No Deposit	-	Second half I AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A15	-	1	-	-	-	-	-	No Deposit	-	End I AD - beginning II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A16	-	1	-	-	-	-	-	No Deposit	-	II AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A17	-	1	-	-	-	-	-	No Deposit	-	AD70-100
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A18	-	1	-	-	-	-	-	No Deposit	-	I AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A19	-	1	-	-	-	-	-	No Deposit	-	I AD
Sánchez Barrero, 2007: 409-429	5037	Tomás Romero de Castilla St	SE	-	A20	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Sauceda Rodríguez, 2015: 101-110	8098 and 8107	María Auxiliadora Av - N-V Rd	NE	112	A4	-	1	-	-	-	-	-	Looted	-	Second half I AD - II AD
Sauceda Rodríguez, 2015: 101-110	8098 and 8107	María Auxiliadora Av - N-V Rd	NE	112	A5	-	1	-	-	-	-	-	Fragments of oil lamp, coarse ware jar. Looted	-	Second half I AD - II AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2714	3 Cardero St	N	1,200	A138	1	-	-	-	-	-	-	No Deposit	-	I - III AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2715	3 Cardero St	N	1,200	A151	1	-	-	-	-	-	-	1 jar (Sánchez A-VIII/Smit Nolen 3b), 1 cup Drag. 35/TSA A Land 34/Smit Nolen 7e	1 cup Drag. 35/TSA A Land 34/Smit Nolen 7e	End I AD - beginning II AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2716	3 Cardero St	N	1,200	A155	1	-	-	-	-	-	-	1 bowl Form I Plaster C imitation TSA A14 B Hayes, 1 oil lamp Menzel 390	1 bowl Form I Plaster C imitation TSA A14 B Hayes, 1 oil lamp Menzel 390	End I AD - beginning II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2717	3 Cardero St	N	1,200	A157	1	-	-	-	-	-	-	No Deposit	-	I - III AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2718	3 Cardero St	N	1,200	A148	-	1	-	-	-	-	-	1 jar (Sánchez F III), 1 glass bowl (Isings 42) similar to Drag. 35, 1 bronze cup, *spatula* and 1 unidentified metal object	1 glass bowl (Isings 42) similar to Drag. 35	I - II AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2719	3 Cardero St	N	1,200	A150	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2720	3 Cardero St	N	1,200	A156	-	1	-	-	-	-	-	2 wide-mouth pitchers, 1 small coarse ware jar, 2 coarse ware plates imitating TSA A, Lamb. 4/36 B, 1 large plate	2 coarse ware plates imitating TSA A, Lamb. 4/36 B	Second half I AD - II AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2721	3 Cardero St	N	1,200	A162	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Vargas Calderón and Plasencia Sánchez, 2015: 157-178	8086, 8104, 2646, 2722	3 Cardero St	N	1,200	A163	-	1	-	-	-	-	-	No Deposit	-	I - III AD
Departamento de Documentación del Consorcio, 2015: 411-432	2619	Teniente Flomesta St	N	-	A6	1	-	-	-	-	-	-	1 TSH Lamb. 33	1 TSH Lamb. 33 (stamp TIMACI)	II AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A6	-	1	-	-	-	-	-	1 illegible coin, fragment of glass vessel, 1 oil lamp, iron nails	-	Augustus-Claudius
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A7	-	1	-	-	-	-	-	Fragment of glass vessel	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A8	-	1	-	-	-	-	-	Coarse ware and fine ware vessels, jar, bottle and glass lachrymatory, bronze ring and oil lamp	-	First half I AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A10	-	1	-	-	-	-	-	Bronze key, clay lachrymatory, sherds of fine ware and coarse ware vessel and 1 oil lamp	-	I - II AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A11	-	1	-	-	-	-	-	2 bone *acus crinalis,* glass fragments, various fragments of bronze with uncertain use	-	I - II AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A12	1	-	-	-	1	-	-	1 fine ware bowl, 1 glass lachrymatory, 1 oil lamp	-	I AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A25	-	1	-	-	-	-	-	3 glass vessels	-	I - II AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A26	-	1	-	-	-	-	-	1 glass lachrymatory	-	I - II AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A27	-	1	-	-	-	-	-	Partially melted glass lachrymatory, iron nails, glass bottle, 2 bone *acus*, bone spoon, shells and fragments of oil lamp	-	I - II AD
Heras Mora, 2017: 171-186	2510	Confederación Hidrográfica Guadiana - Reina Sofía Av	NE	-	A28	1	-	-	-	-	Still-born	-	4 necklace beads, 1 bone token, 1 urn, 2 coarse ware cups, 1 fine ware cup, 1 coin (Caligula)	1 coin (Caligula)	First half I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A3/1000	-	1	-	-	-	-	-	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A4/1000	-	1	-	-	-	-	-	1 fine ware bowl (Mayet XXXVII)	1 fine ware bowl (Mayet XXXVII)	Second half II AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A6/1000	-	1	-	-	-	-	-	1 coarse ware urn, bowl, 1 lachrymatory Oberaden 29	1 lachrymatory Oberaden 29	First half I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A7/1000	-	1	-	-	-	-	-	1 Mayet XLIII, 1 Loeschcke IV, 1 plate Morin 91, 1 beacon Isings 42, 5 iron nails	1 Mayet XLIII, 1 Loeschcke IV	II AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A8/1000	-	1	-	-	-	-	-	Fragments of Ising 8a, iron nails	-	I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A10/1000	1	-	1	-	-	-	-	Iron scissors	-	I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A11/1000	-	1	-	-	-	-	-	1 coarse ware urn, 1 lachrymatory Oberaden 29	1 lachrymatory Oberaden 29	First half I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A12/1000	-	1	-	-	-	-	-	Coarse ware urb, 1 Loeschcke I B, 1 coarse ware pot and 1 bronze figurine of Harpocrates	1 Loeschcke I B, 1 bronze figurine of Harpocrates	I - II AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A16/1000	-	1	-	-	-	-	-	1 lachrymatory Oberaden 29, 1 coarse ware urn	1 lachrymatory Oberaden 29	First half I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A5/1500	1	-	1	-	-	-	-	1 illegible coin, 1 beacon Isings 42, 1 Deneauve IV D/VE, 1 cup (fine ware) Mayet LXVVV, bones of a bird	1 Deneauve IV D/VE, 1 cup (fine ware) Mayet LXVVV	Mid I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A6/1500	-	1	-	-	-	-	-	Iron and bronze box, 1 Isings 8b, 4 partially melted Isings 8b, 1 bone *agitator*, 2 small glass *amphora*, 1 scallop shell, 6 shells, 1 oil lamp	Scallop shells, 6 shells	I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A7/1500	-	1	-	-	-	-	-	Various Isings 8, 1 cup Mayet XXXVIII	1 cup Mayet XXXVIII	Second half I AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A8/1500	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A9/1500	-	1	-	-	-	-	-	Looted	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A4/2000	1	-	1	-	-	-	-	1 jar Smit Nolen 1k, iron plaque and oil lamp	-	II - III AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A6/2000	-	1	-	-	-	-	-	Fragments of glass, iron nails, lead object, bone box, 1 cameo, gold net, bronze remnants of a box	-	I - II AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A3/3000	1	-	-	-	-	1	-	Coarse ware bowl, glass object	-	I - II AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A4/3000	1	-	1	-	-	-	-	Bronze plaque, glass fragments, nails, marble inscription	-	II AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A5/3000	-	1	-	-	-	-	-	3 glass bottles with stamp (similar to Isings 90), Isings 97c, 2 bronze *strigili*, 1 bronze knife with a bone handle	-	II - III AD
Márquez Pérez, 2017: 187-204	2510	CHG - Reina Sofía Av	NE	-	A6/3000	-	1	-	-	-	-	-	1 oil lamp, iron nails, glass fragments, 1 bronze coin, glass tokens	-	I - II AD
Pérez Maestro, 2017b: 271-278	8111	Arturo Barea St	SE	8,795	A1	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Pérez Maestro, 2017b: 271-278	8111	Arturo Barea St	SE	8,795	A2	-	1	-	-	-	-	-	Fragment of carved bone, isings 15, isings 8, jar Scatozza 32	-	I - II AD
Pérez Maestro, 2017b: 271-278	8111	Arturo Barea St	SE	8,795	A3	1	-	1	-	-	-	F	1 Mayet LI B, 1 Mayet XLIII A, 1 Mayet LI, 1 pot Smit Nolen 2-k, 1 jar Smit Nolen 1-c, bone *acus*, 28 nails, 1 illegible coin	1 Mayet LI B, 1 Mayet XLIII A, 1 Mayet LI, 1 pot Smit Nolen 2-k, 1 jar Smit Nolen 1-c	I - II AD
Pérez Maestro, 2017b: 271-278	8111	Arturo Barea St	SE	8,795	A4	-	1	-	-	-	-	-	1 illegible coin, 2 nails	-	I - II AD
Pérez Maestro, 2017b: 271-278	8111	Arturo Barea St	SE	8,795	A5	1	-	-	-	-	1	-	1 Isings 30, fragments of Loeschcke IV	fragments of Loeschcke IV	I - II AD
Pérez Maestro, 2017b: 271-278	8111	Arturo Barea St	SE	8,795	A6	-	1	-	-	-	-	-	1 illegible coin	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Pérez Maestro, 2017b: 271-278	8111	Arturo Barea St	SE	8,795	A7	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A3	-	1	-	-	-	-	-	Looted	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A66	-	1	-	-	-	-	-	Iron nail, glass vessel	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A8	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A13	1	-	1	-	-	-	-	Nails, Smit Nolen 3b, jar Sánchez 1,44, oil lamp Deneauve V-A, 1 Isings 86, *Dupondius* Antoninus Pius	oil lamp Deneauve V-A, Dupondius Antoninus Pius	Mid II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A2	-	1	-	-	-	-	-	1 jar Mayet LI, *aes* Claudius, hobnail	*Aes* Claudius	Mid I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A15	-	1	-	-	-	-	-	1 Deneauve VG, 1 Mayet XX, 1 pot Sánchez I, 14 nails	-	End I AD - beginning II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A47	1	-	1	-	-	-	-	2 Smit Nolen 21, 1 bowl Smit Nolen 1b, 1 glass cup, 1 illegible coin	-	End I AD - beginning II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A18	1	-	1	-	-	-	-	2 Isings 51, 1 Deneauve VIII B, nails, coin (Galienus)	Coin (Galienus)	III AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A52	-	1	-	-	-	-	-	No Deposit	-	I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A7	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A71	-	1	-	-	-	-	-	Fragmented coarse ware, glass vessels, bone plaque, bronze handles from a box	-	End I AD - beginning II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A43	-	1	-	-	-	-	-	1 oil lamp Leibundgut XVII	-	Mid-End II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A42	-	1	-	-	-	-	-	Iron nails, pot Mezquiriz 129/3, 1 Deneauve VIII B, 1 glass lachrymatory Caldera 71, 1 cup Mayet LIII, bronze wire	-	Mid II - III AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A17	1	-	1	-	-	-	-	Bowl Smit Nolen 6b, pot Sánchez II	-	Mid II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A14	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A44	-	1	-	-	-	-	-	Nail, *tessera*, 1 *aes* (Nerva), 1 clay token	*Aes* Nerva	End I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A69	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A57	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A25	1	-	1	-	-	-	-	Iron and bronze nails, 1 pot Smit Nolen 1d, 1 Deneauve VIII A, 1 coarse ware bowl	-	II - III AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A5	-	1	-	-	-	-	-	1 Smit Nolen 2f, nails and 1 calcined coin	-	End I AD - beginning II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A23	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A61	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A37	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A38	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A36	1	-	1	-	-	-	-	Jar Sánchez II, 1 Isings 50, 1 iron nail	-	End I AD - beginning II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A35	1	-	1	-	-	-	-	1 Smit Nolen 1b, 1 Smit Nolen 6a, bronze coin, glass fragments, coarse ware pot	-	I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A26	1	-	1	-	-	-	-	1 Isings 34, 1 Isings 96b2, nail, coarse ware pot	-	Second half I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A68	-	1	-	-	-	-	-	Nail, glass fragments	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A58	1	-	1	-	-	-	-	1 Deneauve VIII B, 1 Isings, Caldera 71, 1 jar Sánchez III, Glass vessels, 1 coin, 1 Isings 28, 1 bottle Sánchez VII, 3 nails	-	End II - III AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A45	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A48	1	-	1	-	-	-	-	1 Deneauve VII B, 1 Isings 30, 1 illegible coin	-	II - III AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A46	1	-	1	-	-	-	-	1 oil lamp Dressel-Lamboglia 30A	-	III AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A70	-	1	-	-	-	-	-	Sherds of coarse ware	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A19	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A65	1	-	1	-	-	-	-	1 Ising 103	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A34	1	-	1	-	-	-	-	Sherds of Mayet XXXIV, edge of lachrymatory (pottery) Sánchez II, 1 coarse ware Smit Nolen 1c	-	Mid I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A54	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A10	-	1	-	-	-	-	-	1 amber bead, sherds of coarse ware pot, 1 nail, 1	1 amber bead, 1 *aes* Nerva	End I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
													bronze rivet, 1 *aes* Nerva		
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A27	1	-	1	-	-	-	-	1 Smit Nolen 6b, 1 jug, glass fragments	-	End I AD - beginning II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A28	1	-	1	-	-	-	-	1 jar Smit Nolen 1a, 1 white glass token, 1 Isings 32, 1 Isings 87	-	II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A67	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A9	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A56	1	-	1	-	-	-	-	Sherds of TSH, 2 iron nails, 1 bronze coin	-	II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A55	1	-	1	-	-	-	-	No Deposit	-	II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A62	-	1	-	-	-	-	-	1 jar Vegas 46, nail	-	Mid I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A51	1	-	-	-	-	1	-	Bowl Smit Nolen 6b, cup Smit Nolen1c, 1 jar Smit Nolen 1c, lid Ostia 1, 1 Deneauve VIII B	-	End I AD - beginning II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A53	1	-	-	-	-	1	-	1 Smit Nolen 1c pot, nails	-	End I AD - beginning II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A72	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A63	-	1	-	-	-	-	-	No Deposit	-	End I AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A31	1	-	-	1	-	-	-	Cup Mayet LI, 1 oil lamp Sotomayor D1, 1 coin (Commodus), *acus*, fragment of Smit Nolen 1d	Commodus coin	End II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A30	1	-	-	1	-	-	-	1 jar Smit Nolen 1k, 1 Deneauve V-A. Isings 51b, shell	Shell	Mid I AD - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A49	1	-	-	-	-	1	-	Looted	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A29	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A24	1	-	1	-	-	-	-	1 Deneauve V-A, 1 jar Sánchez VII, 1 lachrymatory Caldera 71, glass plate, 12 iron nails	-	Flavian - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A39	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	8117	García y Bellido St	S	536	A50	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	2835	García y Bellido St	S	536	A1	1	-	1	-	-	-	-	No Deposit	Ara with a Greek inscription	I - II AD
Bejarano Osorio, 2017c: 291-329	2835	García y Bellido St	S	536	A2	-	1	-	-	-	-	-	1 oil lamp, 1 circular bronze plaque, bronze lid, bronze dice cup, lachrymatory Isings 8, 2 bronze tweezers, bronze spoon and knife handle, *tisanarium* Mayet LII, fragments of coarse ware and glass, 26 white glass tokens, 26 black glass tokens, 1 aryballos Isings 61, bronze hinge, handles and spoon	1 aryballos Isings 61	Mid I AD
Bejarano Osorio, 2017c: 291-329	2835	García y Bellido St	S	536	A3	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	2835	García y Bellido St	S	536	A4	1	-	1	-	-	-	F	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Bejarano Osorio, 2017c: 291-329	2835	García y Bellido St	S	536	A5	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017c: 291-329	2835	García y Bellido St	S	536	A6	1	-	1	-	-	-	-	1 Loeschcke X	1 Loeschcke X	End I AD
Bejarano Osorio, 2017c: 291-329	2835	García y Bellido St	S	536	A7	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Aranda Cisneros, 2017a: 365-412	8130	42 Rambla Martir Santa Eulalia	N	116	A32	1	-	1	-	-	-	-	No Deposit	-	I - II AD
Pérez Maestro, 2017c: 413-427	8131	46 Rambla Santa Eulalia St	N	250	A9-15	7	-	5	2	-	-	2 M, 1 F	No Deposit	-	I - II AD
Pérez Maestro, 2017c: 413-427	8131	46 Rambla Santa Eulalia St	N	250	A16	1	-	-	1	-	-	-	Fine ware vessels, TSG	TSG	I - II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A3	-	1	-	-	-	-	-	1 Isings 28, 1 loom	-	I - II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A6	-	1	-	-	-	-	-	1 Mayet XLIII, 1 Mayet LI, 1 Mayet LIII	1 Mayet XLIII, 1 Mayet LI, 1 Mayet LIII	AD100-125
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A7	-	1	-	-	-	-	-	1 Deneauve V-A, 7 iron nails	-	Tiberius-Claudius
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A10	-	1	-	-	-	-	-	1 Deneauve VA, 1 Mayet XXXII, 1 Deneauve VI A, 1 bowl Smit Nolen A 2b, illegible bronze coin	-	I - II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A14	-	1	-	-	-	-	-	1 *denarius* (TI CAESAR DIVI AUG F AUGUSTUS/PONT IF MAXIM)	1 *denarius* (TI CAESAR DIVI AUG F AUGUSTUS/PONT IF MAXIM) Tiberius	AD14-37
Vargas Calderón and Plasencia	8137	Urbano González Serrano St	SE	-	A16	-	1	-	-	-	-	-	*Amphorae* (fragment), illegible bronze coin	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sánchez, 2017: 437-450															
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A17-19	-	3	-	-	-	-	-	No Deposit	-	I - II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A20	-	1	-	-	-	-	-	*Amphorae* (fragment), 1 Isings 28, cup Sánchez I, 1 jar Smit Nolen 7e, 2 pots Sánchez II, vessel imitating Smit Nolen 7e, 1 Sánchez III	-	Second half I AD - II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A21	-	1	-	-	-	-	-	*Amphorae* (fragment), 1 jar Smit Nolen 4d, 1 Isings 28, 1 bottle Isings 51a, 2 plates Isings 22, 4 bowls Isings 53, 1 Deneauve V-A	-	Second half I AD - II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A40	-	1	-	-	-	-	-	1 Ising 88, 1 Mayet XXXIV, 1 Mayet XLIV	-	Claudius-Nero
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A39	-	1	-	-	-	-	-	1 jar Smit Nolen 4c	-	End I AD - beginning II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A41	-	1	-	-	-	-	-	2 jars Smit Nolen II, cup Mayet VIII, 1 Isings 64, bone spindle whorl, bone adornment, 1 cup Mayet XXXIV, 1 glass *agitator*, 2 lachrymatories Isings 82 A1, fragments of 1 bone *acus crinalis*, 4 shells, fragments of a bronze plaque	4 shells	End I AD - beginning II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A42	-	1	-	-	-	-	-	1 pot Sánchez II	-	I - II AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A22	1	-	1	-	-	-	-	1 jar Smit Nolen 3b, 1 Deneauve V-A	-	First half I AD
Vargas Calderón and Plasencia Sánchez, 2017: 437-450	8137	Urbano González Serrano St	SE	-	A23	1	-	1	-	-	-	-	1 Smit Nolen 4a, 1 pot Sánchez II	-	First half I AD
Bejarano Osorio, 2017: 451-457	3501	22 Circo Romano St	NE	35,61	A3	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio, 2017: 451-457	3501	22 Circo Romano St	NE	35,61	A5	-	1	-	-	-	-	-	3 illegible bronze coins, 1 bottle Isings 51, 1 cup Isings 32, edge and base of glass bowl	-	I - II AD
Bejarano Osorio, 2017: 471-477	3503	55 Pontezuelas St	N	94	A1	-	1	-	-	-	-	-	1 jar, 1 illegible bronze coin, glass fragments, 1 bronze palette knife, nails, fish hook	-	I - II AD
Bejarano Osorio, 2017: 471-477	3503	55 Pontezuelas St	N	94	A2	-	1	-	-	-	-	-	1 jar Sánchez F1, 2 bowls Smit Nolen 6b, 2 Isings 32, 12 nails	-	I - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A7	-	1	-	-	-	-	-	Scallop shells, 1 cup imitating fine ware Mayet XLV, 2 pots Smit Nolen 2t and 2c, oil lamp	Scallop shells	Second half I AD - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A3	-	1	-	-	-	-	-	Round shaped overlay	-	I - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A8	-	1	-	-	-	-	-	1 illegible coin, fragments of Drag. 35, fragments of por Smit Nolen t2, 7 iron nails	Drag. 35	I - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A17	-	1	-	-	-	-	-	Illegible coin and nails	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A16	-	1	-	-	-	-	-	1 Deneauve V-G, 1 Smit Nolen t4, 1 Smit Nolen 4c	1 Deneauve V-G	AD50-100
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A10	-	1	-	-	-	-	-	1 pot Smit Nolen t2 ,1 cup Mayet XLV, oil lamp, coarse ware vessel	-	Second half I AD - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A9, A21, A32	-	3	-	-	-	-	-	No Deposit	-	I - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A15	-	1	-	-	-	-	-	1 Smit Nolen 2d, coarse ware cinerary urn, 2 glass vessels partially melted	-	End I AD - beginning II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A19	-	1	-	-	-	-	-	Coarse ware cinerary urn Smit Nolen 2b, 1 Isings 50, 2 glass plates	-	II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A20	-	1	-	-	-	-	-	1 lid Vegas 15, 4 lachrymatories Isings 28, 1 Isings 82, metallic brooch, illegible coin, bronze mirror and case	-	Beginning II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	UE206	-	1	-	-	-	-	-	*Amphorae* Dressel 3	Dressel 3	End I AD - beginning II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A22	-	1	-	-	-	-	-	TSH Drag. 27, glass urn Isings 67	TSH Drag. 27	Claudian - beginning II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A29	-	1	-	-	-	-	-	1 Loeschcke IV, fragments of a glass plate, coarse ware pot	1 Loeschcke IV	I - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A33	-	1	-	-	-	-	-	1 coarse ware vessel	-	I - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A27	-	1	-	-	-	-	-	Fragments of Mayet XLVII, 2 plates Smit Nolen 6a, 1 jar Smit Nolen 1b, 1 cup Isings 93, bronze necklace, glass jar and illegible coin	.	Claudian - beginning II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A25	-	1	-	-	-	-	-	5 iron nails, 1 jar Sánchez AI, 2 plates Smit Nolen 2b, 1 glass plate, 1 jar Sánchez I, 1 bowl Mayet XLIII, 1 bowl Mayet XLIV, probable Isings 10, illegible coin, sherds of coarse ware vessels	i	II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A31	-	1	-	-	-	-	-	1 plate Smit Nolen 6a, 1 cup Isings 3b, vessel Smit Nolen 2b, illegible bronze coin	-	I - II AD
Pereira Ramos, 2017a: 479-508	8176	SUP-NO-06	N	2,700	A28	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A23	1	-	1	-	-	-	-	1 *imbrex*, 2 Deneauve VIII B, coarse ware vessel	2 Deneauve VIII B	II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A21	1	-	1	-	-	-	-	Coarse ware plate, fragments of glass vessel	-	II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A13	-	1	-	-	-	-	-	Fine wares (local production) copy of Mayet XXXVII A, sherds of coarse ware vessels	-	End I AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A14-16	-	3	-	-	-	-	-	Looted	-	I - II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A17, A19, A22	3	-	3	-	-	-	-	No Deposit	-	I - II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A20	1	-	-	-	-	1	-	Coarse ware vessels	-	II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A18	1	-	1	-	-	-	-	Coarse ware jar and 1 Deneauve VIII B	1 Deneauve VIII B	II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A24	-	1	-	-	-	-	-	Coarse ware vessel	-	I - II AD
Aranda Cisneros, 2017b: 509-528	8177	Vicente Aleixandre St - Aguadores St	S	411	A25	1	-	1	-	-	-	-	Coarse ware jar and plate, 1 Deneauve V-A (local production)	-	II AD

Reference	Intervention	Location	Sector	Area (M²)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Delgado Molina, 2017: 547-577	2810	Juan Pablo II Av - Transportes St	NE	59,000	A10	-	1	-	-	-	-	-	1 ribbon glass vessel (Millefiori)	1 ribbon glass vessel (Millefiori). From the Bay of Naples - Vesuvian area	I BC
Méndez Grande, 2017: 579-638	8135	Reina Sofía Industrial Compound	NE	3,815	A5	-	1	-	-	-	-	-	TSI	TSI, stamp OILI (Arezzo) from CN. ATEI. ZOILI	End I BC - AD15/20
Méndez Grande, 2017: 579-638	8135	Reina Sofía Industrial Compound	NE	3,815	A8	1	-	1	-	-	-	-	Coarse ware pot	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8135	Reina Sofía Industrial Compound	NE	3,815	A6	1	-	1	-	-	-	F	1 Smit Nolen 5g jar	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8135	Reina Sofía Industrial Compound	NE	3,815	A10	-	1	-	-	-	-	-	1 lachrymatory Isings 26, fine ware vessel	-	First half I AD
Méndez Grande, 2017: 579-638	8135	Reina Sofía Industrial Compound	NE	3,815	A9	-	1	-	-	-	-	-	No Deposit/Looted	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8135	Reina Sofía Industrial Compound	NE	3,815	A13	1	-	1	-	-	-	-	Fragments of glass/looted	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A2	-	1	-	-	-	-	-	1 lachrymatory Isings 8, fragment of Isings 8, scallop shells, bone box and needle, coarse ware vessel	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A5	-	1	-	-	-	-	-	1 lachrymatory Isings 82b, coin	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A4	-	1	-	-	-	-	-	Bottle Smit Nolen 1J, bottle, coin, fragment of earring, plate Smit Nolen 2b, 1 Deneauve V-A	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A3	-	1	-	-	-	-	-	Fragments of coarse ware	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A12	-	1	-	-	-	-	-	4 lachrymatories with circular shape, fragments of two more, 2 brooches, 1 token, 1 ring, 1 bonepin	-	Beginning I AD - End I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A10	-	1	-	-	-	-	-	TSH, 1 bronze coin	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A7	-	1	-	-	-	-	-	1 cup Sánchez III, 1 pot, 1 bowl, 1 cup with lid, glass bowl, 2 bronze *acus*, 1 iron nail	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A6	-	1	-	-	-	-	F	1 fine ware inkwell, 6 lachrymatories (1 Isings 55, 3 Isings 57, 2 Isings 15), 3 hobnails, 34 stone tokens, 1 scallop shell, 2 buttons, 1 bone needle, 1 bronze key and deadbolt	Scallop shell	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A11	-	1	-	-	-	-	-	Coin and bone needle	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A8	1	-	-	-	-	Stillborn	-	1 oil lamp, 3 necklace beads	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A14	1	-	1	-	-	-	-	1 Smit Nolen 1a jar, 1 vessel Sánchez II, 1 lachrymatory Isings 82a, lead fragment, bone needle, bird bones	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A61	-	1	-	-	-	-	-	Oil lamp	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A29	1	-	1	-	-	-	-	Plate, jar Sánchez II	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A30	1	-	1	-	-	-	-	Glass plate, jar, illegible coin	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A42	1	-	1	-	-	-	-	No Deposit	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A9, 15, 27, 35, 49, 54, 57	-	7	-	-	-	-	-	No Deposit/Looted	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	16	-	1	-	-	-	-	-	Fine ware inkwell	-	Beginning I AD - End I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A19	-	1	-	-	-	-	-	Fine ware lachrymatory, Smit Nolen 3a cup, glass lachrymatory, glass cups, 4 iron nails, scallop shells, part of box, cauldron, bronze box and plaque	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A13	1	-	1	-	-	-	-	Coarse ware jar	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A28	-	1	-	-	-	-	-	Iron bar, part of bronze box	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A33	-	1	-	-	-	-	-	Coarse ware sherds, 4 iron nails, glass lachrymatory	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A34	-	1	-	-	-	-	-	8 iron nails	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A35	-	1	-	-	-	-	-	Unidentified pottery object	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A36	-	1	-	-	-	-	-	*Tisanarium* Deneauve V-A, fine ware vessel, jar, coin	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A40	-	1	-	-	-	-	-	Coarse ware jar and pot	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A41	-	1	-	-	-	-	-	Sherds of coarse ware, oil lamp	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8139	Reina Sofía Industrial Compound	NE	3,815	A55	-	1	-	-	-	-	-	Fine ware bottle and cup	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A37	-	1	-	-	-	-	-	1 coarse ware vessel	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A31	1	-	1	-	-	-	-	1 Deneauve V-A, *Guttus* (glass), iron nail	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A56	1	-	1	-	-	-	-	Fine ware fragments, glass lachrymatory	-	Beginning I AD - End I AD

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Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A13, 21-25, 29, 38, 39, 47, 48, 51, 58	-	13	-	-	-	-	-	No Deposit/Looted	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A50	-	1	-	-	-	-	-	1 Deneauve V-A, fine ware cup, glass plate	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A44	-	1	-	-	-	-	-	Unidentified pottery object, glass fragments	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A45	-	1	-	-	-	-	-	Coarse ware vessel, glass fragments, iron nail	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A51	-	1	-	-	-	-	-	Fragment *Amphorae*	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A6	1	-	1	-	-	-	-	No Deposit/Looted	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A7	-	1	-	-	-	-	-	1 Mayet XLIII, 1 bottle Isings 50a, 1 iron nail	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A8	-	1	-	-	-	-	-	Very fragmented vessel	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A9	-	1	-	-	-	-	-	TSH and fragment glass	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A10	-	1	-	-	-	-	-	Coarse ware vessel	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A17	-	1	-	-	-	-	-	1 glass lachrymatory, *amphorae* as a cinerary urn	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A11	-	1	-	-	-	-	-	Dog canine, oil lamp, 3 iron nails	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A14	-	1	-	-	-	-	-	Coarse ware pot, bronze plaque	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A18	-	1	-	-	-	-	-	3 coarse ware vessels, 3 glass vessels, 1 bronze needle	-	Beginning I AD - End I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A19	-	1	-	-	-	-	-	Coarse ware bottle, lachrymatory, 2 iron nails, 2 iron knives	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A20	-	1	-	-	-	-	-	3 coarse ware vessels, 1 iron nail	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A27	-	1	-	-	-	-	-	2 glass beads	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A32	-	1	-	-	-	-	-	Oil lamp, TSH, glass fragments	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A35	1	-	1	-	-	-	-	Fine ware bowl, oil lamp	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A36	-	1	-	-	-	-	-	2 iron nails, 2 coarse ware vessels	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A46	-	1	-	-	-	-	-	1 Deneauve V-A, 2 Isings 8, 1 iron burin	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A53	-	1	-	-	-	-	-	2 fine ware cups, beacon, Isings 26a, Spindle and spindle whorl (bone)	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A54	-	1	-	-	-	-	-	2 coarse ware vessels, 2 glass plates, 2 iron stirrups	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A57	-	1	-	-	-	-	-	1 Mayet XLIII, 2 TSH jar Mezquiriz II, TSH	TSH	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A59	-	1	-	-	-	-	-	Coarse ware pot as cinerary urn	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A31	-	1	-	-	1	-	-	4 fragments of pottery and glass, iron nails	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A33	-	1	-	-	-	-	-	4 fine wares vessels, jar, bottle, oil lamp	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A34	-	1	-	-	-	-	-	Fine wares	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A48	1	-	1	-	-	-	-	Fine wares, oil lamp	-	Beginning I AD - End I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A55	-	1	-	-	-	-	-	Fragment of fine ware oil lamp, 3 iron nails, round bronze plaque	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A56	-	1	-	-	-	-	-	2 glass lachrymatories, 2 iron bars, iron adornments	-	Beginning I AD - End I AD
Méndez Grande, 2017: 579-638	8175	Reina Sofía Industrial Compound	NE	3,815	A63	-	1	-	-	-	-	-	2 bottles, 1 cup, 2 bowls, 2 glass plates	-	Beginning I AD - End I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A2	-	1	-	-	-	-	-	1 Isings 8, 2 Isings 51	-	Mid I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A3	-	1	-	-	-	-	-	2 coarse ware bowls	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A4	-	1	-	-	-	-	-	1 Isings 54, 2 Isings 50	-	AD50-100
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A5	-	1	-	-	-	-	-	No Deposit	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A6	-	1	-	-	-	-	-	2 coarse ware urns	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A7	-	1	-	-	-	-	-	1 glass lachrymatory, 2 coarse ware sherds, 1 *acus crinalis* (bronze), 1 bronze *agitator*	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A8	-	1	-	-	-	-	-	2 coarse ware urns	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A9	-	1	-	-	-	-	-	Sherds of oil lamp and bowl	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A10	-	1	-	-	-	-	-	Fragments of coarse ware and glass	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A11	-	1	-	-	-	-	-	2 coarse ware urns	-	I AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A20	-	1	-	-	-	-	-	No Deposit	-	I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A21	-	1	-	-	-	-	-	Sherds of coarse ware	-	I - II AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A22	-	1	-	-	-	-	-	Sherds of glass	-	I - II AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A30	-	1	-	-	-	-	-	2 iron nails, 2 coarse ware vessels, bronze plaque. 1 glass bead	-	I - II AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A31	-	1	-	-	-	-	-	Urn	-	I - II AD
Sauceda Rodríguez, 2017: 639-650	8148	SUP-NO-03	N	1,354	A32	-	1	-	-	-	-	-	Fragment of urn	-	I - II AD
Sánchez Hidalgo, 2017: 651-676	654	Plantonal de la Vera Neighbourhood	N	1,800	A9	-	1	-	-	-	-	-	Glass plates, bowls, jars, bottles	-	I - II AD
Sánchez Hidalgo, 2017: 651-676	654	Plantonal de la Vera Neighbourhood	N	1,800	A10	-	1						Jar Smit Nolen 2b	-	I - II AD
Sánchez Hidalgo, 2017: 651-676	654	Plantonal de la Vera Neighbourhood	N	1,800	A20	-	1	-	-	-	-	-	1 Mayet XLIII, 1 Mayet XL, 1 Isings 26, 1 Isings 82, 2 shells, iron nails	-	I - II AD
Heras Mora, Olmedo Grajera, Pérez Maestro, 2017: 707-746	8101, 8102, 8123	41 Almendralejo St	N	5,027	Cremation 1	-	1	-	-	-	-	-	1 Mayet LI, 1 Dressel 9 (oil lamp), bronze *strigili*, bronze needle	-	End I AD
Aranda Cisneros, 2017c: 787-800	630	Octavio Augusto St - Safo St	E	142	A4	-	1	-	-	-	-	-	No Deposit	-	I AD
Aranda Cisneros, 2017c: 787-800	630	Octavio Augusto St - Safo St	E	142	A5	-	1	-	-	-	-	-	1 coarse ware jar, 2 Isings 28	-	I AD
Aranda Cisneros, 2017c: 787-800	630	Octavio Augusto St - Safo St	E	142	A6	1	-	-	-	1	-	-	2 gold earrings, 1 bowl Mayet XLIII (local productions)	-	I AD
Aranda Cisneros, 2017c: 787-800	630	Octavio Augusto St - Safo St	E	142	A9	-	1	-	-	-	-	-	1 Isings 8	-	I AD
Aranda Cisneros, 2017c: 787-800	630	Octavio Augusto St - Safo St	E	142	A14	1	-	1	-	-	-	-	1 illegible coin	-	I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Pereira Ramos, 2017b: 801-809	663	Jardines del Hipódromo	NE	-	A4	-	1	-	-	-	-	-	Lead urn, 1 Isings 8, fragment of oil lamp, 1 Isings 28	-	I - II AD
Pereira Ramos, 2017b: 801-809	663	Jardines del Hipódromo	NE	-	A5	-	1	-	-	-	-	-	1 Mayet XXXVII, 1 Deneauve VII A, fragments of glass lachrymatory	1 Mayet XXXVII (25BC)	End I BC - AD15/20
Pereira Ramos, 2017b: 801-809	663	Jardines del Hipódromo	NE	-	A10	1	-	-	-	1	-	-	No Deposit	-	I - II AD
Pereira Ramos, 2017b: 801-809	663	Jardines del Hipódromo	NE	-	A11	-	1	-	-	-	-	-	1 Smit Nolen 2a	-	Second half 1 AD
Pereira Ramos, 2017b: 801-809	663	Jardines del Hipódromo	NE	-	A12	1	-	-	-	1	-	-	1 *acus*, illegible coin, coarse ware pot	-	I - II AD
Pereira Ramos, 2017b: 801-809	663	Jardines del Hipódromo	NE	-	A13	1	-	-	-	-	1	-	2 coarse ware pots	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2084, 2089, 2095, 2096, 2098, 2103, 2110, 2202, 2210, 2211	-	10	-	-	-	-	-	No Deposit/Looted	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2081	-	1	-	-	-	-	-	1 Smit Nolen 1b, bowl Sánchez III a, 1 pot Smit Nolen 2e, 1 Smit Nolen 7b, 1 Sánchez IIC	-	Second half I AD - III AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2097	-	1	-	-	-	-	-	1 jar Smit Nolen 3b, bowl Sánchez IIB, 1 oil lamp Loeschcke IV, 1 Mayet LI, 1 oil lamp	1 Loeschcke IV, 1 oil lamp with Republican decoration (Hellenic tradition)	II BC - Augustus
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2100	-	1	-	-	-	-	-	2 Mayet XLV, 1 coin Augustus-Claudius	1 coin Augustus-Claudius	31BC - AD54
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2104	-	1	-	-	-	-	-	1 Sánchez VII A	-	II - III AD
Sánchez Hidalgo, Sanabria	8206	Antiguo Cuartel de Artillería	N	12,000	A2105	-	1	-	-	-	-	-	1 oil lamp, 1 coin, sherds of pottery	-	Beginning I AD

Reference	Intervention	Location	Sector	Area (M²)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Murillo, Rosa, 2019: 425-484															
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2101	-	1	-	-	-	-	-	Double-handled fairing pottery vessel Smit Nolen 2b, beacon Smit Nolen 7e, plate Smit Nolen 4b	-	Beginning I AD - second half I AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2109	-	1	-	-	-	-	-	Oil lamp Deneauve V-G	-	AD50-100
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2172	-	1	-	-	-	-	-	Marble plaque, 1 oil lamp, 2 fragments of coarse ware vessel (1 Mayet XLIII, local production)	-	Second half 1 AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A116	-	1	-	-	-	-	-	3 oil lamps: 1 Deneauve V-G, 1 Dressel 11, 1 Loeschcke IV. 1 coarse ware pot	1 Deneauve V-G, 1 Dressel 11, 1 Loeschcke IV	AD40-100
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A126	-	1	-	-	-	-	-	1 coarse ware pot	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A127	-	1	-	-	-	-	-	No Deposit/Looted	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A81	-	1	-	-	-	-	-	1 Smit Nolen 3b	-	Flavian - III AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A156	-	1	-	-	-	-	-	1 lachrymatory Isings 28/Caldera 12b	-	I - IV AD
Sánchez Hidalgo, Sanabria	8206	Antiguo Cuartel de Artillería	N	12,000	A99	-	1	-	-	-	-	-	1 *aes* Fausta/looted	1 *aes* Fausta	First half II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Murillo, Rosa, 2019: 425-484															
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A39	-	1	-	-	-	-	-	Glass (1 jar, 2 bowls, 2 lachrymatories, tokens), bronze (buckle, ring, illegible coin)	-	First half I AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A44	-	1	-	-	-	-	-	1 oil lamp (1 Loeschcke IV/Dressel 11)	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A49	-	1	-	-	-	-	-	1 coarse ware bowl	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A41	-	1	-	-	-	-	-	Glass urn containing the ashes	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	Inhumation 1-2	2	-	2	-	-	-	-	1 coin/No deposit	-	I AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2199	-	1	-	-	-	-	-	Glass bottles (Caldera 1 and 2), 1 Isings 26, 1 oil lamp Loeschcke IV	-	I - III AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A2200	-	1	-	-	-	-	-	Urn Sánchez II B, lid Sánchez I B	-	Second half I AD - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	UE3203	-	1	-	-	-	-	-	2 *dolia*, 1 fine ware cup similar to Mayet XXX/XXXVII, 1 glass vessel	-	Tiberius - second half I AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A149	1	-	1	-	-	-	-	No Deposit	-	I - II AD

Reference	Intervention	Location	Sector	Area (M²)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A150	1	-	1	-	-	-	-	1 oil lamp Dressel 11/Deneauve VIII C, 1 *acus*, 1 illegible *semis*, 1 beaker, 2 lachrymatories (Caldera 71), 1 glass bottle, glass vessel	1 *semis*	Second half II - III AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A1052, A1057	2	-	2	-	-	-	-	No Deposit	-	I - II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	UE1303	-	1	-	-	-	-	-	1 oil lamp Deneauve V-A	-	Tiberius
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A1030	1	-	-	-	1	-	-	1 glass bottle similar to Smit Nolen 4e	-	End I AD - beginning II AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A1034	-	1	-	-	-	-	-	Tokens (stone and glass), 1 bone dice, gold bracelet with glass beads, fragments of 20 glass vessels	-	Second half I AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A1032	-	1	-	-	-	-	-	Calcined bronze coin, needle	-	Second half I AD
Sánchez Hidalgo, Sanabria Murillo, Rosa, 2019: 425-484	8206	Antiguo Cuartel de Artillería	N	12,000	A1037	-	1	-	-	-	-	-	1 dice cup, cinerary urn with no lid, 1 cup Vegas 27, 1 cup Smit Nolen 7a, 1 oil lamp Deneauve D III, glass jar Caldera 1, lachrymatory Caldera 4, bowl Mayet XLIII, 1 pot Sánchez D II	-	Second half I AD - II AD
Sánchez Hidalgo, Sanabria	8206	Antiguo Cuartel de Artillería	N	12,000	Cremation 1	-	1	-	-	-	-	-	Oil lamp Deneauve V-A, Mayet XLIII,	-	First half I AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Murillo, Rosa, 2019: 425-484													lachrymatory Caldera 2		
Sánchez Barrero, 2019: 547-556	1506	Medea St	N	500	Cremation 1, 3, 5, 6, 7, A16, 17	-	7	-	-	-	-	-	No Deposit/Looted	-	I - II AD
Sánchez Barrero, 2019: 547-556	1506	Medea St	N	500	Cremation 2	-	1	-	-	-	-	-	Looted. Silver necklace with gold inclusions	-	I - II AD
Sánchez Barrero, 2019: 547-556	1506	Medea St	N	500	Cremation 4	-	1	-	-	-	-	-	Coin and glass tokens	-	I - II AD
Sánchez Barrero, 2019: 547-556	1506	Medea St	N	500	A2	-	1	-	-	-	-	-	Cup imitating fine wares	-	I - II AD
Sánchez Barrero, 2019: 547-556	1506	Medea St	N	500	A5	-	1	-	-	-	-	-	3 sherds of coarse ware	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A700	-	1	-	-	-	-	-	2 cups (fine wares), 1 bowl	-	Second half I AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A701, 702, 706, Cremations 1-4	-	7	-	-	-	-	-	No Deposit	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A719	-	1	-	-	-	-	-	1 *amphorae*, 4 Isings 8, 1 fine ware pot	-	Second half I AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A704	-	1	-	-	-	-	-	Remnants of wood, oil lamp and fine ware bowl	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A708	-	1	-	-	-	-	-	Coarse ware lachrymatory, *amphorae*	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A715	-	1	-	-	-	-	-	Top part of an *amphorae*, fine ware bowl, oil lamp	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A716	-	1	-	-	-	-	-	Glass *agitator*, 3 sherds of glass	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A713	-	1	-	-	-	-	-	Bone *acus*, spindle whorl, 1 sherd of coarse ware	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A712	-	1	-	-	-	-	-	Bottom part of an *amphorae*, 1 lachrymatory, 1 pot, 2 fragments of glass	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	A707	-	1	-	-	-	-	-	2 Deneauve V-A, coarse ware bottle, 1 bowl, 1 coin, 1 jar, iron nails	-	End I AD - beginning II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	Cremation 1	-	1	-	-	-	-	-	Coarse ware pot as cinerary urn	-	I - II AD
Chamizo de Castro, 2019b: 557-568	8219	CHG - Reina Sofía Av	NE	297	Inhumation 1	1	-	-	-	-	1	-	No Deposit	-	I - II AD
Ayerbe Vélez, 2019: 569-592	12009, 12011	9 Extremadura Av	N	100	Inhumation 1-2, A15	3	-	3	-	-	-	-	No Deposit	-	I - II AD
Ayerbe Vélez, 2019: 569-592	12009, 12011	9 Extremadura Av	N	100	A5	1	-	1	-	-	-	M	Marble sarcophagus, bird bones. No deposit	-	II - III AD
Ayerbe Vélez, 2019: 569-592	12009, 12011	9 Extremadura Av	N	100	A16	1	-	1	-	-	-	-	Glass lachrymatory	-	II - III AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A2	-	1	-	-	-	-	-	Glass lachrymatory, coarse ware pot as urn, illegible coin	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A3, 4, 22	3	-	3	-	-	-	-	No Deposit/Looted	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A6, 9, 23, 27, 41, 53	-	6	-	-	-	-	-	No Deposit/Looted	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A5	1	-	1	-	-	-	-	Fine ware oil lamp decorated with stork	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A7	-	1	-	-	-	-	-	Glass vessel, iron nails, oil lamp, coarse ware vessel	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A8	-	1	-	-	-	-	-	2 shells, 2 coarse ware vessels	2 shells	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A14	-	1	-	-	-	-	-	Coarse ware jar, *sestertius* (IMP CAESAR NERVA TRAIAN AUG GER M P M), glass vessel, oil lamp decorated with Cupid, bronze box	Trajan *sestertius*	End I AD - beginning II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A15	-	1	-	-	-	-	-	Coarse ware bottle	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A16	-	1	-	-	-	-	-	Coarse ware jar, iron nail (circular head)	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A17	-	1	-	-	-	-	-	I jar Vegas 48, 1 coarse ware vessel	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A18	-	1	-	-	-	-	-	Coarse ware bottle	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A19	-	1	-	-	-	-	-	Calcined fine ware oil lamp, lachrymatory	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A20	1	-	1	-	-	-	-	Coarse ware vessel, oil lamp, 2 bronze coins	2 illegible bronze coins	I AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A21	-	1	-	-	-	-	-	Base of glass lachrymatory	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A24	-	1	-	-	-	-	-	1 bronze coin, rim of coarse ware jar, bronze plaque from a mirror	Bronze coin	I AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A26	-	1	-	-	-	-	-	3 Isings 28, 2 bronze coins, oil lamp, bracelet (metal), gold ring with glass paste stamp, remnant of bronze box	Bronze coins, gold ring with glass paste stamp	I AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A30	-	1	-	-	-	-	-	Coarse ware jar and bottle	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A31	-	1	-	-	-	-	-	1 coarse ware vessel, 1 pot, 1 oil lamp, lachrymatory, iron nails, shells, coin	Shells. Coin, imperial figure M AGRIPPA L F COS III	End I BC - AD15/20
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A32	-	1	-	-	-	-	-	Fine ware oil lamp, 2 coarse ware vessels, glass jar, bottle, lachrymatory, 2 rings, 1 bronze coin, case and 2 plaques	Illegible bronze coin	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A33	-	1	-	-	-	-	-	3 coarse ware vessels	-	I - II AD

Reference	Intervention	Location	Sector	Area (M^2)	Activity	Inhumation	Cremation	Adult	Young Adult	Child	Other	Sex	Deposit	Foreign Imports	Chronology
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A34	-	1	-	-	-	-	-	2 coarse ware vessels, iron nails, glass lachrymatory, oil lamp, fragments of bronze box	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A35	-	1	-	-	-	-	-	Oil lamp, shell, iron nails, coarse ware bowl	Shells	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A36	-	1	-	-	-	-	-	Large coarse ware vessel containing a metallic bell	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A37	-	1	-	-	-	-	-	1 coarse ware vessel, base of glass lachrymatory	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A38	-	1	-	-	-	-	-	Game tokens, dice, glass vessels, bronze medical equipment, bronze scissors, bronze weight	-	I AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A40	-	1	-	-	-	-	-	1 Mayet XLIII	-	I AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A44	-	1	-	-	-	-	-	Fine ware jar	-	I - II AD
Rodríguez del Mazo, 2019: 593-624	8190, 8212	SUP-NO-02/202	S	-	A80	1	-	-	-	1	-	-	Coarse ware vessel and pot	-	Second half I - III AD
Bejarano Osorio, Heras Mora, Sánchez Barrero, Sánchez Capote, 2019: 625-664	8192	Del Río Av	W	361	A1	-	1	-	-	-	-	-	Coarse ware sherds	-	I - II AD
Bejarano Osorio, Heras Mora, Sánchez Barrero, Sánchez Capote, 2019: 625-664	8192	Del Río Av	W	361	A3	-	1	-	-	-	-	-	No Deposit	-	I - II AD
Bejarano Osorio *et alii*, 2019: 625-664	8192	Del Río Av	W	361	A6	-	1	-	-	-	-	-	Fragments of fine ware vessel, orange glaze	-	I - II AD
						361	654	214	12	38	92				

Appendix II. Classical sources referenced in my thesis[25].

Ausonius, *Ordo Urbium Nobilium*, XI.	
Cara mihi post has memorabere, nomen Hiberum, Hispalis, aequoreus quam praeterlabitur amnis, submittit cui tota suos Hispania fasces. Corduba non, non arce potens tibi Tarraco certat quaeque sinu pelagi iactat se Bracara dives.	After these thou shalt be told, beloved Hispalis, name Iberian, by whom glides a river like the sea, to whom all Spain subjects her magistrates. Not Cordova, not Tarragona with its strong citadel contends with you, nor wealthy Braga, lying proudly in her bay beside the sea.
Cassius Dio, *Roman History*, LIII, 25. 2.	
Κἀν τῷ αὐτῷ ἔτει τούτῳ ὅ τε Πολέμων ὁ ἐν τῷ Πόντῳ βασιλεύων ἔς τε τοὺς φίλους καὶ ἐς τοὺς συμμάχους τοῦ δήμου ἀνεγράφη, καὶ προεδρία τοῖς βουλευταῖς ἐν πάσῃ τῇ ἀρχῇ αὐτοῦ ἐς πάντα τὰ θέατρα ἐδόθη· τόν τε Αὔγουστον ἐς τὴν Βρεττανίαν, ἐπειδὴ μὴ ἠθέλησαν ὁμολογῆσαι, στρατευσείοντα κατέσχον οἵ τε Σάλασσοι ἐπαναστάντες αὐτῷ καὶ οἱ Κάνταβροι οἵ τε Ἄστυρες πολεμωθέντες. οἰκοῦσι δὲ ἐκεῖνοι μὲν ὑπὸ τὰς Ἄλπεις, ὥσπερ εἴρηταί μοι, οὗτοι δὲ ἑκάτεροι τοῦ τε Πυρηναίου τοῦ πρὸς τῇ Ἰβηρίᾳ τὸ καρτερώτατον καὶ τὴν πεδιάδα τὴν ὑπ᾽ αὐτοῦ οὖσαν.	In this same year Polemon, the king of Pontus, was enrolled among the friends and allies of the Roman people; and the privilege was granted the senators of occupying the front seats in all the theatres of his realm. Augustus was planning an expedition into Britain, since the people there would not come to terms, but he was detained by the revolt of the Salassi and by the hostility of the Cantabri and Astures. The former dwell at the foot of the Alps, as I have stated, whereas both the other tribes occupy the strongest part of the Pyrenees on the side of Spain, together with the plain which lies below.

[25] Unless otherwise stated, and referenced, all texts -original and translations- belong to the work of the Loeb Classical Library, as referenced in the Bibliography.

Cassius Dio, *Roman History*, LIII, 26. 1.	
Παυσαμένου δὲ τοῦ πολέμου τούτου ὁ Αὔγουστος τοὺς μὲν ἀφηλικεστέρους τῶν στρατιωτῶν ἀφῆκε, καὶ πόλιν αὐτοῖς ἐν Λυσιτανίᾳ τὴν Αὔγουσταν Ἠμέριταν καλουμένην κτίσαι ἔδωκε, τοῖς δὲ τὴν στρατεύσιμον ἡλικίαν ἔτ᾽ ἔχουσι θέας τινὰς διά τε τοῦ Μαρκέλλου καὶ διὰ τοῦ Τιβερίου ὡς καὶ ἀγορανομούντων ἐν αὐτοῖς τοῖς στρατοπέδοιςἐποίησε.	Upon the conclusion of this war Augustus discharged the more aged of his soldiers and allowed them to found a city in Lusitania, called Augusta Emerita. For those who were still of military age he arranged some exhibitions in the very camps, under the direction of Tiberius and Marcellus, since they were aediles.
Pliny, *Naturalis Historia*, III, 1. 7.	
Ex his digna memoratu aut Latino sermone dictu facilia, a flumine Ana, litore oceani, oppidum Ossonoba, Aestuaria cognominatum, inter confluentes Luxiam et Urium, Hareni montes, Baetis fluvius, litus Curense inflexo sinu, cuius ex adverso Gadis inter insulas dicendae, promunturium Iunonis, portus Vaesippo, oppidum Baelo, Mellaria, fretum ex Atlantico mari, Carteia Tartesos a Graecis dicta, mons Calpe.	Worthy of mention in this district, or easily expressed in Latin, are: on the ocean coast beginning at the river Guadiana, the town Ossonoba, surnamed Aestuaria, at the confluence of the Luxia and the Uriuma; the Hareni Mountains; the river Guadalquivir; the winding bay of the Coast of Curum, opposite to which is Cadiz, to be describedb among the islands; the Promontory of Junoc; Port Vaesippo; the town of Baelo; Mellaria, the strait entering from the Atlantic; Carteia, called by the Greeks Tartesos; Gibraltar.
Pliny, *Naturalis Historia*, III, 1. 13-14.	
Quae autem regio a Baete ad fluvium Anam tendit extra praedicta Baeturia appellatur in duas divisa partes totidemque gentes, Celticos qui Lusitaniam attingunt, Hispalensis conventus, Turdulos qui Lusitaniam et Tarraconensem accolunt, iura Cordubam petunt. Celticos a Celtiberis ex Lusitania advenisse manifestum est sacris, lingua, oppidorum vocabulis quae cognominibus in Baetica distinguntur: Seriae adicitur Fama Iulia, Nertobrigae Concordia Iulia, Segidae Restituta Iulia, Contributa Iulia Ugultuniae (cum qua et Curiga nunc est), Lacimurgae Constantia Iulia,	The region stretching from the Guadalquivir to the river Guadiana beyond the places already mentioned is called Baeturia, and is divided into two parts and the same number of races, the Celtici bordering on Lusitania, of the jurisdiction of Seville, and the Turduli, who dwell on the borders of Lusitania and the Tarragon territory, but are in the jurisdiction of Cordova. That the Celtici came from the Celtiberi in Lusitania is proved by their religion, their language, and the names of their towns, which in Baetica are distinguished by surnames: Seria has the additional name of

Steresibus Fortunales et Callensibus Aeneanici.	Fama Julia, Nertobriga that of Concordia Julia, Segida that of Restituta Julia, Ugultunia that of Contributa Julia (in which now is also included the town of Curiga), Lacimurga that of Constantia Julia, and Stereses the surname of Fortunales and Callenses that of Aeneanici.
Pliny, *Naturalis Historia*, III, 1. 17.	
Baeticae longitudo nunc a Castulonis oppidi fine Gadis CC et a Murgi maritima ora XXV p. amplior, latitudo a Carteia Anam ora CCXXXIV p. Agrippam quidem in tanta viri diligentia praeterque in hoc opere cura, cum orbem terrarum urbi spectandum propositurus esset, errasse quis credat et cum eo divum Augustum? is namque conplexam eum porticum ex destinatione et commentariis M. Agrippae a sorore eius inchoatam peregit.	At present the length of Baetica from the frontier of the town of Cazlona to Cadiz is 250 miles, and from the seafront of Murgi 25 miles more; its breadth from Carteia along the coast to the Guadiana is 234 miles. Agrippa was a very painstaking man, and also a very careful geographer; who therefore could believe that when intending to set before the eyes of Rome a survey of the world he made a mistake, and with him the late lamented Augustus? for it was Augustus who completed the portico containing a plan of the world that had been begun by his sister in accordance with the design and memoranda of Marcus Agrippa.
Pliny, *Naturalis Historia*, IV, 22. 115.	
Erratum et in amnibus inclutis. ab Minio, quem supra diximus, CC (ut auctor est Varro) abest Aeminius, quem alibi quidam intellegunt et Limaeam vocant, Oblivionis antiquis dictus multumque fabulosus. ab Durio Tagus CC interveniente Munda; Tagus auriferis harenis celebratur. ab eo CIX promunturium Sacrum e media prope Hispaniae fronte prosilit. XIV inde ad Pyrenaeum medium colligi Varro tradit, ad Anam vero, quo Lusitaniam a Baetica discrevimus, CXXVI, a Gadibus CII additis.	Mistakes have also been made in regard to the important rivers. From the Minho, which we spoke of above, the distance to the Agueda according to Varro is 200 miles, though others place the latter elsewhere and call it the Limaea; in early times it was called the River of Forgetfulness, and a great many stories were told about it. Two hundred miles from the Douro is the Tagus, the Mondego coming between them; the Tagus is famous for its auriferous sands. At a distance of nearly 160 miles from the Tagus is Cape St. Vincent, projecting from nearly the middle of the front of Spain. The distance from Cape St. Vincent to the middle of the Pyrenees is stated by Varro to amount to 1400 miles; from St. Vincent to the Guadiana,

	which we indicated as the boundary between Lusitania and Baetica, he puts at 126 miles, the distance from the Guadiana to Cadiz adding another 102 miles.
Pliny, *Naturalis Historia*, IV, 22. 116	
Gentes Celtici, Turduli et circa Tagum Vettones; ab Ana ad Sacrum Lusitani. Oppida a Tago memorabilia in ora Olisippo equarum e favonio vento conceptu nobile, Salacia cognominata Urbs imperatoria, Merobriga, promontorium sacrum et alterum Cuneus, oppida Ossonoba, Balsa, Myrtilis	The peoples are the Celtici, the Turduli, and on the Tagus the Vettones; and between the Guadiana and Cape St. Vincent the Lusitanians. The notable towns on the coast, beginning at the Tagus, are: Lisbon, famous for its mares which conceive from the west wind; Alcazar do Sal, called the Imperial City; Santiago de Cacem; Cape St. Vincent, and the other promontory called the Wedge; and the towns of Estombar, Tavira and Mertola.
Pliny, *Naturalis Historia*, IV, 22. 117.	
Universa provincia dividitur in conventus tres, Emeritensem, Pacensem, Scallabitanum, tota populorum xlv, in quibus coloniae sunt quinque, municipium civium Romanorum, Lati antique iii, stipendiaria xxxvi. coloniae Augusta Emerita Anae fluvio adposita civium Romanorum, Lati antique iii, stipendiaria xxxvi. coloniae Augusta Emerita Anae fluvio adposita, Metellinensis, Pacensis, Norbensis Caesarina cognomine (contributa sunt in eam Castra Servilia, Castra Caecilia); quinta est Scallabis quae Praesidium Iulium vocatur. municipium civium Romanorum Olisippo Felicitas Iulia cognominatum.	The whole province is divided into three associations, centred at Merida, Beja and Santarem. It consists of 45 peoples in all, among whom there are five colonies, one municipality of Roman citizens, three with the old Latin rights and 36 that pay tribute. The colonies are Merida on the river Guadiana, Medellin, Beja, and Alcantara surnamed Caesarina (to this Trujillo and Caceres are assigned); and the fifth is that of Santarem, which is called the Garrison of Julius. The municipality of Roman citizens is Lisbon, surnamed the Success of Julius.
Pliny, *Naturalis Historia*, IV, 22. 118.	
Oppida veteris Lati Ebora, quod idem Liberalitas Iulia, et Myrtilis ac Salacia, quae diximus. stipendiariorum quos nominare non pigeat, praeter iam dictos in Baeticae cognominibus, Augustobricenses, Aeminienses, Aranditani, Axabricenses,	The towns with the old Latin rights are Evora, which is also called the Generosity of Julius, and Mertola and Alcazar do Sal which we have mentioned. Of the tributary towns that deserve mention, besides those already specified in the list of names of those belonging to Baetica, are

Balsenses, Caesarobricenses, Caperenses, Caurienses, Colarni, Cibilitani, Concordienses, Elbocori, Interamnienses, Lancienses, Mirobricenses qui Celtici cognominantur, Medubricenses qui Plumbari, Ocelenses, Turduli qui Bardili et Tapori.	Augustobriga, Aemia, Arandita, Axabrica, Balsa, Caesarobrica, Capera, Coria, Colarna, Cibilita, Concordia, Elbocorium, Interamnium, Lancia, Malabriga surnamed Celtic, Medubriga surnamed Plumbaria, Ocelum, the Turduli also called Bardili, and the Tapori.
Pliny, *Naturalis Historia*, VIII, 73. 191.	
Histriae Liburniaque pilo propior quam lanae, pexis aliena vestibus, et quam Salacia scutulato textu commendat in Lusitania.	Istrian and Liburnian fleece is nearer to hair than wool, and not suitable for garments with a soft nap; and the same applies to the fleece that Salacia in Lusitania advertises by its check pattern.
Pliny, *Naturalis Historia*, IX, 65. 141.	
Coccum Galatiae rubens granum, ut dicemus in terrestribus aut circa Emeritam Lusitaniae in maxima laude est. verum, ut simul peragantur nobilia pigmenta, anniculo grano languidus sucus, idem a quadrimo evanidus: ita nec recenti vires neque senescenti.	The kermes, a red kernel of Galatia, as we shall say when dealing with the products of the earth, or else in the neighbourhood of Merida in Lusitania, is most approved. But, to finish off these famous dyes at once, the kernel when a year old has a viscous juice, and also after it is four years old the juice tends to disappear, so that it lacks strength both when fresh and when getting old.
Pliny, *Naturalis Historia*, XV, 4. 17.	
Sunt et superbae praeter iam dicta genera; sunt et praedulces, per se tantum siccatae uvisque passis dulciores, admodum rarae in Africa et circa Emeritam Lusitaniae.	Beside the kinds already mentioned there is also the ‘proud olive,’ as well as the very sweet variety, which is merely dried by itself and is sweeter than a raisin; this last kind of olive is rather rare, and is grown in Africa and in the vicinity of Merida in Lusitania.
Pliny, *Naturalis Historia*, XV, 30. 103.	
Principatus duracinis quae Pliniana Campania appellat, in Belgica vero Lusitanis, in ripis etiam Rheni.	The highest rank, however, belongs to the bigaroona cherry called by the Campanians the Plinian cherry, but in Belgium to the Lusitanian, and so also on the banks of the Rhine.
Pliny, *Naturalis Historia*, XXI, 43. 73.	

Et in Hispania mulis provehunt simili de causa,	In Spain too for a like reason they carry the hives about on mules.
Pliny, *Naturalis Historia*, XXII, 3. 3.	
Iam vero infici vestes scimus admirabili fuco, atque ut sileamus Galatiae, Africae, Lusitaniae e granis coccum imperatoriis dicatum paludamentis transalpina Gallia herbis Tyria atque conchylia tinguit et omnes alios colores.	Moreover we know that clothes are dyed with a wonderful dye from a plant, and, to say nothing of the fact that, of the berries of Galatia, Africa, and Lusitania, the “coccum” is specially reserved to colour the military cloaks of our generals, Transalpine Gaul can produce with vegetable dyes Tyrian purple, oyster purple and all other colours.
Pomponius Mela, *De Chorographia*, II, 87. (Ranstand, 1971; Romer, 2001: 93).	
Tribus autem est distincta nominibus, parsque eius Tarraconensis, pars Baetica, pars Lusitania vocatur. Tarraconensis altero capite Gallias altero Baeticam Lusitaniamque contingens mari latera obicit Nostro qua meridiem, qua septentrionem spectat oceano. Illas fluvius Anas separat, et ideo Baetica maria utraque prospicit, ad occidentem Atlanticum, ad meridiem Nostrum. Lusitania oceano tantummodo obiecta est, sed latere ad septentriones, fronte ad occasum.	It is, however, distinguished by three names. Part of it is called Tarraconensis, part Baetica, and part Lusitania [Portugal]. Tarraconensis borders on the Gauls at one extreme, on Baetica and Lusitania at the other. Where it looks south, it thrusts its sides along Our Sea; where it looks north, along Ocean. The Anas [Guadiana] River separates the other two regions there, and thus Baetica faces both seas -the Atlantic to the west, Our Sea to the south- while Lusitania is situated only along the Atlantic, but with its lateral extension to the north, its front to the west.
Polybius, *Histories*, II, 14. 1.	
Ὑπὲρ ὧν δοκεῖ μοι χρήσιμον εἶναι κεφαλαιώδη μὲν ποιήσασθαι τὴν ἐξήγησιν, ἵνα τὸ τῆς προκατασκευῆς οἰκεῖον συσσώσωμεν κατὰ τὴν ἐξ ἀρχῆς πρόθεσιν	I think it will be of use to give some account of these peoples, which must be indeed but a summary one, in order not to depart from the original plan of this work as defined in the preface.
Polybius, *Histories*, XXXIV. 4. 4 (extract from Athenaeus, *The Learned Banqueters*, VIII. 330d).	
Τὴν κατὰ Λυσιτανίαν—χώρα δ’ ἐστὶν αὕτη τῆς Ἰβηρίας, ἣν νῦν Ῥωμαῖοι Σπανίαν ὀνομάζουσι—διηγούμενος εὐδαιμονίαν	Polybius, in the thirty-fourth book of his Histories speaking of the natural wealth of Lusitania (a district of Iberia, or, as the Romans

Πολύβιος ὁ Μεγαλοπολίτης . . . ἐν τῇ τετάρτῃ καὶ τριακοστῇ τῶν Ἱστοριῶν φησιν ὡς αὐτόθι διὰ τὴν τοῦ ἀέρος εὐκρασίαν καὶ τὰ ζῷα πολύγονα καὶ οἱ ἄνθρωποι, καὶ οἱ ἐν τῇ χώρᾳ καρποὶ οὐδέποτε φθείρονται· ῥόδα μὲν γὰρ αὐτόθι καὶ λευκόια καὶ ἀσπάραγοι καὶ τὰ παραπλήσια τούτοις οὐ 6πλεῖον διαλείπει μηνῶν τριῶν, τὸ δὲ θαλάττιον ὄψον καὶ κατὰ τὸ πλῆθος καὶ κατὰ τὴν χρηστότητα καὶ 7κατὰ τὸ κάλλος μεγάλην ἔχει διαφορὰν πρὸς τὸ γινόμενον ἐν τῇ καθ᾽ ἡμᾶς θαλάττῃ.	now call it, Spain), tells us that owing to the favorable climate both men and animals are very prolific, and the land is constantly productive. For roses, white violets, asparagus, and similar plants only cease flowering for three months, and as for the sea fish, in quantity, excellence, and beauty it is far superior to that in our own sea.
Prudentius, *Peristephanon*, Hymn III.	
Hymnus in Honorem Passionis Eulaliae Beatissimae Martyris Germine nobilis Eulalia mortis et indole nobilior Emeritam sacra virgo suam, Cuius ab ubere progenita est. Ossibus ornat, amore colit. 474roximus occiduo locus est qui tulit hoc decus egregium urbe potens, populis locuples. sed mage sanguine martyrii virgineoque potens titulo. […] Sed pia cura parentis agit virgo animosa domi ut lateat abdita rure et ab urbe procul, ne fera sanguinis in pretium mortis amore puella ruat. illa perosa quietis opem degeneri tolerare mora nocte fores sine teste movet saeptaque claustra fugax aperit. inde per invia carpit iter. ingreditur pedibus laceris	A Hymn in Honour of the Passion of the Most Blessed Martyr Eulalia Noble of stock, and nobler still in the quality of her death. the holy maid Eulalia honours with her bones and tends with her love her own Emerita, the town that gave her birth. Far in the west lies the place that has won this signal honour; as a city, great and populous, but greater through the blood of martyrdom and a maiden's tombstone. […] But her mother's loving care sought to keep the high-spirited damsel at home out of notice, buried in the country at a distance from the town, lest the self-willed girl rush to expend her blood from the love of death. She, hating to let herself be saved by keeping quiet and hanging back like a coward, opens the door by night with none to see, makes her escape through the enclosing fence, and then pursues her way across the wilds. With torn feet she passes over a rough waste overgrown with briers, but she is accompanied by a troop of angels, and for all the gruesome silence of the night she still has light to guide her.

per loca senta situ et vepribus angelico comitata choro, et licet horrida nox sileat, lucis habet tamen illa ducem. […] nunc locus Emerita est tumulo. clara colonia Vettoniae, quam memorabilis amnis Ana praeterit et viridante rapax gurgite moenia pulchra lavit. Hic, ubi marmore perspicuo atria luminat alma nitor et peregrinus et indigena, relliquias cineresque sacros servat humus veneranda sinu.	[…] Now her tomb stands in Emerita, that famous town in Vettonia by which the notable river Ana passes, washing the handsome walls as it sweeps along with its green waters. Here, where the lustre of shining marble, foreign and native, lights up the motherly church. the worshipful earth keeps her remains, her holy ashes, in its bosom.
Ptolemy, *Cosmographia*, II, 5. 7. (Roldán Hervás, 1968-69: 75-76).	
Ἀνατολικώτατοι δὲ Οὐέττονες, ἐν οἷς πόλεις […] Ὄκελον η΄ Υ΄΄ μα΄ δ΄΄	The westernmost (among the Lusitanian peoples) are the Vettonians, among which are the cities: […] Ocelum…8º 20'…41º 15'
Strabo, *Geography*, III, 2. 15.	
Τῇ δὲ τῆς χώρας εὐδαιμονίᾳ καὶ τὸ ἥμερον καὶ τὸ πολιτικὸν συνηκολούθησε τοῖς Τουρδητανοῖς· καὶ τοῖς Κελτικοῖς δὲ διὰ τὴν γειτνίασιν, ὡς εἴρηκε Πολύβιος, ἢ διὰ τὴν συγγένειαν, ἀλλ' ἐκείνοις μὲν ἧττον· τὰ πολλὰ γὰρ κωμηδὸν ζῶσιν. οἱ μέντοι Τουρδητανοί, καὶ μάλιστα οἱ περὶ τὸν Βαῖτιν, τελέως εἰς τὸν Ῥωμαίων μεταβέβληνται τρόπον, οὐδὲ τῆς διαλέκτου τῆς σφετέρας ἔτι μεμνημένοι. Λατῖνοί τε οἱ πλεῖστοι γεγόνασι, καὶ ἐποίκους εἰλήφασι Ῥωμαίους, ὥστε μικρὸν ἀπέχουσι τοῦ πάντες εἶναι Ῥωμαῖοι. αἵ τε νῦν συνῳκισμέναι πόλεις, ἥ τε ἐν τοῖς Κελτικοῖς Παξαυγούστα καὶ ἡ ἐν τοῖς Τουρδούλοις Αὐγούστα Ἠμερίτα καὶ ἡ περὶ τοὺς Κελτίβηρας Καισαραυγούστα καὶ ἄλλαι	Along with the happy lot of their country, the qualities of both gentleness and civility have come to the Turditanians; and to the Celtic peoples, too, on account of their being neighbours to the Turdetanians, as Polybius has said, or else on account of their kinship but less so the Celtic peoples, because for the most part they live in mere villages. The Turdetanians, however, and particularly those that live about the Baetis, have completely changed over to the Roman mode of life, not even remembering their own language any more. And most of them have become Latins, and they have received Romans as colonists, so that they are not far from being all Romans.

ἔνιαι κατοικίαι τὴν μεταβολὴν τῶν λεχθεισῶν πολιτειῶν ἐμφανίζουσι. καὶ δὴ τῶν Ἰβήρων ὅσοι ταύτης εἰσὶ τῆς ἰδέας τογᾶτοι λέγονται· ἐν δὲ τούτοις εἰσὶ καὶ οἱ Κελτίβηρες οἱ πάντων νομισθέντες ποτὲ θηριωδέστατοι. ταῦτα μὲν περὶ τούτων.	And the present jointly-settled cities, Pax Augusta in the Celtic country, Augusta Emerita in the country of the Turdulians, Caesar-Augusta near Celtiberia, and some other settlements, manifest the change to the aforesaid civil modes of life. Moreover, all those Iberians who belong to this class are called "Togati". And among these are the Celtiberians, who were once regarded the most brutish of all. So much for the Turditanians.
Strabo, *Geography*, III, 3. 3	
Τοῦ δὲ Τάγου τὰ πρὸς ἄρκτον ἡ Λυσιτανία ἐστὶ μέγιστον τῶν Ἰβηρικῶν ἐθνῶν καὶ πλείστοις χρόνοις ὑπὸ Ῥωμαίων πολεμηθέν. περιέχει δὲ τῆς χώρας ταύτης τὸ μὲν νότιον πλευρὸν ὁ Τάγος, τὸ δ' ἑσπέριον καὶ τὸ ἀρκτικὸν ο ὠκεανός, τὸ δ' ἑωθινὸν οἵ τε Καρπητανοὶ καὶ οἱ Οὐέττωνες καὶ Οὐακκαῖοι καὶ Καλλαϊκοί, τὰ γνώριμα ἔθνη· τἆλλα δὲ οὐκ ἄξιον ὀνομάζειν διὰ τὴν μικρότητα καὶ τὴν ἀδοξίαν· ὑπεναντίως δὲ τοῖς νῦν ἔνιοι καὶ τούτους Λυσιτανοὺς ὀνομάζουσιν. ὅμοροι δ' εἰσὶν ἐκ τοῦ πρὸς ἕω μέρους οἱ μὲν Καλλαϊκοὶ τῷ τῶν Ἀστούρων ἔθνει καὶ τοῖς Κελτίβηρσιν, οἱ δ' ἄλλοι τοῖς Κελτίβηρσι. τὸ μὲν οὖν μῆκος μέχρι Νερίου τρισχιλίων σταδίων, τὸ δὲ πλάτος πολὺ ἔλαττον, ὃ ποιεῖ τὸ ἑωθινὸν πλευρὸν εἰς τὴν ἀντικειμένην παραλίαν. ὑψηλὸν δ' ἐστὶ τὸ ἑωθινὸν καὶ τραχύ, ἡ δὲ ὑποκειμένη χώρα πεδιὰς πᾶσα καὶ μέχρι θαλάττης πλὴν ὀλίγων ὀρῶν οὐ μεγάλων· ᾗ δὴ καὶ τὸν Ἀριστοτέλη φησὶν ὁ Ποσειδώνιος οὐκ ὀρθῶς αἰτιᾶσθαι τὴν παραλίαν καὶ τὴν Μαυρουσίαν τῶν πλημμυρίδων καὶ τῶν ἀμπώτεων· παλιρροεῖν γὰρ φάναι τὴν θάλατταν διὰ τὸ τὰς ἄκρας ὑψηλάς τε καὶ τραχείας εἶναι, δεχομένας τε τὸ κῦμα σκληρῶς καὶ ἀνταποδιδούσας τῇ ἴσῃ βίᾳ τἀναντία γὰρ θινώδεις εἶναι καὶ ταπεινὰς τὰς πλείστας ὀρθῶς λέγων.	And yet the country north of the Tagus, Lusitania, is the greatest of the Iberian nations, and is the nation against which the Romans waged war for the longest times. The boundaries of this country are: on the southern side, the Tagus; on the western and northern, the ocean; and on the eastern, the countries of the Carpetanians, Vettonians, Vaccaeans, and Callaicans, the well-known tribes; it is not worth while to name the rest, because of their smallness and lack of repute. Contrary to the men of to-day, however, some call also these peoples Lusitanians. These four peoples, in the eastern part of their countries, have common boundaries, thus: the Callaicans, with the tribe of the Asturians and with the Celtiberians, but the others with only the Celtiberians. Now the length of Lusitania to Cape Nerium is three thousand stadia, but its breadth, which is formed between its eastern side and the coast-line that lies opposite thereto, is much less. The eastern side is high and rough, but the country that lies below is all plain even to the sea, except a few mountains of no great magnitude. And this, of course, is why Poseidonius says that Aristotle is incorrect in making the coast-line and Maurusia the cause of the flood-tides and the ebb-tides; whom he quotes as saying

	that the sea ebbs and flows on account of the fact that the coast-lands are both high and rugged, which not only receive the waves roughly but give them back with equal violence. For on the contrary, Poseidonius correctly says, the coast-lands are for the most part sandy and low.
Strabo, *Geography*, III, 3. 4.	
Ἡ δ’ οὖν χώρα, περὶ ἧς λέγομεν, εὐδαίμων τέ ἐστι καὶ διαρρεῖται ποταμοῖς μεγάλοις τε καὶ μικροῖς, ἅπασιν ἐκ τῶν ἑωθινῶν μερῶν, παραλλήλοις τῷ Τάγῳ· ἔχουσι δὲ καὶ ἀνάπλους οἱ πλείους καὶ ψῆγμα τοῦ χρυσοῦ πλεῖστον.	At all events, the country of which I am speaking is fertile, and it is also traversed by rivers both large and small, all of them flowing from the eastern parts and parallel to the Tagus; most of them offer voyages inland and contain very great quantities of gold-dust as well.
Strabo, *Geography*, III, 3. 6.	
Τοὺς δ’ οὖν Λυσιτανούς φασιν ἐνεδρευτικούς, ἐξερευνητικούς, ὀξεῖς, κούφους, εὐεξελίκτους· ἀσπίδιον δ’ αὐτοὺς δίπουν ἔχειν τὴν διάμετρον, κοῖλον εἰς τὸ πρόσθεν, τελαμῶσιν ἐξηρτημένον (οὔτε γὰρ πόρπακας οὔτ’ ἀντιλαβὰς ἔχει). παραξιφὶς πρὸς τούτοις ἢ κοπίς· λινοθώρακες οἱ πλείους· σπάνιοι δὲ ἀλυσιδωτοῖς χρῶνται καὶ τριλοφίαις, οἱ δ’ ἄλλοι νευρίνοις κράνεσιν· οἱ πεζοὶ δὲ καὶ κνημῖδας ἔχουσιν, ἀκόντια δ’ ἕκαστος πλείω· τινὲς δὲ καὶ δόρατι χρῶνται. ἐπιδορατίδες δὲ χάλκεαι. ἐνίους δὲ τῶν προσοικούντων τῷ Δουρίῳ ποταμῷ Λακωνικῶς διάγειν φασίν, ἀλειπτηρίοις χρωμένους δὶς καὶ πυρίαις ἐκ λίθων διαπύρων, ψυχρολουτροῦντας καὶ μονοτροφοῦντας καθαρίως καὶ λιτῶς. θυτικοὶ δ’ εἰσὶ Λυσιτανοί, τά τε σπλάγχνα ἐπιβλέπουσιν, οὐκ ἐκτέμνοντες· προσεπιβλέπουσι δὲ καὶ τὰς ἐν τῇ πλευρᾷ φλέβας, καὶ ψηλαφῶντες δὲ τεκμαίρονται. σπλαγχνεύονται δὲ καὶ δι’ ἀνθρώπων αἰχμαλώτων, καλύπτοντες σάγοις· εἶθ’ ὅταν πληγῇ ὑπὸ τὰ σπλάγχνα ὑπὸ τοῦ	At any rate, the Lusitanians, it is said, are given to laying ambush, given to spying out, are quick, nimble, and good at deploying troops. They have a small shield two feet in diameter, concave in front, and suspended from the shoulder by means of thongs (for it has neither arm-rings nor handles). Besides these shields they have a dirk or a butcher’s-knife. Most of them wear linen cuirasses; a few wear chain-wrought cuirasses and helmets with three crests, but the rest wear helmets made of sinews. The foot-soldiers wear greaves also, and each soldier has several javelins; and some also make use of spears, and the spears have bronze heads. Now some of the peoples that dwell next to the Durius River live, it is said, after the manner of the Laconians—using anointing-rooms twice a day and taking baths in vapours that rise from heated stones, bathing in cold water, and eating only one meal a day; and that in a cleanly and simple way. The Lusitanians are

ἱεροσκόπου, μαντεύονται πρῶτον ἐκ τοῦ πτώματος. τῶν δ᾽ ἀλόντων τὰς χεῖρας ἀποκόπτοντες τὰς δεξιὰς ἀνατιθέασιν.	given to offering sacrifices, and they inspect the vitals, without cutting them out. Besides, they also inspect the veins on the side of the victim; and they divine by the tokens of touch, too. They prophesy through means of the vitals of human beings also, prisoners of war, whom they first cover with coarse cloaks, and then, when the victim has been struck beneath the vitals by the diviner, they draw their first auguries from the fall of the victim. And they cut off the right hands of their captives and set them up as an offering to the gods.
Strabo, *Geography*, III, 3. 7.	
Ἅπαντες δ᾽ οἱ ὄρειοι λιτοί, ὑδροπόται, χαμαιεῦναι, βαθεῖαν κατακεχυμένοι τὴν κόμην γυναικῶν δίκην· μιτρωσάμενοι δὲ τὰ μέτωπα μάχονται. τραγοφαγοῦσι δὲ μάλιστα, καὶ τῷ Ἄρει τράγον θύουσι καὶ τοὺς αἰχμαλώτους καὶ ἵππους· ποιοῦσι δὲ καὶ ἑκατόμβας ἑκάστου γένους Ἑλληνικῶς, ὡς καὶ Πίνδαρός φησι πάντα θύειν ἑκατόν. τελοῦσι δὲ καὶ ἀγῶνας γυμνικοὺς καὶ ὁπλιτικοὺς καὶ ἱππικούς, πυγμῇ καὶ δρόμῳ καὶ διακροβολισμῷ καὶ τῇ σπειρηδὸν μάχῃ. οἱ δ᾽ ὄρειοι τὰ δύο μέρη τοῦ ἔτους δρυοβαλάνῳ χρῶνται, ξηράναντες καὶ κόψαντες, εἶτα ἀλέσαντες καὶ ἀρτοποιησάμενοι, ὥστ᾽ ἀποτίθεσθαι εἰς χρόνον· χρῶνται δὲ καὶ ζύθει· οἴνου δὲ σπανίζονται· τὸν δὲ γενόμενον ταχὺ ἀναλίσκουσι κατευωχούμενοι μετὰ τῶν συγγενῶν· ἀντ᾽ ἐλαίου δὲ βουτύρῳ χρῶνται· καθήμενοί τε δειπνοῦσι, περὶ τοὺς τοίχους καθέδρας οἰκοδομητὰς ἔχοντες, προκάθηνται δὲ καθ᾽ ἡλικίαν καὶ τιμήν. περιφορητὸν δὲ τὸ δεῖπνον, καὶ παρὰ πότον ὀρχοῦνται πρὸς αὐλὸν καὶ σάλπιγγα χορεύοντες, ἀλλὰ καὶ ἀναλλόμενοι καὶ ὀκλάζοντες· ἐν Βαστητανίᾳ δὲ καὶ γυναῖκες ἀναμὶξ ἀνδράσι ἀντιλαμβανόμεναι τῶν χειρῶν. μελανείμονες ἅπαντες, τὸ πλέον ἐν σάγοις, ἐν οἷσπερ καὶ στιβαδοκοιτοῦσι.	All the mountaineers lead a simple life, are water-drinkers, sleep on the ground, and let their hair stream down in thick masses after the manner of women, though before going into battle they bind their hair about the forehead. They eat goat's-meat mostly, and to Ares they sacrifice a he-goat and also the prisoners and horses; and they also offer hecatombs of each kind, after the Greek fashion—as Pindar himself says, "to sacrifice a hundred of every kind." They also hold contests, for light-armed and heavy-armed soldiers and cavalry, in boxing, in running, in skirmishing, and in fighting by squads. And the mountaineers, for two-thirds of the year, eat acorns, which they have first dried and crushed, and then ground up and made into a bread that may be stored away for a long time. They also drink beer; but they are scarce of wine, and what wine they have made they speedily drink up in merry feastings with their kinsfolk; and instead of oliveoil they use butter. Again, they dine sitting down, for they have stationary seats builded around the walls of the room, though they seat themselves forward according to age and rank. The dinner is passed round, and amid their

κηρίνοις δὲ ἀγγείοις χρῶνται, καθάπερ καὶ οἱ Κελτοί. αἱ γυναῖκες δ᾽ ἐν ἐνδύμασι καὶ ἀνθιναῖς ἐσθήσεσι διάγουσιν· ἀντὶ δὲ νομίσματος οἵ γε λίαν ἐν βάθει φορτίων ἀμοιβῇ χρῶνται, ἢ τοῦ ἀργυροῦ ἐλάσματος ἀποτέμνοντες διδόασι.	cups they dance to flute and trumpet, dancing in chorus, but also leaping up and crouching low. But in Bastetania women too dance promiscuously with men, taking hold of their hands. All the men dress in black, for the most part in coarse cloaks, in which they sleep, on their beds of litter And they use waxen vessels, just as the Celts do. But the women always go clad in long mantles and gay-coloured gowns. Instead of coined money the people, at least those who live deep in the interior, employ barter, or else they cut off pieces from beaten silver metal and pass them as money.
Strabo, *Geography*, III, 4. 20.	
πέμπονται δ᾽ ἀπ᾽ αὐτοῦ δύο πρεσβευταί, στρατηγικός τε καὶ ὑπατικός, ὁ μὲν στρατηγικός, ἔχων σὺν αὐτῷ πρεσβευτήν, δικαιοδοτήσων Λυσιτανοῖς τοῖς παρακειμένοις τῇ Βαιτικῇ καὶ διατείνουσι μέχρι τοῦ Δουρίου ποταμοῦ καὶ τῶν ἐκβολῶν αὐτοῦ· καλοῦσι γὰρ οὕτω τὴν χώραν ταύτην ἰδίως ἐν τῷ παρόντι· ἐνταῦθα δ᾽ ἐστὶ καὶ ἡ Αὐγούστα Ἠμερίτα.	But all the rest of Iberia is Caesar's; and he sends thither two legati, praetorian and consular respectively; the praetorian legatus, who has with him a legatus of his own, being sent to administer justice to those Lusitanians whose country is situated alongside Baetica and extends as far as the Durius River and its outlets (indeed, at the present time they apply the name Lusitania specifically to this country); and here, too, is the city of Augusta Emerita.
Tacitus, *Histories*, I, 78.	
Eadem largitione civitatum quoque ac provinciarum animos adgressus Hispalensibus et Emeritensibus familiarum adiectiones,	With the same generosity Otho tried to win over the support of communities and provinces. To the colonies of Hispalis and Emerita he sent additional families.

Appendix III. Typology of grave goods and chronological value for “R” modelling

SiteID	Start	End	-100	-50	0	50	100	150	200	250	300
10004	75	100	0	0	0	1	0	0	0	0	0
10004	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10004	75	100	0	0	0	1	0	0	0	0	0
10005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10033	1	50	0	0	1	0	0	0	0	0	0
10033	1	50	0	0	1	0	0	0	0	0	0
10033	1	50	0	0	1	0	0	0	0	0	0
10036	75	200	0	0	0	0,2	0,4	0,4	0	0	0
10059	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10059	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10059	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
10059	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10059	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10059	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10059	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	51	150	0	0	0	0,494949495	0,505050505	0	0	0	0
10066	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
10066	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0

10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	-41	50	0	0,450549451	0,549450549	0	0	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
10066	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
10066	-41	-41	0	1	0	0	0	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	41	120	0	0	0,113924051	0,632911392	0,253164557	0	0	0	0
10066	25	160	0	0	0,185185185	0,37037037	0,37037037	0,074074074	0	0	0
10066	69	150	0	0	0	0,382716049	0,617283951	0	0	0	0
10066	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
10066	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	-41	-41	0	1	0	0	0	0	0	0	0
10066	75	200	0	0	0	0,2	0,4	0,4	0	0	0
10066	14	37	0	0	1	0	0	0	0	0	0
10066	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	51	117	0	0	0	0,742424242	0,257575758	0	0	0	0
10066	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
10066	41	150	0	0	0,082568807	0,458715596	0,458715596	0	0	0	0

10066	-41	50	0	0,450549451	0,549450549	0	0	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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10066	-50	14	0	0,78125	0,21875	0	0	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
10066	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
10066	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
10066	25	300	0	0	0,090909091	0,181818182	0,181818182	0,181818182	0,181818182	0,181818182	0
10066	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
10066	25	300	0	0	0,090909091	0,181818182	0,181818182	0,181818182	0,181818182	0,181818182	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
10066	50	300	0	0	0	0,2	0,2	0,2	0,2	0,2	0
10066	30	100	0	0	0,285714286	0,714285714	0	0	0	0	0
10066	50	100	0	0	0	1	0	0	0	0	0
10066	50	125	0	0	0	0,666666667	0,333333333	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	14	37	0	0	1	0	0	0	0	0	0

10066	-41	50	0	0,450549451	0,549450549	0	0	0	0	0	0
10066	-41	50	0	0,450549451	0,549450549	0	0	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	25	300	0	0	0,090909091	0,181818182	0,181818182	0,181818182	0,181818182	0,181818182	0
10066	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	75	220	0	0	0	0,172413793	0,344827586	0,344827586	0,137931034	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	69	150	0	0	0	0,382716049	0,617283951	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
10066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
10066	-50	400	0	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111
10066	69	150	0	0	0	0,382716049	0,617283951	0	0	0	0
1018	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0

1018	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
1018	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
1018	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
1018	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
1018	41	80	0	0	0,230769231	0,769230769	0	0	0	0	0
1018	150	200	0	0	0	0	0	1	0	0	0
1018	1	105	0	0	0,471153846	0,480769231	0,048076923	0	0	0	0
1018	1	105	0	0	0,471153846	0,480769231	0,048076923	0	0	0	0
1018	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
1018	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
1018	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
1018	75	200	0	0	0	0,2	0,4	0,4	0	0	0
1018	69	125	0	0	0	0,553571429	0,446428571	0	0	0	0
1018	69	125	0	0	0	0,553571429	0,446428571	0	0	0	0
1018	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
1018	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
1018	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
1018	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
1018	1	105	0	0	0,471153846	0,480769231	0,048076923	0	0	0	0
1018	1	105	0	0	0,471153846	0,480769231	0,048076923	0	0	0	0
1018	69	250	0	0	0	0,171270718	0,276243094	0,276243094	0,276243094	0	0
1018	69	250	0	0	0	0,171270718	0,276243094	0,276243094	0,276243094	0	0
12009-12011	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
12009-12011	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
12009-12011	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
134	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0

134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
134	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
134	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
134	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
134	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
1506	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
1506	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
1506	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
1506	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
1506	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
1506	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
1506	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	125	0	0	0,39516129	0,403225806	0,201612903	0	0	0	0
156	201	300	0	0	0	0	0	0	0,494949495	0,505050505	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0

156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
156	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
156	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
159	-100	100	0	0,25	0,25	0,25	0	0	0	0	0
159	-25	-1	0	1	0	0	0	0	0	0	0
159	-25	-1	0	1	0	0	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2076	50	150	0	0	0	0,5	0,5	0	0	0	0
2076	50	150	0	0	0	0,5	0,5	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0
2076	50	100	0	0	0	1	0	0	0	0	0	0
2076	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2076	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2077	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2077	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2077	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0

2261	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
2261	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
2261	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0

2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2261	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2481	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
2481	75	200	0	0	0	0,2	0,4	0,4	0	0	0
2481	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
2481	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
2481	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
2481	50	100	0	0	0	1	0	0	0	0	0
2481	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
2510	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
2510	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	101	400	0	0	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408
2510	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
2510	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
2510	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	120	200	0	0	0	0	0,375	0,625	0	0	0
2510	120	200	0	0	0	0	0,375	0,625	0	0	0
2510	120	200	0	0	0	0	0,375	0,625	0	0	0
2510	175	275	0	0	0	0	0	0,25	0,5	0,25	0
2510	25	75	0	0	0,5	0,5	0	0	0	0	0
2510	40	60	0	0	0,5	0,5	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	-27	54	0	0,333333333	0,617283951	0,049382716	0	0	0	0	0
2510	-27	54	0	0,333333333	0,617283951	0,049382716	0	0	0	0	0
2510	-27	54	0	0,333333333	0,617283951	0,049382716	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0

2510	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	25	54	0	0	0,862068966	0,137931034	0	0	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
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2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0

2510	37	41	0	0	1	0	0	0	0	0	0
2510	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	40	60	0	0	0,5	0,5	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	-27	54	0	0,333333333	0,617283951	0,049382716	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
2510	14	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	50	0	0	1	0	0	0	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
2510	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

2510	1	50	0	0	1	0	0	0	0	0	0
2619	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
2810	-100	-1	1	0,494949495	0	0	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0

2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
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2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	50	100	0	0	0	1	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	75	100	0	0	0	1	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0

2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	40	60	0	0	0,5	0,5	0	0	0	0	0
2835	30	100	0	0	0,285714286	0,714285714	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	54	200	0	0	0	0,315068493	0,342465753	0,342465753	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3002	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
3002	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
3002	15	200	0	0	0,189189189	0,27027027	0,27027027	0,27027027	0	0	0
3002	60	200	0	0	0	0,285714286	0,357142857	0,357142857	0	0	0
3002	-50	50	0	0,5	0,5	0	0	0	0	0	0
3002	1	50	0	0	1	0	0	0	0	0	0
3017	150	200	0	0	0	0	0	1	0	0	0
3017	14	125	0	0	0,324324324	0,45045045	0,225225225	0	0	0	0
3017	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
3017	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
3017	51	100	0	0	0	1	0	0	0	0	0
3017	75	125	0	0	0	0,5	0,5	0	0	0	0
3017	30	100	0	0	0,285714286	0,714285714	0	0	0	0	0
3017	30	100	0	0	0,285714286	0,714285714	0	0	0	0	0

3017	150	200	0	0	0	0	0	1	0	0	0
3017	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3017	75	125	0	0	0	0,5	0,5	0	0	0	0
3017	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
3017	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
3017	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
3017	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
3017	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3017	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
3017	50	150	0	0	0	0,5	0,5	0	0	0	0
3017	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
3017	14	125	0	0	0,324324324	0,45045045	0,225225225	0	0	0	0
3017	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3017	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3017	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
3017	50	150	0	0	0	0,5	0,5	0	0	0	0
3017	30	100	0	0	0,285714286	0,714285714	0	0	0	0	0
3017	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
3017	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3017	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
3017	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
3017	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
3017	75	400	0	0	0	0,076923077	0,153846154	0,153846154	0,153846154	0,153846154	0,153846154
3501	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3501	150	200	0	0	0	0	0	1	0	0	0
3501	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3501	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3501	30	250	0	0	0,090909091	0,227272727	0,227272727	0,227272727	0,227272727	0	0
3501	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	30	250	0	0	0,090909091	0,227272727	0,227272727	0,227272727	0,227272727	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	30	250	0	0	0,090909091	0,227272727	0,227272727	0,227272727	0,227272727	0	0

3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	69	250	0	0	0	0,171270718	0,276243094	0,276243094	0,276243094	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	50	150	0	0	0	0,5	0,5	0	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	50	150	0	0	0	0,5	0,5	0	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
3503	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	201	300	0	0	0	0	0	0	0,494949495	0,505050505	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	201	300	0	0	0	0	0	0	0,494949495	0,505050505	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
6014	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

6020	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
6020	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
630	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
630	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
630	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
630	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
630	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
630	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
630	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
630	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
654	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
654	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
654	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
654	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
654	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
654	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
654	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
654	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
654	50	100	0	0	0	1	0	0	0	0	0
654	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
654	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
654	75	200	0	0	0	0,2	0,4	0,4	0	0	0
663	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
663	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
663	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
663	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
663	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
663	-25	-25	0	1	0	0	0	0	0	0	0
663	69	150	0	0	0	0,382716049	0,617283951	0	0	0	0
663	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
663	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
663	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
663	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

663	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
663	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	270	270	0	0	0	0	0	0	0	1	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
7017	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	54	200	0	0	0	0,315068493	0,342465753	0,342465753	0	0	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
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7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
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7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
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7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0

7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7017	150	350	0	0	0	0	0	0,25	0,25	0,25	0,25
7017	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
7505	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
7505	50	100	0	0	0	1	0	0	0	0	0
7505	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8002	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8002	25	300	0	0	0,090909091	0,181818182	0,181818182	0,181818182	0,181818182	0,181818182	0
8002	1	25	0	0	1	0	0	0	0	0	0
8002	1	25	0	0	1	0	0	0	0	0	0
8002	1	25	0	0	1	0	0	0	0	0	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0

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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
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8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0

8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8004	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8005	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8006	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8007	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8007	50	100	0	0	0	1	0	0	0	0	0
8007	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	81	96	0	0	0	1	0	0	0	0	0
8010	50	100	0	0	0	1	0	0	0	0	0
8010	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8010	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8010	50	100	0	0	0	1	0	0	0	0	0
8010	-27	96	0	0,219512195	0,406504065	0,37398374	0	0	0	0	0
8010	75	150	0	0	0	0,333333333	0,666666667	0	0	0	0
8010	50	100	0	0	0	1	0	0	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8010	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8010	50	100	0	0	0	1	0	0	0	0	0
8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8010	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8010	75	125	0	0	0	0,5	0,5	0	0	0	0
8010	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8010	50	100	0	0	0	1	0	0	0	0	0
8011	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8011	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8019	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8019	50	100	0	0	0	1	0	0	0	0	0
8019	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8019	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8019	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8019	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8019	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8019	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8019	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0

8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8019	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8019	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8019	25	54	0	0	0,862068966	0,137931034	0	0	0	0	0
8019	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8019	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	69	79	0	0	0	1	0	0	0	0	0
8019	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8019	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8019	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8019	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8019	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8020	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8020	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8020	51	100	0	0	0	1	0	0	0	0	0
8020	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8020	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8020	51	100	0	0	0	1	0	0	0	0	0
8020	51	100	0	0	0	1	0	0	0	0	0
8020	1	250	0	0	0,196787149	0,200803213	0,200803213	0,200803213	0,200803213	0	0
8020	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8020	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8020	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8020	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8020	51	100	0	0	0	1	0	0	0	0	0
8020	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8020	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0

8020	51	100	0	0	0	1	0	0	0	0	0
8020	51	100	0	0	0	1	0	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	75	400	0	0	0	0,076923077	0,153846154	0,153846154	0,153846154	0,153846154	0,153846154
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
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8024	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	100	250	0	0	0	0	0,333333333	0,333333333	0,333333333	0	0
8024	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8024	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8024	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8024	50	100	0	0	0	1	0	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8024	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
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8024	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0

8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8024	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8024	69	125	0	0	0	0,553571429	0,446428571	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8024	50	100	0	0	0	1	0	0	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8024	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8026	25	300	0	0	0,090909091	0,181818182	0,181818182	0,181818182	0,181818182	0,181818182	0
8026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
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8026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8026	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8026	-50	400	0	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111	0,111111111
8026	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8026	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
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8033	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8036	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8036	25	200	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0	0
8036	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8036	41	41	0	0	1	0	0	0	0	0	0
8036	25	200	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0	0
8036	25	200	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0	0
8036	25	200	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0	0
8036	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8036	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8036	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0

8036	25	200	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0	0
8036	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8036	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8039	40	60	0	0	0,5	0,5	0	0	0	0	0
8039	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8039	40	60	0	0	0,5	0,5	0	0	0	0	0
8039	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8043	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8043	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8043	75	100	0	0	0	1	0	0	0	0	0
8043	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8043	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8043	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8043	150	200	0	0	0	0	0	1	0	0	0
8043	50	75	0	0	0	1	0	0	0	0	0
8043	50	75	0	0	0	1	0	0	0	0	0
8043	50	75	0	0	0	1	0	0	0	0	0
8043	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8043	51	150	0	0	0	0,494949495	0,505050505	0	0	0	0
8043	50	75	0	0	0	1	0	0	0	0	0
8043	50	120	0	0	0	0,714285714	0,285714286	0	0	0	0
8043	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8050	50	150	0	0	0	0,5	0,5	0	0	0	0
8050	50	150	0	0	0	0,5	0,5	0	0	0	0
8050	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	14	37	0	0	1	0	0	0	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0

8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8055	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	50	150	0	0	0	0,5	0,5	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8055	75	250	0	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8055	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8057	150	200	0	0	0	0	0	1	0	0	0

8057	150	175	0	0	0	0	0	1	0	0	0
8057	150	200	0	0	0	0	0	1	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	150	200	0	0	0	0	0	1	0	0	0
8057	41	54	0	0	0,692307692	0,307692308	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8057	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8057	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	41	54	0	0	0,692307692	0,307692308	0	0	0	0	0
8057	50	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	150	200	0	0	0	0	0	1	0	0	0
8057	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8057	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8057	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8057	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8057	41	54	0	0	0,692307692	0,307692308	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	50	100	0	0	0	1	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0

8057	1	50	0	0	1	0	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	175	250	0	0	0	0	0	0,333333333	0,666666667	0	0
8057	69	150	0	0	0	0,382716049	0,617283951	0	0	0	0
8057	150	200	0	0	0	0	0	1	0	0	0
8057	80	200	0	0	0	0,166666667	0,416666667	0,416666667	0	0	0
8057	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	30	100	0	0	0,285714286	0,714285714	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	42	42	0	0	1	0	0	0	0	0	0
8057	14	54	0	0	0,9	0,1	0	0	0	0	0
8057	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8057	350	350	0	0	0	0	0	0	0	0	1
8057	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	75	125	0	0	0	0,5	0,5	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8057	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8057	14	54	0	0	0,9	0,1	0	0	0	0	0
8057	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0

8057	51	100	0	0	0	1	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8057	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8057	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8057	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8057	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8057	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	51	100	0	0	0	1	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	1	50	0	0	1	0	0	0	0	0	0
8057	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8058	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8058	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8058	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8058	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8058	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8058	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8058	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8058	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8058	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8058	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8058	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8058	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8058	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8058	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8060	50	100	0	0	0	1	0	0	0	0	0
8060	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8060	51	150	0	0	0	0,494949495	0,505050505	0	0	0	0
8060	50	75	0	0	0	1	0	0	0	0	0

8060	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8066	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	-200	100	0	0,166666667	0,166666667	0,166666667	0	0	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	41	150	0	0	0,082568807	0,458715596	0,458715596	0	0	0	0

8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8067	54	96	0	0	0	1	0	0	0	0	0
8067	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8086-8104-2646-2714	160	200	0	0	0	0	0	1	0	0	0
8086-8104-2646-2714	75	150	0	0	0	0,333333333	0,666666667	0	0	0	0
8086-8104-2646-2714	50	250	0	0	0	0,25	0,25	0,25	0,25	0	0
8086-8104-2646-2714	1	250	0	0	0,196787149	0,200803213	0,200803213	0,200803213	0,200803213	0	0
8086-8104-2646-2714	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8086-8104-2646-2714	50	250	0	0	0	0,25	0,25	0,25	0,25	0	0
8086-8104-2646-2714	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8086-8104-2646-2714	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8086-8104-2646-2714	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8086-8104-2646-2714	-1	200	0	0,004975124	0,248756219	0,248756219	0,248756219	0,248756219	0	0	0
8086-8104-2646-2714	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8086-8104-2646-2714	75	150	0	0	0	0,333333333	0,666666667	0	0	0	0
8086-8104-2646-2714	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8086-8104-2646-2714	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0

8086-8104-2646-2714	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8098-8107	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8098-8107	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8101-8102-8123	50	100	0	0	0	1	0	0	0	0	0
8101-8102-8123	-27	75	0	0,264705882	0,490196078	0,245098039	0	0	0	0	0
8101-8102-8123	75	100	0	0	0	1	0	0	0	0	0
8101-8102-8123	75	100	0	0	0	1	0	0	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8111	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8111	50	100	0	0	0	1	0	0	0	0	0
8111	-100	100	0	0,25	0,25	0,25	0	0	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	50	100	0	0	0	1	0	0	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8111	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8111	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	75	250	0	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0

8117	75	220	0	0	0	0,172413793	0,344827586	0,344827586	0,137931034	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	250	0	0	0	0,171270718	0,276243094	0,276243094	0,276243094	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8117	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8117	138	161	0	0	0	0	0,52173913	0,47826087	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8117	41	69	0	0	0,321428571	0,678571429	0	0	0	0	0
8117	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8117	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8117	75	100	0	0	0	1	0	0	0	0	0
8117	1	220	0	0	0,223744292	0,228310502	0,228310502	0,228310502	0,091324201	0	0
8117	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8117	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	41	54	0	0	0,692307692	0,307692308	0	0	0	0	0
8117	51	150	0	0	0	0,494949495	0,505050505	0	0	0	0
8117	14	54	0	0	0,9	0,1	0	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	400	0	0	0	0,076923077	0,153846154	0,153846154	0,153846154	0,153846154	0,153846154
8117	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8117	175	200	0	0	0	0	0	1	0	0	0

8117	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8117	101	400	0	0	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408
8117	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8117	50	120	0	0	0	0,714285714	0,285714286	0	0	0	0
8117	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8117	175	275	0	0	0	0	0	0,25	0,5	0,25	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8117	41	120	0	0	0,113924051	0,632911392	0,253164557	0	0	0	0
8117	50	150	0	0	0	0,5	0,5	0	0	0	0
8117	75	100	0	0	0	1	0	0	0	0	0
8117	75	100	0	0	0	1	0	0	0	0	0
8117	96	98	0	0	0	1	0	0	0	0	0
8117	75	100	0	0	0	1	0	0	0	0	0
8117	75	100	0	0	0	1	0	0	0	0	0
8117	75	100	0	0	0	1	0	0	0	0	0
8117	75	100	0	0	0	1	0	0	0	0	0
8117	96	98	0	0	0	1	0	0	0	0	0
8117	-100	100	0	0,25	0,25	0,25	0	0	0	0	0
8117	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8117	40	60	0	0	0,5	0,5	0	0	0	0	0
8117	50	100	0	0	0	1	0	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8117	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8117	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8117	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8117	150	350	0	0	0	0	0	0,25	0,25	0,25	0,25
8117	51	100	0	0	0	1	0	0	0	0	0
8117	51	100	0	0	0	1	0	0	0	0	0
8117	50	150	0	0	0	0,5	0,5	0	0	0	0

8117	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
8117	50	100	0	0	0	1	0	0	0	0	0
8117	-25	96	0	0,20661157	0,41322314	0,380165289	0	0	0	0	0
8117	177	192	0	0	0	0	0	1	0	0	0
8117	175	300	0	0	0	0	0	0,2	0,4	0,4	0
8117	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8117	75	250	0	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0
8117	175	300	0	0	0	0	0	0,2	0,4	0,4	0
8117	175	300	0	0	0	0	0	0,2	0,4	0,4	0
8117	175	300	0	0	0	0	0	0,2	0,4	0,4	0
8117	50	150	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	50	100	0	0	0	1	0	0	0	0	0
8117	150	300	0	0	0	0	0	0,333333333	0,333333333	0,333333333	0
8117	50	150	0	0	0	0,5	0,5	0	0	0	0
8117	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8117	201	399	0	0	0	0	0	0	0,247474747	0,252525253	0,252525253
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8117	69	125	0	0	0	0,553571429	0,446428571	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8117	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8117	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8117	175	300	0	0	0	0	0	0,2	0,4	0,4	0

8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281		0	0
8117	140	160	0	0	0	0	0,5	0,5	0	0	0
8117	40	60	0	0	0,5	0,5	0	0	0	0	0
8117	50	150	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	50	150	0	0	0	0,5	0,5	0	0	0	0
8117	100	300	0	0	0	0	0,25	0,25	0,25	0,25	0
8117	25	160	0	0	0,185185185	0,37037037	0,37037037	0,074074074		0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	253	268	0	0	0	0	0	0	0	1	0
8117	201	300	0	0	0	0	0	0	0,494949495	0,505050505	0
8117	69	125	0	0	0	0,553571429	0,446428571	0	0	0	0
8117	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281		0	0
8117	150	200	0	0	0	0	0	1	0	0	0
8117	150	300	0	0	0	0	0	0,333333333	0,333333333	0,333333333	0
8117	100	300	0	0	0	0	0,25	0,25	0,25	0,25	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389		0	0
8117	150	200	0	0	0	0	0	1	0	0	0
8117	201	399	0	0	0	0	0	0	0,247474747	0,252525253	0,252525253
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	75	125	0	0	0	0,5	0,5	0	0	0	0
8117	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8117	150	200	0	0	0	0	0	1	0	0	0
8117	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8117	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8117	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8131	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281		0	0

8131	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8135	10	90	0	0	0,5	0,5	0	0	0	0	0
8135	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8135	1	50	0	0	1	0	0	0	0	0	0
8135	10	90	0	0	0,5	0,5	0	0	0	0	0
8135	-40	50	0	0,444444444	0,555555556	0	0	0	0	0	0
8135	201	300	0	0	0	0	0	0	0,494949495	0,505050505	0
8137	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8137	41	150	0	0	0,082568807	0,458715596	0,458715596	0	0	0	0
8137	50	100	0	0	0	1	0	0	0	0	0
8137	41	69	0	0	0,321428571	0,678571429	0	0	0	0	0
8137	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8137	14	54	0	0	0,9	0,1	0	0	0	0	0
8137	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8137	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8137	50	100	0	0	0	1	0	0	0	0	0
8137	25	80	0	0	0,454545455	0,545454545	0	0	0	0	0
8137	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8137	14	54	0	0	0,9	0,1	0	0	0	0	0
8137	14	54	0	0	0,9	0,1	0	0	0	0	0
8137	14	54	0	0	0,9	0,1	0	0	0	0	0
8137	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8137	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8137	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8137	50	100	0	0	0	1	0	0	0	0	0
8137	14	54	0	0	0,9	0,1	0	0	0	0	0
8137	50	150	0	0	0	0,5	0,5	0	0	0	0
8137	25	80	0	0	0,454545455	0,545454545	0	0	0	0	0
8137	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8137	14	54	0	0	0,9	0,1	0	0	0	0	0
8137	14	54	0	0	0,9	0,1	0	0	0	0	0
8137	150	250	0	0	0	0	0	0,5	0,5	0	0
8137	41	69	0	0	0,321428571	0,678571429	0	0	0	0	0

8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8137	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8137	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8137	50	100	0	0	0	1	0	0	0	0	0
8137	-50	14	0	0,78125	0,21875	0	0	0	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	50	150	0	0	0	0,5	0,5	0	0	0	0
8137	50	150	0	0	0	0,5	0,5	0	0	0	0
8137	50	100	0	0	0	1	0	0	0	0	0
8137	50	100	0	0	0	1	0	0	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	50	150	0	0	0	0,5	0,5	0	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8137	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	50	150	0	0	0	0,5	0,5	0	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8137	50	150	0	0	0	0,5	0,5	0	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8137	25	160	0	0	0,185185185	0,37037037	0,37037037	0,074074074	0	0	0
8137	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8137	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8137	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8137	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8137	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8137	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8137	50	120	0	0	0	0,714285714	0,285714286	0	0	0	0

8137	1	250	0	0	0,196787149	0,200803213	0,200803213	0,200803213	0,200803213	0	0
8137	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8137	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8137	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8137	14	37	0	0	1	0	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8139	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8139	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	50	100	0	0	0	1	0	0	0	0	0
8139	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0

8139	50	300	0	0	0	0,2	0,2	0,2	0,2	0,2	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	25	160	0	0	0,185185185	0,37037037	0,37037037	0,074074074	0	0	0
8139	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8139	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	100	250	0	0	0	0	0,333333333	0,333333333	0,333333333	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0

8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	55	125	0	0	0	0,642857143	0,357142857	0	0	0	0
8139	1	102	0	0	0,485148515	0,495049505	0,01980198	0	0	0	0
8139	1	102	0	0	0,485148515	0,495049505	0,01980198	0	0	0	0
8139	1	102	0	0	0,485148515	0,495049505	0,01980198	0	0	0	0
8139	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8139	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0

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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	50	120	0	0	0	0,714285714	0,285714286	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0

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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
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8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8139	10	90	0	0	0,5	0,5	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0

8148	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	150	200	0	0	0	0	0	1	0	0	0
8148	150	200	0	0	0	0	0	1	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8148	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8148	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0

8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8175	50	250	0	0	0	0,25	0,25	0,25	0,25	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0

8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	50	250	0	0	0	0,25	0,25	0,25	0,25	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0

8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8175	10	90	0	0	0,5	0,5	0	0	0	0	0
8176	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0

8176	50	100	0	0	0	1	0	0	0	0	0
8176	50	100	0	0	0	1	0	0	0	0	0
8176	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8176	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8176	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8176	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8176	50	100	0	0	0	1	0	0	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	75	400	0	0	0	0,076923077	0,153846154	0,153846154	0,153846154	0,153846154	0,153846154
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	50	150	0	0	0	0,5	0,5	0	0	0	0
8176	-27	85	0	0,241071429	0,446428571	0,3125	0	0	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	-300	200	0	0,1	0,1	0,1	0,1	0,1	0	0	0
8176	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8176	50	100	0	0	0	1	0	0	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	41	125	0	0	0,107142857	0,595238095	0,297619048	0	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	25	300	0	0	0,090909091	0,181818182	0,181818182	0,181818182	0,181818182	0,181818182	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	75	200	0	0	0	0,2	0,4	0,4	0	0	0
8176	1	120	0	0	0,411764706	0,420168067	0,168067227	0	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0

8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	69	220	0	0	0	0,205298013	0,331125828	0,331125828	0,132450331	0	0
8176	101	125	0	0	0	0	1	0	0	0	0
8176	101	125	0	0	0	0	1	0	0	0	0
8176	101	125	0	0	0	0	1	0	0	0	0
8176	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	50	150	0	0	0	0,5	0,5	0	0	0	0
8176	50	100	0	0	0	1	0	0	0	0	0
8176	69	220	0	0	0	0,205298013	0,331125828	0,331125828	0,132450331	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	101	125	0	0	0	0	1	0	0	0	0
8176	150	250	0	0	0	0	0	0,5	0,5	0	0
8176	41	125	0	0	0,107142857	0,595238095	0,297619048	0	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	-100	300	0	0,125	0,125	0,125	0,125	0,125	0,125	0,125	0
8176	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8176	51	150	0	0	0	0,494949495	0,505050505	0	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	49	200	0	0	0,006622517	0,331125828	0,331125828	0,331125828	0	0	0
8176	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8176	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8176	41	125	0	0	0,107142857	0,595238095	0,297619048	0	0	0	0
8176	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8176	75	400	0	0	0	0,076923077	0,153846154	0,153846154	0,153846154	0,153846154	0,153846154
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8176	50	100	0	0	0	1	0	0	0	0	0
8176	75	400	0	0	0	0,076923077	0,153846154	0,153846154	0,153846154	0,153846154	0,153846154
8177	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8177	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	75	100	0	0	0	1	0	0	0	0	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8177	101	300	0	0	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0
8177	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	98	117	0	0	0	0,105263158	0,894736842	0	0	0	0

8190-8212	75	125	0	0	0	0,5	0,5	0	0	0	0
8190-8212	75	125	0	0	0	0,5	0,5	0	0	0	0
8190-8212	75	125	0	0	0	0,5	0,5	0	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	-100	100	0	0,25	0,25	0,25	0	0	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8190-8212	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8190-8212	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0

8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	75	125	0	0	0	0,5	0,5	0	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8190-8212	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	51	300	0	0	0	0,196787149	0,200803213	0,200803213	0,200803213	0,200803213	0
8190-8212	51	300	0	0	0	0,196787149	0,200803213	0,200803213	0,200803213	0,200803213	0
8190-8212	-25	20	0	0,555555556	0,444444444	0	0	0	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8190-8212	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8192	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8192	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8192	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8206	75	250	0	0	0	0,142857143	0,285714286	0,285714286	0,285714286	0	0
8206	50	200	0	0	0	0,333333333	0,333333333	0,333333333	0	0	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8206	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8206	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8206	-50	-1	0	1	0	0	0	0	0	0	0
8206	1	300	0	0	0,163879599	0,16722408	0,16722408	0,16722408	0,16722408	0,16722408	0
8206	50	100	0	0	0	1	0	0	0	0	0
8206	-200	14	0	0,23364486	0,065420561	0	0	0	0	0	0
8206	1	25	0	0	1	0	0	0	0	0	0
8206	14	96	0	0	0,43902439	0,56097561	0	0	0	0	0
8206	-27	54	0	0,333333333	0,617283951	0,049382716	0	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8206	14	100	0	0	0,418604651	0,581395349	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0

8206	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8206	1	25	0	0	1	0	0	0	0	0	0
8206	1	400	0	0	0,122807018	0,125313283	0,125313283	0,125313283	0,125313283	0,125313283	0,125313283
8206	50	120	0	0	0	0,714285714	0,285714286	0	0	0	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8206	-200	220	0	0,119047619	0,119047619	0,119047619	0,119047619	0,119047619	0,047619048	0	0
8206	69	220	0	0	0	0,205298013	0,331125828	0,331125828	0,132450331	0	0
8206	69	201	0	0	0	0,234848485	0,378787879	0,378787879	0,007575758	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	41	150	0	0	0,082568807	0,458715596	0,458715596	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	69	200	0	0	0	0,236641221	0,381679389	0,381679389	0	0	0
8206	175	300	0	0	0	0	0	0,2	0,4	0,4	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8206	151	300	0	0	0	0	0	0,32885906	0,33557047	0,33557047	0
8206	151	300	0	0	0	0	0	0,32885906	0,33557047	0,33557047	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8206	50	220	0	0	0	0,294117647	0,294117647	0,294117647	0,117647059	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	151	300	0	0	0	0	0	0,32885906	0,33557047	0,33557047	0
8206	151	300	0	0	0	0	0	0,32885906	0,33557047	0,33557047	0
8206	151	300	0	0	0	0	0	0,32885906	0,33557047	0,33557047	0
8206	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8206	75	125	0	0	0	0,5	0,5	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	51	200	0	0	0	0,32885906	0,33557047	0,33557047	0	0	0
8206	175	300	0	0	0	0	0	0,2	0,4	0,4	0
8206	51	300	0	0	0	0,196787149	0,200803213	0,200803213	0,200803213	0,200803213	0
8206	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0

8206	151	300	0	0	0	0	0	0,32885906	0,33557047	0,33557047	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	41	250	0	0	0,043062201	0,23923445	0,23923445	0,23923445	0,23923445	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	1	50	0	0	1	0	0	0	0	0	0
8206	-90	25	0	0,434782609	0,217391304	0	0	0	0	0	0
8206	14	50	0	0	1	0	0	0	0	0	0
8206	151	300	0	0	0	0	0	0,32885906	0,33557047	0,33557047	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	75	125	0	0	0	0,5	0,5	0	0	0	0
8206	50	100	0	0	0	1	0	0	0	0	0
8206	150	300	0	0	0	0	0	0,333333333	0,333333333	0,333333333	0
8206	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8206	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	50	120	0	0	0	0,714285714	0,285714286	0	0	0	0
8206	41	200	0	0	0,056603774	0,314465409	0,314465409	0,314465409	0	0	0
8206	289	326	0	0	0	0	0	0	0	0,297297297	0,702702703
8206	1	50	0	0	1	0	0	0	0	0	0
8206	50	100	0	0	0	1	0	0	0	0	0
8206	41	100	0	0	0,152542373	0,847457627	0	0	0	0	0

8206	40	100	0	0	0,166666667	0,833333333	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	40	100	0	0	0,166666667	0,833333333	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	1	25	0	0	1	0	0	0	0	0	0
8206	50	100	0	0	0	1	0	0	0	0	0
8206	1	150	0	0	0,32885906	0,33557047	0,33557047	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	101	200	0	0	0	0	0,494949495	0,505050505	0	0	0
8206	51	150	0	0	0	0,494949495	0,505050505	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	150	0	0	0	0,494949495	0,505050505	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	40	100	0	0	0,166666667	0,833333333	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	40	100	0	0	0,166666667	0,833333333	0	0	0	0	0
8206	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	51	100	0	0	0	1	0	0	0	0	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8206	1	100	0	0	0,494949495	0,505050505	0	0	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	51	100	0	0	0	1	0	0	0	0	0
8219	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8219	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0

8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	51	100	0	0	0	1	0	0	0	0	0
8219	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8219	-27	150	0	0,152542373	0,282485876	0,282485876	0,282485876	0	0	0	0
8219	75	125	0	0	0	0,5	0,5	0	0	0	0
8219	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8219	51	100	0	0	0	1	0	0	0	0	0
8219	75	125	0	0	0	0,5	0,5	0	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	14	117	0	0	0,349514563	0,485436893	0,165048544	0	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	75	125	0	0	0	0,5	0,5	0	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	75	125	0	0	0	0,5	0,5	0	0	0	0
8219	75	125	0	0	0	0,5	0,5	0	0	0	0
8219	51	100	0	0	0	1	0	0	0	0	0
8219	51	100	0	0	0	1	0	0	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0
8219	1	200	0	0	0,246231156	0,251256281	0,251256281	0,251256281	0	0	0