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THE PHOENICIANS IN IBERIA:
SETTLEMENTS, CEMeterIES, TRADE
AND AGRICULTURE
THE PHOENICIANS IN IBERIA: SETTLEMENTS, CEMETERIES, TRADE AND AGRICULTURE

Thesis submitted in fulfillment of the degree of Doctor of Philosophy, Trinity College Dublin.

Ann Neville
October 1997.
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SUMMARY

This thesis examines the archaeological and textual evidence for Phoenician settlement in Iberia during the eighth and seventh centuries.¹

It looks at the settlements founded in Iberia during this period as well as the cemeteries associated with these sites. Using this evidence it attempts to assess the nature of colonial society in Iberia, concentrating on the areas of trade and agriculture. The thesis questions the traditional assumption that the Phoenician presence in Iberia was wholly due to the search for metals and suggests that many of the settlements may also have had an important agricultural function.

¹ All dates are B.C. unless otherwise specified.
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Settlements

The Greek and Roman historical tradition is quite explicit in placing the start of Phoenician expansion in the far west to the late twelfth century, with the foundations of Gadir and Lixus, beyond the Straits of Gibraltar in Spain and Morocco respectively, as well as that of Utica in Tunisia. After thirty years of intensive research and excavations in these areas, however, there is still no incontrovertible proof of Phoenician settlement in the Atlantic and the western Mediterranean basin before the eighth century.¹

The archaeological record places the earliest Phoenician settlements in Iberia on the Andalusian coast, where a dense network of small settlements has been found along a coastal strip, covering the modern provinces of Cádiz, Málaga, Granada and Almería.² This area shows continuous Phoenician occupation over 200 years, from the beginning of the eighth century until the mid-sixth century, with some settlements continuing under Carthaginian influence, and displaying a marked Punic character right down to the Roman period. From

¹ Velleius Paterculus, 1,2,3; Pliny, NH, 16, 40; 19, 4, 63; Strabo 3, 5, 5; Pomponius Mela, 3, 6. For a critical discussion of the traditional dating of the earliest Phoenician foundations see G. Bunnens, L'expansion phénicienne en Méditerranée, Brussels 1979 and C.G. Wagner, Fenicios y cartagineses en la Península Ibérica: ensayo de interpretación fundamentado en un análisis de los factores internos, Madrid 1983.

this central area of settlement, the Phoenicians expanded to occupy other parts of Iberia during the seventh century, reaching the coasts of Portugal, Alicante and the Balearic Islands, as well as Algeria, and Atlantic Morocco in North Africa.

Some of these sites were known and referred to by the classical authors, but the scale of Phoenician settlement in Iberia only became clear with the start of sustained archaeological investigation from the 1960's onwards. We have a number of references to Cádiz, as well as quite detailed accounts of its topography, undoubtedly due to its economic importance and peculiar location, on the Atlantic, on the edge of what was *terra incognita* for the Greeks and, for a long time, the Romans.³ The other Phoenician sites on the Mediterranean coastline, and the Atlantic, passed largely unremarked by classical historiography, as the important conflicts in the region, the Second Punic War and the Roman civil wars, took place elsewhere. Therefore we have to rely on the geographers such as Strabo, who dedicated Book III of his *Geography* to Iberia, and Avienus, who wrote a *periplus* of the Spanish coastline, as well as the Elder Pliny. They preserve valuable information concerning the origin of these sites, and Strabo gives us the story of the foundation of Cádiz, as told by the inhabitants of that city. However, neither Strabo nor Pliny claim to be exhaustive in their description of the cities and peoples of southern Spain, and in general mention only those

³ For references to Cádiz see below chapter three.
Phoenician foundations which were still prosperous cities in their own day. Thus, while the evidence from the ancient texts provides us with some useful information, for a historical reconstruction of the Phoenician enclaves in Iberia our primary source is the archaeological data.

Before discussing any of the settlements in detail, the following is a survey of all the sites in Iberia which show signs of Phoenician occupation during the eighth century.

The earliest known Phoenician site on the Mediterranean coast of Spain is that located at Morro de Mezquitilla, in the province of Málaga, on a hill rising some 30m above sea level, just to the east of the mouth of the Algarrobo river, and some 300m distant from the modern coastline (Fig. 1). Here six phases of

4 Claims not to be exhaustive: Strabo, 3, 3, 3; Pliny, NH, 3, 3, 28. Strabo correctly identifies as Phoenician foundations Malaka, Sexi and Abdera - the modern Málaga, (3,4,2) Almuñécar (3,5,5) and Adra (3,4,3); F. Wulff Alonso, "Fuentes literarias sobre Málaga antigua," in idem and G. Cruz Andreotti (eds.), Historia antigua de Málaga y su provincia. Actas del Primer congreso de historia antigua de Málaga (Málaga 1994), Málaga 1996, 335-351.

5 The ancient texts provide us with a general confirmation that southern Spain was settled by the Phoenicians: "the Phoenicians ... occupied the best of Iberia and Libya... and continued to be masters of those regions until the Romans broke up their empire" (Strabo 3, 2, 14), and "these people (= the Iberians) became so utterly subject to the Phoenicians that the greater number of the cities in Turdetania (= Tartessos, south-western Iberia) and of the neighbouring places are now inhabited by the Phoenicians" (3, 2, 13). Avienus in his Ora Maritima stresses that the coastal region around Málaga was crowded with Phoenicians in former times: "In the past, numerous cities were built on this coastline and many Phoenicians occupied these places previously. Now the deserted land extends its inhospitable sands, and the fields doze and sleep, devoid of cultivators" (OM, 438-443). The foundation of Ibiza is mentioned (Diodorus, 5, 16 - see below), but Phoenician settlement in Portugal is completely ignored, presumably because these sites had long since vanished. For a full list of all references to Spain in classical authors, see A. Schulten, Fontes Hispaniae Antiquae, I-VI, Barcelona 1922-1952.

6 The sites of Cádiz and Castillo de Doña Blanca, both settled in the eighth century, are discussed in detail in chapter three.
Phoenician settlement have been identified, ranging from approximately 800 (Phase I) to the sixth century (Phases V-VI), making its foundation roughly contemporary with that of the Phoenician Castillo de Doña Blanca in Cádiz.\(^7\)

The next area to be settled by the Phoenicians was at Almuñécar, in the province of Granada, known to us from its coins of the Roman era as \(F(irmum)\) \(I(ulium)\) \(SExS\), or in its Neo-Punic issues \(sks\) (Fig. 1).\(^8\) Strabo refers to a failed attempt by the Phoenicians to establish themselves at Sexs before they eventually settled at Gadir soon after the Trojan war (3, 5, 5). Although the existence of the Phoenician colony of Sex or Ex somewhere on the Andalusian coast between Málaga and Almería was well documented in the classical sources, its location was discovered only with the chance find of a cemetery situated on the slopes of the Cerro de San Cristóbal, a promontory 1km to the NW of Almuñécar castle, in the ancient centre of the town. This cemetery consisted of some 200 shaft graves, containing cremations in large

\(^7\) H. Schubart, "Morro de Mezquitilla. Informe preliminar sobre la campaña de excavaciones de 1976", \textit{NAH}, 6 (1979), 175-209; idem, "Morro de Mezquitilla Kampagne 1982", \textit{MM}, 24 (1983), 104-131. Some C-14 analyses were carried out which, when calibrated, produced dates of 894-835 for the oldest level of Phoenician occupation, and dates of 1429-1411 (probably reflecting the pre-Phoenician occupation of the site) and 786 for an area conventionally dated to the first half of the eighth century. If accepted, these dates push the initial occupation of the site back into the ninth century.

\(^8\) For ancient references to \(sks\) see M. Pellicer, "Sexi fenicia y púnica", \textit{Los fenicios en la Península Ibérica}, 90; M. Pastor Muñoz, "Fuentes antiguas sobre Almuñécar (Sexi Firmum Iulium)", in F. Molina Fajardo, (ed.), \textit{Almuñécar Arqueología e Historia}, Granada 1983, vol. 1, 205-235. The toponym \(Sek\) seems to be identical with that of \(Suk\) attested in the Levant from the middle of the second millennium and preserved in the name of Tell Sukas in Syria. On this basis E. Lipinski has suggested that the town of \(Sek\) in Granada could have been founded by emigrants from \(Suk\). E. Lipinski, "Vestiges phéniciens d'Andalousie," \textit{OLP}, 15 (1984) 118-119.
alabaster urns of Egyptian origin. It was the first Phoenician necropolis to be discovered in Spain, and was the cause of renewed archaeological and historical interest in this area. It was dated by its excavator to the first half of the seventh century, based on the discovery of two Protocorinthian Subgeometric kotylai in tomb 19B, but this dating was subsequently modified on the basis of the analysis of the forms of Phoenician pottery found in the tombs to a time period extending from the very late eighth to the late seventh centuries. Initial excavations in the ancient centre of the town revealed materials which dated back only as far as the sixth century; but recently various settlement areas in and around the ancient centre of Almuñécar have been identified which can be dated to the eighth century. The earliest settlement levels were found at El Majuelo, underneath a Roman fish sauce factory, where abundant Phoenician red slip ware was found. Based on the relative chronology devised by H. Schubart which establishes chronological progression according to the growth in the width of the rims of Phoenician red slip plates, the El Majuelo plates, with their narrow edges,


can be dated to the first half of the eighth century. 

According to the geological research programme of the German Archaeological Institute, El Majuelo was located directly on the ancient coastline, along the shores of an open maritime bay, which would make Sexi conform to the general settlement pattern adopted by the Phoenicians in Iberia, who generally preferred sites directly adjacent to the ancient coastline.

Datable to the middle of the eighth century is the settlement of Las Chorreras, situated in a rocky coastal promontory only 1 km east of Morro de Mezquitilla (Fig. 1). This site is interesting for two reasons. Unlike many other Phoenician sites it was not subsequently reoccupied after its abandonment by the Phoenicians so excavations can reveal more of the ancient site plan than is normally possible. Also it was occupied for a very limited period of time, with only one habitation level, dating from roughly 750-700. This relatively short period of occupation, before the final, apparently peaceful, abandonment of the site, means that here we can observe the eighth-century habitation structures and artefacts, unencumbered by the subsequent building which we

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find on other sites. For this reason Chorreras is one of the best examples available of the urban structure and material culture of an eighth-century Phoenician site in Spain.\textsuperscript{14}

Equally shortlived was the settlement at Casa de Montilla, near San Roque on the Mediterranean coast of the province of Cádiz (Fig. 1).\textsuperscript{15} Here an indigenous Late Bronze Age site was located at the mouth of the river Guadiaro which provided a direct link with the Guadalquivir valley via Ronda. In the second half of the eighth century this site came into close contact with the Phoenicians, with Phoenician pottery, chiefly amphorae, found in large quantities at the settlement. Most of the Phoenician pottery comes from an area 125m from the indigenous site, where almost no local pottery was found, and where the materials are wholly Phoenician in character. This area has been interpreted by the excavators as a small Phoenician colony, founded close to the indigenous site and occupied for some fifty years before being abandoned c. 700.

7 km west of Morro de Mezquitilla is the Phoenician settlement of Toscanos, on the bank of the Vélez river, near


the coast (Fig. 1). The settlement on the summit of the hill of Toscanos was undoubtedly the central nucleus of Phoenician occupation around the former maritime bay which existed between Cerro del Mar, the hill on the other side of the Vélez river, and the hill of Toscanos. The ancient remains situated on these hills were once thought to be those of the Phocaean colony, Mainake, mentioned in the ancient sources. The settlement at Toscanos is one of the best known Phoenician sites in Spain, having been excavated by the German Archaeological Institute since 1964. These excavations have revealed an occupation of the site dating from c. 730 to somewhere in the first half of the sixth century. The Phoenician settlement at Toscanos clearly had important mercantile and commercial functions, as the presence of harbour installations and an imposingly large central warehouse building reveal. In the seventh century the settlement expanded to include the nearby hills of Cerro del Peñón and Cerro del Alarcón. Cerro del Peñón may have originally been the site of a cemetery, but by the seventh century it was also used for metallurgical activities, as we can see from the large quantities of slag and the presence of a smelting furnace, possibly that of a smith, on the slope above.


17 For the harbour bay of Toscanos at Manganeto to the north of the site see O. Arteaga, "Die römischen Öfen vom Manganeto bei Torre del Mar (Málaga)," MM, 23 (1982), 234-246; idem, "Zur phönizische Hafensituation von Toscanos," in Niemeyer, Briese and Bahnemann, (op. cit. n. 13) 127-141; for the warehouse see H.G. Niemeyer, "Die phönizische Niederlassung Toscanos: eine Zwischenbilanz," Phönizier im Westen, 195-206.
the settlement nucleus.\textsuperscript{18} The Cerro del Alarcón, to the northwest of Toscanos, seems to have had a defensive purpose, housing first a large rectangular building, which has been interpreted as a military outpost, and then a fortification wall. This defensive wall ran from Alarcón over the Peñón and undoubtedly served to protect and enclose the by now extensive site of Toscanos, which had expanded to the north to enclose the harbour bay at Manganeto and to the west to Cerro del Peñón.\textsuperscript{19}

Also dating to the second half of the eighth century is the site known to classical historians as Abdera, located to the east of the modern city of Adra in the province of Almería, and the most easterly of all the Phoenician eighth-century foundations in Spain (Fig. 1 - listed as Cerro de Montecristo). Initial excavations at the site, on the edge of the former estuary of the Río Grande, revealed nothing earlier than the fifth century.\textsuperscript{20} Recent rescue excavations, however, revealed four levels of occupation of the site, the earliest datable to the


\textsuperscript{19} H. Schubart, "Alarcón, Vorbericht über die Grabungskampagne 1984 im Bereich der phönizischen Siedlung und der Befestigungsmauer," in Niemeyer, Briese and Bahnehmann, (op. cit. n. 13) 172-188.

second half of the eighth century and the latest to the fourth century.\textsuperscript{21}

The last securely dated eighth-century site is situated at Cerro del Villar, some 4km from the Phoenician town of Malaka, the modern Málaga (Fig. 1). What is now a low hillock some 6.30m high, situated in the alluvial plain of the Guadalhorce river, was in Phoenician times a small island with a surface area of approximately 260m x 200m, located in the centre of an extensive marine inlet into which the Guadalhorce river drained.\textsuperscript{22} Excavated using a combination of archaeological, geological and paleoenvironmental techniques, the site at Cerro del Villar has yielded valuable data concerning the interaction of the Phoenician settlement with its environment. The importance of the Guadalhorce site was its geographical location, at the entrance to one of the largest and most important Mediterranean rivers of Andalusia; this waterway acted as a means of communications between Upper Andalusia and the mineral resources of Tartessos. Cerro del Villar had as its hinterland the Guadalhorce valley which provided optimum conditions for intensive irrigation agriculture. Our evidence shows that this is precisely what the Phoenicians at El Villar practised, with the remains of various different types of cereals, and mills for grinding found


The island site of El Villar was intensively occupied from the eighth to the sixth centuries and had strong industrial functions. During the seventh century dyeing and the processing of fish products were carried out there but, by the sixth century, one of the most important industrial activities seems to have been pottery production, for which the Phoenicians at El Villar had excellent raw materials in the clay deposits in the Guadalhorce valley. While the choice of site might have been favourable from an economic perspective it was not the most appropriate for human occupation. Geomorphological analysis of the area around El Villar has revealed the silting up of the former Guadalhorce estuary and the resulting disappearance of the island of El Villar at the beginning of the sixth century. Low lying areas of the Phoenician settlement were subject to periodic floods and eventually had to be abandoned; settlement concentrated only in the centre of the island. This process of sedimentation and erosion has been linked by the excavator to the results of pollen analysis which point to an intense degradation of the environment during the seventh and sixth centuries, and she has suggested that this dramatic environmental deterioration was the result of an intensification of the agriculture, herding and forestry carried out by the Phoenicians in the lower


24 Eadem, "Nuevos datos arqueológicos sobre las colonias fenicias de la bahía de Málaga," Lixus, Colloque de l'école française de Rome 166, Rome 1992, 76.

Guadalhorce valley. Whatever the cause, the island of El Villar was abandoned very suddenly around 580/570. Significantly it is precisely at this time that the first Phoenician materials appear at nearby Malaka, which was soon to become, with Gadir, the most important Phoenician city in Spain, under the hegemony of Carthage.

These initial eighth-century settlements show the Phoenicians establishing themselves on small islands or low promontories along the lower reaches of all the most important rivers on the Andalusian Mediterranean coast, in sites which lay in close proximity to the ancient coastline. These offered their settlers easy navigation along both maritime and fluvial trade routes, and access to the rich natural resources located in the hinterland of their settlements.

For a closer examination of the urban structure and the nature of settlement in these earliest Phoenician sites, it is the places which are not named as Phoenician colonial centres in our literary sources - Toscanos, Morro de Mezquitilla and Chorreras - which have provided the richest eighth-century habitation levels, and where we can best appreciate the exact nature of the initial Phoenician settlement in these small coastal enclaves.

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26 Eadem, (op. cit. n. 23) 477.

In Morro de Mezquitilla, where the start of Phoenician occupation dates to c. 800, the earliest settlement levels (B1) consist of large rectangular dwellings, one of which has sixteen rooms. The walls, which are preserved to a height of up to 1 m, are made from sun-dried brick and covered with a reddish-brown plaster on the outside. At intervals the walls have openings which would have provided access between rooms and there were high thresholds with steps on either side. In two places hearths could be observed.

The rooms have rectangular ground-plans which are not always regular. They tend to be large, e.g. 4.20-4.80m x 3m, and are occasionally subdivided. In total, we can distinguish three construction complexes belonging to the earliest phase of occupation at Morro de Mezquitilla. The largest of these is Building K which extends over 19m with a width of 11m and is divided into at least sixteen rooms. Building K was not built at once, as the obtuse and acute angles of its walls show. The walls are sometimes joined slightly irregularly and some of the rooms are also irregular, as we can see from the plan.\(^{28}\) (Fig. 2) The eastern part of the building may be the oldest and the western part could have been added later. This is suggested by the fact that the western part of Building K partially overlies a metallurgical workshop.

Between Building K and Building I, situated further south and only partially documented, there seems to have been a narrow

\(^{28}\) We find similar deviations from the right angle in Chorreras but there it is caused by the presence of a road or pathway running between the buildings.
street which runs through all the western part of the settlement area. This street is characterised by a green-coloured surface, its colour deriving from the organic material contained in its composition. Building H, immediately to the east of I, differs slightly in its orientation from buildings K and I and it is quite likely that Building H is slightly more recent than Building I.29

Significant too for the economic role of the settlement is the discovery of the remains of metallurgical workshops contemporary with the first buildings on the site and partly at least slightly earlier.30 This area is located in the south-west of the archaeological zone occupied by the residential buildings. Here several furnaces were found, some of which show signs of having been renovated on several occasions. Near the furnaces, which show strong signs of burning, slag remains were found, as were fragments of ventilation tubes, especially bellows nozzles, sometimes with metal remains still adhering to them. The nozzles found here prove that smelting was carried out in the settlement, and thus these workshops would have been for metallurgical purposes. In addition, fragments of large clay jars were found which had drops of melted metal still adhering to them. Analysis of the slag remains proved that the metal being processed here was


30 Idem, "El asentamiento fenicio del siglo VIII a.C. en el Morro de Mezquitilla (Algarrobo, Málaga)," Los Fenicios en la Península Ibérica, 63; idem, (op. cit. n. 29) 148.
Iron.\textsuperscript{31} Obviously the metallurgical activities attested here are not those of primary smelting, as in that case there would have been far greater signs of combustion on the furnaces and a larger amount of slag produced. It is more likely that we have a workshop designed to resmelt and process the metal or perhaps even a smithy. In any case the fact that a metallurgical work shop was in operation during the initial occupation of the site provides us with important evidence as to the settlement's economic activities.\textsuperscript{32}

Despite its very early dating, the initial occupation of the Morro de Mezquitilla hill (Phase B1) shows well-planned buildings, with an urban structure characterised by large houses, measuring up to 15m long and divided into up to sixteen rooms. Both the uniform orientation of the earliest houses as well as their layout along regularly-planned streets point to urban planning worthy of a settlement of some rank. Some of the buildings at Morro de Mezquitilla, like Building K, suggest the presence of a population with a relatively high standard of living.\textsuperscript{33} This is interesting given the building's construction in the earliest phase of occupation at the site, and also the clear evidence for social stratification which Morro de Mezquitilla and the other colonial sites present during the seventh century.


\textsuperscript{32} Schubart, (op. cit. n. 30) 63; idem, (op. cit. n. 29) 148.

The other eighth-century site, Chorreras, also presents evidence of a planned urban structure, with large isolated houses laid out on both sides of wide, fairly regular streets (Fig. 3). Unlike the urban development typical of the seventh-century settlements, where we see a more dense occupation of the urban site, with the spaces between adjoining buildings often reduced to a minimum, in Chorreras there is a feeling of space with large open areas between the houses.\textsuperscript{34} Here too, as in Morro de Mezquitilla, we have large buildings made up of various, more or less rectangular, rooms. Deviations from the right angle, as we find in the wall linking rooms O and S, are clearly caused by the presence of a street, which runs through the excavation area in a west-north-west, east-south-east direction, with a width of up to 2.5m. Again, like the buildings at Morro de Mezquitilla, those at Chorreras do not have a uniform orientation.\textsuperscript{35} The ground-plan of some of the houses at Chorreras could be completed, and they generally show large buildings with no evidence of the very modest single room constructions, which we find at Toscanos a century later.\textsuperscript{36} In addition to their large size these houses are also solidly constructed. The walls have socles made from regular masonry, which consists of boulders, occasionally secured with clay, with large squared stones or ashlars placed at the

\textsuperscript{34} Eadem, G. Maass-Lindemann, H. Schubart, "Chorreras, un establecimiento fenicio al este de la desembocadura del Algarrobo," \textit{NAH}, 6 (1979), 100-102; Aubet, Maass-Lindemann, Schubart, (op. cit. n. 14) 146.

\textsuperscript{35} Idem, (op. cit. n. 34) 78; idem, (op. cit. n. 14) 144.

\textsuperscript{36} Idem, (op. cit. n. 34), 102.
corners or the entrances to the rooms. This is a more solid construction technique than that observed in the buildings at Morro de Mezquitilla and it seems to be characteristic of eighth-century Phoenician architecture, as we can see a similar method of construction in the oldest houses at Toscanos.\(^{37}\)

Our knowledge of the eighth-century buildings and urban structure of Toscanos is limited by the more intensive land-use and greater concentration of buildings which we find in the seventh century. However we can still discern the outline of the earliest occupation of the hill-top site from roughly 730-700 (Phases I and II). Initially a band of Phoenician settlers occupied a small mound, the Cortijo de Toscanos, which dominates the plain of the Vélez river. There they built several large, isolated dwellings bounded by streets or paths similar to those of the contemporary Chorreras. To this first phase belongs House A, of which only one room was uncovered (Fig. 4). It is unclear whether this building had a residential or commercial function, but the former seems to be the most likely. Immediately to the north and west of House A are areas of public passage. During this first phase of construction the area to the west of House A remained free of any construction for a distance of about 15m.\(^{38}\)


After this initial phase of occupation the settlement grew larger and was more densely occupied during Phase II. Building A was enlarged by Annex B to the west, and almost at the same time, on the other side of the pathway which passes to the north of House A, House D was built. Houses H and K were now built. Of these houses only parts of the walls' socles were preserved. These were made of stones set in clay mortar and on top of them rose the sun-dried brick walls. The buildings at Toscanos were all made up of several rooms and can be unequivocably categorised as residences, and at least H and K can be classified as luxury dwellings. Building H was divided into three aisles, of which the two side aisles are considerably narrower than the central aisle. These aisles were subdivided into rooms. In the centre of the building there was a large room which was perhaps an open courtyard and from which access could be gained to the other rooms of the house. As in Chorreras, here too the buildings do not share the same orientation but each one varies slightly from the adjoining constructions. At the same time other buildings were so obviously taken into consideration when new ones were built that one gets the impression that some sort of original plan had to be respected.


41 Niemeyer, (op. cit. n. 38) 480.
Thus during Phase II, still within the eighth century, we can observe a tendency towards urban agglomeration, perhaps in response to a second wave of colonists, or simply an increase in population. The construction of up-market houses is especially noteworthy, and such dwellings are also found at the same date in Morro de Mezquitilla (B1) and Chorreras. So, as Aubet points out, the earliest architecture on these sites marks the arrival in the region of family groups or individuals of a relatively high economic level.\textsuperscript{42} Perhaps we can infer from the presence of such large buildings in the earliest levels of these settlements that the élites who become visible through the construction of monumental tombs in the seventh century were present at these sites right from the beginning of their occupation.

There is reason to believe that Toscanos' first system of fortification belongs to the two oldest phases of urban development. This defensive structure consists of a deep v-shaped ditch, 70m of which is still preserved, defining the western border of the centre of the site, while to the south and east the settlement's centre was bordered by a beach and the river bank. This escarpment has an almost perfect 45-degree slope and was surely part of a more expansive defence system, later filled in and built over.\textsuperscript{43} Similar defensive

\textsuperscript{42} Aubet Semmler, (op. cit. n. 38) 259.

systems are found in the East and Palestine in a tradition which goes back to the Bronze Age, and the v-shaped profile of a rock-cut trench at Motya in Sicily may also be similar.\textsuperscript{44} The existence of this early system of fortification could help to explain the differences in urban structure that we see between Phases I and II at Toscanos and that of Chorreras. In both settlements we find an architectural system based on buildings of considerable size, arranged alongside streets or pathways. But in contrast to Toscanos, the urban structure of Chorreras is more generously laid out, with large open spaces between the buildings and a more extensive area of occupation, with buildings covering a surface area of some 350m.\textsuperscript{45} However, in Toscanos, by the time we reach the new surge of building at the turn of the eighth and start of the seventh centuries, the fact that every square metre of land had been used, when the warehouse building C was constructed, would indicate that the settlement, limited by a rigid boundary, was already suffering from a lack of space.

Taken together, the evidence we have from the earliest phases of occupation at Morro de Mezquitilla, Chorreras and Toscanos does not support the traditional view of the first generation of

\begin{itemize}
\item apéndice sobre los resultados de la campaña de 1978)," \textit{NAH}, 6 (1979), 228-229.
\end{itemize}
Phoenician colonists to arrive at the Andalusian coast as being made up only by small groups of traders and adventurous sailors involved in metallurgical prospecting and exploration of the area round the Straits. Instead sites like Chorreras and Morro de Mezquitilla prove that from at least 750 onwards important nuclei of colonial population were present on the eastern Mediterranean coast of Andalusia, occupying stable, prosperous centres which, as in the case of Chorreras, occasionally were quite large in size. Judging from the presence of a fortification wall at Toscanos, and large dwelling houses at Morro de Mezquitilla and Chorreras, with metallurgical workshops attested at the former site, we have an initial population which was not negligible in size, which was certainly organized enough to carry out large building projects on a community scale (as indicated by the v-shaped ditch) and which was socially complex.46

From 700 onwards (Toscanos III, Morro B2) all these Phoenician enclaves, and especially those on the Vélez and Algarrobo rivers, display clear signs of internal reorganization and a qualitative leap in their economic structures. Well-established Phoenician sites show signs of internal growth which in turn leads to a growing complexity in the urbanism of

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the sites, in the organisation of the urban area and in the structure of the residential and service areas.47

This qualitative leap can best be observed in Phase III of Toscanos, with the construction of Building C in the centre of the settlement hill (Fig. 5). Its orientation clearly differs from that of the earlier houses belonging to phases I and II. It is larger than the other structures and its building technique is far superior, consisting of rubble stones interspersed with ashlars, and topped with a mud-brick superstructure.48 It was composed of three wings with at least two storeys. An important indication of its original function is provided by a comparison with three-winged buildings excavated in the harbour of Motya, considered by their excavators to have been storehouses or magazines.49 Such a conclusion is supported by the presence of a large quantity of transport and storage amphorae found in the building, confirming its function as a central installation for merchandise. Similar warehouse buildings of a comparable date have been found in Palestine, for instance at Hazor.50 In the East a warehouse holding

47 See the changes in orientation and function in the ground plan of the seventh century sites as compared to that of the eighth century. Schubart, (op. cit. n. 29) 150-153; O. Arteaga, "Perspectivas espacio-temporales de la colonización fenicia occidental. Ensayo de aproximación", Iberos: Actas de las I jornadas sobre el mundo ibérico, Jaén 1985, Jaén 1987, 219-220.

48 Niemeyer, (op. cit. n. 39) 112; idem and Schubart, (op. cit. n. 38) 81-82.

49 Isserlin, (op. cit. n. 44) 115-116; idem, J. du Plat Taylor, Motya, a Phoenician and Carthaginian City in Sicily, Leiden 1974 vol.1, 91.

50 A. García y Bellido, H. Schubart, H.G. Niemeyer, "Espagne", in F. Barreca, et al., L'espansione fenicia nel Mediterraneo, relazioni del colloquio in Roma, 4-5 maggio 1970, Rome 1971, 153; Yadin, (op. cit. n. 44), 167-169. Tripartite structures, sometimes called bit hilani, have also been found in Tell Abu Hawam, Beth Shemesh, Lachish, Tell Beit Mirsim, Tell el Kheleifeh, Megiddo and
commodities such as grain, oil or wine, was characteristic of every market centre. The majority of these large repositories were privately owned and great stocks of merchandise were stored for speculative purposes.\(^5^1\)

We do not know if the warehouse played a similar role at Toscanos. But it is clear that in contrast to the previous buildings in the area it represents a relatively impressive structure and it occupied a central place in the life of the community. With its construction we see a structurally new and different use of the area. When Warehouse Building C was being built small dwellings or huts, with a far more careless and flimsy construction technique, appear for the first time in the vicinity of the building (houses E, F and G). Their small size and simple structure (House F consists of only one room) suggests that they may have been intended for the staff of the warehouse and its services. So once again we have evidence of social differentiation and specialised occupations in the colonial population.\(^5^2\)

The construction of Warehouse Building C in the centre of the settlement also brings with it all the signs of a concentration of the structures in that area. Building C closely adjoins the west wall of Houses A and H which had been extended by an

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\(^{5^1}\) Aubet Semmler, (op. cit. n. 38) 261.

\(^{5^2}\) Ibid, 263; Niemeyer, (op. cit. n. 39) 42.
additional structure to the west. The space left between the older constructions and Building C is barely sufficient to allow a connection via a narrow stairway between the higher street to the north and the pathway along the beach.\textsuperscript{53} To make room for the warehouse, parts of standing structures were demolished, something which had not happened during the earlier phases of settlement in this area. It is thus obvious that the intention was to make Building C as large as possible, but at the same time it was difficult to obtain the necessary space. This could indicate that by the turn of the eighth century the settlement, limited by a rigid boundary, suffered from a lack of space, and may well have been densely occupied throughout the entire area enclosed by its defensive structure.

The reorganization and restructuring of urban space during the seventh century can also be observed at Morro de Mezquitilla (Phase B2). Here the seventh century brings with it a new phase of construction. New buildings were constructed on top of the old sun-dried brick houses of B1 and their orientation is completely different to that of the buildings of the previous phase. Their construction technique is different too. In the eighth century the mud-brick walls were built by simply placing them on top of levelled ground, but in the seventh century the walls have a stone base which was placed in a foundation trench. In comparison with the previous buildings, especially Building K, a much more complex and solid construction technique is used in this second phase.\textsuperscript{54}

\textsuperscript{53} Idem, (op. cit. n. 38) 483; idem, (op. cit. n. 39) 111.

\textsuperscript{54} Schubart, (op. cit. n. 30) 66-67.
According to its excavator, this new building phase with its more solid structures indicates the progressive consolidation of the Phoenician settlement after a first phase of occupation which seems to have been provisional in comparison.\textsuperscript{55} It is interesting to compare the different urban structures of Morro de Mezquitilla and Toscanos in the seventh century. At Morro de Mezquitilla we find buildings aligned along streets which are terraced to follow the slope of the hill, whereas in Toscanos the houses are in isolated groups, located around port, industrial and commercial installations, such as the Warehouse Building C. Perhaps this different urban layout reflects differences in function between the two sites.\textsuperscript{56}

The picture of increasing prosperity which we observe in the internal structuring of the settlements and their new density of occupation in the seventh century is confirmed by their growth in size. The seventh century represents the period of maximum economic growth for all these coastal centres, except for the odd case, such as Chorreras and Casa de Montilla, where the place was abandoned. In the case of Chorreras the abandonment was a peaceful and apparently organised one, and it seems likely that its population simply transferred to Morro de Mezquitilla, only 1km away, which enjoyed a better location in terms of its situation on the bank of the river Algarrobo, on a hilltop overlooking the sea. An

\textsuperscript{55} Ibid, 67.

\textsuperscript{56} Arteaga, (op. cit. n. 47) 220; a similar urban design to that at Morro has been observed at the Phoenician site of Cerro del Villar. Aubet Semmler, (op. cit. n. 24) 74.
influx of new settlers might well explain the new construction work and the increased prosperity in seventh-century Morro de Mezquitilla.

Once again it is Toscanos that best exemplifies the phenomenon of the growth in size of these seventh-century Phoenician enclaves. During the course of this century the settlement expanded to include the Cerro del Peñón and the Cerro del Alarcón, the two hills immediately adjoining the site to the north-west and south-west, and on the hill of Toscanos itself the settlement grew to cover the north side of the hill down to what was in Phoenician times the harbour bay at Manganeto. The growth in the size of the enclave visible during this period brought with it differentiated uses of the settlement space, with clearly demarcated residential and mercantile quarters in the central core of the site, at the hill of Toscanos, surrounded by outlying areas on the hills of Alarcón and Peñón, which were used for military and industrial purposes respectively, as we will see.

The Peñón is situated to the south-west of the hill of Toscanos from which it is separated by a small depression. With a height of 91.9m it is the highest peak on this area and strategically it is of key importance in any defensive system of Toscanos. The Peñón was first investigated in the excavations of 1964 which revealed only very slight Phoenician settlement remains on the summit of the hill.57

57 Pellicer, in Schubart, Niemeyer and Pellicer, (op. cit. n. 12) 11-21.
The discovery of a bronze thymiaterion of probable eastern origin at the Peñón, which would once have formed part of the grave goods of a burial, may well indicate that there was a necropolis somewhere on the hill.\textsuperscript{58} The recent discovery of a fragment of an alabaster urn found on the eastern slope of the Peñón, and similar to those often used as cinerary urns in Phoenician cemeteries in Iberia, points in the same direction.\textsuperscript{59}

It was the 1978 and 1984 excavations which first revealed significant traces of Phoenician settlement on the hill, dating to the seventh and first part of the sixth centuries.\textsuperscript{60} These failed to uncover any traces of a cemetery but located the remains of a quite considerable metallurgical quarter on the eastern slope of the Peñón. Here a smelting furnace, used to produce iron, was found, along with slag, semi-smelted residue and bellows pipes. The large amounts of slag found in the vicinity of the furnace could not all have been produced by that single structure and the fact that the slag extends downhill over a considerable area provides important indications as to the scale of the metallurgical industry on the east slope of the Peñón.\textsuperscript{61} Analysis of the slag remains proves


\textsuperscript{59} Niemeyer, Briese and Bahnemann, (op. cit. n. 18) 155.

\textsuperscript{60} Ibid, \textit{passim}; Niemeyer, (op. cit. n. 43), 247.

\textsuperscript{61} Niemeyer, Briese and Bahnemann, (op. cit. n. 18) 158-163; H.G. Niemeyer, "Trabajos arqueológicos realizados en las faldas orientales del Cerro del Peñón, yacimiento de Toscanos, Torre del Mar (Vélez-Málaga)," \textit{AAA}, 1986, 422-424.
that the metals processed here were chiefly iron with occasional finds of copper.\textsuperscript{62} Fragments of red slip ware, the Phoenician quality table ware, in the area around the furnace, date Phoenician occupation of this part of the hill to the second half of the seventh century at the earliest, while pottery found on the lower slopes of the Peñón are clearly earlier in date. A few sherds from Etruscan kantharoi prove that settlement in this area continued until the sixth century.\textsuperscript{63} From the evidence at our disposal the Peñón was used as a possible cemetery and as an industrial quarter during the seventh century. This clear division of space was probably the result of practical considerations to avoid pollution from the toxic emissions produced by the furnaces and iron oxide seepage into the water supply.

Further evidence of settlement dating to the seventh century has come from the Cerro del Alarcón, the hill overlooking Toscanos to the north-west. Alarcón enjoys a strategically favourable position controlling access to Toscanos from several directions which must have given it a special significance in Phoenician times. The earliest settlement there on the western slope of the hill is dated to the first half of the seventh century or perhaps even earlier by Protocorinthian imports.\textsuperscript{64} Coinciding with the latest phases

\textsuperscript{62} I. Keesmann, "Naturwissenschaftliche Untersuchung des archäometallurgischen Fundmaterials der Grabung 1984 am Cerro del Peñón," in Niemeyer, Briese and Bahnemann, (op. cit. n. 13) 171.

\textsuperscript{63} Niemeyer, Briese and Bahnemann, (op. cit. n. 18) 164-170.

of occupation at Toscanos, Alarcón gradually acquired greater strategic importance as a defensive outpost of the core settlement which had extended to the north to Manganeto and to the south to the Peñón.

The 1967 excavations first revealed the defensive role which Alarcón played in terms of the protection of the settlement nucleus at Toscanos. Here on the hill a large rectangular stone-built construction was erected, with the obvious intention of occupying the highest part of Alarcón. The walls are conspicuously large, with a width of 1m and more, and they were additionally strengthened in places. The building materials were soft white limestone, probably quarried from the Peñón, which was interspersed with a few isolated pieces of slate. These stone walls rose to a height of up to 1.4m and served as a socle for the sun-dried brick walls which rise above and which show signs of having been renewed at least once. The floors inside the building reveal only slight traces of use. Outside, especially in the east and south, that is in the area away from the slope, several walls were added to the building and represent new rooms which indicate a longer period of use for the building complex.

On the peak of Alarcón no further settlement buildings were found. Given the size, ground plan and construction technique

65 Niemeyer and Schubart, (op. cit n. 38) 92-94.

of the rectangular building, it is unlikely that we are dealing with a simple dwelling house. These considerations, together with its position on the summit of Alarcón, point to the possibility that this was a building which was erected to fulfil some public purpose. If we exclude cult or ritual purposes, for which there is no evidence, then it is possible that such a massive building in so exposed a location was planned as a military outpost. Such an outpost on the hill of Alarcón dominating access to the settlement of Toscanos from several directions is extraordinarily significant for the defense of Toscanos. It could have served as an observation post as well as sheltering a small detachment which from here could intervene effectively against an enemy advancing into the valley. In this role the rectangular building would have had a defensive function acting as a secure house or small fort. Wall reinforcements of considerable size on the enemy sides and outbuildings on the inner sides could have had a special purpose in such a context. A construction of this kind would be the predecessor of the later defensive wall on the hilltop and sides of Alarcón.67

The defensive function attributed to the rectangular building on the summit of Alarcón is continued by the later fortification wall which runs from Alarcón down through the valley dividing Alarcón from the Peñón to the Peñón itself. It also runs from Alarcón in the direction of the Manganeto peninsula directly north of the harbour bay of Toscanos. Thus

this defensive wall would have enclosed all the areas of Phoenician settlement around Toscanos, closing off access to Toscanos through the Vélez valley as well as through the valley between the Peñón and Alarcón. The wall can be divided into two parts, a north-facing outer front made from large regular blocks of Peñón limestone, and a southern inner front made from slate. There seems to have been a slight chronological difference between the construction of the outer limestone wall and the inner slate one, as the limestone wall was in places completely destroyed when the slate one was built. We do not know how long a time elapsed between the destruction of the limestone wall and the building of the slate wall but it must have been at least a decade, according to the excavator. For the construction of the limestone wall a date around 600 or soon after is to be taken as probable, based on the finds. The re-adoption of the course of the older wall and also the lack of finds of later date make it extremely unlikely that the more recent slate wall was begun very much later, for instance in the Roman or mediaeval eras. The construction of this defensive structure must have been caused by some specific historical situation, probably a threat to the Phoenician settlement from the Vélez valley itself, or from the far side of the Zafarraya Pass to the north of Toscanos. A change in this situation then lead to the neglect, abandonment and destruction of the first limestone wall. However a recurrence of this situation - so one must assume - caused a renewal of the wall as a slate wall. The construction of both

68 Ibid, 182 and 188.
the limestone and slate walls, given their extension and building techniques, represented a considerable effort for the Phoenician settlers.69

Thus during the first half of the seventh century the western slope of Alarcón, and then in the second half of that century, the peak of the hill, were included in the Phoenician settlement area, and we can assume that the other slopes also bore some form of settlement which it is now impossible to recognise, given the intense erosion which affected this area. The extension of the area occupied by the Phoenicians during the seventh century to reach the hills lying above the original site of Toscanos, and the protection of this settlement area through defensive works, reflects the growing importance of the foundation, its economic and social achievements as well as its capabilities of reaction to external threats.70 The existence of a possible military outpost or watch tower, guarding access to the central settlement, and which was reinforced by a later defensive wall is worthy of comment. Up to now Toscanos is the only Phoenician site east of the Straits to have a defensive wall. It was not the only Phoenician settlement in the Peninsula to be fortified, however, as the defensive walls at Castillo de Doña Blanca in Cádiz, and Cerro da Rocha Branca and Abúl in Portugal, show.71 At all three sites the wall was built at the time of the foundation of the

69 Ibid, 188.

70 Ibid, 188.

71 For Castillo de Doña Blanca see chapter three; for the Phoenician sites in Portugal see below.
settlement, just as at Toscanos the eighth century site was protected by the v-shaped ditch which may have served as a basis for a protective palisade. Obviously some sort of defensive structure was always deemed necessary at Toscanos, as even when the v-shaped ditch was filled in, it was replaced by the military building on top of Alarcón, and then by the wall enclosing Alarcón, Peñón and the hill of Toscanos itself. The question is why was such attention paid to the defence of the site here when none of the other sites in the region felt it necessary to go to such elaborate precautions? It is tempting to link the emphasis on defence at Toscanos with the presence of the Warehouse Building C. Both features distinguish this site from its neighbours and obviously the warehouse implied the centralisation and storage of a lot of goods. Perhaps for this reason the inhabitants of Toscanos went to such lengths to defend their site.

The picture of increasing economic prosperity in the seventh century which we first observed in the restructuring of the urban site of Toscanos, with the construction of the Warehouse Building C, and in phase B2 of Morro de Mezquitilla, with its new more solidly-built dwelling houses, is confirmed by the increasing size of the settlements themselves. The dramatic increase in the area of occupation by the Phoenician settlers of Toscanos during this period speaks eloquently of the success of the eighth-century foundation.
However the economic prosperity visible in the growth of the pre-existing sites is more dramatically reflected in the foundation of new settlements which extended in two directions from the core settlement area along the coast of Andalusia to cover the Mediterranean coast of Iberia, north to Alicante and the Balearic islands, and south to Algeria, while in the Atlantic there were new foundations along the coasts of Portugal and Morocco.

From west to east the Spanish settlements founded in the seventh century include Cerro del Prado, near San Roque in the province of Cádiz (Fig. 1). This settlement was located on a promontory between the Guadarranque and the Arroyo de la Madre Vieja rivers, on the edge of the bay of Algeciras, immediately to the west of Gibraltar, and only 1.5km north of the Roman city of Carteia, which took a Semitic name. It was occupied from the second half of the seventh century to the mid-fourth century, when the silting of the Guadarranque and Arroyo de la Madre Vieja rivers made it lose its harbour. The settlement yielded large amounts of pottery, of which amphorae and pithoi were by far the most numerous throughout all levels of occupation, by comparison with the fine table ware which is poorly represented: this suggests that the site had primarily commercial functions. Cerro del Prado has been

linked with the marine sanctuary apparently dedicated to Astarte situated in Gorham's Cave in Gibraltar.\textsuperscript{73}

In the province of Málaga, Phoenician remains have been found at Cerro del Castillo in Fuengirola, which corresponds to the Roman town of Suel, a toponym of probable Phoenician origin (Fig. 1). The materials consist of pottery dating from the sixth century onwards.\textsuperscript{74}

In Almería, the ancient town of Baria, the modern Villaricos, was located at the mouth of the river Almanzora, dominating access to the former bay into which the river flowed (Figs. 1 and 6). It became a flourishing town with a marked Carthaginian influence during the Punic period, and it is known chiefly for its necropolis which contained thousands of burials dating down to the Roman period.\textsuperscript{75} Although generally regarded as a Punic site, it has been suggested that the oldest levels of both the settlement and the necropolis date to the seventh century, which would make it a Phoenician foundation.\textsuperscript{76} It owed its foundation and prosperity to the rich mineral resources of Herrerías, some 3 km to the north of the

\textsuperscript{73} See chapter three.

\textsuperscript{74} For a full bibliography see J.A. Martín Ruiz, \emph{Catálogo documental de los fenicios en Andalucía}, Junta de Andalucía, Consejería de Cultura, 1995, 256.

\textsuperscript{75} M.E. Aubet Semmler, "La necrópolis de Villaricos en el ámbito del mundo púnico peninsular," \emph{Homenaje a Luis Siret}, Seville 1986, 612-624.

town, which were intensely exploited from the third millennium onwards for their copper, silver, gold and lead ores.77

Still on the Almanzora river, but a few kilometres inland from Villaricos, another Phoenician settlement has been identified at Cabecico de Parra (Fig. 1) 78. It was situated on a small peninsula between the Arteal and Almanzora rivers, and it is dated by its pottery to the seventh century. Like that of Villaricos, its foundation was due to the exploitation of the local mineral resources, and these were obviously important enough to account for the presence, not just of these two sites, but also a further five sites identified in the immediate area by the German Archaeological Institute: most of these however date to the later Punic period.79 Cabecico de Parra was situated next to the mines, and as the Almanzora was at that time navigable, it is possible that the ores were transported to the site and from there shipped to Villaricos. The site at Cabecico de Parra may have had its cemetery at Loma de Boliche where cremation burials in urns revealed materials from the seventh to the sixth centuries, if not

77 Some of these ores were exploited in the Phoenician period, as silver slag was found in the oldest tombs at Villaricos which date to the seventh century. J.L. López Castro, *Hispania Poena. Los fenicios en la Hispania romana*, Barcelona 1995, 38.


earlier.\textsuperscript{80} It is obvious that the mineral resources of Herrerías exerted a strong attraction on the Phoenicians, given the intensity and duration of settlement there right down through the Punic period.

The most northerly wholly Phoenician site so far identified on the coast of mainland Spain is on the mouth of the river Segura, at Guardamar in the province of Alicante, facing the island of Ibiza, where another Phoenician settlement is attested from the seventh century onwards (Fig. 8). The site at Guardamar is unmistakably oriental in its materials, yielding in its pottery the R-1 amphorae, red slip plates, grey ware, and pithoi which are characteristic of the pottery assemblages of the Phoenician sites in the Far West, as well as such typically Phoenician materials as ivory bracelets and ostrich eggs.\textsuperscript{81} On the basis of these objects, it can be dated to the second half of the seventh century.\textsuperscript{82}

The functions of the settlement at Guardamar have to be understood in relation to the resources offered by its hinterland. Starting in the eighth century the indigenous sites in the region had been receiving Phoenician products in large

\textsuperscript{80} M. Osuna and J. Remesal, "La necrópolis de Boliche (Villaricos, Almería)," \textit{APL}, 16 (1981) 373-441. Three red slip plates found among the grave goods can be dated to the eighth century.

\textsuperscript{81} For a discussion of the typical pottery types in Iberia, Morocco and Algeria see below.

\textsuperscript{82} Guardamar has not yet been published but a brief description can be found in A. González Prats, "La presencia fenicia en el Levante peninsular y su influencia en las comunidades indígenas," in \textit{I-IV Jornadas de arqueología fenicio-púnica}, Ibiza 1991, 111-114.
quantities, chiefly in the form of pottery, especially red slipware and amphorae. This is most evident at Los Saladares (Alicante), Peña Negra (Alicante) and Castellar de Librilla (Murcia) (Fig. 6).\textsuperscript{83} These sites had a number of things which the Phoenicians were interested in: at Peña Negra, the production of bronze weapons and objects, and access to the Atlantic Late Bronze Age trade circuits; at Castellar de Librilla, the mineral resources (copper, iron and galena) which that site controlled; and at Los Saladares, a strategic position in the network of regional trade routes.\textsuperscript{84} Certainly at least some of these resources were important enough for a Phoenician enoikismos to be set up at the settlement of Peña Negra in the seventh century producing typically Phoenician pottery, particularly amphorae, and orientalizing jewellery. (See chapter four). In general, the presence of a Phoenician industrial quarter in one of the most important metal producing sites in the region, and the foundation of a Phoenician settlement at the mouth of the Segura river, which offered an ideal link to the hinterland, points to an intensification of the contacts between the colonial sites of Andalusia and this region. Thus the area around the Segura

\textsuperscript{83} For a bibliography and full discussion of La Peña Negra see chapter four. There is a large bibliography for Los Saladares but most of it is contained in O. Arteaga, "Los Saladares-80. Nuevas directrices para el estudio del horizonte protoibérico en el Levante meridional y sudoeste de la Península," HA, 6 (1982) 131-183. For El Castellar see M.M. Ros Sala, "Presencia fenicia en el área murciana: los materiales de la fase II de El Castellar de Librilla (Murcia), in II CISFP, 1197-1204; idem, "El trabajo del hierro en el poblado protohistórico de El Castellar (Murcia). I: análisis arqueológico," R. Arana Castillo et al. (eds.), Metalurgia en la Península Ibérica durante el primer milenio a.C. Estado actual de la investigación, Universidad de Murcia 1993, 71-109.

\textsuperscript{84} M.E. Aubet Semmler, Tiro y las colonias fenicias de occidente, 2nd ed. Barcelona 1994, 290.
river may well have acted as a distribution point for the goods coming from Andalusia towards the Balearics and the Central Mediterranean, as the discovery of a Phoenician shipwreck at Bajo de la Campana, off the Murcia coast seems to indicate. Its cargo consisted of tin and lead ingots and ivory in bulk, and given these objects, it very probably came from the Phoenician sites in Portugal and Atlantic Morocco.\(^{85}\) It provides the archaeological confirmation of what Avienus said about this part of the Spanish coast: "the Phoenicians formerly lived in these places" (OM, 460).

The success of the Phoenician commercial contacts in this area may have been one of the reasons for their occupation of an important point in the regional and international trade routes during this time: that of the island of Ibiza.\(^{86}\) Here, during the second half of the seventh century, a group of settlers, apparently from the Phoenician enclaves in Andalusia, judging by their pottery, occupied the island, setting up a small establishment at Sa Caleta on its southwestern coast (Fig. 9).\(^{87}\) The site was located on a small

\(^{85}\) Ibid, 291-292.

\(^{86}\) The island of Ibiza was the last stop on the so called island route from Tyre to Gadir, which starts with Cyprus and continues through Asia Minor, the Ionic sea, Sicily, the Spanish Levant and the Straits of Gibraltar, following the current which in these regions runs from east to west. The return journey from Gadir to Phoenicia would generally have followed the southern route along the north African coast where the current went from west to east. The existence of these routes helps to explain the proliferation of Phoenician objects and sites in the areas along the island route, and also the relative scarcity of Carthaginian objects in Iberia during the pre-Punic period, as Carthage was reached on the return route from Spain to Tyre. Ibid, 163-167; C. Picard, "Les navigations de Carthage vers l'ouest. Carthage et les pays de Tarsis aux VIII-VI siècles," \textit{Die Phönizier im Westen}, 161-173.

peninsula which jutted out into the sea, with a sheltered bay on one side, and a stream providing fresh water nearby. The settlement was evidently a success, as the whole area of the peninsula (some 4 ha.) is densely covered with the settlers' houses, which followed the usual rectilinear groundplan, with stone socles for the walls, which were made from sun-dried bricks. The pottery found at Sa Caleta, both wheelmade and handmade, was all imported, and analysis of its clay points to an origin in the south of Iberia, a circumstance which is confirmed by its forms. These consist of small amounts of the usual red slip ware, as well as pithoi and R-1 amphorae, the latter making up almost all the pottery found at the site. The settlement obviously also had access to the Central Mediterranean trade routes, as the presence of Phoenician amphorae from Sardinia, Sicily and Carthage indicates. Metals played an important role in the economy of Sa Caleta, since considerable quantities of argentiferous galena, some of it semi-smelted, were found throughout the site, both in the houses and outside. Analysis has proved that the mineral came from the mines at S. Argentera, in the east of the island, and it was clearly used to produce silver and lead. Iron-smelting was less prominent among the site's activities, since iron slag and a furnace were found in only one house.

The settlement at Sa Caleta had a limited life, from sometime in the third quarter, or at the earliest, the second half, of the seventh century to the first years of the sixth century. Its abandonment was peaceful, and well organised, as the entire
population apparently all left together, leaving only a few small objects and broken pottery behind them. It is possible that they simply left to join the settlers in what is now the city of Ibiza, only 10km away and visible from the site, and where a Phoenician settlement had existed for a few decades (Fig. 7). Ibiza offered better conditions for settlement than Sa Caleta, and had a much larger bay, favouring more intense commercial activities.

Ibiza was traditionally thought to have been a Carthaginian foundation, based on the evidence of Diodorus. However, the discovery of a number of cremation burials, at the cemetery of Puig des Molins, dating to the end of the seventh and early sixth centuries, proves that the site was already occupied before the influence of Carthage became apparent towards the end of the sixth century. The burials are interesting for the information they give us on the early settlement there. They are all poor, with scanty grave goods, and none of the opulence associated with contemporary Phoenician burials in Andalusia. Judging by the demographic structure of the burials, none of the early population was much over thirty, and the evidence

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88 Diodorus 5, 16: There comes first an island called Pityussa ... it has a city named Eresus, a colony of the Carthaginians. And it also possesses excellent harbours, huge walls and a multitude of well-constructed houses. Its inhabitants consist of barbarians of every nationality, but Phoenicians preponderate. The date of the founding of the colony falls 160 years after the settlement of Carthage. Timaeus dates the foundation of Carthage to 814 and this is probably the source Diodorus is using here. Ibiza (Ebusus) is a semitic toponym, the Phoenician/Punic 'ybsm, or island of the balsam tree.

points to an early group of settlers consisting of young families, as women and children are well represented. A large quantity of pottery dating to the last quarter of the seventh century has also been found at the site. These consist of types which are typical of those produced in the Andalusian colonial enclaves, such as R-1 amphorae, pithoi and grey ware. Based on these finds, a hypothetical reconstruction of the early topography of Ibiza is possible. The first occupation seems to have taken place to the west of the Bay of Ibiza, on the hill of Puig de Vila, where the fortress of Ibiza and the cathedral are now located. At the foot of the hill lay a sheltered port, where a large amount of pottery dating from 625-600 was found. To the west, the hill of Puig des Molins was the site of the cemetery down to the Roman era. (Fig. 8)

Possibly the main function of Ibiza during the pre-Carthaginian period, was to trade with the Spanish Levant, Catalonia and the Gulf of Leon. Based on the finds of Phoenician pottery in these regions which consist almost exclusively of the R-1 amphorae, and more rarely other large containers such as pithoi, this trade was organised around food products, either

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wine or oil. Other imported objects were Egyptian scarabs and amulets which are found in cemeteries and settlement sites in these regions. These objects were found in coastal sites, often located close to a river and were then redistributed to indigenous sites further inland. The discovery of a warehouse at Aldovesta (Baix Ebre, Tarragona), on the lower Ebro river, gives us an insight into how this trade was carried out. The site consisted of only one building, with rooms devoted to storage, domestic purposes, and stables. The storage area contained more than a hundred R-1 amphorae, which made up 57% of the total pottery assemblage and almost 100% of the storage jars (Fig. 10). As the site at Aldovesta cannot be regarded as a village, but was occupied by a small number of individuals, the number of amphorae by far exceeded the needs of its inhabitants, and it must have functioned as a warehouse where the products obtained by trade with the Phoenicians were stored and redistributed in the hinterland. The presence of a large number of bronze objects, most of which were broken, and that of a mould used to produce spits.

93 The R-1 amphora is a peculiarly western product, characteristic of the Phoenician sites in Iberia and associated regions, found in large quantities in native and colonial contexts there, and only sporadically in the Central Mediterranean. See below and chapter four for a discussion and bibliography of this pottery type. The contents of these amphorae were enticing to the inhabitants of Iberia as wine and oil were introduced to the Peninsula by the Phoenicians, or at the very least their cultivation was enormously stimulated through Phoenician influence.

94 The only exception to this is one Mañá A1 amphora, a type typical of the early production at Ibiza. M. Mascort, J. Sanmarti and J. Santacana, "Aldovesta. Les bases d'un modèle commercial dans le cadre de l'expansion phénicienne au nord-est de la Péninsule Ibérique," Il CISFP, 1076. Aldovesta is clearly indigenous in that all the domestic pottery consists of local handmade ware but the Phoenician influence is obvious not just in the amphorae, but also in the building itself, which as well as the usual oval groundplan, contains several rectilinear rooms, something not previously found in the architecture of the Late Bronze Age/Early Iron Age.
indicates that the Phoenicians received bronze in exchange for their wine and oil.\textsuperscript{95} The occupation of Aldovesta dates to the second half of the seventh century and continued down to the first quarter of the sixth century and this corresponds to the period when Phoenician contacts with northern Spain and the Languedoc, as far north as Narbonne, were at their strongest. The purpose of this trade, as the evidence from Aldovesta suggests, was to obtain metals, chiefly bronze. The region was also important in that it provided them with access to the tin resources of Atlantic Europe in Armorica and Britain, accessible via the isthmus of Aquitania, following the route that went from Narbonne to Bordeaux, through the valleys of the Aude and Garonne.\textsuperscript{96} This was the route described by Avienus (\textit{OM}, 146-151).

The sites founded in Spain during the seventh century greatly increase the areas in contact with the Phoenicians, from the central part of Andalusia up as far north as southern France. They seem to have been founded largely to carry out trade with the indigenous inhabitants of the regions where they were located in a concerted effort to exploit the locally available resources, chiefly minerals, and to tap into the pre-existing trade routes which in the Spanish Levant and Catalonia gave them access to the Late Bronze Age Atlantic trade circuits. Similar objectives were to lead to the foundation of a number

\textsuperscript{95} In this respect they were following the pattern of behaviour ascribed to them by some of our sources. See Pseudo-Aristotle, \textit{On marvellous things heard}, 135.

\textsuperscript{96} Arteaga, Padró and Sanmartí, (op. cit. n. 92) 312; J.J. Jully, "Présence phénico-punique en Languedoc méditerranéen et en Catalogne," \textit{I CISFP}, 806.
of sites in Atlantic Iberia during the seventh century, as far north as central Portugal.

**PHOENICIANS IN PORTUGAL**

It is an often repeated truism that the Straits of Gibraltar act as a dividing point in the settlement pattern adopted by the Phoenicians in Iberia. Thus, in contrast to the plethora of sites east of the Straits, to the west of Gibraltar there is only Cádiz, and the eccentricity of its location has been frequently remarked upon. However, recent research has revealed that the coastline of Portugal was occupied by a number of sites from the seventh century, while there was regular contact between the Phoenician settlements in Andalusia and the indigenous occupants of southern and central Portugal from the eighth century. The reason for the prompt and persistent Phoenician interest in Portugal and the Atlantic region generally was the availability of important mineral resources, gold, lead and especially tin. The last of these was one of the basic constituents of the bronze alloy, and a mineral which was extremely rare in the ancient world, but was concentrated in large amounts in the north-west of the Iberian Peninsula. The Atlantic coast of Iberia also provided access to the important Late Bronze Age Atlantic trading circuits in which especially the north west of Iberia and central Portugal played an important part, and through which the Phoenicians could obtain large amounts of tin, copper, finished bronzes, amber,

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ivory, salt and other items. The tin resources of the north-west enabled this region to develop a flourishing bronze production industry which was soon incorporated into the Atlantic Bronze Age economic system centred around the Armorican Peninsula, the Gironne and Loire valleys in western France and south-east England, and which reached its peak in the eighth century when the system expanded to come into contact with the central Mediterranean, especially Sardinia. Other parts of the Iberian Atlantic seaboard were incorporated into this trade circuit, especially Central Portugal, in the region between the Sado and Mondego estuaries, which developed its own bronze production industry, and in general the whole Extremadura area, with its gold, lead and tin resources, formed an extension of the trade system. Their involvement in this highly developed system of exchange allowed a growing stratification of the indigenous society in Portugal, with the establishment of large fortified sites in the estuaries of the most important rivers, controlling access to the mineral resources of the interior and a series of dependant agricultural and minero-metallurgical sites in their


99 M. Ruiz-Gálvez Priego, "Navegación y comercio entre el Atlántico y el Mediterráneo a fines de la Edad del Bronce," Trabajos de prehistoria, 43 (1986) 9-42. Argument continues over who was responsible for the expansion of the Atlantic Bronze Age exchange system into the Mediterranean, its indigenous participants or the Phoenicians who were actively involved in Iberia and Sardinia from the start of the eighth century at the latest, see Ruiz-Gálvez Priego, (op. cit. this note) passim.
hinterland. It was these sites that were to come into contact with the Phoenicians during the seventh century.

The Phoenicians established a number of bases in Portugal to facilitate their contact with the indigenous population (Fig. 11). In the Algarve, in southern Portugal, a small settlement was founded at Cerro da Rocha Branca, near Faro, at the end of the eighth century or start of the seventh century. The site chosen for settlement is similar to those favoured by the Phoenicians for their enclaves in Spain. It is located close to the coast, on a peninsula surrounded on two sides by the river Arade, which gave access to the fertile agricultural land and deposits of gold, copper and iron in the region which had been exploited since the Bronze Age. The location of the site was an easily defensible one, and security was obviously important for its settlers, as the neck of the peninsula was protected by a defensive wall, made from large stone blocks, protecting the settlement from possible attacks by land. The area enclosed by the wall was occupied by rectangular buildings, divided into square rooms. Its pottery, which consists of red slip and grey ware, as well as amphorae of a typically western type, links Cerro da Rocha Branca very firmly with the Phoenician settlements in Spain, although contact with the indigenous


society was evidently close, given the large quantities of hand-made local pottery found at the site.\textsuperscript{102}

There are signs of contact with the Phoenicians in the sites controlling the estuaries of all the main rivers along the Atlantic seaboard of Portugal from the Arade in the extreme south as far north as the Mondego. These contacts can be traced through the presence of imported wheel-made pottery, the red slip and grey ware, as well as amphorae and pithoi, found in the pottery repertories of the indigenous sites. All are very similar to the pottery produced in the colonial sites of southern Spain. Thus in the Sado river region these materials are found at Setúbal and Alcácer do Sal, located at the mouth of the river and at the interior of its estuary respectively.\textsuperscript{103} At Alcácer do Sal contact with the Phoenicians seems to have been particularly intense. The pottery of the orientalizing level of occupation at the site, which dates to the period between the seventh and sixth centuries, contains only some 11.5\% of handmade pottery, a figure which declines to 8.7\% by the end of this period, while some of the buildings adopt the rectilinear groundplan introduced to Iberia by the Phoenicians.\textsuperscript{104} In addition, the cemetery at Alcácer do Sal included among its grave goods

\textsuperscript{102} Varela Gomes, (op. cit. n. 101) 101.


\textsuperscript{104} Ibid, 129-131.
scarabs, decorated ostrich eggs, and double spring fibulae.  
At the mouth of the Sado, Setúbal also yielded Phoenician pottery during phases I and II of the occupation of the site. The same period brought with it a rapid decline in the percentage of hand-made pottery, from 84% of the total to some 24% (Fig. 10).  

The reason for such a marked Phoenician influence at these two sites lies in the presence of a small colonial settlement at Abul, on the right bank of the Sado estuary, occupied between the second half of the seventh century and the start of the sixth century. Abul was enclosed by a defensive wall which was subsequently rebuilt, probably as a result of the settlement's need for expansion. The pottery consists of red slip and grey ware, along with pithoi and amphorae, all of which have numerous parallels in native and colonial contexts in southern Spain, suggesting that Abul's inhabitants probably originated from the Phoenician colonies in Spain. The settlement was probably founded to take advantage of the access which the Sado river provided to the interior of Portugal, and possibly also the important copper resources of the south-west of the country. Along with the Tagus, the Sado river region was an important source of gold, and this may also

106 Mayet and Tavares da Silva, (op. cit. n. 103) 132.
107 Ibid, 134.
have been a consideration in the Phoenicians' choice of settlement.\textsuperscript{109} Frankenstein suggests that the Sado and Tagus rivers had an important role in the regional commercial network of Atlantic Iberia, linking the copper resources of south-western Portugal and the lead of Extremadura with the tin and gold of the north-west, and therefore the trade in metals passing through Alcácer do Sal might have played a factor in attracting the Phoenicians there.\textsuperscript{110}

The small site at Abul is the most northerly Phoenician settlement so far attested in Atlantic Iberia but the Phoenicians maintained regular contacts with the inhabitants of this region as far north as the Mondego valley.\textsuperscript{111} Evidence of an active Phoenician presence also comes from a cluster of sites along the Tagus, at Lisbon, Quinta de Almaraz near Almuda, and Santarém. Phoenician contact with this area goes back to the eighth century, judging by the pottery found at Santarém, and continued during the seventh and sixth

\textsuperscript{109} Frankenstein, (op. cit. n. 98) 189.

\textsuperscript{110} Ibid, 186-189.

\textsuperscript{111} V.H. Correia, "Os materiais pré-romanos de Conimbriga e a presença fenícia no baixo vale do Mondego," in Tavares, (op. cit. n. 101) 229-283; I. Pereira,"Figueira da Foz. Santa Olaia," in Tavares, (op. cit. n. 101) 285-304. Evidence for Phoenician contacts with this area comes from the sites at Santa Olaia and Conimbriga. The former site in particular shows a strong orientalizing influence in its construction techniques. The arrival of the Phoenicians at the site is documented by the appearance of a retaining wall designed to support the terraces on which the settlement was located and built with the pier and rubble construction technique characteristic of Phoenician architecture. A very similar wall, with a comparable function, was found in the indigenous site of Huelva, where it has been interpreted as an introductory gift from the Phoenicians to the inhabitants of the settlement, as a means of establishing favourable terms between the two sides so that regular commercial contacts might be entered into.
centuries. The Tagus may have attracted the Phoenicians because of its alluvial gold resources mentioned by Pliny (NH, 4, 115): however it was also important in that it provided access deep into the interior of Iberia and acted as a channel whereby the tin, silver and copper of Extremadura could all easily reach the coast. Judging by the close parallels between the Phoenician pottery found in Lisbon and Almaraz and that produced by the colonial sites in Andalusia, as well as the proliferation of orientalizing luxury goods found in the areas alongside the Tagus, around Cáceres and Toledo, the river was an important route for Phoenician trade. The choice of the Tagus as a route for Phoenician commercial expansion helps to explain the many orientalizing objects and influences far into the interior of Iberia, such as the treasure of Aliseda and the enigmatic palace-sanctuary at Cancho Roano.

112 A.M. Arruda, "A ocupação da idade de ferro da Alcâçova de Santarém no contexto da expansão fenícia para a fachada atlântica peninsular," in Tavares (op. cit. n. 101) 193-214. A sample from the stratum where the earliest Phoenician pottery was found provided a calibrated C14 date of 900-780.


114 Aubet Semmler, (op. cit. n. 84) 253-254.

115 For Aliseda and Cancho Roano see R.J. Harrison, Spain at the dawn of history. Iberians, Phoenicians and Greeks, London, 1988, 63-64 and 132-134.
PHOENICIAN SETTLEMENTS IN ATLANTIC NORTH AFRICA

Both the archaeological and literary evidence makes it clear that North Africa, from Algeria to Morocco, was incorporated into the economic sphere of Phoenician Iberia from the seventh century, if not earlier. A number of authors tell us that the Phoenicians travelled beyond the Straits of Gibraltar and sailed far down the Atlantic coast of North Africa. These ventures into the Atlantic are particularly associated with Gadir, the Phoenician Cádiz. Analysis of the pottery from this area points to close links between Iberia and North Africa within the Phoenician context at four places: in Algeria at Rachgoun and Mersa Madakh, and in Morocco at Lixus and Mogador (Fig. 11).

116 Diodorus, 5, 20, 1-2 (probable source - Timaeus): "The Phoenicians who, from ancient times, accomplished incessant navigations with a commercial objective, created numerous colonies in Libya and other places, not less numerous, in the regions of Europe situated near the west. Their projects having succeeded as they wished, they obtained great riches and wanted to navigate beyond the columns of Hercules on the sea that is called the Ocean. And first of all in the Straits themselves which are near the Columns, they founded on the European side, a city which they called Gadeira (Cádiz)."

Strabo 17, 3, 3: "From the same source (fables told about North Africa) is the tradition of former establishments of the Tyrians in the gulfs beyond this point (the Emporian Gulf - a point located to the south of Lixus) which are now deserted - not less than three hundred cities which the Pharousians and the Nigritans destroyed. These are situated, they say, at a distance of thirty days march from Lynx (Lixus)."

Strabo's probable sources for this is Artemidorus who found the story in Eratosthenes. (Strabo, 17, 3, 8). Strabo, 2, 3, 4 also tells the story of a certain Eudoxus of Cyziquos who, when sailing down the north African coast, was blown off course and landing beyond Ethiopia discovered a carved wooden prow in the shape of a horse, which the locals had recovered from a shipwreck. Returning to Egypt, he was told that it came from Cádiz. "In this town, while the rich sail in large ships, the poor sail in small boats which are called horses because of the figures sculpted on the prow. They use them to fish in the region of Lixus in Mauretania. Some of the captains recognised in this sculpted prow a ship which like many others had gone far beyond Lixus and never returned."
The island of Rachgoun, 2 km from the mouth of the river Tafna, off the coast of Algeria, was occupied by a small settlement with its associated cemetery from the seventh to the fifth centuries. The pottery from the settlement and cemetery showed clear similarities with that produced in the Phoenician sites in Iberia. Thus the so called Cruz del Negro urns, pithoi, R1 amphorae and tripod bowls from Rachgoun are all characteristic of the Phoenician sites in Iberia and are rarely found in Carthage or the Central Mediterranean. The similarities with Iberia extend to the imported pottery at Rachgoun. The Attic SOS amphora found on the island is a frequent import in the Phoenician sites in Iberia, appearing at Toscanos, Cerro del Villar in Málaga and Aljaraque in Huelva, as well as in sites in the far western Phoenician koiné, such as Mogador in Morocco, while apparently absent in Carthage. Aubet Semmler has pointed out the similarities between the burial practices attested at Rachgoun, with their cremations in Cruz del Negro urns and the indigenous cemeteries in the Guadalquivir valley which share the same burial ritual and cinerary urn. According to her, these similarities reflect contact between the indigenous inhabitants of south-western


118 See below for a full discussion of these pottery types.

Iberia and North Africa, as both the burial ritual (cremation in urns placed in shallow holes in the ground) and the cinerary urn (the Cruz del Negro amphora) are only found in the context of the indigenous cemeteries in Tartessos. However, the discovery of the first burials at the Phoenician settlement of Ibiza shows that the use of Cruz del Negro cinerary urns buried in the ground is not the exclusive prerogative of the indigenous population of south-western Iberia. In fact, the recently discovered Iron Age cremation burials in Tyre follow an identical ritual in cinerary urns which are remarkably similar to the Cruz del Negro vessels. Therefore there is nothing either in the burial rite or the artefacts found at Rachgoun which might lead us to believe that the Iberian influences are exclusively the result of interactions with the indigenous Tartessian society, although this does not exclude some contacts, but within the framework of Phoenician navigation and trade (Fig. 14).


121 For the cremation burials at Ibiza and the Iron Age cemetery at Tyre see chapter two, below. The archaic cremation cemetery at Motya also shares the same burial rite of cremation in urns in shallow hollows in the ground.

122 Handmade pottery was found both at Rachgoun and Mersa Madakh which Vuille mot compared with indigenous Iron Age Iberian pottery but such pottery is found in small quantities in most of the Phoenician sites in Iberia and may have been carried with them to north Africa in the same way as the Attic and East Greek pottery. The links between south-western Spain and North Africa were not instituted by the Phoenicians, as they had existed since the lower Palaeolithic, but from the eighth to the sixth centuries these contacts became more intense as a result of the active Phoenician navigation north and south of the Straits. M. Ponsich, "Pérennité des relations dans le circuit du Détroit de Gibraltar," ANRW, II, Berlin 1975, 655-684.
Further evidence of contact with the Phoenician sphere in Iberia comes from the small settlement of Mersa Madakh some 50km east of Rachgoun (Fig. 14). While the majority of the pottery consisted of hand-made ware, the wheel-made pottery was represented by large quantities of the R1 amphorae, along with some examples of the Cruz del Negro urn, indicating that Mersa Madakh shared Rachgoun's orientation towards the west rather than to Carthage and the central Mediterranean.\(^{123}\)

Contact with Iberia continued west of the Straits along the Moroccan coastline. According to the literary evidence, Lixus (Fig. 14) (the semitic Iks) is one of the first Phoenician settlements in the far west, founded along with Gadir and Utica shortly after the Trojan war.\(^{124}\) However nothing has been found there which could securely date the foundation of the settlement to a period earlier than the eighth century. The site was situated on good agricultural land, in one of the few natural harbours along the very inhospitable Moroccan coastline, and located on the river Loukkas which provided it with easy communications with the interior from where it could obtain gold and ivory. It also had access to copper, iron

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\(^{123}\) S. Lancel, "Algérie," in Krings (op. cit. n. 89), 789; Vuillemot, (op. cit. n. 117) 131-155.

\(^{124}\) Pliny, NH, 16, 40 and 19, 63; Velleius Paterculus 1, 2, 3. It is interesting that these three sites, singled out by Classical authors as the first of the Phoenician colonial foundations in the west, all have a temple to Hercules, undoubtedly the Tyrian Melqart. For a full discussion of these texts and their historical value see chapter two. Strabo, 17, 3, 2 tells us: On proceeding outside the Straits at the Pillars with Libya on the left, one comes to a mountain which the Greeks call Atlas ... Nearby is a small town above the sea which the barbarians call Tinx though Artemidorus has given it the name Lynx and Eratosthenes Lixus. It is situated opposite Gadeira at a distance of 800 stadia which is about the distance of each of the two places from the strait at the pillars.
and lead in the Atlas mountains.\textsuperscript{125} The oldest pottery from Lixus shows strong links with that of the Phoenician sites in Iberia. The R-1 amphorae, pithoi and tripod bowls are types which are distinctive western productions, only occasionally found in the Central Mediterranean.\textsuperscript{126} It is possible to be even more precise and state that the similarities are closest between the Lixus material and that from the Phoenician site at Castillo de Doña Blanca, intimately associated with Cádiz.\textsuperscript{127} The similarities between the Iberian pottery and that of Lixus extend to the handmade ware found at the site which shows close links to that found in the indigenous sites of southern Spain, and occasionally also in colonial contexts there.\textsuperscript{128}

Lixus also served as a stopping point on a route that went south to Mogador, another site which belongs to the Ibero-
Phoenician koiné (Fig. 14). Mogador was a conspicuous spot, as it was one of only three islands along the 1,000 km of the Atlantic coast of Morocco, and thus allowed the Phoenicians to follow their usual practice of choosing a small island close to the coast for settlement.\(^\text{129}\) The island was inhabited from the first half of the seventh century down to the mid-sixth century, however even during this period occupation appears to have been seasonal only.\(^\text{130}\) No walls were found there and the only signs of dwellings come from some hearths and floors of beaten earth. Therefore the inhabitants of Mogador may have lived in flimsy huts or perhaps in tents, as did those Phoenicians who visited the island of Cerne in Africa described in the Periplus of Pseudo-Scylax.\(^\text{131}\) The only stone structure found on the island is a large quadrangular pillar, 1.47m long, with a small cavity near the top, which may have been a baetyl, and served a religious purpose, acting as an altar or shrine.\(^\text{132}\) Undoubtedly Mogador was a small trading post periodically visited by Phoenician sailors and traders and used by them as a base from which to trade with the inhabitants of the mainland.\(^\text{133}\) The settlement at Mogador

\(^{129}\) Other examples of island settlements are Motya, on the island of San Pantaleo, off the coast of Sicily, Cerro del Villar in Andalusia, and in the Atlantic, Cádiz. The most notable island city is, of course, Tyre.


\(^{131}\) Scylax 112 in Müller, *GGM*, I, 94.

\(^{132}\) The Phoenicians generally tended to establish centres of worship for their divinities everywhere they went and these may have also have facilitated their commercial contacts with the local population. See chapter two below.

\(^{133}\) In this respect Scylax is very instructive: "beyond the island of Cerne it is not possible to sail due to the shallowness of the sea, the mud and algae. ... The traders are Phoenicians. When they reach the island of Cerne they land their cargo ships and raise their tents on Cerne. But the cargo, after having unloaded it
yielded a lot of pottery, the majority of which consisted of amphorae and large storage jars, with only very small amounts of fine tableware, as one would expect in a settlement with a primarily commercial function. As in the case of Lixus, the pottery here attests to very close links with the Phoenician settlements in Iberia. These links are visible not just in the types of Phoenician pottery which are found there, the red slip plates and bowls, the tripods, incense burners, Cruz del Negro urns and R-1 amphorae, all of which are characteristic of the pottery production of the Phoenician sites in Iberia, but also in the imported pottery found there. The Attic SOS amphorae and Chian amphorae found at Mogador are also found at Toscanos, as are the Cypriot Bichrome IV vessels. All these pottery types, both Greek and Phoenician, are found in Iberia, but the closest parallels for the Mogador material comes from Castillo de Doña Blanca, a site in the immediate orbit of Cádiz. The links are so close, both in the types of vessels represented and the clay, that the excavator of Castillo de Doña Blanca has

from their ships, they transport it in small boats to the continent. The Ethiopians are on the continent. It is with these Ethiopians that they trade. (The Phoenicians) sell (their goods) in exchange for the skins of gazelles, lions and leopards, as well as the skins and tusks of elephants and domestic animals. The Phoenician traders bring them unguents, Egyptian stone, Attic pottery and choes. These forms are those which can be acquired during the feast of the Choës. These Ethiopians live off meat, drink milk and they make large quantities of wine from their own vines, although the Phoenicians also bring it to them. (The Ethiopians) also have a large city to which the Phoenicians also sail." The identification of Mogador with Cerne is tempting since it marks the most southerly Phoenician settlement known in Africa. The pottery repertory, with its Attic SOS amphorae and profusion of oil bottles (at least 34 found at the site), fits the description of the materials offered by the Phoenicians to the Ethiopians. Strabo 17, 3, 2 mentions a κόλπος εμπορικός, south of Lixus, "which contains settlements of Phoenician merchants."

claimed that Mogador depended absolutely on Cádiz.135 Despite the 1,000 km separating Cádiz from Mogador it is clear that the latter site was fully incorporated into the Phoenician koínē of Iberia, and given the similarity in the pottery between Doña Blanca and Mogador it seems likely that Cádiz was the origin of the materials found on the island. Scylax tells us that the Phoenicians frequented this area in search of ivory and the skins of exotic animals. Obviously the animal skins are not detectible archaeologically, although elephant bones were found on Mogador, and 13 tusks from African elephants were found in the wreck of a seventh-century Phoenician ship at Bajo de la Campana, off the coast of Murcia. Trade in unworked ivory and ivory objects was part of the Phoenician long-distance trade in luxury goods and the Phoenician cities played a prominent role in supplying worked and unworked ivory to Israel, Assyria and Greece.136

Of all the North African sites discussed so far only Lixus could claim to have reached some degree of urban development, although the extent of its urbanism in the seventh and sixth

135 D. Ruiz Mata, "Las cerámicas fenicias del Castillo de Doña Blanca (Puerto de Santa María, Cádiz)," Los fenicios en la Península Ibérica, 260; López Pardo (op. cit. n. 133) 288. The links with the region of Cádiz are confirmed by the discovery of a fragment of stroke burnished ware at Mogador, typical of the indigenous pottery production of south-western Andalusia. Jodin, (op. cit. n. 130) 167.

136 M.F. Baslez, "Ivoire - commerce," in E. Lipinski (ed.) Dictionnaire de la civilisation phénicienne et punique, Paris Brussels 1992, 236-237. There was also a flourishing ivory industry in southern Iberia. A large number of small decorated ivory objects were found in the tombs of south-west Iberia during the seventh and sixth centuries and are regarded as the work of a local workshop. M.E. Aubet Semmler, Marfiles fenicios del bajo Guadalquivir I, Cruz del Negro, Studia archeologica 52, Valladolid 1979; eadem, Marfiles fenicios del bajo Guadalquivir II, Acebuchal y Alcantarilla, Studia archeologica 63, Valladolid 1980.
centuries is still open to question. The other sites never went beyond the level of small settlements, in the case of Mogador occupied only seasonally, founded to carry out a specific purpose, either commercial or strategic, and abandoned as soon as they were no longer necessary. However their importance for us is that they show that a large area of the Mahgreb was actively involved in the commercial and strategic activities of the Phoenician colonies in Iberia. Obviously, as in Greece, the sea could unite rather than divide, and in this case North Africa and Iberia belong to the same geographical unit, what Braudel called the Mediterranean Channel, with its Atlantic extension, an area whose inhabitants had been in contact with each other since early prehistory. The unification of the area north and south of the Straits is visible in a number of different areas, especially the pottery, where the same types recur in indigenous and

137 Ponsich claimed to have excavated a series of temples, the oldest of which, Temple H, an impressive absidal structure, went back to the seventh century. However the date of this building has been seriously questioned. H.G. Niemeyer, "Lixus: fondation de la première expansion phénicienne, vue de Carthage," Lixus. Collection de l'école française de Rome 166, Paris-Rome 1992, 45-57.

138 The poverty of the finds at Mersa Madakh, with only a few items of imported pottery, which when broken were carefully repaired and reused, has led to its interpretation as a small fishing village. The strategic position of Rachgoun, on an island some 2 km from the river Tafna, allowed it to control the maritime traffic along the coast on either side of the island, as well as any traffic up and down the river itself. Weapons were found in several of the burials and the author of the Periplus of Scylax (111) refers to the island as 'αυρία, the fortress. Only its strategic position explains why it was occupied for two centuries. See chapter two for a further discussion of the site.

139 Frankenstein, (op. cit. n. 98) 205; F. Braudel, The Mediterranean and the Mediterranean world in the age of Philip II, London 1972, 108. According to Braudel, the Mediterranean Channel extends from the Straits of Gibraltar in the west to Cape Matouf, near Algiers and Cabo de la Nao, near Valencia, in the east, and forms one of the 'narrow seas' of the Mediterranean, along with the Adriatic, the Aegean and the Tyrrenian sea, where intense maritime communication is carried out. These 'narrow seas' are then linked up by long-distance traders who cross the 'maritime saharas' of the Ionian and western Mediterranean basins.
colonial contexts in Iberia and North Africa and are only occasionally found further east.

**PHOENICIAN POTTERY - THE FAR WESTERN SPHERE**

Iron Age Phoenician pottery can be divided into two groups: bichrome and red slip. The bichrome group, consisting of red, black and white concentric circles, is the earliest, dating from c. 1200-850, while it is the red slip group, dating from c. 850-550, which is found in the Phoenician colonies. The pottery repertory of the colonies shows some forms which are derived from the motherland, (typically, the red slip mushroom lip and trefoil jugs and plate) and are found in all the regions occupied by the Phoenicians, while others are specific to the area where these enclaves are located and develop as a result of contacts with the indigenous populations there. The most marked example of this is the so called grey ware found in Iberia and North Africa. However even the most common pottery forms found throughout the colonies show regional variations in their shape or the application of the red slip. As we have already seen, the pottery of the extreme western Mediterranean and the Atlantic regions - Iberia, western Algeria and Morocco - has a number of forms found only very occasionally or not at all in Carthage and the colonies of the central Mediterranean. Some of these peculiarly western forms are derived from

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oriental prototypes which are little used in Phoenicia, while others are influenced by contacts with the indigenous society.

A characteristically western production and one which was found in large numbers in Phoenician and indigenous sites in this region is the R-1 amphora, also known as the *amphore à sac*, or Schubart and Lindemanns' Type 1 (Figs. 15, 16 and 18). This is an oval-shaped amphora, some 60-70 cm in height, with a rounded or flat base, globular shoulders, and small thick handles, with a circular section, situated at the carination of the shoulder. The surface of the amphora is generally left untreated, but sometimes a white or yellow slip was added, covering the entire vessel. It is a form which derives from the Bronze Age Canaanite jar, with direct prototypes in Tyre from the eleventh century, and especially in the ninth century, when this type is very abundant there, and probably represented the model for that produced in such quantities in the Far West.\(^{142}\)

It is only occasionally found in Carthage and the central Mediterranean where another type of amphora also derived from the Canaanite jar was common.\(^{143}\)

Another large storage jar, the distribution of which was confined to Iberia and its associated regions, is the pithos. This is a large jar, with an elongated oval body, and two or four small double circular handles which go from the rim of


\(^{143}\) For a further discussion of this pottery type see chapter four below.
the jar to the upper part of the body. It has a short neck, in the shape of an inverted cone, and it is generally decorated with dark stripes and bands around the upper part of the body. This form is found at a number of sites in the east but it is not common there and it is also rare in the central Mediterranean (Fig. 16).\(^{144}\)

Related to the pithos is the neck amphora or Cruz del Negro urn, named after the cemetery in south-western Spain where it was found in large numbers.\(^ {145}\) This has a globular or oval body, with a flat base, two double handles, and a high carinated neck, with a pronounced mouth. Like the pithos, it is often decorated with painted bands and stripes. It probably derives from the Phoenician Iron Age neck-ridge jugs, but these only have one handle. The Cruz del Negro urn is another characteristically western form, found only occasionally in the central Mediterranean, and with marked differences to its western counterpart (Fig. 17).\(^ {146}\)

All the above forms have their origin in the pottery of Phoenicia but developed from forms which are little used there (the pithoi) or assumed specifically 'western' characteristics not found elsewhere (the Cruz del Negro urns and the R-1 amphorae). Another type of specifically western pottery

\(^{144}\) Gómez Bellard, (op. cit. n. 141) 100; Schubart and Maass-Lindemann, (op. cit. n. 40) 74.

\(^{145}\) For the Cruz del Negro cemetery see chapter two below.

\(^{146}\) Gómez Bellard, (op. cit. n. 141) 100; Schubart and Maass-Lindemann, (op. cit. n. 40) 71-74.
displays the influence of indigenous Iberian pottery and such influence is behind the production of the grey ware found in large quantities in the Phoenician and orientalizing settlements in Iberia.

This grey ware was first recognised in the north-east of Spain and was thought to have been introduced to Spain by Greeks from Phocis. When it began to appear in many sites in southern Spain, both Phoenician and Iberian, it became clear that some of the grey ware was associated with the Phoenicians. Now we can distinguish two groups: that brought by the Phocians and distributed in north-eastern Spain in the sixth and fifth centuries and that manufactured first in the Phoenician settlements and then subsequently in indigenous sites in southern Spain from the eighth century onwards. Grey ware was a popular product since it is found in all Iberian sites with orientalizing levels as far as Portugal and North Africa but it is not characteristic of pottery production in the East. The handmade LBA pottery of south-western Iberia often included a grey to black coloured ware decorated with a burnish and the wheelmade productions applied this technique to oriental shapes, typically the plates and bowls which are

147 Grey ware is found in Toscanos from the earliest level of occupation (Phase I) onwards and in an Iberian context at Cabezo de San Pedro (Huelva), Cerro Macareno (Seville) and Pinos Puente (Granada) from the end of the eighth century. In Alcores de Porcuna it was imported from the second half of the eighth century. A.M. Roos, "Zur frühen grauen Dreheschreibenware auf der Iberischen Halbinsel," MM, 24 (1983) 153-176; M. Bélen Deamos, "Estudio y tipología de la cerámica gris en la provincia de Huelva," Revista de archivos, bibliotecas y museos, 79 (1976) 353-389.

148 J.G. Chamorro, "Survey of archaeological research on Tartessos," AJA, 91 (2) (1987), 212; Roos, (op. cit. n. 147) 162.
otherwise associated with the red slip fine table ware. These may have been produced for export to the Iberian settlements but were also found in the Phoenician sites themselves, although significantly, never in a funerary context. In this case it seems that the Phoenicians applied their more advanced manufacturing techniques to produce a type of pottery which would appeal to their indigenous 'customers' by offering a combination of a new shape in a familiar colour (Fig. 21).

Although the pottery of the far western Phoenician colonies is derived from that produced in the homeland it quickly developed its own style. This can be clearly seen in the pottery from the earliest settlement levels at Morro de Mezquitilla and Castillo de Doña Blanca, the two oldest Phoenician settlements in Spain. Fragments from at least two thin-walled, high quality red slip bowls known as Samaria ware, or Phoenician Fine Ware, were found at the oldest levels at Morro de Mezquitilla, and are also attested at strata V/IV and III/II of Tyre, dating to the second half of the eighth century. At Castillo de Doña Blanca the Phoenician fine ware bowls are apparently even earlier than those at Morro de Mezquitilla, corresponding to Tyre strata VII-V, dating to the first half of the eighth century.

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149 G. Maass-Lindemann, "Orientalische Importe vom Morro de Mezquitilla," MM, 31 (1990), 171; Aubet Semmler, (op. cit. n. 84) 263.

150 D. Ruiz Mata and C. Pérez, El poblado fenicio del Castillo de Doña Blanca (El Puerto de Doña María, Cádiz) Ayuntamiento de El Puerto de Doña María, Concejalía de Cultura, 1995, 58. The Samaria ware is the highest quality table ware produced by the Phoenicians and is widely distributed in the East and Cyprus, but up to now none has been found in the area between Cyprus and Iberia.
the Samaria ware fragments are associated with several pottery forms which are of eastern origin and do not survive in the pottery produced in the Phoenician colonies overseas.\textsuperscript{151} However, despite the presence of forms which indicate very close links with the Levant, the earliest pottery at Morro de Mezquitilla is already clearly 'western' (Fig. 19).\textsuperscript{152} As the pottery of the earliest levels of settlement in Iberia already displays some individual traits, this raises interesting questions about the dating of the first wave of Phoenician colonies in Iberia and the lack of any secure archaeological evidence for the presence of colonists in Iberia before the eighth century. The fact that the pottery produced in Iberia and its associated regions in North Africa is free from any significant Carthaginian influence during the eighth and seventh centuries \textsuperscript{153} also leads to questions as to how this western sphere was organised and what was the role of Cádiz.

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\begin{itemize}
\item \textsuperscript{151} Maass-Lindemann, (op. cit. n. 149) 176.
\item \textsuperscript{152} Ibid, 174-176.
\item \textsuperscript{153} Carthaginian amphorae were found at Toscanos and Castillo de Doña Blanca, along with a plate and a small bowl. These amphorae which are extremely common in Carthage and the Central Mediterranean make up only 3.1\% of the amphorae at Toscanos. R.F. Docter, "Karthagische Amphoren aus Toscanos," \textit{MM}, 35 (1994), 123-139. Carthaginian amphorae are also found in eighth century Doña Blanca, along with Corinthian and Eastern Mediterranean types, Ruiz Mata and Pérez, (op. cit. n. 149) 58. The number of objects in Carthage associated with Iberia is very limited, consisting of one ivory comb and the handle from a typically Iberian bronze bowl, Picard, (op. cit. n. 86) \textit{passim}.
\end{itemize}
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Figure 1. Phoenician settlements in Andalusia. Source: Martin Ruz 1995.
Figure 2. Houses at Morro de Mezquitilla. The seventh century B.C. houses (fine lines) were built over those from the eighth century B.C. (thick lines). Source: Gras, Rouillard and Teixidor.
Figure 3. Domestic buildings at Toscanos, Chorreras, Morro de Mezquitilla and Cerro del Villar. Source: Fernández Castro 1995.
Figure 4. Map of the eighth century B.C. houses at Chorreras (Málaga). Source: Gras, Rouillard and Teixidor.
Figure 5a. Early settlement at Toscanos, phases I and II. Source: Niemeyer 1990.
Figure 5b. Seventh and sixth century settlement at Toscanos, phases III and IV. Source: Niemeyer 1990.
Figure 6. a) Warehouse building at Toscanos with comparable structures from Iron Age Palestine. b) 1 and 2, Tell en-Nasbeth, Four Room House 1 and 2; 3 - Hazor, Area G, Building 10037c from level VI. Source: López Castro 1995; Niemeyer 1984.
Figure 7. Defensive wall at Cerro del Alarcón. Source: López Castro 1995.
Figure 8. The south-east of Spain: indigenous sites (●), Phoenician colonies (○) and underwater finds (Δ). Source: Aubet Semmler 1994.
Figure 9. Phoenician sites on Ibiza. Source: Gómez Bellard 1995.
Figure 10. R1 amphorae from Aldovestà (Tarragona). Source: Samartí 1991.
Figure 11. Mineral resources and Phoenician (o) and indigenous sites (●) in Portugal and Extremadura. Source: Aubet Semmler 1994.
Figure 1. Cerro da Rocha Branca, Faro. Shaded: enclosing wall of phase 2. (Redrawn from Gomes 1993, fig. 3.)

Figure 2. Abul, Setúbal. Shaded: enclosing wall of phase 1. (Redrawn from Mayet and Tavares da Silva 1993, fig. 5.)

Figure 13. Pottery from Abul. N° 1-5 red slip ware; n° 6 amphora; n° 7 pithos; n° 8 Cruz del Negro urn. Source: Aubet Semmler 1994.
Figure 14: Ptolemaic settlements in Libya, North Africa and the central Mediterranean. Source: Lancel 1992.
Figure 15. Pottery from Rachgoun (Algeria). Ones typical of the Phoenician koiné of the extreme west are: N° 1 and 1 bis R-1 amphora, 2b pithos, 5, 5b and 5c Cruz del Negro urns. Source: Vuillemot 1965.
Figure 16. R-1 amphora from Mersa Madakh (Algeria). Source: Vuillemot 1965.
Figure 17. Phoenician pottery from Mogador (Morocco). Source: Niemeyer 1984. 1-7 red slip ware, scale = 1:3; 8-11 pottery with no surface treatment, scale = 1:6.
Figure 18. Characteristic forms of the most western colonies. a) R-1 amphora; b) pithos. Source: Maass-Lindemann 1992.
Figure 20. Phoenician fine ware from Morro de Mezquitilla. Source: Aubet Semmler 1994.
Cemeteries

Our knowledge of the nature and function of the archaic Phoenician settlements on the southern coasts of the Iberian Peninsula comes not only from the investigation of the settlements themselves but also from the cemeteries adjoining these sites. Often the graves of these earliest colonists offer us greater insights into the identity of the settlers, their activities and social position, than the places where they lived and worked. The latter have very often been rendered inaccessible to archaeology by their continuous occupation down through the centuries, as is most notably the case with Cádiz.

The cemeteries associated with several Phoenician foundations have been located. Generally they follow a distinct pattern in terms of their location, tending to be situated on a low hill next to the sea and close to the settlement area which they serve. But their most characteristic geographical feature is that they are separated from the habitation sites by water, normally being situated on the opposite side of the river from the settlement area itself.1

1The necropolis on the Cerro de San Cristóbal at Almuñécar is divided from the settlement by the river Seco, while at Toscanos the earliest cemetery is located at Casa de la Viña on Cerro del Mar, the hill on the opposite bank of the Vélez river to the settlement. This pattern also holds true for the cemetery at Trayamar, located on the eastern bank of the Algarrobo river, with Morro de Mezquitilla, its settlement area, on the western bank. This pattern is repeated again in the case of the burial area at Lagos, if it is true that it does correspond to the enclave of Chorreras (see below).
This settlement pattern is obviously not randomly chosen as we find similar arrangements in Phoenicia itself, where the necropolis of Tyre must have been situated at Ushu, or Paleotyre, and is situated on the mainland at the mouth of the river, the Ras-el-Ain.²

We know of only four Phoenician cemeteries on the coasts of the provinces of Málaga and Granada, belonging to the first period of Phoenician settlement there during the eighth and seventh centuries (Fig. 1): that of Toscanos on the hill of Cerro del Mar, on the left bank of the Vélez river, that of Morro de Mezquitilla at Trayamar on the right bank of the Algarrobo, the recently discovered cemetery at Lagos, near Chorreras and finally that located on the hill of the Cerro de San Cristóbal at Almuñécar.³ In the sixth century there is a change in the location of the cemeteries, their rituals and grave goods, as the Andalusian coast moves under the hegemony of Carthage, and this period is represented by the abandonment of the old cemeteries and the choice of new sites, generally located at some distance from their predecessors.⁴

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³ There may also have been an area of possible Phoenician burials at Churriana, near the site of El Villar, close to the modern city of Málaga (see below).
⁴ This period is represented by the cemeteries of Jardín, situated to the north of Toscanos, on the right bank of the Vélez river, and those at Puente de Noy and Cerro de Velilla at Almuñécar, successors to that on the San Cristóbal hill. See Aubet Semmler, "La necrópolis de Villaricos en el ámbito del mundo púnico peninsular", *Homenaje a Luis Siret*, Seville 1986, 612-624.
The necropolis at Cerro de San Cristóbal

The first of these cemeteries to be discovered was that located on the Cerro de San Cristóbal hill, at Almuñécar in the province of Granada (Fig. 1). It was found accidentally in 1962 by some workers building houses on the hill of the Cerro de San Cristóbal, a promontory 1 km to the north-west of the Castillo de Almuñécar, the old centre of the town, where the Phoenician settlement of Sexi is thought to have been located. While levelling the site deep shafts began to appear, some three to five metres deep, which had at the bottom large alabaster jars, containing cremated human remains, and a variety of grave goods (Fig. 2). The construction workers discovered and looted eight graves (nos. 4-11) and the whole site would surely have been lost had it not been for the decisive intervention of a local woman, Laura de Prieto Morena, who alerted the authorities to the existence of the site, and in whose honour its chivalrous excavator, Manuel Pellicer Catalán, named the cemetery Laurita. Nowadays more prosaic archaeologists and historians prefer to call it by its location, Cerro de San Cristóbal, and so it will be referred to here.

The site was excavated in 1962 and Pellicer found a total of 20 graves representing all the burials on that site. The graves extend over an area approximately 650 metres squared, following the slope of the hill, aligned in a north-south

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5 M. Pellicer Catalán, Excavaciones el la necrópolis púnica <<Laurita>> del Cerro de San Cristóbal (Almuñécar, Granada), EAE, 17, Madrid 1962. It was published in German as "Ein altpunisches Gräberfeld bei Almuñécar", MM, 4 (1963), 9-39. All references will be made to the Spanish original.
direction, forming 2 rows which are at the most 6 metres distant from each other.\textsuperscript{6}

The graves themselves are uniform in structure, consisting of roughly circular or oval shafts, with a maximum diameter of between 1.50 and 2.50 m, and a depth of between 2 and 5 m. Their typology corresponds to Tejera's groups VI and VII,\textsuperscript{7} while Pellicer divides them into five groups, depending on the position of the cinerary urn, and the existence of either one or two lateral niches:

A. With the cinerary urn in a lateral niche at the bottom of the shaft and the niche blocked off by one or more stone slabs. Tombs 3, 14, 17 and 20.

B. With 2 niches and 2 burials. Tombs 15 and 19.

C. With a double burial in a niche and in an irregular cist. Tombs 1 and 3.

D. With the cinerary urn sunk into the bottom of the shaft and protected by large blocks of stone. Tombs 10, 11, 12, 13 and 16.

E. Without a burial.\textsuperscript{8}

\textsuperscript{6} Idem, 9.

\textsuperscript{7} That is simple shaft graves in type VI and shaft graves with a lateral chamber in type VII. Las tumbas fenicias y púnicas del Mediterráneo occidental, Sevilla 1979, 79.

\textsuperscript{8} Pellicer, (op. cit. n. 5) 11.
The niches are oriented to the north in tombs 1, 2, 3 and 17, and to the south in tombs 14 and 15. But the chief peculiarity of the Cerro de San Cristóbal cemetery is the cinerary urns, which are all, without exception, alabaster jars, some of which carry hieroglyphic inscriptions and cartouches of various Egyptian pharaohs (Figs. 3 and 4). The urns were placed in an upright position, sunk into the floor of the niche or the shaft itself, with their handles towards the side of the niche, and their cartouches, if they had any, turned to face the entrance of the niche, as if to frighten off an intruder. These urns contain burnt human bones which had previously been separated from the ashes, together with unburnt objects of personal adornment. They were found either uncovered or covered simply by a stone. Some of the urns had been repaired before they were placed in their shaft with patches of alabaster attached with tin clamps, as in the case of the urn found in tomb 3A or 15A. Almost all the urns are stained with red ochre.

The grave goods consist of plates, in one instance still containing the bones of a bird or rodent, and trefoil and mushroom-lip jugs which are frequently found in funerary contexts and generally in association with one another. The

9 M.C. Ramos Sainz, Estudio sobre el ritual funerario en las necrópolis fenicias y púnicas de la Península Ibérica, Madrid 1986, 64.

10 Pellicer, (op. cit. n. 5) 11.

11 As in the archaic cemetery at Motya where they form the most frequent ceramic group, occurring in association with a cooking pot, 124 times in 160 tombs. See V. Tusa, in Mozia - IX, Rapporto preliminare della Missione
trefoil jug was designed for holding liquids, such as water or wine, while the mushroom-lip jug owed its name to the large, rounded, flat disk which made up its mouth and was designed for the pouring of oils or unguents.¹² Both these jugs show signs of having once contained organic material. Lamps and Protocorinthian kotylai were also found in some of the tombs, as were decorated ostrich eggs containing ochre. These grave goods were placed on top of, or near to, the cinerary urn, protected by large blocks of irregular schist, some weighing up to half a ton. The rest of the fill of the shaft contained blocks of medium sized schist in a clayey medium.¹³

These graves are unusual in at least two respects, their structure and their burial urns. In terms of their structure, deep circular or oval shafts, the only direct parallels are found in other Phoenician cemeteries in the Peninsula itself, at Casa de la Viña and Lagos, where the shaft was also used for burial, as far as we can judge from the very poor state of preservation of the graves found there.¹⁴ Outside the

¹² P. Bikai, The Pottery of Tyre, Warminster 1978, 35, calls this form the 'calling card' of the Phoenicians as it has appeared in every area where the Phoenicians settled and is a form not used outside the Phoenician world. Negueruela, (op. cit. n. 11) 261 and 271.

¹³ Pellicer, (op. cit. n. 5) 11.

Peninsula other similar graves are found only in Carthage in the early necropolis of Juno. In contrast to those at the Cerro de San Cristóbal necropolis, the Carthaginian pozzi are smaller and much shallower, reaching depths of only 1,20m on average, compared with depths of up to 5m at Almuñécar. The shafts at Juno correspond to Pellicer's type D, with a central hollow cut into the floor of the shaft, into which the urn is placed. The other type of burial found at Almuñécar, with the urns in lateral niches, is not found at Carthage where the niches are used to hold grave goods only. In general these shafts are quite different from the more common form of eighth and seventh century Phoenician method of cremation, that is cremations placed in shallow cavities or holes in the ground. These cremations can be in urns, small stone boxes, either monolithic or made from two hollowed-out blocks, or otherwise simply placed in the earth without any protection, or perhaps wrapped in cloth which has not survived. Examples of this kind of simple burial are found both in the East and the West, most notably in Hama in northern Syria at the start of the Iron Age, Athlit on the Palestinian coast in the eighth and seventh centuries, and recently in Tyre itself, where a series of cinerary urns, accompanied by red slip pottery from the ninth and eighth centuries has been found in the area of the


17 A. Tejera Gaspar, "Orígenes y paralelos de las tumbas fenicias y púnicas de Andalucía", Habis, 6 (1975), 198-202.
Roman and Byzantine cemeteries.\textsuperscript{18} In the West such cremations are found in the archaic cemetery at Motya dating to the eighth century, on the island of Rachgoun off Algeria, dating to the seventh, and in Phoenician and Phoenician-influenced cemeteries in the Iberian Peninsula in the seventh and sixth centuries at Frigiliana in Málaga, Puig des Molins in Ibiza and La Joya in Huelva.\textsuperscript{19}

So apart from a partial parallel in the Juno necropolis in Carthage, the shaft grave with a lateral irregularly excavated niche into which the burial is placed, along with its grave goods, is unknown in the west Phoenician area. Up to now similar graves have been found only in the East, such as the Bronze Age necropolis near Sidon which, however, contains only inhumations.\textsuperscript{20} According to their excavator, the Almuñécar shaft graves are the result of a mixture of two distinct traditions, the shaft of Tyrian or Sidonian origin, where it is used for inhumation only, and cremation which came from northern Syria. The mixture of burial rite and grave


\textsuperscript{19} For Motya see J.I.S. Whitaker, Motya, a Phoenician colony in Sicily, London 1921, 206-260, V. Tusa et al., Mozia VII, Rapporto preliminare della missione congiunta con la Sorrintendenza alle Antichità delle Sicilia Occidentale, Rome 1972; idem, (op. cit. n. 11) passim; for Rachgoun, G. Vuillemot, La nécropole punique du phare dans l'île Rachgoun (Oran), Libyca, 3 (1955), 7-76. For Frigiliana see A. Arribas and J. Wilkins, "La necrópolis fenicia del Cortijo de las Sombras (Frigiliana, Málaga), Pyrenae, 5 (1969), 215-234; La Joya, J.P. Garrido, Excavaciones en la necrópolis de <<La Joya>>, Huelva, EAE, 96, Madrid 1978.

\textsuperscript{20} Lindemann, (op. cit. n. 16), 123.
structure is the result of ethnic mixing.\textsuperscript{21} Tejera suggests that it was the cremation burials near the Phoenician colonies between Mount Carmel and the north of Athlit and Dor, influenced by Tyrian and Sidonian traditions, which could be the origin of the shaft graves at the Cerro de San Cristóbal.\textsuperscript{22} While the question of the origins of the cremation burial in the shaft grave must remain unclear, all we can say at the moment is that this method of burial, with only one exception, remains unique to the Iberian Peninsula.

\textit{Cinerary urns}

With the other distinguishing feature of the Cerro de San Cristóbal necropolis, the alabaster jars used as cinerary urns, we are on firmer ground. These hold the cremated remains of not more than one individual, along with small personal items, usually pieces of jewellery or scarabs, placed there for their apotropaic value. Four of the urns bear the cartouches of Osorkon II, Takelot II and Sheshonq III, pharaohs of the XXII dynasty who reigned in succession in the ninth and eighth centuries.\textsuperscript{23} The inscription on the alabaster urn in tomb 16 was originally attributed by Pellicer to Sheshonq II, an obscure figure of whom we know very little. This was corrected by Kitchen who identified the cartouche with Sheshonq III, who

\textsuperscript{21} M. Pellicer, "Relaciones de la necrópolis púnica del Cerro de San Cristóbal de Almuñécar con el Mediterráneo occidental," \textit{CNA}, 8 (1964), 397; Ramos Sainz, (op. cit. n. 9) 34.

\textsuperscript{22} Tejera Gaspar, (op. cit. n. 17) 206-207; idem, (op. cit. n. 7) 83-84.

\textsuperscript{23} The urns in tombs 17, 20, 16 and 1 respectively. Pellicer, (op. cit. n. 5), 52; J. Padró i Parcerisa, \textit{Egyptian Type Documents from the Mediterranean littoral of the Iberian Peninsula before the Roman conquest, vol. III. Study of the material}. Andalusia, Leiden 1985, 92-93.
reigned from 825-773, thus bringing us into the eighth century.24 Therefore the three pharaohs represented at Cerro de San Cristóbal now stand as Osorkon II, 874-850, Takelot II, 850-825, and Sheshonq III, 825-773.

These jars can be accepted as genuine Egyptian products, not merely Phoenician imitations, such as the glass jug from the treasure at Aliseda in the province of Cáceres, with its pseudo-hieroglyphic inscription.25 They are made from calcite, a form of calcium carbonate which was extracted from the Sinai in the eastern desert of the Nile.26 Their forms all have abundant parallels in Egypt, and the hieroglyphic texts inscribed on the urns of tombs 1 and 15 are wholly Egyptian in both style and content, and must have been the work of someone completely familiar with the Egyptian language and script as well as Pharaonic religion, in other words an Egyptian and not a Phoenician imitator.27

All this seems clear enough. The question is how did the 17 alabaster urns found in situ in the Cerro de San Cristóbal necropolis, the largest group of such vessels to be found


25 Pellicer, (op. cit. n. 5), 50; J.M. Blázquez, Tartessos y los orígenes de la colonización fenicia en occidente, Salamanca 1968, 60-63.


27 I. Gamer-Wallert, "La inscripción del vaso de alabastro de la tumba número uno de Almuñécar (Granada)," CNA, 12 (1971), 407-408. For an analysis of their forms Padró, (op. cit. n. 23).
outside Egypt, reach the Phoenician settlement at Almuñécar?28

Judging by the texts inscribed on two of the urns in Almuñécar, these jars were originally manufactured as recipients for wine, a product in which Egypt had a long tradition.29 This idea is supported by the fact that the inscriptions on other, roughly contemporary, alabaster jars found in Thebes, Assur and the mouth of the Barbate river in the province of Cádiz, invariably refer to wine.30 We can assume that these vessels travelled to Spain on Phoenician carriers, given the fact that they have always appeared there in either wholly Phoenician contexts, such as the Cerro de San Cristóbal necropolis, or in

28 We also have to consider the alabaster jar with the cartouche of Apophis I, a hyksos monarch of the XV dynasty, who reigned from the end of the seventeenth to the start of the sixteenth centuries. This vessel may well have come from the Cerro de San Cristóbal, as it was found in the possession of a family who had property there. See F. Molina Fajardo and J. Padró i Parcerisa, "Nuevos materiales procedentes de la necrópolis del Cerro de San Cristóbal (Almuñécar, Granada)," in F. Molina Fajardo, (ed.), Almuñécar, arqueología e historia, vol. I, Granada, 1983, 35-44. In addition, three further uninscribed alabaster urns were discovered by the authors in private ownership. They date them on the basis of parallels with the Cerro de San Cristóbal materials to the Third Intermediate Period. These vessels must have come from the tombs looted by construction workers in 1962.

29 For a translation and commentary on the inscriptions see J. Padró, "Las importaciones egipcias en Almuñécar y los orígenes de la colonización fenicia en Iberia," Homenaje a Luís Siret, Seville 1986, 526-529. That on the jar from tomb 15 seems to contain veiled references to the mysteries of Hathor. According to Padró's analysis both texts are religious and allude to the original contents of the vessels, wine.

native settlements which had strong links with the Phoenicians.31

From the cuneiform inscription found on one such alabaster jar in the palace of Assurnasirpal II at Assur we are told that this jar, containing oil, came from the treasure of Abdimilkuti, king of Sidon, looted by the Assyrians in c. 677. Thus we know that these Egyptian jars were present in Phoenicia itself, containing wine, as we can infer from the hieroglyphic inscription inscribed on the jar.32 There are two theories as to how such jars reached the Phoenician cities: either that they were part of an illicit trade in antiquities robbed from Egyptian royal tombs, where several such jars have been found,33 or they were simply the result of commercial exchanges with Egypt and, more especially, of Egypt's diplomatic dealings with its Asiatic neighbours. The second theory seems the most likely given the proliferation of this kind of material outside Egypt throughout several centuries34 and the close contact the Phoenician cities enjoyed with Egypt during the first centuries of the first millennium, as well as the volume of Egyptian products of all kinds found in the Peninsula and evidently brought by the Phoenicians as a result.

31 For such objects in indigenous contexts see J. Padró i Parcerisa, "Datos para una valoración del <<factor egipcio>> y de su incidencia en los orígenes del proceso de iberización," Els orígens de Mons Ibèric, Ampurias, 38-40 (1976-78), 487-509.

32 Culican, (op. cit. n. 30) 29 for a translation of the text.

33 Gamer-Wallert, (op. cit. n. 27) 408.

34 Padró, (op. cit. n. 23) 50-51.
of trade with Egypt. These commercial and diplomatic exchanges with Egypt's neighbours consisted of offering certain produce, whether as gifts or in trade, in containers which enhanced their value. Evidently the Phoenicians must have valued the containers more than their contents, as is proved by the fact that they used jars, originally designed to contain wine, as cinerary urns in their cemeteries, just as Pedro III of Aragon had himself buried in a porphyry bathtub, received as a present from the East. Perhaps the hieroglyphic inscriptions carried on some of the jars were felt to have some kind of apotropaic or magical function as they did in the scarabs and scaraboids which the Phoenicians buried with their dead.

As for the dating of the necropolis we have various possibilities depending on whether we follow the dating given by the alabaster urns, that offered by the presence of the two Protocorinthian Subgeometric kotylai found in the grave goods of burial B in tomb 19, or the Phoenician graffiti painted on the urn in tomb 3. Pellicer identified the kotylai

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36 Padró, (op. cit. n. 23) 51-53.


38 Pellicer, (op. cit. n. 5), 63-65.

as belonging to the first black figure style, dating them to the first quarter of the seventh century, and on this basis he assigned a date of the first half of the seventh century to the whole necropolis. Shefton subsequently reexamined the pieces and attributed one to the end of the eighth century, while the other which, in his view, could have been an imitation from Pithekoussai or Cumae, he dated to the first half of the seventh century.

Padró rejected the kotylai as a valid indication of the dating of the necropolis. He points out that tomb 19 which contained the kotylai also contained a cinerary urn of the alabastron type for which parallels have been found dating from the XXV and XXIV dynasties, that is, from the second half of the eighth right through to the seventh centuries, making it one of the most recent of all the burial urns in the necropolis. In addition, tomb 19 itself is the grave furthest away from the settlement of Sexi. If we can accept the premise that generally in Phoenician cemeteries the latest tombs are those located furthest away from the habitation site, that would make tomb 19 the latest of all the burials at the Cerro de San Cristóbal. He prefers to rely on the evidence given by the urns

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42 (op. cit. n. 23) 54.

themselves. The new dating of the cartouches gives us pharaohs who reigned from c. 874 to 773, providing a chronological range from the second half of the ninth to the first half of the eighth centuries, with the possibility that some of the urns might be slightly more recent again. He gives as the earliest possible start of the burials at Almuñécar the reign of Osorkon II (874-850), and feels that burials could not have continued throughout the seventh century, given the general absence of Greek pottery and other objects characteristic of Phoenician cemeteries in the seventh century such as the ceramic burial urn and the double spring fibula.44

We can also look at the Phoenician pottery itself to provide us with evidence as to the dating of the site. Plates can be dated according to the width of their rims in relation to the diameter of the plate as a whole. The narrower the rim in relation to this diameter, the earlier in the series. With the passage of time, the rims progressively get wider.45 The mushroom-lip jugs also show typological development which can be used to set them in a chronological framework. Here the salient point is the height of the neck ridge. A ridge lower on the neck and nearer the body of the vessel is indicative of a later date.46 Following these criteria, Negueruela examined the ceramic grave goods and came to the conclusion that tombs

44 (op. cit. n. 23) 54.


13 and 20 are the oldest, with a date towards the end of the eighth century, while the remaining tombs cover the period down to the end of the third quarter of the seventh century. Given the progress made in the studies of the material remains of the Phoenician colonies on the Andalusian coast, and the definition of more exhaustive stratigraphical sequences based on Phoenician pottery, Negueruela’s conclusions can be accepted as valid as far as they go. Unfortunately, however, of the twenty tombs published by Pellicer, only seven could be dated by analysis of their pottery, as Phoenician pottery was not present in the other tombs. But as some of the latest pottery forms were found precisely in those tombs whose urns had cartouches (tomb sixteen with the cartouche of Sheshonq III and tomb seventeen with that of Osorkon II) it seems that to disregard the evidence of the pottery, and give the necropolis a start in the early eighth century, based on the Egyptian cartouches, would be a mistake, especially since the alabaster urns, which were valuable and exotic objects, may have been placed in the graves as heirlooms.

The necropolis on the hill of Cerro de San Cristóbal is in fact exceptional in many aspects. A mere twenty graves yielded Egyptian alabaster urns, with royal cartouches, in shaft graves, both unparalleled elsewhere. In addition, there are two examples of Greek pottery of the late eighth and early seventh


48 Ibid, 204.
centuries, a considerable quantity of Phoenician red slip pottery, and the earliest appearance of iron in a stratified context in the Iberian Peninsula (in tomb 19). As the first cemetery to be excavated in Spain which could be definitely identified as Phoenician rather than Punic, it has provided the first archaeological corroboration of what was already known from Classical sources and a few sporadic finds without any firm archaeological context: the existence of Phoenician settlements on the south-east coast of the Iberian Peninsula.

The Cerro de San Cristóbal cemetery is also exceptional in terms of its relationship to other Phoenician cemeteries outside Spain. Compared with the roughly contemporary early cremation burials at Motya, it stands out in terms of the elaborateness of the tombs, and the effort put into their construction (shafts up to five metres deep compared with shallow hollows in the rock at Motya), and also in terms of the opulence of its grave goods. In contrast to the Egyptian alabaster cinerary urns, in Motya we have pottery urns or simple loculi to house the mortal remains of the settlers there. More significantly, at Motya only 9% of the pottery was made up of imports (of which the most numerous were kotylai), and very often we find local imitations in place of the imported Protocorinthian, with two-handed cups acting as substitutes for Protocorinthian kotylai.  

Exceptional too is the clear Carthaginian influence visible in the structure of the tombs and their grave goods. Apart from the Cerro de San Cristóbal necropolis, shaft graves with cremation burials are found only in Carthage, and it is only in Carthage that we find Egyptian alabaster jars used to hold cremated human remains. The Cerro de San Cristóbal necropolis also provides the only example of decorated ostrich eggs, found in a Phoenician context of the eighth and seventh centuries. Given these differences we could perhaps assign the colonisation of Almuñécar to a different ethnic group from the people who settled at Toscanos, Chorreras, Morro de Mezquitilla and the other sites on the Mediterranean Littoral of Spain. Alternatively these links with Carthage may merely reflect a group of settlers who apparently enjoyed closer trade relations with the African metropolis than the other Phoenician sites in Spain.

It is obvious that the twenty graves of the "Laurita" necropolis could not represent all the burials of the eighth and seventh century Phoenician enclave of Sks. Not all the inhabitants of the settlement could have afforded an alabaster urn imported from Egypt for their ashes, and twenty tombs are too few to account for a time span of circa one hundred years. Consequently we must suppose that the Cerro de San Cristóbal

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51 Padró, (op. cit. n. 23) 56.
cemetery was not the only one to serve the early years of the Phoenician settlement at Almuñécar and that some other burial place for the economically less privileged inhabitants of the area must have existed. During the building work which led to the discovery of our necropolis, a burial in a pottery cinerary urn was discovered at the foot of the Cerro de San Cristóbal hill, but Pellicer was unable to obtain any further information about it. Perhaps this find came from a further undiscovered part of the early burial area at Sexi, now destroyed by building on the site.

The necropolis at Lagos

Further to the west, in the province of Málaga, another Phoenician cremation cemetery was discovered recently during building work in the valley of the river Lagos, on the Mediterranean coast of Andalusia. This site is 8 km east of Torre del Mar, where the Phoenician site of Toscanos is located, and only 3 km from the Algarrobo valley, with its Phoenician settlements at Morro de Mezquitilla and necropolis at Trayamar (Fig. 1).

The Lagos river is now dry but must have once been a good means of communication with the interior, as well as providing suitable conditions for irrigation agriculture. The valley itself is flanked by two high promontories, to the west by Cerro y Mar, also known as Chorreras, where a large eighth

52 (op. cit. n. 5), 5.

53 For these sites see chapter one.
century Phoenician settlement was located, and to the east by a slightly lower promontory, the Cerro de la Molineta. These promontories form a small bay which is in turn an excellent natural port and harbour. On a clear day from the top of these hills it is possible to see the Vélez valley, where Toscanos was located, the bay of Málaga and the valley of the Guadalhorce river, all areas occupied by the Phoenicians. The mutual interrelation between the various Phoenician sites in this area was obviously close in terms of visibility and reference points for navigation.

Immediately adjoining the Cerro de la Molineta hill to the east is a slightly lower hill, the Cerro Carchín, and, in the track which runs between these two hills, the remains of a Phoenician cremation burial were first discovered in October 1989. During the construction of a road, mechanical diggers uncovered a fossa dug in the rock which still contained an alabaster urn, in an upright position, with cremated human remains inside. Because of financial constraints, the subsequent rescue excavations in Spring 1990 could only investigate those areas disturbed during the building work and, as a result, the size, boundaries, density and spatial characteristics of the necropolis at Lagos must all remain unknown. However, judging by the presence of deep shafts cut into the natural schist rock in areas near to the cremation burial, which were found empty of any contents, we can infer

54 For Chorreras see chapter one.

55 Aubet Semmler et al., (op. cit. n. 14) 10.
that there must have been other graves which have long since been looted of their grave goods.\textsuperscript{56} The shafts and small fossa cut into the natural schist were protected or hidden by large blocks of slate and reached an average depth of approximately 1 m. The only structure located by the excavation which could be definitely identified as a burial was grave 1A (Fig. 5), with its alabaster cinerary urn, although the remains of another cremation, 1B, were also found. The fossa in which grave 1A was found has an elongated oval shape, approximately 0.60 m in height and with a diameter of roughly 0.29 m. As it had been almost destroyed by bull-dozers, it is impossible to tell whether the grave took the form of a simple fossa designed to contain one or more burials or whether it constituted only the lateral niche of a much larger shaft grave, similar to those found at the Cerro de San Cristóbal necropolis at Almuñécar.\textsuperscript{57}

Fragments of red slip pottery were found at the bottom of the burial fossa and there were further pottery fragments in the area immediately around the fossa, along with burnt human bones coming from another cremation burial 1B, probably originally contained in the pottery amphora, the fragments of which were found with the bones. Grave 1B itself was not located and must have been destroyed in the building work, but the excavator believes that it may have been situated somewhere on the slopes of the Cerro de la Molineta hill. As the pottery fragments discovered in the area around grave 1A

\textsuperscript{56} Ibid, 13.

\textsuperscript{57} Ibid, 15.
were mixed up with the cremated bones of grave 1B it is impossible to determine to which of the burials these objects should be assigned. Part of an amphora, a pithoid vase with two handles, and a small red slip plate were identified from the fragments. Other fragments could be assigned to some kind of large vessel, probably another amphora, although its exact form could not be determined.

All the Phoenician pottery discovered at Lagos was found to show remarkable similarities with the pottery from the nearby Chorreras in terms of its finish, and the clay itself. Although none of the forms identified in Lagos allow us to date the burials with absolute precision, they can be used to assign a date somewhere at the end of the eighth century.58

While the majority of the alabaster urns from the cemeteries at Almuñécar, Trayamar and Cerro del Mar share the same elongated oval shape, the Lagos jar, 35cm in height, is smaller and with its torpedo-shape, has a different form from its counterparts in Andalusia (Fig. 5).59 Closer to our jar in form than the Almuñécar jars are two jars found in Andalusia, without any known archaeological context. They have the same pointed shape and have similar handles to those on the Lagos jar. One was found 200 years ago in Churriana, near the Phoenician settlement of Cerro del Villar, at the site of a

58 Ibid, 17-44.

59 This shape is represented at the Cerro de San Cristóbal necropolis only by the jars from tombs 3 and 12, which however have no handles, unlike the Lagos jar.
suspected Phoenician cemetery.\textsuperscript{60} The other comes from the Puerto de Santa María, or the mouth of the Barbate river, both in the province of Càdiz, and bears a hieroglyphic inscription identifying its owner as a priest buried in Thebes in the XXII Dynasty.\textsuperscript{61} The latter jar offers the closest parallel in the Iberian Peninsula to the jar from Lagos, although other very similar jars have been found in the East.\textsuperscript{62}

Apart from the pottery and the alabaster urn the only other significant finds were a bronze ring and a silver pendant with a scarab, dated to the first half of the first millennium (Fig. 5). This object is very similar to a scarab mounted in a silver swivel ring, found in grave 3 at the Cerro de San Cristóbal necropolis, the same grave which provided a torpedo shaped jar similar to the jar from grave 1A at Lagos.\textsuperscript{63}

Given the quality of the grave goods it is obvious that we are dealing with two relatively rich burials, which in terms of their composition and quality are at least comparable to the grave goods from Almuñécar. Yet nothing which could be securely identified as a burial was found in the area round graves 1A and 1B at Lagos, a circumstance which may indicate that we are dealing with a secondary or peripheral sector of a


\textsuperscript{61} García y Bellido, (op. cit. n. 30), 11-21; Gamer-Wallert, (op. cit. n. 30) 223-228.

\textsuperscript{62} That found in Asarhaddon's palace in Assur has a very similar form and the same semi-circular handles. Culican, (op. cit. n. 30), 28-29.

\textsuperscript{63} Padró, (op. cit. n. 23), 58-59.
necropolis, perhaps situated on the top of the Cerro de la Molineta hill.

The situation of the graves themselves is surprising. Located on the edge of the Lagos valley and adjacent to the Algarrobo valley, they are only 1.8 km away from the Phoenician settlement of Chorreras, suggesting that these graves may well have been linked to this site. Chorreras was occupied over approximately fifty years, from the middle of the eighth century, and yet no burials corresponding to the settlement have, as yet, been located. The only necropolis in the Algarrobo valley is the chamber tomb cemetery at Trayamar dating to the seventh century, by which time the site at Chorreras had already been abandoned. Therefore it seems likely that the two burials at Lagos may have formed part of the cremation necropolis of the settlement at Chorreras. This theory is supported by the pottery found at Lagos which dates to the late eighth century and is very similar to the pottery from Chorreras.64 If this is indeed the case, and we can link the burials at Lagos with the Phoenician occupation of the hill of Chorreras, then that would indicate that the site at Chorreras was not linked directly to the control of the territory of the Algarrobo valley, as was previously supposed, but instead was linked to the valley of the river Lagos,65 changing our picture of the functions and purpose of the Phoenician settlements in this area.

64 Aubet et al., (op. cit. n. 14), 19.

65 Ibid, 10.
The necropolis of Toscanos

Only eight kilometres west of the necropolis at Lagos is the Vélez valley with its hill top sites at Toscanos, Cerro del Peñón and Cerro del Alarcón (Figs. 1 and 6). While the settlement remains of the eighth and seventh centuries are relatively well known we have less information about the cemetery corresponding to the early Phoenician occupation of the Cortijo de los Toscanos. The discovery of a bronze Phoenician thymaterion which apparently came from the Peñón hill led its excavators to suspect that the early necropolis must have been situated there. But despite the fragments of an alabaster urn found on the eastern side of the Peñón, the most recent excavations on the hill have uncovered only industrial and some residential remains.

In the Museo Arqueológico Nacional in Madrid there are several objects dating to the Phoenician era which were discovered in the eighteenth century A.D. at Casa de la Viña on the hill of Cerro del Mar, directly across the river from the settlement at Toscanos. These objects consist of a mushroom-lip and a trefoil jug (Fig. 7), both covered in a characteristic Phoenician red slip, and dated on stylistic criteria to the mid seventh century.

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66 For the settlement of Toscanos see above chapter one.

century,\textsuperscript{68} and four alabaster urns, dated by comparison with those from Almuñécar to sometime between the late eighth and the seventh centuries. Judging by the large size of two of the urns, and their shape, they may well have been used to hold cremated remains, whereas the small size of the other two urns suggests that they were probably grave goods and were used to hold perfumes.\textsuperscript{69} Given these finds it was probable that the eighth and seventh century necropolis of Toscanos was to be found somewhere on the slopes of Cerro del Mar. But it was not until the 1978 excavations that this cemetery was located. On the western slope of the Cerro del Mar hill, the side directly overlooking the settlement, twenty-eight definite and fourteen probable shaft graves were found extending over an area of 350 metres squared.\textsuperscript{70} As the necropolis had been built over during the Roman era, all that was left of the burials was the floor of the shaft graves, with a rectangular or square ground plan cut into the natural rock. The presence of an additional hollow inside the bottom of the shafts, measuring between 0.50-0.70m in diameter, was evidently designed to hold the cinerary urn of each burial. In one of these structures the base of an alabaster urn was found still \textit{in situ} and two more fragments of alabaster urns were

\textsuperscript{68} M. Almagro Gorbea, "Dos jarros paleo-púnicos del Museo Arqueológico Nacional hallados en la Casa de la Viña," \textit{MM}, 13 (1972), 181-183.

\textsuperscript{69} M.C. Pérez Die, "Notas sobre cuatro vasos egipcios de alabastro procedente de Torre del Mar (Málaga) conservados en el Museo Arqueológico Nacional de Madrid," \textit{Revista de archivos, bibliotecas y museos}, 79 (1976), 911.

found on the surface of the hill. In addition, inside the remains of these shaft graves, or in their immediate vicinity, small fragments of red slip pottery were found. These have not been helpful in providing a date for the burials at Casa de la Viña, but the discovery in one of these graves of a fragment of a Protocorinthian kotyle, with a linear geometric style of decoration, gives us a date right at the beginning of the seventh century. This date should represent only the start of burials here, while the better preserved grave 14 provides us with the last phase of burial at this site. This is a fossa grave which must be dated to the sixth century, judging by its form and the few remains of pottery found there.

The cremation necropolis at Casa de la Viña is the last site to be definitively identified as a Phoenician necropolis belonging to the first period of burials which extends *grosso modo* from the late eighth century (Cerro de San Cristóbal, Lagos) to the seventh century (Casa de la Viña). These graves form a distinct group which, as we will see later, differs significantly from the subsequent burials in the later seventh century.

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73 There is a possible Phoenician necropolis at Churriana, near Torremolinos, possibly corresponding to the settlement of Cerro del Villar, close to the modern city of Málaga. Here a number of alabaster urns and an orientalising ivory plaque were found. See Pérez Die, (op. cit. n. 60) 237-243 and J. Padró i Parcerisa, *Egyptian Type Documents from the Mediterranean littoral of the Iberian Peninsula*, I, Leiden 1985, 39-43, who questions the authenticity of the ivory plaque. Recent studies, however, prefer to situate the cemetery of Cerro del Villar in the Cortijo de Montañez. M.E. Aubet Semmler, G. Maass-Lindemann, J.A. Martín Ruiz, "La necrópolis fenicia de Montañez (Guadalhorce, Málaga)," *Cuadernos de arqueología mediterránea*, 1, (in press).
and sixth centuries, both in terms of funerary structure and ritual. From the mid seventh century onwards we see an increasing opulence in the graves, with ashlar built chamber tombs, reached by a rock-cut dromos. Instead of the single burials which make up the majority of the shaft graves, now we have tombs which seem to have been used as family vaults, with successive burials in the same chamber stretching over a period of two or more generations. It is interesting to note that the later seventh century, when increasing amounts of investment, labour, time and planning were invested in the construction of large, imposing chamber tombs, is also the time when the Phoenician settlements themselves reached the height of their prosperity, with new more solid and imposing constructions superceding older buildings on these sites, the proliferation of new sites and the expansion of existing settlements to occupy new areas. This phenomenon of growing ostentation in the tombs built in the later seventh century is not limited only to Spain but is found in other areas of Phoenician settlement such as Carthage and Malta, and is shared by many of the burials in the indigenous society of south-western Iberia.

In comparison, the cemeteries we have examined form a coherent group in terms of their structure (the use of the shaft graves for single or occasionally double burials) and the burial method which is, without exception, cremation. These cremations, as far as we can tell, did not occur in situ and there must have been at least one ustrinum, or common funeral pyre, for each necropolis. So far none of these ustrina has
been identified in the Peninsula. The charred remains were carefully separated from the ashes, perhaps by sieving, and placed in alabaster urns. These are the distinguishing feature of this initial group of cemeteries, in which all the burials, with the possible exception of grave 1B from Lagos, were placed in alabaster urns, apparently of Egyptian manufacture. In the chamber tombs, alabaster jars are still found as cinerary urns but now they appear in conjunction with pottery cinerary urns, generally simple amphorae, which have been given a red slip to mark their new purpose and distinguish them from those used for less solemn functions.\textsuperscript{74} The alabaster cinerary urns are accompanied by grave goods, generally some combination of the mushroom-lip and trefoil jugs, the simple saucer-shaped lamp and plate, all with the characteristic red slip. But the identifying feature of this group of early cemeteries is the use of cremation. No eighth-century inhumations have been found and their first appearance is in the chamber tombs of the seventh century.

Partial parallels to the cremation burials in shaft graves have been noted in the Juno necropolis at Carthage which also provides the only known instance of alabaster jars used as cinerary urns outside the Iberian Peninsula. However in general these graves show more differences than similarities when we compare them with contemporary burials in the other Phoenician sites scattered throughout the Mediterranean. In

\textsuperscript{74} Negueruela, (op. cit. n. 46), 199-205.
terms of their form and their cinerary urns they are exceptional. They are also unusual in terms of size. This earlier period accounts for only fifty definite burials and fourteen probable in a period which extends over a century, compared with figures in the thousands for later Punic cemeteries. Overall the picture is one of relative uniformity in the burials, with no marked differences of wealth or status emerging from the burials. This may well be because both the ritual and the objects chosen for the burial were determined by tradition and did not reflect the social status of the individual buried there, but, in comparison with the roughly contemporary cremation necropolis at Motya, clear differences do emerge. A general comparison of the two cemeteries gives the impression that the Spanish burials reflect a wealthier community than those in Sicily, or at least a community with access to international commercial circuits linking the eastern and western sides of the Mediterranean, and exemplified by the presence of Egyptian alabaster urns and the Protocorinthian kotylai. But, like Sicily, we do not see any sharp distinctions in wealth and status, unlike the tombs built in succeeding generations, where imposing ashlar chamber tombs alternate with simple shaft graves. The simpler forms of burial such as the shaft graves and cremations in shallow cavities in the rock, which initially were prevalent across all

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75 The shaft graves in Spain are far deeper than those in Carthage. At Almuñécar the shafts reach a maximum depth of five metres compared to an average of one metre for the shafts with cremation burials in Carthage.
social classes, now become the prerogative only of the less privileged sectors of society.76

**Chamber tomb burials - Trayamar**

This new style of tomb is best exemplified in Spain by the necropolis at Trayamar, situated only three kilometres to the east of the Lagos cemetery, on a hill which rises up from the coast and the alluvial land of the current river valley, on the west bank of the Algarrobo river, directly opposite the settlement area it served on the summit of the hill of Morro de Mezquitilla (Fig. 1).77 Here five built tombs, each with access via a dromos, were found. All the Trayamar tombs are made up of a single rectangular chamber sunk into the ground at a depth of up to 4.50m and constructed from ashlar blocks (Fig. 8 B). The entrance to the chamber is invariably found on one of the narrow sides, and always opens onto a dromos which in tomb 1, the only tomb in which the dromos could be excavated, was a simple narrow ramp cut into the natural earth. The entrance is oriented towards the east in the direction of the settlement at Morro de Mezquitilla. The tombs all display slight differences in their construction techniques which may be due to slight chronological differences, or partly also to different traditions in the workshops or masons responsible for their erection. The tombs also display the use of wood in their construction, apparently for decorative as well as practical

76 As exemplified for instance in the seventh century cremation necropolis at Puig des Molins where the cinerary urns in cavities in the rock were accompanied by relatively poor grave goods, C. Gómez Bellard, La colonización fenicia de la isla de Ibiza, EAE, 157. Madrid 1990, 153-164.

77 For the Phoenician settlement at Morro de Mezquitilla see above chapter one.
purposes. As for their external appearance it is possible that they were originally surmounted by small tumuli, as tomb 1 had once been covered by a small conical mound.\footnote{H. Schubart and H.G. Niemeyer, Trayamar los hipogeos fenicios y el asentamiento en la desembocadura del río Algarrobo, EAE, 90, Madrid 1976, 191-194. It was also published in German as Trayamar. Die phönizischen Kammergraber und die Niederlässung an der Algarrobo Mündung. Madrider Beiträge IV, Mainz 1975. All references will be to the Spanish publication.}

Construction work on the hill of Trayamar in the 1930s first brought to light the existence of this necropolis, and tomb 1 was then partially excavated by the workmen who discovered it, and its contents were dispersed. The remaining tombs were excavated in 1967 and 1969 by the German Archaeological Institute who carefully documented them before they were destroyed in the construction of agricultural terraces shortly afterwards.

Although tomb 1 had been damaged by the building work which led to its discovery, the burial chamber itself was still recognisable, consisting of an ashlar chamber approximately 1.90m wide by 2.50m long. Two stages of burials were found separated by a short interval of time during which the ceiling of the chamber seems to have partially collapsed. The roof was ridged and made of wood and seems to have been placed at a height of 1.70m above the floor of the chamber. A bronze nail found on the chamber floor at some distance from the burials was probably once part of the framework of the roof. The chamber door is located in the southern half of the eastern wall and is crowned by a lintel made up of two flat blocks.
with an obliquely cut joint. The door opens directly onto the narrow access ramp, the floor of which was not levelled and is slightly concave. The door of the chamber was sealed by a conglomerate of stones made up of roughly hewed blocks and boulders.

The grave goods had been robbed in the 1930s but, from what remained, it was possible to identify two burials which succeeded each other with a certain interval of time between them (Figs. 9 and 12). Working on the assumption that when we have two examples of a particular object, we can assign one of the objects to each burial, the grave goods of each burial consisted of two rough walled amphorae, two red slip amphorae, two circular supports to keep the amphorae upright, two mushroom-lip jugs and two trefoil jugs. The red slip amphorae acted as cinerary urns and were placed upright on the circular supports. They were surrounded by their grave goods consisting of the jugs, the rough walled amphorae, a lamp, plate, incense burner and some personal objects. In the dromos fragments belonging to several vases and amphorae were found together with a complete red slip plate.79

Only 600m away from tomb 1, two other chamber tombs (tombs 2 and 3) had been totally destroyed during the construction of agricultural terraces. By questioning the workers who had destroyed the tombs, and observing the remains, the excavators were able to ascertain that tomb 2

79 Ibid, 118-126.
measured 3.80m by 2.00m, and was approximately 2.5m high. The chamber was buried at a depth of 1.50-2.00m below the surface and its walls were built from rectangular blocks of limestone which probably came from the Cerro del Peñón, the hill overlooking the Phoenician site of Toscanos. The entrance to the chamber was in its narrow eastern side. No traces of the dromos, which probably consisted of a ramp cut into the natural rock, now remain. Inside the tomb there were two alabaster urns containing cremated human remains. The workers who had witnessed the destruction of the tomb said that it had also contained numerous bones, presumably the remains of inhumations which would indicate the coexistence of both rites or a prolonged use of the chamber not reflected in its remaining contents. In addition it contained the fragments of two amphorae, some closed form of vessel, a lamp and a support.80

In the case of tomb 3 the only information we have comes from the descriptions of the workers who were there at its destruction. The chamber tomb seems to have been roughly the same size as tomb 4 (discussed below), with a rectangular ground plan, ashlar walls and eastward orientation. There seem to have been fewer finds than in tomb 2, although they included at least one alabaster cinerary urn. None of the pottery vessels mentioned by the workers have been preserved.81

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80 Ibid, (op. cit. n. 78), 126-128.
Tomb 4 also consists of a burial chamber, partially built from limestone blocks, with a wooden covering and an entrance on the eastern side. It measures 3.90m long and 2.90m wide. The east and west walls of the chamber are the gable walls, designed to support the roof of the structure. They are higher than the side walls and more crudely constructed, being made from pieces of slate and gravel held together with mud. The chamber seems to have had a flat wooden ceiling, the remains of which have been found inside the building, and a ridged roof. The most peculiar aspect of this structure is the presence of a groove some 7-8.5cm high and 7.5cm wide, on top of the third and fourth row of masonry, which was probably originally used to insert a wooden band which would have had practical as well as decorative functions in the tomb. In the area between these two wooden bands, in the fourth layer of ashlars, there were two niches in the centre of the western and northern walls.\footnote{Ibid, 131-139; H. Schubart, "Colonias fenicias en la región de Málaga," \textit{Arbor}, 280 (April 1969) 42-43.}

Inside the chamber there were three cremations (4a, 4b and 4c), dating to the first period of use of the tomb, and two inhumations from the second phase of use, as well as a lot of finds which could not be definitively assigned to any one particular burial. The cremations were found on small stone slabs and must have been originally placed in containers made from perishable material (perhaps wood, or baskets as in Carthage). Cremations 4a and 4b were found in the south-west
and north-west corners, while cremation 4c was found in the centre of the chamber, beside a broken amphora which would have originally acted as its container. It seems to be slightly more recent than the other cremation burials. Two mushroom-lip jugs were also found on the floor as was a two-beaked lamp; all three vases may be assigned to cremations 4a and 4b (Fig. 12). Two mushroom-lip jugs and a group of vessels found in the south-east corner of the chamber are more difficult to assign to any particular burial, although given the fact that they show parallels with tomb 1 they could belong to the earlier cremation burials.

The three cremation burials belong to the first phase of use of the tomb. Only when a 5-8cm deep layer of reddish clay was formed do we see the appearance of two or possibly three inhumation burials, all of which were found in an exceptionally poor state of preservation. The remains of the skeleton of the 4d burial were found in the north-west corner of the chamber tomb, and its disturbed appearance indicates that it must have been robbed, given the wealth of its golden adornment, the remains of which were found scattered around the body.83

Burial 4e had much more modest grave goods, consisting of items of pottery and only one small gold ring, and appears not

83 They consist of a magnificent gold pendant decorated with a relief and granulation technique. For a discussion of this piece see H.G. Niemeyer, "The Trayamar medallion reconsidered," in R.Y. Ebied and M.J.L. Young (eds.), Oriental Studies Presented to B.S.J. Isserlin, Leiden 1980, 108-113. Several small conical gold pendants were also found, see Schubart and Niemeyer, (op. cit. n. 78), 145-146.
to have been disturbed by robbers. The niche in the south wall was empty but that in the north wall contained a small ivory box, while that in the west wall held two trefoil jugs, a mushroom-lip jug and a bronze double spring fibula. Other objects in a secondary position on the floor of the chamber included an amphora and a fragment of iron which probably belonged to the grave goods. However other finds situated in various strata laid down inside the chamber were obviously the result of offerings placed on the tomb after it had been closed and which subsequently fell inside the burial chamber after its roof collapsed. These offerings consisted of complete plates and fragments of red slip pottery and some red slip closed vessels. They can be paralleled with the find of a red slip plate deliberately placed in an upright position in the dromos of tomb 1, directly outside the door to the burial chamber.\(^{84}\)

One final tomb, tomb 5, was identified during the excavations of the site. Along with tombs 4, 3 and 5, it was destroyed by terracing work on the site and thus could not be systematically investigated. It was situated between tomb 1 and the group of tombs 2, 3 and 4. According to the workmen who destroyed it, tomb 5 was also a chamber tomb, some 7m by 4m, with a longitudinal axis in a north-west to south-east direction. None of the contents were recovered although it is possible that it may have had at least one alabaster urn.\(^{85}\)

\(^{84}\) Ibid, 139-143.

\(^{85}\) Ibid, 189-190.
The dating of the chamber tombs can be based only on the almost complete tomb furniture of tombs 1 and 4. The differences in construction technique notable in the tombs themselves can just as easily be a reflection of different workshops and construction traditions used in their building as the result of chronological differences between the various tombs. So, judging by the similarity of their grave goods, tombs 1 and 4 were occupied roughly at the same time, with tomb 1 being slightly older than tomb 4, perhaps dating around 650. However, before the later burial 1b took place in tomb 1, tomb 4 was built with its cremation burials 4a, 4b and 4c, at the beginning of the second half of the seventh century. One of these cremations must be contemporary with burial 1b and probably one of the inhumations of the second phase, in the late seventh century. The most recent finds in strata 8 of tomb 4 can be dated to c. 600 when the funerary cult at this tomb was abandoned.86

These five chamber tombs represent the only burials at Trayamar to have been scientifically recorded and they have since been destroyed by agricultural work. However they do not constitute all the burials at this site. According to the labourers who witnessed the destruction of tomb 3, in the area around tombs 2 and 3, apart from the chamber tombs themselves, burials in shafts cut into the rock were also discovered. If this were indeed the case, then it is possible

86 Ibid, 236-237.
that the Phoenician necropolis at Trayamar also contained shaft graves like those in the cemeteries at Almuñécar, Lagos and Cerro del Mar. Either these represent a phase of burials earlier than the mid seventh century chamber tombs, and contemporary with the similar cemeteries at Almuñécar and Lagos, or perhaps these simpler tombs represent the burials of those who did not have the means to have large, imposing and costly tombs built to house their mortal remains.87

Puente de Noy

The same type of monumental tomb was discovered in excavations of a Phoenician necropolis on the hill of Puente de Noy at Almuñécar (Fig. 8 C). This necropolis is far more extensive than its predecessor at the Cerro de San Cristóbal and contains burials dating from the seventh to the first centuries, bringing us right down to the Roman era.88 The majority of burials take the form of inhumations and the most common form of grave is the fossa, dated by the grave goods and parallels with other cemeteries to the fifth and fourth centuries. However two particularly spectacular tombs have been found which date to the second half of the seventh century. These take the form of an ashlar-built chamber tomb with a dromos, tomb 4 of zone C, and a deep shaft with a lateral chamber, tomb 1 of zone E.89 Tomb 4C was very poorly

87 Ibid, 130.

88 Judging by some fragments of Phoenician red slip plates found in the necropolis, burials there may even go back as far as the eighth century. F. Molina Fajardo, "Almuñécar a la luz de los nuevos hallazgos fenicios," Los fenicios en la Península Ibérica, 201.

preserved and all that remained of its grave goods were fragments of a plate and a bronze nail which might indicate that the burial ritual in use in this tomb was inhumation in a wooden coffin. The chamber itself measured approximately 3.20m long by 2.20m wide and 4m high. It had a niche in the front wall next to the entrance and probably had a ridged roof made from large stone slabs. Entrance to the chamber was via a rock-cut dromos and the entrance faced east, just as at Trayamar. Many of these features recall the chamber tombs at Trayamar but the materials recovered in the area of the dromos date to the fifth century. The discovery of two carved stone lions in the area near the tomb may indicate that it had some form of external monument, marking its location, probably similar to the funerary tower we find in the East, generally associated with chamber tombs. As it is only in the Achmaeneid period that these monuments acquire monumental proportions, we can fix the mid sixth century as a *terminus post quem* for this tomb. The continuation of its use down to the fifth century may be the result of its use as a family vault over several generations. The monumental aspect of this tomb indicates the existence of a wealthy class who could afford such ostentatious burials and of workshops specialising in large scale funerary constructions to satisfy such needs.90

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Closer in age to the Trayamar tombs is tomb 1E, dating to the second half of the seventh century and which consists of a deep shaft, some 7.5m long, with a lateral burial chamber, measuring some 3.45m wide with a depth of 1.90m. The chamber contained several burials, including one cremation, and an inhumation inside a wooden sarcophagus. Although the tomb had been robbed, the excavators were able to recover quite a number of pottery objects, including red slip plates datable to the second half of the seventh century and two amphorae also dating to the seventh century.91 One interesting feature is the discovery in the access shaft of a large quantity of fragments of plates which appeared at different levels in the shaft and seem to have been broken and thrown down there intentionally during some kind of funerary ritual which took place while the shaft was being covered with earth.92 Apart from the plates, fragments of a jug, a carinated bowl and some east Greek vases were found.

**Parallels**

The tombs from the cemeteries at Trayamar and Puente de Noy are the oldest chamber tombs known so far in the Iberian Peninsula and are the only ones attributable to the first period of Phoenician colonisation, the eighth and seventh centuries, before the influence of Carthage becomes apparent in the sixth century. They obviously represent a dramatic change in burial

91 F. Molina Fajardo, C. Huertas Jiménez, "La tumba fenicia 1E de Puente de Noy," in Molina Fajardo (ed.), (op. cit. n. 90), 81-86.

92 Ibid, 58; Ramos Sainz, (op. cit. n. 9), 117; Jiménez Flores, (op. cit. n. 90), 41.
structure from the earlier shaft graves, both in terms of their monumentality and the introduction of a new burial ritual, that of inhumation. However these chamber tombs are far from unique in the Phoenician world and are paralleled by more or less contemporary burials in Utica, Carthage and Cyprus.

Three built chamber tombs have been identified at Utica, of which tomb 8 from the "Nécropole de l'île" appears to be the closest to the Trayamar tombs. It has a simple, almost isodomic construction technique, and displays between the third and fourth courses of ashlars a space which may have been destined to hold a wooden beam, indicating that here there was a similar alternation of wooden and stone elements to that in the tombs at Trayamar. As in tomb 4 at Trayamar, tomb 8 has a niche in the centre of the back wall. However tomb 8 differs from the Trayamar tombs in several aspects, including its roof which was flat and made from long stones which covered the chamber. Unfortunately none of the original grave goods of tomb 8 have survived and its dating can therefore be approximate only.

The chamber tomb burial is well represented in Carthage where it appears in the second quarter of the seventh century

93 P. Cintas, "Nouvelles recherches à Utique," Karthago, 5 (1954), 117-122. The other two tombs have not been published in detail so we know little of their structure except that they have a niche in their back wall. See J. Moulard, Bulletin archeologique du Comité, 1924.

94 Cintas, (op. cit. n. 93), 117. The difference in roofing may simply be the result of a difference in the strength of the materials used. The soft local limestone used at Trayamar was not strong enough to bear the pressure of the earth above the chamber so a sloping wooden roof had to be used. Schubart and Niemeyer, (op. cit. n. 78), 174.
and continues until the end of the sixth century. It is especially frequent there in the Douimès-Dermech necropolis and on the Byrsa hill and in general it is found in those parts of the cemeteries which are regarded as being among the oldest in the city.\footnote{Benichou-Safar, (op. cit. n. 15), 135-165.} In Carthage the single built tomb opening on to a lateral shaft or dromos is represented by less than one hundred burials out of more than three thousand tombs excavated there. Its high cost, in terms of transport of materials and the numerous skilled workmen required for its construction, would have made this form of burial accessible only to the very rich.\footnote{Ibid, 137; S. Lancel, \textit{Carthage, a History}, Oxford and Cambridge, Massachusetts, 1995, 48-50.}

In terms of their typology the Carthaginian tombs are closer in form to the Utica examples than those from Spain. They share the same flat stone ceiling, above which a pitched roof made from sloping stone slabs, acted as a relieving arch, easing the load of earth on the tomb's ceiling. The pitched roof was concealed at the front by a facing wall built in horizontal courses, giving the tomb a frontal emphasis which does not seem to have been the case at Trayamar where the gable walls were rather neglected and sometimes more crudely constructed than the side walls.\footnote{Lindemann, (op. cit. n. 16), 127; Lancel, (op. cit. n. 96), 47.} However some of the Carthaginian tombs do show by the grooves in the upper part of the walls the existence of a wooden framework or perhaps a
wooden ceiling which is found in the most luxuriously decorated tombs, like that of Yada'milk (discussed below).98

While the built tombs from Carthage, Utica and Trayamar display general similarities in terms of their structure and typology, they have enough differences to show that they came from the same koiné but do not seem to have had a direct influence on each other. It therefore appears that we have to look elsewhere for the prototype of the Trayamar tombs. Ultimately the built chamber tombs may derive from the late Bronze Age built tombs of Ugarit, which with their niches in the walls and entrance via a shaft or steep stair, share some common characteristics with the Phoenician chamber tombs of the western Mediterranean.99 However Benichou-Safar prefers to see the origin of the built tombs in Egyptian funerary architecture which, in the burial chamber of the royal pyramids, or the mastabas of the chief dignitaries, shows an organization in hypogaea with a shaft providing access to them.100 Although she regards the Egyptian influence as fundamental for the Carthaginian built tombs she admits that the use of a sloping dromos to provide access to the burial chamber at Trayamar is a reflection of an Anatolian tradition transmitted via Cyprus where it appears in the necropolis of Palaeopaphos, Tamassos, Amathus and Salamis.101


99 Schubart and Niemeyer, (op. cit. n. 78), 196-197.

100 Benichou-Safar, (op. cit. n. 15), 364-368.

101 Ibid, 368; Jiménez Flores, (op. cit. n. 90), 56-60.
In any case, wherever the ultimate origin of the Phoenician built tombs of the western and central Mediterranean may lie, in their alternation of wood and stone in the walls of the burial chamber, the tombs at Trayamar display a Phoenician and specifically Tyrian construction tradition, reflected in the accounts of the building of the temple and palace of Solomon in Jerusalem by Phoenician architects and builders, lent out for this purpose by Hiram of Tyre.\textsuperscript{102} This same alternation of three rows of stone and one row of beams is also found in Bronze Age Ugarit and early Iron Age Palestine, and this and other parallels link the tombs of Trayamar with the Phoenician cities and the Syro-Palestine area in general.\textsuperscript{103} Given the divergences between the Spanish tombs and their counterparts in North Africa, it seems that we must put aside a direct North African influence and attribute the building of the Trayamar chamber tombs to architects working in a specifically eastern tradition.

\textit{Tombs and society}

But as well as providing us with insights into the various constructional techniques adopted, a comparison with similar contemporary burials in other parts of the west Phoenician world provides us with glimpses of the kind of society

\textsuperscript{102} 1, \textit{Kings} 6, 36: "He (Solomon) built the inner court with three courses of hewn stone and one course of cedar beams. 1, Kings 7, 12: The great court had three courses of hewn stone round about and a course of cedar beams; so had the inner court of the house of the Lord and the vestibule of the house," from \textit{The Holy Bible}, Revised Standard Version, London 1966.

\textsuperscript{103} Schubart and Niemeyer, (op. cit. n. 78), 197-198.
reflected by these ornate tombs. For instance there is the
tomb of Yada’milk in Carthage (Fig. 10), a large chamber tomb
with a wooden cornice and ceiling, stuccoed walls and
abundant grave goods, reflecting a level of financial
investment in the construction of the tomb comparable to that
at Trayamar. The Yada’milk tomb contained two inhumations,
probably that of a man and a woman, laid out next to each
other. The body on the left still wore a bronze bracelet and
gold ring, while that on the right had a silver cup next to its
head. This cup was 7cm high, 125cm wide and weighed 283
grams. Fragments of bronze and a small emerald cylinder were
the remains of a necklace. The sieving of debris found in the
tomb revealed more elements of a necklace: two small round
electrum pearls, a small circular box made of gold and
decorated with a rosette, a discoid gold pendant with an
engraved Phoenician inscription, a granulated gold bead, a gold
cylindrical amulet case and an ivory scarab set in gold and
mounted on a large silver ring. Of these finds the most
spectacular is the engraved medallion whose inscription is the
oldest Punic inscription discovered at Carthage. It is
dedicated to Astarte and Pygmalion by Yada’milk, son of Padai.
Yada’milk is very probably one of the bodies buried in the tomb
and must have once worn the engraved medallion. By the
paleography of the medallion’s inscription and the presence of
a Protocorinthian skyphos, the tomb can be dated to the first
half of the seventh century approximately.104

104 Delattre, (op. cit. n. 98) 15; for the medallion see J. Ferron, "Le médaillon
In Malta a rock cut chamber tomb was discovered at Ghajn Ouajjed, west of Mdina in 1950 (Fig. 11). It contained the skeletons of a man and woman lying side by side on a limestone platform placed on the floor. The woman wore five bracelets on her right arm (four silver and one bronze) and a silver ring on her right hand. On the man's right arm (or the woman's left arm) there was a bronze bracelet and a silver one, with three silver rings and an imported feldspar bead nearby. There were also abundant pottery grave goods, including a Corinthian or Cycladic cup and an East Greek type bird bowl. Judging by the Greek pottery, the burials can be dated to the mid seventh century.105

In their structure, grave goods and abundance of silver and gold jewellery, these two burials from Carthage and Malta are similar to the Trayamar chamber tombs, especially number 4 with its richly adorned inhumation burials which date to the same period, the second half of the seventh century. The inscribed golden Yada'milk medallion from Carthage is directly comparable with the gold medallion found in tomb 4 at Trayamar, and the abundance of silver jewellery found in the tomb near Mdina may indicate that Malta was one of the stages in the return journey from Spain to the East.106 These chamber tombs, the construction of which would have involved architects, stone cutters, carpenters and numerous workmen,


evidently represented a considerable expenditure, and the high
cost of the tombs would have made this form of burial the
prerogative of the very rich only, while the less affluent still
continued to be buried in the simpler shaft or fossa graves we
find beside the chamber tombs of Carthage and Spain. It is
tempting to link these costly and extravagant burial structures
to the settlements of the seventh century which, in Spain at
least, show signs of consolidation and economic prosperity far
greater than that of the initial eighth century facies. In
Toscanos the seventh century is the time when the central
warehouse building C is built and the settlement expands into
the nearby hills, with an area of metallurgical workshops,
processing copper and iron. At Morro de Mezquitilla in
particular, whose inhabitants are buried at Trayamar, the
seventh century brings with it a renewal of the existing urban
structure with the old mud brick houses being replaced by
more solid, stone built constructions, some of which are quite
large and imposing in size. Undoubtedly the wealth reflected
in the architecture of settlements and cemeteries was the
result of the profits from the Spanish silver trade, then at its
peak. The ostentation of the seventh century burials in
Phoenician society in Spain is reflected, and if anything,
surpassed by that of the indigenous cemeteries there, where
the characteristic Phoenician 'funerary service' of red slip
jugs and plate is replicated in bronze, and where the grave
goods sometimes include truly spectacular items, such as the
walnut and bronze war chariot of tomb 17 at La Joya, the
cemetery of the orientalizing settlement of Huelva.
Funerary rituals - cremation versus inhumation

The Trayamar tombs are interesting too in that in tomb 4 for the first time we see the appearance of inhumation with burials 4d and 4e dated towards the end of the seventh century. We have seen that cremation was the preferred burial ritual in the eighth and seventh century cemeteries in Spain, with all the burials at the Cerro de San Cristóbal, Lagos and Casa de la Viña conforming to this pattern. The earliest burials in Trayamar too are cremations (in tomb 1), but with tomb 4 we find inhumations appearing for the first time, in this case sharing the same burial chamber with two cremations which preceded the inhumations by at most a few decades. Inhumation was soon to become the predominant burial ritual in the Phoenician cemeteries of the Iberian Peninsula, at first alternating with, then gradually superseding, cremation as the century progressed. By the end of the sixth century it was to become the predominant burial ritual in Spain until it was replaced by cremation in the third century, this time under the influence of Hellenistic practices.

The absolute predominance of cremation in the earliest phase of Phoenician colonisation is not exclusive to Spain. Cremation is predominant too in Sicily, where in the archaic cemetery at Motya almost all the burials are cremations,\(^{107}\) and in Sardinia where it accounts for all the burials at Nora.

\(^{107}\) There are 143 cremations and 5 inhumations, all of these corresponding to infant burials, P. Gasull, "El sistema ritual fenicio: inhumación e incineración," *MM*, 34 (1993), 71-82.
and Bithia and 91% of those at Monte Sirai. Cremations are found in North Africa where, in the seventh century cemetery at Rachgoun in Algeria, inhumations make up only a very small percentage of burials, again all corresponding to children. The only exceptions to the predominance of cremation in the west Phoenician settlements are found in the Central Mediterranean with Malta, where no cremations have been found, and at Utica, where all the burials attributable to the eighth and seventh centuries are inhumations. In Carthage too the situation is the opposite to that in Spain, Sicily and Sardinia. Here cremation is very much a minority ritual, confined to the earliest cemeteries only (Dermech, Juno, Byrsa) and it disappears completely around 600, not reappearing again until the last two centuries of the city's existence.

This brief examination of the funerary rituals practised in the Phoenician colonial settlements provides us with the impression of relative uniformity in the burial rituals used there, with a general predominance of cremation up to the sixth century, with only a few exceptions, notably that of Carthage. The problems begin when we compare this picture with the situation in the Levant where the cemeteries of the early part of the first millennium show an absolute


109 Vuillemot, (op. cit. n. 19) passim; idem, Reconnaissances aux échelles puniques d'Oranie, Autun 1965.

110 Benichou-Safar, (op. cit. n. 15), 329-335.
predominance of inhumation, with cremation appearing only sporadically. Indeed it has sometimes been assumed that Semitic religious concepts were opposed to cremation and the diffusion of this practice in the Levant from the end of the Bronze Age and the early Iron Age has generally been attributed to the penetration of new groups of peoples in this area, the Sea Peoples. However it has recently been shown that some of the examples of cremation which had been assigned to the settlement of the Sea Peoples actually predate them, or are much later, as at Deve Hüyük, where the majority of cremations date to the eighth and possibly the seventh centuries. It is only at Hama that cremation definitely appeared at the beginning of the Iron Age but that may be due to Anatolian or Hittite influences, or simply, because of the differences observable between Hittite and North Syrian burials, here we may be dealing with an independent development of the ritual which coexists with the majority of the inhumations.

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111 For instance at Khaldeh, 10km south of Beirut, where of 178 tombs dating from the tenth to the end of the eighth centuries, there were only two cremations. R. Saidah, "Fouilles de Khaldé. Rapport préliminaire sur la première et deuxième campagnes (1961-1962), BMB, 19 (1966), 51-90.


113 As at Alalakh, in Syria, where all the cremations belong to the Late Bronze Age.


115 Ibid, 81-84.
Certainly it is true that we do not have to wait for the arrival of the Sea Peoples for the introduction of cremation to the Near East. Bienkowski has compiled a list of cremation burials in Mesopotamia, North Syria, Anatolia and Palestine, all of which predate the Iron Age and some of which are significantly earlier than the twelfth century.116

In Phoenicia the spread of cremation seems to have been gradual with the first cremations appearing as sporadic occurrences within a tradition where inhumations are dominant.117 The recently discovered ninth and eighth century necropolis of Tyre consists of numerous cremations in urns, buried in the ground and accompanied by red slip pottery.118 A few more cremations were found at Tambourit, a few kilometres south of Sidon, dating to the last quarter of the ninth century, and in northern Phoenicia at Tell Arqa, near Tripoli, dating to the end of the eighth century or the start of the seventh century.119 More cremations are found in those areas of Palestine under Phoenician influence, at Achziv, datable to the eighth century, and at Athlit, where the cemetery of a Phoenician colony was discovered. All the burials at this site bar one are cremations and date to the


117 For instance at Khaldeh where two cremations are found dating to the eighth century. Saidah, (op. cit. n. 111), 60 and 64-66.

118 Seeden, (op. cit. n. 18), 39-87.

seventh century. The only exception dates to the sixth century when inhumation here again becomes the rule.\textsuperscript{120} None of these cremations are comparable in form or in context. At Khaldeh and Achziv cremations were the exception while they are predominant at Athlit.\textsuperscript{121} At the moment the oldest cremations in a Phoenician context are found not in Phoenicia but in southern Palestine, at Tell Fara, in the Jordan valley, Tell Ajjul and Tell er-Regeish, near Gaza, dating from 950 to the end of the ninth century.\textsuperscript{122} Therefore in the present state of the evidence we are left with the paradoxical situation whereby cremation appears among the Phoenician colonies of Palestine before it is found in Phoenicia itself.\textsuperscript{123} In any case it is interesting to note that cremation appears in the supposed Phoenician colonies of southern Palestine, as it does in the Phoenician colonies of the Central and western Mediterranean.

We have seen that the Phoenicians' northern neighbours practised cremation, as did the Greeks at this time, and it has been suggested that cremation was introduced among the Phoenicians through contacts with the Greeks of the Geometric period.\textsuperscript{124} Cremations there had grown from a few isolated

\textsuperscript{120} Johns, (op. cit. n. 18) 121-152.

\textsuperscript{121} Bienkowski, (op. cit. n. 114), 85.

\textsuperscript{122} W. Culican, "The graves at Tell Er-Regeish," \textit{AJBA}, 2, n°2 (1973), 66-103.

\textsuperscript{123} Bienkowski, (op. cit. n. 114), 84-85. This may be due to the fragmentary state of our knowledge of Phoenician archaeology as a result of the civil war in Lebanon.

\textsuperscript{124} Saidah, (op. cit. n. 119), 146.
cases at the end of Late Helladic III and this practice continued throughout the Protogeometric period and well into the Geometric period, with strong regional and chronological variations.\textsuperscript{125} Snodgrass has observed the progressive expansion of this ritual and found that the first cremations took place on the eastern side of the Aegean and in the islands of the Dodecanese, where, along with Crete, they continued to be strongly represented, probably as a result of the influence of the Hittite and Anatolian culture where cremation had been practised since the mid second millennium.\textsuperscript{126} It is therefore not improbable that it was contact with Greek burial customs which induced some of the Phoenicians to adopt cremation as their preferred form of burial to a greater or lesser extent.\textsuperscript{127} These contacts would have been made largely by the sailors and merchants who encountered the Greeks in places like Crete and Rhodes where their presence has been clearly documented.\textsuperscript{128}

Thus cremation, far from being exceptional in the context of the Iron Age Syro-Palestine area, is attested in a series of


\textsuperscript{126} A. Snodgrass, \textit{The Dark Age of Greece}, Edinburgh 1971, \textit{passim}.

\textsuperscript{127} Gómez Bellard, (op. cit. n. 76), 167.

burials that stretch from Hama in the north, down through Phoenicia, and into the extreme south of Palestine, reaching back far earlier in time than the arrival of the Sea Peoples who, it was thought, introduced this burial rite to the Near East. It may well be that cremation was first adopted by the Phoenicians through the influence of their northern neighbours, although we cannot rule out a possible Greek influence coming from contacts with Crete, Rhodes and other islands.

Gómez Bellard has suggested that the appearance of isolated cremations in a predominantly inhumation context in the cemeteries of Phoenicia may be due to a certain social group who practised this burial rite more because of the type of life they lived than because of their ethnic origin or position within the social hierarchy. This group was made up of those individuals directly involved with commercial activities and navigation. Through their contacts with peoples and cultures outside the Phoenician area they were the first to come into contact with cremation and to appreciate its advantages when it came to transporting the remains of the deceased back to his home. This hypothesis would explain why cremations are less frequent in Phoenicia and are often found surrounded by inhumations as at Khaldeh and Achziv.129

And it is precisely in the Phoenician colonies from Athlit to Trayamar, frequented originally by the most mobile elements

129 Gómez Bellard, (op. cit. n. 76), 171. An interesting example of the return of cremated remains to the home of the deceased is provided by Sophocles’ Electra, where the tutor tells Clytemnestra that the remains of Orestes will soon be sent to her in a bronze urn, lines 713-786.
of Phoenician society, the merchants and navigators involved in long distance trade, that we find cremation used almost exclusively as the burial ritual *par excellence*. It is interesting in this respect that the only areas which differ significantly in their burial practices, during the eighth and seventh centuries, are located in North Africa, at Utica and Carthage. This would seem to indicate that the social or ethnic composition of the initial group of colonists there differed from that of other sites in the central and western Mediterranean. If we are to believe the foundation legend of Carthage, its initial settlers were not drawn from those groups apparently more commonly involved in the journeys to the West, but included representatives of the highest social classes at Tyre, and also a strong Cypriot element. Given that island's emphatic preference for inhumation, perhaps the predominance of that ritual in early Carthage could reflect the influence of Cyprus.\(^{130}\)

The adoption of a burial ritual or grave form among colonists which differs significantly from that practised in their homelands is not confined only to the case of the Phoenician cities and their outposts overseas. Snodgrass has found a similar situation in the necropolis of the Euboean colony of Pithekoussai where many burials take the form of cremations placed in the soil without any protective covering and covered with a small tumulus. Such a grave form is unparalleled.

elsewhere in Greece at this time and may be the result of contacts with other colonizers or to circumstantial pressures which are stronger than the cultural origins of the settlers.\textsuperscript{131}

It has generally been the custom to affirm that funerary practices are the most conservative element in any society's ideological structure and therefore the most resistant to change. Thus any alteration in these rituals must be the result of profound changes in the structure or ideology of the society in question\textsuperscript{132}, and may well indicate the infiltration of that society by new ethnic groups.\textsuperscript{133} However in the vast majority of cases known ethnographically, a society is not defined by only one type of burial practice, but will undertake several different forms of burial, and these forms will often be correlated with the status of the deceased. These different burial treatments may be used to distinguish the rich from the poor, and adults from children, but as African ethnography shows, they may also be reserved for lepers, those killed by lightning, twins, suicides and many other categories impossible to identify archaeologically.\textsuperscript{134} Ethnographically one of the features characterizing burial rites is their speed of change and their relative instability.\textsuperscript{135} If we take the case

\textsuperscript{131} Snodgrass (op. cit. n. 126), 173-176; Gómez Bellard (op. cit. n. 76), 172; D. Ridgway, \textit{The First Western Greeks}, Cambridge 1992, 45-83.

\textsuperscript{132} Ramos Sainz, (op. cit. n. 43) 255-256.

\textsuperscript{133} Hence the initial attribution of the cremation burials in the Levant to the Sea Peoples, Bienkowski, (op. cit. n. 114) 80.


\textsuperscript{135} Ibid, 273.
of Mycenaean and Dark Age Athens, burial changes from multiple burial by inhumation in rock-cut chamber tombs in the Mycenaean period, to single burials and cremations in the Submyceneaen, Protogeometric and Geometric periods, to return to inhumation again in the second quarter of the eighth century, and finally to change back to cremation around 700. But despite the considerable changes in burial rituals there was no invasion of Attica or any considerable immigration during the period of the eleventh to the sixth centuries. The same can be observed in Rome where the evidence suggests that there were no changes in religious belief to explain the switch from cremation to inhumation and these two practices were in no way distinguished either in funerary regulations or by funerary terminology. In the chamber tombs of Trayamar where we gain our earliest evidence of the practice of inhumation by Phoenician settlers in Spain we see the coexistence of inhumation and cremation in the same burial chamber with only a short interval of time separating both rituals. Both inhumation and cremation are housed in the same burial structure, the chamber tomb, and both share the same grave goods, so that the pair of mushroom-lip and trefoil jugs, the plate, lamp and amphorae are common to both burial rites. The only difference seems to be one of wealth, inhumation 4d


with its rich gold jewellery is wealthier than the three cremation burials in the chamber, but then again it is also wealthier than inhumation 4e. The imposing ashlar built chamber tomb is used to house both rituals indiscriminately at Trayamar. Here it seems that we are dealing with a continuity of social and religious practices, the only change being in the treatment of the body itself. While it may be an exaggeration to claim, as Cook does, that such a change may be due to nothing more than a change in fashion,¹³⁸ perhaps the diversity of rites indicates only uncertainty as to the length of time which is appropriate to assign to the corpse before it assumes its definitive form, that is the skeleton. Some leave this function to the earth, while others prefer to activate this process of reduction, perhaps to free the body from the disagreeable phase of corruption.¹³⁹

Funerary ritual - grave goods

As we have seen, the differing treatments given to the deceased in no way affects the grave goods chosen to accompany him. They form a relatively homogeneous group composed mainly of high quality pottery vases, finished with a burnished red slip that marks them out as belonging to Phoenician fine table ware. The most common ceramic form is the mushroom-lip jug, the presence of which is characteristic of the tombs of the eighth and seventh centuries, not just in

¹³⁸ (op. cit. n. 125) 178.

Spain but in Carthage and Sicily too.\textsuperscript{140} This jug, with its small capacity and peculiarly shaped mouth, was obviously intended to contain perfumed oils or perfumes, rather than liquids, so its function in the tomb would be associated with the cleanliness and purification of the corpse, and also the possible pouring of libations, as we find in the classical lekythoi. Its form is typical of the Syro-Phoenician pottery repertory to the extent that it has been called the Phoenician 'calling card.'\textsuperscript{141} It was never found outside the Semitic world, and the form itself disappeared to be replaced by Greek forms of unguentaria which fulfilled the same function in a funerary context.\textsuperscript{142} The mushroom-lip jug is invariably accompanied by another jug, the trefoil jug, which is characterised by a three-lobed mouth. The earliest examples of this form are piriform with a double cylindrical handle and a little bulge on the body on a level with the lower attachment of the handle.\textsuperscript{143} Like the mushroom-lip jug, the trefoil jug is a form which is well represented in the East and it is an important component of the red slip ware assemblage.\textsuperscript{144} It seems to have derived from metallic prototypes and examples of this form in bronze have been found in indigenous, orientalizing contexts in Spain, for instance in the orientalizing necropolis of La Joya in

\textsuperscript{140} For Sicily see Tusa, (op. cit. n. 11) 63-64; for Carthage Lancel, (op. cit. n. 96) 56, and Benichou-Safar, (op. cit. n. 15) 291.

\textsuperscript{141} Bikai, (op. cit. n. 12) 35.

\textsuperscript{142} Jiménez Flores, (op. cit. n. 90) 66.

\textsuperscript{143} Lancel, (op. cit. n. 96) 55.

\textsuperscript{144} Maass-Lindemann, (op. cit. n. 11) 230-231.
Huelva.145 This form was designed to hold liquids, like wine or water, and was probably deposited as some kind of offering in the tomb.146

While both these jugs are pouring forms, food was also represented in the grave goods of this period. The wealth of the deceased determined the number and variety of containers and serving vessels to be placed in the tomb. Richer burials are characterised by the presence of various amphorae, sometimes of very high quality, such as that used as a cinerary urn in burial 4d at Trayamar (Fig. 12).147 The amphorae could also be used to contain liquids, as is shown by the amphora no. 559, in tomb 1 at Trayamar, where a line found on the inside of the vessel indicates the presence of some kind of liquid.148 But generally the most common serving vessel in the Spanish burials is the simple red slip plate which at the Cerro de San Cristóbal was found still containing the bones of a bird or rodent.149 The plate form also served as a support for the saucer-shaped oil-lamp, on which the pinching of the rim in two places close together creates two lips or spouts. Plates

145 Garrido and Orta, (op. cit. n. 19) passim.

146 Negueruela, (op. cit. n. 11) 291.

147 Negueruela suggests that this amphora was covered with a red slip to mark its new sacred function, (op. cit. n. 46) 200.

148 Schubart and Niemeyer, (op. cit. n. 78) 121. Perhaps the liquid in question was milk which is found in some amphorae at Carthage, Benichou-Safar, (op. cit. n. 15) 263.

149 In Carthage some plates found in early tombs still had the remains of fish, birds, small mammals, mushrooms almonds etc, Benichou-Safar, (op. cit. n. 15) 263-264.
are also very well represented among the offerings made outside the tombs, as at Trayamar where a plate was found in tomb 1 deliberately placed on its side at the start of the dromos, leaning against the sealed door of the burial chamber. More plates were found in the offering strata which formed on top of tomb 4.\textsuperscript{150}

With the exception of the lamp, all these pottery forms were used to contain or symbolize offerings of food and drink. It is interesting that this 'funerary service' which shared the same forms as the table ware and pottery used by the living did not include any Phoenician drinking vessels. Instead the Phoenicians preferred to use Protocorinthian kotylai as drinking vessels and these forms are found in tomb 19 at the Cerro de San Cristóbal, in the archaic necropolis at Motya, and frequently appear in Carthage from the end of the eighth century up to the mid seventh century, when they were replaced by cups of Etruscan \textit{bucchero nero sottile} which fulfilled the same function.\textsuperscript{151}

The mushroom-lip and trefoil jugs, plates and amphorae are the most commonly occurring grave goods in Spain. They also form part of the 'canon' of grave goods established in the Phoenician colonies during the course of the seventh century. The only forms of the 'canon' not found in Spain were the

\begin{itemize}
\item \textsuperscript{150} They also appear in a similar context at the Byrsa necropolis in Carthage, Lancel, (op. cit. n. 96) 54, and see below.
\item \textsuperscript{151} Ibid, 58-60. Lancel suggests that the Phoenicians were attracted by the thinness of their sides which gave these vessels an almost glass-like quality.
\end{itemize}
spherical jars or 'chamber pots', so well represented at Motya. In the early Spanish tombs this grave good inventory is not always completely represented. However, with the adoption of the chamber tomb, the grave goods conformed more fully to the canonical form, and at Trayamar this was more or less adhered to, again with the exception of the spherical pots. Apart from this core of pottery grave goods, there were other objects which could also be included, such as the incense burners found in burials 1a and 1b at Trayamar, and items such as the pottery stands, which had no ritual significance but were placed in the tombs to keep the amphorae in an upright position. There was also the occasional occurrence of items linked to Phoenician eschatology, such as the amulets, ostrich eggs and the use of red ochre.

While the picture of an increasingly rigid appearance of certain objects in Phoenician burials of the eighth and seventh centuries might indicate that we are dealing with very well defined notions of death and the afterlife, it would be

152 The canon consisted of a mushroom-lip and trefoil jug, a lamp with its corresponding plate, one or two spherical jars and one or two amphorae. Lindemann, (op. cit. n. 16) 124; Lancel, (op. cit. n. 96) 55.

153 The most common amulets are scarabs, adopted from Egyptian religious beliefs. These would have been worn by the deceased during his lifetime and were buried with him. To continue to protect him after his death they had to be in close contact with him. Hence we find them placed in the cinerary urn as at tombs 3, 16 and 20 at Cerro de San Cristóbal.

154 The ostrich egg is found only in tombs 10 and 19 at Cerro de San Cristóbal and does not become common until the influence of Carthage becomes more generalised in the sixth century. It is associated with ideas of regeneration and birth, an association which is strengthened by the fact that it is frequently used as a container for red ochre, as in tomb 19A at Almuñécar, which also has regenerative connotations. Perhaps for this reason nearly all the cinerary urns at Cerro de San Cristóbal were stained with the substance. Ramos Sainz, (op. cit. n. 9) 105-111.
hazardous to make such assumptions.\textsuperscript{155} Certainly, the almost constant presence of vessels used to contain food and drink, and the frequent remains of actual foodstuffs found in them, might indicate that the Phoenicians were providing for the physical needs of the deceased in the underworld, and believed in the 'bodily' survival of the dead. However it is hard to imagine that they felt cremated bones would need the food and drink placed beside them, and often at Carthage these food offerings were placed outside the sarcophagus or cist containing the body, and thus were physically out of reach of the dead person.\textsuperscript{156} At the same time, although the grave goods represented in the tombs of the eighth and seventh centuries are all taken from the standard household tableware repertory, it is obvious that by placing them in the grave they do have some special significance and in no way represent merely a random sample.\textsuperscript{157} The problem lies in trying to establish the criteria which determined their selection.

\textit{Funerary rituals}

Cicero mentions the celebration of a procession in Nora from the city to the necropolis where ceremonies were carried out which included a banquet or feast.\textsuperscript{158} The remains found at

\textsuperscript{155} Ucko, (op. cit. n. 134) 265.

\textsuperscript{156} Lancel, (op. cit. n. 96) 54.

\textsuperscript{157} Ucko, (op. cit. n. 134) 266; S. Pigott, "Conclusion", in Ucko and G. Dimbleby, (eds.), \textit{The domestication of plants and animals}, London 1969.

\textsuperscript{158} \textit{Pro Scauro}, VI, 11, \textit{Quae quidem suspicio valuit etiam plus ob hanc causam, quod, cum agerent parentalia Norenses omnesque suo more ex oppido exissent.} "It was the time when the people of Nora were holding their festival of the Dead and had all, after their due custom, left the city."
tomb 4 at Trayamar and tomb 1E at Puente de Noy suggest that some kind of funerary feast or libation was also carried out in the Phoenician cemeteries in Spain. In tomb 4 at Trayamar a large quantity of fragments of red slip plates, along with amphorae, lamps and red slip closed vase forms and incense burners, were found in a secondary position in strata which had accumulated inside the burial chamber as a result of the collapse of the wooden ceiling of the tomb. Judging by the gradual increase in the width of the rims of the plates and, following the relative chronology devised by Schubart, these pieces of pottery were placed on top of the tomb immediately after the first burials and continued to be deposited there, even after the tomb was sealed for the last time, right down to c. 600. This succession of items of pottery can only be interpreted as the remains of some kind of cult or ritual act, repeated at intervals, often on a large scale, over a prolonged period of time. None of them have been


160 Schubart and Niemeyer, (op. cit. n. 78) 201-205 and 237. The fact that the first layer of pottery was found directly on the floor of the chamber might indicate that they had been placed inside the tomb by the mourners, immediately after or during the funeral, before the chamber was sealed. A.M. Jiménez Flores, "Ritual funerario y sociedad: el banquete funerario en las necrópolis fenicias de la Península Ibérica," J. San Bernadino Coronil, A.J. de Miguel Zabala, F.J. López de Ahumada del Pino, (eds.), Kolaios. Un periplo de cinco años. Miscelánea de estudios sobre la antigüedad, Seville 1994, 135.

161 The offerings on top of the tomb went from stratum 2 down to stratum 8. The number of items tended to get smaller as time passed. Thus stratum 1 (placed inside the tomb) consisted of 14 plates, an amphora, a closed vase and a pot; stratum 2 had 8 plates, and a lamp; stratum 3, 7 plates, 2 pots, 3 jugs and 2 lamps; stratum 4, 1 plate and 1 amphora; stratum 5, 2 plates. However, from stratum 6 onwards the offerings started to increase again. Stratum 6 had 6 plates, 3 closed vases, a pot and a bowl; stratum 7, 8 plates, 2 amphorae, a pot
found unbroken and, while this may have been due simply to the collapse of the roof of the chamber, the fact that a number of fragments of incense burners were found among the plates can only point to the existence of some kind of ceremonies carried out either next to, or directly on top of, the tomb. In addition to the incense burners, the pottery forms consisted of amphorae, jugs, lamps, and plates which formed the ritual vessel *par excellence*, and taken together, the pottery offerings placed outside the tomb by and large reflect the funerary service included among the grave goods inside the tomb.

A similar ritual involving the breaking of plates was observed at Tomb 1E at Puente de Noy where a large number of fragments of pottery vessels, especially plates, were found at varying depths in the shaft which served as access to the burial chamber. The excavator has suggested that these vessels might have been deliberately broken and thrown down into the shaft while it was being filled up with earth or were used in some kind of secondary ritual after the burial. Some kind of comparable ritual has also been identified in the recent excavations of the early necropolis at Byrsa in Carthage. There, in the simple inhumation graves on the south side of Byrsa, the sand fill nearly always included numerous

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and 2 jugs. The final stratum, 8, was the most spectacular in terms of finds: 347 red slip plates, 2 incense burners and 14 closed red slip vases. Schubart and Niemeyer, (op. cit. n. 78) 151-189; Jiménez Flores, (op. cit. n. 160) 135.

162 Schubart and Niemeyer, (op. cit. n. 78), 202.

163 Molina Fajardo, Huertas Jiménez, (op. cit. n. 91) 58.
fragments of plates and dishes, the latter decorated with a red slip, indicating that they must be assigned to the early period of occupation of Carthage, during the eighth and seventh centuries. The fill also contained fine particles of charcoal. These finds are interpreted by Lancel as the remains of a funerary feasting ritual to which both the charcoal and the receptacles, which were deliberately smashed and thrown into the tomb at the same time as the fill, bear witness.\textsuperscript{164} Further evidence comes from the seventh century cremations at Puig des Molins in Ibiza where in one case red slip plates were thrown onto the pyre while it was still burning and the presence of kid bones suggests an offering of food. Another grave shows signs of possible libations, indicated by the presence of an Etruscan kantharos of \textit{bucchero nero}. In the cemetery at Cruz del Negro in Carmona many of the dishes were apparently deliberately broken, or were pierced with small holes to prevent their further use. In addition to these rituals there is the possibility that the ritual slaughter of an animal probably occurred on the occasion of funerals.\textsuperscript{165}


\textsuperscript{165} Benichou-Safar, (op. cit. n. 15) 278-282. Finds of slaughtered animals have been made in Carthage and in Spain, at tomb 11 at the Punic necropolis at Jardín, near Toscanos, where a goat was found buried in a tomb with the ends of all its limbs missing. Gómez Bellard, (op. cit. n. 76) 202; H. Schubart, H.G. Niemeyer, G. Lindemann, "Toscanos, Jardín y Alarcón. Excavaciones de 1971," \textit{NAH}, 1, Madrid 1972, 34. In the southern necropolis at Tharros graves 4 and 9 revealed goat bones, which in at least one case had been cremated, F. Molina, "La necrópli sur de Tharros," \textit{RSF}, 12, 1 (1984), 81 and 83.
What kind of ritual is represented by these often considerable quantities of pottery? According to Schubart and Niemeyer, at Tomb 4 at Trayamar they are offerings left on top of the tomb after its closure, while Ramos Sainz and Jiménez Flores prefer to see them as the visible remains of funerary banquets held on top of the tomb. In favour of the latter interpretation is the literary evidence from the Bronze Age Levant which refers to the celebration of official symposia or banquets in commemoration of the dead, involving the consumption of large quantities of wine. Certainly the presence of vessels for storage (amphorae), display (bowls), and pouring (jugs) suggest drinking or libations, accompanied by the burning of incense (incense burners). We have seen that the chamber tombs were used to hold burials stretching out over several generations and probably represented family vaults. Judging by the scale and ostentation of the tombs and of the commemorative rituals carried out there, those buried there came from the highest levels of colonial society. Any attempt to identify them must be based on an examination of the social structure of contemporary Phoenicia. Argument continues over who was behind the planning and organisation of the Phoenician expansionary movement - the state, in the form of the Tyrian monarchy, or private enterprise, represented by large commercial firms, generally organised along kinship lines.

166 Shubart and Niemeyer, (op. cit. n. 78), 202; Ramos Sainz (op. cit. n. 9) 115; Jiménez Flores, (op. cit. n. 160) 135.


168 S.F. Bondi, "Note sull'economia fenicia - I. Impresa privata e ruolo dello stato," EVO, 1 (1978) 139-150; idem, "Sull'organizzazione dell'attività
However, given the fact that the foundation of the colonies took place precisely at the time when the kings of Tyre had become practically puppet figures dominated by the Assyrian empire, it is widely thought that it was Phoenician private enterprise which played the major role in the organisation of the whole colonial network. To be a professional trader was a disgrace in Homeric Greece, but not so in Tyre, *the crowned city, whose merchants are princes, whose traders are the most honoured on earth*, according to Isaias, 23, 8. It is clear that the successful traders formed an important and honoured part of Phoenician society and in this context we should probably think of the Phoenician merchant Odysseus claims to have met in Crete who had a house and property in Phoenicia and entertains Odysseus as his guest for nearly a year (*Odyssey*, 14, 285-297). This class of successful merchants can probably be identified with the *hubur* or commercial association which appears in the Tale of Wenamon, controlling a large number of ships which travel between Phoenicia and Egypt. From Ugaritic and biblical texts, these commercial associations seem to have been organised around family groups, or guilds of merchants and were formed to provide the capital for building ships and protection against losses and damage, in a kind of all risk insurance, as Katzenstein says.169

In this light it is tempting to associate the wealth and inceasing ostentation of the burials in south-western Spain

with the western representatives of these commercial firms, whose descendants continued to honour them long after their deaths.

**Conclusions**

What kind of society is reflected in the cemeteries of Andalusia? First of all by their very existence they testify to the existence of permanent settlements situated along the coast of southern Spain, inhabited by settlers who had chosen to live and die in the far west of the Mediterranean. The chamber tombs of Trayamar show that we are not dealing with trading posts occupied by a skeleton population of traders, sailors and some artisans, with the few scattered graves representing the burials of seamen or traders who had met with an accidental death here in Spain. Obviously these large tombs demanded time, energy, planning and capital, and they reflect the presence of people who had decided to make their home permanently in the West, and who left family behind them to perform rituals at their tomb over several generations.¹⁷⁰ When we compare the Trayamar tombs with the large, well constructed dwelling houses at Morro de Mezquitilla we get the impression of orderly prosperous communities, open to the maritime trade routes which brought imported items like the Egyptian alabaster jars, and where the succession of burials in family vaults across several generations provides us with a confirmation of the consolidation of the colonial population.

¹⁷⁰ Ibid, 286.
The cemeteries also reflect clear social stratification. The shaft graves at Almuñécar with their imported Greek pottery, Egyptian alabaster jars and ostrich eggs are relatively wealthy burials reflecting a community which enjoyed access to all the most important trade routes of the Mediterranean. They certainly give the impression of greater wealth than the roughly contemporary cremation necropolis at Motya, with its scarcity of imported materials.\textsuperscript{171} Despite their greater wealth, however, the shaft graves at Cerro de San Cristóbal are still overshadowed by the imposing ashlar built chamber tombs constructed by succeeding generations of settlers. This would seem to indicate that we are dealing with an increasing level of wealth and resources, reflected in the archaeology of the settlements themselves and the evidence of Phoenician activities in Iberia which show the seventh century to be the peak of success and prosperity for the Phoenicians in Spain.

The Phoenicians chose to separate the living from the dead, situating their cemeteries at a distance from the settlements, separated from them by a river, or simply by distance. The problem in identifying such cemeteries is that they are not at all monumental in their external appearance. The number of stelae or other monuments such as tumuli visible and still \textit{in situ} is tiny and we do not know how many were destroyed or

\textsuperscript{171} Contrast the limited occurrence of the imported pottery items at Motya and the use of pottery or stone cinerary urns there with the universal use of the imported Egyptian alabaster vessel as a cinerary urn in the early group of Spanish cemeteries.
removed since antiquity. This makes such cemeteries difficult to identify and in Spain their discovery has generally come about accidentally. Often they were recognised only after their partial destruction, as in the case of Lagos. Such circumstances mean that our current picture of the cemeteries in Spain is bound to be partial. We do not know how many graves have been destroyed and how many are waiting to be discovered. Our knowledge of Phoenician burials in the Iberian Peninsula is based only on roughly fifty graves - twenty at Cerro de San Cristóbal, two at Lagos, four chamber tombs at Trayamar and the small number of burials at Casa de la Viña. These figures are tiny when compared with the volume of burials in the Punic period, with 3,000 at the cemetery at Villaricos in Almería, and a similar number in the Punic levels at Puig des Molins. Based on the small number of burials in the Phoenician period, it has been suggested that "the burials of the eighth and seventh centuries, far from expressing the presence of permanent settlement groups, made up of various generations, are more likely to reflect unstable populations from communities which have not achieved an authentic social consolidation in the region." However the small number of

172 Gras, Rouillard and Teixidor, (op. cit. n. 106) 164. The evidence for the existence of such funerary monuments in Spain is slight. At Tumulus 1 in the Las Cumbres cemetery at Castillo de Doña Blanca in Cádiz, the Phoenician burials are incorporated under the tumulus which probably reflects an indigenous tradition (See below, chapter three). There is a possible tumulus above tomb 1 at Trayamar and the remains of two sculpted lions from Puente de Noy. Simple undecorated stone stelai were placed above three of the sixth century cremation burials in the Puig des Molins cemetery at Ibiza, Gómez Bellard, (op. cit. n. 76), 147. The fact that a funerary cult was carried out above tomb 4 at Trayamar for years after its final closure would indicate that the tomb had to have some kind of marker to enable the celebrants to be sure of its location.

173 Aubet et al., (op. cit. n. 14), 19.
burials so far discovered for the eighth and seventh centuries is not necessarily a faithful reflection of the numbers of settlers in this region at the time. Apart from the obvious hazards of lost or still undiscovered graves mentioned above, there is also the very real possibility that the fifty or so burials corresponding to this period may represent the graves of the upper strata of the colonial society alone, and therefore cannot be used to make any kind of statements about the number of settlers and the nature of colonial society at this time. Given the level of wealth and conspicuous consumption reflected first by the shaft graves, and then most imposingly, by the chamber tombs at Trayamar and Puente de Noy, this is a very real possibility, and one which is shared by contemporary burial practices at Athens, where Ian Morris has convincingly argued that the burials throughout the Dark Age and down to the late sixth century, with only a brief hiatus, represent solely those of the governing elite of Athenian society at the time.174 Certainly, to return to the Phoenician context, the burials in both shaft graves and chamber tombs in Iberia have been shown to be wealthy in comparison with contemporary Phoenician burials elsewhere in the koiné. The alabaster cinerary urns, obtained from Egyptian royal tombs, or as the result of international diplomatic and commercial exchanges in Asia, can hardly be expected to be within the grasp of the farmers, herdsmen and fishermen who made up a large proportion of the settlers in these coastal enclaves, and yet we find them used as cinerary urns almost without exception

174 Morris, (op. cit. n. 136), passim.
throughout the shaft grave burials of the eighth century and early seventh. In the seventh century the evidence for commemorative funerary rituals continuing for over fifty years at chamber tomb 4 at Trayamar clearly represents a group aware of its origins in the region and eager to commemorate them with often lavish rituals.\textsuperscript{175} In fact the very existence of formally defined cemeteries associated with the Phoenician enclaves may have status implications. It is possible that areas formally set aside for the exclusive disposal of the dead may reflect the existence within society of unilineal corporate descent groups, tracing their lines from the buried ancestors, and using the cemetery as a symbol to legitimise the monopolisation of access to vital resources.\textsuperscript{176}

In the context of the Phoenician settlements in Spain such a group would be the western representatives of the great commercial firms, organised in family groups, who played a vital role in the Phoenician expansionary movement, and whose burials we undoubtedly see in the chamber tombs at Trayamar and Puente de Noy.

But if the fifty or so burials discussed so far represent solely those of the elite, where are the burials of the lower strata of society? There is some evidence that there may well have been a number of simpler and less grandiose shaft graves in

\textsuperscript{175} Jiménez Flores, (op. cit. n. 160) 127-143.

the area around the chamber tombs of Trayamar. However, given the level of wealth associated with the shaft graves in other cemeteries in the region, these burials could still represent those of an elite group in society, either a sub-elite, or simply elite burials which predated the change in burial rite from shaft graves to chamber tombs. For the graves of the humbler elements of colonial society we have to look to the periphery of the western system, at Puig des Molins in Ibiza and Rachgoun in Algeria.

While the large Punic cemetery at Puig des Molins in the city of Ibiza has been known for over a century, the burials of the early period of the colony at Ibiza were discovered only in the 1980s. These consisted of some 38 cremation burials, dating from the second half of the seventh century to the early sixth century. The deceased was generally cremated in a common funeral pyre, or *ustrinum*, and then the cremated remains were placed in holes in the rock, some natural, some artificially created, or in urns, or perhaps sometimes receptacles of perishable material, and then covered with stones and earth (Fig. 8 F). The most elaborate burials were a

177 Schubart and Niemeyer, (op. cit. n. 78), 130. The existence of these burials is inferred by descriptions given by the drivers of the bulldozers which destroyed them.

number of fossa graves, in some of which the deceased was cremated in situ and then buried. Despite the simplicity of the burials, however, there are signs that several were covered with simple undecorated stone stelae, or arrangements of stones to mark the position of the grave. No alabaster urns were found and the grave goods were scanty and generally poorer than their equivalents on the Peninsula, consisting of small personal objects, such as amulets and the occasional piece of jewellery, usually silver. There is no sign of the funerary service which was so striking a feature of the grave goods in the Phoenician cemeteries in Andalusia. Here out of 38 burials the grave goods are restricted to five oil bottles, one lamp, two small bowls and a hand made pot. The cinerary urns are pottery jars, all of the so called Cruz del Negro type.\textsuperscript{179} Their use as cinerary urns is striking in this context given that they are frequently used for this purpose in indigenous cemeteries in southern Spain. According to Gómez Bellard, the cremation burials in the Cruz del Negro urns are the oldest, dating to the second half of the seventh century, while the fossa burials and the cremations placed in the rock are slightly later. However, in total all the burials cover a period of no more than fifty years, or two generations, and correspond to the first years of the Phoenician settlement at the city of Ibiza. The analysis of the cremated remains points to a society of pioneers which had not yet achieved

\textsuperscript{179} Also known as neck amphorae, they have a globular or oval body, two double handles and a high carinated neck, and are often decorated with dark bands and stripes on the body. C. Gómez Bellard, "Céramique," in E. Lipinski, (ed.) \textit{Dictionnaire de la civilisation phénicienne et punique}, Brepols 1992, 96-101, and see above chapter one.
demographic stability. While the bones represent women and men in roughly equal amounts, the cremation burials at Puig des Molins belong to individuals who were not much more than 30 years old at the time of death, with the majority of burials representing children of less than 6 years old and adults between 20 and 30. Although the high level of infant burials is to be expected, the predominance of deaths among adults from 20-30 years old and the lack of individuals who were much more than 30 is surprising, especially since we can exclude epidemics and violent deaths as a possible cause, as the burials cover a period of some 50 years. Perhaps this demographic structure may reflect the burials of the first generations of settlers at Ibiza who, judging by the evidence of the cremations, were made up of families with young children.180

A similar form of burial to that practised in the oldest levels of the cemetery at Puig des Molins is found at the necropolis at Rachgoun in Algeria. Rachgoun is a small island 2 km from the Algerian coast, facing the mouth of the river Tafna. Despite its distance from Iberia, the similarity in both form and decoration of the pottery found in the island's settlement and cemetery points to close links with Spain, and particularly with Castillo de Doña Blanca and Gadir.181 On the north side of the island the so-called nécropole de phare was excavated in

180 F. Gómez Bellard, "Estudio antropológico," in C. Gómez Bellard, (op. cit. n. 76) 186-200. For the history of Phoenician settlement on Ibiza see above chapter one.

181 For a fuller discussion see above chapter one and below chapter three.
the 1950s and contained some 114 burials: 101 cremations, 9 inhumations and 4 cases where both rites were found juxtaposed. The inhumation burials were of children, all less than 8 years old. The cremations were of two types. The first consisted of cremations in cinerary urns, where the bones were separated from the ashes and put into urns, many of the *Cruz del Negro* type, and then placed upright in a hole in the ground, propped up by stones. The urns were generally covered with a small stone or a plate, and sometimes contained items of jewellery and weapons. The second type of cremation burial involved cremation in a shallow pit directly at the place of burial. The remains may have originally been put into some kind of basket or left without any container.182 Personal items were burnt with the deceased and consisted of jewellery, amulets and weapons. Burials of both types were accompanied by a variety of pottery grave goods. Red slip mushroom-lipped and trefoil jugs, as well as plates and bowls were found, along with oil bottles, tripods and the occasional animal-shaped *askoi*. There was also much hand-made pottery, some imitating Phoenician forms, while other items, showed a marked resemblance to indigenous Iberian forms. The cemetery dates from the second half of the seventh century down to the close of the sixth century and served the small settlement located on the southern side of the island.

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In their pottery Rachgoun and Ibiza are clearly part of the southern Andalusian cultural system, centred round Gadir and the enclaves along the Costa del Sol. However, while their pottery seeks its inspiration from this region, their burial practices are quite distinct. The simple cremations buried in shallow cavities in the rock have few obvious similarities with the shaft graves and chamber tombs of Granada and Málaga and are far more reminiscent of the archaic cremation cemetery at Motya and the recently discovered ninth-eighth century cremation cemetery from Tyre itself. The differences are striking too in the level of wealth reflected in the grave goods and burial structure. The number of grave goods was noticeably poor among the cremations at Puig des Molins, where even the pottery was very scarce. In Rachgoun they are more numerous but still consist basically of pottery, with none of the imported Greek items that we find at Almuñécar. There is no evidence of spectacular wealth at Puig des Molins and the nécropole de phare and nor are we likely to find any. The settlements at Ibiza and Rachgoun were outposts, one commercial and the other military (judging by the weapons found in the burials at Rachgoun). Although Ibiza was destined to become a large and thriving port city from the late sixth century onwards under the hegemony of Carthage, the early years of settlement at the site appear to have been precarious. The pottery, which consists wholly of imports from southern Spain, points to a group of settlers sent out by the Phoenician enclaves there to found a settlement which

183 Seeden, (op. cit. n. 18) 39-82.
would tap the resources of the indigenous communities in Catalonia and southern France, as well as act as a stopping point for traffic from Sardinia, Sicily and the eastern Mediterranean. The early settlers were a pioneering community, occupying a few isolated points on the south coast, who had not yet expanded to settle and exploit the fertile territory of the island which was to provide their successors with a profitable trade in agricultural surpluses, in locally produced amphorae. As for Rachgoun, it was obviously reasons of strategic necessity that lead to its habitation from the seventh to fifth centuries. The island is extremely inhospitable, with a very thin soil cover and poor vegetation. Although when it was first settled its vegetation cover must have been denser, the needs of the community, both domestic and funerary, must soon have exhausted the trees on the island and the settlers would have been frequently dependant on imports of wood and other items of basic necessity. However, its position in a large bay facing the mouth of the river Tafna enabled it to control the coast on both sides, as well as any traffic up and down the river itself. The author of the Periplus of Scylax (111) refers to the island as ακρα, the fortress, and only its strategic position explains why it was occupied for two centuries. Its abandonment in the fifth century may be linked with the foundation of the town of Siga,

184 C. Gómez Bellard, "Asentamientos rurales en la Ibiza púnica," Los fenicios en la Península Ibérica, 177-192. For a more detailed discussion of the early history of Ibiza see above chapter one.

185 Vuillemot, (op. cit. n. 19) 36-37 and (op. cit. n. 109) 105.

on the mainland facing the island, which offered far more favourable conditions for settlement and urban development. Taken together, the relatively modest levels of wealth and the simple graves found at Ibiza and Rachgoun point to sectors of society with a far less elevated social position than those buried in the shaft graves and chamber tombs of Málaga and Granada. They also suggest that in the latter regions the graves of their less socially privileged counterparts are still to be discovered or have not yet been correctly evaluated.

The cemeteries at Ibiza and Rachgoun have been discussed in some detail. However they are not the only ones in the Far Western Phoenician koiné which differ in terms of wealth and burial structure from their counterparts in the Costa del Sol. The sixth century burials at Herrerías in Almería, close to the ancient silver, copper and lead mines in the Sierra de Almagrera, consisted of cremations placed in holes up to 1 m deep. Often the bones were found in urns, either crude handmade jars, or wheelmade oval urns, decorated with painted bands. The grave goods were small metal objects found with the handmade urns, or decorated ostrich eggs, small pieces of jewellery, and two-spouted lamps and plates (some red slip), accompanying the wheelmade urns. The cemetery, which dates probably to the first half of the sixth century, may well be a mixed Phoenician and indigenous burial ground, given the varying cinerary urns and grave goods. Siret suggested that it could represent the final resting place of those involved in the exploitation of the rich mineral ores in
the Sierra Almagrera.\textsuperscript{187} The cemetery at Frigiliana, in the province of Málaga, close to the Phoenician sites of Toscanos and Morro de Mezquitilla, is similar to those at Ibiza and Rachgoun.\textsuperscript{188} Here the burials are cremations in urns, placed in small holes in the ground and covered with a stone or plate. The cinerary urns are of various types, including \textit{Cruz del Negro} and pithoi, and they contain the grave goods, which consist of scarabs, tweezers, and fibulae (Fig. 13). The burials at Frigiliana date throughout the sixth century and have been variously interpreted first as Phoenician by their excavators, and then as "indigenous" Tartessian, despite the fact that Tartessian culture has its focus in south-west Spain, far away from the coastal plain of Málaga which was densely occupied by the Phoenicians.\textsuperscript{189}

The cemeteries at Boliche and Frigiliana have not received much scholarly attention, largely because they are difficult to fit into the existing paradigm of Phoenician colonisation in Iberia. With their cremation burials, often in \textit{Cruz del Negro}

\textsuperscript{187} Gómez Bellard, (op. cit. n. 76) 170; M. Osuna Ruiz and J. Remesal Rodríguez, "La necrópolis de Boliche (Villaricos, Almería), Archivo de prehistoria levantina, 16 (1981) 373-416; L. Siret, Villaricos y Herrerías. Antiguiedades púnicas, romanas, visigóticas y árabes, Memorias de la Real Academia de Historia, Madrid 1908.

\textsuperscript{188} A. Arribas and J. Wilkins, (op. cit. n. 19) 185-245.

\textsuperscript{189} A recent cluster analysis of the Frigiliana cemetery came to the conclusion that it most closely resembled the burials at Tumulus I, at Las Cumbres, the cemetery associated with the Phoenician settlement at Castillo de Doña Blanca, which seems to contain the burials of both the colonists and local inhabitants incorporated into the settlement. Despite this, the study concluded that Frigiliana was indigenous. J.M. Martín Ruiz, J.A. Martín Ruiz and J.A. Esquivel Guerrero, "Análisis arqueológico y estadístico de la necrópolis del Cortijo de las Sombras (Frigiliana, Málaga)," in F. Wulff Alonso and G. Cruz Andreotti, (eds.), \textit{Historia antigua de Málaga y su provincia}, Málaga 1996, 167-175.
urns, they bear far too close a resemblance to the 'Tartessian' cemeteries of the Guadalquivir valley and for that reason have been classified as mixed (Boliche) or indigenous (Frigiliana), influenced through contact with Phoenician colonists, as the result of a process of acculturation, into adopting and imitating Phoenician burial rites.\textsuperscript{190} The problem in classifying Iberian, and Phoenician burials and distinguishing between them, is that we have no indigenous burials from the centuries immediately preceding the Phoenician presence in Spain to enable us to establish what was the basic burial practice of these people. Phoenician burial practices also vary considerably, as we have seen. When burials do appear in the Tartessian cemeteries of the Guadalquivir valley and associated regions, they display a bewilderingly wide variation of rituals and it is impossible to pick out and identify the typical indigenous burial rite of this period.\textsuperscript{191} According to the most widely accepted interpretation of the cemeteries in southern Spain, Phoenician burials are limited to those associated with the colonial settlements on the coasts of Cádiz, Málaga, Granada and Almería, while everywhere else the burials are indigenous. Limiting the dead Phoenicians to this area also restricts the contacts of the living Phoenicians with the Iberians to the strictly commercial. Thus the colonial enclaves were founded and existed largely to


facilitate and increase trade with the inhabitants - and by trade is meant trade in silver. This model for Phoenician settlement in Spain is one which is based on the traditional view of Phoenician colonisation in general as being wholly commercial in its objectives, with no interest in any of the factors which played so prominent a role in the contemporary Greek colonial movement - agricultural deficit, overpopulation, social tensions, etc. The problem with this model is that it is becoming increasingly inadequate in the face of the accumulating evidence that contacts between the two sides were far more intense than has traditionally been thought. The obvious example is the settlement at Castillo de Doña Blanca in Cádiz, with its associated cemetery at Las Cumbres, which are discussed in detail in chapter three. Here the site was initially thought to be an indigenous settlement which acted as the continental 'foothold' of the island city of Gadir. This was despite the presence of Phoenician pottery in large quantities and the wholly oriental construction techniques and agricultural practices there. The significant representation of indigenous pottery at the site, and the cemetery, which showed both Phoenician and indigenous settlers sharing the same burial space under a communal tumulus, with burial rites which looked suspiciously like those in the Guadalquivir valley, did not fit the picture of strictly commercial contacts between the two sides. In Carmona, at the heart of the Guadalquivir valley, recent excavations by María Belén in the centre of the town have uncovered a complex of buildings, dating from the seventh to the sixth centuries, which were wholly oriental in their construction techniques
and decoration. One of the rooms in the oldest of the buildings contained four carved ivory spoons and three decorated pithoi placed at the three corners of the room. The most elaborately decorated of these portrayed a procession of winged griffins interspersed with floral motifs, while the others were painted with flowers and lotus buds (Fig. 14). Analysis of the clay from the pithoi showed that they were manufactured in Carmona itself, obviously by someone fully conversant with oriental decorative traditions, a Phoenician craftsman or someone trained by one, and the whole complex of buildings has been interpreted by its excavator as a Phoenician shrine, given the consistently and unambiguously oriental nature of its form and finds. A Phoenician religious building in Carmona was obviously built by, and to serve, Phoenicians resident in the city, and the existence of such a community would clarify the reason for the persistence of Carmona’s strong and lasting links with Phoenico-Punic culture down to the late Roman Empire. For our purposes the interest of these finds lies in the fact that the possible sanctuary building is located in the area of the city closest to the cemetery at Cruz del Negro. This cemetery, which was first excavated in the 1890s by Georges Bonsor, was interpreted by him as wholly oriental, serving the Phoenician agricultural colony of Carmona, but was reinterpreted as an indigenous orientalising burial ground,


193 For a more detailed discussion of this issue see chapter four below.
given the impossibility of imagining Phoenicians resident so deep in the heartland of Tartessian territory.\textsuperscript{194} In fact the cemetery at Cruz del Negro displays the same burial rites, cremations placed in urns (the characteristic two-handled globular or oval decorated amphorae which were named after the site) and buried in shallow holes in the ground, as we see in Puig des Molins, Rachgoun and Frigiliana (Fig. 15). It is a burial rite which is found in Motya, and also in the Phoenician homeland. Dating from the end of the eighth century at the earliest, down to the sixth century, the fifty-five cremation burials at Cruz del Negro contained some spectacular grave goods, chiefly in the form of decorated ivory combs and other small toilet items. These objects are thought to be the work of a local workshop which also produced similar examples found in Carthage and the Heraion at Samos, where they are dated to 640-630.\textsuperscript{195} The presence of such typically Phoenician items as decorated ostrich eggs, swivel seal rings, and especially the large quantity of deliberately broken Phoenician pottery, echoing the funerary rituals at Trayamar and Puente de Noy, was not enough to convince the majority of scholars that the cemetery at Cruz del Negro was Phoenician. Instead, the burial ritual of cremations in urns, and the fact that several of the cinerary urns were handmade, meant that it had to be an indigenous cemetery, while the large number of Phoenician products simply indicated "un alto poder de


\textsuperscript{195} M.E. Aubet Semmler, Marfiles fenicios del bajo Guadalquivir I, Cruz del Negro, Studia archeologica 52 (1979); B. Freyer Schauenburg, "Kolaios und die west phönizischen Elfenbeine," MM, 7 (1966) 90-108.
adquisición" on the part of those buried there. This interpretation does not take into account the similar burial rites and cinerary urns in Puig des Molins, Rachgoun and Frigiliana, as mentioned above. To back up the point that cremation burials in urns in shallow cavities in the ground is a characteristically Tartessian burial practice, we are forced to make Rachgoun an indigenous Iberian cemetery, with all the problems this involves (see chapter one), and to ignore its occurrence in areas outside the Iberian Peninsula. In the case of the cremations at Puig des Molins we cannot assign them to an indigenous population since, as far as we know, the island was unoccupied at the time of the establishment of the Phoenicians there. Frigiliana is situated in an area heavily colonised by the Phoenicians, and to make it indigenous we have to suppose that the local inhabitants chose to follow burial rites of their south-western neighbours hundreds of kilometres away. All in all it is facile to judge the ethnicity of burials on their location or their cinerary urn. Not every colonist could afford imported alabaster urns and the use of Cruz del Negro urns might indicate the burials of those with a more humble social position than the great traders buried in Trayamar and Almuñécar, as we can see in the case of Ibiza. The presence of handmade indigenous ware among the burials might suggest a mixed population or simply the use of local items in the grave goods. To judge accurately the ethnicity of those buried in the cemeteries of the orientalizing era in Andalucía and Extremadura it it necessary to examine

critically the burials in their entirety, in terms of burial rite, grave goods and historical context. Even then, given the lacunae that exist in our knowledge of the burial practices of both sides, the whole area is bound to continue to be controversial. 197

197 For instance the orientalizing necropolis at Medellin, Extremadura, which has many similarities with the Frigiliana and Cruz del Negro cemeteries. Is it wholly indigenous, or does it represent the burials of Phoenicians working on the gold and tin routes of the Iberian north-west, or is it a mixture of both? M. Almagro Gorbea, "La necrópolis orientalizante de Medellin," I-IV Jornadas de arqueología fenicio-púnica, Ibiza 1991 233-243. A neat, if rather extreme, solution to the problem of the interpretation of the burial evidence in this period is that of Escacena, who interprets the complete lack of burial evidence in southwestern Iberia, in the periods both immediately preceding and following the Phoenician presence, as the result of indigenous burial practices which left no archaeological record - such as exposure of the corpse. The burials of the orientalizing period would then all belong to the colonists. J.L. Escacena Carrasco, "Los turdetanos o la recuperación de la identidad perdida," in M.E. Aubet Semmler (ed.), Tartessos, 297-338.
Figure 1: Indigenous and Phoenician settlements in eastern Andalusia.
Source: Aubet Semmler, 1994, fig 84.
Figure 2: Grave 19B of the Cerro de San Cristóbal cemetery at Almuñécar, showing the alabaster cinerary urn, and grave goods which consisted of mushroom-lipped and trefoil red slip juglets, and two Protocorinthian kotylai, along with an amphora, plate and iron nail (not shown). Source: Gras, Rouillard and Texidor 1991, fig.41.
Figure 3: Grave goods from grave 20 at Cerro de San Cristóbal, Almuñécar. Source: Aubet Semmler 1994, fig.97.
Figure 4: Grave goods from grave 13 at Cerro de San Cristóbal, Almuñécar. Source: Ramos Sanz 1986, fig.109.
Figure 5: Alabaster cinerary urn and swivel scarab-ring from Lagos, grave 1a. Source: Jiménez Flores 1996, fig.12.
Figure 6: Settlements at Morro de Mézquitilla. Chorreras and cemetery at Trayamar. Source: Jiménez Flores 1996, fig.4.
Figure 7: Mushroom-lipped juglet from Casa de la Viña and trefoil juglet from Vélez-Málaga. Source: Ramos Sanz 1986, figs. 111 and 112.
Figure 8: Burials at Cerro de San Cristóbal (Almuñécar), Trayamar, Puente de Noy (Almuñécar), Villaricos and Ibiza. Source: López Castro 1994, Fig. 8.
Figure 9: Grave goods from Trayamar Tomb I. Source: Aubet Semmler 1994, fig. 101.
Schematic disposition of the bodies and grave goods according to the description of the excavation report.

Objects from the tomb of Yada'milk:
1. Bronze bracelet
2. Gold ring
3. and 4 iron hilts
4. Mushroom-lipped jug
5. Bronze handle
6. Lamp (fallen onto the ground)
7. Phoenician urn with lid (broken)
8. Silver cup
9. Remains of a bronze necklace
10. Emerald cylinder
11. Large cylindrical vase (amphora?)
12. Protocorinthian Skyphos
13. Large amphora
14. Small round electrum beads
15. Phoenician urn with lid and support
16. Trefoil jug
17 and 18. Cooking pots
19. Small round electrum beads
20. Circular gold box
21. Discoid pendant with inscription (the so called Carthage Medallion)
22. Granulated Gold pearl
23. Cylindrical gold amulet carrier
24. Ivory scarab mounted in gold and set in a large silver ring

Figure 10: The tomb of Yada'milk in Carthage. Source: Gras, Rouillard and Texidor 1991, fig.8.
Figure 11. The seventh century B.C. tomb from Ghajn Ouajjed near Rabat in Malta. Source: Gras, Rouillard and Teixidor 1991, fig 9.
Figure 12: Inventory of the contents of Tombs 1, 2 and 4 at Trayamar. Source: Ramos Sanz 1986. Fig.107.
Figure 13: Cinerary urns from graves 1, 2, 3 and 4 at Cortijo de Las Sombras, Frigiliana, Málaga. Source: Arribas and Wilkins, 1969, fig 3.
Figure 14: Pithos with orientalizing decoration from Carmona. Source: Belén and Chapas 1997, fig. 6.4.
Figure 15: Burial from Cruz del Negro, near Carmona, Seville. Source: Jiménez Flores 1996, fig 22.
Gadir

Cádiz was one of the most famous cities of antiquity. Celebrated for its wealth, high spirits and the success of its commerce, its opulence was legendary. Renowned too was its Herakleon, where the god was worshipped with a Phoenician ritual, and its oracle which was consulted by such notables as Hannibal and Julius Caesar.¹

But although Roman Gades was a famous and celebrated city, not much is known about its predecessor, the Phoenician GDR or Gadir.² Three thousand years of continuous occupation and the use of the ruins of the ancient city as a quarry since late antiquity have obliterated all the ancient landmarks and rendered large scale archaeological investigations of the site impracticable. The location of the earliest Tyrian colony is still a subject of controversy, as is the configuration of the site itself. While the ancient Cádiz was located on one of a series of small islands, situated in the bay of Cádiz, three millennia of sedimentation and marine erosion mean that the

¹ A. García y Bellido, "locosae Gades," BRAH, 129 (1951) 100. Its reputation for high spirits was due largely to the notorious puellae gaditanae, exotic dancers who were apparently indispensable to the success of a Roman party: see among others, Pliny, Ep. 1, 15 and Juvenal, Sat. XI, 162-164.

modern city now forms a long, narrow peninsula attached to the mainland.³

So unlike the Phoenician settlements east of the Straits of Gibraltar which were largely ignored by ancient authors and where archaeology is almost exclusively our sole source of evidence, in the case of Cádiz, its Atlantic location, on the edge of the then known world, and the fame of the city in Hellenistic and Roman times means that we have quite a number of references to it, and especially its shrine dedicated to Hercules, which provide us with valuable information regarding the city's origins and foundation.⁴

All the ancient texts agree in making Gadir a Phoenician settlement, founded at the very end of the twelfth century, after the fall of Troy. Strabo is the first author to date the foundation of the city which he puts sometime after the fall of Troy (1,3,2). Velleius Paterculus, (1,2,3) writing in the first half of the first century A.D., tells us that: "About this time, also, the fleet of Tyre, which controlled the sea, founded in the

³ The existence of a number of islands is reflected in the plural form of the name given to the city by the Greeks, ta gadeira, and by the Romans, Gades, Gadium, where the noun is a feminine plural. García y Bellido, (op. cit. n. 1), 77-79.

⁴ The location of the city on the Atlantic ocean, facing regions the identity of which remained vague and nebulous to the Greeks, meant that a number of legends were located there: for instance, Atlas, the garden of the Hesperides, Medusa, Gerion and Habis, as well as the nostoi of some of the Homeric heroes. The expansion of the Greek world, with the start of the colonisation movement from the eighth century onwards, and their growing familiarity with the Central Mediterranean, meant that these legends, many of which had originally taken place in Italy, were now moved further west. J. Millan, Cádiz y el mar, unpublished Ph.D. thesis, University of Seville 1995; C.G. Wagner, "Tartessos y las tradiciones literarias," RSF 14 (1986) 201-228; D. Plácido, "Realidades arcaicas de los viajes miticos a Occidente," Gerión 7 (1989) 41-51.
farthest district of Spain, on the remotest confines of our world, the city of Cádiz, on an island in the ocean separated from the mainland by a very narrow strait." These events were placed during the time of the Heraclids, eighty years after the fall of Troy. As the fall of Troy was dated to 1184/3, according to Eratosthenes and Apollodorus, then the foundation of Gadir eighty years after the end of the Trojan war would mean that the city was founded in 1104/3. Velleius (1,2,3) goes on to say that Utica on the North African coast, another Phoenician foundation, was only slightly later, founded "a few years" after Gadir.

Pliny in his *Natural History* tells us that Gades was founded by Tyre, and later on says that the temple of Hercules in Lixus was slightly earlier than that in Gadir, and the foundation of the temple of Apollo at Utica, and by inference, that of the city itself, took place 1178 years before his own time. (5.17.76; 16.40; 19.63) As his *Natural History* was dedicated to Titus in the year of his sixth consulship, in 77 A.D., that would place the foundation of Utica to 1101, a date which coincides with that given by Velleius who placed the foundation of Utica a few years after that of Gadir in 1104/3.

*De mirabilibus auscultationibus* attributed to Aristotle and written at an unknown date, says that Utica was founded 287 years before the foundation of Carthage. Therefore if we take

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5 Eratosthenes, F. Jacoby, *Die Fragmente der griechischen Historiker*, Leyde 1923-, II, B, n° 241 F 1a; Apollodorus, idem, II, B, n° 244 F 61.

the date given by Timaeus for the foundation of Carthage, which he assigns to 814, that would give us a date of 1101 for the foundation of Utica which again coincides with the date given by Velleius. Finally Pomponius Mela, a Spaniard writing around 43 or 44 A.D., dates the foundation of Gadir vaguely to the years immediately after the fall of Troy (III, 6 (46)).

These texts by five different authors display a remarkable coherence in their dating of the foundation of Gadir, Utica and Lixus to the final years of the twelfth century, but this very unity has served to render their testimony suspect. According to G. Bunnens, the dating of the start of the Phoenician presence in the extreme west of the Mediterranean to shortly after the end of the Trojan war is the result of an intellectual controversy about the scientific and historical veracity of the Homeric poems. As Strabo decided to join the side of those who defended the Homeric poems as sources of real historical value, then in order to claim the Phoenicians as a possible source of information for Homer, he was forced to place them among the legendary navigators who had travelled the world immediately after the fall of Troy.7 The association of the Phoenicians with the travels of Hercules in the extreme West, which we find several times in the work of Strabo, leads to the attribution by Velleius of the date of the return of the successors of Hercules, the Heracleides, to Greece, eighty years after the fall of Troy, to the foundation of the

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7 Bunnens, (op. cit. n. 2) 188-200 and idem, "Le rôle de Gadès dans l'implantation phénicienne en Espagne," in Los fenicios en la Península Ibérica, 188-189.
Phoenician foundations in the West. Thus these texts should be seen as the result partly of a hellenistic intellectual controversy and partly also of a desire to attribute a remote and heroic past to cities which, at least in the case of Gadir, were flourishing and prosperous when these texts were written in the first century A.D.

However, although the date assigned to the foundation of Gadir by Strabo and the authors who followed him has been shown to lack a historical basis, this does not necessarily have to invalidate his account of the circumstances of that foundation: "In telling stories of the following sort about the founding of Gades, the Gaditans recall a certain oracle, which was actually given, they say, to the Tyrians, ordering them to send a colony to the Pillars of Heracles: the men who were sent for the sake of spying out the region, so the story goes, believed, when they got near to the strait at Calpe, that the two capes which formed the strait were ends of the inhabited world and of Heracles' expedition, and that the capes themselves were what the oracle called "pillars," and they therefore landed at a place inside the narrows, namely where the city of the Exitanians now is; and there they offered sacrifice, but since the sacrifices did not prove favourable they turned homeward again; but the men who were sent at a later period went on outside the strait, about fifteen hundred stadia, to an island sacred to Heracles, situated near the city of Onoba in Iberia, and believing that this was where the Pillars were they offered sacrifice to the god, but since again the sacrifices did not prove favourable they went back home; but the men who
arrived on the third expedition founded Gades and placed the
temple in the eastern part of the island but the city in the
western."8 This account was based on information he received
from the inhabitants of Gadir itself, "In telling stories of the
following sort about the founding of Gades, the Gaditans recall
a certain oracle ...", and his source here may well have been the
philosopher Posidonius of Apamea who visited Gadir c. 100 to
investigate the Atlantic tides.9

Bunnens rejects this passage as merely "une fable grecque",
stating that the whole narrative is designed to support the
idea that the pillars of Hercules were located in Gadir. He also
rejects the idea that the Phoenicians founded two colonies
before their final successful attempt in Gadir, and concludes
that if the narrative is indeed the work of some Gaditans then
these must have been hellenised.10 While it is true that the
whole narrative bears a strong Greek influence, with the
Phoenician colonisation of the far West taking place following
the prompting of an oracle, just as Delphi encouraged colonial

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8 III, 5,5, C169-70. Translation, H. L. Jones, The Loeb Classical Library,
London 1968.

9 Strabo tells us later that Posidonius regarded the story of the foundation of the
city as a "Phoenician fiction", III, 5, 5 C170, so it was obviously one with which
Posidonius too was familiar. The text is included among the fragments of
Posidonius by F. Jacoby, (op. cit. n. 5) II, A, n° 87 F 53, although it is
sometimes attributed to Timaeus, for instance by E. Hübner, "Gades", RE, VII/1,
1910, col. 447. See also Bunnens, (op. cit. n. 2) 195.

10 (Op. cit. n. 2), 194. See also idem, "Aspects religieux de l'expansion
phénicienne," Studia Phoenicia IV, Religio Phoenicia, Namur 1986, 122. It is
interesting, in this context, that while Bunnens regards the foundation legend of
Gadir as Greek, for the Greeks it was a Phoenician lie (Strabo 3, 5, 5).
foundations in the Greek West\textsuperscript{11}, nevertheless every area mentioned in the text as having been visited by the Tyrian expedition shows evidence either of direct Phoenician settlement or of strongly Phoenician-influenced, orientalizing native occupation.

The first area where the the Tyrian delegation tried to settle was the "city of the Exitanians," otherwise known as Sexi, the modern Almuñécar in the province of Granada. This site was occupied in the eighth century by a flourishing Phoenician settlement with a necropolis which yielded spectacular grave goods, demonstrating strong links with the eastern Mediterranean.\textsuperscript{12} However Sexi was situated in a very sparsely populated area without any appreciable mineral resources and one which was separated from the resources of the hinterland by a chain of mountains running parallel to the coast. Thus if we accept that Gadir was founded primarily to tap the rich silver mines of Tartessos, then the area around Sexi would indeed, as Strabo's story says, have been unsuitable for such a purpose.\textsuperscript{13}

The second abortive attempt at settlement was made at "an island sacred to Heracles, situated near the city of Onoba in


\textsuperscript{12} For details of this site and its cemetery see chapters 1 and 2 above.

\textsuperscript{13} C. G. Wagner, "Gadir y los más antiguos asentamientos fenicios al este del estrecho," \textit{Actas del congreso internacional el estrecho de Gibraltar, Ceuta 1987}, Madrid 1988, 421.
Iberia." The town of Onoba is the modern town of Huelva, capital of the province of the same name. This settlement was situated in the heart of the mineral rich area of south-western Spain, the Iberian pyrite belt, one of the most important metallogenic provinces in Europe, with large quantities of copper, silver, gold and iron. It was home to a large, thriving and organised community who controlled the extraction of metals and the metal trade in this part of the Peninsula. In fact it may well have been the very size and organisation of the settlement at Huelva which prevented the Phoenicians from establishing themselves in a separate settlement there, even though the site they had chosen, on an off-shore island at the mouth of the Tinto and Odiel rivers, which combined good defensive conditions with easy access to the hinterland, was one which was characteristic of most Phoenician sites in the West and was similar to that eventually occupied by Gadir.

Strabo tells us that the island near Huelva where the Phoenicians attempted to settle was dedicated to Hercules. In the area of the "Barra de Huelva," in the sea off Huelva, several small statues of Syro-Egyptian divinities of the kind known as

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the 'smiting god' have recently been discovered. While the stylized nature of such representations makes it difficult to identify with precision the individual deity being represented, it is tempting to associate the Huelva statues with Melqart, the Tyrian god whose temple was established in Cádiz, given their similarity to those from Cádiz, and Strabo's statement that an island near Huelva was dedicated to Hercules, the Greek syncretic representation of the Phoenician Melqart. This would indicate that there may well have been a shrine dedicated to Melqart off the city of Huelva, perhaps on the island of Saltés or nearby.

All this evidence shows that the Gaditan informants of Strabo or Posidonios, hellenised or not, had a good knowledge both of the geography of the south coast of the Peninsula and of the history of the settlements located there. Whether this passage reflects the difficulties of crossing the Straits of


19 M.C. Marin Ceballos, in eadem and F.J. Lomas, "Cádiz fenicio-púnico y romano," Dialoghi di Archeologia, 3ª serie, anno 10 (1992), numero 1-2, 130-131. She points out in support of this suggestion that a small terracotta head apparently representing Hercules-Melqart was found at Saltés.
Gibraltar in adverse meteorological conditions, as some authors believe, or is the echo of exploratory precolonial voyages carried out by the Phoenicians as a form of 'market research,' I believe that Bonnet is right when she speaks of the "imperialisme de l'objet" to the detriment of a close analysis of the texts. While the choice of a date does indeed seem to reflect a late process of systematization of the old legends of mythological travels in the far West, the actual circumstances of the foundation narrative given by Strabo appear to find their confirmation in the archaeological record of these places and, for this reason, this version of the city's foundation does contain valuable information concerning the origin of Gadir, whatever the date we choose to assign to its foundation.

**Hercules gaditanus or the role of Melqart in the early life of the city**

It is interesting that according to Strabo, the Gaditans believed that the foundation of their city was the result of a divine oracle. The god in question is not mentioned but there can be no doubt that it was Melqart or MLK QRT, the 'king of the city', and chief divinity of Tyre. An oracle of Melqart was

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22 (Op. cit. n. 11), 204.

23 One of his titles is Ba'al Sor, or the lord of Tyre, see CIS I, 122 and 122b.
responsible for the foundation of Tyre itself according to one source, and Melqart was also involved in the foundation of Carthage.\textsuperscript{24} Thus the chief god of Tyre, Melqart is indissolubly associated with the two most important Phoenician foundations in the central and western Mediterranean, with the metropolis and chief player in the Phoenician move westwards, Tyre itself, and with Phoenician expansion in general. While our evidence for the role of Melqart in the foundation of the principal western colonies is based mainly on literary sources which are all, without exception, late and non-Phoenician, the fact that Melqart appears in the Greek and Roman authors as the divinity associated with Phoenician expansion overseas shows that in their eyes Melqart was the patron of the Tyrian foundations in the West, and thus, in the words of Bonnet, "their chief adversary against whom they would oppose their national Herakles, glorious explorer of the western Mediterranean."\textsuperscript{25}

Melqart was a relatively recent arrival in the Tyrian pantheon. He does not appear in the Ras Shamra texts and we first hear of him only in the tenth century, in relation to a religious reform carried out by Hiram I of Tyre.\textsuperscript{26} Our first iconographical representation of the god dates to the end of

\textsuperscript{24} For Tyre see Nonnos of Panopolis, \textit{Dionysiaca}, XL 311-580 and for the temple of Melqart at Tyre see Herodotus, II, 43-44. For Carthage see Justin, XVIII, 4, 2-15 and XVIII, 5, 1-17.

\textsuperscript{25} (Op. cit. n. 11), 165-166.

\textsuperscript{26} Josephus, \textit{AJ}, VIII, 144-147; \textit{Contra Apionem}, I, 18. Josephus tells us that the king was the first to celebrate the \textit{egersis} of the god, that is his ritual awakening from the sleep of death.
the ninth century.\textsuperscript{27} As his name suggests, Melqart is closely linked to the ruling dynasty and in some ways represents the mythical ruler of the city, the archetypal king of Tyre, responsible for the well-being and protection of its citizens, as we can see from the terms of the treaty between the seventh century king of Tyre, Baal, and his Assyrian counterpart, Assarhadon.\textsuperscript{28} Given the close association between god and ruler it is not surprising that we find royalty directly involved in the cult of Melqart, with Hiram playing a prominent role in the worship of the divinity, and Elissa, daughter of the king of Tyre, married to the chief priest of Melqart, her uncle Acherbas whom, we are told, held the first place in the city after the ruler himself.\textsuperscript{29} Therefore it should

\textsuperscript{27} On a stele now in the Aleppo Museum in Syria, and dedicated by Bar-Hadad, a high official at the court and perhaps a relative of the king of Aram, Hazaël. See W. F. Albright, "A votive stele erected by Ben-Hadad I of Damascus to the god Melcarth," BASOR, 87 (1942), 23-29 and C. Bonnet, "Le culte de Melqart à Carthage: un cas de conservatisme religieux," Studia Phoenicia IV, Religio Phoenicia, Namur 1986, 218.

\textsuperscript{28} Bonnet, (op. cit. n. 11), 40-42 and G. Pettinato, "I rapporti politici di Tiro con l'Assiria alla luce del trattato tra Asarhaddon e Baal," RSF, 3 (1975), 145-160. According to the terms of the treaty, Melqart and Eshmun, between them, were responsible for providing all the elements necessary for the well-being of the people of Tyre, such as food and clothing and unguents. Melqart is also associated with the discovery of the purple dye which was one of Phoenicia's most important manufacturing activities, and most importantly for our purposes, with the invention of navigation. Nonnos Dionisiaca, XL 443-468. He was the god prayed to for a safe journey at sea, as we learn from a text of the third century Christian writer, Heliodoros of Emesus, Aethiopica IV, 16-17, Bonnet, (op. cit. n. 11) 67, and this aspect of the god is perhaps illustrated by the appearance of a marine divinity riding a hippocamp who may represent Melqart on archaic coins of Tyre. R. Dussaud, "Melqart," Syria, 25 (1948), 206. This function as the patron of navigation may well come from the fact that Melqart is the product of a syncretic association between Baal (Hadad) and the marine god Yam, ibid, 205. In this context it is interesting to note that Melqart, chief god of Tyre, makes his appearance precisely at the beginning of Tyre's maritime power during the reign of Hiram I, the king who organised the famous long-distance trading expeditions in a "joint venture" with Solomon.

\textsuperscript{29} Justin, XVIII, 4, 3-5. This association between the sovereign and the god is continued in Carthage where those involved in the ritual égersis of Melqart are invariably drawn from the chief magistrates and high priests of the city. See
not surprise us that Melqart played an important role in the move westwards with shrines and sanctuaries dedicated to him situated in all the main areas of Phoenician interest along the shores of the Mediterranean and beyond.

It is interesting to note that in the accounts of the establishment of Phoenician settlements the foundation of the settlement is often accompanied or preceded by the establishment of a temple. Sometimes, as Bunnens points out, only the temple is mentioned, as in the case of Lixus. Thus we get the impression from the ancient authors that the foundation of Phoenician settlements was associated with the foundation of shrines or sanctuaries to their gods. So it seems that wherever the Phoenicians chose to settle, they invariably brought their gods with them. Such an impression is confirmed by epigraphical evidence. The controversial Nora

Bonnet (op. cit. n. 27) 215-216. In Philadelphia, Amman in Jordan, it is the gymnasiarch who is the egas(iten tou) 'Heraklóus, the semitic mqm 'lm mtrh 'strny, as is the case also at Ramleh, west of Jerusalem. In Cyprus it is the supreme magistrate. The predominance of senior officials among the holders of this office reinforces the official and national aspect of the cult. See C. Bonnet-Tzavellas, "Le dieu Melqart en Phénicie et dans le bassin Méditerranéen: culte national et officiel," Studia Phoenicia, vol. II, Leuven 1983, 195-207 for references.

30 Bunnens, (op. cit. n. 2), 282-283. This is confirmed by Herodotus, II. 44, who tells us that the temple of Melqart in Tyre was founded at the same time as the city, 2,750, a date which has now found its archaeological confirmation in the soundings carried out in Tyre. N. Jidejian and E. Lipinski, "Tyr" in E. Lipinski, (ed.), Dictionnaire de la civilisation phénicienne et punique, Paris Brussels, 1992, 477-480.

31 Even when the settlement itself was very precarious, with only temporary or seasonal habitation of the site, see for instance the stone monolith erected at the Phoenician settlement of Mogador off the North African coast, A. Jodin, Mogador. Comptoir phénicien du Maroc atlantique, Tangiers 1966 and F. López Pardo, "Reflexiones sobre el origen de Lixus y su Delubrum Herculis en el contexto de la empresa comercial fenicia," Lixus. Collection de l’école française de Rome 166, Paris-Rome 1992, 95-96.
stone seems to have been set up to commemorate the dedication of a monument to the god Pmy, represented by a temple, an altar, or perhaps even the stone itself,\textsuperscript{32} while a Phoenician shrine has been identified at Kommos in Crete.\textsuperscript{33} In second century Delos we find a group of Phoenician traders, the Heracleists of Tyre, asking Athenian permission to build a temenos dedicated to Heracles, "founder of the fatherland", undoubtedly in this context the Tyrian Melqart.\textsuperscript{34} Temples to the great Phoenician goddess Astarte are found in the Tyrian quarter at Memphis in Egypt, in Cyprus at Kition and probably Cythera, at Tas Silg in Malta where the Phoenician temple occupies the site of a prehistoric religious complex, and in the West at Eryx in Sicily and Sicca Veneria south-west of Carthage,\textsuperscript{35} but the divinity most closely involved in the great expansionary movement westwards is the national god of Tyre, Melqart. He is associated with the most


\textsuperscript{33} J.W. Shaw, "Phoenicians in southern Crete," AJA, 93 (1989) 165-183. During the first millennium a shrine occupied the site of a Minoan coastal settlement. It had three phases of use (A,B,C) and in Temple B, dating from 800-600, 3 baetyl were found, along with 2 faience figures, one representing the Egyptian goddess Sekhmet, who shares some of the aspects of Astarte in her guise as warrior goddess. C. Baurain and C. Bonnet, Les phéniciens. Marins des trois continents, Paris 1992, 119-121. Phoenician pottery, mostly amphorae, was found in the area around the shrine and dates back to the founding of Temple A, in the late tenth century. The temple at Kommos, with its coastal location, offered a convenient stopover point for ships, where the crews and local inhabitants could worship. It evidently served as a focal point for trade, given the huge numbers of Phoenician amphorae found near the temple and it also allowed easy access to the interior of the island where there is now clear evidence for a Phoenician presence during this time.

\textsuperscript{34} Ins. Delos, 1519; Bonnet (op. cit. n. 11), 371-375.

\textsuperscript{35} For Astarte see C. Grottanelli, "Santuari e divinità delle colonie d'occidente," in La religione fenicia, matrici orientali e sviluppi occidentali, Atti del colloquio in Roma, 6 Marzo 1979, Rome 1981, 118-123.
distant Phoenician foundations of Gadir and Lixus, both situated on the Atlantic coasts, had a temple dedicated to him at Thasos in Greece, and it has been suggested that he was the god originally worshipped at the Ara Maxima in Rome. He is invoked in Tarsis, Malta and Delos as the *archegetes*, a term usually reserved for eponymous or founding heroes, protectors of the city or presumed ancestors, reflecting Melqart's character as mythical founder of the city of Tyre and the god responsible for the well-being and protection of his human worshippers. Unlike his counterpart Astarte who generally can be taken as continuing the local cults of indigenous female divinities, nowhere is this the case for Melqart. It seems his

36 For Thasos see Herodotus, II, 44 and Pausanias, V, 25, 12. For Hercules at Rome, see D. van Berchem, "Hercule Melqart à l'Ara Maxima," *Rendiconti della Pontificia Accademia romana di archeologia*, 32 (1959-1960), 61-68. This idea is disputed by Bonnet (op. cit. n. 11) 294-304.

37 For Tarsis see Dio Chrysostom, *Orationes*, XXXIII 1,47; Malta, *CIS*, I 122 and 122b and Delos, *CIS*, I 1519.

38 Bonnet (op. cit. n. 11), 245-246. For the meaning of the term *archegetes* see Strabo VIII, 5, 5 C365, citing Ephorus, *FGrHist* 70 F118 "They (= Eurysthenes and Procles) were not even honoured with the title of *archegetae*, an honour which is always paid to founders," (translation H.L. Jones, Loeb Classical Library, London 1968) and Malkin (op. cit. n. 11), 241-250 for a general discussion of the term. In the Delos inscription he is referred to as "Herakles, author of the greatest goods for humanity."

39 We can see this most notably in Malta, where the sanctuary reuses an ancient megalithic temple, Grottanelli, (op. cit. n. 35), 122-123, while the temple of Astarte at Kition in Cyprus was superimposed on the ruins of an indigenous Bronze Age temple. In the bilingual Etruscan-Punic Pyrgi tablets from Caere in Etruria we find Astarte associated with the Etruscan goddess worshipped at this sanctuary, Bonnet (op. cit. n 11), 279-291 and in general *Akten des Kolloquiums zum Thema: Die Göttin von Pyrgi, Archäologische, linguistische und religionsgeschichtliche Aspekte. Tübingen, 16-17 Januar 1979* (Biblioteca di Studi Etruschi, 12), Florence 1981. This association of the Phoenician and native deity is logical if we consider that the foundation of the cult to Astarte was a method of establishing good relations with the local inhabitants, see below. In addition, Astarte was closely associated with Melqart in Tyre, with the possibility that Hiram dedicated a common temple to the two divinities, Bonnet (op. cit. n. 11), 35-36. This possible association between Astarte and Melqart
Tyrian character remained uppermost, and even when he was later subsumed by his Greek counterpart, Herakles, and Roman successor, Hercules, many of the features of his worship were unaltered, even though they were puzzling or foreign to later generations of worshippers. Melqart always remained true to his name as the lord of Tyre, the divine representation of the ruler of the city, and as such may well have had a special role to play in the Phoenician colonisation movement. A text of Diodorus Siculus XX, 14, 1 refers to Melqart as "Hercules who accompanies the colonists". This may indicate as Bunnens observes, that Melqart presided over the new colonial foundations, a premise supported by Diodorus' account of how the first Carthaginians used to send one tenth of their public revenues to the temple of the god in Tyre, and by the official and national character of the god as divine counterpart of the temporal ruler, founder of the metropolis itself and inventor of navigation.

is continued in Gadir where the island of Erytheia was dedicated to Astarte, Pliny NH, IV, 120; Avienus OM, 305-317 and M.C. Marin Ceballos, "Reflexiones en torno al papel económico-político del templo fenicio," Homenaje a José María Blázquez, vol. II, Madrid 1993, 354-355.

40 Such as the lack of a cult statue and the shaved heads of the priests at Gades. 41 Diodorus, XX,14,2; Bunnens (op. cit. n. 2), 284-285 and idem (op. cit. n. 10), 121. Bunnens suggests that this offering may represent the profit (bénéfice) which accrued to the temple in return for its financial investment in the colonial ventures, but this is unlikely given what we know of the economic role of the temple in Tyre, see Marín Ceballos, (op. cit. n. 39), 355. The temple of Melqart in Tyre also apparently benefitted from Carthaginian war booty, Diodorus XIII 108, 4; Justin XVIII 7,7. According to Polybius XXXI 12, the god received offerings of the first fruits, transported on a specially selected ship from Carthage to Tyre, as well as annual sacrifices in his honour carried out by Carthaginian officials, Quintus-Curcius IV 2, 10, confirmed by Arrian II 24, 5.

42 For Melqart as the inventor of navigation see Nonnos Dionysiaca, XL 443-468. Bonnet observes that by this myth, the destinies of Tyre, Melqart and navigation are inseparable right from the beginning (op. cit. n. 11), 33, making Melqart, the divine representation of the Tyrian monarchy, the most likely candidate for
Undoubtedly the chief function of these sanctuaries which we find in all the areas of the Mediterranean associated with the Phoenicians was the need to provide a place where Phoenician sailors and traders could continue to honour their gods and it is clear from their position that these sanctuaries were closely linked to maritime trade. But the diffusion of the cult of Melqart may not have been the result of national piety alone. Several factors indicate that these sanctuaries may have had an important role to play in the economic life of the regions in which they were situated.

It is generally accepted that it was trade that brought the Phoenicians to the central and western Mediterranean, and in particular, a need for the precious metals which were abundant in these regions and were far less widely available in the East. While we see the Phoenicians establishing international trade relations through treaties or agreements concluded between the tutelary divinity who presided over such an important venture as the Phoenician maritime expansion.

43 In Gadir Phoenician sailors and navigators visited the temple of Melqart to offer him sacrifices once they had achieved their objectives in the area, Avienus, OM, 358, taken from the fifth century Athenian writer, Euktemon, and Strabo, 3, 5, 5, C170. The siting of the shrine to Melqart on the Canopic mouth of the Nile was surely due to the fact that this was the only branch of the river which the Egyptian authorities opened to maritime commerce, as Grottanelli points out (op. cit. n. 35) 118. Gibraltar which marks the transition from the Mediterranean to the Atlantic had its shrine which has recently been linked with the nearby Phoenician settlement at Cerro del Prado, M. Belén and I. Pérez, "Gorham's Cave. Un santuario de navegantes en el Estrecho," Fourth International Congress of Phoenician and Punic Studies, Càdiz 1995 (in press). Here the shrine was in a cave, accessible by sea, with a prominent stalagmite which may have given it a sacred character, and the divinity worshipped appears to have been Astarte. The use of the cave as a sanctuary may well go back to the seventh century but most of the offerings date from the fifth to the third centuries. W. Culican, "Phoenician remains from Gibraltar," The Australian Journal of Biblical Archaeology, 1 (1972) 110-145.
heads of state, such as that concluded between Hiram I of Tyre and Solomon of Israel, and the treaties between Rome and Carthage, this form of agreement was only possible if the parties involved were at a comparable level of social development.44

The situation was completely different in the far West where the Phoenicians met peoples who lacked a strong centralised state, such as were found in the East, and who were at a far more primitive level of development than the Phoenicians themselves. In such circumstances trade could take the form of the famous "silent exchange" which Herodotus 4.196 describes between the Carthaginians and their neighbours in North Africa. But given the disparity of the parties involved, and their lack of familiarity with one another, with no common language or customs, there was always the danger that one of the parties would be tempted to defraud the other, or worse.45 The best way to overcome initial distrust and to ensure and safeguard continuing trade was to establish a sanctuary to a Phoenician divinity in the area where they had come to trade.

44 For the agreements made by Hiram and Solomon see 1 Kings, 5.1-11, and 1 Kings, 9.10-14 concerning the building of the temple of Jerusalem and 1 Kings 9.26-28 and 10.22 for their joint venture to Ophir in search of precious metals; for the treaties between Rome and Carthage see Polybius, 3.22-25.

45 Bunnens, (op. cit. n. 2) 284. In this context it is interesting to note that the Homeric poems constitute our only insight into the attitude and perspective of the native peoples to the Phoenician traders who arrived on their shores. Given the wariness and suspicion with which they were viewed, (see for instance, Odyssey, 14, 295-381; 14, 347-517) it is not surprising that the Phoenicians felt they had to resort to some means of overcoming this in the interest of securing trade relations with the people of the regions which they frequented. See J. Latacz, "Die Phönizier bei Homer," in U. Gehrig and H.G. Niemeyer (eds.), Die Phönizier im Zeitalters Homers, Mainz 1990, 11-21 for the depiction of Phoenicians in Homer.
"The sanctuary legitimised the Phoenician presence on foreign soil and created the conditions necessary for peaceful relations with the natives."\(^{46}\) In a time when there was no international law to regulate and protect trade and the traders who carried it out, the presence of a god in the market area provided a divine presence to preside over the proceedings, automatically converting any act of fraud or violence into a transgression of divine law which would call down the wrath of the offended god. So the altars of the gods witnessed the first peaceful encounters between native and trader and the first transactions between strangers.\(^{47}\) The Phoenician temple may also have offered the right of asylum to shipwrecked travellers, as one interpretation of Herodotus II, 115 suggests, which would have provided an additional assurance of protection for visitors and merchants.\(^{48}\)

For the authority of the god as guardian of the transactions carried out under his auspices to be accepted by the local inhabitants, the god himself had to be recognised and accepted by them. In this context the Phoenicians enjoyed the advantage

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\(^{47}\) Van Berchem, (op. cit. n. 46) 76. The active role played by the god in the regulation of commercial transactions is illustrated by the title of the Hercules worshipped at the Ara Maxima in Rome, "Hercules ponderorum," ibid 324. Again in the context of the Ara Maxima Diodorus IV, 19,1 tells us that around this altar respect for promises and the strict application of contracts had to prevail over violence and robbery.

of having a form of religious worship which was characterised by the elaborateness and complication of its ritual which may well have been, as van Berchem suggests, an important factor in the acceptance of the lord of Tyre among the inhabitants of the various areas of the Mediterranean and beyond where his shrines were set up. In return for his services the god benefitted from the transactions that were carried out under his protection. There are numerous references in Roman comedy to the *pars Herculanea* and in the *Ara Maxima* it was customary to offer a tenth of war booty or commercial gains to Hercules. Obviously Melqart received some recompense at his other temples too and this is probably the reason why his sanctuary at Gadir in particular became famous for its great wealth.

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49 (op. cit. n. 46) 77.

50 Ibid, 324 and 309 who emphasises the semitic nature of the one tenth offering instead of the one twelfth which would have been more natural in the Roman numerical system. For the *pars Herculanea* see Plautus, *Bacch.*, 661-665; *Stich.*, 232-234 and 386; *Truc.*, 562.

51 See Porphyrios, *De Abst.* 1, 25 who calls the temple *ploúsitwatos*. Such wealth must have consisted of the *pecunia* and *ornamenta* mentioned by Caesar, *BC*, II, 18. In Roman times Hercules Gaditanus was one of the few gods who had the right to receive legacies, Ulpian, *Dig.* XXII, 6. Such wealth meant that the sanctuaries were frequently attacked and plundered and some had strong defensive fortifications. For attacks on the Herakleion at Cádiz see the passage from Porphyrios cited above which tells the story of the siege of the temple by Bogud of Mauretania in 38 and the semi-mythical account given by Macrobius, *Sat.* I, 20, 12 which deals with an attack on the temple from the sea at an unspecified date by a local chieftain. Its wealth meant that it was plundered several times during the Roman civil wars of the first century, see A. García y Bellido, *Les religions orientales dans l'Espagne romaine*, Leiden 1967, 161-162 for references. For the plundering of the temple of Astarte in Malta see Cicero, *In Verr.*, II, 4, 103-105 and for Eryx Polybius, 2, 7, 9-10. In the case of the temples of Astarte sacred prostitution must have greatly contributed to the temples' revenues, Grottanelli, (op. cit. n. 35) 128-129.
Such wealth and the economic independence which it brought with it must have given these sanctuaries considerable autonomy in terms of freedom from interference from the officials of the cities where they were situated. Recently it has been suggested that this autonomy could have extended as far as the issue of coins by the temple's own mint. This suggestion is based on some Sicilian coins dating to the second half of the fourth century the legend of which had been traditionally interpreted as a toponym, Rsmlqrt, or the cape of Melqart, and was now read as the "chosen of Melqart", implying that the temple was responsible for the minting of the coins bearing this legend and by extension could have had economic and administrative functions in addition to purely religious duties. Such an interpretation is supported by coins issued in Mauretania Tingitana in the first century bearing the legend MKM ShMsh, which has been interpreted as meaning "the temple of the sun" and which has been linked to the temple of Hercules Melqart at Lixus. If this interpretation is correct the fact that these coins are found in considerable numbers in all the sites of the period has considerable implications as to the importance of the temple of Hercules-Melqart at Lixus. Although the evidence for the temple of Melqart as the producer of coins is considerably later than our period and it is debatable how far back one can apply the situation of fourth


century Sicily and first century North Africa, it is interesting in the light it sheds on the autonomy of the temple of Melqart and the considerable importance of that institution in the economic life of the cities in which it was located.

Given this economic aspect of Melqart we can now see why his shrines are found in all the areas where the Phoenicians went to trade, some situated in regions with important mineral deposits, and others in major craft centres, where they could obtain manufactured products to use in their trade with the natives. Such considerations also explain why the temple of Melqart in Gadir occupied an important position in the life of the city right down to the end of antiquity.

The topography of Phoenician Cádiz

As we have seen the date and circumstances of the foundation of Phoenician Gadir are the subject of controversy, as is the very configuration and topography of the city itself. While a glance at the map shows that the modern city of Cádiz is made

54 For instance at Thasos where the Phoenician presence was due to the rich gold mines on the island and on the Thracian mainland around Mount Pangaenum, Herodotus, VI, 46-47. In Rome too the cult of Hercules at the Ara Maxima is probably best explained by the fact that the forum was one of the few bridging points of the Tiber and a meeting place for many land-based communication routes where they could obtain the metals which were abundant in Italy. van Berchem, (op. cit. n. 46), 322-323; idem, (op. cit. n. 36) 62. In Cyprus the temple of Astarte at Kition was closely linked to metal extraction and trade, López Pardo, (op. cit. n. 31), 97.

55 Such as the Tyrian quarter at Memphis in Egypt with its temple of Astarte. See López Pardo, (op. cit. n. 31) 97.

56 In the late fifth century A.D. when nothing was left of the once flourishing city, Hercules Gaditanus was still worshipped at his temple. Avienus, OM, 270-274. Nos hic locorum praeter Herculaneam solemnitatem vidimus miri nihil.
up of a long narrow peninsula which stretches from the mainland out into the Bay of Cádiz, the descriptions given by Pliny, Avienus, Strabo and Pomponius Mela are of a city located on a number of islands, explaining the plural form of its name both in Greek and Latin (Fig. 1). It is obvious that three millennia of continuous marine erosion on the western side of the bay, added to the silting caused by alluvial deposits laid down by the river Guadalete on the eastern side of the bay, have profoundly altered the topography of this area, explaining why the exact location of the ancient city has been the cause of such controversy.

According to the description given by the ancient authors, the bay of Cádiz was occupied in antiquity by an archipelago composed of three main islands, two of which were occupied by the first Tyrian settlers. Pliny (NH, 4,22), citing among his sources Polybius and Timaeus, states that there were three islands but describes only two: Kotinoussa which owed its name to the abundance of olives growing there, and a smaller island, Erytheia, also known as Aphrodisias and which the Gaditans called the Insula lunonis.57 This is where he places the city of Gadir. According to the accounts given by Strabo and Mela, the main island was long and narrow with a promontory at each end: the city of Gades was located at the western end of the island while at the eastern end stood the temple of Hercules.58 Judging by the description given by

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57 From kótinos - a wild olive tree.
58 Mela, 3,46; Strabo 3,5,3.
these authors, already by Roman times, there was considerable confusion about the original topography of the bay and the location of the city and its sanctuaries, undoubtedly due to the changes in the geomorphology of the bay and its islands.\textsuperscript{59} The key to reconstructing the geography of this area in the Phoenician period lies in the recent discovery of a channel linking the side of the modern peninsula directly exposed to the ocean with the interior of the bay of Cádiz, from "La Bahía" to "La Caleta" (see map). This so-called Bahía-Caleta channel thus divided the widest part of the peninsula of Cádiz in two at its northernmost end, perpendicular to the coast, and delimited a small island some 1,500 metres in circumference which is now occupied by the nineteenth century quarter of the city.\textsuperscript{60} The Bahía-Caleta channel was deep and wide, measuring some 150-200m wide and some 9m deep, and had sloping banks. Given its size, it is unlikely to have been artificial in origin and may once have represented a bed of the Guadalete river.\textsuperscript{61} It seems clear that this channel was exploited by the Phoenicians and used as the port of the first settlement there,\textsuperscript{62} a circumstance which may have contributed to its rapid infill. Given the fact that this channel

\textsuperscript{59} Aubet Semmler, (op. cit. n. 48), 229.

\textsuperscript{60} Ibid, 232; M.C. Fernández Castro, Iberia in prehistory, Oxford 1995 179-182; J.A. Martín Ruíz, Catálogo documental de los fenicios en Andalucía, Junta de Andalucía, Consejería de Cultura, 1995, 47-55.


\textsuperscript{62} Ramírez Delgado, (op. cit. n. 61) 82; J.L. Escacena, "Gadir," in Los fenicios en la Península Ibérica, 41-42.
is not mentioned in any of the ancient authors it seems likely that its infill had been completed by Roman times\(^{63}\), and with the loss of the Bahía-Caleta channel what had originally been two islands, the Erytheia and Kotinoussa of Pliny's narrative, became the long narrow island described by Mela and Strabo.

It is generally agreed that the Phoenician colony, which Avienus describes as having once been a fortress, the \textit{arx Gerontis}, must have been situated somewhere within the area of the \textit{casco antiguo}, or old centre of Cádiz, most probably in the area of the Torre de Tavira, the highest point of the modern city, and one which has yielded some of the oldest Phoenician objects found so far.\(^{64}\) These include the so-called "priest of Cádiz," a bronze statuette of Ptah which has been dated from the eighth to the sixth century (Fig. 3).\(^{65}\) It was found during building work in 1928 at a depth of five metres below street level and an ashlar structure was found nearby, ten metres below street level, suggesting that this is an area with a deep stratigraphy.\(^{66}\) Excavations carried out in the area once occupied by the island have revealed few traces of urban

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\(^{63}\) Ramírez Delgado, (op. cit. n. 61) 82.

\(^{64}\) Avienus, \textit{OM}, 304; Escacena, (op. cit. n. 62) 43; Ramírez Delgado, (op. cit. n. 61) 85; Aubet Semmler, (op. cit. n. 48) 232; L. Perdigones Moreno, "La necrópolis fenicio-púnica de Cádiz (siglos VI al IV a.C.)" \textit{I-IV Jornadas de arqueología fenicio-púnica}, Ibiza 1991, 222.


\(^{66}\) Escacena, (op. cit. n. 62) 43.
remains. Some flimsy dwellings constructed from very poor building materials and with correspondingly poor finds have been dated to the sixth century, while recent and still unpublished excavations in Calle Concepción Arenal uncovered the remains of rectilinear dwellings dating to the end of the eighth century.67

Pliny tells us that the island of Erytheia, where the *prius oppidum Gadium* was situated, was also called Aphrodisias, while the locals referred to it as the *Insula lunonis*.68 This is most probably the island which, according to Avienus (*OM*, 315-317), was dedicated to Venus marina, undoubtedly the Phoenician Astarte, who was worshipped there at her temple which had a deep crypt and an oracle. This temple may well have been situated around the Punta del Nao, an area of reefs, submerged by the high tide, at the foot of the modern Castillo de Santa Catalina. Since 1969 the waters round these reefs

67 R. Corzo Sánchez, "Cádiz fenicia," I-IV Jornadas de arqueologia fenicio-púnica, Ibiza 1991, 80-81; Martín Ruiz, (op. cit. n. 60) 49. An interesting feature of the excavations carried out in this area was the discovery of a number of infant burials (ranging from new-borns to children up to 10 years old) where death was caused by blows to the head, confirming the existence in Phoenician times of the ritual murder later forbidden in Gades by Julius Caesar, Cicero, *Pro Balbo*, 43. These finds have been interpreted as a tophet by their excavator, although the burial rites are different from those generally associated with a tophet, in that the corpses are inhumed and not cremated as one would expect, and the child burials are found alongside those of adults. If these burials do indeed represent a tophet, in the sense of a group of infant burials where the deceased has been ritually dedicated to Baal or Tanit, then this is the first such cemetery to have been found in the Iberian Peninsula. Corzo Sánchez, (op. cit. this note) 81; idem, "Cádiz y la arqueologia fenicia," *Anales de la real academia de bellas artes de Cádiz*, 1 (1983) 20-22; C. Gómez Bellard, "Tophet," in E. Lipinski, (ed.), *Dictionnaire de la civilisation phénicienne et punique*, Paris Brussels 1992, 461-463.

68 *NH*, IV, 120. Pliny calls it the *prius oppidum Gadium* to distinguish it from the neapolis, known as the Didyme, built by L. Cornelius Balbus the younger to alleviate problems of overcrowding, *Strabo*, III, 5,3. The new city was already under construction in April of 46 according to Cicero (*Ad Att.* XII, 2, 1).
have yielded a series of objects which seem to have a marked ritual aspect, consisting of various heads with negroid or Egyptianizing traits, incense burners and thymateria, small terracotta female figures and small amphorae which have dated this sequence of finds from the sixth to the third centuries. Given the type of objects found and their wide chronological sequence it is unlikely that they would have come from a shipwreck and it seems that we should regard them as offerings to the goddess which were ceremonially thrown into the water as votive offerings by the faithful.69

As for the second island mentioned by our sources, Kotinoussa, this extended from the area occupied by the modern Castillo de San Sebastián down to the islet of Sancti Petri.70 Here Pliny (NH, 4,120) puts the sanctuary of Kronos, the Phoenician Baal Hammon, across from the shrine to Venus/Astarte and thus the entry to the channel dividing the two islands, which served as the port of the Tyrian colony, was marked by the presence of twin sanctuaries.71 It seems likely that on the small elevation now occupied by the Castillo de San Sebastián there once rose the temple of Baal Hammon and it was from the sea to the south of the Castillo de San Sebastián that our only archaeological evidence for the monumental architecture of Phoenician Cádiz comes. This consists of a small limestone

69 Escacena, (op. cit. n. 62) 44-45; Perdigones Moreno, (op. cit. n. 64) 222; C. Blanco, "Nuevas piezas fenicias del Museo Arqueológico de Cádiz," AEA, 43 (1970), 50.

70 Ramírez Delgado, (op. cit. n. 61), 86; Aubet Semmler, (op. cit. n. 48) 233.

71 Corzo Sánchez, (op. cit. n. 67), 81.
proto-aeolic capital, 27cm high and 30cm wide (Fig. 4). Given the fact that it is rounded on top it could not have had any architectonic function and must have been purely decorative, possibly serving to mark the entrance to a temple. It has been dated on the grounds of similarities to capitals from Megiddo, Jerusalem and Tyre to the eighth or seventh centuries.\textsuperscript{72}

Excavations carried out in the area of the former island of Kotinoussa have failed to reveal any evidence of Phoenician settlement, confirming the evidence of Strabo and Pliny that the earliest settlement was very limited in size and it was not until the construction of Balbus' Didyme in Roman times that Gades jumped from Erytheia to Kotinoussa.\textsuperscript{73} Up to then Kotinoussa was occupied only by the shrine to Baal Hammon, Strabo's Kronion, the Phoenician necropolis and the most famous of Gadir's shrines, that of Melqart, later to become the temple of Hercules Gaditanus.\textsuperscript{74} The sources agree in placing the Herakleion on the opposite end of the island to the city\textsuperscript{75}

\textsuperscript{72} Blázquez, (op. cit. n. 65) 167-168; Lipinski, (op. cit. n. 2) 84-86; C. Pemán, "El capitel, de tipo protojónico, de Cádiz," AEA, 32 (1959), 58-70.

\textsuperscript{73} Escacena, (op. cit. n. 62) 47.

\textsuperscript{74} The definitive article on the Hercules worshipped at Cádiz is that of A. García y Bellido, "Hercules Gaditanus," AEA, 36 (1963), 70-153.

\textsuperscript{75} Poseidonios in Strabo, III, 5, 3 C169: The city of Gades is situated on the westerly parts of the island; and next to it, at the extremity of the island and near the islet, is the temple of Cronus: but the temple of Heracles is situated on the other side, facing towards the east, just where the island runs, it so happens, most closely to the mainland, thus leaving a strait of only about a stadium in width. And they say that the temple is 12 miles distant from the city, (...); yet the distance is greater than that and amounts to almost as much as the length of the island; (Translation: H.L. Jones, the Loeb Classical Library, London 1969); Mela, III, 46 confirms this: the island is a stretch of land which ends in two cornua, one of which houses the town, the other the temple of Hercules; for commentary see García y Bellido, (op. cit. n. 74) 74-77.
and there is general agreement that its location corresponds to the area of the modern islet of Sancti Petri, situated 18 km south of the Torre de Tavira, site of the earliest Tyrian settlement, a distance which coincides with the figure of 12 miles between the colony and the sanctuary given by Strabo and the Roman Itineraries.\textsuperscript{76} Sancti Petri is now an islet some 400 to 500 m long which has been cut off from the main body of what was once Kotinoussa by the force of the Atlantic and this process was already complete by the Roman imperial era, judging by the fact that we are told that the sanctuary occupied the entire surface of the island on which it was built\textsuperscript{77} and that it was vulnerable to flooding from the sea during the spring tides of the summer solstice.\textsuperscript{78} Given these circumstances it is not surprising that the majority of the archaeological finds which can be ascribed to the temple from both Phoenician and Roman times have come from the waters immediately surrounding Sancti Petri.\textsuperscript{79} These include the most recent discoveries of five Phoenician bronze figures in an archaic style representing a masculine divinity of the type known as the \textit{Smiting God}.\textsuperscript{80} They were found in a cavity in the

\textsuperscript{76} Strabo, 3, 5, 3 C169; \textit{Antonine Itinerary}, 408, 3 and 4. See also Pliny, citing Polybius, who gives the precise dimensions of the island: 12 miles long and 3 miles wide, \textit{NH}, IV, 119. In Roman times the Herakleion was linked to the city by a road which is still visible in places. See Garcia y Bellido, (op. cit. n. 51) 156 and (op. cit. n. 74) 77-80.

\textsuperscript{77} Philostratos, \textit{V. Apoll.}, V, 5. This passage refers either to the author's own time, the early third century A.D., or to that of Apollonios, the second third of the first century A.D.

\textsuperscript{78} Poseidonios in Strabo, ill, 5, 9 C174-175; Silius Italicus, ill, 32-44.

\textsuperscript{79} García y Bellido, (op. cit. n. 74) 82-93.

\textsuperscript{80} Blanco, (op. cit. n. 18); Perdigones (op. cit. n. 18).
rock in shallow waters between Sancti Petri and _terra firma_ and may represent offerings from a _favissa_ of the temple which marked the centre of the sanctuary’s sacred area, as Corzo suggests.81 Excavations carried out by Corzo in the south-east part of Sancti Petri in 1985 have shown that the area occupied by the islet represents only a peripheral part of the sacred enclosure and the central area of the shrine, with the main monuments of both the Phoenician and Roman temple, is now under water precisely in that part of the sea which yielded the bronze statuettes. The excavation uncovered various levels of occupation which seem to have begun around the seventh century.82

As for the appearance of the temple we have only written evidence on which to rely and none of our sources gives us a clear picture of its appearance. Arrian says that both the architecture and the sacrificial rites of the temple reveal its Phoenician origin (Alex., II, 16, 4. This is confirmed by Appian, _Iber._, I, 2), and others stress its great antiquity and sumptuousness (Silius Italicus, III, 17-20; Diodorus, V, 20, 2). Based on the information provided by the Graeco-Roman sources and a comparison with Phoenician temples elsewhere, García y Bellido has suggested that the temple at Gadir originally consisted of a large temenos with an open courtyard.

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81 Corzo Sánchez, (op. cit. n. 67) 83.

82 Ibid, 83.
which may have been porticoed and which had within it the
\textit{naos} or temple building.\textsuperscript{83}

We know that the temple had no images or visual
representations of the god, a circumstance which surprised
many of our sources.\textsuperscript{84} Inside the temple were the relics of
Hercules who was said either to have died in Spain\textsuperscript{85} or to have
had his remains transferred from Tyre (Justin, XLIV, 5, 2). A
similar monument may well have existed in the temple of
Melqart in Tyre and, according to Bonnet, this indicates that
the temple in Cádiz was closely linked to its Tyrian
counterpart, a link which is also evident in the accounts we
have of the worship of the god in Cádiz which remained
markedly oriental in character even as late as the Roman
imperial era\textsuperscript{86}.

\textsuperscript{83} (Op. cit. n. 74) 100-131 and (op. cit. n. 51) 157-161.

\textsuperscript{84} Silius Italicus, Ill, 30-31; Philostratos, \textit{V. Apoll.}, V, 5. The god was
represented only on an altar which depicted the twelve labours, and on the doors
of the sanctuary which had only ten of the labours. These representations were
the result of the identification of Melqart with the Greek Herakles and what
surprised the Greek and Roman commentators was the lack of a cult image of the
Tyrian Hercules, Melqart. Bonnet, (op. cit. n. 11) 213.

\textsuperscript{85} Arnobius, \textit{Adv. Nat.} I, 36; Sallust, \textit{Jug.} XVIII, 3 and Mela, III, 46 who says
that the bones of the god were kept in the temple at Gades.

\textsuperscript{86} Bonnet, (op. cit. n. 11) 211 and 78-80; for the ritual used in Cádiz see
Diodorus V, 20, 2, Arrian, \textit{Anab.}, II, 16, 4, Appian, \textit{Iber.}, I, 2; Garcia y Bellido,
(op. cit. n. 51) 162-164 and Aubet Semmler, (op. cit. n. 48) 238-239. The
famous columns of Hercules bore illegible inscriptions which were written in
characters which were neither "Egyptian nor Indian," (Philostratos, \textit{V. Apoll.}, V,
5,) and which both Strabo, III, 5, 5, following Poseidonios, and Philostratos
place inside the sanctuary, probably next to the altar according to Porphyry, \textit{De
Abst.}, I, 25. The columns in Gades seem to reflect the two pillars in the temple of
Melqart in Tyre which Herodotus describes in II, 44, again emphasising the
apparent unity in design and ritual between the sanctuary of the metropolis and
that of the colony.
Apart from the two shrines to Kronos/Baal Hammon and Melqart/Herakles, Kotinoussa was occupied only by a vast necropolis until the erection of Cornelius Balbus’ neapolis. The burials of the Phoenician era were found in the modern area of Puertas de Tierra, within the cemetery of the later Punic city, and on the side of the island facing Erytheia. Generally speaking the burials become more numerous as we approach Erytheia, the island on which the first Tyrian settlement was located. There is also a clear link between the chronology of the burials within the Phoenician and Punic eras and their location, with the burials tending to become more modern as we approach the Herakleion. The oldest Phoenician burials are dispersed over an area of approximately 220,000m squared, occasionally forming small groups. They are all cremations, either in a simple or a double rectangular fossa, carried out *in situ* and then simply covered with earth. The burials can be dated from the start of the sixth century to the end of that century. Grave goods which consist generally of decorated ostrich eggs, two-spouted oil lamps and some carnelian and gold beads (Fig. 5) are not particularly impressive and do not bear comparison with the spectacular

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87 The Phoenician city must have been very limited in size, and may well have remained confined to the north of the Bahía-Caleta channel until the formation of Balbus’ dipolis. Aubet Semmler, (op. cit. n. 48) 232.

88 Escacena, (op. cit. n. 62) 48.

89 Perdigones Moreno, (op. cit. n. 64) 223; idem, A. Muñoz Vicente, G. Pisano, *La necrópolis fenicio-púnica de Cádiz, siglos VI-IV a. de C.*, Studia Punica 7, Rome 1990.
anthropoid sarcophagi of fifth century Cádiz (Fig. 6). In terms of the position of the necropolis of Phoenician Cádiz it is interesting to note that it conforms to the standard pattern of location of the cemeteries of the Phoenician sites on the other side of the Straits, situated as it is across from the settlement nucleus, separated from it by a body of water.

The third island of the archipelago on which the Phoenicians settled is called antipolis by Strabo and is the area formerly known as the Isla de Léon, now San Fernando. No Phoenician finds or settlement remains have been made there but enormous quantities of shells of the murex trunculus species of shellfish were found, showing that the former island was the site of purple-manufacturing factories, and may have been reserved exclusively for industrial purposes, given the offensive smell produced in the process of extracting the dye.

It is evident that the geography of the city of Cádiz has changed fundamentally since the time of the first Tyrian foundation, and in many ways the site chosen for the Phoenician settlement seems an odd one, located as it was in an area which was difficult to reach by sea, given the considerable navigational difficulties involved in the crossing of the Straits which divide the Mediterranean from the

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91 Aubet Semmler, (op. cit. n. 48) 232.

92 Strabo, III, 5, 3 C169.
Atlantic.\textsuperscript{93} However, as Strabo's account of the foundation of Gadir shows, it was obviously a carefully chosen site, and one which must have offered advantages which outweighed the difficulties involved in reaching it. As an island settlement Gadir replicated the settlement pattern habitual in Phoenician sites in the western Mediterranean in general, such as Motya, situated on the island of San Pantellaria, off Sicily, and in the Iberian Peninsula, the site of Cerro del Villar on the other side of the Straits, and of course that of Tyre itself. Such a situation offered the advantages of an easily defensible site, which avoided the perils involved in too close a contact with the mainland and its inhabitants.\textsuperscript{94} In addition to its defensibility, Phoenician Gadir allowed easy access to the hinterland, with its location at the mouth of the river Guadalete, not far from the valley of the Guadalquivir. During the last millennium the lower stretches of these rivers formed large estuaries in an area which is now largely marshland, but which was then occupied by a network of indigenous sites which was particularly dense around the edges of the Guadalquivir estuary. The Guadalquivir river was navigable almost as far as Corduba, and provided access to the fertile

\textsuperscript{93} Aubet Semmler, (op. cit. n. 48) 229. For the difficulties involved in reaching Gadir by sea, Gasull, (op. cit. n. 20) 193-202. The discovery of a Phoenician settlement at Abul in northern Portugal shows that the difficulties of crossing the Straits and navigating the Atlantic may have been overestimated by many researchers.

\textsuperscript{94} As far as we can tell the archipelago of Gadir was uninhabited on the arrival of the first Tyrian settlers. Indigenous settlement remains on the islands date to the Copper and Bronze Ages and there is no evidence for any human settlement there at the time of the foundation of the Phoenician enclave. Escacena, (op. cit. n. 62) 48-49. Generally the Phoenicians chose uninhabited sites in Iberia for their settlements, which were either virgin territory or had been unoccupied for centuries, as in the case of Morro de Mezquitilla which too had settlement remains at least a millenium older than the Phoenician strata.
agricultural lands on either side of the river and the mining regions of Aznalcóllar with its rich silver deposits and Huelva which controlled the metal resources of Riotinto. In addition to its immediate hinterland Gadir, with its Atlantic location, provided and controlled access to the Atlantic coasts of the Peninsula and Africa, regions which show increasingly clear evidence of economic and cultural links to the city. Thus in terms of strategic location the site chosen by the Tyrian delegation under the direction of Melqart could not be bettered, especially when we take into consideration that the only thing lacking for the successful survival of the enclave, a foothold on the mainland, was soon provided by the Phoenician site at the Castillo de Doña Blanca.

The Phoenician site at Castillo de Doña Blanca

According to Strabo, 3, 5, 3 C169, As for their city, the one they lived in at first was very small indeed, but Balbus of Gades (...) founded another for them (...) and the city which is composed of the two they call "Didyme," although it is not more than twenty stadia in circuit, and even at that not crowded. For only a few stay at home in the city, because in general they are all at sea, though some live on the continent


opposite the island. This division of the habitation areas, described by Strabo, between the islands in the bay of Cádiz and the mainland, was a situation which began almost as soon as the city was founded, with the establishment of a Phoenician enclave at Castillo de Doña Blanca, on the coast overlooking the main nucleus of the city on Erytheia. This pattern of island city with some occupation on the mainland is a reflection of what we find in Tyre with its outer suburbs at Usu or Palaeotyre on the mainland. As recent research has shown, the Phoenician settlement at Castillo de Doña Blanca was an integral part of Gadir and one which provides us with very valuable information as to the nature of early urbanisation in Gadir, and its trading and commercial activities, information which is impossible to obtain from the island of Erytheia itself given the intensity and continuity of occupation there from Phoenician times to the present day.97

Castillo de Doña Blanca is situated close to Cádiz, in the municipal district of the town of Puerto de Santa María, at the edge of the Sierra de San Cristóbal which rises to a height of 124m and separates the coastal plain from the interior. Although in antiquity it was situated directly on the coast and had at least one harbour, now it is cut off from the sea by extensive marshland, the result of alluvial deposits laid down by the nearby Guadalete river. The position of the settlement on a small natural elevation, some 15m above sea level, next

to the small bay which must have acted as its port, and close to the Guadalete estuary, explains the reason for the foundation of the site, as a commercial enclave connecting Gadir and the indigenous communities in its hinterland. As well as the advantages of a sheltered and secure harbour, Castillo de Doña Blanca provided access to the Guadalete river which was navigable for several kilometres inland and was close to the Guadalquivir, the main artery of communications between Upper and Lower Andalusia. Thus its position enabled it to provide abundant supplies of fresh water to the island city where it was very probably in short supply, agricultural produce from its fertile hinterland, stone which was undoubtedly used for construction in Gadir, as well as space for expansion which was lacking in the archipelago. All these natural advantages explain why it soon grew to become such an important settlement in size, urban development and trade.

The settlement itself forms a small artificial hillock, rectangular in shape due to its system of defensive walls, and measuring some 340m long by 200m wide in its north-south axis. Behind the settlement is its necropolis, Las Cumbres.

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98 Certainly trade rather than defence seems to have been the main purpose of the settlement as otherwise it would have been situated higher up in the mountains, in a place with a better view of the hinterland. D. Ruiz Mata, "Las cerámicas fenicias del Castillo de Doña Blanca (Puerto de Santa María, Cádiz), Los fenicios en la Península Ibérica, 241; idem, (op. cit. n. 95), 41-42.

99 Idem, (op. cit. n. 95) 42; idem and C. Pérez, El poblado fenicio del Castillo de Doña Blanca (El Puerto de Santa María, Cádiz), Ayuntamiento de El Puerto de Santa María, Concejalía de cultura, El Puerto de Santa María 1995, 15-19. It is interesting to note, in this respect, that Doña Blanca's coastal location, next to a major river providing it with easy communications with the hinterland, is very similar to the settlement pattern adopted by the Phoenician enclaves at the other side of the Straits on the Mediterranean coast of Spain, see below chapter four.
which covers an area of some 100ha, and was probably separated from the habitation site by a channel of water, again replicating the characteristic division of cemetery and settlement area which we find in the Phoenician sites east of the straits. This area was first settled in the Copper Age, during the third millennium and the first half of the second, on the coast at La Dehesa, to the east of Castillo de Doña Blanca, and in the area subsequently occupied by the Phoenician settlement itself. Later an indigenous Late Bronze Age population occupied the highest point of the sierra, at Las Cumbres, with only one phase of occupation dating to the pre-Phoenician Late Bronze Age, probably in the ninth century. There are signs of a further Late Bronze Age occupation 3 km to the west at Las Beatillas. Immediately after the Phoenician foundation these sites were abandoned and their inhabitants probably moved to Castillo de Doña Blanca. Thus the Phoenicians occupied an uninhabited site at Castillo de Doña Blanca and they remained there until the fourth and third centuries, when the settlement moved up to Las Cumbres, before the occupation of this area was finally abandoned at the end of the third century probably as a result of the Second Punic War.


101 Ruiz Mata (op. cit. n. 95) 43-44; idem, "El poblado fenicio del Castillo de Doña Blanca. Introducción al yacimiento," in E. Roselló and A. Morales, (eds.) *Castillo de Doña Blanca. Archaeo-environmental investigations in the Bay of Cádiz, Spain (750-500 B.C.), B.A.R. International Series 593*, Oxford 1994, 3-4. The final abandonment of the settlement can be dated very precisely to 215-210 by the discovery of a hoard of 46 Carthaginian coins hidden or simply left behind in one of the houses on the site. C. Alfaro and C. Marcos, "Tesorillo de
As for the urban structure of the settlement it seems that right from the beginning the site was enclosed by its own system of defensive walls, part of which has been excavated (Fig. 8). They consisted of a broad masonry socle, with mortar used to fix the stones in place. The wall itself was made up of irregular masonry set in clay which in the excavated area reaches a height of more than 3m. This first wall may well have had a system of casemates as one of its successors had, and was probably surmounted by a further stretch of mudbrick wall bringing the total height of the fortifications up to some 5/6 m. In front of the wall there was a trench, measuring some 20m in width and 4m in depth, and which seems to have served a defensive purpose, protecting the settlement walls.\textsuperscript{102} This early defensive structure continued in existence until the sixth century when it was replaced in the fifth and again in the fourth/third centuries with another defensive system, this time following the typical oriental model of the casemate wall, made up of alternating large rectangular rooms and towers.\textsuperscript{103}

\textsuperscript{102} Ruiz Mata, (op. cit. n. 101) 7 and (op. cit. n. 95) 48.

\textsuperscript{103} Idem, (op. cit. n. 101) 7-9; idem and Pérez, (op. cit. n. 99) 99-103.
The earliest residential structures at Castillo de Doña Blanca date to the eighth century and are found in an area of more than 1,000 square metres in what the excavator has called the *barrio fenicio*. Here the houses are laid out in terraces because of the sloping ground on which they are built and are separated by narrow streets or laneways (Fig. 8). They are made up of three or four rooms with masonry, or sometimes simple mud brick, walls which reached a height of between 2 and 2.5m, and reddish clay floors, sometimes intercalated with thin layers of lime. The walls were plastered with clay and then whitewashed. The roof was undoubtedly thatched and had a wooden framework. The doorway was generally at the corner of the house and there was one or two steps from the street into the house. The door jambs were made from stone blocks and stone blocks were occasionally found in the centre of the walls, an oriental construction technique also found in Huelva.\(^{104}\) Most of the houses had an oven used to bake bread. This was a small domed clay structure, approximately 1m in diameter and 0.5m high, with a slabbéd stone floor, and there were numerous clay structures inside the houses which were probably used as benches, hearths or recipients for pottery containers.\(^{105}\) At the foot of the lower terrace of houses there was a v-shaped trench, approximately 3m wide and 2m deep which may have been used either for channeling water or for

\(^{104}\) Ruiz Mata, (op. cit. n. 95) 46; idem "Los fenicios en la Bahía de Cádiz, según el Castillo de Doña Blanca," *I-IV Jornadas de arqueología fenicio-púnica*, Ibiza 1991, 94.

\(^{105}\) Idem, (op. cit. n. 101) 9; idem, (op. cit. n. 95) 46-47.
the defence of the residential area.\textsuperscript{106} No remains of a wall or fencing of any kind have been found in the trench and it seems that the trench itself must have been the sole line of defence here, as the walls of the houses are extremely close to its edge. In front of this trench a further trench was discovered in the 1991 excavations measuring between 10 and 12m wide and 4/5m deep, and which appears to have a clear defensive function.\textsuperscript{107}

Judging by the layout of the earliest eighth century system of fortifications and their relative distance from the contemporary residential area, the so called \textit{barrio fenicio}, it seems that right from the beginning the settlement at Castillo de Doña Blanca assumed considerable proportions, probably covering an area of some 5ha, almost the same size as the area occupied by the later Punic site. This is a considerable size for a settlement of this era especially when we compare it with Gadir which did not grow to more than 7 or 8ha until the construction of Balbus' neapolis. Given its size, fortifications and high degree of urban organization then, as its excavator points out, we have to assume that the Phoenician settlement at Castillo de Doña Blanca was a genuine town rather than a simple \textit{emporium} occupied seasonally for trading purposes.\textsuperscript{108}

With its carefully planned layout of terraced houses, divided

\textsuperscript{106} Ibid, 48; idem, (op. cit. n. 101) 9; idem, "Informe sobre la campaña de excavaciones de 1987 realizada en el Castillo de Doña Blanca (El Puerto de Santa María, Cádiz)," AAA, 1987, 381.

\textsuperscript{107} Idem, (op. cit. n. 95) 48.

\textsuperscript{108} Ibid, 45.
by narrow streets and enclosed by a thick fortification wall, we are reminded of the other Phoenician settlements to the east of the Straits, and it is obvious that the first settlers at Castillo de Doña Blanca, like those on the Mediterranean coast, who expended so much energy and resources into building their settlements, were planning on the permanent occupation of these coastal sites so far away from their homes in the eastern Mediterranean.109

Careful excavation of the site at Castillo de Doña Blanca, and especially of the stratified midden in use from the eighth to the third centuries, allows us to reconstruct some of the economic activities of its inhabitants. Analysis of the animal bones from the midden reveals an agricultural strategy similar to that practised in the other Phoenician sites on the Mediterranean coast of Andalucía, in particular that at Toscanos, near Torre del Mar, in Málaga province. Just as at Toscanos, in Doña Blanca there was considerable emphasis put on stockbreeding, and particularly cattle-rearing, for meat production, but also for traction.110 The cattle at Doña Blanca may well have had an important role in the ploughing of the fields used to grow the wide variety of crops attested at the site. Barley and wheat were the most important cereals during the eighth and seventh centuries but pulses and leguminous plants were also cultivated, and several new species of plants

109 For the Phoenician settlements east of the straits of Gibraltar see above chapter one.

110 A. Morales et al., "The mammals," in E. Roselló and A. Morales, (op. cit. n. 101) 37-71; for a more detailed discussion of this issue see below chapter four.
introduced, including the chickpea, almond and the cultivated grape (*vitis vinifera*). The evidence points to a mixed agriculture combining cereal growing with horticulture, with protein coming from cattle, and also from fishing which was extremely important, with shellfish, freshwater and marine species (deep sea as well as coastal) all well represented. The agriculture practised at Doña Blanca was clearly a specialist business, probably involving fulltime work, given the level of time and resources needed, for instance, to go deepsea fishing, or to engage in specialised stockrearing.\textsuperscript{111} Clearly not everyone at Doña Blanca was a trader.

The site at Castillo de Doña Blanca was initially thought to be a native settlement which through its proximity to Gadir received strong orientalizing influences in both its pottery production and construction techniques.\textsuperscript{112} However, in addition to the purely Phoenician nature of the construction techniques and layout of the settlement, and the introduction of plants and animals previously unknown in the Peninsula, an examination of the pottery repertory proves that the site was fully oriental in character, showing strong links, first with the Levant, and subsequently with the other Phoenician sites in Iberia, and Atlantic North Africa.

\textsuperscript{111} For evidence of specialised animal breeding see below chapter four.

The pottery from the site comes mainly from the barrio fenicio and the areas around the settlement wall, and can be divided chronologically into three phases: the eighth century material which makes up the first phase of pottery production and displays strong links with the Levant, and the material produced in the second and third phases, from the end of the eighth century and throughout the seventh, which by now has begun to display those features which characterise the pottery production of the extreme western Mediterranean. The earliest ceramic material consists almost entirely of fine table ware, red slip ware, with an almost complete absence of the bichrome or polychrome decorated ware generally found on the less high quality large storage jars or pithoi.\textsuperscript{113} Among the red slip forms the plates are very frequent and provide valuable dating evidence for the start of the occupation of the site.\textsuperscript{114} The plates at Castillo de Doña Blanca have narrow rims, between 20 and 30 mm on average, occasionally reaching up to 35mm, which in the Phoenician sites in the province of Málaga would indicate a date in the mid eighth century (Fig. 9).\textsuperscript{115} Other red slip forms are paterae or carinated bowls of

\textsuperscript{113} Idem, (op. cit. n. 95) 48 and (op. cit. n. 101) 11. The fact that this fine table ware accounts for almost the entire pottery production of the site in the initial facies is most unusual for the settlements in the Peninsula. At Toscanos, for instance, it amounts to no more than 10%. H. Schubart, H.G. Niemeyer, M. Pellicer, Toscanos. La factoría paleopúnica de la desembocadura del rio de Vélez. Excavaciones de 1964. EAE 66, Madrid 1969; idem, Toscanos. Die altpunische Faktorei an der Mündung des Río de Vélez 1: Grabungskampagne 1964 (Madrider Forschungen VI, 1) passim.

\textsuperscript{114} H. Schubart, "Westphönizischer Teller, RSF, 4 (1976), 179-196. See above chapter one.

\textsuperscript{115} Widths within such a range would make them at least contemporary with strata I and II of Toscanos and Chorreras and the lower levels of Morro de Mezquitilla, dated to the mid eighth century. D. Ruiz Mata, (op. cit. n. 98) 244-247; idem, (op. cit. n. 95) 49-51 and (op. cit. n. 101) 11. However the
different sizes and covered with a very high quality red slip,116 mushroom-lipped and trefoil jugs117 which bear a strong resemblance to their eighth century oriental prototypes,118 and one-spouted lamps.119 Amphorae are very common at Castillo de Doña Blanca, the most common being the R-1 type which is found extensively in the Phoenician enclaves in the south of the Iberian Peninsula and Ibiza, as well as the areas under their influence in Portugal, the north-eastern Mediterranean coast and Morocco (Fig. 10, 1-3).120 But there is evidence of contacts with the central Mediterranean in the form of a large number of amphorae typical of those produced in Carthage and Tunisia (Fig. 10, 5-6).121 Other types are imported from the East and suggest continued contact with that area. Some of these eastern imports correspond to A.

author points out that in the examples from Castillo de Doña Blanca the width of the rim of the plate varies in accordance with its total diameter so that plates with a larger diameter tend to have wider rims and vice versa (op. cit. n. 95) 49-51. Therefore in measuring the width of the rim we have to keep in mind the total diameter of the plate before making any decision as to the dating of the plate.

116 Such forms are frequent in the East, in Hazor in levels VIII (ninth century) and VII-V (end of the ninth to 732) and are found in Tyre in levels IV (from 760-740 B.C) and II-III (740-700), and in Spain at Chorreras in the mid eighth century. For references see Ruiz Mata (op. cit. n. 98) 247.

117 These have been found in nearly every house on the site. In other settlements their use is confined to funerary contexts only. Idem (op. cit. n. 95) 51 and (op. cit. n. 101) 11. One of the trefoil jugs from Doña Blanca had a black surface, something which is found in examples from Tyre, idem, (op. cit. n. 99) 56.

118 Idem, (op. cit. n. 104) 91 and (op. cit. n. 98) 247-248.

119 A feature which normally indicates a relatively high dating as one-spouted lamps are most commonly found in the East, while the two-spouted variety is the most frequently represented in the West.

120 Ruiz Mata, (op. cit. n. 95) 52-54; G. Maass-Lindemann, "Vasos fenicios en la Península Ibérica," Los fenicios en la Península Ibérica, 228. See below chapter four for a full discussion of this amphora and its distribution.

121 Ruiz Mata and Pérez, (op. cit. n. 99) 58.
Sagona's type 2 amphora which is found widely on the Levantine coast between 760 and 700 (Fig. 10, 4). In general, the pottery of the first years of occupation at Doña Blanca points to close and continued links with the motherland, with some contact with the central Mediterranean, and to a relatively high economic level, judging by the predominance of fine table ware, and imports of high quality pottery from the East.

The barrio fenicio was abandoned at the end of the eighth century, perhaps following an earthquake, and the second and third phases of pottery, dating from the end of the eighth century and throughout the seventh, come from this area which was subsequently used as a dump until it was reoccupied in the fifth and fourth centuries. The second and third phases show quite distinct changes from the older pottery with the large scale manufacture of polychrome decorated pottery, mainly on the pithoi, urns, small amphorae and bowls (fig. 11). This polychrome ware consists of wide red bands, framed by black stripes and it is often decorated with concentric

122 This type of amphora has a short vertical neck, carinated shoulders and pointed base, Ruiz Mata, (op. cit. n. 98) 248-250; A. G. Sagona, "Levantine Storage Jars of the 13th to 14th Century B.C.," Opuscula Atheniensia, 14 (1982), 75-78.

123 Ruiz Mata (op. cit. n. 101) 11; (op. cit. n. 95) 54. This ware is also found in the lowest levels of Morro de Mezquitilla where the pottery production is still very closely linked to the East. See above chapter one.

124 Idem, (op. cit. n. 95) 55-56.
circles.\textsuperscript{125} The turn of the eighth century also marks the large scale appearance of grey ware in plates, paterae and bowls.\textsuperscript{126} The red slip forms continued to be manufactured but now the plates have wider rims following the same chronological evolution that we see in the Phoenician settlements and cemeteries in Málaga.\textsuperscript{127} In their form and decoration they are exactly similar to the plates from Mogador, and this similarity to the Moroccan pottery is found in the red slip carinated bowls which in Castillo de Doña Blanca are again very similar in typology to forms found in Mogador.\textsuperscript{128} The amphorae continue to be mostly the R-1 form and the Levantine Sagona type 2 form now disappears, perhaps indicating an increased reliance on local production of amphorae and their contents rather than on imports from the motherland. The amphorae are now more numerous than in the preceding phase, testifying to a new growth in the settlement's commercial activities with the

\textsuperscript{125} The pithoi at Castillo de Doña Blanca are very similar in their decoration, form and firing to those from Mogador, the Phoenician trading post on the Atlantic coast of Morocco, Jodin, (op. cit. n. 31). It is interesting that several of the pithoi from Doña Blanca were decorated with figurative motifs of fantastic animals and exotic flowers. Similar decorations were found on pithoi from a mid-seventh century context in what has been interpreted as a possible Phoenician religious building in the indigenous site of Carmona in the Guadalquivir valley in Seville province. M. Belén et al., Apuntes para un centro de interpretación de la ciudad en la casa-palacio Marqués de las Torres Carmona, Carmona 1996, 15-17.


\textsuperscript{127} Ruiz Mata, (op. cit. n. 98) 250-251.

\textsuperscript{128} Ibid, 251; for the Mogador plates see Jodin, (op. cit. n. 31) 77-84 and fig. 15 a and b.
coming of the seventh century, the apogee of Phoenician activities and prosperity in the West.\textsuperscript{129}

Thus, from the turn of the eighth century onwards, we find a wider variety of ceramic types, with the introduction of polychrome painted ware in great quantities, and grey ware, and Ruiz Mata has suggested that "so many differences, in such a short time suggest the presence of new stimuli, from the end of the eighth/start of the seventh century, coming perhaps from Cyprus or the Phoenician cities."\textsuperscript{130} Throughout the seventh century the pottery of Doña Blanca shows clear links not only with the neighbouring Phoenician sites on the Mediterranean coast of Andalusia, but also with the Atlantic sites on the Moroccan coast, especially with Mogador. This unified material culture is specific to the Phoenician Far West and is not found in Carthage, Motya and the other great Phoenician sites of the central Mediterranean. It seems that for purposes of trade this region formed a distinct, autonomous unit, which scholars have called the "provincia cultural occidental" or "el círculo del estrecho", independent of Carthaginian influence until well into the sixth century, and we should probably link it with the search for metals which the sources tell us brought the Tyrians to the far end of the Mediterranean and beyond.\textsuperscript{131}

\textsuperscript{129} Ruiz Mata, (op. cit. n.98) 259-260; idem, (op. cit. n. 95) 56.

\textsuperscript{130} Idem and Pérez (op. cit. n. 99) 64. The economic prosperity and growth in the size and number of the Phoenician colonies in Iberia during the seventh century has often been attributed to the influx of large numbers of new settlers from the East. See below chapter four.

\textsuperscript{131} G. Maass-Lindemann, "A comparison of the Phoenician pottery of Lixus with the west Phoenician pottery of Spain," Lixus, collection de l’école française de
While the pottery of Doña Blanca corresponds to that of the other Phoenician enclaves in Iberia, there is one important difference - the levels of indigenous handmade pottery are far higher here than in the other sites in the region where they make up only a tiny percentage of the total pottery assemblage. The indigenous pottery consists mainly of bowls, cups and large storage vessels, the so called thistle-vases, because of their thistle-shaped form (Fig. 12). These were used for storing solids and liquids and most were found still in situ inside the houses.\(^\text{132}\) The handmade ware at Doña Blanca undergoes the same process of evolution that we see in contemporary indigenous settlements, gradually becoming less frequent in number, and more limited in type, as wheelmade ware becomes predominant, until by the seventh century it makes up only 10% of the total.\(^\text{133}\)

Does the greater representation of indigenous handmade pottery at Castillo de Doña Blanca reflect a greater representation of the local population among its inhabitants than we find in the sites to the east of the Straits? The answer at the moment seems to be yes, for a number of reasons. We saw that the Phoenician enclaves in Iberia responded.

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\(^{132}\) Ruiz Mata, (op. cit. n. 101) 11 and (op. cit. n. 95) 54-55; idem and Pérez, (op. cit. n. 99) 59.

\(^{133}\) Ruiz Mata, (op. cit. n. 112) 97. As the final publication of the excavations at Doña Blanca is still in progress the percentages of handmade versus wheelmade pottery and the changes in these figures over time are not available.
reasons. We saw that the Phoenician settlers who reached the Bay of Cádiz at the start of the eighth century chose for their new foundation a previously unoccupied site, but one which was in close contact with at least two Late Bronze Age indigenous settlements, situated slightly further up the Sierra de San Cristóbal. These settlements seem to have been abandoned when the Phoenician site was established and their inhabitants may well have joined the new colony, given the very visible presence of indigenous pottery at the site.\textsuperscript{134} However the real proof of the close ties linking the new settlers with the local population comes from the cemetery on the Sierra de San Cristóbal. Instead of the very characteristic shared burial rites which we find in the other colonial settlements in Spain, the inhabitants at Doña Blanca chose to bury their dead alongside their indigenous neighbours, and to some extent participating in their burial rituals.\textsuperscript{135}

The cemetery of Las Cumbres is situated on the southern side of the Sierra de San Cristóbal, less than 500 m away from the settlement at Doña Blanca. Although it extends over an area of some 100 Has, so far only three burial areas have been excavated. Two of these date to the period between the seventeenth and fifteenth centuries, corresponding to the end of the Copper Age and start of the Bronze Age in the region, while the burial area that interests us is Tumulus 1, which

\textsuperscript{134} The form and decoration of the indigenous pottery at Doña Blanca is restricted to the Late Bronze Age sites in the area around the Bay of Cádiz and not found elsewhere, indicating that its users may well have come from the immediate vicinity of the site; idem and Pérez (op. cit. n. 99) 59.

\textsuperscript{135} For Phoenician burial rites see above chapter two.
was in use throughout the eighth century until it was closed at the end of that century with the erection of the mound of the tumulus over the burials (Fig. 13). The area enclosed by the tumulus contains the burials of the Phoenician settlement at Doña Blanca, and probably some belonging to its indigenous predecessor.\textsuperscript{136} Tumulus 1 is located on the slope of a small ridge, close to two other tumuli which have yet to be excavated. It consists of a small circular hill, defined by stones at its southeast, southwest and northwest ends, and contains at least 62 cremation burials. The central area of the tumulus is occupied by a collective funerary pyre, or \textit{ustrinum}, where the cremations were carried out. The burials were placed around the \textit{ustrinum} and had a variety of forms: the simplest had no urns, and little or no grave goods, and the ashes were simply placed in small hollows in the ground, and then covered with stones. More elaborate forms of burial consisted of small fossa dug into the rock with the ash urn in the centre covered and protected by small stones. The grave goods were placed inside the urn and around it. Some of the burials were covered with a layer of red clay similar to that used to form the floors of the houses at Doña Blanca. This would have been used to seal the burials and perhaps to serve as an indicator of sacred space in the time before the mound of the tumulus was raised. There are no obvious indicators of sex or rank in the external appearance of the burials and the

\textsuperscript{136} Idem, (op. cit. n. 100) 287-295; idem, (op. cit. n. 99) 113-122.
excavators have suggested that prestige was indicated by the place occupied in the funerary circle.\textsuperscript{137}

The earliest burials have indigenous handmade ash urns consisting of large biconical vases, burnished pots with incised geometric decoration, or the thistle-vase, with its wide flaring mouth. They have very few or no metal objects. By the end of the eighth century, wheelmade ash urns are used, most commonly those of the Cruz del Negro type.\textsuperscript{138} Other pottery types used as grave goods in the latter period of the cemetery's use are handmade cups and pots, wheelmade Cruz del Negro urns, incense burners, red slip paterae, and small perfume jars, either of alabaster or pottery, as well as on one occasion a tripod and a red slip plate. Metal objects consist of bronze belt buckles, double spring fibulae and iron knives, the latter a sure sign of Phoenician influence.

There is evidence of some ritual activity which would have been carried out at the site before the necropolis was closed with the erection of the tumulus. This takes the form of fires, sometimes associated with high quality drinking vessels and red slip incense burners, which seem to have been deliberately broken after use. This inevitably reminds us of similar acts of libation at the Phoenician cemeteries of Trayamar in Málaga and Puente de Noy in Granada.\textsuperscript{139} However there is clearer

\textsuperscript{137} Idem, (op. cit. n. 99) 117.

\textsuperscript{138} For a discussion of this pottery type see chapter one above.

\textsuperscript{139} See above chapter two.
evidence of a Phoenician presence in the form of several burials grouped around a small secondary tumulus in the southwest corner of the mound, still included within the overall structure of Tumulus 1. The centre of the secondary tumulus is occupied by an elaborate burial structure, which is made up of a circular masonry wall, with a sand floor. This structure houses the cremated remains of an adult and child, contained within 2 Cruz del Negro urns, along with abundant grave goods. These consist of an incense burner, a red slip support and bottle, two alabaster perfume flasks, two gold and two alabaster beads, several burnt shells, a handmade pot, and inside one of the urns there were a bronze belt buckle, a glass bead and a silver pendant. Around this structure there are thirteen cremation burials, crowded together and sometimes superimposed, which contain Phoenician wheelmade pottery and metal grave goods. This area probably dates to the last period of the cemetery’s use and is one that was obviously set apart from the main body of the cemetery by its peripheral position and more elaborate central burial structure. The burials within the circular masonry wall have been interpreted as Phoenician by Ruiz Mata and Pérez and, if this is the case, it is the first instance of a Phoenician buried in an indigenous context known in the Iberian Peninsula.  

140 The obvious parallel is that of Pithekoussai where a Phoenician family was buried in cemetery of the Greek colony, D. Ridgway, The first western Greeks, Cambridge 1992, 111-118. Ruiz Mata and Pérez (op. cit. n. 99) 120, cite the case of the burial of a Phoenician craftsman in a Bronze Age tholos tomb in Crete, however this is not an exact parallel as the tomb was rededicated in a Phoenician manner and there were no contemporary Cretan burials. See H.G. Niemeyer, "Die Phönizier und die Mittelmeerwelt im Zeitalter Homers," Jahrbuch des Römisch-Germanischen Zentralmuseums, 31 (1984) 3-94.
The burials at Tumulus 1 are a rich source of information about the nature of the relationship between the Oriental settlers and the local population but one which at the moment provides us with more questions than answers.\textsuperscript{141} What is certain is that our interpretation of Phoenician settlement in Iberia is radically altered by the evidence from both the settlement at Castillo de Doña Blanca and its necropolis which show far closer contact between Phoenicians and Iberians than has traditionally been imagined. Taking as its starting point the viewpoint of classical authors, the traditional model assigned to explain the reasons behind the Phoenician presence in the Iberian Peninsula, has been their search for metals. Thus the search for silver brought them to Iberia where contact between the new settlers and the indigenous Iberians was limited to commercial exchanges to achieve the primary purpose of Phoenician interest in the Far West - the acquisition of precious metals on a large scale.\textsuperscript{142} However this model has a number of serious limitations; the theory that contact between the settlers and the local inhabitants was restricted primarily to a commercial context fails to account for the deep and lasting effect Phoenician culture had on indigenous society in places such as the Guadalquivir valley with no Phoenician colony nearby to explain such a culture change and in areas of society which it is hard to imagine

\textsuperscript{141} There are several other tumuli visible at Las Cumbres, none of which have been excavated yet. As the area of the cemetery has not been fully investigated, it is always possible that there are other burials of an exclusively Phoenician type which could alter our interpretation of the Tumulus 1 evidence. We have to await further investigation of the site and the full publication of the Tumulus 1 findings.

\textsuperscript{142} Aubet Semmler, (op. cit. n. 48) 241.
would be so profoundly transformed through commercial contact, no matter how intense and sustained. In this context the evidence from Doña Blanca shows that contacts between Phoenician settlers and the local inhabitants were not driven purely by commercial considerations. Phoenician and Tartessian were, it seems, prepared to live together and to some extent share the same burial rituals. This is only logical given that the investigations carried out by Ruiz Mata and his team in the areas around the Bay of Cádiz and between the Guadalquivir and the Guadalete rivers as far inland as the Sierra de Gibalín revealed that this region was densely populated at the time of the establishment of the Phoenician settlement at Doña Blanca. Ruiz Mata has suggested that the presence of indigenous pottery at Doña Blanca is the result of the peaceful coexistence of Phoenicians and Spaniards, either because of the pressure of native population in the area, or out of a need for labour in the settlement, although there are several other possible scenarios, such as the incorporation

143 In Carmona, for instance, which is generally characterised as an indigenous settlement in commercial contact with the Phoenicians, we find evidence of strong oriental influence in the burials of the Roman period, M. Bendala Galán, "La perduración púnica en los tiempos romanos. El caso de Carmo," HA, 6 (1982) 193-203. See also M. Belén,"Fenicios en Andalucía occidental. Diez años de investigación (1980-1990)," Hispania Antiqua, 18 (1994) 495-518; J.L. López Castro, "La colonización fenicia en el sur de la Península Ibérica. 100 años de investigación," Actas del seminario celebrado en la facultad de humanidades del campo universitario de Almería, 5-7 junio 1990, Almería 1992, 11-79. This model also ignores the evidence of the ancient authors. For instance Strabo, III, 2, 13: The people (= the inhabitants of Iberia) became so utterly subject to the Phoenicians that the greater number of the cities in Turdetania (the area corresponding to Tartessos) and of the neighbouring places are now inhabited by the Phoenicians. For a more detailed discussion of this issue see below chapter four.

144 Ruiz Mata and Pérez, (op. cit. n. 99) 126. These investigations have not yet been published.
of local people, mainly women, through intermarriage.\(^{145}\) It is clear that the commercial model of Phoenician colonisation in Iberia needs to be reevaluated in order to achieve a more balanced understanding of Phoenician activities there.

The settlement at Castillo de Doña Blanca is important not only for its own sake but also for the insight it gives us into the kind of construction techniques and urbanisation which could have existed in Gadir. More importantly, it supplies us with crucial information concerning the trading activities and commercial contacts of Cádiz during the eighth and seventh centuries and beyond. We have seen that the commercial hinterland of Gadir went far beyond the Bay of Cádiz, stretching out into the Phoenician sites of Málaga and Granada and Ibiza, and south of the Straits to Atlantic Morocco, at Mogador and Lixus. The similarities in the pottery of these sites to that from the Spanish Phoenician sites and native Tartessian settlements along the Guadalquivir valley shows that North Africa was an integral part of the trading area of Gadir and seasonal trading posts such as that at Mogador and also Rachgoun on the Moroccan coast could well have been founded at the instigation of Gadir itself. It therefore seems that despite the elusive and enigmatic nature of the remains found under modern Cádiz, the wealth and industry of the Tyrian colony at Gadir can still be glimpsed in the pottery

\(^{145}\) Ruiz Mata, (op. cit. n. 101) 11; idem, (op. cit. n. 95) 54-55. In the Greek colonial context local women may often have been incorporated into the colony as wives of the colonists, see R. Van Compernolle, "Femmes indigènes et colonisateurs," *Forme di contatto e processi de trasformazione nelle società antiche*, *Collection de l'école française de Rome*, Pisa-Rome 1983, 1033-1049.
fragments found from Morocco to Almería, thereby confirming the ancients' view that, of the Phoenician foundations in the West, along with Carthage, the most important was Cádiz.
Figure 1. Palaeotopography of Cadiz. Source: Martín Ruiz 1995.
Figure 2. Bronze statuette of Melqart found near Cadiz. Source Martín Ruiz 1995.
Figure 3. The "priest of Cadiz". Bronze statuette with gold face. Source: Martín Ruiz 1995.
Figure 4. Proto-aeolic capital from Cadiz. Source: Martín Ruiz 1995.
Figure 5. Gold jewellery from the Phoenician cemetery in Cadiz. Source: Martín Ruiz 1995.
Figure 6. Female anthropoid sarcophagus now in the Cadiz Archaeological museum. Source: Martín Ruiz 1995.
Figure 8. Plan of the site at Castillo de Doña Blanca. The clear lines indicate the eighth century buildings. Source: Ruiz Mata and C.J. Pérez 1995.
Figure 10. Eighth century Phoenician amphorae from Castillo de Doña Blanca. 1-3 amphorae from the western Mediterranean; 4 amphora from the eastern Mediterranean, Sagona type 2; 5 and 6 Carthaginian or central Mediterranean amphorae. Source: Ruiz Mata and Pérez 1995.
Figure 11. Seventh century Phoenician pottery from Castillo de Doña Blanca. 1 and 2 Pithos with painted bichrome decoration; 3 and 5 Cruz del Negro urns with painted bichrome decoration; 6 tripod bowl; 7 and 9 oil bottles; 8 red slip oil lamp with two wicks. 1 bis jug. Source: Ruíz Mata and Pérez 1995.
Figure 12. Indigenous handmade ware from Castillo de Doña Blanca. Source: Ruíz Mata and Pérez 1995.
Figure 13. Tumulus 1 from the cemetery at Las Cumbres. Eighth century. Source: Ruiz Mata and Pérez 1995.
**Agriculture**

From the evidence presented in the previous chapters it will have become obvious that Phoenician settlement along the Mediterranean and Atlantic coasts of the Iberian Peninsula was dense, intense and long-lasting throughout nearly three hundred years, from the start of the eighth to the close of the sixth centuries, when the intervention of Carthage brought with it profound changes in the settlement pattern in this area.

In any discussion of the function and purpose of the Spanish settlements, it has generally been the custom to associate them with the search for metals, which, according to classical tradition, was the main motivation for the Phoenician expansionary movement westwards. In this context Spain was the obvious choice for such a dense settlement pattern given, the country's spectacular mineral riches, and more especially its abundance of silver. However, while such an explanation may appear plausible at first sight, on closer examination it fails to account both for the density of the settlement pattern along the coastline of the Costa del Sol and for the location of the sites themselves in an area which has no significant mineral resources, no appreciable local population with which to trade and which is separated by a chain of mountains from
the metal resources and the native population which controlled them.

It is undoubtedly true that it was the metal resources of the Far West that drew the first Phoenician traders and settlers to make the long and often arduous journey from one extreme of the Mediterranean to the other, but it is also true that this explanation does not by itself explain the situation and density of the Phoenician settlement pattern in all the regions touched by this phenomenon. Why so many sites so close together in Spain and Sardinia while in North Africa, Sicily and Malta the needs of the Tyrian traders were apparently adequately serviced with only a handful of settlements? Nor does the metal trade account for all the activities engaged in by the various sites throughout the Mediterranean. While servicing the international trade routes does seem to be one of the most important functions of the great Phoenician centres at Motya, Panormus and Solunto, why in Sardinia do we have a large number of smaller sites which, right from the beginning, display a considerable interest in expanding and controlling the fertile land which made up their hinterland? Agriculture and the provision of an outlet for population surpluses are not expected to account for every single Greek colonial foundation, and some Greek colonies do seem to have had a predominantly commercial function, such as the earliest Euboean colony in the West at Pithekoussai on Ischia. Obviously Phoenician objectives were equally varied and might be expected to be different depending on the differing resources and possibilities available in the areas where they settled.
Obviously too, trade and the needs of navigation were not the only factors which played a role in the formation and structuring of the settlement pattern. Manufacturing, industrial activities and agriculture must also have been important considerations. It is often forgotten that no matter how acute their commercial sense, Tyrian traders too had to eat. The research carried out over the last fifteen years has shown that all these factors played a role in the various Western foundations, and obviously in individual sites some were more important than others. In this chapter the Spanish settlements will be considered in relation to the natural environment which made up their hinterland, and we will see the various ways in which the settlers exploited the natural resources available to them. Nearly a thousand years later Strabo (3, 2, 8) praised the wealth of south-western Spain which, he said, alone among all the countries in the world, combined an abundance of mineral resources with great natural fertility, and the archaeological evidence shows that the Eastern Mediterranean settlers too were aware of, and exploited, the many natural advantages available to the inhabitants of the southern coastline of Spain.

The natural environment - landscape and climate

Modern geographers have divided Andalusia into two distinct geographical zones, Lower Andalusia, with the Guadalquivir valley and the Sierra Morena, which is oriented towards the Atlantic, and Upper Andalusia, comprising the Penibaetic mountains to the east, and which opens on to the Mediterranean
The Phoenician sites of Cádiz and Castillo de Doña Blanca are situated in Lower Andalusia, on the Atlantic, near the estuary of the Guadalquivir river which acts as the chief means of communication with the fertile agricultural land of the interior, on either side of the river itself, and with the rich silver deposits of the mining region of Aznalcóllar and the indigenous settlement of Huelva which controlled the metal resources of Riotinto. The sites located to the east of the Straits of Gibraltar are situated on the Mediterranean coastal plain of Upper Andalusia, separated from the interior by the mountains of the Cordillera Penibética, the inner and more southerly belt of the Cordillera Bética.

The climate of Andalusia is basically Mediterranean with short, wet winters, becoming colder at higher altitudes and in inland areas, and summers which are dry from early June to late September, if not longer, with temperatures which can rise to 40°C and beyond. In Upper Andalusia temperatures and precipitation are strongly influenced by relief and distance from the Mediterranean, with the upland areas of the interior receiving significantly higher rainfall than the coast which

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4 Harrison, (op. cit. n. 1) 22.
has an average annual rainfall of 300-400mm, and often receives much less.\(^5\)

The area occupied by the Phoenician settlements east of Gibraltar, on the littoral of the provinces of Málaga, Granada and Almería, forms a narrow coastal plain, cut off from the interior by the Penibaetican Cordillera. This mountain range is located at an average distance of 20km from the sea, forming a formidable and often impenetrable barrier between the coast and the interior. The coastal plain is divided up into a series of narrow, fertile alluvial valleys, in the estuaries of which the Phoenician sites are generally located.\(^6\) Although cut off from the interior by the mountains, communication is possible through the courses of the rivers themselves, most notably in the cases of the Guadiaro, Guadalhorce and Vélez rivers, all of which are dominated by a Phoenician settlement. The Vélez river in particular, on which the site of Toscanos is situated, provides direct access to the mining areas of the eastern Sierra Morena and the areas of Ronda, Antequera and the vega of Granada through the Zafarraya pass.\(^7\) The Guadalhorce river, on which the eighth century settlement of Cerro del Villar is located, is another important channel of communication with the interior, linking the coast with the uplands of Granada and

\(^5\) Warning Treumann, (op. cit. n. 3) 17-18; Harrison (op. cit. n. 1) 22 cites figures of less than 250mm rainfall a year for parts of coastal Almería and Murcia.


the provinces of Corduba and Seville. It may well be the overland route from Malaka to Tartessos recommended by Avienus as an alternative to the crossing of the straits by sea during adverse weather conditions.8

It was this region of narrow river valleys, cut off from the interior by high mountains, which the first settlers chose for their homes. It is remarkable how similar the landscape is to that which they left behind, where the Lebanese coastal plain is divided from the open lands of the interior of Asia by the anti-Lebanon range, and split into numerous narrow river valleys by the rocky outcrops of these mountains which often run down to the sea itself.9 In building their settlements too the Phoenician colonists opted for sites which reproduced the distinctive locations of their mother cities. Ezekiel, in his invective against Tyre, addresses it as the city which *dwell* at the entrance to the sea, merchant of the peoples on many coastlines,10 and the chief Phoenician cities were all situated on the coast, either on the mainland itself, dominating a bay or small inlets which acted as natural ports, such as Biblos, Berytus and Sidon, or on small islands situated close to the

8 Avienus, *OM*, 178-182; Aubet Semmler, (op. cit. n. 6) 56; eadem and N. Carulla, "El asentamiento fenicio del Cerro del Villar (Málaga): arqueología y paleogeografía del Guadalhorce y de su hinterland," *AAA*, 1986, 425-426. This route was obviously frequently used, given the number of Phoenician finds along it, see P. Silières, *Les voies de communication de l'Hispanie méridionale*, Paris 1990, 537-542.


coast, as in the case of Tyre and Arvad.\textsuperscript{11} In the West their preference for coastal locations continued and the settlement pattern which Thucydides describes for the earliest Phoenician presence in Sicily is characteristic of the other regions of the Phoenician koiné also.\textsuperscript{12} Such a location for their sites offered the advantages of combining secure defensive conditions with good means of communication with the hinterland and we can see this pattern repeated in the locations chosen for the Phoenician sites on the southern Spanish coasts.

Most of the Phoenician sites there are now situated on small natural elevations, alongside a river, and close to the shoreline, overlooking the flat alluvial land on either side of the riverbed. The only exception is Cádiz which now forms a long narrow peninsula, jutting out into the Bay of Cádiz. It has always been thought that the Phoenicians chose these sites because of the presence of the rivers which were used to connect the settlements to the sea, but recent geological investigations carried out by the German Archaeological Institute and the Geologisch-Paläontologisches Institut of the University of Kiel have shown that the flat alluvial land cutting off the settlement remains from the sea is the result of relatively recent sedimentation processes caused by extensive deforestation and the resulting soil erosion in the

\textsuperscript{11} Aubet Semmler, (op. cit. n. 7) 22; Moscati, (op. cit. n. 9) 25.

\textsuperscript{12} Thucydides VI, 2, 6, There were also Phoenicians living all round Sicily. The Phoenicians occupied the headlands and small islands off the coast and used them as posts for trading with the Sicels.
mountains behind the coastal plain.\(^{13}\) Hence a site such as Toscanos in the province of Málaga, which is now some 1,300m distant from the modern coastline, was once located at the side of a very deep marine or brackish inlet which penetrated far into what is now flat farmland.\(^{14}\) On the northern slope of the settlement hill itself, Toscanos had its own small harbour complex at Manganeto, with an artificial platform built at the edge of the former shoreline and which is now buried deep under the alluvial deposits laid down by the river Vélez.\(^{15}\)

The geological investigations carried out by the University of Kiel have confirmed the Phoenician preference for settlement sites on peninsulas in the interior of a marine bay, or sometimes right on the shore, where the former bay opened out into the sea. The settlements of Toscanos, Morro de

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\(^{13}\) There is an extensive bibliography on the subject, see chiefly, H.G. Niemeyer, C. Briese and R. Bahnemann, *Geologisch-archäologische Forschungen zum Verlauf der andalusischen Mittelmeerküste*, Forschungen sur Archäologie und Geologie von Torre del Mar 1983/84, Madrider Beiträge XIV, Mainz 1988, especially O. Arteaga *et al.*, "Geologisch-archäologische Forschungen zum Verlauf der andalusischen Mittelmeerküste," in Niemeyer, Briese and Bahnemann, (op. cit. this note), 107-126. This article was also published in Spanish as "Investigaciones geológicas y arqueológicas sobre los cambios de la línea costera en el litoral de la Andalucía mediterránea. Informe preliminar (1985)," AAA, 1985, 117-122.


Mézquitilla, Adra, Montilla and, later on, Villaricos and Málaga, all conform to this pattern which we find again in Lixus in North Africa.\textsuperscript{16} Sites which were especially protected and isolated from the hinterland, while still offering easy access to the sea, were also favoured. Hence we find peninsulas situated inside a marine bay, as in the case of Cerro del Prado and Almuñécar, where the settlement is located on a small peninsula jutting out into the bay between the marine inlets into which flowed the twin rivers of the Seco and the Verde.\textsuperscript{17} But the ideal combination of security with ease of communication was offered by the situation of Tyre itself, on a small island facing the coast, and this situation was reproduced in Spain with the settlement of Cerro del Villar, on an islet in the estuary of the Guadalhorce river, and Cádiz, situated on a small archipelago in the bay of the same name.\textsuperscript{18}

The identification of the ancient coastline of Mediterranean Andalusia provides us with a clear picture of what constituted the ideal location for the first Phoenician settlers to reach Spain: easy access to the sea through the bays and inlets which also acted as natural harbours and landing places providing shelter from adverse winds and currents; settlement sites


\textsuperscript{17} Utica on the North African coast shares this type of location, on a peninsula between two lateral bays, ibid, 73.

which combined ease of communication with good natural defensive conditions; and, most importantly of all it seems - as this factor is a constant in all the Phoenician sites so far found on the Peninsula - access to a river which acted as the ideal means of communication with both the immediate hinterland of the site, and with the indigenous settlements beyond.

The most striking feature in terms of the location of the southern Spanish sites is not their coastal situation, however, but rather the great density of settlement which we find along the coastlines of the modern provinces of Cádiz, Málaga, Granada and Almería. The latest geological and archaeological research has brought the number of definitive Phoenician settlements along the Andalusian coast up to 18,19 with several others which may represent Phoenician or Phoenician-influenced indigenous settlements stretching up as far north as Alicante. It must be stressed that these figures are anything but definitive. Undoubtedly there are more settlements which have yet to be discovered, or lie forever out of reach under the cement foundations of the holiday apartments and tower blocks of the Costa del Sol. So far all the archaeological research along the coastline of the Costa del Sol has only served to prove the truth of Avienus' description of the coast between Málaga and Almería as formerly home to a crowd of Phoenicians.20

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19 See above chapter one.

20 Ora Maritima, 440; 459-460.
One of the most remarkable aspects of the settlement pattern in this area is that the sites are not evenly distributed along the coast but instead are clustered close together, sometimes with only a few kilometres distance from one to the next. Thus, between the site at Cerro del Villar and Málaga, there is a distance of only 4km, as the crow flies. Toscanos is 7km away from Morro de Mezquitilla, while Chorreras is a mere 800m away from Morro de Mezquitilla (see chapter 1, figure 1).21 This dense concentration of settlements has generally been contrasted to that to the west of the Straits of Gibraltar, where up to recently Cádiz was the only site which could be securely identified as Phoenician. However even there, the coastal area is beginning to fill up, with sites located at Castillo de Doña Blanca, Tarifa and Cerro del Prado, as well as a sanctuary to Astarte at Gorham’s Cave in Gibraltar. Such a density of settlement is found nowhere else in the Phoenician world, with the possible exception of Sardinia. In Africa the average distance between settlements was some 30-40km.22 Thus there must have been a reason for the Phoenicians, after navigating from one extreme of the Mediterranean to the other, to have set up such a large number of sites in a string of pearls pattern in precisely this one area.23 The problem lies in

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21 Aubet Semmler, (op. cit. n. 7) 266 and (op. cit. n. 6) 55.

22 S. Moscati, Tra Tiro e Cadice, Studia Punica 3, Rome 1989, 143.

23 This term was first used by H.G. Niemeyer, "Die Phönizier im Zeitalter Homers," Jahrbuch der Römisch-Germanischen Zentralmuseums, 31 (1984), 3-94 to describe the settlement pattern along the southern Spanish coastline.
identifying the factors which induced the Phoenicians to settle so intensively here for almost three centuries.

The most obvious reason would seem to be metals. After all there is almost unanimous agreement among both ancients and moderns that it was the search for metals which drew them to the Far West in the first place. But, while the Peninsula itself is one of the richest metallogenic provinces in Europe, the area occupied by the Phoenician settlements is one which is lacking in any significant mineral resources and which is separated by the Penibaetican mountains from the metal-producing areas, located in the Iberian Pyrite Belt of south-west Spain. The only mineral available in significant quantities within easy reach of the Costa del Sol settlements is the iron deposits of the mountains of Ronda, Archidona, Antequera, the Upper Guadalhorce and the Alpujarras. These deposits, while valuable, can hardly compare with the spectacular silver deposits of the province of Huelva, where the Riotinto mines, in addition to silver, also yielded gold.


25 P. Gasull, "Problematica en torno a la ubicación de los asentamientos fenicios en el sur de la Península," *Los fenicios en la Península Iberica*, 194. There are some sources of argentiferous galena in the province of Málaga but there is no evidence that these were exploited in this period, F.J. Rodríguez Vinceiro *et al.*, "Aproximación a los recursos abióticos durante la protohistoria en la provincia de Málaga," in F. Wulff Alonso and G. Cruz Andreotti, *Historia antigua de Málaga y su provincia, actas del primer congreso de historia antigua de Málaga (Málaga, 1994)* Málaga 1996, 189-204. For the mineral resources of south-west Spain see chapter five.

copper, iron and lead.\textsuperscript{27} By themselves they are hardly sufficient to account for such intense settlement in the area over more than two hundred years, as Aubet points out, given that iron is the most common mineral in the Mediterranean basin.\textsuperscript{28} Metallurgical workshops have been found in several of the Phoenician sites in this part of Spain - most notably at Toscanos, Morro de Mezquitilla and Adra where iron was processed - but any activities carried out there were very much small scale, and must have served merely to satisfy the internal needs of the settlements.\textsuperscript{29} If access to the mineral resources of the Peninsula was indeed the most important consideration in the choice of a site, then Cádiz is far better situated than the Costa del Sol settlements, located as it is close to the mouth of both the Guadalete and Guadalquivir rivers which provide direct links to the silver mines of the interior.\textsuperscript{30}


\textsuperscript{28} (op. cit. n. 7) 269.

\textsuperscript{29} I. Keesmann, H.G. Niemeyer, F. Golschani, "Schlakenfunde von Toscanos," \textit{MM}, 24 (1983) 65-75; I. Keesmann, B. Hellermann, "Mineralogische und chemische Untersuchungen am Schlacken von Morro de Mezquitilla," \textit{MM}, 30 (1989) 92-117. The discovery of iron-production across a number of Phoenician sites in Andalusia, Portugal and Ibiza may be due to the fact that as this metal was first introduced to Iberia by the Phoenicians, the settlers had no means of obtaining the metal other than by producing it themselves or importing it from the Eastern Mediterranean, a costly business when there were abundant supplies of ore available locally. Silver-smelting is attested at the Phoenician sites of Villaricos in Almería and Sa Caleta in Ibiza. These exploited locally available sources of ore. See below chapter five.

\textsuperscript{30} See above chapter three.
Since direct and immediate access to the mineral resources of the Peninsula does not seem to have been the determining factor in the location of these settlements, then how are we to explain such a large number of small sites located so close together along the Mediterranean coast of Andalusia? This is a question which has puzzled a lot of authors and various solutions have been put forward to explain it. One of the most obvious would be to view them as settlements founded to carry out trading activities with the indigenous population of the interior. However, as we have seen, the situation of the coastal enclaves, cut off from the main centres of population in the south-west with their spectacular wealth in metals, is not an ideal one for trade. Some of these sites, it is true, were located along natural communication routes with the interior, such as Toscanos, on the Vélez, and Cerro del Villar, on the Guadalhorce, both offering connections with the south-east and the Guadalquivir valley. Indeed, the area around both these rivers was chosen for intense Phoenician settlement, implying that communication with the interior was an important consideration. But, judging by the lack of finds along the course of the Vélez and its affluents, only the Guadalhorce was regularly used as a link with the interior, perhaps because it offered the most direct route to Tartessos, while the other Phoenician settlements were located on rivers which did not provide any significant links with the interior, so trade could not have been their primary raison d'être. The existence of a large-scale local trade with the indigenous population of the immediate hinterland has been questioned since the number, and quality, of imported objects found in
indigenous contexts in Upper Andalusia remains surprisingly low - especially when compared with the situation in the south-west - with the bulk of finds coming from those routes linking the south-east with Tartessos.31 However the differences between the nature of Phoenician trade with the south-west and that with the south-east may be due to fundamental differences in the societies of the two regions. (See below)

Another explanation for the proliferation of sites in this region is that these settlements owed their existence to the difficulties involved in crossing the Straits, and therefore were founded to provide refuge for travellers who had to wait for a favourable wind before they travelled on to the Atlantic.32 However difficult the crossing from the Mediterranean to the Atlantic, this explanation of the function of the sites east of the Straits fails to take into account the Phoenician skill at navigation for which they were famous throughout antiquity (after all Gadir was founded to the west of the Straits, on the Atlantic, and several Phoenician sites have been discovered along the Portuguese coast, and far down the Atlantic coast of Morocco). Moreover it suffers from the

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32 Gasull, (op. cit. n. 25) 200-202, followed by Moscati (op. cit. n. 22) 146-147. This idea is developed by Aubet Semmler (op. cit. n. 6) 61-62 who suggests that sailors and travellers, often forced to wait for considerable periods of time for a favourable wind before crossing the Straits, could have provided the extra manpower needed to plant and harvest the crops cultivated at these sites, especially at Cerro del Villar.
additional inconsistency of failing to explain why, if such a large number of sites was necessary to support navigation in this area, is this pattern not repeated elsewhere in the Phoenician world? Most crucially of all, however, it still does not provide a satisfactory explanation for the need to have so many landing places so close together. Other explanations have focussed on a more theoretical framework, such as that put forward by Aubet, who has adopted the model of the commercial diaspora, first developed by Curtin, in an attempt to explain the role and function of these settlements. Once again this theoretical approach, while interesting, fails to address the issue as to why the settlement pattern adopted by the Phoenicians should vary so much from region to region, with only a few large centres in Sicily and North Africa, while in Sardinia, and more especially in Spain, such a dense concentration of sites was deemed necessary, and indeed flourished, for so long. The reason must lie in the natural resources which drew the Phoenicians to settle in this area in the first place and, more specifically, in the functions carried out by these settlements during the course of their existence.

33 C.G. Wagner, "Fenicios y cartagineses en la Península Ibérica. A propósito de una publicación reciente," Gerión, 5 (1987) 333-334. Given the Phoenician navigational skill, Moscati's idea (op. cit. n. 22, 146-147) that so many settlements were founded to ensure immediate refuge for ships caught in adverse natural conditions is extremely unlikely, see J. Alvar, La navegación prerromana en la Península Ibérica: colonizadores e indígenas, Madrid 1981, 66-89.

34 P.D. Curtin, Cross-Cultural Trade in World History, Cambridge 1984; Aubet Semmler, (op. cit. n. 7) 299-300.
The Phoenicians and the environment - the role of the Costa del Sol sites

It is a topos of any study on ancient urbanism that Phoenician settlements were founded primarily to serve commercial or navigational purposes while the Greeks, when establishing sites overseas, did so with a view primarily to found agriculturally self-supporting population centres. The detailed results of the excavations carried out over the last thirty years along the Costa del Sol, however, have shown that the Greeks were not alone in their preoccupation with agriculture, and the view that trade was the principal consideration of the Phoenician settlers overseas is very much a crude and over-simplistic one.

The analysis of animal bones found at several of the Phoenician sites provides us with an insight both into the kind of environment which surrounded these sites and the economic activities carried out there. The settlements were optimally situated to carry out mixed agriculture. They were located each in its own river valley, contiguous to the ancient coastline, and thus were able to exploit the agricultural possibilities offered by the fertile alluvial land of the river valley, which could be enhanced by the use of irrigation with the water which was readily available from the river. The settlements' proximity to the sea offered the inhabitants the chance to supplement their diet through fishing which could also be carried out in the rivers. The sea also provided the dye-producing snails, the famous murex, which the Phoenicians
used to produce purple dye. As well as the resources available from their immediate hinterland, the foothills of the mountains, which formed the backdrop to the agricultural land, provided grazing for herds of livestock, along with game animals and timber for shipbuilding, construction and industrial purposes.

From the results of animal bone analysis, it seems clear that in the Phoenician era, the climate was damper than it is now, with more abundant rainfall, and a far denser cover of deciduous forestry, as we can infer from the presence of abundant red deer bones and those of wild boar and wild cat found in the indigenous settlements of Cerro de la Tortuga, situated some 3km north-west of the Phoenician site of Málaga, and the bones of wild boar and red deer found at Toscanos and at the Tartessian site of Cabezo de San Pedro in Huelva.35

The results obtained from the analysis of animal bones found during the excavations of the Phoenician settlements provide us with valuable insights into the economic and agricultural activities carried out there and the social composition of the settlements themselves. Toscanos in particular is a rich source of animal remains with the bones of both domesticated

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animals, and wild species represented at the site, as well as fish and shellfish. The composition of the animal remains allows us to identify which were the most economically valuable animals to the inhabitants of the site. Cattle made up 49% of the identified fauna during the oldest occupation levels of the site, a figure which steadily increases throughout the period of Phoenician occupation at Toscanos until they make up 80% of the animal remains in the final levels of Phoenician occupation. The economic importance of cattle here is in contrast to their position in contemporary indigenous settlements such as Cerro de la Tortuga, where at least half the meat was supplied by sheep and goats, with cattle providing no more than approximately one-third of the meat supply. The emphasis on the role of cattle at Toscanos may soon have led to specialised stock-breeding, and it is possible that the animals, whose remains were found at the site, were not merely acquired by exchange with the natives but carefully bred there, using techniques designed to produce a heavier-


37 Uerpmann and Uerpmann, (op. cit. n. 35) 86, figure 24. Cattle appear to have occupied an important position among the domestic animals at the Phoenician site of Cerro de Rocha Branca in the Algarve in Portugal, where, with 37.5% of the total animal bone remains, they make up by far the most important element in the food supply there. However the importance of cattle did not prevent the inhabitants from occasionally resorting to more unusual types of meat. Marks on the bones of a fox terrier indicate that the dog had been eaten, apparently in a stew, while donkey was also an occasional source of protein. The use of dogs as a source of food is corroborated by Justin, XIX, 1, 10-12. J.L. Cardoso, "Contribuição para o conhecimento da alimentação em contexto fenicio. Estudos dos restos da Rocha Branca (Silves)," A. Tavares (ed.), Os fenícios no território português, Estudos Orientais IV, Instituto Oriental, Lisbon 1993 124.

38 Uerpmann and Uerpmann, (op. cit. n. 35) 90.
built animal. Although the size of the cattle at Toscanos cannot be estimated due to the poor preservation of the find material, the width of their limb bones can be compared with similar finds from other sites and the resulting comparison shows that the cattle from Toscanos were considerably more heavily-built than those from late Bronze Age indigenous sites.

The role of cattle was obviously not limited to their importance as meat suppliers, and they may also have been used as work animals. Given the fact that the majority of the animals found at Toscanos were adults, we must assume that they were used for other purposes, such as traction, which may imply a progressive increase in the use of the plough and cultivation in general, as Aubet suggests, as well as suggesting that milk-production was a consideration for the settlers at Toscanos. The possibility that cattle played an

39 We know that the Carthaginians at least were very interested in the question of stock-breeding. Magon in his treatise on agriculture gives very precise indications as to the identification of the ideal cow and also provides instructions as to how best to ensure the health and prosperity of cattle, preserved in Columella, VI, 1, 3 and Varro, Rust., II, 5, 18. See S. Gsell, Histoire Ancienne de l'Afrique du Nord, IV, Paris 1920, 1-52 for references; see also S. Lancel and E. Lipinski, "Agriculture," and E. Lipinski, "Magon," both in E. Lipinski, (ed.), Dictionnaire de la civilisation phénicienne et punique, Paris Brussels 1992, 9-10 and 268-269.

40 Uerpmann and M. Uerpmann, (op. cit. n. 35) 49-52. The finds from the Phoenician-influenced Cerro de la Tortuga also point to a stockier type of cattle than their late Bronze Age predecessors.

41 Soergel, (op. cit. n. 36) 112 who in the 1964 excavation materials found only 1 animal who was less than 4 years old, and 5 who were slaughtered at 5-6 years of age, out of a total of 9 identified individuals.

42 Aubet Semmler, (op. cit. n. 6) 59. The use of cattle for traction is supported by the archaeological data which have identified morphological changes in some lower limb bones which may be the result of the demands of work. Uerpmann and Uerpmann (op. cit. n. 35) 93-94. A similar exostosis has been observed in
important role as work animals is supported by the animal bones from the Phoenician site of Castillo de Doña Blanca, associated with the Tyrian colony at Cádiz (see above chapter three). Here too most of the cattle bones came from adult specimens, with a lack of sub-adult individuals, who would have been present if the main goal of cattle rearing on the site was maximum meat production, while the discovery of a castrate among the cattle further points to the use of cattle as draught animals.43 Thus at Doña Blanca, as at Toscanos, it seems that the goal of Phoenician cattle rearing was to produce multi-purpose full-grown adults.

The economic importance of cattle in Toscanos also provides us with a glimpse of the social composition of the Phoenician settlers there. Although cattle were the single most important suppliers of meat at the site, in the early phases of occupation small ruminants, consisting of sheep and goats, were also an important source of meat, supplying 42.5% of the total meat supply in the earliest strata I-II, a figure which steadily declines as cattle assume an increasingly important position in the meat supply.44 This change in emphasis may reflect changes in the social organisation of the settlement itself, as H.P and M. Uerpmann suggest. In the very warm level XVI (dated to the end of the eighth or early seventh centuries) at the Phoenician site of Castillo de Doña Blanca and attributed to the use of the animal as a draught beast. A. Morales et al., "The Mammals," in E. Roselló and A. Morales (eds.), Castillo de Doña Blanca. Archaeo-environmental investigations in the Bay of Cádiz, Spain (750-500 B.C.), BAR International Series 593, Oxford 1994, 45.

43 Morales et al., (op. cit. n. 42) 40-45.

44 Uerpmann and Uerpmann (op. cit. n. 35) 86, table 24.
climate of Toscanos the use of large animals, such as cattle, for meat would have brought with it considerable problems of meat preservation for the average family or small group of consumers. Thus the choice of cattle as the main suppliers of meat suggests that there was a definite organisation of meat distribution to larger consumer groups.\textsuperscript{45} The preference for small ruminants as meat suppliers in the initial phases of occupation at the site, on the other hand, implies the existence of small autonomous consumer groups, such as individual families perhaps, who later became more dependent on a specialised production of livestock for slaughter.\textsuperscript{46} Or, in other words, the possibility exists that given the preference of many of the earliest inhabitants of Toscanos for goat and sheep rearing, either they were not exclusively agriculturists, or they were self-sufficient in their meat production, while later on this more autonomous form of food production was replaced, or at the very least superseded, by specialised cattle-rearing for traction, draught, milk and finally the meat supply, by settlers for whom agriculture played a more important, if not exclusive, role in their lives. This hypothesis of growing specialisation in the activities carried out by the settlers is supported by data from other sites and from the fish bones and mollusc remains from Toscanos itself.

The large number of fish remains found at Toscanos indicates that fishing was an important economic activity there.

\textsuperscript{45} Ibid, 86-87.

\textsuperscript{46} Ibid, 87.
Despite the fragility of fish bones the number of remains which have been preserved is large enough to infer the existence of a population group who specialised in fishing.\textsuperscript{47} Such a supposition is supported by the composition of the remains themselves. Fish represented at Toscanos include both littoral and pelagic species indicating that some fishing must have been carried out at considerable distances from the coast. Therefore it is quite possible that fishing was undertaken by people for whom it was their main economic activity, given the time expenditure involved in this activity, and also the specialised equipment needed (boats, nets, harpoons, etc.),\textsuperscript{48} and the subsequent specialisation of many of these Phoenician settlements in the fish preservation industry, especially in the production of fish sauce, \textit{garum}, for which they became famous from the fifth century right through the Roman period.\textsuperscript{49} The importance of fishing in the archaic


period of Phoenician settlement was not confined to Toscanos, as excavations at other sites have revealed. At Cerro del Villar on the Málaga coast, a large seventh-century building, made up of numerous small rectangular rooms grouped around a central courtyard, was used for various functions related to fishing. One of the rooms was used to store fishing equipment, such as lead weights, hooks and harpoons, while another room contained large quantities of murex shells. A small stairway from one of the rooms linked the house with its own jetty, providing it with a direct connection with the sea. At Castillo de Doña Blanca the analysis of the fish and shellfish remains from proves that fishing was very probably one of the most important of the animal resource cropping strategies, with an extraordinarily varied repertory of fish represented among the finds. At Cádiz huge heaps of murex trunculus shells were found, on one of the former islands that made up the city, suggesting that purple-dye production was carried out there. (See chapter three)

So the faunal remains of several of the Phoenician settlements in Andalusia testify to the intensity of the agricultural and fishing activities carried out at these sites, but they also point to the existence of a clear division of work.


responsibilities in the cropping strategies practised there. The increased emphasis on cattle rearing at Toscanos in the seventh century indicates that we are dealing with an element of the population for whom agriculture was not subsidiary to their commercial or mercantile interests, and who were skillful enough to produce animals which were notably more sturdy and well-built than the cattle of the indigenous settlements surrounding them. The volume of the fish bones found at Toscanos and Castillo de Doña Blanca shows that fish was an important source of food for the settlers and one which was obtained by professional fishermen. When we compare our knowledge of the agricultural and subsistence patterns of these settlements with the evidence from other areas of society some interesting conclusions can be made. In the seventh century, agriculture and fishing were carried out by sectors of society for whom this was their principal, if not their sole activity. They would then have supplied other sectors of the colonial society, notably the elites whose existence we can infer both from the elaborate chamber tombs at Trayamar and Tarifa, and the imposing houses at Toscanos and Morro de Mezquitilla, as well as the metalworkers who produced iron at both these sites. Therefore by the seventh century the colonial population seems to have diversified into a number of groups carrying out specialised economic activities, among whom full-time farmers had an important role to play. The existence of full-time agriculturalist should not surprise us. Given the density of the population to be fed in these sites it would have been extremely difficult, not to mention unprofitable, to satisfy all or most of their
subsistence needs by means of trading with the natives.\textsuperscript{52} We know that this is not the reason the Phoenicians came to Spain, and indeed the evidence points to a well established and successful mixed agriculture practised at these sites, and also to the production of agricultural surpluses, notably in those areas where the Phoenicians enjoyed great specialisation, wine and oil production. These agricultural products could be used to trade with the indigenous inhabitants of south-west Spain who controlled the all-important mineral resources for the sake of which the Phoenicians had made the journey to the Far West. The increasing predominance of cattle at Toscanos points to an intensification of the agricultural activities, away from the self-sufficient sheep- and goat-rearing of the initial phases of occupation, to an ever increasing use of the plough and cultivation in general.\textsuperscript{53} However, for a clearer picture of Phoenician agriculture we need to look away from Toscanos, to the site at Cerro del Villar in the province of Málaga, where the evidence of Phoenician cereal growing and exploitation of the hinterland is clearest.

\textsuperscript{52} H.G. Niemeyer, "El yacimiento fenicio de Toscanos: urbanística y función," in Los fenicios en la Península Ibérica, 117, estimates the population of seventh century Toscanos (including the out-lying sites of Alarcón and Peñón) as from 1,000-1,500 people. That of Doña Blanca during the same period may have been some 1,000 to 1,200 individuals. Although these are two of the largest sites, given the overall number of settlements, we are still dealing with a considerable colonial population.

\textsuperscript{53} Aubet Semmler, (op. cit. n. 6) 58-60. She uses the low incidence of swine found among the animal remains at Toscanos (never more than 11\% - a figure which sinks to a mere 1.5\% in the most recent levels of Phoenician occupation) to support her theory of intensive agriculture practised in the Vélez valley, as this animal is generally incompatible with intensive cereal cultivation.
The Phoenician site of Cerro del Villar - an example of cereal cultivation

Cerro del Villar was first identified as a Phoenician site following the excavations of 1966-1967 which defined two main phases of occupation, from the second half of the seventh century down to the fifth to fourth centuries. However the excavations carried out by M. E. Aubet from 1986 onwards have proved that settlement at the site began a century earlier, at the end of the eighth century, and continued down to the start of the sixth, when the abandonment of permanent occupation there is precisely dated by Etruscan bucchero and East Greek pottery to 580-570. These excavations are especially significant for our purposes in that they have included rigorous analysis, not only of the urbanism of the site itself, but also of the pollen, faunal and geomorphological evidence, in an attempt to reconstruct the environment around El Villar and to understand the Phoenician settlement in terms of its relationship to its hinterland.

The results of these analyses have shown that the site at El Villar was originally situated on a small island, measuring


55 M. E. Aubet Semmler, "Cerro del Villar (Guadalhorce, Málaga). Estudio de los materiales de la campaña de 1987," AAA, 1988, 246-247; Aubet Semmler, (op. cit. n. 50) 76.

56 Eadem, "Notas sobre las colonias del sur de España y su función en el marco territorial: el ejemplo del Cerro del Villar (Málaga)," in II CISFP, 2 617-626.
some 250m by 200m, in the middle of the delta of the river Guadalhorce. This was a conspicuous choice for the location of a settlement, as it was the only island on this side of the Straits along the whole length of coastline colonised by the Phoenicians, and, for this reason, must have constituted an easily recognisable landmark for ships sailing towards the Atlantic.\textsuperscript{57} But, while the site was certainly optimally situated for shipping and navigational purposes, it was not an ideal place to live. The island was limited in size and, at its highest point, was a mere 5m above sea level. As such it was vulnerable to flooding from both the river itself and the sea, and the evidence shows that the settlement suffered from disastrous flooding on at least two occasions, leading to the progressive abandonment of the slopes of the island to concentrate the settlement area in the centre of the island where it was less vulnerable to flooding.\textsuperscript{58} Ultimately it was the threat of flooding, which grew progressively more severe over the life of the settlement, as the Guadalhorce delta was silted up by the alluvial deposits laid down by the river, that caused its abandonment by its inhabitants who may well have moved to the nearby site of Málaga, ancient Malaka, which was founded just as El Villar was abandoned.\textsuperscript{59}

\textsuperscript{57} Ibid, 626.


Thus, given the serious problems associated with settlement on the island of El Villar, why did the Phoenicians stay there for well over one hundred years? The answer lies in the situation of the island itself. It was located in the delta of the Guadalhorce river, the longest and most important river in the province of Málaga, which, unlike most of the other rivers in the province, never dried up in the drought of the summer months, and was characterised by the high volume of water which it contained. The river served as the main channel of communications between the coast and the principal area of Phoenician economic interest, the south-west of the Peninsula, via the plains of Antequera and the province of Seville.  

Thus the fluvial location of the site combined the possibility of easy communication with the resources, both mineral and agricultural, of the interior, and also provided an abundant source of water, available throughout the year, which could be used to irrigate any cultivation practised on the mainland around the settlement.

The immediate hinterland of the site at El Villar is estimated by its excavator to have covered some 18km². This area was exceptionally fertile and ideal for any form of agriculture, thanks to the rich alluvial deposits laid down by the Guadalhorce river, and the permanent supply of water from the river, while the foothills of the mountains behind the site

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60 Aubet Semmler, (op. cit. n. 7) 276; eadem and Carulla, (op. cit. n. 8) 426.

61 In addition to the water supplied by the Guadalhorce there were several fresh water springs in the vicinity of the site which could have provided water for the settlement. Aubet Semmler, (op. cit. n. 56) 622.
were suitable for pasture and stock breeding.\textsuperscript{62} The hinterland of the site also provided stone and marble for construction purposes and high quality clay for use in the production of pottery in which the settlement specialised.\textsuperscript{63} The one natural resource that was conspicuous by its absence was access to metals. The only minerals accessible from the site are some low grade iron deposits in the Sierra Blanca at Marbella some 40km away. Economically these were not significant and we have no evidence that they were ever exploited in antiquity, thus we can discount the availability of minerals as a factor in the choice of El Villar as an area of settlement.\textsuperscript{64}

Judging by the analysis of pollen and plant remains found at the settlement, the inhabitants of El Villar were aware of this area's potential and exploited it to the full. The diachronic analysis of the pollen found at the site enables us to reconstruct the changing environment around El Villar, over the course of the seventh and sixth centuries. While pollen from seventh-century strata indicates that the land within a 10km radius of the settlement was mainly occupied by various species of trees, among which the pine was predominant, plant remains from the final settlement level show that pine trees are now found with plants associated with grasslands and open spaces, indicating that there has been significant deforestation over the period of settlement there. In addition,

\textsuperscript{62} Eadem, (op. cit. n. 50) 72-73 and (op. cit. n. 58) 474.

\textsuperscript{63} Eadem and Carulla, (op. cit. n. 8) 429.

\textsuperscript{64} Ibid, 430.
pollen from the second half of the seventh century shows greater quantities of hydrophilous species, generally found in wetlands or marshes, which become less frequent in the later seventh century, and early sixth century, levels. When this evidence is combined with the clear signs of progressively more frequent and severe flooding of the island, we have virtually incontrovertible proof of the dramatic degradation of the natural environment over the course of the occupation of the site, with deforestation on the mainland leading to increased soil erosion and alluvial sedimentation in the Guadalhorce delta, eventually resulting in the total disappearance of the island, dated by pollen analysis to the sixth century. It is only with the abandonment of the settlement in the early sixth century that the trees gradually start to recover their former density. This interpretation of the environmental evidence is backed up by the faunal remains from the indigenous site of Cerro de la Tortuga, situated only 5 km away, at the northern edge of the Guadalhorce valley. Here the presence of deer, wild boar and wild cat seems to point to the existence of considerable areas of deciduous forests in the mountains on the edge of the valley up to the fourth century, but the occurrence of horse and donkey remains, the latter in large quantities, suggests that deforestation had occurred here too, with open grassland alternating with wooded areas.

65 Aubet Semmler, (op. cit. n. 55) 245-246.
66 Ibid, 246.
67 Aubet Semmler, (op. cit. n. 6) 58; Uerpmann and Uerpmann, (op. cit. n. 35) 68-83.
The pollen and faunal remains from the Guadalhorce valley thus testify to a clear and dramatic degradation of the area around El Villar. Since we have to rule out metal smelting or metallurgical activities as the cause of the deforestation there, the only remaining possibility is that the change in the landscape from woodlands to open grasslands is the consequence of intensive agriculture practised in the lower Guadalhorce valley. Such a conclusion is supported by several finds in the settlement. A large number of stone hand mills used for grinding corn were found at El Villar in seventh and sixth century levels, implying that cereal growing was an important activity in the area around the site, and that its processing took place in the settlement itself.\(^{68}\) Pollen found at the settlement also points to large-scale cereal growing carried out there in the seventh century, with barley as the most common species (55%), followed by wheat (33.3%) and oats (11.1%). Several leguminous plants are also attested, including peas, and in the sixth century grape remains are found in significant quantities in amphorae which appeared in a building used for large scale pottery production. The grapes could have been eaten fresh, dried and turned into raisins, or used for wine making, but the fact that they are found inside amphorae points to wine production, especially given the fact that El Villar was a major amphora-producing centre in the seventh and sixth centuries, implying that the amphorae were

\(^{68}\) Aubet Semmler and Carulla, (op. cit. n. 8) 426; Aubet Semmler, (op. cit. n. 56) 624.
used as containers for locally produced products, probably in this case wine.69

When we compare the data from El Villar with that obtained from plant analysis at Castillo de Doña Blanca we gain a clearer picture of Phoenician agricultural strategies at both sites. In the seventh century levels of Doña Blanca barley and wheat are the most common cultivated plant species, as at El Villar. Cereal cultivation alternated with horticulture here too, with pulses and leguminous plants identified, including lentils, beans and peas, and chickpeas, the presence of which at Doña Blanca provides the earliest evidence for their cultivation in the Iberian Peninsula. Cabbage is also attested and cultivated grape pips (*vitis vinifera*) are found consistently throughout all the occupation strata.70 The combination of cereal growing with horticulture indicates a carefully planned, well thought out crop-growing strategy with pulses providing protein, which is vital as a complement to starch-rich cereals, and also as a substitute for meat consumption. Pulses also play a crucial role in maintaining the fertility of soils which are used in cereal growing, by putting nitrogen back into the soil. The plants cultivated at Doña Blanca point to an emphasis on cereal-growing for human and animal consumption, combined with high-protein horticultural

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69 Aubet Semmler, (op. cit. n. 58) 477-478.

products and grape growing, and in the similar mix of plants cultivated at El Villar we can infer a similar objective.\textsuperscript{71}

At El Villar the animal remains indicate that cereal growing and horticulture were combined with the stockrearing which we find at other Phoenician sites in the region. In the seventh and sixth centuries cattle, sheep and goats were all bred there, and this herding would seem to have been most intensive in the hills surrounding the settlement, which also provided game animals. As at Toscanos and Doña Blanca, at El Villar cattle were economically the most important animals, followed by sheep and then goats.\textsuperscript{72} In fact stock rearing would have had an important role to play in increasing the fertility of the soil used for cereal growing through the provision of fertiliser.\textsuperscript{73} But the most interesting result of the analysis of the hinterland of this site is the indication that the practice of what would seem to be quite intensive agriculture also led to the creation of a number of small rural settlements, dependent on the central nucleus of settlement on the island itself, which were involved in the agricultural activity carried out on the mainland. Although the results of the settlement analysis in the hinterland are still only provisional, it seems that the Guadalhorce valley was not devoid of indigenous population, which occupied a few small, settlements on the edge of the

\textsuperscript{71} Ibid, 35; S. Isager and J.E. Skydsgaard, \textit{Ancient Greek Agriculture, an introduction}, London and New York 1992, 43.

\textsuperscript{72} Aubet Semmler, (op. cit. n. 58) 477-478.

valley and former delta, at Llano de la Virgen, near Coín, and Loma del Aeropuerto on the mainland opposite El Villar.\textsuperscript{74} Given the island situation of the principal Phoenician settlement, and the often quite intensive labour requirements demanded by irrigation agriculture, the establishment of small outlying settlements on the mainland is an obvious necessity to facilitate the agricultural activities carried out in the extensive hinterland of El Villar. So far, two secondary Phoenician settlements have been identified on the coast facing the island, at Campamento Benítez, where Phoenician pottery dates occupation during the seventh and sixth centuries, and at Loma del Aeropuerto, where the Phoenician settlement directly overlies the indigenous Late Bronze Age site.\textsuperscript{75} Thus we could be dealing with a settlement pattern here similar to that found in the Vélez valley, which again has a number of small settlement sites a few kilometres from the Phoenician enclave,\textsuperscript{76} or even with an archaic precursor of the pattern of rural settlement found in the island of Ibiza in the Carthaginian period. There small rural cemeteries scattered

\textsuperscript{74} Aubet Semmler, "Cerro del Villar 1989. Informe de la segunda campaña de excavaciones arqueológicas en el asentamiento fenicio de la desembocadura del Guadalhorce (Málaga)," AAA, 1989, 381.

\textsuperscript{75} Aubet Semmler, (op. cit. n. 50) 73-74 and (op. cit. n. 58) 479. Two further sites have yielded archaeological materials, at San Julián which dates from the Punic period of the fifth to third centuries when the site acted as a sanctuary, and at Churriana, where the remains seem to reflect the existence of a necropolis there dating to the Phoenician period (see above chapter two). Another possible cemetery is situated at Cortijo de Montañez, eadem, G. Maass-Lindemann, J.A. Martín Ruiz, "La necrópolis fenicia de Montañez (Guadalhorce, Málaga)," Cuadernos de arqueología mediterránea, I, (in press).

throughout the island attest to intensive agricultural activities, carried out in small settlements specialising in the production of wine and oil, which was then exported in the island's characteristic amphorae.\textsuperscript{77}

What is clear from the description of the natural environment in the Guadalhorce valley, and the activities carried out there, is that the principal economic activity at the Phoenician site of El Villar was agriculture, carried out in the fertile alluvial land of the valley and the foothills of the mountains surrounding it. As Aubet points out, with no evidence of metallurgical activities there, only intensive agriculture could have caused the extensive deforestation and environmental damage which we can trace through the changing profile of the pollens and seeds found in the area. The Guadalhorce valley with its rich alluvial soils and copious supplies of water was ideal for agriculture, and all the evidence points to the fact that the Phoenicians understood and took full advantage of this. Cerro del Villar is one Phoenician site whose raison d'être cannot be wholly explained in terms of the metal trade, or navigational needs. The chief resource of the lower Guadalhorce valley was its rich agricultural potential, and this was sufficient to attract and keep settlers there for nearly two hundred years. The example of El Villar should make us wary of assigning all Phoenician foundations to the metal trade, or navigational purposes, or strategic control of trade routes, all of which have been suggested as possible

\textsuperscript{77} C. Gómez Bellard, "Asentamientos rurales en la Ibiza púnica," in Los fenicios en la Península Ibérica, 177-192.
explanations for the density of settlements in this one area. The evidence of plant and animal remains shows that the settlers along the Costa del Sol coastline did not limit themselves to one activity. Rather our information points to a diversified economy, with a wide range of activities being carried out there; small-scale metallurgical activities at Toscanos, Morro de Mezquitilla and Adra, pottery production at all the sites, especially Chorreras and El Villar, and a mixed agriculture, combining cereals and horticulture in the fertile land of the river valleys, with stockrearing in the hills behind the settlements, and a full use of the abundant fish stocks available from the sea and the rivers. In an area with no appreciable mineral resources and poor connections to the hinterland the real resource is the land, and it is only agriculture that can explain the cluster of sites, all sharing the same location, along the narrow coastal plain of Mediterranean Andalusia. Nor should there necessarily be anything incongruous in the picture of the Phoenician as farmer. Their reputation as the unscrupulous and opportunistic traders of antiquity has overshadowed their skill as builders, artisans and farmers. Mention has already been made of Magon and the Carthaginian expertise in agriculture. Here is one case where commerce did not overshadow cultivation. The evidence from Spain points to a successful and prosperous agriculture which formed the basis of the great food-processing industries of the Punic period. The size of the cattle from Toscanos is very probably the result of selective breeding of the kind recommended by Magon and designed to produce a stronger and sturdier animal. Nor were they content with
merely improving existing economic species. The domestic hen and donkey first appear in Iberia in Phoenician and Phoenician-influenced sites, as does the cat.\textsuperscript{78} The cultivation of the vine and olive, if not actually introduced by the settlers, was greatly stimulated by them, and they were responsible for the introduction of several new varieties of plants.\textsuperscript{79} The hypothesis of agriculture as a prime consideration in the establishment of these sites is not to deny the Phoenician interest in metals. It was obviously this which drew them to the Peninsula, as both the literary and archaeological traditions prove. But once there, they needed something to exchange with the natives in return for the silver and precious metals of south-west Spain, and this trade was one in which the agricultural surpluses produced in the Costa del Sol sites could have had an important role to play.

\textit{Commercial agriculture?}

One of the most characteristic elements of the pottery repertory of the Phoenician sites in southern Spain is the R-1 amphora (see chapter 1, figures 10 and 18).\textsuperscript{80} It was first classified by Vuillemot in his excavations at the Phoenician


\textsuperscript{79} The chickpea and the almond, both first attested in Spain at Phoenician sites, M.E. Aubet Semmler, "El asentamiento fenicio del Cerro del Villar (Guadalhorce, Málaga)," in \textit{I-IV Jornadas de arqueología fenicio-púnica}, Ibiza 1991, 103; Roselló and Morales (eds.), (op. cit. n. 42) passim.

\textsuperscript{80} For a full discussion of this type see above chapter one.
site of Rachgoun in Algeria as his type R-1, 81 and it is one which we find in all the Phoenician sites in Iberia, where it was produced in large quantities, apparently right from the start of pottery production at these settlements. 82 The R-1 amphora is widely distributed among the Phoenician sites of the Far West of the Mediterranean and the Atlantic, occurring in considerable quantities from Mogador in Atlantic Morocco, up through Lixus and Rachgoun in Algeria, on to the colonial sites in Andalusia and up as far as the Phoenician foundation at Ibiza in the Balearic Islands. 83 Outside the Iberian Peninsula and its area of influence, the R-1 amphora is found only very sporadically, with isolated examples identified at


82 For instance, among others, at Chorreras, M.E. Aubet Semmler, "Excavaciones en las Chorreras (Mezquitilla, Málaga)," Pyreneae, 10 (1974), figs. 10, 17 and 19; eadem, G. Maass-Lindemann, H. Schubart, "Chorreras, eine phönisische Niederlassung östlich der Algarrobo-Mundung," MM, 16 (1975) fig. 8; Toscanos - Schubart and Maass-Lindemann, (op. cit. n. 81) 119-124, and at Guadalhorce where it was the only amphora identified by the first excavations at the site, Arribas and Arteaga, (op. cit. n. 56) passim. At Castillo de Doña Blanca it is the most frequent amphora type of the eighth and seventh centuries, D. Ruiz Mata and C. Pérez, El poblado fenicio del Castillo de Doña Blanca (El Puerto de Santa María, Cádiz), El Puerto de Santa María 1995, 57-67.

Carthage, Motya, and Pithekoussai.\textsuperscript{84} It is therefore a form which seems to be characteristic of the Phoenician koiné of the Extreme West, and one which enjoyed great success, not just in the colonial sites of this area, but among the native settlements which traded with the colonists, from the Tartessian sites of Lower Andalusia, all along the Mediterranean coast of Spain, up to Catalonia and as far as Languedoc in southern France.\textsuperscript{85} In all these areas the R-1 amphora is found so frequently that it constitutes the type fossil for the identification of Phoenician activities in Spain and southern France, and it was obviously manufactured on such a large scale that \textit{one can consider that the R-1 type was the only amphora produced by the west Phoenician workshops at this time, at least on a large scale.}\textsuperscript{86}

Obviously the R-1 amphorae were not produced and exported for their own sake and clearly they must have appealed to settler and native alike because of their content. We cannot identify with absolute certainty the original content of the R-1 amphorae - and this statement also applies to all Phoenician

\textsuperscript{84} Maass-Lindemann, (op. cit. n. 81) 234. It has oriental prototypes but there are clear differences between its eastern predecessor and the form in which it appears in the western Mediterranean.

\textsuperscript{85} In southern Spain it appears in Cerro Salomón, Huelva, El Carambolo (Seville) and Carmona among others, Schubart and Maass-Lindemann, (op. cit. n. 81) 124; for the Spanish Levant see A. González Prats, "Las importaciones y la presencia fenicia en la Sierra de Crevillente (Alicante)," in \textit{Los fenicios en la Península Ibérica}, 279-301; for Catalonia see J. Sanmartí, "El comercio fenicio y púnico en Cataluña," I-IV \textit{Jornadas de arqueología fenicio-púnica}, Ibiza 1991, 119-136; O. Arteaga, J. Padró and E. Sanmartí, "La expansión fenicia por las costas de Cataluña y del Languedoc," in \textit{Los fenicios en la Península Ibérica}, 303-314; for Languedoc see Benoit, (op. cit. n. 81) 56-66.

\textsuperscript{86} Ramón, (op. cit. n. 83) 16; Maass-Lindemann, (op. cit. n. 81) 234
and Punic amphorae outside the East - \(^{87}\) but on balance it seems likely that this was originally some kind of food product, probably either wine or olive oil, the standard content of amphorae in the ancient world.\(^{88}\) Such an interpretation is confirmed by what little literary evidence there is regarding Phoenician commercial activities in Spain. According to Pseudo-Aristotle and Diodorus, the Phoenicians made huge profits in Spain by acquiring large quantities of precious metals, particularly silver, from the natives in exchange for olive oil and worthless gewgaws.\(^{89}\) When we compare this with the huge number of R-1 amphorae found distributed throughout the areas of Phoenician influence in North Africa, Spain and southern France, where in some sites they make up

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\(^{87}\) Ramón, (op. cit. n. 83) 16.


\(^{89}\) *De mirabilibus auscultationibus*, 135, see W.D. Ross (ed.), *The works of Aristotle translated into English VI*, Oxford 1913; Diodorus V. 35. 4-5. From the Periplus of Scylax we see a similar form of exchange between the Phoenicians and the native peoples on the west coast of Africa, with the latter offering animal skins and ivory in return for unguents, Attic pottery and wine jars, Pseudo-Scylax 112, in C. Müller, *Geographia Graeci Minores*, Paris 1882, 94. Pseudo-Aristotle's mention of the Phoenician trade in gewgaws (*áthurmatā*) seems to find its archaeological confirmation in the numerous scarabs found in indigenous contexts in the Spanish Levant and Catalonia as far north as the Languedoc. These and amphorae seem to have formed the basis of Phoenician trade with the local people there. For a list of such finds in Iberia and France, see J. Padró i Parcerisa, "Datos para una valoración del <<factor egipcio>> y de su incidencia en los orígenes del proceso de iberización," *Els orígens de Mons Iberic, Ampurias*, 38-40 (1976-78) 487-509.
almost 100% of the imported amphorae found there, then we are confronted with strong evidence for the existence of a trade in oil or wine between the colonial sites of Andalusia, where they were made, and the indigenous sites controlling access to the metals of southern Spain, on the one hand, and the trade routes of southern France, which connected the tin-producing regions of Atlantic Europe with the Mediterranean, on the other. Confirmation of this trade in food products for metals and access to the Atlantic trade circuits is provided by the evidence from La Peña Negra de Crevillente in Alicante (see chapter 1, figure 8). Evidence for the presence of Phoenicians here comes from the large amount of wholly Phoenician pottery produced in situ and the presence of potter's marks on locally produced R1 amphorae, as well as Phoenician graffitti found on a locally manufactured red slip plate. All this suggests that there was a pottery workshop run by Phoenicians, perhaps from the southern colonies, given the


91 Arteaga, Padró and Sanmarti, (op. cit. n. 85) 312-314; J. Briard, The Bronze Age in Barbarian Europe, London 1979, 192-208. The supposition of a significant Phoenician involvement in oil production and trade is supported by the appearance in the Phoenician sites of southern Spain of Attic amphorae of the SOS type which would originally have contained oil and which B.B. Shefton identifies as possible trade goods exchanged with the Spaniards in return for silver, and most probably acquired in Pithekoussai, see "Greeks and Greek imports in the south of the Iberian Peninsula. The archaeological evidence," in Die Phönizier im Westen, 338-342; also, D.W. Gill, "Silver anchors and cargoes of oil: some observations on Phoenician trade in the western Mediterranean," Papers of the British School at Rome, 56, New Series, 43 (1988), 1-12. In addition small oil bottles designed to hold perfumed oil or unguents and of clear Phoenician manufacture are found in many Phoenician sites in the central and western Mediterranean and in certain native sites in Spain, see J. Ramón, "Cuestiones de comercio arcaico: frascos fenicios de aceite perfumado en el Mediterráneo central y occidental," Ampurias, 44 (1982), 17-41.
discovery of an identical potter's mark on an R1 amphora from Morro de Mezquitilla in Málaga. There also seems to have been specialised jewellery makers resident at La Peña Negra, judging by the discovery at the site of orientalizing jewellery, complete with the tools necessary for its production, and a bronze mould found in a burial near the settlement and used for the production of repoussé decorated oval medallions of a wholly oriental style.92 The reason for Phoenician interest in La Peña Negra seems to lie in its active bronze production which specialised in such typically Atlantic types as carp's tongue swords and axes which were produced on a large scale from the eighth century onwards, exploiting the locally available ores in the mountains of the Sierra de Crevillente, to the extent that the site has been termed one of the most important central points of western European metallurgy.93 Of the imports to La Peña Negra the most numerous are the R1 amphorae, many of which were produced in the Phoenician enclaves in Andalusia, judging by the clay analysis test results. These amphorae were either shipped directly from the sites in this area or alternatively may have reached La Peña Negra through the Phoenician settlement set up in the seventh


century, at Guardamar, on the mouth of the river Segura, close to La Peña Negra. All in all the evidence for an active Phoenician presence in this region confirms Avienus' comment that in the region of the Segura river, *Ista Phoenices prius loca incolebant* (*OM*, 456-460) and La Peña Negra (the ancient Herna) marked the northern limit of Tartessos. (*OM*, 462-463)

This trade in food products fits in very well with the evidence we have for the kind of activities carried out at the colonial sites in southern Spain. We have seen that access to mineral resources and navigational considerations are not enough to explain the prosperity of so many colonial foundations over two hundred years, just as we have also seen that agriculture played a far more important role in these settlements' economy than is generally recognised. The advanced agricultural and stock-breeding techniques attested at these sites, together with the fertility of the land surrounding them, and the relatively limited population occupying these small sites, must have produced agricultural surpluses which went beyond the subsistence agriculture generally attributed to them, as it would do again from the sixth century onwards, when food production became the chief economic activity of the Punic settlements here.94 Obviously these agricultural surpluses were put to use and it is here that the pottery production carried out at all these sites becomes significant.

We have seen that the R-1 amphorae were produced on a large scale by all the Oriental sites in Spain, apparently right from

the start of pottery production there. We have also seen that these amphorae almost certainly contained food products, most probably oil or wine. Therefore, given the fact that these amphorae were obviously manufactured to store locally produced resources, then, with their presence on a large scale in the native settlements throughout the area of Phoenician influence in the Far West, there is convincing evidence for a trade in food products produced at these sites as the result of an agriculture orientated to the production of surpluses in certain products which could then be traded for others, most probably the Spanish metals.95 At the site of El Villar agriculture obviously occupied a prominent position in the range of activities carried out there, if indeed it was not the reason for the foundation of the site in the first place. The main manufacturing activity on the island seems to have been pottery production, represented by the production of transport amphorae and large storage vessels on a scale which its excavator has qualified as "intense" and which almost excludes the production of the characteristic fine table ware, the red slip ware, which is well represented at other sites in the region.96 As some of the amphorae found at El Villar contained

95 This hypothesis of a commercial agriculture carried out by the Phoenician settlements in Spain was first suggested by Schubart and Arteaga (op. cit. n. 88) and further developed by C.G. Wagner, "Gadir y los más antiguos asentamientos fenicios al este del Estrecho," in Actas del congreso internacional El Estrecho de Gibraltar, Ceuta 1987, Madrid 1988, 426-427. He takes this one step further to posit that the agricultural activities carried out there were the result of a strategy implemented by Gadir, which must, therefore, have significantly predated the other Phoenician sites in the Peninsula, probably as a result of precolonial frequentation of this region. While the archaeological evidence supports the first part of his theory, the whole precolonisation issue is exceedingly thorny, and I do not think that the pottery production of the other Andalusian Phoenician settlements can be used to support this premise.

96 Aubet Semmler, (op. cit. n. 55) 247 and (op. cit. n. 79) 103.
the remains of grapes, and were probably used to contain wine, then can we assume that the large scale pottery production that we find there from the seventh century onwards was designed to provide containers for the agricultural surpluses produced in the hinterland of the settlement? If the answer is yes, then we are left with a picture of the exploitation of the hinterland of these settlements that is considerably more sophisticated than the traditional image of the Phoenician as peddlar of gewgaws of heterogeneous origin and doubtful worth.

Certainly it is true that the small size of the potential *chora* surrounding these sites means that the area available to be farmed by the Phoenicians must always have remained limited, especially since at that time the sea penetrated far deeper inland than it does now, and it would be wrong to think of the extensive and opulent *latifundia* observed in North Africa by Agathocles in his invasion of Cape Bon, at the end of the fourth century.97 Rather than large properties concentrated in the hands of a few individuals, the mixed agriculture practised in the alluvial valleys of the Costa del Sol suggests small landholdings owned or worked by the colonists, with the possibility that certain areas were held in common ownership for grazing or hunting purposes.98 In fact it is a picture very

97 Diodorus, 20, 8, 3-4; confirmed by Polybius, 1, 29, 7.

similar to what we know of the agricultural practises of Phoenicia itself, where a diversified intensive agriculture was also practised, based on cereals, the vine and olive as staples, supplemented with vegetables and fruit trees, and additional protein coming largely from sheep and goats.99 We know that in Phoenicia Tyre had for a long time been suffering from what Aubet has termed an "agricultural deficit", and from the time of Hiram I we have numerous Biblical references to the various palliative measures undertaken by that monarch to remedy this situation brought on by overpopulation and the limited availability of agricultural land.100 Several of the ancient authors mention problems of overpopulation in Phoenicia and two of them explicitly assign the Tyrian expansionary movement to an attempt by Tyre to provide an outlet for its surplus population,101 thus providing us with the kind of factors, overpopulation and agricultural crisis, more generally associated with the Greek colonial movement than the Phoenician. Therefore in the light of such a situation in the homeland it seems natural that the availability of good agricultural land would have been appreciated and exploited as a factor in the choice of sites for potential settlements, as Whittaker first suggested over twenty years ago.102


100 Aubet Semmler, (op. cit. n. 7) 75-77.

101 Curtius Rufus, IV, 4, 20; Justin, Epitome, XVIII, 3, 50; Tertullian, De anima, 30; Sallust, Jugurtha, XIX, 1-2.

Phoenicians and Iberians - commercial contacts only?

While the Phoenician enclaves on the southern coasts of Spain have been intensively investigated over the last 30 years, very little attention has been paid to their indigenous neighbours in the areas immediately surrounding the colonial sites. As a result, one of the statements frequently made about the Mediterranean coastal plain where the Phoenicians settlements are found is that there was apparently only a small indigenous population in the area. This is often cited as an important factor in the Phoenician decision to settle there in great numbers, especially given the contrast with western Andalusia, the heartland of Tartessos, which was densely populated throughout this period, with large settlements controlling all the points of access to the key mineral and agricultural resources of the region. According to this theory, the Phoenicians were able to settle and exploit the local resources in any way they wanted, free from constraints imposed by the locals who were too few in number and not sufficiently organised to prevent this. However, the Mediterranean coastal plain was not unoccupied when the Phoenicians settled there, and indeed contact between colonists and locals may have been far closer than was thought.

The indigenous society of Upper Andalusia during the Phoenician occupation formed part of the south-eastern Bronze Age. In the south-east, the collapse of the highly developed El Argar culture in c. 1200, had brought with it a period of apparent crisis, when the settlement pattern, agriculture, economic production, pottery and metallurgy, were all totally reorganised during the Late Bronze Age (Bronce Final). There is little evidence of hierarchy or social stratification during this period, and in general it seems to have been one of recession, perhaps brought on by drastic changes in the environment. Thus, according to the traditional view of Phoenician settlement, the first settlers to arrive in the coastal plains of Malaga, Granada and Almeria would have found an area almost empty of any indigenous population, who preferred to settle in the upland areas further inland. Consequently, contacts between the two sides would have been limited to the strictly commercial, as evidenced by the abundant amphorae and other oriental pottery found in the indigenous sites of the interior.


However, a large number of Phoenician settlements contain indigenous pottery, occasionally in considerable quantities. In the province of Granada, the Phoenician settlement at Almuñécar, yielded, as well as its spectacular shaft grave burials, an initial level of settlement in the eighth century, where Phoenician pottery made up a mere 2% of the total, compared with a large amount of indigenous LBA ware, suggesting that the site was already occupied by the local population when the new settlers arrived.107 Iberian LBA pottery is found in other Phoenician sites in the region, including Toscanos, where it is most common in the initial phases of occupation, as well as Chorreras and Morro de Mezquitilla.108 The handmade pottery at these sites is similar in form and decoration to pottery found in indigenous sites in the interior and its presence at the Phoenician sites has been attributed by Schubart, Niemeyer and Pellicer to Phoenician acquisition of local products, possibly foodstuffs.109 However, given the variety of forms attested, both open and closed, and their variation from site to site, they might well indicate the incorporation of an element of the local population, rather than


109 Schubart, Niemeyer and Pellicer, (op. cit. n. 108) 140.
a hypothetical trade in foodstuffs (the honey trade suggested by Schubart, Niemeyer and Pellicer). The settlement at Toscanos was situated only a few kilometres away from two indigenous sites upriver on the Vélez, at Vélez-Málaga and Cerca Niebla, the latter located a mere 2 km away, while the Phoenician sites of Cerro del Villar and Málaga were located close to three indigenous sites, at Cerro Asperones, Cerro Cabello and Cerro de la Tortuga.\textsuperscript{110} Therefore the possibility exists, as Whittaker suggested, that these colonial sites incorporated on their foundation some element of the local population. Unfortunately, the only way to identify the presence of indigenous inhabitants is through their pottery, and with the adoption of the potter's wheel by the Iberians, the presence of indigenous elements in the colonial sites becomes much harder to recognise.\textsuperscript{111} However judging by the fact that even in the initial levels of occupation at Toscanos the handmade ware never made up more than a few percent of the total pottery assemblage the number of indigenous inhabitants in the colonial centres such as Toscanos, Morro and Chorreras, could not have been very considerable.\textsuperscript{112} The co-existence of


\textsuperscript{111} The fact that the majority of the indigenous ware at Toscanos comes from the first stratum of occupation at the site and then steadily diminishes might simply reflect the adoption of the potter's wheel by the indigenous population through Phoenician influence, and not the gradual reduction in the number of locals present there.

\textsuperscript{112} In the 1964 excavations at Toscanos the total quantity of handmade pottery was 265 fragments compared with some 10,000 fragments of wheelmade ware, Schubart, Niemeyer and Pellicer, (op. cit. n. 108) 128. At Morro de Mezquitilla more handmade pottery was found but the majority of this belonged to the fully
settlers and local inhabitants is well attested on the Atlantic coast of Spain, at Castillo de Doña Blanca, where indigenous LBA pottery was found in very significant quantities.\textsuperscript{113} This cannot be attributed to commercial contacts alone, as the burials at the cemetery of Las Cumbres, where both Phoenicians and locals shared a communal tumulus, testify. Given the similarity between the indigenous ware at Doña Blanca and that produced by nearby sites in the province of Cádiz, it seems likely that the Iberians living at Doña Blanca came from the surrounding area, probably from a site only a few kilometres away from the new foundation, which was abandoned, apparently peacefully, at the time of the establishment of the colonial site.\textsuperscript{114} The indigenous population living at Doña Blanca, Toscanos and the other colonial sites could have come from two distinct groups - either through intermarriage with local women or from the provision of labour, especially in agriculture. Whatever the role of the Iberian inhabitants, their pottery is not found restricted to any one area in the settlement, but appears to be dispersed throughout it, implying that the indigenous inhabitants were not confined to a peripheral area of the site but formed an integral part of the colonial society, perhaps simply because they were not numerically very important. We

\textsuperscript{113} No exact figures are available as the site still has not been fully published.

\textsuperscript{114} See chapter three.
can thus exclude situations like that attested at the Greek colony of Emporion, at Gerona in the northeast of Spain, where a wall separated the Greek quarter from that of the local population, forming what Strabo and Livy call a dipolis, or dual city.\textsuperscript{115}

It is clear that relations between colonisers and locals were close and that Iberians could live in the colonial sites. But the situation could be reversed and Phoenicians could live in an indigenous context, as we can see from the case of Casa de Montilla in the province of Cádiz.\textsuperscript{116} Here an indigenous LBA site was located at the mouth of the river Guadiaro which provided a direct link with the uplands of Ronda. In the second half of the eighth century this site came into close contact with the Phoenicians, with Phoenician pottery, chiefly amphorae, found in large quantities at the settlement. Contact was obviously close and intense enough for this site to substitute completely its indigenous pottery production for wheelmade Phoenician types within at the most 50 years. Most of the Phoenician pottery comes from Trench 3 of the excavation, where almost no local pottery was found, and where the materials are wholly Phoenician in character. This area has been interpreted as a small Phoenician colony founded close to the indigenous site. However as Trench 3 is less than 125m from the LBA site, rather than viewing it as a discrete

\textsuperscript{115} Strabo, 3, 4, 8; Livy 34, 8, 4-9; J.L. López Castro, Hispania Poena. Los fenicios en la Hispania romana, Barcelona 1995, 41-46.

Phoenician foundation, can we not envisage a mixed settlement where a group of Phoenicians came to live at an already established indigenous site, where they formed a separate *barrio*, or district, on the lines of the Tyrian quarter described by Herodotus (II, 112) in Memphis, or perhaps, to use an example from Iberia, in a situation similar to that of the indigenous site of La Peña Negra in Alicante, where the presence of Phoenician settlers during the seventh and sixth centuries is undeniable?

In general contact between both sides was close and obviously beneficial to both, given the proliferation of both Phoenician and indigenous sites in the region during the seventh century. Contact with the settlers had a profound effect on the indigenous society in terms of changes in urban structure, with insubstantial circular huts substituted by rectangular houses built on stone foundations, and changes in agriculture which was greatly stimulated by the introduction (or at the very least intensification) of the cultivation of the grape and the olive.117 This close contact may not have been limited to the coastal plain where the colonial sites were located, but, according to one of the most innovative investigative theories of Phoenician settlement, it could have extended far into the interior, to reach the heartland of Tartessos, with the establishment of nuclei of largely agricultural settlements there.

Based on a model first put forward in the 1970s by Whittaker, Wagner and Alvar rejected the customary explanation for the Phoenician presence in Iberia as being wholly aimed at the extraction of large amounts of silver, and other metals, from Tartessus. Instead they suggest that there were three main periods of Phoenician activity in the far west and central Mediterranean: precolonization from the tenth century onwards, when the first contacts were made; colonisation in the eighth century, with the establishment of permanent settlements in Spain, Sicily, Sardinia and North Africa; and most controversially, a second wave of migration from the Levant in response to the acute pressure put on the region by Assyrian military occupation. This second wave of colonisation took place in the seventh century and included not just merchants and craftsmen, but crucially, farmers who had been displaced by an agricultural crisis brought on by environmental damage, a shortage of agricultural land, population growth and Assyrian aggression. The new settlers were responsible for the growth in size of the pre-existing Phoenician settlements, in Sicily, Carthage and Spain, and the foundation of new settlements in these areas. The most controversial aspect of this theory is the authors' claim that the new settlers, who were mainly farmers, sought to reproduce the conditions of their lives in the homeland and thus established small agricultural enclaves in the fertile land

of the Iberian interior, in the Guadalquivir valley, and possibly Extremadura. The presence of groups of population permanently settled in the heartland of Tartessos would explain the reason why this region was so profoundly and lastingly influenced by the Phoenicians in areas which it is hard to imagine would by transformed by commercial contact alone - religion and burial practices. Instead of identifying cemeteries with oriental artefacts and burial rituals as those of an "orientalizing" indigenous population who had adopted Phoenician customs, basing their argument chiefly on the cemetery at Cruz del Negro, near Carmona, and similar burials at Setefilla in Seville and Medellín in Extremadura, they claim that these burials are either those of oriental settlers, or those of Iberians who display such a degree of oriental influence that they must have been in close contact with Phoenician settlers living in the area. The appearance of materials in these cemeteries which are oriental in character but exceedingly rare in the colonies on the coast means that we cannot attribute their occurrence in the Guadalquivir valley to influence from the Andalusian coastal settlements, they have to belong to the hypothetical second wave of settlers.\footnote{119 The materials in question are the Cruz del Negro urns and the single beaked lamps, as well as the decorated ivories, none of which are found in the coastal colonies until the seventh century, and even then in very small numbers. For a discussion of the Cruz del Negro cemetery see chapter two above.} These settlers would have engaged in a subsistence agriculture, forming independent communities in the area around Carmona, the existence of which is reflected in the cemetery at Cruz del Negro, or simply incorporating themselves into preexisting indigenous settlements, where
they were accepted and eventually integrated into indigenous society, leaving as the only record of their presence lasting and pervasive Semitic influences in the local culture which are otherwise hard to explain.

Wagner and Alvar's theory of agricultural colonization has not received a favourable response from the majority of Spanish scholars, being either openly rejected or largely ignored. However, in comparison with the wholly commercial model of Phoenician settlement (discussed above in chapter two), it is more flexible in that it allows for factors other than the strictly commercial to account for the colonisation movement and it admits that contacts between settlers and native population were far closer than they have traditionally been admitted. It also makes clear that such a large scale undertaking as the Phoenician expansionary movement cannot be solely attributed to the search for raw materials alone, however great the Phoenician commercial aptitude. Rather, like the Greek colonies, commerce and agriculture were not mutually exclusive, and the examination of the pottery production of the colonies on the Mediterranean coast of Spain has shown that the foodstuffs produced and packaged by them may have had an important role in the trade with the inhabitants of the Spanish Levant, Catalonia and Languedoc within the Atlantic commercial system. The agricultural colonisation model of Wagner and Alvar also allows for the diachronic development of the Phoenician settlements with foundations which had been established for reasons of navigation, or trade, such as Motya, or the exploitation of local
resources such as the Spanish enclaves, subsequently serving other purposes as well, relieving population pressure and providing an outlet for those fleeing an adverse political situation at home. In other words, in their emphasis on insufficient agricultural resources to support a growing population and the desire of some of that population to escape oppression at home, we have a model which is not unlike that of Greek colonisation, hence perhaps some of the hostility generated to it. But however plausible Wagner and Alvar's model on an abstract level, it must stand or fall against the evidence, both archaeological and textual, available for the activities of the Phoenicians in Iberia and their contact with the local population. In this respect the appearance of new evidence and the reinterpretation of existing data is providing a situation more supportive of this interpretation than has generally been accepted.

The evidence for a strong oriental influence in Carmona, in the province of Seville, has already been discussed in chapter two. Here a pronounced Phenico-Punic influence has long been visible, both on a historical and archaeological level, well into the Roman period.120 As we can discount the possibility of this being the result of developments during the era of

120 On a historical level - in the town's pro-Carthaginian stance in the second Punic War, and its participation, along with the Punic towns of Malaka and Sexs (Málaga and Almuñécar), in the uprising against the Romans in 197 (Livy, 33, 21, 6); on an archaeological level - in the use of characteristically Phoenician-style building techniques down to the Roman period, in the mortuary practices of the Roman era and the town's coin types, where the figure of Melqart was a frequent choice. J.B. Tsirkin, "The Phoenician civilisation in Roman Spain," Gerión, 3 (1985) 245-270; M. Bendala Galán, "La perduración púnica en los tiempos romanos. El caso de Carmo," HA, 6 (1982) 193-203.
Carthaginian control, then these influences must be the result of sustained contact with the Phoenicians at some time from the eighth to the sixth centuries.¹²¹ Evidence for this contact has been accumulating, from the find of a wall of a characteristically Phoenician rubble and masonry type, dating to the sixth century, to the more dramatic discovery of a seventh century shrine or temple building, in the part of the city closest to the strongly Phoenician-influenced cemetery at Cruz del Negro.¹²² Given the wholly oriental nature of what we know of the building's construction techniques and contents (so far only one room has been excavated), with carved ivory spoons, and pithoi decorated with griffins and lotus flowers (see chapter 2, figure 14), we have to admit the presence in Carmona of Phoenician masons, potters and vase painters - judging by the analysis of the clay, the pithoi were manufactured in Carmona. The possible temple-building itself, with its oriental construction techniques and furniture, was built to serve either an indigenous community which had become so influenced by oriental culture that its religious practices had become virtually indistinguishable from those of the Phoenicians, or the Phoenician community resident in Carmona. In either case we are dealing with lasting and sustained contact between Phoenicians and Iberians at


Carmona - in other words the stable presence of Phoenicians apparently peacefully residing in an indigenous context in the Guadalquivir valley, in a similar situation to that at La Peña Negra in Alicante. The presence of a Phoenician community in Carmona is not surprising given its control of the communication routes in the region and its fertile hinterland. The settlement is located on the natural communication route linking Cádiz and Cástulo, an important source of silver, and which was to become the *Via Augusta* in Roman times. Other routes link the city with the province of Málaga and the Phoenician settlements there. Its situation on the river Corbones, a tributary of the Guadalquivir, provided it with a direct link to Seville, with its important sites of Cerro Macareno and El Carambolo (discussed below). Still in Roman times Caesar was to call the former Carmo *longe firmissima totius provinciae civitas* - *Bellum Civile*, II, 19, 4.

Further evidence of a possible Phoenician presence in the Guadalquivir valley comes from Seville, at El Carambolo, a hill some 3km from the city. The site of El Carambolo is located at a key point for trade and communications, situated as it is on a promontory dominating the Guadalquivir, at the point where goods transported from the coast by large sea-going ships had to be moved to smaller river boats, and in a location which was equidistant between Cádiz, Huelva and Córdoba, giving it, and the city of Seville in general, a key position in the west-east trade within the Peninsula (see chapter 5, figure 15).\(^\text{123}\)

\(^{123}\) Strabo 3, 2, 3: "The Baetis ... is navigable for approximately one thousand two hundred stadia from the sea up to Corduba and the regions a little higher up. ... Now up to Hispalis (Seville), the river is navigable for merchant vessels of
El Carambolo received its first Phoenician imports in the eighth century which, apart from the usual R1 amphorae, included red slip ware of exceptional quality. It was there that a hoard of sumptuous gold jewellery was found showing a mixture of oriental and Atlantic traditions (Fig. 3). The most remarkable find from that site, however, is the so-called Astarte of Seville, a bronze statuette of the goddess now in the Archaeological Museum in Seville (Fig. 4). From the inscription at the base of the statue we know that it is an ex voto dedicated by two Phoenician brothers to the goddess Astarte in gratitude for having granted their prayers. The statuette is clearly oriental and was probably made in Cyprus or Phoenicia itself, sometime in the eighth century. However we have no way of knowing where it was inscribed, and whether it made the journey west before or after its dedication to the goddess. With its obvious sacredness it is of considerable size, that is, for a distance not much short of five hundred stadia; to the cities higher up the stream as far as Ilipa, for the smaller merchant vessels; and as far as Corduba, for the river-boats."

124 I. Negueruela Martinez, "Sobre la cerámica de engobe rojo en España," Habis, 10-11 (1979-1980) 348-349. According to Negueruela, the red slip ware from El Carambolo consists of Oriental forms which are surprising in the purity of their parallels and their quality ... thus (El Carambolo) must be a very important centre, with first class pottery materials, directly linked to the East.


126 The text of the inscription on the base of the statue reads: B'lytn, son of D'mmlk, and 'bbl', son of D'mmlk, son of Ys'I, made this throne for Astarte-hr, our lady, since she has heard the voice of their words. C. Bonnet, Astarté. Dossier documentaire et perspectives historiques, (Contributi alla Storia della religione Fenicio-Punica - II) Rome 1996, 127-133; E. Lipinski, "Vestiges phéniciens d'Andalousie," OLP, 15 (1984) 102-117 believes that certain palaeographical traits link the statue with the region of Sidon which would be appropriate, as together with Eshmoun, Astarte was the chief deity of that city, and was referred to as Astarte of the Sidonians in the Old Testament.
unlikely that it came from the Andalusian coastal colonies as part of a commercial cargo to be traded with the local inhabitants. As Wagner points out, no matter how acute his commercial acumen was, it is hard to imagine a Phoenician trafficking in a sacred object.\textsuperscript{127} Blanco has suggested that given the appearance of the treasure and the abundance of extremely high quality Phoenician-manufactured pottery we have to interpret El Carambolo as a shrine, and in this context the presence of the statuette of Astarte makes sense.\textsuperscript{128} Thus we have to imagine that two Phoenician brothers who were present in the area dedicated the statuette to Astarte at her shrine in gratitude for the assistance she had given them. El Carambolo is situated only 3 km from the city of Seville which in the eighth century was already receiving Phoenician pottery in significant quantities. The origin of the city’s former name, Hispalis, is linked to the Semitic root, spl, to be low, with the additional term ‘y, meaning island, peninsula or coast in Phoenician.\textsuperscript{129} Such a name is very appropriate for the early settlement at Seville which was then located on lowlying ground, only a few kilometres from the mouth of the Guadalquivir, which opened on to the sea in a very wide

\textsuperscript{127} Wagner, (op. cit. n. 118) 45-46.

\textsuperscript{128} A. Blanco Freijeiro, \textit{Historia de Sevilla I, la ciudad antigua}, Seville 1979, 96. The site at El Carambolo is extremely problematic in that it was poorly excavated and published. In addition, the Astarte has no known archaeological context, having been donated to the Museum by someone who received it from a construction worker who found it during building work at the site, Lipinski, (op. cit. n. 126) 102.

\textsuperscript{129} Belén and Escacena, (op. cit. n. 122) 91.
maritime inlet.\textsuperscript{130} Given the existence of a Semitic name for the city of Seville, it is possible that it was a Phoenician foundation, or at the very least a site with a significant Phoenician quarter which ended up giving its name to an indigenous settlement, as Belén and Escacena have suggested.\textsuperscript{131} Certainly the archaeological evidence supports the idea of close contact with the Phoenicians on a large scale from the eighth century onwards.\textsuperscript{132} And in this context having established a presence close to the mouth of the Guadalquivir, the most important river in Andalusia, it was customary practice for the Phoenicians to build some kind of temple or shrine to one of their divinities - in this case Astarte - who would preside over the transactions carried out there and the contact between the two sides.\textsuperscript{133}


\textsuperscript{131} Belén and Escacena, (op. cit. n. 122) 91. The same root Spl gave its name to the coastal plain of southern Palestine which was called Sepela, the Low Country, Lipinski, (op. cit. n. 126) 100. Therefore perhaps we should think of settlers from southern Phoenicia inhabiting this region?

\textsuperscript{132} J.M. Campos, M. Vera and M.T. Moreno, Protohistoria de la ciudad de Sevilla. El corte estratigráfico San Isidoro 85-86, Monografías de Arqueología Andaluza 1, Seville 1988. From the results of this excavation wheelmade pottery was probably present in the oldest level of settlement, and went on to become predominant from the start of the orientalizing period onwards, (73% wheelmade in comparison with 27% handmade) which here can be dated to at the latest 725, a very early date in comparison with other sites in the region. Some building remains were found at the site which show the characteristically Phoenician rectangular groundplan already at the end of the eighth century, or the start of the seventh century. The authors of this report have stressed that these dates place Seville among the earliest sites to show evidence of Phoenician contacts, undoubtedly due to its strategic position in terms of communication and trade routes, (op. cit. this note) 127.

\textsuperscript{133} Astarte is attested elsewhere in Iberia at a comparable date, in Gadir where she had a temple close to that of Melqart, and also possibly at Gorham's Cave, at the Straits. Thus all three sites of worship of the goddess were located at strategic points of communication, perhaps because of her associations with the sea, C. Baurain and C. Bonnet, Les phéniciens, marins des trois continents, Paris
I have chosen to discuss in detail the evidence for a stable Phoenician presence (and most probably Phoenician communities) in two important sites in the Guadalquivir valley, the heartland of Tartessian society. I could, however, have added many more. All the accumulation of evidence points to close and lasting contact between the indigenous population and the Oriental settlers far beyond the hinterland of the coastal colonies, even without providing definitive proof of that elusive phenomenon, a Phoenician farmer in the Spanish interior. I believe that despite the opposition of those

1992, 87 and see above, chapter three. Certainly El Carambolo was the centre of intensive trade with the Phoenicians. 50% of the wheelmade pottery from the "Poblado Bajo" at the site was made up of amphorae, confirming the importance of the site for Phoenician commercial interests, D. Ruiz Mata, "Las cerámicas fenicias del Castillo de Doña Blanca," Los fenicios en la Península Ibérica, 259.

For instance from Montemolin further down the river Corbones from Carmona, and which is very possibly the site of Ilipa where the decisive battle of the Second Punic War was fought, there is a clear Phoenician influence in the buildings constructed there during the orientalizing period of occupation at the site. These buildings are remarkably large (up to 210m²) and as well as showing the typically Phoenician-influenced rectilinear layout, in their design of a number of rooms arranged around a large open courtyard, they display a type of groundplan hitherto unknown in the Peninsula and with a close resemblance to contemporary houses in the Syria-Palestine region. The site at Montemolin has been interpreted by its excavators as a shrine which received a strong Phoenician input in terms of its design, and the pottery found and produced there, which in the seventh and sixth centuries included pithoi painted with such typically oriental motifs as griffins and bulls interspersed with stylised lotus flowers. All this evidence, as well as an orientalizing treasure found at the site, suggests close and sustained contact with the Phoenicians, who were interested in Montemolin because of its strategic position at the intersection of a number of inter-regional trade routes. Such a supposition is confirmed by the site's lasting links with Punic culture until it was destroyed at the close of the Second Punic War precisely because of its philopunic sympathies. F. Chaves Tristán and M.L. de la Bandera, "Aspectos de la urbanística en Andalucía occidental en los s. VII-VI a.C. a la luz de yacimiento de Montemolin (Marchena, Sevilla)," II CISFP, 691-714; M.L. de la Bandera et al., "El yacimiento tartesico de Montemolin," in Tartessos 25 años después, 317; F. Chaves Tristán and M.L. de la Bandera, "Avance sobre el yacimiento arqueológico de Montemolin," in T.F.C. Blagg, R.F.J. Jones and S.J. Keay (eds.), Papers in Iberian Archaeology, BAR IS 193(1) 1984, 145-153; F. Chaves Trisán et al., "Proyecto: Investigación arqueológica en Montemolin," Investigaciones arqueológicas en Andalucía 1985-1992. Proyectos, Huelva 1993, 505-507.
who want to limit the presence of Phoenicians in significant numbers to the colonial sites on the Andalusian coastline, and contacts between settlers and locals to the strictly commercial, the view that there were stable communities of foreigners established within the indigenous society is far less problematical than the traditional 'commercial' model of settlement in Iberia. Firstly it is one which fits the literary evidence available. Strabo tells us that: "the people (= the Iberians) became so utterly subject to the Phoenicians that the greater number of the cities in Turdetania (= Tartessos) and of the neighbouring places are now inhabited by the Phoenicians."\(^{135}\) Secondly it is one which is consonant with the evidence for Phoenician contacts with the indigenous inhabitants in other parts of the Mediterranean, most notably the Aegean, where Phoenician craftsmen and potters taught their skills to the local community in Attica, Crete and Rhodes, and who may have formed one of the ways in which the Phoenician alphabet was transmitted to the Greeks.\(^{136}\) This pattern of cohabitation is continued in Italy where there is quite strong evidence from Pithekoussai that there was an oriental community living in the Euboean colony.\(^{137}\) Thirdly and perhaps most crucially there is the evidence of strong Semitic influence persisting well into Roman times in areas

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\(^{135}\) Strabo 3, 2, 13. Confirmed by 3, 2, 14: "the Phoenicians ... occupied the best of Iberia ... and continued to be masters of those regions until the Romans broke up their empire." See also Avienus, \textit{OM}, 375-77, 421, 440, 459.

\(^{136}\) J.N. Coldstream, "Greeks and Phoenicians in the Aegean," \textit{Die Phönizier im Westen}, 261-275. According to Coldstream, "nowhere in the Aegean did the Phoenicians form a separate community; on the contrary they mixed quite freely with the locals."

where the only justification for such influences is the supposed 'commercial' contacts with Gadir and the Phoenician colonies in Malaga, Granada and Almeria, situated often hundreds of miles away, centuries before. The commercial model of settlement and contacts between both sides in Iberia is too limiting in that it makes rigid distinctions between 'Phoenician' and 'Iberian' settlements and areas of influence. However the reality was considerably less tidy than that and points to the existence of many mixed towns, with indigenous settlers living in a Phoenician context, such as as Castillo de Doña Blanca in Cádiz, and the reverse, with Phoenicians living in indigenous sites, such as La Peña Negra in Alicante and also Casa de Montilla in Cádiz.

We have come a long way in our appreciation of Phoenician rural settlement and agriculture since B.S.J. Isserlin lamented the total lack of archaeological research on this topic. Recent work in Sardinia in particular reveals a distinct preoccupation with expansion into the hinterland by the Phoenician cities on the coast, especially in the case of Sulcis (San Antioco), which had a chain of small satellite fortresses, such as Monte Sirai and Pani Loriga, consisting of isolated buildings and small groups of tombs, which controlled the access to the mineral and agricultural resources of the interior, over a radius of fifteen to twenty kilometres from the city. That such fortresses were not exclusively

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138 In "Phoenician and Punic rural settlement and agriculture: some archaeological considerations," in I CISFP, 157-163.

military is proved by the presence of burials of women and children in the necropolis of Monte Sirai and the general lack of weapons found in the tombs. At Pani Loriga, apart from the defensive structures, there is also a residential quarter, a tophet and a large necropolis with some 150 tombs. The presence of these structures provides us with a confirmation that the territorial penetration of Sulcis was aimed at the control of the sub-coastal plain and was supported by a network of installations of mixed rural and military character which served to define the territory controlled by the Phoenicians and to house communities dedicated to the exploitation of local resources over an area, which as Barreca observes, corresponds roughly to the size of the chora of a Greek city.\textsuperscript{140} Such dramatic evidence of the Phoenician interest in creating and controlling a dependent chora has not so far been found in Spain. However we can trace some similarities in the settlement pattern adopted in both areas. Only in Spain and Sardinia do we find a dense network of colonial settlements attesting to the importance which both regions had for the Phoenicians, undoubtedly due to the presence of abundant mineral resources in both areas.\textsuperscript{141} In both regions, the Phoenicians were able to develop a colonial strategy free from the interference by the Greeks which so


\textsuperscript{140} Bondi, (op. cit. n. 139) 164; F. Barreca, "Sardegna," \textit{L'espansione fenicia nel Mediterraneo, Studi Semitici}, 38, Rome 1971.

\textsuperscript{141} Mainly copper, silver and lead in Sardinia, R. Massoli-Novelli, "The Geology, and Natural Resources of Sardinia," in Balmuth (ed.), (op, cit. n. 139) 2-7.
influenced their settlement pattern in Sicily, for instance. And perhaps most significantly of all, although we have not found any of the military outposts in Spain (with the possible exception only of Cerro del Alarcón at Toscanos) which are a feature of the Phoenician occupation of Sardinia, in the multiplication of settlements which we find along the Andalusian coastline and the south-western coast of Sardinia, there is clear evidence of a desire to secure and control the resources of these areas, in what Bondi calls "un sistematico controllo territoriale," for the exclusive use of the settlers.\textsuperscript{142}

\textsuperscript{142} Bondi, (op. cit. n. 103) 381.
Figure 1. Physical geography. Source: Naval Intelligence Division 1941.
Figure 2. Settlements around Cerro del Villar. Source: Aubet Semmler 1992.
Figure 3. Jewellery from El Carambolo. Source: F. Fernández Gómez 1997.
Figure 4. Astarte from El Carambolo. Source: F. Fernández Gómez 1997.
Metals

It has by now become a *topos* of Phoenician history that their interest in the areas, both immediately beyond their own frontiers, and in the central and western Mediterranean, was motivated largely by the search for metals, particularly precious metals. In such a context Phoenician interest in the Iberian Peninsula, which, as we have seen in previous chapters, was intense and sustained, is a logical response to its mineral wealth. All the metals known and exploited in antiquity were found in the Peninsula, often in spectacular amounts, and we have clear evidence of direct Phoenician involvement in metal processing and trade extending from the Mediterranean south to the Atlantic north-west of Spain.

Iron production

Although our sources emphasise that Spanish silver resources were the main focus of Phoenician interest, the evidence for metallurgical activities found in the Phoenician settlements on the Peninsula points mainly to iron-smelting (Fig. 1). The presence of iron slag in the Phoenician levels at Cabecico de Parra, near Villaricos in Almería, and in seventh-century strata at Abdera in Almería, where iron slag and fragments of tuyères were found,\(^1\) indicates that iron was processed in the

Phoenician sites in Spain. Excavations in the recently discovered Phoenician settlement at Cerro de Rocha Branca in southern Portugal have also uncovered signs of iron production. More substantial evidence of iron production comes from Morro de Mezquitilla in Málaga where the remains of metallurgical workshops were found contemporary with the first levels of occupation at the site, at the start of the eighth century, if not slightly earlier. These consisted of several furnaces which showed strong signs of burning and were associated with slag remains, ventilation tubes and tuyères, some of which still bore traces of metal. The slag was identified as iron slag. Schubart has suggested that the workshops identified here did not carry out the primary smelting required to obtain iron bloom but were used to resmelt and process raw iron and might thus represent a smithy. The remains of an iron-producing furnace were also

López Castro et al., "La colonización fenicia en Abdera: nuevas aportaciones, II CISPP, 987.

2 M. Varela Gomes, "O estabelecimento fenicio-púnico do Cerro da Rocha Branca (Silves)," in A. Tavares (ed.), Os fenicios no território português, Estudos Orientais IV, Instituto Oriental, Lisbon 1993, 87. Iron slag has also been found associated with orientalizing pottery in emergency excavations in the cloister of the cathedral in Lisbon, C. Amaro, "Vestigios materiais orientalizantes do claustro da sé de Lisboa," in Tavares (ed.), (op. cit. this note) 185.


5 Schubart, (op. cit n. 3) 148.
discovered at the Phoenician site of Sa Caleta on the island of Ibiza.  

Iron working is also well attested at the site at Toscanos in Málaga. Here many finds of metallurgical residues, such as iron slag and fragments of crucibles and tuyères, were found in excavations of the settlement nucleus, and the 1984 campaign uncovered a smelting furnace on the eastern slope of the outlying hill of Cerro del Peñón, overlooking the centre of the settlement (Fig. 2). The hill has now been divided into a number of agricultural terraces and it was on Terrace II, some 22-23m above sea level, that the remains of the furnace were uncovered. These consist of an oval combustion chamber, some 30cm wide, probably originally domed in shape, which was constructed from mud bricks, laid while still damp and covered on the inside by a layer of mud. The combustion chamber still contained slag and metal casting cakes, and numerous fragments of bellows nozzles were found immediately beside it which would originally have been used to provide ventilation during the smelting process. Running downhill from this structure is a channel some 30cm wide, and 30-40cm deep,

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8 Niemeyer, Briese, Bahnemann, (op. cit. n. 7) 159.
filled with a mixture of charcoal and slag along its entire length. There is a corresponding channel situated above the combustion chamber which drains into it, containing charcoal remains and small particles of slag, mixed with a thin layer of sand. Obviously the lower part of the channel was used to tap the slag produced in the metallurgical process, while the excavators suggest that the upper channel may have been used as the loading hole of the combustion chamber. The pottery found near the furnace dates it to the second half of the seventh century.

Chemical analysis of the slag remains shows that iron was the primary metal processed on the Cerro del Peñón. As at Morro de Mezquitilla, the evidence does not indicate that the metallurgical processes carried out here were intended to obtain raw iron from iron ore but rather points to a process whereby both the iron bloom and scrap metal were reworked to form a new working material. Among the pottery finds in the area of the furnace were fragments of thick-walled handmade jars, covered on their inner side with a layer of copper which had apparently been smelted into them, suggesting that copper was occasionally smelted in this area also, just as it was at


10 I. Keesmann, "Naturwissenschaftliche Untersuchung des archäometallurgischen Fundmaterials der Grabung 1984 am Cerro del Peñón," in Niemeyer, Briese and Bahnemann, (op. cit. n. 7) 171.

11 Ibid, 171; Keesmann and Niemeyer, (op. cit. n. 9) 106.
Morro de Mezquitilla.\textsuperscript{12} Judging by the large amount of slag uncovered, both in the area around the furnace, and lower down on the slopes of the Peñón, there may have been more than one furnace here, although further excavations failed to uncover any traces of them.\textsuperscript{13} Certainly both the furnaces at Morro de Mezquitilla and Toscanos show signs of having been renovated on several occasions; this, and the large amount of slag yielded by the latter site, attest to the intensity of the metallurgical activities undertaken at both settlements.\textsuperscript{14}

The finds of slag from Abdera and Cabecico de Parra, and the discoveries of smelting furnaces at Morro de Mezquitilla and Cerro del Peñón, show that metallurgical activities in general, and the production of iron in particular, were well developed at these sites and formed an integral part of the economic activities of the Phoenician settlements in the Far West, in some cases right from the initial moment of occupation, judging by the date of the finds from Morro de Mezquitilla. Obviously the metallurgical activities carried out at these sites represent Phoenician exploitation of locally available resources. Iron is widely available in the mountains behind the

\textsuperscript{12} Keesmann and Hellermann, (op. cit. n. 4) 103-104. Large hand-made jars, similar to those found in the immediate vicinity of the oven on the Peñón, were also involved in metallurgical processes at Morro de Mezquitilla, H. Schubart, "El asentamiento fenicio del s. VIII a.C. en el Morro de Mezquitilla (Algarrobo, Málaga)," Los fenicios en la Península Ibérica, 63.

\textsuperscript{13} H.G. Niemeyer, "Trabajos arqueológicos realizados en las faldas orientales del Cerro del Peñón, yacimiento de Toscanos, Torre del Mar (Vélez-Málaga, Málaga)," AAA, 1986 422-424.

\textsuperscript{14} Keesmann and Niemeyer, (op. cit. n. 9) 101. The intensity of the chemical processes going on inside the furnaces and the materials from which they were built meant that they would frequently have had to be repaired or reconstructed, P.T. Craddock, Early Metal Mining and Production, Edinburgh 1995, 156-189.
settlements, with large concentrations in the provinces of Almería, Granada and Málaga itself.\textsuperscript{15} However to suggest that "one of the main causes of Phoenician colonisation on these southern coasts was none other than the exploitation and industrialisation of iron ore from local sources."\textsuperscript{16} and that "the Phoenicians on the southern coast had one of their principal sources of wealth in the exploitation ... of iron ore" is a claim unsupported by the evidence at our disposal.\textsuperscript{17} None of the remains of metallurgical activities found in the settlements on the south coast and in the Balearics point to large-scale specialised production, as we will see for instance in the mining and smelting of silver in the Tartessian sites in the province of Huelva. Nor should this surprise us. Iron ore is the most commonly occurring mineral in the world, with 4.2% of the earth formed from iron or its compounds.\textsuperscript{18} There are numerous deposits in the ancient world and in this context it is hardly likely that the Phoenicians would have set up settlements at the edge of the known world to tap such a


\textsuperscript{17} Arteaga, (op. cit. n. 15) 43.

widely available resource.\textsuperscript{19} As we have seen, the smelting furnaces found at Toscanos and Morro de Mezquitilla seem to have been used not for the primary smelting of iron ore but rather for the smelting of a mixture of a semi-treated bloom and scrap metal, most probably to satisfy internal demands and perhaps to produce objects to trade with the local population, or to use as status-enhancing gifts to the local elites.\textsuperscript{20} The Phoenician sites would have had to be self-sufficient in this regard as iron had not yet been exploited by the Iberians and its use is generally regarded as having been introduced to the Peninsula by the oriental settlers.\textsuperscript{21} Similar


\textsuperscript{20} Iron knives, spearheads and a sword were found in the burials at the orientalizing cemetery of La Joya in the town of Huelva, in tombs 5, 9, 10, 15, 16, 17, 18 and 19. J. P Garrido and E. Orta, \textit{Excavaciones en la necrópolis de la Joya, Huelva (1\textsuperscript{a} y 2\textsuperscript{a} campahs). EAE, 71 (1970)}; J.P Garrido and E. Orta, \textit{Excavaciones en la necrópolis de la Joya, Huelva (3\textsuperscript{a} y 4\textsuperscript{a} y 5\textsuperscript{a} campahs). EAE, 96 (1978)}. Of these objects the most frequent are the knives or daggers, sometimes decorated with ivory- or silver-covered handles. It is possible that these objects had a strictly utilitarian function, but given their decoration and material - iron was unknown in Spain before the arrival of the Phoenicians - they may also have been offered and received with a symbolic purpose as status-enhancing elements. Knives and daggers had been exchanged as ceremonial items by royal elites of the eastern Mediterranean in the second millennium B.C and iron knives (frequently with ivory handles) also circulated at a slightly lower social level across a variety of early Iron Age sites in funerary and settlement contexts in the Aegean, Cyprus and the Levant as a \textit{status-enhancing novelty in a combination of artefact type and material which up to now had been the rare preserve of relatively few} - S. Sherratt, "Commerce, iron and ideology: Metallurgical innovation in 12th-11th century Cyprus," V. Karageorghis (ed.), \textit{Cyprus in the 11th century B.C.}, Nicosia 1994, 59-106. They perhaps performed a similar role in the ostentatious burials at La Joya as the imported Egyptian alabastra, Phoenician bronze ewers and basins, ceremonial bronze chariots, and gold jewellery, as symbols of the rank and power of their possessors.

\textsuperscript{21} R.F. Tylecote, \textit{A History of Metallurgy}, 2nd ed., London 1992, 47; S. Rovira Llorens, "La metalurgia de la Edad del Hierro en la Peninsula Ibérica: una síntesis introductoria," in R. Arana Castillo et al. (eds.), \textit{Metalurgia en la Peninsula Ibérica durante el primer milenio a.C. Estado actual de la investigación}, Universidad de Murcia 1993, 45-70. Recently however it has been claimed that iron was being smelted by the indigenous occupants of the Iberian Peninsula contemporary with, if not before, the establishment of the
installations have been found in other contemporary sites such as the Euboean colony of Pithekoussai on Ischia and, most notably, in the eighth-century settlement levels of Carthage, between the Roman Cardo XV and the ancient shoreline, where an orthogonally laid-out metallurgical quarter with iron slag and tuyères has been discovered.22

The really interesting question raised by the discovery of metallurgical residues in so many of the Phoenician settlements in the Peninsula is what were the sources of the iron treated and produced there. As we have seen, there were plentiful supplies of iron relatively close to the sites at Morro de Mezquitilla, Toscanos and Abdera, but none in the area

first Phoenician settlements there, and thus the introduction of iron-working to the Peninsula was not the result of Phoenician initiative. See M.M. Ros Sala, "El trabajo del hierro en el poblado protohistórico de El Castellar (Murcia). I: análisis arqueológico," and R. Arana and C. Pérez Sirvent, "El trabajo del hierro en el poblado protohistórico de El Castellar de Librilla (Murcia). II: estudio mineralógico," in R. Arana Castillo et al. (eds.), op. cit. (this note) 71-109 and 111-129. This claim is based on the discovery of two iron-smelting furnaces in the indigenous settlement of El Castellar de Librilla in Murcia, the first dating to the second half of the eighth century. However, as none of the metallurgical evidence from this site can be definitively assigned to pre-orientalizing levels, and there is a high percentage of Phoenician pottery found in the occupation levels contemporary with the earliest furnace (46.35% of the total pottery), we cannot definitively exclude the possibility that the iron-smelting technology attested here was introduced directly by the Phoenicians themselves, as the large amounts of Phoenician domestic pottery, fundamentally table ware, and the absence of the more usual amphorae (1.98% of the wheelmade ware) and storage vessels (1.32% of the wheelmade ware) would seem to indicate, or at least was the result of indigenous contact with similar processes in a Phoenician context. The latter possibility is rendered all the more likely given that the region of the Segura-Guadalentin rivers, in which El Castellar is located, was the scene of intense Phoenician interest and occupation from the end of the eighth century onwards, see M.E. Aubet Semmler, Tiro y las colonias fenicias de Occidente, 2nd ed. Barcelona 1994, 289-293. For the Phoenician pottery found at El Castellar see M.M. Ros Sala, "Presencia fenicia en el área murciana: los materiales de la fase II de El Castellar de Librilla (Murcia)," in II CISFP, 1197-1204.

forming their immediate hinterland or *chora*. Therefore we have to imagine them either seeking it out and extracting it themselves or trading for it from the local population who would apparently have had to be made aware of its existence and value by Phoenician stimulus. The whole question of the sources of the iron produced at the Phoenician settlements in Spain and the means which they used to obtain it is one which still remains poorly researched and understood.

**Silver production**

The real mineral wealth of the Peninsula lay elsewhere, to the west of Toscanos and the other Phoenician settlements on the Mediterranean coast, in the provinces of Huelva and Seville, the area which the Greeks knew as Tartessos. In this region lies the Iberian Pyrite Belt, covering an area of some 250km by 35km, from Aznalcóllar in Southwestern Spain to Aljustrel in Southern Portugal, and which constituted one of the richest metallogenic provinces in the ancient world, with silver, gold, iron and copper occurring in large quantities there (Fig. 3).23 The richest minerals are found concentrated under the surface iron-sulphate and iron-oxide gossans in the secondary enrichment zone, with copper, silver and gold appearing there at much higher values than the unaltered primary deposits below.24 The ancients were well aware of the valuable

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24 Jones, (op. cit. n. 23) 33; Healy, (op. cit. n. 19) 24-27; J. Fernández Jurado, "La metalurgía de la plata en época tartésica," in Domergue (op. cit. n. 9), 157; V. Kassianidou, *Monte Romero (Huelva)*. A silver-producing workshop
minerals contained in this belt and Strabo and Herodotus, among others, lavish praise on the mineral wealth of southern Spain.  

Of the 60 pyrite deposits which make up the Iberian Pyrite belt, 52 are located in the province of Huelva, making this by far the richest metallogenic area in the Iberian Peninsula, and therefore it is logical to assume that this area was the most intensely exploited from the earliest times onwards.  

It is likely that the first mining operations were restricted to the isolated veins of native copper which are frequent in this area, but the first definite evidence we have for the beginning of mining in southwest Spain is in the Chalcolithic (fourth-third millennia), when it was copper ores that were extracted and smelted.  

After a hiatus, perhaps the result more of the lack of evidence for the Middle and early Late Bronze Ages in this region, rather than due to a break in

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25 "Although the aforesaid country has been endowed with so many good things, still one might welcome and admire ... its natural richness in metals. For the whole country of the Iberians is full of metals. ... But, as for Turdetania and the territory adjoining it, there is no worthy word of praise left to him who wishes to praise their excellence in this respect. Up to the present moment, in fact, neither gold, nor silver, nor yet copper, nor iron, has been found anywhere in the world, in a natural state, either in such quantity or of such good quality." Strabo, 3. 2. 8, C 146; Herodotus, 4. 152 and 1, 163. See also Stesichorus, apud Strabo, 3. 2. 11, C148; Poseidonius, apud Strabo, 3. 2. 9, C147 and Atheneus, 6. 233.


27 Ibid, 214.

28 Rothenberg and Blanco Freijeiro, (op. cit. n. 23) 164-165.
exploitation of the ores here, we have a number of Late Bronze Age sites, probably belonging to the early part of that period, many of them located on top of Chalcolithic mining and metallurgical sites, which again show evidence exclusively of copper production.29 The best known of these is the site of Chinflón, some 3km east of the village of El Pozuelo, in the municipal area of Zalamea la Real, Huelva, and approximately 12km south-west of Rio Tinto. Here, close to a group of dolmen burials, a mining site, apparently first occupied sometime in the third millennium, was re-occupied between the end of the ninth and the start of the seventh centuries, and used for the production of copper. No wheel-made ware was found on the site, nor are there any signs of Phoenician imports.30 The absence in Chinflón of the Phoenician imports which are so characteristic of the later eighth- and seventh-century silver-producing sites, and the similar absence of all evidence of silver-production in these tenth- to ninth-century sites, suggest very strongly that it was not until the establishment of the first Phoenician sites in Spain, in the early eighth century, that silver first began to be mined in the

29 Examples are the sites at Chinflón, Cerro Masegoso, Minas de Masegoso, Cueva del Monje and Junta de la Gila, all investigated in the Huelva archaeometallurgical survey, ibid, 36-81; Ruiz Mata, (op. cit. n. 26) 214-217. Copper production dating to the eighth century is also attested at the settlement of Setefilla, located at the southern edge of the Sierra Morena, close to the Guadalquivir river, M.E. Aubet et al., La Mesa de Setefilla, Lora del Río (Sevilla). Campaña de 1979, EAE, 122 (1983).

mountains of Huelva on a large scale. The evidence suggests that, in the two centuries preceding this, we are dealing with a small-scale production of copper from local resources which was later superseded by the development of the silver-mining industry in the Orientalizing period.31

This is confirmed by what we know of the economy of the local pre-Phoenician Late Bronze Age society. Arguably the most famous find of the period immediately preceding the colonial era in Spain is the deposit of bronze objects discovered in the dredging of the harbour of Huelva city in 1923.32 This hoard consists of more than 400 objects, mostly weapons, and all of the Atlantic Bronze Age type, with the exception of the fibulae which indicate a Mediterranean origin. It has a calibrated C-14 date of the late tenth to the early ninth century and it is tempting to connect this huge collection of bronze objects, some more than a century old at the time of their deposition in the harbour, with the copper-production industry directly upriver from Huelva, in the area around Rio Tinto, as Davies first suggested in 1935.33 Given the overwhelmingly Atlantic orientation of the trade routes and artefacts of the pre-colonial Late Bronze Age in the region around Huelva and

31 Ruiz Mata, (op. cit. n. 26) 217.
32 For the Huelva hoard see M. Almagro Basch, "El hallazgo de la ría de Huelva y el final de la Edad del Bronce en el Occidente de Europa," Ampurias, 2 (1940) 85-143; M. Ruiz Gálvez Priego (ed.), Ritos de paso y puntos de paso. La Ría de Huelva en el mundo del Bronce Final europeo, Complutum extra vol. 5, Madrid 1995.
southern Spain in general, it seems that the abundant copper resources of the south-west could have had an important role to play in the bronze-production industry of north-west Spain which had plentiful supplies of tin but had to import its copper. In such a context the concentration on copper-production evident in the mineralised areas of Huelva, and in the Sierra Morena at Setefilla, is a logical response to the demand for this raw material by the inhabitants of north-western Spain. In this trade in copper the settlement of Huelva could have first begun to play the role of metallurgical and commercial centre which it was to assume later, as Ruiz Mata suggests. However the scale of metal production in this period seems to have been very far from the almost industrial proportions which the silver-extraction industry would assume in the following centuries. The relatively modest level of copper production may have been due to the fact that the crude mining techniques of the period made access to the rich sources of copper in the copper sulphides and sulphide masses impossible, and meant that only the superficial veins of malachite could be tapped, until the Roman era when copper began to be mined on a large scale at Rio Tinto.

This leads us to one of the most vexed questions in protohistorical Spanish metallurgy - did silver-production in

34 Ruiz Mata, (op. cit. n. 26) 217-218.
35 J.A. Pérez Macías, "Poblados, centros mineros y actividades metalúrgicas en el cinturón ibérico de piritas durante el bronce final," in Tartessos 25 años después, 428.
Huelva precede the Phoenicians, and were the origins of the sophisticated metallurgical technique used in the orientalizing period (cupellation) an indigenous development or due to colonial intervention. The traditional view has been that as the evidence for the production of silver points to an apparently insatiable demand for this resource from the mid-eighth to the mid-sixth centuries, in other words precisely coinciding with the Phoenician presence in the Iberian Peninsula, and given that everywhere evidence for its production is associated with clear signs of Phoenician interest in terms of pottery and other oriental goods appearing in the mining and metallurgical sites of Huelva and elsewhere, then there is a direct link between these two phenomena - the development of silver-production and the Phoenician presence in Spain - a view moreover supported by what literary evidence is available.36 Others, chiefly Rothenberg and Blanco, have rejected this view, based principally on the stratigraphy from the Corta Lago metallurgical site in Rio Tinto. Before attempting to find a solution to this apparent impasse it is important to consider the archaeological evidence on which the two opposing opinions are based. The development of silver-mining from the eighth century onwards can be clearly traced in a number of sites, associated with the minerals of Rio Tinto in Huelva, and those of Aználcollar to the east in the province of Seville.

36 See for instance C.G. Wagner, "Aproximación al proceso histórico de Tartessos," AEA, 56 (1983) 5-11; Ruiz Mata, (op. cit. n. 26) 232-237; Diodorus V, 35, 4-5: The natives did not know how to exploit it (silver), but the Phoenicians realising this to be the case, bought the silver in exchange for items of very little value.
Rio Tinto

The obvious place to begin any investigation of the development of silver-mining in this period is in the pyrites of Rio Tinto, in the western foothills of the Sierra Morena, some 75km north-east of Huelva town (Fig. 4). This is the largest single mining site of antiquity and the volume of slag associated with ancient mining operations here has now been estimated at some six million tons, originally extending over an area some 1.5km long, 0.5km wide and with an average depth of 6m.37 The majority of this ancient slag is the result of silver-smelting, as copper began to be mined here on a large scale only in the Roman period. The silver-ores came from the zone of secondary enrichment between the overlying gossan and the massive sulphide deposit below. The ores were contained in the argentiferous jarosites, a clay layer, up to 1.5m thick, of varying colours, which contained, among other minerals, gold, lead and antimony, together with irregular quantities of silver. These jarosites only form in arid climates from the degradation of pyrite in a silica-rich environment. Directly beneath this jarositic layer are the copper-rich layers mined by the Romans.38 The last pocket of

37 These figures are the result of a new survey of the gossans carried out in 1982, which helped to reconstruct the original topography of Rio Tinto before mining operations began, and established that a figure of approximately 6,000,000 tons is far more likely than that of some 16,000,000 traditionally attributed to the site. B. Rothenberg et al., "The Rio Tinto enigma," in Domergue (ed.), (op. cit. n. 9) 65-66; R.J. Harrison Spain at the Dawn of History, London 1988, 150.

silver-rich jarositic earth was mined in the late nineteenth century and the assays taken then are our only indication of the value of the ore extracted at Rio Tinto. These assays give figures which vary from 3.1kg of silver per ton of ore to nothing at all. Harrison gives the figure of 0.6kg of silver per ton of ore as that produced by the richest mines in operation today, and, in comparison, the Rio Tinto assays are extraordinarily rich.\textsuperscript{39}

From the late eighth century onwards we have clear evidence of the exploitation of silver on a large scale at Rio Tinto. This can be seen most clearly in the settlements at Cerro Salomón and Quebrantahuesos and the stratified slag-heap at Corta Lago (Figs. 4 and 5). The main lodes at Rio Tinto are divided by a ridge which once held 4 peaks, some now lost to opencast mining. Cerro Salomón, which has been partially mined away, is 515m in height, and on its slopes rises the Tinto river which gives the area its name. While the river Tinto has been poisoned by iron salts leached out from the main ore bodies, fresh water is provided from a number of springs at the base of the hill, offering favourable conditions for human habitation.\textsuperscript{40} The main reason for the establishment of the

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Peninsula, in VI congreso internacional de minería y metalurgia. La minería hispana e iberoamericana, Leon 1970, 1, 85-98; Craddock, (op. cit. n. 14) 28-29.
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\textsuperscript{39} Harrison, (op. cit. n. 37) 150; Rothenberg et al., (op. cit. n. 37) 59; J.C. Allan, Considerations on the antiquity of mining in the Iberian Peninsula, Royal Anthropological Institute Occasional Paper n° 27, London 1970, 6-7. The average value of these ores today is some 40gr of silver per ton and 2.5gr of gold per ton of ore.

\textsuperscript{40} L.U. Salkield, A technical history of the Rio Tinto mines: some notes on exploitation from pre-Phoenician times to the 1950s, The Institution of Mining and Metallurgy, London 1987, 2-6; Harrison (op. cit. n. 37) 149-151.
settlement, however, lies in the rich minerals contained in the hill itself, and which apparently were once visible inside a cave at the foot of the mountain, the Cueva del Lago, where they could have easily been tapped without the need for shaft and gallery mining.\textsuperscript{41} The top of the hill was covered by the remains of what was both a mining and a metallurgical settlement which extended over an area of approximately 1km (Fig. 6). The site was densely occupied from the end of the eighth century to the end of the seventh century, with a second period of occupation indicated for the north-eastern part of the settlement by the presence of an Attic kylix dated to the fourth century.\textsuperscript{42} There is no discernible street plan and the site consists of a number of rectangular houses divided up into small rooms, arranged in no apparent order and built from undressed, dry stone. The walls had no foundations, suggesting that the roofs were made from some light material, such as thatch, and some of the floors were covered with slate slabs.\textsuperscript{43} Most of the objects found inside the houses were related to metallurgical activities indicating that they had once been used as metallurgical workshops. These objects included

\textsuperscript{41} Apparently the mineral-rich veins in the Cueva del Lago, the source of the Tinto river and which was destroyed by mining in the nineteenth century, stood out like the veins of a dissected corpse. This rather lurid description comes from R. Rua Figueroa, \textit{Ensayo sobre la historia de las minas de Rio Tinto}, Madrid 1859, quoted by A. Blanco and J.M. Luzón, "Pre-Roman Silver Miners at Riotinto," \textit{Antiquity}, 43 (1969) 124-131.

\textsuperscript{42} Rothenberg and Blanco Freijeiro, (op. cit. n. 23) 28-29. Cerro Salomón was also the site of a Roman mining town, G.D.B. Jones, "The Roman mines at Riotinto," \textit{JRS}, 70 (1980), 146-165.

granite pestles and stone mortars, probably used to crush the mineral before its treatment, together with slag, charcoal, droplets of lead and numerous fragments of tuyeres. The fact that slag was scattered throughout the houses at Cerro Salomón, and not found in large concentrations in one area of the site, suggests that metal-founding was carried out as a small-scale domestic activity by the inhabitants of the settlement. Analysis of the slag shows it to have been silver-slag, with a rich silver content of some 600gr per ton, while the presence of lead droplets indicates that the technique used to refine the silver was that of cupellation, the standard metallurgical process used in the production of silver in this period in south-western Spain (Fig. 8). No traces of a furnace were found on the site, although a hearth was discovered in one of the rooms, about 1m in diameter and 40cm deep, which contained ashes and partially burnt bones. The presence of the bones could imply that this was more than a domestic hearth as bone ash is the material traditionally used to make crucibles.

No real slag heaps were found on the top of Cerro Salomón and it is clear that the hill tops at Rio Tinto were reserved for habitation sites and workshops, while the mining and main


46 Salkield, (op. cit. n. 40) 6; Blanco, Luzón and Ruiz, (op. cit. n. 43) 14.
smelting activities were carried out below. At Cerro Salomón the remains of primitive mining shafts, consisting of low galleries, were found on the slopes of the hill, and another probable pre-Roman shaft has been identified on the hill below the site of Quebrantahuesos. These had been dug out by the stone hammers and picks found in large numbers in Rio Tinto and other mining sites in Huelva province, although it is probable that the first miners at Rio Tinto obtained their ore firstly from the Cueva del Lago and similar cave-mines, where the veins would have been accessible without the need for the labour-intensive shaft and gallery mining.47 The main smelting sites for the mineral extracted from Cerro Salomón and the other peaks at Rio Tinto were situated at the bottom of the hills, and in the adjoining terrain, areas which are now covered by extensive slag heaps. Smelting was carried out here perhaps for health reasons, as the fumes produced from the smelting of silver are extremely toxic.48

47 Rothenberg and Blanco Freijes, (op. cit. n. 23) 98-111. Late Bronze Age miners at Chinchón used a small circular shaft, 80cm in diameter, with footholds cut into its sides, to gain access to the major calcopyrite ore lode, idem, (op. cit. n. 30) 45. Crude hole mines or horizontal galleries have also been found at several sites which yielded Phoenician-type pottery but as they were also worked subsequently, we cannot definitively assign them to the Phoenician period, idem, (op. cit. n. 23), 171.

48 Ibid, 98-100; Harrison, (op. cit. n. 37) 152. Exposure to fumes from silver-smelting produces a condition known as saturnism, which, if untreated, can be fatal. In Roman times Spanish silver-smelters took preventive measures to minimise exposure to fumes, see Strabo, Ill. 2. 8: They build their silver-smelting furnaces with high chimneys so that the gas from the ore may be carried high into the air; for it is heavy and deadly. J. Fernández Jurado, "Aspectos de la minería y metalurgia en la protohistoria de Huelva," in idem (ed.), Tartessos y Huelva, Huelva Arqueológica X-XI, vol. 3, 207-209, has claimed that some of the skeletons from the orientalizing cemetery of La Joya in Huelva show deformations of the hands and fingers characteristic of saturnism, but this claim needs to be backed up by scientific analysis of the bones before it can be taken seriously.
Some of the ore extracted from the slopes of Cerro Salomón was probably smelted at the Corta Lago site on the north-east side of the hill. This site consists of a section of an ancient slag heap, with some building remains, some 8m high and more than 500m long, which were exposed in the excavation of an open-cast mine (Fig. 7). According to the analysis of the Corta Lago section undertaken by Rothenberg and Blanco, silver-smelting first began here in the pre-Phoenician Late Bronze Age and continued until the Roman period, when copper and iron also began to be exploited. They found that until Roman times the slag which makes up the Corta Lago section is the result of many separate metallurgical working surfaces, each one the result of a single furnace run. While the mining techniques attested at Cerro Salomón and Quebrantahuesos are rudimentary, the metallurgical processes seem to have been highly evolved right from the earliest levels at Corta Lago. Stone-built, clay-lined furnaces were used to produce proper tapped slag, and crucible fragments point to the use of either casting or cupellation procedures.49

More settlement remains were found at Quebrantahuesos, situated on the mountain ridge of Cerro Salomón, to the east of that settlement. Rather than a discrete habitation site, Quebrantahuesos should be considered as a continuation of the settlement at Cerro Salomón. Like Cerro Salomón, at Quebrantahuesos the buildings were roughly rectangular in shape and built from locally available undressed stone, with no

49 Rothenberg and Blanco Freijeiro, (op. cit. n. 23) 101-106; Harrison, (op. cit. n. 37) 153; Kassianidou, (op. cit. n. 24) 95-97.
evidence of any organised planning of the settlement space. The finds of slag, crucible fragments and tuyères, along with that of a semi-circular stone structure, filled with slag and charcoal, which may represent a smelting furnace, indicated that here too the settlement functioned as both a residential and workshop area. The high silver content of the slag, as well as the discovery of a lump of litharge, suggest that silver was the metal extracted and cast at the site by means of cupellation.\textsuperscript{50} Judging by the pottery, Quebrantahuesos was occupied from the late eighth century down to the fourth century, although given the poverty of the finds, it seems that this occupation may have only been seasonal, as in the case of the contemporary metallurgical settlement at nearby San Bartolomé de Almonte in Huelva.\textsuperscript{51} The reason for the continued occupation of the site over 400 years was the mining and processing of silver. Silver slag is scarce in the Late Bronze Age level of the site, increasing dramatically in the seventh and sixth centuries, only to decrease again in the succeeding Iberian period until the site is abandoned in the fourth century.\textsuperscript{52} While the initial levels of occupation at the site belong to the Late Bronze Age, wheel-made ware is already present in significant quantities, representing 9.12\% of the total pottery assemblage for this period, and this figure increases to some 57.63\% in the following period, dated to the

\textsuperscript{50} Rothenberg and Blanco Freijeiro, (op. cit. n. 23) 100-101; M. Pellicer, "El yacimiento protohistórico de Quebrantahuesos (Riotinto, Huelva)," NAH, 15 (1983) 61-91; Kassianidou, (op. cit. n. 24) 98-99.

\textsuperscript{51} Ruiz Mata, (op. cit. n. 26) 218-222.

\textsuperscript{52} Ibid, 222.
seventh and sixth centuries, and coinciding with the apogee of metal-production at the site.\textsuperscript{53}

These three sites offer clear and incontrovertible evidence that silver began to be extracted and exploited on a large scale from the eighth century onwards. It is equally clear that this change in emphasis, from the small-scale copper mining of the pre-Phoenician Late Bronze Age to the extraction of silver on a scale which has often been termed industrial, is the result of Phoenician influence. This can be shown by the composition of the pottery yielded by the above sites. The pottery found at Cerro Salomón and Quebrantahuesos is the standard indigenous pottery of the orientalizing period in south-western Spain, with parallels in Cabezo de San Pedro, in the city of Huelva, and in the Tartessian metallurgical site of San Bartolomé de Almonte in Huelva province.\textsuperscript{54} But from the earliest levels of occupation at Cerro Salomón Phoenician imports are present and, in a later phase of occupation of the site, they make up some 25-30\% of the total pottery assemblage.\textsuperscript{55} The same can be said about the neighbouring site of Quebrantahuesos.\textsuperscript{56} A similar picture of Phoenician involvement emerges from the Corta Lago slag heap. Imported wheel-made ware is found almost from the very start of silver-smelting activities here,

\textsuperscript{53} Pellicer, (op. cit. n.50) 69-71.

\textsuperscript{54} Ruiz Mata, (op. cit. n. 26), 234-235; Blanco Freijeiro, Luzón Nogué and Ruiz Mata, (op. cit. n. 44) 126-132.

\textsuperscript{55} Ibid, 132-138; Ruiz Mata, (op. cit. n. 26) 235.

\textsuperscript{56} Pellicer, (op. cit. n.50) 69-71.
and in significant quantities, c.19%. This figure rises to c.70% of the total ceramic assemblage in subsequent strata at the site. Even if Rothenberg and Blanco are correct in assigning the start of silver-smelting at Corta Lago to the pre-Phoenician Late Bronze Age, these pottery imports show a significant, and speedy, Phoenician interest in the processes carried out here. The pottery from Rio Tinto tells us that right from the start of large-scale silver-mining there, apparently in the latter part of the eighth century, the mining and smelting of silver was controlled and carried out by the indigenous inhabitants of south-west Spain. However, at the same time, the presence of Phoenician pottery in significant quantities, from the start of occupation at Cerro Salomón and Quebrantahuesos points to Phoenician interest and involvement in the silver-production carried out here and in the other sites at Rio Tinto. While the argument continues as to the ultimate origin of the silver-smelting technology, indigenous or allochthonous, it is unquestionable that it was Phoenician interest and influence which provided the stimulus for the population of this region to increase dramatically their production of silver, to the extent that it became the most valuable commodity in the indigenous economy, and one that was responsible for the rapid and ostentatious enrichment of the most powerful sectors of society, both native and oriental.

57 Rothenberg and Blanco Freijeiro, (op. cit. n. 23) 172. The stratigraphy of Corta Lago has been questioned and will remain problematic until its detailed publication which is in progress, see Ruiz Mata, (op. cit. n. 26) 232-233.
While Phoenician interest in silver-production at Rio Tinto is clear, the problem of the origin of the metallurgical techniques attested there is still problematic. Cupellation is a two-step process consisting of smelting followed by the cupellation itself. For the smelt, lead was necessary to prevent excessive loss of the silver during the smelting process. In the case of the jarositic ores used to produce silver at Rio Tinto, lead would have been added to the ore to collect and concentrate the silver. The argentiferous lead produced from the smelting of the jarosite generally contained traces of copper, arsenic, antimony and bismuth, all already present in the jarosite itself. These would turn into litharge during the cupellation, and only gold and some bismuth would be left in the silver. The gold was not generally recovered from the silver, even though the technology existed to do so, but the undesirable bismuth could be eliminated through repeated cupellation. Cupellation consisted of heating the metal until the lead separates from the other metals, part of it adhering to the cupel as litharge, which absorbs the oxides of most of the other metals, while the remainder passes into the air as lead-oxide, leaving a button of silver behind. Cupellation would take place either in cupellation hearths, where the furnace consisted of a dome-shaped hood made of a thick refractory material with openings for the tuyeres and to add fuel or remove litharge, or simply in small open cupellation dishes. The discovery of a silver-smelting workshop to the west of Rio Tinto at Monte Romero, near the

58 Tylecote, (op. cit. n. 21) 45; Fernández Jurado, (op. cit. n. 24) 160; Kassianidou, (op. cit. n. 24) 32-44; Craddock, (op. cit. n. 14) 216-231.
village of Almonaster la Real in the province of Huelva, provides us with a clear picture of the kind of metallurgical techniques used to refine silver in this period.\textsuperscript{59} Here the ore came from the nearby mine of Monte Romero where the silver-bearing ore outcropped at the surface and was therefore easily accessible even to primitive mining techniques. The ore was first roasted and then smelted in furnaces made from layers of slate and clay, lined on the inside with clay. Then the argentiferous lead was cupelled in cupellation dishes, of which 12 complete examples were found at the site. These were circular dishes measuring some 12cm in diameter (Fig. 9). Although bone-ash is generally regarded as the best material for cupellation hearths and dishes, this was not found in the cupellation dishes at Monte Romero. The finds from the site point to the use of relatively sophisticated metallurgical processes to refine and produce the silver - but what was their origin?

Rothenberg and Blanco contend that, as there were no mines in Phoenicia, the Phoenicians had no specialist skill or knowledge of extractive metallurgy to pass on, and thus the use of cupellation attested at Rio Tinto, and other sites in south-west Spain, owed nothing to Phoenician expertise.\textsuperscript{60} However, this technique is one which was not exclusive to Spain, and was well known in the eastern Mediterranean. It was

\textsuperscript{59} V. Kassianidou, "Monte Romero, a silver producing workshop of the seventh century B.C. in south-west Spain," \textit{Institute for Archaeo-Metallurgical Studies (IAMS) Newsletter}, n° 18 (1992) 7-10; Rothenberg and Blanco, (op. cit. n. 23) 84-87.

\textsuperscript{60} Idem, (op. cit. n. 23) 172.
practised during the Aegean Bronze Age at the silver-mines in Laurion, in Attica, and is one which the Phoenicians were clearly familiar with, given its occurrence at the Phoenician settlement of Castillo de Doña Blanca, near Cádiz. This site yielded clear signs of significant metallurgical activities linked to the production of silver. Silver-slag was found attached to many pottery fragments, as were double-tube tuyères, similar to those found both at Toscanos and Cerro Salomón. But most importantly for our purposes, blocks of metallic lead were discovered in a building dated to the second half of the eighth century, suggesting that silver was either produced here, or that the lead necessary for its extraction through cupellation was supplied by the inhabitants of Doña Blanca to the mining and metallurgical sites in the interior, some of which, such as the mines at Aznalcollar in the province of Seville, were lacking in lead, and thus dependent on outside sources of supply for the production of silver. All this shows an intimate connection between the Phoenicians and metals in terms of metallurgical procedures, not just in the metal-working for which even Rothenberg and Blanco concede that they were famous. They too were obviously familiar with the addition of lead to silver-ore to obtain the

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62 Ruiz Mata, (op. cit. n. 26) 237-238.

63 Rothenberg and Blanco, (op. cit. n. 23) 172. Aside from Spain and the evidence from Carthage in Cyprus the sanctuary at the Phoenician colony of Kition is closely associated with metallurgical workshops.
precious metal through cupellation, as the presence of lead blocks at Doña Blanca shows.64

Therefore given the clear association between the Phoenicians and this technique for the refining of silver it is tempting to assign its introduction at Rio Tinto to Phoenician intervention there, especially given the unfailing correlation, both at Rio Tinto and elsewhere in south-west Spain, between Phoenician colonisation and the development of large-scale silver-mining, as many authors have done. This argument has been strengthened by the relative paucity of evidence linking the exploitation of silver to the pre-Phoenician era. Up to now the only direct evidence to suggest that the use of cupellation to refine silver predated the Phoenicians comes from the stratigraphy published by Rothenberg and Blanco for the Corta Lago mine at Rio Tinto.65 The lowest levels of the stratigraphy indicated that silver was being smelted there and were dated by the excavators to the Late Bronze Age (twelfth-ninth centuries) by the pottery found there, in other words to the pre-Phoenician period. This is contested by Ruiz Mata, who has raised serious doubts about the dating assigned to this stratigraphy.66 However, leaving aside the controversy about

64 The Phoenician term for a gold-smith, nsk hrs, smelter of gold, suggests that cupellation was the method used by them to purify precious metals: see E. Lipinski, "Métallurgie," in idem, (ed.), *Dictionnaire de la civilisation phénicienne et punique*, Paris Brussels 1992, 289-290.

65 Rothenberg and Blanco, (op. cit. n. 23) 101-106 and 172.

66 Ruiz Mata, (op. cit. n. 26) 232-233. He rejects the identification of the pottery fragments published by Rothenberg and Blanco as belonging to the pre-Phoenician period. He disputes their analysis of the Corta Lago stratigraphy, claiming that the lowest level of the Corta Lago stratigraphy already contains Phoenician wheel-made ware, and in the next level, wheel-made ware is predominant. Therefore, according to Ruiz Mata, the analysis of pottery from
the origin of the Corta Lago site, recent archaeological discoveries in the region of Rio Tinto have placed the origin of this technology firmly in the hands of the native population of this part of Spain. A Bronze Age cist-burial cemetery was discovered at La Parrita, near the village of Nerva, in the Rio Tinto area, associated with a pit filled with Bronze Age pottery and slag and containing a crucible with silver still adhering to it. Slag containing a high quantity of silver and lead was also found in one of the tombs. It has been suggested that the area around the pit, with its burnt earth, could have been used for the cupellation of the silver-lead compound in open pottery containers. Such a procedure would account for the high percentage of lead found in the cupel. This find attests not only to the production of silver in a fully pre-colonial context, the mid second millennium, but also, to the native origin of the development of the cupellation technique of silver smelting. Further evidence of prehistoric silver-mining comes from the settlement of Cerro de Tres Aguilas, 1 km to the north of La Parrita. Dated to the south-west Bronze Age of the second millennium, this site yielded large amounts

Corta Lago essentially provides the same picture of Phoenician involvement right from the start of silver production at Rio Tinto. However these objections will be undermined by the full publication of the Corta Lago stratigraphy, currently in preparation. The lowest levels consist of pre-Phoenician and fully prehistoric Late Bronze Age deposits. These fully support the view that the Rio Tinto lodes were known, and exploited, before the arrival of the Phoenicians. The pottery associated with these levels includes a large fragment of a plain shouldered bowl, of a type only known in the Late Bronze Age, 11-10 centuries B.C. (R.J. Harrison, personal communication).

67 The figures are silver - 273 ppt (parts per million), copper - 204 ppm, and lead - 613 ppm. Pérez Macías, (op. cit. n. 35) 431-434.

68 B. Rothenberg, "Miners' tombs help date early work at Rio Tinto," in Institute for Archaeo-Metallurgical Studies (IAMS) Newsletter, nº 7, December 1984, 1-3; idem et al., (op. cit. n. 37) 57-70, 62; Harrison, (op. cit. n. 37) 154.
of mineral and scoria, as well as cupels similar to that from La Parrita. The mineral when analysed proved to be gossan, with extremely high quantities of gold, silver and lead, which could only have come from the upper levels of the oxidised gossan with its high percentages of silver and lead, easily accessible even to the primitive techniques of these early miners.69 The finds from La Parrita and Cerro de las Aguilas seem to offer definite proof that silver was produced through cupellation as far back as the mid second millennium. However the fact that cupellation was known to the inhabitants of this area in the Early Bronze Age does not necessarily imply that this knowledge was applied almost a millennium later, and, as we have seen, there is little reliable evidence for the production of silver in the period immediately preceding the arrival of the Phoenicians in Spain, early in the eighth century. At this time local metallurgical activities seem to have concentrated primarily on the production of copper to satisfy the Atlantic Late Bronze Age trade circuit in which the southwest was immersed. In this context it seems unquestionable that it was the demand on the part of the recently established colonists with their enticing bronzes, ivories, fine wines and oil that provided the stimulus for the local chieftains to switch their mining activities from the production of copper to that of silver. This would explain not just the start of large-scale silver-mining at Rio Tinto in the late eighth century but also the fact that all the mining and metallurgical sites investigated so far in other parts of Huelva and in Seville

69 Pérez Macías, (op. cit. n. 35) 432-434.
seem to date roughly to the same period and again show signs of Phoenician influence from the start of their first occupation.

**Huelva**

The development of the settlement of Huelva from the ninth century onwards provides us with an insight into how profoundly Phoenician intervention altered the economy of this area. Given the site chosen for the settlement it seems obvious that Huelva’s main role lay not in agriculture but in the commercial relations which its strategic location favoured. At the start of the first millennium B.C it was situated on a peninsula, in the centre of a deep bay, which served as an excellent natural harbour. The two rivers which flowed into the bay, the Tinto and Odiel, provided a direct line of communication with the mineral resources of the interior. Thus Huelva shared the characteristic location of the Phoenician colonial sites, situated on the coast, at the mouth of a river. The foundation of the town, probably in the tenth, or at the latest, the ninth century, may have been related to the exploitation of the copper ores in the interior of Huelva province in the pre-Phoenician Late Bronze Age, a supposition confirmed by the discovery of the Huelva hoard. Certainly it

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71 The oldest settlement remains come from the hill of Cabezo de San Pedro which shows an initial pre-Phoenician Late Bronze Age level, D. Ruiz Mata, "Aportación al análisis de los inicios de la presencia fenicia en Andalucía sudoccidental, según las excavaciones del Cabezo de San Pedro (Huelva), S. Bartolomé (Almonte, Huelva), Castillo de Doña Blanca (Puerto de Santa María, Cádiz) y El Carambolo (Camas, Sevilla)," *Homenaje a Luis Siret*, Seville 1986, 539.
seems that around this time the production and trade in metal was directed primarily at the production of copper, with almost no evidence of the silver-production which is to become so abundant in the two succeeding centuries. Only one instance of silver-production has been identified from allegedly pre-Phoenician levels in Huelva city,\textsuperscript{72} while from the eighth century onwards, with the appearance of the first wheel-made pottery, the finds of silver-slag and evidence of metal production become numerous and are dispersed throughout the city, suggesting that a large part of the population was involved in the production of this resource (Fig. 10).\textsuperscript{73} At the same time the settlement had expanded greatly, moving out from its original nucleus on the Cabezo de San Pedro hill to occupy the adjoining hills, with rectilinear houses now made from mudbrick, with masonry socles (which often include slag used as a building material), in contrast to the circular cabins, made from organic materials, which we suspect made up the initial settlement. The prosperity of the

\textsuperscript{72} J.M. Blázquez \textit{et al.}, "Las cerámicas del Cabezo de San Pedro," in J.M. Blázquez, \textit{Fenicios, griegos y cartagineses en Occidente}, Madrid 1992, 256, also published in \textit{HA}, 1 (1970). The finds, consisting of litharge and metallurgical remains adhering to crucibles, do not have a proper stratigraphical context, but were collected rather than excavated during building work on the hill, thus their attribution to the pre-Phoenician levels of the settlement cannot be beyond dispute.

\textsuperscript{73} J. Fernández Jurado, "La orientalización de Huelva," in M.E. Aubet Semmler (ed.), \textit{Tartessos}, 347; J.P. Garrido, \textit{El hábitat antiguo de Huelva, periodos orientalizante y arcaico}, EAE 1994; C. García Sanz, "El urbanismo protohistórico de Huelva," in Fernández Jurado (ed.), (op. cit. n. 48), vol. 3, 143-175. The remains of what were apparently two smelting furnaces were found on the site of number 6, Calle Puerto, Fernández Jurado and Ruiz Mata, (op. cit. n. 45) 28-29; Fernández Jurado, (ed.) (op. cit. n. 48), vol. 1. However based on the diameter of the excavated furnace (1.50m) Kassianidou (op. cit. n. 24) 100-101, has concluded that it cannot have been a smelting furnace and is more likely to have been a cupellation hearth for a silver refining workshop rather than an indication that the site was used for primary smelting of silver-ore.
site can also be seen in its graves, the necropolis of La Joya yielding some of the most sumptuous grave goods of this period in Spain, and, very significantly, also silver slag in many of the tombs there, clearly reflecting the prosperity that the silver-trade had brought to Huelva.\textsuperscript{74} Given the unvarying link between Phoenician-associated goods and the evidence for silver production in the settlement of Huelva, it can be assumed that it was the demand for silver by the Phoenicians that lead to the hugely increased scale of production of this resource, and indeed to the shift in emphasis away from the production of copper attested for the tenth and ninth centuries in Huelva.

Given the great mineral wealth of the entire province of Huelva and the fairly rudimentary mining technique used by the miners of this era it can be expected that mineral-extraction was not confined to Rio Tinto and its adjoining areas but extended to take advantage of any readily-accessible source of silver in the mineralised area of the Pyrite Belt. Recent excavations have confirmed that Rio Tinto was not the only silver-producing region at this time and have allowed us to gain a greater insight, not just into the metallurgical and extractive procedures used, but also into the whole infrastructure used.

\textsuperscript{74} J.P Garrido and E. Orta, \textit{Excavaciones en la necrópolis de la Joya, Huelva (1\textsuperscript{a} y 2\textsuperscript{a} campañ\~nas)}. \textit{EAE}, 71 (1970); idem, \textit{Excavaciones en la necrópolis de la Joya, Huelva (3\textsuperscript{a} y 4\textsuperscript{a} y 5\textsuperscript{a} campañ\~nas)}. \textit{EAE} 96 (1978). Slag was found in some very wealthy burials. For instance in Tomb 5, along with a bronze jug and ewer, pieces of iron, gold jewellery, amber beads and fragments of decorated ivory, \textit{EAE} 71, 33; and in Tomb 9 with a bronze shield, iron dagger, gold and amber jewellery, ivory plaques and 4 alabaster containers, \textit{EAE} 71, 51. The placing of slag in the tombs of La Joya was a practice which we also find in graves of the Middle Bronze Age in Huelva, in tomb 6 of the cist grave cemetery of La Parrita, for instance, Pérez Macías, (op. cit. n. 35) 431.
for the safe transport of the minerals to their final point of
destination in the Peninsula, before their export to the central
and eastern Mediterranean.

Aznalcóllar

The Sierra Morena is an obvious source of mineral wealth. This
mountainous range which forms the most southerly part of the
southern meseta lies immediately to the north of the
Guadalquivir valley and is part of the Iberian Pyrite Belt.75 As
such it has large quantities of gold, silver, copper, zinc and
lead, among other minerals, and it is clear that these
resources were exploited from earliest times onwards,
although subsequent large-scale exploitation of these ores has
made the exact evaluation of the extent of early operations
almost impossible.76 The proximity of the Sierra Morena to
the Guadalquivir river meant that any metals produced there
could easily have been transported down to the coast, which
was then much further inland than at present, and helps to
explain the large quantity of Phoenician items, especially
amphorae, found in the indigenous settlements which cluster
along the entire length of the river's course.

The mineral-rich area of Aznalcóllar lies in in the province of
Seville, just over the border from Huelva province, at the
south-east end of the Iberian Pyrite belt, and is an area which
seems to have been intensely exploited in antiquity for its

75 Harrison, (op. cit. n. 37) 19-22.
76 D. Ruiz Mata, J. Fernández Jurado, El yacimiento metalúrgico de época
tartésica de San Bartolomé de Almonte (Huelva), HA, 8 (1986), 253.
silver ores (Fig. 12). The mineral composition of the Aznalcóllar mines is essentially similar to that of Rio Tinto, with oxidised gossan covering primary deposits of unaltered pyrites, while between lies the secondary enrichment zone, where the richest concentration of metaliferous ores is found. The exploitation of the minerals at Aznalcóllar follows a similar pattern to that at Rio Tinto. While the first evidence of mining at Aznalcóllar dates from the Chalcolithic and points to the exploitation of copper, the Late Bronze Age colonial period brings with it a huge increase in the level of activities undertaken here, with two sites identified at the mines, both apparently linked to silver-production. The first of these is situated at Cerro del Castillo, at the northern end of the modern village of Aznalcóllar, on the right bank of the river Agríco. This site consists of a flat plateau surrounded by the remains of a defensive wall, part of which dates to the Late Bronze Age colonial period. The wall is associated with handmade pottery, with no evidence of wheelmade ware. Judging by its pottery, the site was first occupied in the pre-Phoenician Late Bronze Age, and seems to have been continuously inhabited up until at least the Middle Ages. An ancient mining gallery was found in the hill-side below the settlement and evidence of silver-production was found at the site itself, in the form of silver-slag, unfortunately without a proper archaeological context, so we cannot put a precise date on the start and duration of metal-production at this


78 Ibid, 38; Ruiz Mata and Fernández Jurado, (op. cit. n. 76) 253.
settlement. However the slag was of the free silica type, a kind of slag generally found immediately before or in association with Phoenician materials.79 The second site associated with the mines was found on the other side of the river from Cerro del Castillo, at Los Castrejones, strategically situated at the edge of the mines. It too was protected by a sloping defensive wall, built from slate and apparently reenforced by towers. The settlement was occupied from the eighth to the sixth centuries, and seems to have been a mining and metallurgical settlement dedicated exclusively to the production of silver. Numerous mining tools were found there, including miners' hammers, and mortars used to crush the mineral, as were almost 46 kilos of slag, pottery fragments with slag still adhering to them, and part of a silver ingot.80 Analysis of the mineral found at Los Castrejones shows that it very probably came from the Aznalcóllar mines, where the remains of an ancient mining system designed to exploit the gossan were found.81

Judging by the settlement remains found at Aznalcóllar, its rich silver ores first began to be exploited in the eighth century, reflecting contemporary developments at Rio Tinto. However, while at Rio Tinto, much of the smelting and general metallurgical activities were carried out in the area of the

79 Hunt Ortiz, (op. cit. n. 77) 40; idem, "El foco metalúrgico de Aznalcóllar, Sevilla, técnicas analíticas aplicadas a la arqueometalurgia del suroeste de la Península Ibérica," in Tartessos 25 años después, 448-449.

80 Idem, (op. cit. n. 77) 40-41 and (op. cit. n. 79) 449-450.

81 Idem, (op. cit. n. 77) 40-41.
mines themselves, at Aznalcóllar the minerals produced there were frequently transported to other sites where they could be further processed. This was done for a number of reasons, largely economic. As the habitation sites in the mining area were restricted to small mining settlements, occupied probably only seasonally, it is obvious that the silver produced there would not remain there, but would be transported to the settlements controlling the production of this resource, where it would stay in the hands of the local elites, or more likely, given the large number of Phoenician objects found in these settlements, would have been traded with the oriental merchants in exchange for their amphorae, containing wine and oil, or perfumed unguents, as well as luxury goods made from ivory and precious metals. Given, then, that the product of the mines would have to be transported sooner or later, there were a number of factors which made it economically more advantageous for the mineral to be transported after some initial treatment rather than to transport the prized final product, the silver itself. Chief among them was likely to be the need for large amounts of wood to be used as fuel for the metallurgical processes. As Forbes has pointed out, the availability and especially the quality of the fuel determine the temperature attained in the furnace, and this in turn is largely responsible for the possibility of working certain ores and using certain processes, so that the fuel determines to some degree the melting and smelting activities of the early smith.82 The fuel used in the metallurgical processes in

south-west Spain took the form of charcoal produced from the local evergreen oaks, the *Quercus ilex*, regarded by Theophrastus as the best source of charcoal and the most appropriate for the first smelting of silver ore.\textsuperscript{83} The quantities of wood required for roasting and smelting the ores have been calculated at 90.2 kg of wood to produce 1 kg of copper and approximately the same amount of wood to produce 0.1 kg of silver.\textsuperscript{84} Given these figures, such wood as there was in the mountainous areas around the mines would soon have become exhausted, and transporting the minerals to areas where this resource was readily available was easier, and more secure, than transporting large quantities of wood to the mines and then transporting the silver.\textsuperscript{85} The metallurgical

\textsuperscript{83} Theophrastus, *Enquiry into Plants*, V. 9; III. B. 5-7; IX. 2. 1. Traces of charcoal have been found at Rio Tinto, as a layer of fine dust at Corta Lago. Craddock, (op. cit. n. 14) 192.

\textsuperscript{84} Allan, (op. cit. n. 39) 10-11; Harrison, (op. cit. n. 37) 154; Craddock, (op. cit. n. 14) 189-195.

\textsuperscript{85} J. Fernández Jurado, "Plata y plomo en el comercio fenicio-tartésico," in Arana Castillo et al. (eds.), (op. cit. n. 21) 140-142. In the Roman period, lack of fuel led to the transport of iron ore from the mines of Elba to Populonia for smelting, as fuel supplies were plentiful there, Forbes, (op. cit. n. 82) 108. The separation of the extractive and metallurgical processes is also found in Nuraghic Sardinia, where the workshop centres where smelting was carried out were often located outside the actual mining area, C. Giardino, *The West Mediterranean between the 14th and 8th Centuries B.C.*, Mining and Metallurgical spheres, BAR Int. S. 612, Oxford 1995, 294. There are signs of deforestation in south-west Spain during our period. Analysis of pollen diagrams from 2 mires in the province of Huelva shows a significant level of deforestation in the period from 1600-500. A.C. Stevenson and R.J. Harrison, "Ancient forests in Spain: a model for land-use and dry forest management in south-west Spain from 4000 B.C. to 1900 A.D." *PPS* 58 (1992) 227-247. The authors reject any link between the deforestation attested during this period and silver-mining in the province of Huelva during the Late Bronze Age and Phoenician period on the grounds that their analysis sites are too far from the Rio Tinto mines. But, as the city of Huelva is only 15 km away, it is possible that the large-scale metallurgical activities undertaken there during the seventh and first half of the sixth centuries could be one reason for the decline in the levels of oak which have recovered by 500, when exploitation of silver in the south-west had almost ceased.
centres were generally well communicated, either situated near to a river or the sea, thus facilitating the transport of the metals to the settlement where they would be traded, or they also acted as the commercial centre itself, as in the case of Huelva. Therefore in general the separation of the extractive and processing areas provided greater control over the production of the resource, and the mines at Aznalcóllar seem to have been the first link in a chain which went from the extractive centre itself to a strategically situated storage and redistribution centre, and from there on to a metallurgical settlement, located on the edge of the Guadalquivir estuary, from which the metals were transported to the final exporting centre, at the mouth of the river, Gadir.

San Bartolomé de Almonte
The settlement of San Bartolomé, located some 2.5km north-east of the town of Almonte in Huelva province, is an example of a purely metallurgical settlement, situated in an area with no mineral resources of its own. The ores processed at this site had to be transported from elsewhere, and analysis of the constituent properties of the slag (more than 3,000kg) and minerals found at San Bartolomé shows that it came from the mines at Aznalcóllar, some 40km away.86 While San Bartolomé

86 D. Ruiz Mata, "El poblado metalúrgico de época tartésica de San Bartolomé (Almonte, Huelva)," MM, 22 (1981) 151. Kassianidou, (op. cit. n. 24) 103-107, has suggested that given the large size of one of the "furnaces" excavated at the site it is extremely unlikely to have been used as a smelting furnace or even a cupellation hearth and in fact the slag at San Bartolomé may be the result of silver-refining and not primary smelting. However, whatever the true nature of the metallurgical procedure carried out there, it is undeniable that the raw material, either in the form of ore or semi-refined metallic lead, could not have come from the immediate vicinity of the settlement. Judging by the analysis of the ore, it had been extracted from the mines at Aznalcóllar, and therefore the
may initially seem an odd choice for a metallurgical settlement, with no immediately accessible minerals and lacking any direct access to the coast, at the start of the last millennium it was situated right on the edge of the Guadalquivir estuary, which then formed a large lagoon, opening out onto the sea a little below the city of Seville, and extending from San Lucar de Barrameda in the east to El Rocio in the west. This lagoon covered an area of some 1,400 km, offering far greater possibilities for navigation than the marshes which now cover the lower course of the river, as a reading of some of the ancient authors and the profusion of ancient sites in the area of the marshes confirms. It therefore had direct access to the most important channel of communication in Lower Andalusia. In addition, the composition of its soil made it ideal for metallurgical activities. The lime in the soil was an essential component in the production of cupels, as well as acting as a flux in the metallurgical procedure.

The settlement at San Bartolomé extended over some 40 Has., and consisted of flimsy circular or oval huts, made from

chain of extractive centre and dependent metallurgical workshops still remains intact.


88 Ruiz Mata and Fernández Jurado (op. cit. n. 76) 11-13.
organic material, arranged into a number of nuclei, perhaps indicating family or work groups, but with no evidence of any previous planning of the settlement space. Each hut had only one layer of occupation suggesting that they were probably occupied on a seasonal basis and then abandoned. Some of the huts were associated with oval or circular trenches, and given their narrowness and the large amount of slag found in them, it seems likely that these were used as metallurgical workshops rather than dwellings, although the presence of slag in the cabins indicates that metal-working was also carried out in the living areas, just as it was at Cerro Salomón. The settlement was occupied for approximately two centuries, from the end of the pre-Phoenician Late Bronze Age, c. 800, to the end of the seventh century. During this time the pottery at the site was overwhelmingly indigenous handmade ware, stroke-burnished and coarse ware, similar to that found in the native sites of Huelva and the lower Guadalquivir. There are relatively few Phoenician imports, and none at all in the first phase of occupation at San Bartolomé. When they do appear, from the second half of the eighth century, they tend to represent exotic objects, such as oinochoes or unguentaria, rather than the amphorae, red slip and grey table ware so common in both Phoenician settlements and orientalizing sites elsewhere in the Peninsula. Given the unusual composition

89 Ruiz Mata, (op. cit. n. 86) 154.

90 Ibid, 156.

91 Ruiz Mata and Fernández Jurado, (op. cit. n. 76) 236-237.

92 Ibid, 219-228.
of the wheel-made pottery, and its low incidence, it is unlikely that we are dealing with a large-scale Phoenician presence at the site, and its excavators have suggested that the composition of the imported pottery reflects the beginning of contact and trade between the two social groups, rather than active Phoenician collaboration in the economic activities undertaken here.\textsuperscript{93} Judging by the results of the analysis of the wheelmade pottery it is possible to identify these imports as having originated from Castillo de Doña Blanca, in other words, as this site is regarded as an extension of the Phoenician colony of Cádiz, the Phoenician pottery came directly from Gadir itself rather than from Huelva.\textsuperscript{94} This is an important distinction which allows us to identify the respective areas of influence of the two trading centres. The comparative infrequency of the wheelmade ware is reflected in the overall lack of any great orientalizing influence in the structure of the site. With its insubstantial round huts and lack of urban planning or defensive wall it shows that any outside influence had little effect here and that once again the production of silver lay firmly in the hands of the indigenous inhabitants of south-west Spain.

\textbf{Peñalosa}

San Bartolomé is not the only metallurgical centre in the area and recent excavations have uncovered several small indigenous metal-working sites devoted to the production of...
silver and dependent on the minerals produced by the Sierra Morena in general, and the Aznalcóllar mines in particular. One such settlement is at Peñalosa, in the municipal district of Escacena del Campo, in the eastern part of Huelva province, near the border with the province of Seville.95 Like San Bartolomé, the site at Peñalosa consisted of small circular or oblong huts, made from organic material, and arranged with no apparent planning. Again like San Bartolomé, here too the pottery is overwhelmingly indigenous handmade and burnished ware, with Phoenician influence indicated by the presence of just one wheelmade red slip bowl. The Phoenician interest in this site is undoubtedly due to the silver-production attested by the presence of metallic lead, necessary for the extraction of silver in the cupellation process, as well as finds of slag, slagged pottery and tuyères.96 The site at Peñalosa is considerably smaller than San Bartolomé and was occupied for only a short period of time, from the end of the ninth to the middle of the eighth century. Another site in this area with signs of metal production is Cerro de la Matanza, again in the municipal district of Escacena del Campo, about 3.5 km south of the settlement at Tejada la Vieja. Although it has not been excavated, the remains of stone tools and silver-slag have been found at the site which may well have had a defensive wall. Its pottery dates the occupation of the settlement from the Chalcolithic down to the Roman period. As it has no mines in its immediate hinterland the origin of the ore treated there


96 Fernández Jurado, (op. cit. n. 85) 138-139.
must be open to speculation, and it is possible that it could have come from Aznalcóllar, although until the constituent properties of the slag are analysed this is only a hypothesis.97

In general the spatial analysis of the Sierra Morena area and its foothills between the Tinto river to the west and the Guadiamar to the east has revealed a total of 36 ancient mines, although not all of them would belong to our period.98 Associated with these ancient mines are a number of settlements which clearly functioned in terms either of direct resource production (the silver-slag of Cerro de la Matanza), or of the coordination and control of access to the mines and their mineral resources, along with access to rivers which acted as the channels of communication linking the mines and metallurgical centres with the commercial centres down river. The most important of these in size and strategic function was undoubtedly the settlement at Tejada la Vieja which combined metallurgical activities with a strategic location close to the mines, permitting it to act as a storage and redistributive centre for the silver-ore mined at Aznalcóllar.

Tejada la Vieja

Tejada la Vieja is located in the municipal district of Escacena del Campo, just over the border from the province of Seville, and close to the settlements at Peñalosa and Cerro de la Matanza (Fig. 13). It is strategically situated in the


foothills of the Sierra Morena between the mountains of the Sierra Morena to the north and the fertile agricultural land, the campiña to the south. It is located close to a number of major routes of communication, linking the mineral-rich areas with the commercial centres along the river Guadalquivir. Three kms north of Tejada lies the mountain pass of La Garganta which gives access to the mines of Rio Tinto. The road from Tejada to Rio Tinto passes through Aznalcóllar, and continues from there on to San Bartolomé and El Rocío, on the western edge of the Guadalquivir estuary, where slag of similar appearance to that found at San Bartolomé has been found. Another road passes through Tejada linking the fords over the Tinto at Niebla and the Odiel at Gibraleon in the west with a ford over the Guadalquivir near Alcalá del Río. Tejada is also linked to the Guadalquivir through the Guadiamar river, which flows into the Guadalquivir estuary. The commanding position of Tejada on a plateau 160 m above sea level gave it a great visibility over the surrounding area and it was essentially its frontier position between the minerals of the Sierra Morena and the Guadalquivir estuary which explains its importance and prosperity throughout 400 years.

The site was first excavated by A. Blanco in 1974-1975 as part of the Huelva archaeo-metallurgical survey but these excavations dealt primarily with the last phases of occupation there, during the fifth and fourth centuries B.C, when the

99 Ruiz Mata, (op. cit. n. 86) 150. In Roman times the Rio Tinto mines were linked by road to Hispalis (Seville), Jones, (op. cit. n. 42) 148.

100 Blanco Freijeiro, in Rothenberg and Blanco Freijeiro, (op. cit. n. 23) 231.
settlement was occupied by large solidly built rectangular structures which were arranged in orderly blocks, divided by wide streets (Fig. 16). Of the initial settlement we are less well informed. The site seems to have first been occupied at the end of the eighth century and perhaps originally took the form of the circular huts, or cabañas found at San Bartolomé and Peñalosa. If so these were very soon replaced by more substantial structures, the remains of which are limited to red clay floors found in the excavations of Fernández Jurado and his team. But the most striking feature of the site and one which still impresses to this day is the thick defensive wall surrounding the settlement. This wall is very roughly built, consisting of two stretches of wall, the outer slightly trapezoidal in shape, made from large limestone blocks, joined without any mortar, and with the area between the walls filled with earth, rubble and pottery. It was subsequently reinforced with a number of square and circular buttresses. This defensive wall seems to be contemporary with the earliest moments of occupation at the site, being built at the end of the eighth century, but was subject to continual repairs and reinforcements throughout the settlement’s history, largely due to the careless nature of its construction.


102 Fernández Jurado, (op. cit. n. 97) 154. Blanco (idem and Rothenberg, op. cit. n. 23, 234-254) claimed an earlier date for the foundation of the settlement, sometime in the Middle to Late Bronze Age (eleventh century), while the defensive wall was built later, in the ninth to eighth century. Both these dates are called into question by later excavations at the site which failed to uncover any evidence of a Middle Bronze Age occupation, Ruiz Mata, (op. cit. n. 26) 229-231; Fernández Jurado, (op, cit. n. 97) 155.

of a defensive wall is a distinctive feature in an area where other settlements were generally unwalled, as is the size of the site, some 6.4 Has, making it large in comparison with other settlements of this period.

The pottery fragments associated with Tejada's wall provide a date for its construction at the end of the eighth century. The presence among the typical indigenous burnished and handmade ware of some fragments of wheelmade ware shows that while Tejada is an indigenous settlement, Phoenician influence was present right from the start of occupation there. The reason for Phoenician interest in the site lies in its proximity to the mineral wealth of Aznalcóllar and the use which it made of its strategic situation. Right from the earliest moments of occupation at Tejada, we find slag, ore and pottery types which are generally associated with metallurgical activities, as well as a significant increase in the so-called cerámica con decoración digitada, indigenous handmade coarse ware pottery, decorated with applied finger impressions and sometimes incised decoration, which is unfailingly associated with mining and metal-working in all the Tartessian sites in which it appears. These signs of metal-working continue to be found throughout the succeeding strata of occupation at the settlement right down to the second half of the fifth century, when the general crisis in the metal trade evident in all the major metallurgical and commercial sites in the Tartessian

104 Ibid, 125.
area from the sixth century onwards, brings metal-production at Tejada to a close.

While it is clear that Tejada's association with the metal trade is the reason for its prosperity, as evidenced by the intensive building activities carried out there and the regular planned urbanism found in the later levels of occupation, the overall amount of slag found at the site is small for a settlement of its size, and is insignificant compared with the large quantities uncovered at nearby San Bartolomé. In addition, no signs of smelting furnaces have been found at Tejada, in contrast to the situation in Huelva, San Bartolomé and the Rio Tinto sites. All in all the evidence of metallurgical activities at Tejada is more consonant with a level of production designed to meet the settlement's internal requirements than the production of large quantities of metal for export. The answer to this apparent contradiction of a site situated next to one of Europe's richest mineralised regions with little evidence of metal-production lies in the ore exploited at San Bartolomé. It will be remembered that this site was one devoted apparently exclusively to smelting silver, as the more than 3,000kg of slag found there demonstrate. However, as San Bartolomé was located in a region with no mineral resources of its own, the silver-ore

106 In the final levels of occupation at the site some circular stone-built structures have been found which are similar in shape and dimensions to the furnaces found in Huelva. However the lack of any slag or ore, or signs of burning, makes this interpretation unlikely, and it has been suggested that they were used either as pottery kilns or silos. Ibid, 112-113.

107 Ibid, 113.
processed there had to be brought in from elsewhere. Analysis of samples of ore found at Tejada has shown that they are identical with the ore worked at San Bartolomé, and the content of lead and copper in the San Bartolomé samples points to Aznalcóllar, rather than Rio Tinto as the source of the minerals worked at both sites.\textsuperscript{108} Thus the role of Tejada seems to have been that of a mining rather than a metallurgical centre, a settlement where the ore produced at Aznalcóllar was stored and redistributed for further treatment in specialised metallurgical centres, such as San Bartolomé, situated close to the Guadalquivir and the coast from where the silver could be transported to its final point of destination in the Peninsula, Gadir (Fig. 15).\textsuperscript{109} Thus metal-working settlements situated on the edge of the Guadalquivir estuary, like San Bartolomé and El Rocio, where slag similar to that from San Bartolomé was found, were dependent on Tejada for the supply of silver-ore which was not available to them in their hinterland. Although San Bartolomé is some 40 km away from the Aznalcóllar mines there are no major obstacles to communication as most of the intervening distance consists of flat agricultural land, the campiña, which links the mountains.


\textsuperscript{109} Its function primarily as a storage point for the Aznalcóllar ore is confirmed by the discovery of a possible ore washery in the final levels of occupation at the site which was used to separate the mineral from the worthless gangue (Fernández Jurado, (op. cit. n. 97) 112. Given the large quantities of water necessary for such a process, Tejada was an ideal place to undertake activities of this kind. As well as its on-site water sources, it was situated close to the springs of Fuente Grande and Fuente Chica which were later to provide water for the Italica aqueduct, Blanco Freijeiro in idem and Rothenberg (op. cit. n. 23) 232.
with the Guadalquivir and the ancient coastline. An alternative route, along the Guadiamar river, which flows from the Sierra Morena into the Guadalquivir estuary, could also have linked the two settlements. This fluvial route culminated in the settlement of Chillar, situated right on the edge of the former estuary, which was occupied in the seventh and sixth centuries and from where the metal could have been shipped down to Cádiz.110 In this context, the role of Tejada la Vieja as a centre for the accumulation and redistribution of silver-ore to small dependant metallurgical centres helps to explain its size and prosperity in a region where the great majority of other settlements were small and unwalled groups of flimsy huts. The importance assumed by Tejada, apparently right from the first moments of occupation there, judging by its size and defensive wall, may be the reason for the abandonment of the smaller metallurgical settlement at Peñalosa, only 4 km from Tejada, in the mid-eighth century, for a site which was strategically of greater importance in terms of the control of the region and its resources.

Analysis of the constituent properties of ancient slag and ore allows us to trace the silver-route further downstream and to identify its final destination. It has already been noted that the settlement of El Rocio situated right on the banks of the former Guadalquivir estuary, on what was then the shores of a

110 M. Pellicer, "Yacimientos orientalizantes del bajo Guadalquivir," in I CISFP, 825-836. An alternative route could also have existed linking Aznalcóllar directly with the Guadiamar, by land from the mines to the site of Cerro de la Cabeza de Olivares, on the bank of the river, and occupied from the Late Bronze Age to the Roman period, and from there on to the settlement at Chillar and the Guadalquivir estuary, ibid 835.
wide coastal inlet, has provided evidence of silver-rich slag similar to that found at San Bartolomé. Slag showing constituent properties comparable to that from San Bartolomé has also been identified in seventh century strata at the Phoenician site of Castillo de Doña Blanca, at the mouth of the Guadalete river, close to the Guadalquivir.¹¹¹ As the settlement at Doña Blanca is now regarded as an outpost of the Tyrian colony of Gadir this presents us with the possibility that the silver-ore mined at Aznalcóllar and distributed through Tejada down to San Bartolomé and El Rocío could have had its final destination in Phoenician Gadir.

Metallurgical analysis provides us with further confirmation of Gadir as the ultimate destination for the silver of this region. The silver produced in all the Tartessian sites in south-west Spain at this time was the result of cupellation, a process which relies on lead to separate the silver from the gangue. Therefore the presence of lead in the silver-ore is vital for a successful extraction of the metal. Lead is present in the ores mined from Rio Tinto, but is found only in extremely small quantities in the Aznalcóllar ore, and thus had to be added artificially to the ore before it could be successfully smelted.¹¹² In this context the presence of metallic lead might be expected in sites dependent on Aznalcóllar for the provision of silver-ore, and in fact it has been found in San Bartolomé and Peñalosa, while it is entirely

¹¹¹ Ruiz Mata, (op. cit. n. 71) 540.

¹¹² Fernández Jurado, (op. cit. n. 85) 154.
absent from Huelva and the other metallurgical sites processing ore produced by the Rio Tinto mines.\textsuperscript{113} The presence of metallic lead not only indicates that the Tartessians were skilled metallurgists, and were fully aware that lead was a vital element in the whole cupellation process, it provides us with another link between Gadir and the Aznalcóllar mining complex. For a large quantity of metallic lead, with a similar composition to that found in Peñalosa, has been found in Doña Blanca, apparently placed for storage in a building dating to the second half of the eighth century.\textsuperscript{114} The discovery of metallic lead at Doña Blanca indicates that the Phoenicians at Gadir may well have been supplying metallic lead to the silver-smelting sites of the interior and therefore were directly involved with the metallurgical activities carried out by them. An alternative possibility is that the inhabitants of Doña Blanca were using the lead to undertake their own silver-smelting at the site.\textsuperscript{115} In either case the evidence of direct links between Aznalcóllar and the Phoenicians of Gadir was strengthened by the lead isotope analysis undertaken by the Isotrace Laboratory at Oxford University which showed that the numerous litharge fragments found in eighth century levels of Doña Blanca came from the smelting of minerals mined at Aznalcóllar.\textsuperscript{116}

\textsuperscript{113} Ibid, 154 and fig 1 162.
\textsuperscript{114} Ruiz Mata, (op. cit. n. 26) 237; Fernández Jurado (op. cit. n. 85) 154-155.
\textsuperscript{115} See above.
\textsuperscript{116} Hunt Ortiz, (op. cit. n. 77) 41.
The link between Gadir and the silver-producing region of the Sierra Morena and Guadalquivir estuary suggested by metallurgical analysis is confirmed by similarities in the pottery of these two areas. While the indigenous pottery of San Bartolomé shows close links to that from the Huelva area, the same is not the case with the wheelmade ware. X-ray diffraction and infrared analysis of the Phoenician pottery found at San Bartolomé has indicated that it has an identical composition to that from Doña Blanca and therefore was very probably imported from there.\textsuperscript{117} This concurs with the wheelmade pottery from Tejada which is far more similar to that found in the Phoenician and indigenous sites of the lower Guadalquivir area than that from the settlement of Huelva.\textsuperscript{118} Therefore, both the pottery found in the metal-producing sites of the Guadalquivir region, and the metallurgical analysis of the materials found there, point to strong and close links between this area and Doña Blanca, ultimately Gadir. In this context the often remarked upon "eccentricity" of Gadir's location, cut off from the other colonial sites in Spain and from the Mediterranean itself, becomes understandable. Situated next to the mouth of the Guadalete, and not far from the Guadalquivir, it was ideally located to communicate with the indigenous settlements which clustered along the banks of that river and to use the river itself, the most important

\textsuperscript{117} Galván, (op. cit. n. 94) 275-315.

\textsuperscript{118} P. Rufete Tomico, "La cerámica con engobe rojo de Tejada," in Fernández Jurado, (op. cit. n. 97) 146-147; eadem, "La cerámica con barniz rojo de Huelva," in M.E. Aubet Semmler (ed.), Tartessos, 375-394.
single channel of communications in this region, to gain access both to the agricultural resources provided by its fertile valley and to reach the minerals of the Sierra Morena and the mountains of Huelva (Fig. 11). Thus, although the island location of the city may seem to imply distrust of the continent and a desire for isolation, it also offered it far closer communications with the Peninsula than those enjoyed by its counterparts in eastern Andalusia, separated as they were by the Penibaetican mountains from the indigenous communities in the interior.

The profusion of oriental and orientalizing objects found in the indigenous settlements which cluster along the banks of the Guadalquivir, and most spectacularly, in the cemeteries where the most valuable items were found, testifies to the interest this area held for the Phoenicians. However the distribution of these objects all along the course of the river, as far upstream as Cástulo in the province of Jaén, clearly demonstrates that the mines at Aznalcóllar were not the culmination of Phoenician interest in the resources of this region, and that the route from Tejada to San Bartolomé and down to Cádiz was only one of a number of possible routes along which the mineral and agricultural resources of the Guadalquivir hinterland were channeled. If we look at the distribution of the richest Tartessian burials, the so-called tumbas principescas, we see that many of them are centred on the

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119 Strabo, 3, 2, 3, praises both the mineral and agricultural wealth of the Guadalquivir valley and its hinterland, and this whole area was densely populated in Roman times.
Guadalquivir and, in general, they follow the major routes of communication to the mineral resources of the Sierra Morena and Extremadura, be they fluvial or terrestrial.\textsuperscript{120} Thus, leaving aside the burials in the cemetery of La Joya in Huelva and at Niebla, which are clearly linked to the exploitation of the Rio Tinto mines, in the Guadalquivir valley we have the tombs at Cañada de Ruiz Sánchez, Acebuchal and Setefilla, in Seville province, which were all situated in strategic points along the transhumance routes, or natural passes controlling the mineral resources of the Sierra Morena.\textsuperscript{121} Similarly upriver in Córdoba the settlement at Colina de los Quemados, near to the modern city of Córdoba, shows evidence of metal production, undoubtedly the result of its position on the edge of the Sierra Morena. The evidence of metal production here - copper slag - coincides with the appearance of the first imports of wheelmade ware and the cerámica con decoración digitada, invariably associated with metal production.\textsuperscript{122} Its strategic position must also have attracted Phoenician and

\textsuperscript{120} M.E. Aubet Semmler, "La aristocracia tartésica durante el período orientalizante," \textit{Opus} 3 (1984) 446.

\textsuperscript{121} Ibid, 446; for these cemeteries see G. Bonsor, "Les colonies agricoles pré-romaines de la vallée du Bétis," \textit{Revue Archéologique}, 3me série, 35 (1899), 126-159; 232-325; 376-391; idem and R. Thouvenot, \textit{Nécropole ibérique de Setefilla, Lora del Rio, Sevilla}, Bordeaux-Paris 1928; A. García y Bellido, "Inventario de los jarros púnico-tartésicos" \textit{AEA} 33 (1960) \textit{passim}. The settlement at Setefilla has yielded clear signs of metal working, dating both to the pre-Phoenician Late Bronze Age and the Orientalizing period, see Ruiz Mata (op. cit. n. 26).

\textsuperscript{122} Blanco Freijeiro, Luzón Nogué and Ruiz Mata, (op. cit. n. 44) 141-149. The mineral wealth of the Sierra Morena was to be one of the reasons for the opulence of Roman Corduba. A succession of the wealthiest men in Spain came from the city, culminating in the unfortunate Sextus Marius who, Tacitus tells us, \textit{Ann.}, 6, 19, was forced to commit suicide so that Tiberius could confiscate his wealth. The name of the Sierra Morena may well derive from him. R.C. Knapp, \textit{Roman Corduba}, Berkely 1983, 39-40.
Tartessian interest, as it was located at the last point of the river that could be reached by small freight ships coming from downstream, thus making it an important fluvial port.\textsuperscript{123} Further north in the upper Guadalquivir, the grave at Cástulo in Jaén which yielded, among other objects, a silver patera similar to those found in orientalising graves in southern Italy, and various bronze statuettes of the goddess Hathor, was situated in the mining district of Oretania, where Strabo's famous silver-mountain was located, and which was to produce large amounts of silver both in the Barcid and Roman periods.\textsuperscript{124} At Cástulo, we have evidence both for metal-production, in the form of smelting furnaces and mining tools, and for a significant Phoenician interest in the area, judging by the appearance of Phoenician amphorae in large numbers.\textsuperscript{125} These items suggest that there were regular contacts between this area and the lower Guadalquivir to where the minerals was shipped, as does the pottery from Cástulo during this period which is closely related to that of the Lower Guadalquivir area.\textsuperscript{126}

\textsuperscript{123} Strabo 3, 2, 1.

\textsuperscript{124} Ibid, 3, 2, 11. The mines in this area were responsible for a large part of the financing of the Second Punic War, Polybius, 10, 38, 7, Pliny NH, 33, 96. A. Blanco Freijeiro, "El ajuar de una tumba de Cástulo," AEA, 36 (1963) 40-69.


\textsuperscript{126} C.G. Wagner, Fenicios y cartagineses en la Península Ibérica: ensayo de interpretación fundamentado en un análisis de los factores internos, Madrid 1983, 29.
The settlement at El Carambolo, in the village of Camas just outside Seville, where the celebrated orientalizing treasure was found, has yielded prodigious amounts of Phoenician pottery, with more than 50% of the total pottery assemblage consisting of amphorae, and we find a similar situation at nearby Cerro Macareno, just up river from El Carambolo.¹²⁷ This evidence of intense Phoenician commercial contacts is undoubtedly to be ascribed to the position of these two settlements, located as they are at the point when natural routes of communication linking the gold, tin and agricultural resources of Extremadura join the Guadalquivir. The link between the natural resources of Extremadura and those of the Guadalquivir area helps to explain the importance both of the area around Seville and the concentration of settlements along the right bank of the river.¹²⁸ The sites in the area of Seville

¹²⁷ J. de Mata Carriazo, *Tartessos y El Carambolo. Investigaciones arqueológicas sobre la protohistoria de la Baja Andalucía*, Madrid 1973, 555; M.C. Florido Navarro, "Las ánforas del poblado orientalizante e ibero-púnico del Carambolo (Sevilla)," *Habis*, 16 (1985) 487-513. Here the majority of amphorae from the mid-eighth down to the sixth century belong to the so-called "de saco type," Vuillemot's R-1, generally regarded as a characteristically "western" type, peculiar to the Iberian Peninsula, see above chapter four *Agriculture*. For Cerro Macareno see M. Pellicer Catalán, "Las cerámicas del mundo fenicio en el Bajo Guadalquivir: evolución y cronología según el Cerro Macareno (Sevilla)," in *Die Phönizier im Westen*, 371-403 and idem, "Tipología y cronología de las ánforas prerromanas del Guadalquivir, según El Cerro Macareno," *Habis*, 9 (1978) 365-400. Here too the amphora was the most common imported pottery type at the site and the presence of large quantities of amphorae at both sites points to a trade in foodstuffs, probably wine or olive oil.

¹²⁸ Wagner, (op. cit. n. 126) 28-29. Southern Extremadura constituted a natural extension to the mountainous northern area of western Andalusia, and thus to the hinterland of the Guadalquivir valley itself. Extremadura was important both for its own sake, in terms of its silver, gold copper and tin, and agricultural resources, and also as a link to the rich mining region of north-west Spain, along the route which in Roman times was to become the road from Hispalis to Asturica. Its role in the Tartessian economy is demonstrated by the finds of pottery and orientalizing objects in a series of sites such as Medellin, Siruela and Aliseda. Almagro Gorbea, (op. cit. n. 33) *passim*.
were important too in that they acted as ports for the metals which had come down river from Cástulo and Córdoba, and it was in these ports that the metals could be transferred from small fluvial boats to larger ships.\textsuperscript{129}

What is clear from this very brief account of Phoenician trade in the Guadalquivir region is that the whole length of the river was densely populated with indigenous settlements throughout the so-called orientalizing period, and that these settlements were strategically situated to control access to the chief resources of the region, the agricultural wealth of the valley, and the minerals of the Sierra Morena and its hinterland in Extremadura.\textsuperscript{130} In this light the predominance of indigenous pottery in all the mining and metallurgical sites we have examined makes sense. Controlling as they did, the principal routes of access to the mines, the population of this region were able to maintain a firm hold on the extractive and refining processes themselves and thus, as is clear from the proliferation of oriental objects in the settlements, gain ample recompense in return for Phoenician access to the metals produced in this area. In the context of mineral wealth coming from varying sources (Cástulo, Córdoba and Extremadura), controlled by a number of sites all along the Guadalquivir and its tributaries, the route from Aznalcóllar,

\textsuperscript{129} P. Rouillard, \textit{Les Grecs et la Péninsule Ibérique}, Paris 1991, 73; Pellicer, (op. cit. n. 110) 832-836; Strabo, III, 2, 1.

through Tejada and down to San Bartolomé and El Rocío, must have constituted just one of the areas which the Phoenicians tapped to obtain their coveted silver. The Guadalquivir valley was the scene of such intense contacts between Phoenician and native precisely because it acted not just as a source of metals and possibly agricultural products, obtained from its own hinterland, but because, as the most important channel of communications in southern Spain, it was into this river that the routes, and with them, the resources from other areas accrued. Hence the river provided access not just to the silver and copper along its own course but also to the resources of all the regions situated to the north, the silver and tin of Extremadura and the gold fields of the Atlantic north-west. This lies at the heart of the apparent paradox that while Phoenician settlement was dense along the Mediterranean coast, the majority of 'oriental' objects are found at the other side of the mountains, in the indigenous settlements of the Guadalquivir valley.

It is in this context that we have to examine Fernández Jurado's claim that the complex of settlements depending on the mines at Aznalcóllar represents an example of a colonial-type economy directly dependant on Cádiz, in comparison to the open market situation prevalent in Huelva city. He claims that the Phoenicians entered into contact with the inhabitants of the mineral-rich region close to the Guadalquivir estuary to ensure an alternative source of metal to that produced in Rio
Tinto and controlled by Huelva. In other words, according to his hypothesis, during the period of maximum silver-production, from the eighth to the sixth centuries, there were two main routes along which the silver produced in the mountains of Huelva and Seville reached the Phoenicians - that going from Rio Tinto, along the Tinto, down to Huelva - and that leading from the mines at Aznalcóllar, through Tejada, as a mining and redistributive centre, and along to small dependent metallurgical centres like San Bartolomé, where the mineral was processed before being transported to the edge of the Guadalquivir estuary, from which it passed directly to Cádiz. In such a system, given the greater wealth and level of oriental, and later Greek, influence visible in Huelva, that settlement would have functioned as an emporium where traders, Greek and Phoenician were free to enter and barter for the bullion, whereas the Tejada route was directly dependent on Cádiz, and here a colonial type economy existed. The problem with this theory is that given the level of production during this period and the abundance of mineral resources in south-west Spain generally it is extremely unlikely that the silver trade and transport network was restricted to just two routes. Recent work in the mining town of Niebla, on the Tinto river, some 30 km upriver from Huelva, has shown that the distinction between the mining and transport networks centred on Tejada and Huelva may be an artificial one. The similarity between the pottery of Tejada and that of Niebla suggests that contacts between the two areas may have been closer than

131 Fernández Jurado (op. cit. n. 80) 147-156 and (op. cit. n. 73) 351-355; Ruiz Mata (op. cit. n. 26) 243.
previously thought, and it is possible that some of the mineral from Aznalcóllar may have ended up in Huelva, perhaps along the route that was to become the Roman road from Iliipa (Niebla) down to Hispalis.\textsuperscript{132} In such circumstances distinctions between colonial and market economies based on the separation of different trade routes are largely artificial.

\textsuperscript{132} M. Belén, "El yacimiento tartésico de Niebla (Huelva)," in Tartessos 25 años después, 365.
Figure 1: Principal mineral resources of southern Spain with the Phoenician sites where metallurgical activities are found. Source: López Castro, 1995.
Figure 2: Reconstruction of the iron smelting furnace at Cerro del Peñón. Source: López Castro, 1995.
Figure 5: The archaeological sites at Rio Tinto
Figure 6: Cerro Salomón.
Source: Blance and Luzón, 1969
Figure 7: View of the Corta Lago Section.
Source: Rothenberg and Blance, 1981.
Figure 8: Cupellation according to Agricola De Re Metallica
Figure 9: Cupels found at Monte Romero (Almonaster La Real, Huelva)
Figure 10: Ancient metallurgical remains found at Calle Puerto in Huelva. Source: Aubet Semmler, 1993.
Figure 11: Main indigenous sites in Southern Iberia.
Figure 12: Aerial Photo of the mines at Aznalcollar (Seville)
Figure 13: Location of Mining and Metallurgical sites of Tejada La Vieja and San Bartolomé De Almonte.
Figure 14: Location of the silver-producing site at Peñalosa (Huelva).
Source: Fernández Jurado et al. 1990
Figure 15: Main sites in South-West Iberia with arrows showing proposed trade routes.
Source: Fernandez Jurado, 1987
Figure 16: View of the Urbanisation of the final phases of occupation at Tejada La Vieja. Source: García Sanz and Rufete Tomico, 1995.
Conclusion

This thesis has examined Phoenician settlement, burials and trade in Iberia and associated regions during the eighth and seventh centuries. This period marks the highpoint of the Phoenician presence in Iberia, with the foundation of a dense network of settlements stretching from Ibiza as far north as the Atlantic coast of central Portugal, but it represents neither the start nor the finish of Phoenician activities there. The date of the first contacts between Phoenicians and Iberians represents an almost intractable problem, with some who cite the literary evidence and claim that the two opposite sides of the Mediterranean were in contact from the late twelfth century in a process of precolonisation, involving sporadic commercial ventures and no permanent settlement. Others choose to argue from the archaeological evidence which up to now has found no firm proof of a stable Phoenician presence in Iberia before the eighth century. The supporters of both sides have found weaknesses in their opponents' arguments. Those who claim the authority of the literary sources are confronted with the fact that these may have had more to do with a hellenistic literary argument about the historical accuracy of the Homeric poems than any serious attempt to put the Phoenician expansionary movement into its appropriate historical context. Archaeologists on the other hand have to recognise that the research of the last twenty
years has consistently pushed upwards the dating of the first Phoenician settlements in Iberia, which are now placed at the very start of the eighth century, contemporary with the archaeological evidence for the foundation of Carthage. They also have to evaluate the evidence produced from radio carbon analysis which has provided calibrated dates for the earliest levels of Phoenician settlement and commercial contacts with the indigenous hinterland which are consistently more than a century older than the dates calculated by the traditional archaeological method.

The first Phoenician settlements in Iberia at Morro de Mezquitilla and Castillo de Doña Blanca at the start of the eighth century were soon followed by further sites set up throughout that century in the provinces of Cádiz, Málaga, Granada and Almería. This settlement movement intensified during the seventh century and now settlement expanded from the core area along the Andalusian coast to include other regions hitherto untouched by this phenomenon. New sites sprung up in Portugal, and in the Mediterranean in Alicante and the Baleares. Algeria and Morocco were also settled by colonists whose material culture shows close affinities with that of the Phoenician sites in Iberia. It is indisputable that Iberia was singled out for intense settlement during these two centuries. The question is why?

The obvious reason is the spectacular mineral wealth of the south-west, especially silver, the production of which increased enormously with the arrival of the Phoenicians.
They stimulated its production by offering what in Homeric terms would be called *keimelia* and *athurmata*. The former are the decorated ivory objects, ornamental bronze vessels, and alabastra found in the tombs of the orientalizing aristocracy of this period and which were probably offered as introductory gifts by the Phoenician merchants to the indigenous chiefs who controlled access to and production of the mineral resources of this region. These luxury goods were followed by the *athurmata*, trinkets, such as the Egyptian scarabs and amulets found in large numbers in indigenous burials, and amphorae which appear in Iberian settlements in such quantities that we have to assume that a major trade existed in wine and olive oil, and perhaps, even at this early stage, in the preserved fish which was to be the main industry of the Phoenician sites from the sixth and fifth centuries onwards.

As well as the mineral wealth of the south-west, Iberia also offered the Phoenicians access to the rarest metal of the ancient world, tin, which was present in large quantities in the north-west of the Peninsula. They were evidently soon aware of this resource and engaged in regular and intense contact with the Atlantic coast of Portugal as early as the eighth century, contacts which were profitable enough for the foundation of two colonial sites in southern and central Portugal in the seventh century. The intense trade carried out between colonists and Iberians lead to a period of great prosperity for both sides which reached its peak in the seventh century. This is particularly
notable in the increasing opulence of the burials in both societies. In the Phoenician context the chamber tombs of Trayamar and Puente de Noy point to the existence of colonial elites, people who had made a decision to live - and die - in the West, and in the commemorative rituals carried out at their tombs for decades we have evidence for the consolidation of the colonial society, people who chose to commemorate ancestors or founding heroes, celebrating the history of the Phoenician society at the edge of the then known world.

From the examination of the pottery produced by the Phoenician settlements in Iberia we see both close links with the East, which provided the models for most of the pottery, and also a specifically 'western' production. The pithoi, R-1 amphorae and Cruz del Negro urns are all specific to the sites in Iberia and associated regions and the grey ware produced there was an imitation of indigenous Iberian Late Bronze Age pottery. All this points to a separate 'western sphere' of Phoenician activity, independent of Carthage during the eighth and seventh centuries. How was this sphere organised? Although many settlements have been excavated along the coasts of Spain and Portugal during the last thirty years, we have little evidence for any administrative functions. So far the only collective building to emerge is the warehouse building C at Toscanos. All the literary sources concur in making Gadir the most important Phoenician settlement in the extreme west, and we know that the temple of Melqart played an important role in the life of the city but our only insight into the earliest history of the site comes from Castillo de
Doña Blanca, regarded as the continental foothold of the island city of Gadir. How were these foundations governed? In the east the monarchy was the system of government for the Phoenician cities but this is not found in the colonial foundations where it has been thought that the temple may have played an important role, acting as a link with the mother city.

The colonial system established during the eighth and seventh centuries enters into a period of apparent crisis in the sixth century. Some settlements are abandoned in favour of fewer, larger sites, the production of silver in south-west Spain greatly diminishes and for the first time the influence of Carthage becomes apparent in this area, as does the presence of the Greeks. These drastic changes have traditionally been attributed to the fall of Tyre to Nebuchadonosor in 573 which cut the links between the colonial society and the motherland. However the sixth century does not mark the end of the Phoenician presence in Iberia. Gadir and Ebusus were to continue as prosperous commercial centres down to the Roman period and beyond and Iberia was to be intimately associated with the Punic world to the extent that even in the first century A.D. Strabo could say of Iberia: "these people became so utterly subject to the Phoenicians that the greater number of the cities in Turdetania and of the neighbouring places are now inhabited by the Phoenicians."

(3, 2, 13)
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Abbreviations

AAA Anuario arqueológico de Andalucía
AEA Archivo español de arqueología
AJA American Journal of Archaeology
AJBA Australian Journal of Biblical Archaeology
ANRW Aufstieg und Niedergang des römischen Welt
APL Archivo de prehistoria levantina
BASOR Bulletin of the American School of Oriental Research
BMB Bulletin du Musée de Beyrouth
BRAH Bolletín de la real academia de historia
BSA The annual of the British School at Athens
CNA Congreso nacional de arqueología
CPUG Cuadernos de prehistoria de la universidad de Granada
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<th>Abreviatura</th>
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<td>EAE</td>
<td>Excavaciones arqueológicas en España</td>
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<td>EVO</td>
<td>Egitto e Vicino Oriente</td>
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<td>HA</td>
<td>Huelva arqueológica</td>
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<td>JRS</td>
<td>Journal of Roman Studies</td>
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<td>MM</td>
<td>Madrider Mitteilungen</td>
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<td>NAH</td>
<td>Noticiario arqueológico hispánico</td>
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<td>PCPS</td>
<td>Proceedings of the Cambridge Philological Society</td>
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<td>RSF</td>
<td>Rivista di Studi Fenici</td>
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