

**Coins from the seaside. An Emiral silver coin hoard
from a harbour settlement on the Cerro da Vila
(Vilamoura, Algarve, Portugal)**

Monedas del litoral marítimo. Un tesoro Emiral
compuesto por monedas de plata procedente de
un asentamiento portuario del Cerro da Vila
(Vilamoura, Algarve, Portugal)

Stefan Heidemann

Universität Hamburg

<http://orcid.org/0000-0001-8248-5969>

Thomas Schierl

Mühlhausen

<http://orcid.org/0000-0002-3571-4383>

Felix Teichner

University of Marburg

<http://orcid.org/0000-0003-4276-0983>

Cerro da Vila was founded as a Roman production and harbour settlement (“*agglomeration secondaire*”) at the end of the Republican Age. It developed into a small seaside settlement (“*aldeia do mar*”), largely based on the exploitation of maritime resources, although it is unlikely that this exploitation exceeded subsistence level. The abandonment of the settlement probably resulted from violent attack and destruction at the end of the 11th / beginning of the 12th century AD. A hoard of 239 silver coins and fragments were discovered at the bottom of an Islamic storage pit dug into the ground in an area of the former Roman site, where several remains of buildings and

El Cerro da Vila se fundó como asentamiento romano de producción y puerto (“*aglomeración secundaria*”) al final de la época republicana. Con el tiempo, se convirtió en un pequeño asentamiento costero (“*aldeia do mar*”), con una actividad basada en gran medida en la explotación de los recursos marítimos, aunque es poco probable que su explotación excediera el nivel de subsistencia. El abandono del asentamiento fue probablemente resultado de un ataque violento y destrucción a finales del siglo XI / comienzos del siglo XII. Un tesoro de 239 monedas de plata y fragmentos fue descubierto en el fondo de un silo de almacenamiento de época

layers confirm settlement activity in the Visigothic and Islamic period. The latest coin is dated 270/883-4, but the hoard might have been buried some years later. It is likely that the hoard represents a small random sample of the coin circulation in *Gharb al-Andalus*. Most of the coins are fragmented. As it is typical for that period, a number are slotted and slashed coins; some of them are plugged with tiny pieces of silver. With the exception of two Carolingian deniers all the identifiable coins are from Cordoba, proving a tight control of the circulation of coins in al-Andalus. The hoard belongs to a horizon of similar hoards from southern and south-western al-Andalus which were buried in the 260s/870s and 270s/880s. Their composition is discussed in the article. They all belong to the period of the uprising of the *muwallad* landowner 'Umar ibn Ḥafṣūn between 267/880-1 and 303/915-6, against the Emirate of Cordoba.

Key words: Cerro da Vila, Umayyads, Carolingians, 'Umar Ibn Ḥafṣūn, dirhams, slashing coins, fragmented coins.

islámica, excavado en el suelo en una zona del antiguo emplazamiento romano, donde los restos de edificios y la estratigrafía confirman la actividad de asentamiento en los periodos visigodo e islámico. La cronología de la última moneda encontrada data de 270/883-4, pero el tesoro podría haber sido enterrado algunos años después. Es probable que el tesoro represente una pequeña muestra aleatoria de la circulación de monedas en *Garb al-Andalus*. La mayoría de las monedas están fragmentadas. Como es típico de este período, un gran número de las monedas están cortadas y ranuradas; y algunas de éstas están conectadas con pequeñas piezas de plata. Con la excepción de dos denarios carolingios, todas las monedas identificables proceden de Córdoba, lo que demuestra un estricto control de la circulación de monedas en al-Andalus. El tesoro pertenece a una zona del sur y el sudoeste de al-Andalus en la que se han encontrado tesoros similares que fueron enterrados en los años 260, 270, 870 y 880. Este artículo discute la composición de las monedas. Estas pertenecen al período de la sublevación del terrateniente *muwallad* 'Umar Ibn Ḥafṣūn entre los años 267/880-1 y 303/915-6, contra el Emirato de Córdoba.

Palabras claves: Cerro da Vila, Omeyas, carolingios, 'Umar ibn Ḥafṣūn, dirhams, monedas cortadas y ranuradas.

Introduction

The Cerro da Vila, the “hill of the old settlement”, is one of the most famous tourist destinations in the southern Portuguese Algarve, known because of the nearby Vilamoura marina and golf resort. In antiquity, a Roman settlement on top of the small elevation of 7 metres altitude over sea level was located in the territory of the ancient city *Ossonoba*. This settlement continued to function as the urban center for the coastal region as *al-Uqshunuba* or *Shantamariyyat al-Gharb* in the Islamic period and as Faro in modern times (fig. 1). As an archaeological site, Cerro da Vila became particularly famous for its major residential area, its well-preserved polychrome mosaics and a large-sized public bath complex (*thermae*), built during the Roman imperial period. Substantial industrial facilities – among others a huge number of characteristic rectangular basins – indicate the processing of maritime resources on

a large scale. Archaeozoological assemblages excavated during the last decades also confirm that a production of salted fish, fish sauces and dyes may have been the main economic basis of this settlement. Moreover, as a naturally protected harbour situated at the estuary of the Quarteira river, the site was suitable for all aspects of the maritime economy, from fishing and harvesting the sea to the shipping of manufactured goods. These are all economic activities, which have been characteristic of smaller settlements and urban centres in the Gulf of Cadiz and on the Lusitanian coast during antiquity¹.

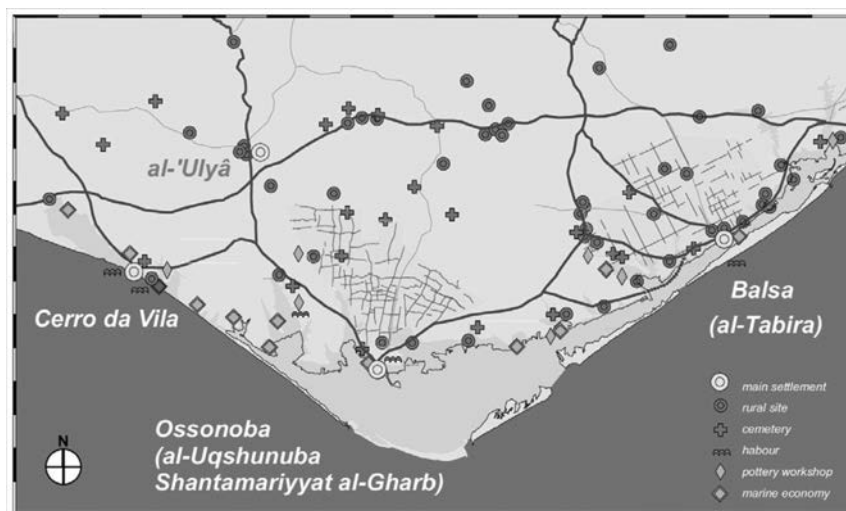


Fig. 1. Roman settlement in the *territorium* of Ossonoba (arab. *al-Uqshūnuba* / *Shantamariyyat al-Gharb*) at the Portuguese south coast (Algarve). The ancient name(s) of Cerro da Vila is unknown, other settlements in the later *kūra Uqshūnuba* like al-'Ulyā (port. Loule) or *al-Tabīra* (port. Tavira) seem to be post-Roman (Teichner, "El *territorium* de Ossonoba", fig. 1 with modifications).

Recent prospections at the site have revealed a massive quay built of Roman concrete (fig. 2 V) which is exceptional in size and quality. It might be comparable to the urban harbours, which are still undiscovered but believed to have existed at *Ossonoba* (Faro) and *Balsa* (Torre

¹ Teichner, "Mensch, Umwelt, Wirtschaft"; Teichner, "Von Exportschlagern und Cash Crops".

de Aires) and underlines therefore the economic prosperity of the ancient settlement on the Cerro da Vila. In addition to these infrastructural elements of the Roman period, the treasure of silver coins studied here will shed new light on the significance of the last early Islamic settlement in *Gharb al-Andalus*.

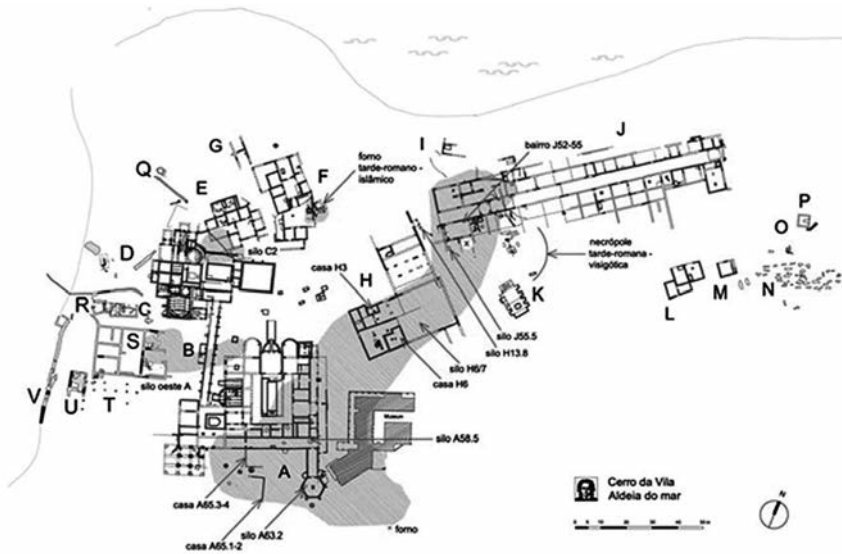


Fig. 2. The Roman fishermen and harbour settlement («agglomération secondaire») of Cerro da Vila (Quarteira, Portugal). Map of all known building structures. The area of Islamic occupation is marked in grey and the findspot of the coin hoard inside the former Roman building J is marked by an X (Teichner and Schierl, “Aldeia do mar”, p. 124 fig. 1 with modifications).

State of research

First evidences of a former Roman settlement on top of the Cerro da Vila were published by Sebastião Phillippes Martins Estácio da Veiga, the pioneer of archaeology of the Algarve, in 1910². About 50 years later new investigations provided enough data to map a wide range of

² Veiga, “Antiguidades monumentaes do Algarve”, p. 233.

different Roman remains on an area of about 3 ha, such as two well-preserved Roman mosaics still *in situ*³, which provided substantial information about settlement structure and size of the monument. A few years later between 1971 and 1991 large parts of a central building in area A, the so-called “villa”, and sectors in the areas B to H (fig. 2) were excavated under the directorship of José Luís de Matos. Following its classification as a National Archaeological Monument in 1977 the architectural remains of the main buildings were carefully preserved as an open-air museum at the end of the 1980s⁴. Ever since, the increasing number of artefacts found at the site itself and during rescue excavations in the surrounding tourist complex (Vilamoura Resort) confirmed an occupation of the area in the Roman, Visigothic, and Islamic period. In his first summarizing publication in 1984⁵ and similarly in 1997⁶ José Luís de Matos described the excavated architectural remains of the large central building in area A, as well as a number of single and fragmented structures discovered in parts of the areas B to H (fig. 2). In concluding his results, he emphasized a long-term occupation of the site between antiquity and the Islamic period based on the artefacts discovered. Focussing on the economic basis of the settlement, Maria Luisa Estácio da Veiga Affonso dos Santos pointed out the existence of technical equipment for the production of fish sauce (*garum*) at the site⁷, acknowledging also that some basins were significantly later than the «Roman period»⁸, a fact that has been confirmed by recent excavations.

Later, on the occasion of the Congress on Medieval Pottery in the Mediterranean held in Lisbon in 1987, José Luís de Matos published a first representative sample of Islamic pottery from Cerro da Vila and highlighted the importance of the site in post-Roman times⁹. Some of his following publications on Islamic glazed pottery are mainly based on the collection of finds from Cerro da Vila, which ranked together with the ones in Mértola and Silves as amongst the finest in Portugal

³ Paço and Farrajota, “Subsídios para uma carta arqueológica”, p. 74.

⁴ Alarcão, *Roman Portugal II*, pp. 206-207 cat. 8/298 with 202 fig. 161.

⁵ Matos, “Estações e monumentos”, p. 140.

⁶ Matos, “Cerro da Vila”, p. 392; Matos, “O período Islâmico no Cerro da Vila”, p. 459.

⁷ Santos, *Arqueologia Romana*, p. 143.

⁸ Santos, *Arqueologia Romana*, p. 144.

⁹ Matos, “Cerâmica muçulmana do Cerro da Vila”.

at that time¹⁰. Moreover, a pottery kiln with a well preserved combustion chamber and a lower dome came to light during construction works of a tourist marina about 50 meters south of architectural unit A¹¹. Misfired pottery fragments discovered inside and around the kiln demonstrated the production of pottery and suggest an intentional (?) filling datable not before the 10th century AD¹².

At the end of the last century an extensive fieldwork project carried out by the German universities of Jena and Frankfurt, and financed by the Fritz Thyssen Foundation, provided new data for a detailed reconstruction of the development of the outstanding multi-period settlement on the Cerro da Vila. Two volumes published in 2008 present a complete documentation of all preserved and recently uncovered remains. They summarize and corroborate the interpretations of the previous excavations, with the results of diagnostic re-excavations¹³. The stratigraphic sequences attested during these investigations confirm a largely continuous use of the site, which ranged from the Late Republican and the Augustan to the Islamic period (1st century BC to the 11th century AD). Moreover, the latter research verified the major economic significance of the ancient processing of marine resources, for example the preparation of salted fish, fish sauce, and dye, which was made obvious by the considerable number of buildings and technical installations associated with these activities¹⁴. A comprehensive new interpretation of all known building structures, whether of the production units or of the residential areas, completely changed the overall idea of the settlement layout. Previously published as a Roman villa with additional buildings, it must now be understood primarily as a nonprivileged maritime urban settlement (*«agglomération secondaire»*) in the south of the Roman province of Lusitania, with a complex social structure. The importance of the site was further reinforced in 2007/8, when Roman harbour installations were discovered during rescue excavations caused by construction works for a new marina. In particular, a Roman quay

¹⁰ Matos, “Malagas árabes do Cerro da Vila”; Matos, “Influências orientais”.

¹¹ Matos, “Loulé. Forno de cerâmica”, p. 77; Matos, “Cerâmica muçulmana do Cerro da Vila”, p. 438; Teichner, *Entre tierra y mar-I*, p. 279 fig. 146.

¹² Matos, “O período Islâmico no Cerro da Vila”, p. 460; Teichner and Schierl, “Aldeia do Mar”, 136f. fig. 5, CdV-XXXI; Teichner, *Entre tierra y mar-I*, p. 275.

¹³ Teichner, *Entre tierra y mar*; Teichner, “O estabelecimento portuário”.

¹⁴ Teichner, “Cerro da Vila”; Teichner, “«De lo romano a lo árabe»”; Teichner, *Entre tierra y mar-I*, pp. 273-409.

built of hydraulic concrete (*opus caementitium*) is further evidence for the involvement of the settlement in the ancient maritime economy¹⁵. After large-scale destructions in the 5th century AD, most likely caused by a flood or a tsunami, several changes were made to the general layout of the site and its economic organisation. The most important one is that the destroyed units H and J were reused as smaller residential buildings or as workshops with less technical equipment for purely domestic purposes). However, evidence for a processing of fish and seafood can be associated at the latest with contexts of the second half of the 5th or 6th century AD¹⁶, whereas remains of such activities datable to the Islamic period are still missing. Nevertheless, shells found on the bottom of several storage pits (port. «silos»), as well as in the central residential area of the architectural unit A, may at least indicate a significant processing of seafood during the Islamic period¹⁷.

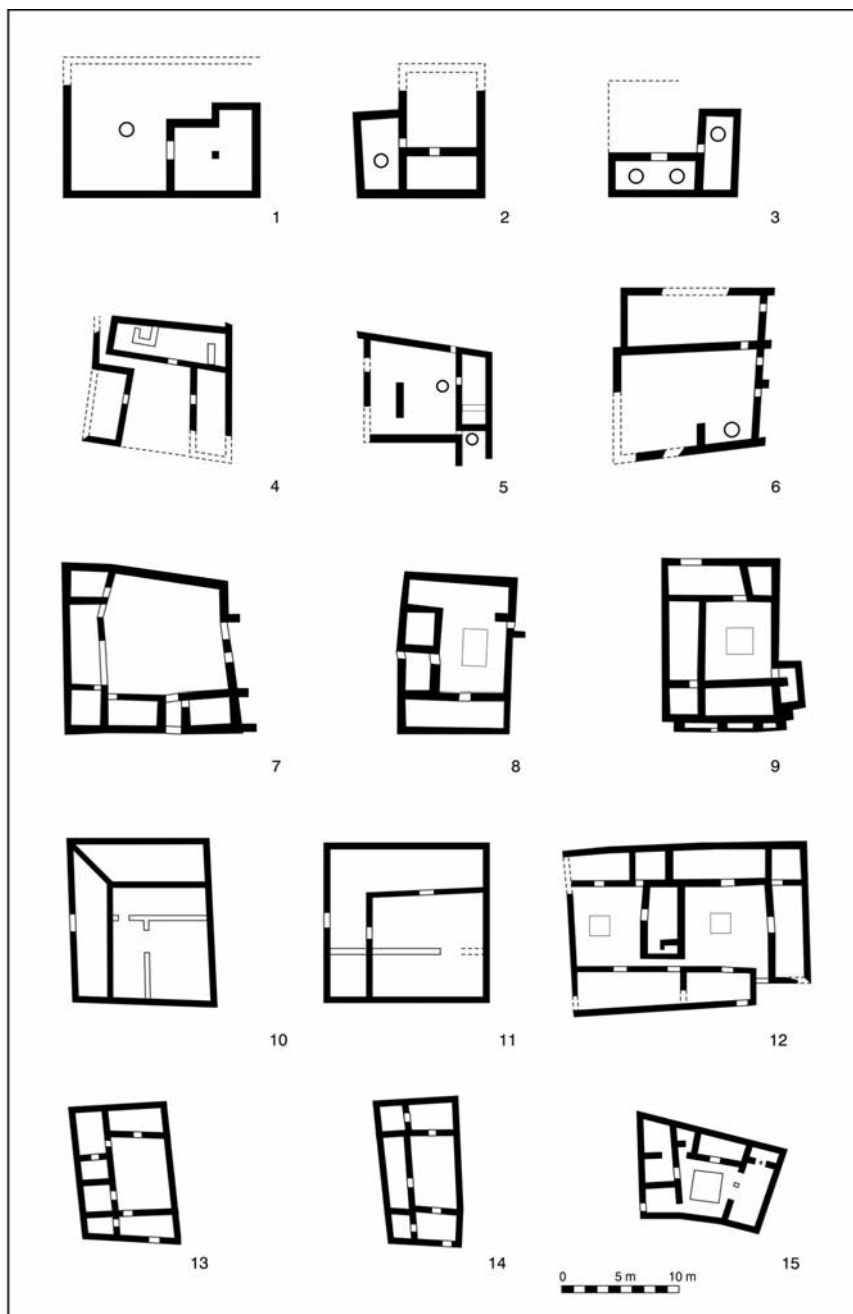
Unfortunately, the use of mechanical excavators for removing the top layers during the first excavations contributed to the fact that – like in many other places in Hispania – the architectural remains particularly of the latest occupation on the Cerro da Vila are highly fragmented and difficult to reconstruct. But also the post-Roman, early medieval construction techniques, such as dry stone walls, resulted in poor preservation and thus rather limited visibility in the archaeological record. Moreover, the later buildings were often reusing Roman walls. Therefore, it may not have been possible to detect a continued use of buildings in all cases. A careful re-analysing of the architectural remains at the Cerro da Vila confirms that the Islamic settlement was characterized by several mono-cellular buildings and small farmsteads with open courtyards (fig. 3)¹⁸. For example, the Islamic building in architectural unit H was erected as a simple house with a yard surrounded by an enclosing wall and constructed with a threshing floor in the middle, on top of the remains of a former Roman workshop, which can be reconstructed as an L-shaped building with a central pillar for

¹⁵ Teichner and Wienkemeier, “Un porto”; Teichner, “Cerro da Vila: A rural commercial harbour”, pp. 424-5.

¹⁶ Teichner, “Cerro da Vila”, p. 98; Teichner, “«De lo romano a lo árabe»”, p. 216; Teichner, *Entre tierra y mar-II*, p. 114 CdV-X with pl. 188.

¹⁷ Matos, “Cerro da Vila. Escavações em 1971”, pp. 212-214.

¹⁸ Teichner and Schierl, “Aldeia do Mar”, pp. 125-127, fig. 2.



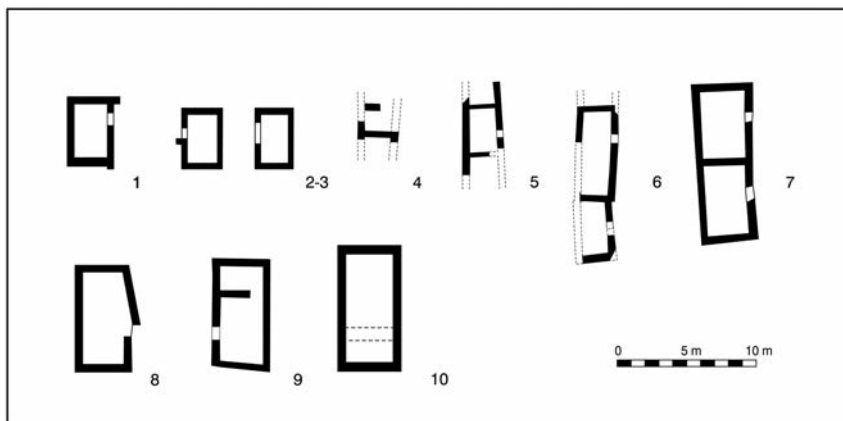


Fig. 3a and b. Houses and farmsteads of the Islamic period at Cerro da Vila (A1 and B1) and comparable structures from the region of *al-Andalus*. A: “*maison rural à cour intérieure*” (farmstead with internal courtyard). B: “*maison monocellulaire isolée*” (isolated single cell house). For the list of evidence, see pp. 220-221. (Teichner, *Entre tierra y mar-I*, pp. 491-3, fig. 277-8).

sustaining the roof (fig. 3, A1)¹⁹. Buildings of comparable layout have been excavated at the nearby Islamic settlement of Quinta do Lagos (Loulé) dating to the 9th–10th century AD (fig. 3, A2-3) and in Portela (Silves), where a building with a courtyard (Building C) was simultaneously in use (fig. 3, A6). Another settlement of the period of the Caliphate of Córdoba and the Taifa period is known from Alcarias dos Guerreiros de Cima (Almodôvar), where at least three of such architectural units have been excavated (fig. 3, A7-9). André Bazzana has classified that kind of building, the “*maison rural à cour intérieure*”, as the most common house type in *al-Andalus*²⁰. A simpler architectural concept is visualized at the Cerro da Vila by building H3 (fig. 3, B1), an example of Bazzana’s house type “*monocellulaire isolées*”, whose parallels are known from various locations in Portuguese and Spanish *al-Andalus* (fig. 3, B2-10).

¹⁹ Teichner, *Entre tierra y mar-II*, pl. 84B.

²⁰ Bazzana, *Maison d’al-Andalus*, pp. 168-170 pl. 76 fig. 111-112; p. 426 pl. 271. Cf. Bazzana, “La maison rural”, pp. 223-226, fig. 396.

The information about the settlement layout and size during the Islamic period provided by the reexamination of the architectural remains is complimented by the identification of several storage pits, which could be identified in a larger area than that of the ancient building remains. These pits, dug into the ground for storage of bulk materials such as agricultural products like grain, can be considered as a characteristic indicator of Islamic settlement activities on the Iberian Peninsula²¹. Based on the partial archaeological data, the reconstructed extension of the Islamic settlement on the Cerro da Vila is highlighted in red on the map (fig. 2). Apart from numerous identified graves of the Roman period, just one individual inhumation grave – a person buried in lateral position in the midst of the destroyed south-western part of a Roman *fabrica* – can be dated to the Islamic period so far²². Although the number of identifiable constructions is limited, the intensity of settlement activities on the Cerro da Vila during the Islamic period is documented by the number of discovered pits and preserved layers. All the features point towards a continuous existence of the seaside settlement or *aldeia do mar*, which developed out of a Roman production and harbour settlement (*agglomération secondaire*), with a significant economic potential. The described paleo-environment, however, indicates that the livelihood of the inhabitants during the early Islamic period was largely based on the exploitation of maritime resources in what was probably a subsistence economy. In this regard, geo-archaeological investigations have proven that the site on top of the Cerro da Vila was still in use as a maritime harbour until the 11th century AD, despite the human-caused silting and erosion since the Roman period²³. Finally, massive layers of debris combined with the residue of burning point towards a violent destruction of the settlement at the end of the 11th century or the beginning of the 12th century AD, which has been related to the collapse of the central government organization in Al-Andalus and the Almorávide conquest²⁴. As a result, the inhabitants abandoned the site permanently, and it was used only sporadically in the following centuries.

²¹ Hauschild and Teichner, *Der römische Tempel in Évora*, pp. 240-269, fig. 75 and 83; pl. 30-33.

²² Teichner, *Entre tierra y mar-I*, fig. 209C and fig. 278, 1; Teichner, “Mensch, Umwelt, Wirtschaft”, pp. 67-70.

²³ Teichner et al., “Investigações geo-arqueológicas”; Teichner, “O estabelecimento portuário”, p. 288.

²⁴ Teichner, *Entre tierra y mar-I*, p. 287; Teichner, “O estabelecimento portuário”, p. 289.

The object of reflection: New information on the post-Roman settlement period

In spring 2001 an extensive geophysical survey was carried out west of the antique burial ground (fig. 2, N) and revealed a large Roman architectural complex further east of the main part of the settlement, which was originally structured in rectangular lateral units along a long street (fig. 2, J). The highly specialised character of its rooms and buildings as places for processing marine resources into salted fish, fish sauce and dyes was confirmed by several small technical basins uncovered during the following excavations. Traces of a post-Roman occupation in this area could be documented mainly in the south-western sector of the *fabbrica*²⁵, where several pillars and a concrete floor of a three-aisle basilica were discovered. The architectural layout of that building and some preserved graves of the so called *mensa* type point to its interpretation as an early Christian church. In addition, some layers and constructions identified in the former rooms J5 and J56 indicate a later reuse of at least some parts of the complex. Moreover, a system of stone walls constructed without concrete, which are comparable to features uncovered in the central part of the settlement, can also be interpreted in that area as post-Roman constructions. An earlier dating of the only partly preserved walls in the rooms J53-56 is supported by a use of spolia, such as a fragment of a marble statue and antique building rubble, and can be confirmed by pottery fragments of early Islamic slip and glazed wares found between these walls. Evidence of an Islamic occupation also include three storage pits (J56.5-J56.7) discovered south-west of the suspected church and in the area of room J56 (fig. 2, grey x).

The mentioned U-shaped or piriform pits of varying depth were uncovered about 50 cm below the present surface (fig. 4, I) under two destruction layers filled with concrete, stones and brickstone fragments (fig. 4, II-III). All three pits were dug into older debris layers (fig. 4, VI and VIII), which included ceramic fragments dating back to the late Roman period; in particular 'red slip' ware produced not before the late 5th or early 6th century AD²⁶. A fine layer of marine sediments (fig. 4,

²⁵ Teichner, *Entre tierra y mar-I*, p. 286 and pp. 376-402, fig. 226-227. Compare Teichner and Schierl, "Aldeia do Mar", pp. 124-126, fig. 1.

²⁶ Teichner, *Entre tierra y mar-II*, pp. 128-129, pl. 201 (CdV XXII).

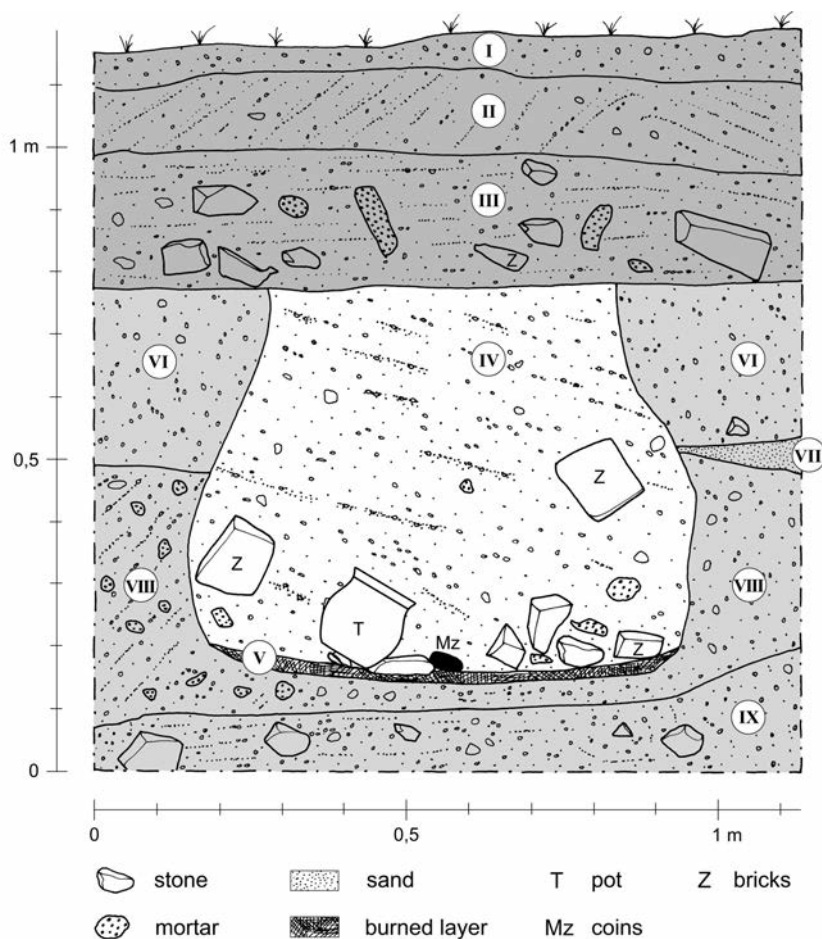


Fig. 4. Cerro da Vila (Quarteira). Cross section of the Roman *fabrica* J, room J56 (south profile), showing the surface layer, several destruction layers of the late Roman period and the Islamic storage pit (J56.7). In the filling of the pit local stones (I), fragments of brickstones (II) and Roman concrete (*opus caementitium*; III), a ceramic vessel or pot (IV) and the coin hoard itself were found (Katja Bieber, Marburg).

VII) separating these two destruction layers might be an indication of a natural disaster, which may have happened in late antiquity.

Specifically, the deepest storage pit (J56.7), found in the south-eastern corner of the former room J56, was characterized by a red brownish

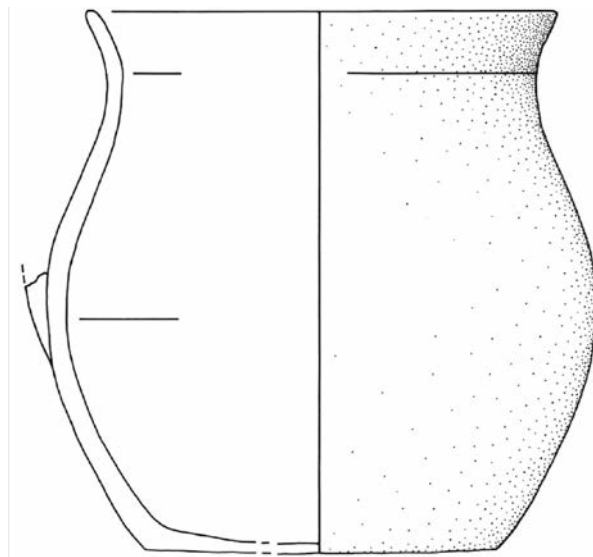


Fig. 5. Cerro da Vila (Quarteira). Wheel-thrown ceramic jar found in storage pit J56.7 (find complex CdV XXIV) close to the coin hoard. Rim diameter: 15 cm; height: 18 cm; bottom diameter: 11.5 dot between 11 and 5, brownish clay (Teichner, *Entre tierra y mar-I*, p. 130, pl. 201, CdV XXIV).

and partly humus filling, with spreads of shell fragments, wood charcoal, and a few small and medium sized stones (fig. 4, IV). In contrast to J56.5 and J56.6, in which just a few small fragments of pottery came to light, at the bottom of J56.7 a nearly complete but crushed wheel-thrown ceramic vessel (fig. 4 T, fig. 5) was found amongst stones and *tegulae* fragments. It was partly embedded in a ground filling. This oldest layer surrounding the jar and stones was characterized by charred wood and burned clay, belonging to a slim but considerable destruction layer (fig. 4, V). About 10 cm west of the vessel a small package of approximately 5 cm was found containing a lump of metal fused together by corrosion (fig. 6 and 7) and probably once wrapped in an organic now decomposed bag. It was extracted en bloc; remains of the bag could not be retrieved anymore and it remains unknown whether it was cloth or leather. The lump of metal could be identified as a small hoard of silver coins. Their close and compact arrangement – visible in the x-ray image – confirm their deposition in an organic bag

(fig. 8)²⁷ A link between the jar and the hoard can be assumed by their deposition in the same stone concentration and filling related to destruction layer V, which may indicate a more or less simultaneously dropping or hiding of the jar and the hoard.



Fig. 6. Cerro da Vila (Quarteira). Jar and hoard in situ.

²⁷ We are grateful to Dr. Peter Fasold, who facilitated the X-ray analysis in the laboratories of the Archäologisches Museum Frankfurt (Germany).

Bulbous vessels with curved rim and one handle have been already documented in Cerro da Vila²⁸. Such forms are known from various find spots of the early Islamic period in the south of contemporary Portugal (Catarino type 1A). Their typological antecedents were already produced in the late Roman and Visigothic period, but the best parallels to the vessel found on the Cerro da Vila are mainly documented in Emir al contexts (8th to 10th century AD)²⁹. However, a more precise dating of the well-preserved vessel is difficult due to the lack of decoration and a damaged rim, which points towards a longer and/or extensive (?) use before its deposition. Found near the ground level of the silo, its former purpose might be connected with the originally usage of the pit as a storage for bulk material.

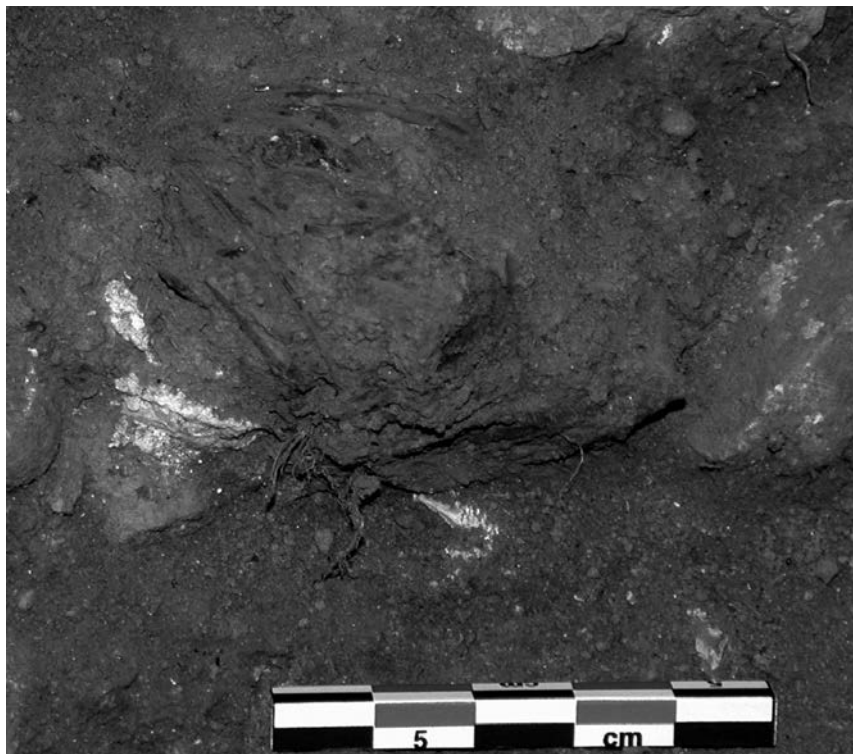


Fig. 7. Cerro da Vila (Quarteira). Hoard with supposedly organic material in situ.

²⁸ Teichner and Schierl, “Aldeia do Mar”, pp. 127-131 with fig. 3, CdV XXII K4.

²⁹ Catarino, “O Algarve oriental”, pp. 761-763 with fig. 66.

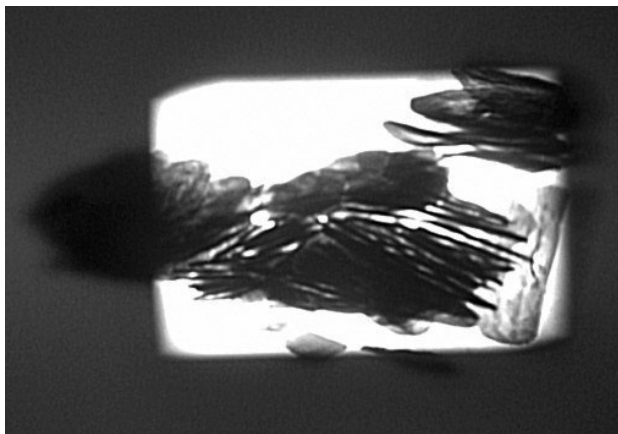


Figura 8. Cerro da Vila (Quarteira). Radiograph of the coins salvaged before conservation and showing the arrangement of the coins in several stacks.

The Dirham Hoard³⁰

The closing coin of the hoard is dated 270/883-4. Given that coins of the 270s/880s are much less frequent than those of decades before, the burial date might be some years after 270/883-4. The closing date falls in a period of violent unrest in the Umayyad Emirate. ‘Umar ibn Ḥaḥṣūn (d. 305/918), a *muwallad* of Visigothic descent, and various other rebels in his wake, rose up against the Emirate³¹. The uprising lasted for almost forty years, between 267/880 and 303/916. This period especially, the years of the 260s and 270s, produced a number of comparable hoards, but some might be hidden at a later date because coinage was rarely minted after 270/883-4 (map 1).

Most of the coins of the Cerro da Vila hoard were fragmented, many even to tiny bits of silver, and only a few dates are legible. The earliest legible date is 216/831-2. Care was taken here (see catalogue) to reconstruct some of the dates, or at least to narrow them down to possible minting years. The undated fragments often show three pelleted circles

³⁰ We are grateful to Dr. Babett Forster, Universität Jena, who undertook the technical documentation and photography of the coins, and Matthias Naue who designed the numismatic plates.

³¹ For the character of ‘Umar ibn Ḥaḥṣūn’s uprising see Fierro, “Cuatro Preguntas”.

at the obverse margin, which is a typical feature for coins produced between 250s and 260s³².

The hoard is comprised of 239 complete and fragmented *dirhams*³³. The cutting up of silver coins at this period is common in the Islamic monetary systems from the Iberian peninsula to Central Asia and to the Baltic Sea. Not the absence of silver was the reason, but the absence of a sufficient supply of copper coins. Coins were weighed in circulation, and the fragments do not follow any specific weight standards, but providing small change for everyday purchases. In regard to the later “Haza del Carmen” hoard (after 316/929), G. García Ruiz and L. Ruiz Quintanar state that there were fragments of irregular shape and fragments which seem to have been cut quite regularly. This allows for the hypothesis, that some were cut at the place of the transaction, others presumably by professionals, probably *ṣarrāf* (money changers)³⁴.

The Cerro da Vila hoard is homogenous; all of the identifiable coins were struck at the mint of Córdoba (*al-Andalus*), except for two Carolingian coins with Latin inscription, and two non-coin silver fragments. No identifiable coin in the hoard came from North Africa or from the Islamic East. Only two to three coins appear to be unmutilated (inv. nos. 11-CdV-015; 17-CdV-002; 36-CdV-071). Typical for finds from the Algarve region are coins slotted or slashed for plugging with silver strips or wire. Some coins from Cerro da Vila are still plugged. A correct number of slotted coins in this hoard is unobtainable, because the fragments themselves may be the result of slashing or bracing along the line of existing slashes. Nineteen slotted and pierced coins may stand for a much larger number³⁵.

³² Most previous coin reports do not care much for the identification of the fragments by their circle -and annulet- pattern on the reverse and just work with frequency tables of the complete and almost complete coins. Here, a frequency table for the years was not composed, because of the missing dates of most of the coins.

³³ The contribution uses *dirham* and coin for any single item be it a complete coin or a fragment. Complete coins and fragments are specifically addressed as such.

³⁴ See discussion in García Ruiz and Ruiz Quintanar, “Fragmentos de monedas” and Ruiz Quintanar, “La fragmentación”.

³⁵ Numbers of slotted and plugged coins: 4 slots around the centre of the coin, one of them plugged with a strip of silver: 12-CdV-001. 2 slots, 4 coins: 3-CdV-006; 25-CdV-068; 32-CdV-075; 87-CdV-066. 1 slot, 14 coins: 14-CdV-017; 18-CdV-010; 19-CdV-048; 24-CdV-047; 27-CdV-086; 45-CdV-020 and plugged; 50-CdV-014; 76-CdV-052; 89-CdV-073 and plugged; 123-CdV-114; 124-CdV-116 and plugged; 125-CdV-117; 127-CdV-119 simple piercing; 153-CdV-145; 162-CdV-156; 195-CdV-195 and plugged.

Five plugs have survived in situ³⁶. The hoard also included a tiny strip of silver and a short bent silver wire both of which might have been used for plugging³⁷. The practice of plugging is common in al-Andalus, but – according to the existing evidence – even more so in the western part in al-Gharb. The reasons for the practice are so far unknown. A. Canto and E. Marsal determined an almost stable weight of the freshly minted dirham during the entire Emirate period of about 2.6g to 2.7g. Plugging increases the weight of the coin. The plugged coins are at a random weight and not brought up to any specific weight standard³⁸. Miles was already aware of this problem³⁹. Rodrigues Marinho after examining the hoard of Arraiolos (Alentejo province) and acknowledging the practice of weighing coins in circulation supposes that the plugging is a form of lumping the tiny fragments together with larger coins or fragments, so that the tiniest fragments do not get lost⁴⁰. In the late 9th and the 10th centuries, silver coins were fragmented and weighed in circulation within the entire Islamic world, not only in Spain, but also in the Levant⁴¹ and in Eastern Europe up to the Baltic. Probably as a result, beginning in about the 280s/890s, the dirham weight standard was increasingly not anymore observed in the mints in the Islamic East. Only in Iberia we find the continued practice of weight control at the mint and also the practice of slashing and plugging in circulation. Rodrigues Marinho's supposition of clustering coins to prevent their loss can not be confirmed by the evidence from any other region in which fragments were circulating. The coins and fragments of Cerro da Vila seem to be culled from circulation shortly before the hoard was stashed away. This would coincide with a probably sudden leveling of the facility. If the hoard had been a saving hoard, with an accumulation of coins over time, we would expect more complete or near complete coins to be included. Saving hoards are build up over time, and contain usually a more complete coin, because they have a

³⁶ See nos. 12-CdV-001; 45-CdV-020; 89-CdV-073; 124-CdV-116; 195-CdV-195.

³⁷ See 238-CdV-191, and 239-CdV-220.

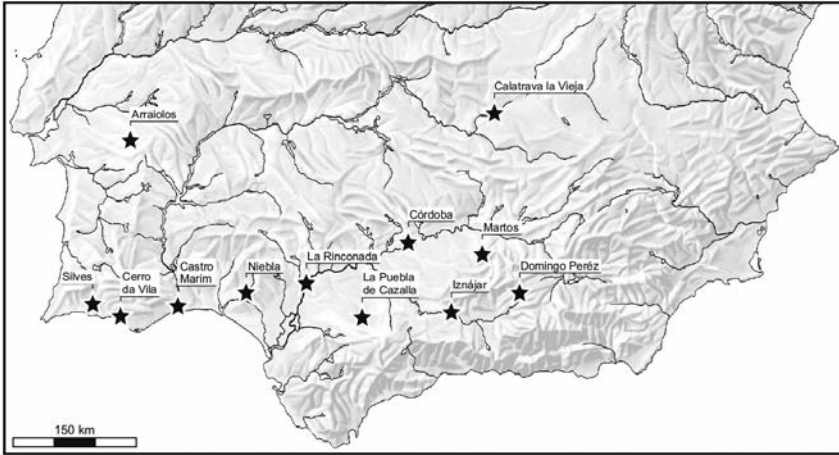
³⁸ Canto García and Marsal Moyano, "On the Metrology", esp. p. 170.

³⁹ Miles, "A Hoard of Arab Dirhems".

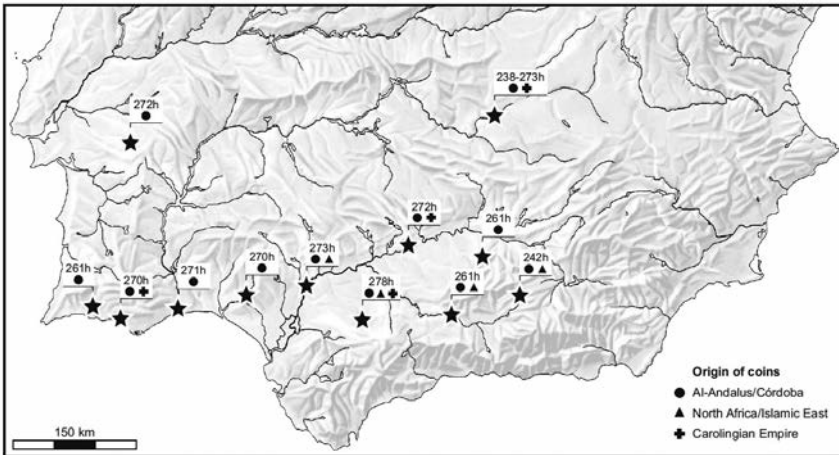
⁴⁰ Rodrigues Marinho, "Uma prática", p. 348.

⁴¹ Ilisch, "Whole and Fragmented Dirhams".

slightly higher value in the market than the same amount of silver in coin fragments⁴².



Map 1. Coin hoards mentioned in the article.



Map 2. Closing dates and foreign elements in the coin hoards.

⁴² For the discussion of the difference in values between fragmented and complete coins see Heidemann, *Die Renaissance der Städte*, pp. 365-369.

The hoard belongs to a horizon of similar hoards from southern and south-western al-Andalus buried in the 260s/870s and 270s/880s (map 2)⁴³. Only three other hoards were found in a container, thus preserving the entire content including the often otherwise lost micro-fragments. The rest of the finds were accidental, outside of controlled excavations. This might have resulted in significant losses of very tiny fragments. Those hoards hidden in all-preserving containers, including the one from Cerro da Vila, contain a much higher proportion of these micro-fragments than those hoards presented without thorough archaeological context. Miles published a commercial parcel of hoard material obtained in Lisbon. It was said to come from Silves, Algarve, about 50 km to the east of Cerro da Vila. Silves was *Shilb*, the capital of the *kūra Uqshūnuba* (Osonoba), to which Cerro da Vila belonged. Cerro da Vila was one of the estates in the hinterland of *Shantamariyyat al-Gharb*, the Portuguese *Faro*. The hoard from the Shilb region consists of 79 coins, the earliest was minted in 153/770-1 and the closing coin in 261/865-6. This seems to be the earliest closing date within this particular coin hoard horizon. The highest concentration of minting dates lies around the last closing years, 260/864-5 (7 coins) and 261/865-6 (10 to 11 coins). The parcel from Shilb is homogeneous, only containing coins minted in Córdoba (*al-Andalus*), and consisting of complete or almost complete coins. Many of them are slotted and plugged. It is likely that the original hoard included more tiny fragments similar to Cerro da Vila, which were probably discarded by the modern antiquity market, which tends to discriminate against seemingly unsalable numismatic material.

The parcel of Martos (Jaén province) in Andalusia, about 380 km east of Cerro da Vila, includes 24 coins, most of them were clipped (only one coin above 2.60g with 2.64g, but only two below 1g (0.67g and 0.68g). Some of these coins were plugged. This parcel also did not come from a controlled excavation. The dates range from 238/852-3 to 261/865-6⁴⁴. With the same closing year of 261/865-6 comes the

⁴³ See Martín Escudero, “Tesoros numismáticos”, pp. 179, 201-204. For a hoard just before the uprising of ‘Umar ibn Ḥaḥṣūn see the small hoard of 175 mostly complete coins, found at the village of El Alamillo about 3 km from Lantejuela in the Sevilla province. The dates of the Umayyad dirhams range from 157/774-5 to 250/864-5. The hoard had only one coin that was not minted in Córdoba but was coming from North Africa and struck by the Aghlabids. Ruiz Asensio, “Tesorillo”.

⁴⁴ Canto García, “Sobre un pequeño hallazgo”.

hoard of Iznajar (Granada province), about 340 km east of Cerro da Vila. It was found in a ceramic jar containing 1,046 dirhams: 641 complete or nearly complete coins, and 402 fragments minted in Córdoba. Three coins arrived from mints of the Islamic East⁴⁵. That hoard can be regarded as complete. The dates of the *al-Andalus*-coins range from 151/768-9 to 261/874-5. A third of the coins (348 coins) weigh below 1g, and even a fourth (245) below 0.5g. This weight distribution makes the Iznajar hoard most similar to the hoard of Cerro da Vila.

P. Cano Ávila and C. I. Martín Gómez record a hoard from the vicinity of Niebla (Huelva province) about 130 km to the east of Cerro da Vila. This hoard of 36 coins, some of them clipped, was transferred by the finder to the Provincial Archaeological Museum in Sevilla in 1970, resulting perhaps in the loss of tinier fragments. The dates range between 190/805-6 and 270/883-4. The lightest coin in this parcel is still heavy, at 1.40g, followed by one at 1.90g⁴⁶.

About 65 km to the east lies Castro Marim (lat. *Aesuris*) at the Rio Guadiana, a river marking the Portuguese-Spanish border. This is the second hoard. It was found in a small earthenware jar, which allows us to presume that the recorded coins represent the entire hoard. It contained 187 coins, 32 seemingly complete and 155 fragmented, all from the *al-Andalus* mint, with a closing date of 271/884-5, only one year after the last established date for Cerro da Vila⁴⁷. The earliest coin bears the date 162/778-9. This hoard contains many more complete coins, and heavier, larger fragments (thus better identifiable) than the Cerro da Vila hoard. Compared with the hoard from Cerro da Vila, it seems that the original owner of the Castro Marim hoard was more selective than the owner of the Cerro da Vila hoard or the Iznajar hoard. Selectivity means here that the coins are more likely to have been culled out of circulation for saving purposes, whereas the Cerro da Vila and Iznajar hoard was presumably closer to the everyday circulation.

Three additional hoards have a closing date of 272/885-6. The hoard from the Sagrada Familia Campo de la Verdad in Córdoba has dates ranging from 150/767 to 272/885-6. It contains 136 complete coins and frag-

⁴⁵ Canto García and Marsal Moyano, “Hallazgo de moneda emiral de Iznájar”.

⁴⁶ Cano Ávila and Martín Gómez, “Hallazgo de dirhemes del emirato omeya de al-Ándalus en Niebla (Huelva)”.

⁴⁷ Rodrigues Marinho, “Um Achado de Dirhames”.

ments⁴⁸. In Bayyāna (Baen, Córdoba province) about 255 km east of Cerro da Vila, a hoard was recorded with 50 dirhams with dates ranging from 162/778-9 to 272/885-6. It was discovered in an olive grove during tilling, in 1985, and not in a controlled excavation. Tiny fragments may have been lost. Four coins in this hoard are pierced and slotted. Three of them have silver plugs still in place. Bayyāna with its proximity to Córdoba was at the center of the events of the uprising of ‘Umar ibn Ḥaṣṣūn⁴⁹. With the same closing year of 272/885-6, but from north of Cerro da Vila comes another homogeneous hoard preserved in the National Archaeological Museum. All the coins in this hoard were minted in Córdoba. It is said to come from Arraiolos (Alentejo province) about 200 km in the north. It comprises 150 dirhams ranging from the year 150/767-8 to 272/885-6. The majority consists of 103 unmutilated dirhams without holes and slots; 34 coins have been slashed, of which 12 coins are plugged with a piece of silver. The hoard contains only 13 fragments with slots. The lightest fragment is much heavier than those from Cerro da Vila with 0.53g (no. 47), followed by a fragment of 0.65g (no. 7). Here again, we do not know the circumstances of the find, and tiny fragments may have been lost before the acquisition by the Museum⁵⁰.

Unusual among this group of hoards seems to be one that was found prior to 1967 on a farm, called San José, in the vicinity of La Rinconada, close to Sevilla, about 200 km to the east of Cerro da Vila. The hoard was purchased by the Museo Arqueológico Provincial de Sevilla and the circumstances of the find remain unknown⁵¹. We do not know whether the parcel is complete or some coins were added to it. The parcel contains 315 coins with dates ranging from 154/770-1 to 273/886-7 including two outlying coins, possibly dated 287/900-1 and 297/910. They may have been additions to the parcel. The main accumulation phase, nevertheless, ended in the same period as the other hoards in the 250s/870s and 260s/880s. There are only two coins from outside Iberia, one from Samarqand and one, surprisingly, the closing coin of the main accumulation, a dirham struck in North Africa by the Sulaymānids in 273/886-7. The last *al-Andalus*-coin is dated 272/885-6. This parcel

⁴⁸ Canto García, “Tesoro de la Sagrada Familia”, re-attributing the closing coin to 272h. Original mention of the hoard in Santos Gener, “Monedas”.

⁴⁹ Ariza Armada, “Un tesoro” and “El tesoro”.

⁵⁰ Rodrigues Marinho, “Uma prática”, esp. p. 352.

⁵¹ Cano Ávila and Martín Gómez, “Tesoro de dirhemes hallado en La Rinconada”.

stands out for the fact that only complete or slightly clipped coins were included, but no tiny fragment below one gram. The tiny fragment may have been possibly lost through the antiquity market.

About 250 km to the east of Cerro da Vila in present day Puebla de Cazalla (district of Sevilla) a hoard of 901 coins, 266 complete and 635 fragments were found with a closing date of 278/891-2, and with an identifiable earliest coin of 153/770-1. Ten coins are from outside of al-Andalus (see below). Five coins are from the Carolingian empire and two from the Islamic east, and three from North Africa⁵². Although the archaeological situation remains undocumented, it is the third hoard, found in ceramic jar, and seems to be complete. Despite the large number of seemingly complete coins, about a third of the total, the hoard resembles in composition the Cerro da Vila hoard, with most of the fragments weighing 1 gram or less (553 coins), and even more than half of them even less than 0.5 g (339 coins).

Foreign components of the hoard usually reveal information of economic contacts outside the Iberian Peninsula. During the Early Islamic Umayyad Empire, before the 'Abbāsid coup-d'état, Iberia was part of an empire-wide circulation of dirhams⁵³. This changed in the time of the autonomous emirate and caliphate. With few exceptions, the hoards from then on only contain Córdobaese coins.

North Africa was supposedly supplying the silver for the Spanish Umayyad coinage⁵⁴. Coins entering the Iberian Peninsula were seemingly melted down immediately and turned into Spanish coinage. The reason for this observable phenomenon are not yet established. Dirhams from the neighboring North Africa have about the same weight between 2.6g and 2.8g but with less control of the individual

⁵² Ibrahim and Canto, "Hallazgo emiral en Puebla de Cazalla".

⁵³ Canto Carcia, "Moneda Foránea", pp. 107-111; Martín Escudero, "Tesoros numismáticos", pp. 173-200; Martín Escudero, "Hallazgos de dirhames omeyas". A hoard preserved at the Museo Arqueológico Nacional shows this quite clear. It contains 119 dirhams with a closing date of 181/797-8. The only coins not minted in al-Andalus were six coins from the East minted before 114/732-3; Canto García, "Tesoro de Moneda". A hoard of from Pedreguer (Alicante) with the closing year 219/834-5 contains only coins from the mint of Córdoba; Navarro Oltra "Un tesorillo".

⁵⁴ Canto Carcia, "Moneda Foránea", pp. 111-116; Martín Escudero, *El tesoro de Baena*. The hoard of Baena closed with a dirham struck in Córdoba in 136/753-4. It represented still the circulation of al-Andalus as part of the Umayyad Islamic Empire. In this hoard only 28 of 166 coins with mint are from al-Andalus the rest came from North Africa and the Empire in the east. In addition, 185 fragments without any identifiable mint belong to the hoard of 351 coins.

coin. The weight is significantly lower than the dirhams minted in eastern corelands with about 2.9g⁵⁵. One reason for the almost lack of North African dirhams on the Iberian peninsula might be a tight control of the monetary system in al-Andalus. The hoards mentioned include therefore only a tiny component of North African and eastern Islamic coins. It is also noteworthy that some Carolingian coins entered the circulation of al-Andalus. Within the Cerro da Vila hoard, one of the two Carolingian coins can be identified as an issue of Charles the Bald (r. 225-264 / 840-877) issued at the mint of Orleans⁵⁶. The hoard from Puebla del Cazalla includes five Carolingian coins, the latest of which is also a fragment of a coin struck by Charles the Bald⁵⁷. Fátima Martín Escudero lists five coin hoards from the Iberian Peninsula comprising Carolingian coins. Four of them, Sagrada Familia/Córdoba (closing date 272/885-6)⁵⁸, Calatrava la Vieja (Ciudad Real province; closing in the reign of Muḥammad I, r. 238-273 / 852-886)⁵⁹, the previously mentioned La Puebla de Cazalla hoard (closing date 278/891-2), and an unpublished hoard of Extremadura⁶⁰ fall within the same time frame as the Cerro da Vila. A fifth hoard from Córdoba, Haza del Carmen, had a total weight of 42.28 kg with about 7,000 (almost) complete coins and 22.680 kg of fragments, among them 140 fragments of Carolingian deniers⁶¹. The hoard was buried during the later caliphate period (after 316/929). Carolingian coins and a few single finds appear to be mostly in the southern part of Iberia, none is recorded so far in Portugal proper⁶². The two Carolingian coins from Cerro da Vila are the first from a hoard found in Portugal and the Algarve.

⁵⁵ Ilisch, "Steckborner Schatzfund", p. 69.

⁵⁶ We are grateful to Alberto Canto García and Alan Stahl for identifying the present coin.

⁵⁷ Ibrahim and Canto Carcia, "Hallazgo emiral en Puebla de Cazalla", pp. 70-71.

⁵⁸ Santos Gener, "Monedas carolingias", pp. 85-87, lists nine identifiable Carolingian coins and an undefined number of unidentifiable fragments of Carolingian deniers.

⁵⁹ Martín Escudero, "De Mahoma a Carlomagno", p. 142. No full description is available.

⁶⁰ The hoard was donated to the Departamento de Prehistoria y Arqueología of the Universidad Autónoma de Madrid. It is currently studied. It is composed of fragments of Andalusian dirhams of the Umayyad Emirate with fragments of coins of the Aghlabids, the 'Abbāsīd East and the Carolingians. Martín Escudero, "De Mahoma a Carlomagno", p. 140.

⁶¹ García Ruiz and Ruiz Quintanar, "Fragmentos de monedas en el hallazgo califal "Haza del Carmen"."

⁶² About the Carolingian finds Martín Escudero, "De Mahoma a Carlomagno", pp. 140-143.

Like the Carolingian coins, dirhams from the Islamic East and even from North Africa constitute only a small and occasional addition to the hoards and the circulation (witnessed by their clipping to fragments). An earlier hoard of 368 complete coins and fragments from Domingo Pérez de Granada (district Iznalloz, Granada province), closing date of 242/856-857, contains only 3 Idrīsid coins and one ‘Abbāsīd coin from Egypt⁶³. Among the hoard of Puebla de Cazalla, two coins come from the mint of Baghdād and three from North Africa. The hoard of Iznajar (province of Granada), contains 3 coins from the Islamic East; the hoard of La Rinconada one coin from North Africa from the year 273/886-7, and another from ‘Abbāsīd Central Asia (Samarqand 197/812-3). In the opposite direction toward the Middle East coins from Iberia flowed also, but only in small quantities. This flow stopped at about the time of Hārūn al-Rashīd, when the following war of succession in the ‘Abbāsīd Empire seemingly cut off commercial ties⁶⁴.

Similarly, Spanish and North African coins are scarce among the finds from within the Carolingian Empire. Charlemagne established a unified currency of silver deniers in his realm. Foreign coins were found only along the main trade routes. Spanish dirhams entered the Carolingian empire via the region of Gascoigne and Loire and via Catalonia, Narbonne north to the Rhine Valley⁶⁵. Seemingly parallel to the Umayyad case, foreign coins were melted down and new Carolingian deniers issued. The homogeneity of Umayyad and Carolingian coin finds might hint at a similar monetary policy in regard to the import of coins. The hoards from the Iberian Peninsula depict the Umayyads emirate as a self-contained monetary entity, compared with the wide circulation of dirhams within the ‘Abbāsīd Empire and the flow of coins from Ifrīqiya to the core lands of the Caliphate and to Central Asia before its political and monetary regionalization in the 940s. The hoard of Cerro de la Vila appears to reflect the circulation, and to be the purse for daily transactions rather than being treasure accumulated over time by selecting coins for saving.

⁶³ Vega Martín and Peña Martín, “Del hallazgo de dirhames emirales en Domingo Pérez”.

⁶⁴ Noonan, “Dirhems Omeyas”.

⁶⁵ Parverie, “Questions sur l’importation”, p. 19, fig. 8. See also Ilisch and Zeiler,

Conclusions

The archaeological investigations carried out for over half a century on top of the Cerro da Vila have uncovered the ruins of a huge fishing and harbour settlement of the first millennium AD. Founded as a small farmstead at the end of the Republican period, the site developed into an important non-privileged settlement («*agglomération secondaire*») during the Roman imperial period, due to successful economic activities such as the exploitation and trading of maritime resources. The environmental conditions in the estuary of a local river and at the nearby highly dynamic Atlantic coast frequently forced the local population to adapt their lifestyles, particularly their economic activities and therefore also the layout of the settlement, to new and different circumstances. The archaeological data, particularly stratigraphic observations documented during the latest excavations, confirm a continuity of settlement until the Middle Islamic Period, most probably up to the end of the 11th or the beginning of the 12th century AD.

The coin hoard analysed here came to light at the bottom of a storage pit dug into the ground in an area of the former Roman settlement, where several building remains and layers confirm settlement activity in the Visigothic and Islamic period. It consists of 239 silver coins and fragments (*dirhams*). With the exception of two Carolingian coins, they were all struck in the capital of the Emirate at Cordóba.

The hoard can be interpreted as a representative random sample of coin circulation in *Gharb al-Andalus* in the second half of the 9th century AD, rather than as a saving hoard that was built up over time. The *terminus post quem* for the hiding of the coins is given by an issue of 270/883-4 and does not contradict the dating of the locally made ceramic vessel found from the same archaeological context.

The coin deposition on the Cerro da Vila fits the historical circumstances at the end of the 9th century AD. Several coin hoards were hidden in this period are of the uprising of the *muwallad* landowner ‘Umar ibn Ḥafṣūn (d. 305/918) between 267/880-1 and 303/915-6. The limited information for reconstructing a historical scenario suggests an intentional concealment of a small hoard that had just been drawn out of circulation. It was stored in a small organic bag (fig. 6, 7 and 8). The hiding of the cash may have been motivated by a more or less direct risk to the property of people once living on the estate of Cerro da Vila,

whilst the failure to retrieve it could be explained by the destruction or by the former owner leaving the area. The complete filling of the silo was probably carried out in a single process at a later date, possibly by using debris from the former violent destruction, and without paying attention to the jar and the money bag.

Catalogue⁶⁶

The citations follow Frochoso Sánchez, *El Dirhem Andalusi*. References to Miles and Vives are retained here on historical reasons. Both knew at their time much less specimens of Andalusian coins and their varieties.

Dirham, (al-Andalus), 216 h. Obv. two pelleted circles; margin five ringlets with pellet.

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, no. 216.8.

*1. Inv. CdV-02-395-150 0.46g 17x9mm

Dirham, al-Andalus, (2)24 h.

Cp. Vives, *Monedas*, no. 224; Miles, *Coinage*, no. 116b, c, e; Frochoso Sánchez, *El Dirhem Andalusi*, nos. 224.2,3.

*2. Inv. CdV-02-395-008 1.02g 24x12mm; fragment

Dirham, (al-Andalus), 225 h. Obv. margin five ringlets with dot.

Cp. Vives, *Monedas*, nos. 176-179; Miles, *Coinage*, no. 117b; Frochoso Sánchez, *El Dirhem Andalusi*, no. 225.1.

*3. Inv. CdV-02-395-006 1.64g 27mm; fragment, 2 slots for plugging

Dirham, al-Andalus, (2)26? h. Obv. *bil-Andalus* ends in an arabesque tail; the *sitt* seemingly clear; *wa-‘ishrīn* seems to be blurred; the marginal circles are not discernable. Rev. pellet/star below central legend.

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, nos. 226.8 to 226.11.

*4. Inv. CdV-02-395-186 0.63g 17x13mm

Dirham, (al-Andalu)s, (2)29 h. Obv. margin not at Frochoso; central legend in line-circle; outer margin line-pellet-line-circle with probably five thick pellets and a line-circle.

*5. Inv. CdV-02-395-044 0.64g 13x18mm

Dirham, al-Andalus, (22?)9 h. Obv. central legend in line-circle, margin in two pelleted circles.

Cp. Frochoso Sánchez, *El Dirhem Andalusí*, nos. 229.3, 229.8, 229.14.

*6. Inv. CdV-02-395-171 0.17g 9x9mm

Dirham, al-Andalus, (2)30 h. Obv. central legend in line-circle, margin in double dotted circle; mint marks (?) / *qāf-hā*'. Rev. three ringlets with 'tail' to the right.

Cp. Vives, *Monedas*, no. 197; Miles, *Coinage*, no. 122k; Frochoso Sánchez, *El Dirhem Andalusí*, no. 230.20.

*7. Inv. CdV-02-395-067 1.48g 24mm; fragment

Dirham, al-Andalus, 233 h. Obv. central legend in two line-circles.

Cp. Vives, *Monedas*, nos. 202-203; Frochoso Sánchez, *El Dirhem Andalusí*, no. 233.

*8. Inv. CdV-02-395-147 0.41g 16x10mm

Dirham, al-Andalus, 237 h. Obv. at least 2 circles of pellets; pellet below central legend. Rev. blurred.

Cp. Vives, *Monedas*, no. 213; Frochoso Sánchez, *El Dirhem Andalusí*, no. 237.6.

*9. Inv. CdV-02-395-0111.79g 24mm; clipped around the margin

Dirham, al-Andalus, (23)8 h. Obv. central legend in two pelleted circles; below *sanat* the straight tail of the *sīn* of *al-Andalus* is visible.

Cp. Frochoso Sánchez, *El Dirhem Andalusí*, no. 238.12.

*10. Inv. CdV-02-395-157 0.36g 13x10mm

Dirham, al-Andalus, 239 h.

Cp. Miles, *Coinage*, no. 131g; Frochoso Sánchez, *El Dirhem Andalusí*, no. 239.17.

*11. Inv. CdV-02-395-015 2.38g 28mm; visually unmutilated coin

Dirham, al-Andalus, 240 h. Naming of an official *Mu'ādh*.

Cp. Vives, *Monedas*, no. 240; Miles, *Coinage*, no. 132g; Frochoso Sánchez, *El Dirhem Andalusí*, no. 240.12.

*12. Inv. CdV-02-395-001 2.60g 27mm; slight clipping at the margin; four slots, one of them plugged

Dirham, (al-Andalus), 24(0-9) h. Obv. central legend in line-circle, outer margin off.

*13. Inv. CdV-02-395-087 0.42g 15x8mm

Dirham, al-Andalus, (2)42 h. Obv. margin off.

Cp. Vives, *Monedas*, no. 243; Miles, *Coinage*, no. 134; Frochoso Sánchez, *El Dirhem Andalusi*, no. 242.

*14. Inv. CdV-02-395-017 1.76g 25mm; fragment of a clipped, and slotted coin but un-plugged

Dirham, (al-Andalus), (24)2 h. Obv. two line-circles, pellets in broad margin.

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, no. 242.3 (because of the margin, the year 252 h. might be excluded).

*15. Inv. CdV-02-395-063 0.44g 15x7mm

Dirham, (al-Andalus), 243 h. Obv. margin off.

*16. Inv. CdV-02-395-021 0.52g 15x10mm

Dirham, al-Andalus, 248 h.

Cp. Vives, *Monedas*, no. 256; Miles, *Coinage*, no. 140a, c; Frochoso Sánchez, *El Dirhem Andalusi*, no. 248.2.

*17. Inv. CdV-02-395-002 2.36g 26mm; visually complete coin

Dirham, al-Andalus, 249 h. Obv. central legend in line-circle, margin in triple dotted circle. The part of *wa-arba 'in* is written in a very dense script, the *'ayn* is hardly distinguishable, but the word starts with a clear *alif*.

Cp. Vives, *Monedas*, no. 257.

*18. Inv. CdV-02-395-010 2.41g 26mm; slotted for plugging

Dirham, (al-Andalus), 250 h. Obv. central legend in double line-circle, 5 pellets, within another line-circle.

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, no. 250.11.

*19. Inv. CdV-02-395-048 0.69g 21x16mm; fragment slotted for plugging

Dirham, al-Andalus, (25?)1 h. Obv. two pelletted circles, ringlet with central pellet.

Cp. Vives, *Monedas*, nos. 258-260; Frochoso Sánchez, *El Dirhem Andalusi*, no. 251,2.

***20.** Inv. CdV-02-395-166 0.49g 14x10mm; marginal inscription: (...*al-Andalu*)*s sanat ihdā wa*-(...)

Dirham, (al-Andalus), 25(1-9) h. Obv. central legend in three pelleted circles. Rev. above central legend arabesque.

21. Inv. CdV-02-395-013 0.57g 22x14mm

***22.** Inv. CdV-02-395-050 0.47g 21x8mm. The *nūn* of *khamṣīn* ends in an arabesque tail; rev. field above off.

23. Inv. CdV-02-395-057 0.60g 20x13mm

Dirham, (al-Andalus), (2)54 h.

Cp. Vives, *Monedas*, no. 268.

***24.** Inv. CdV-02-395-047 0.48g 14x12mm; margin clipped, border not discernable. The original coin was slotted in the middle for plugging.

Dirham, al-Andalus, 256 h. Obv. three pelleted circle *bi-l-Andalus* ends in arabesque tail; no second arabesque. The *sitt* is seemingly clear. Rev. no further mintmark discernable.

Cp. Vives, *Monedas*, nos. 272-3.

***25.** Inv. CdV-02-395-068 2.57g 30mm; two times pecked to create a large slot for plugging

Dirham, al-Andalus, (2)58 h. Obv. central legend in three pelleted circles. Rev. above central legend arabesques.

Cp. Frochoso 2009, no. 258.21.

26. Inv. CdV-02-395-016 0.60g 22x12mm

***27.** Inv. CdV-02-395-086 0.55g 23x7mm; obv. marginal legend (...)*s sanat thamān wa-kh(amsīn)?*, slotted for plugging

28. Inv. CdV-02-395-115 0.48g 18x13mm

29. Inv. CdV-02-395-199 0.43g 13x11mm

30. Inv. CdV-02-395-093 0.28g 11x10mm; legible *sanat thamān*, below ornate arabesque

Dirham, al-Andalus, 260 h.

Cp. Miles, *Coinage*, no. 153a; Frochoso Sánchez, *El Dirhem Andalusi*, no. 260.1. The arabesque on top of the reverse is different (see enlargement).

***31.** Inv. CdV-02-395-012 2.06g 29mm; clipped

Dirham, al-Andalus, (2)6(0-3). Obv. three pelleted circles.

32. Inv. CdV-02-395-060 0.34g 15x11mm

***33.** Inv. CdV-02-395-075 0.66g 14x14mm; original coin; two times slashed for plugging

34. Inv. CdV-02-395-221 0.16g 12x5mm

Dirham, al-Andalus, 261 h.

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, nos. 261.4 - 221.21.

***35.** Inv. CdV-02-395-159 0.67g 19x15mm

Dirham, al-Andalus, 262 h. Floral epigraphy; arabesque above central inscription blurred.

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, no. 262.

***36.** Inv. CdV-02-395-071 2.07g 29mm; seemingly unclipped, pierced or hole by flan crack

***37.** Inv. CdV-02-395-018 1.95g 28mm; large fragment; extremely floriated *sūrat al-ikhlāṣ*

Dirham, (al-Andalus), 26(3?) h. Obv. three pelleted circles. Rev. above central legend 'ayn and star (see enlargement).

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, no. 263.7.

***38.** Inv. CdV-02-395-089 0.44g 11x10mm

Dirham, (al-Andalus) (2)6/7(64-ca.70) h. Obv. central legend in three line-circles; large ringlet with central pellet. Rev. question-mark-like ornament lying.

39. Inv. CdV-02-395-218 0.30g 11x9mm

Dirham, al-Andalus, (264-ca.270) h. Obv. central legend in three line-circles; five ringlets with central pellet.

40. Inv. CdV-02-395-009 0.80g 24x14mm

Dirham, (al-Andalus), (2)6?7 h. Obv. three pelleted circles, the tail of the single digit swings to the left and rolls to the right.

41. Inv. CdV-02-395-105 0.37g 14x11mm

Dirham, (al-Andalus) (2)69 h. Obv. central legend within three line-circles, five ringlets with central dot.

42. Inv. CdV-02-395-003 0.63g 17x17mm

Dirham, al-Andalus, 270 h, corroded and cracked at the margin.

Cp. Frochoso Sánchez, *El Dirhem Andalusi*, no. 270.1.

***43.** Inv. CdV-02-395-069 2.44g 31mm; hornsilver, and parts broken off at the margin

Dirham, al-Andalus, year off, fragments without legible dates. Most of the coins show part of the *sūrat al-ikhlās*

44. Inv. CdV-02-395-019 1.14g 22x15mm

***45.** Inv. CdV-02-395-020 0.81g 23x15mm; slotted and plugged

46. Inv. CdV-02-395-022 0.61g 15x14mm

47. Inv. CdV-02-395-004 0.56g 20x11mm; obv. central legend with in three pelleted circle (250s-260s h.)

48. Inv. CdV-02-395-005 0.56g 21x13mm

49. Inv. CdV-02-395-007 0.61g 20x15mm; obv. central legend in two pelleted and one line-circle

***50.** Inv. CdV-02-395-014 1.41g 23mm; clipped at the margin, and fragmented, slotted for plugging; stylistically 230s h.?

51. Inv. CdV-02-395-023 0.28g 11x8mm; obv. three pelleted circles, legible *mi'atayn*

- 52.** Inv. CdV-02-395-024 0.36g 10x13mm; obv. two pelleted circles, legible *al-And(alus)*
- 53.** Inv. CdV-02-395-025 0.54g 16x9mm; obv. two pelleted circles
- 54.** Inv. CdV-02-395-026 0.71g 21x14mm; obv. two line-circles; five (?) ringlets; outer pelleted circle (early decades of the 3rd c. h.?)
- 55.** Inv. CdV-02-395-027 0.44g 15x13mm; broken in two pieces
- 56.** Inv. CdV-02-395-028 0.53g 26x9mm; obv. two pelleted circles; five ringlets, outer line-circle; *al-Anda(lus)* legible; rev. central legend in two circles
- 57.** Inv. CdV-02-395-029 1.14g 27x15mm; obv. three pelleted circles, *bil-Andalus* ends in arabesque tail
- 58.** Inv. CdV-02-395-030 0.61g 21x7mm; obv. three pelleted circles
- 59.** Inv. CdV-02-395-031 0.69g 20x13mm; obv. central legend in one line-circle; two outer pelleted circles
- 60.** Inv. CdV-02-395-032 0.25g 13x9mm; obv. three line-circles; five ringlets with central pellet; rev. central legend within two line-circles
- 61.** Inv. CdV-02-395-033 0.46g 18x9mm, obv. three pelleted circles, larger pellets in the outer margin
- 62.** Inv. CdV-02-395-034 0.46g 16x13mm; obv. two line-circles
- 63.** Inv. CdV-02-395-035 0.63g 18x13mm; obv. two pelleted circles with ringlets; *al-Andalus* legible

***64.** Inv. CdV-02-395-036 0.63g 17x14mm; clipped and fragmented; obv. at least two pelleted circles. Significant is the use of round punches for the letters and for example the unusual style of writing *hādhā* (see enlargement); rev. bottom ornament late 260s h.?

65. Inv. CdV-02-395-037 0.35g 14x8mm; obv. three pelleted circles.

***66.** Inv. CdV-02-395-038 0.65g 23x13mm; obv. three pelleted circles, *al-Andal(us)* legible; rev. central legend within two line-circles, below central legend six-pointed star

67. Inv. CdV-02-395-039 0.65g 15x12mm; obv. pellet above *kāf* of *sharīk*. cp. 236.9; 238.13, 15-20; 139.16; dating second half of the 230s

68. Inv. CdV-02-395-040 0.33g 13x10mm; obv. at least two pelleted circles; remnants of a year visible (26?4/7/9?)

69. Inv. CdV-02-395-041 0.41g 10x17mm; obv. at least two pelleted circles

70. Inv. CdV-02-395-042 0.51g 17x12mm; obv. two line-circles, broader margin

71. Inv. CdV-02-395-043 0.21g 9x8mm; obv. two pelleted circles

72. Inv. CdV-02-395-045 0.28g 13x6mm; obv. two pelleted circles

73. Inv. CdV-02-395-046 0.13g 9x9mm

74. Inv. CdV-02-395-049 0.30g 12x9mm

75. Inv. CdV-02-395-051 0.46g 16x14mm; obv. two pelleted circles; broad margin

- *76.** Inv. CdV-02-395-052 0.32g 14x10mm; original coin seems to be slotted for plugging
- 77.** Inv. CdV-02-395-053 0.36g 12x7mm; obv. two pelleted circles; and ringlets in the margin
- 78.** Inv. CdV-02-395-054 0.38g 14x9mm
- 79.** Inv. CdV-02-395-055 0.28g 15x11mm; obv. three pelleted circles
- 80.** Inv. CdV-02-395-056 0.66g 20x14mm; obv. central legend within line-circle; outer margin pelleted circle and line-circle
- 81.** Inv. CdV-02-395-058 0.25g 9x7mm
- 82.** Inv. CdV-02-395-059 0.27g 18x14mm
- 83.** Inv. CdV-02-395-061 0.51g 14x13mm; obv. at least two pelleted circles
- 84.** Inv. CdV-02-395-062 0.43g 13x9mm; obv. three pelleted circles
- 85.** Inv. CdV-02-395-064 0.74g 18x15mm; obv. two pelleted circles, broader margin with ringlets
- 86.** Inv. CdV-02-395-065 0.61g 17x12mm; (...) *sittīn?* *wami'atayn*, margin off
- *87.** Inv. CdV-02-395-066 1.35g 28mm; almost exactly half a coin; obv. three pelleted circles; marginal legend *(bi-)smillāh ḡuriba hādhā al-dirham bil-Andalus sanat (...)*. The coin seems to have been slotted two times before breaking
- 88.** Inv. CdV-02-395-072 1.38g 28mm; obv. central legend in two pelleted circles; large pellets, and a thick outer circle; broad margin; *al-Andalus* legible

- *89.** Inv. CdV-02-395-073 0.35g 14x7mm; obv. two pelleted circles, ringlets, plugged fragment
- 90.** Inv. CdV-02-395-074 0.23g 12x9mm; obv. two pelleted circles, broader margin probably with ringlets
- 91.** Inv. CdV-02-395-076 0.49g 16x11mm
- 92.** Inv. CdV-02-395-077 0.26g 12x9mm
- 93.** Inv. CdV-02-395-078 0.35g 13x9mm
- 94.** Inv. CdV-02-395-079 0.38g 11x10mm; obv. three pelleted circles
- 95.** Inv. CdV-02-395-080 0.29g 12x11mm; obv. central legend in line-circle; outer margin off
- 96.** Inv. CdV-02-395-081 0.38g 14x7mm
- 97.** Inv. CdV-02-395-082 0.31g 14x14mm; obv. three pelleted circles; and one thick outer circle
- 98.** Inv. CdV-02-395-083 0.14g 10x5mm
- 99.** Inv. CdV-02-395-084 0.70g 21x12mm; obv. three pelleted circles; rev. arabesque above central legend (see enlargement)
- 100.** Inv. CdV-02-395-085 0.50g 16x9mm
- 101.** Inv. CdV-02-395-088 0.13g 11x9mm
- 102.** Inv. CdV-02-395-090 0.16g 9x9mm; obv. three pelleted circles
- 103.** Inv. CdV-02-395-092 0.21g 12x9mm; obv. *sanat*?
- 104.** Inv. CdV-02-395-094 0.38g 13x12mm

- 105.** Inv. CdV-02-395-095 0.33g 16x13mm
- *106.** Inv. CdV-02-395-096 0.52g 14x11mm; rev. above the *sūrat al-ikhhlāṣ*, ornament
- 107.** Inv. CdV-02-395-097 0.26g 11x9mm
- 108.** Inv. CdV-02-395-098 0.46g 14x13mm; obv. central inscription in line-circle; outer margin three pelleted circles
- 109.** Inv. CdV-02-395-099 0.26g 11x9mm; obv. margin two pelleted circles and a ringlet with a central dot
- 110.** Inv. CdV-02-395-100 0.20g 10x7mm
- *111.** Inv. CdV-02-395-101 0.35g 16x7mm; obv. three pelleted circle in the margin; *nūn* of the single digit ends in a floriated arabesque; slotted for plugging
- 112.** Inv. CdV-02-395-102 0.33g 11x10mm; obv. two pelleted circles; tinier script, probably struck in the 2nd/8th c.
- 113.** Inv. CdV-02-395-103 0.22g 11x7mm
- 114.** Inv. CdV-02-395-104 0.48g 17x10mm
- 115.** Inv. CdV-02-395-106 0.28g 12x9mm
- 116.** Inv. CdV-02-395-107 0.27g 10x7mm; obv. three pelleted circles
- 117.** Inv. CdV-02-395-108 0.39g 10x8mm
- 118.** Inv. CdV-02-395-109 0.11g 8x7mm
- 119.** Inv. CdV-02-395-110 0.47g 17x10mm; obv. central legend within circle
- 120.** Inv. CdV-02-395-111 0.10g 11x5mm

- 121.** Inv. CdV-02-395-112 0.14g 11x5mm; obv. two pelleted circles and ringlet with dot in the middle
- 122.** Inv. CdV-02-395-113 0.12g 9x5mm
- 123.** Inv. CdV-02-395-114 0.67g 16x15mm; pierced; obv. margin (...) *lus sanat* (...) *sittīn*? (...)
- *124.** Inv. CdV-02-395-116 0.94g 19x13mm; plugged with silver wire; obv. central legend in only one pelleted circle; at a wide border ringlet with central pellet, marginal legend: (...) *nat arba' wa-sittīn wa-mi* ('at or *mi'atayn*). The style is different from what one would expect for the year 264 h. and also for the year 164 h.; contemporary forgery? Fragment of a coin from beyond al-Andalus? Cp. 213-Inv. CdV-02-395-214.
- *125.** Inv. CdV-02-395-117 0.53g 18x12mm; obv. three pelleted circles; *bil-Andalus* clearly legible, slotted.
- 126.** Inv. CdV-02-395-118 0.49g 17x10mm; obv. two line-circles and ringlet with central pellet; year (...) *sittīn* (?) *wa-mi'at(ayn)*. The 'tenth' are not very clear.
- *127.** Inv. CdV-02-395-119 0.40g 17x13mm; obv. three pelleted circles; slotted for plugging
- 128.** Inv. CdV-02-395-120 0.46g 11x11mm
- 129.** Inv. CdV-02-395-121 0.36g 14x11mm
- 130.** Inv. CdV-02-395-122 0.28g 9x7mm; obv. two pelleted circles; *al-Andalus* legible
- 131.** Inv. CdV-02-395-123 0.07g 7x6mm
- 132.** Inv. CdV-02-395-124 0.37g 19x7mm; obv. three line-circles; ringlet with central pellet
- 133.** Inv. CdV-02-395-125 0.36g 14x9mm

- 134.** Inv. CdV-02-395-126 0.30g 13x12mm
- 135.** Inv. CdV-02-395-127 0.43g 11x9mm; obv. three pelleted circles
- 136.** Inv. CdV-02-395-128 0.33g 14x11mm; obv. the *sīn* of *bil-Andalus* tails in an arabesque; rev. arabesque above central legend
- 137.** Inv. CdV-02-395-129 0.31g 17x7mm; obv. three pelleted circles
- 138.** Inv. CdV-02-395-130 0.17g 10x7mm
- 139.** Inv. CdV-02-395-131 0.52g 12x13mm; obv. three pelleted circles
- 140.** Inv. CdV-02-395-132 0.22g 8x7mm
- 141.** Inv. CdV-02-395-133 0.16g 7x6mm
- 142.** Inv. CdV-02-395-134 0.28g 12x11mm
- 143.** Inv. CdV-02-395-135 0.11g 7x8mm
- 144.** Inv. CdV-02-395-136 0.13g 9x7mm
- 145.** Inv. CdV-02-395-137 0.41g 12x15mm; obv. two pelleted circles, ringlet, probably with a central pellet
- 146.** Inv. CdV-02-395-138 0.36g 12x10mm; obv. two pelleted circles
- *147.** Inv. CdV-02-395-139 0.20g 10x10mm; obv. year (2x)6 h.; marginal legend (...) *nat sitt wa*-(...)
- 148.** Inv. CdV-02-395-140 0.28g 12x6mm
- 149.** Inv. CdV-02-395-141 0.25g 11x9mm; obv. central legend in two line-circles; marginal ornament three tiny ringlet, outer pelleted circle

- 150.** Inv. CdV-02-395-142 0.15g 5x9mm
- 151.** Inv. CdV-02-395-143 0.44g 7x13mm
- 152.** Inv. CdV-02-395-144 0.35g 11x10mm; obv. in two line-circles
- *153.** Inv. CdV-02-395-145 0.45g 13x12mm; slot on one side open for plugging
- 154.** Inv. CdV-02-395-146 0.42g 10x9mm
- 155.** Inv. CdV-02-395-148 0.25g 11x7mm
- 156.** Inv. CdV-02-395-149 0.31g 11x8mm
- 157.** Inv. CdV-02-395-151 0.16g 16x9mm; obv. three line-circles; ringlet with pellet; one outer line
- 158.** Inv. CdV-02-395-152 0.28g 11x7mm; obv. two pelleted circles, ringlet with pellet
- 159.** Inv. CdV-02-395-153 0.26g 12x11mm; obv. line-pellet-line-circle; outer margin ringlets; marginal legend (...) *b/s 'īn wa-mi' (atayn)*
- 160.** Inv. CdV-02-395-154 0.16g 9x7mm
- 161.** Inv. CdV-02-395-155 0.18g 9x7mm; obv. line-circle; one visible cluster pellet-crescent-pellet; outer margin two pelleted circles; ca. 239 to 242 h. (cp. Frochoso Sánchez, *El Dirhem Andalusí*; nos. 239.4, 240.11; 241.3; 242.4)
- *162.** Inv. CdV-02-395-156 0.56g 16x11mm; three line-circles; slotted for plugging
- 163.** Inv. CdV-02-395-158 0.24g 11x9mm
- 164.** Inv. CdV-02-395-160 0.52g 18x11mm; rev. pellet under central inscription

165. Inv. CdV-02-395-161 0.46g 11x10mm
166. Inv. CdV-02-395-162 0.31g 14x8mm
167. Inv. CdV-02-395-163 0.26g 11x9mm
168. Inv. CdV-02-395-164 0.15g 8x7mm
169. Inv. CdV-02-395-165 0.32g 13x10mm
170. Inv. CdV-02-395-167 0.17g 8x7mm
171. Inv. CdV-02-395-168 0.23g 13x8mm; obv. three pelleted circles
172. Inv. CdV-02-395-169 0.22g 10x9mm
173. Inv. CdV-02-395-170 0.11g 7x4mm; almost blank
174. Inv. CdV-02-395-172 0.17g 9x8mm; obv. two line-circles, two pellets; a *sīn* from the tenths is visible, suggesting a *sittīn* or *sab ʿīn*
175. Inv. CdV-02-395-173 0.11g 9x7mm
176. Inv. CdV-02-395-174 0.21g 11x7mm
177. Inv. CdV-02-395-175 0.13g 14x6mm
178. Inv. CdV-02-395-176 0.61g 17x13mm
179. Inv. CdV-02-395-177 0.49g 14x7mm
180. Inv. CdV-02-395-178 0.34g 11x10mm; obv. three pelleted circles; ringlets with central ringlet
181. Inv. CdV-02-395-179 0.34g 10x9mm; obv. three pelleted circles; marginal legend (...) *bil-Andalus sanat*(...)

- 182.** Inv. CdV-02-395-180 0.39g 18x11mm; obv. two pelleted circles
- 183.** Inv. CdV-02-395-181 0.29g 11x7mm; almost blank
- 184.** Inv. CdV-02-395-182 0.10g 6x5mm
- 185.** Inv. CdV-02-395-183 0.24g 10x8mm; obv. two line-circles; pellet, outer margin circle
- 186.** Inv. CdV-02-395-184 0.21g 12x9mm
- 187.** Inv. CdV-02-395-185 0.35g 12x10mm; obv. three pelleted circle and one line-circle
- 188.** Inv. CdV-02-395-187 0.29g 14x9mm
- 189.** Inv. CdV-02-395-188 0.60g 16x9mm
- 190.** Inv. CdV-02-395-189 0.31g 14x6mm
- 191.** Inv. CdV-02-395-190 0.19g 9x8mm
- 192.** Inv. CdV-02-395-192 0.24g 10x6mm
- 193.** Inv. CdV-02-395-193 0.38g 11x9mm; obv. three pelleted circles
- 194.** Inv. CdV-02-395-194 0.16g 12x6mm
- *195.** Inv. CdV-02-395-195 0.71g 19x13mm; plugged; central legend in circle; central field in two pelleted circles; broad circle in the outer margin
- 196.** Inv. CdV-02-395-196 0.26g 15x9mm; obv. three pelleted circles
- 197.** Inv. CdV-02-395-197 0.25g 11x7mm

- 198.** Inv. CdV-02-395-198 0.27g 9x7mm; obv. three pelleted circles
- 199.** Inv. CdV-02-395-200 0.19g 10x8mm
- 200.** Inv. CdV-02-395-201 0.31g 12x7mm
- 201.** Inv. CdV-02-395-202 0.32g 12x8mm
- 202.** Inv. CdV-02-395-203 0.14g 9x5mm
- 203.** Inv. CdV-02-395-204 0.18g 10x11mm
- 204.** Inv. CdV-02-395-205 0.43g 12x13mm; obv. two pelleted circles; marginal legend (... *bil-*)*Andalus sanat* (...)
- 205.** Inv. CdV-02-395-206 0.22g 12x12mm; three pelleted circles
- 206.** Inv. CdV-02-395-207 0.22g 9x8mm; three pelleted circles
- 207.** Inv. CdV-02-395-208 0.26g 11x8mm
- 208.** Inv. CdV-02-395-209 0.36g 15x8mm
- 209.** Inv. CdV-02-395-210 0.19g 11x6mm
- 210.** Inv. CdV-02-395-211 0.21g 11x6mm
- 211.** Inv. CdV-02-395-212 0.09g 10x4mm
- 212.** Inv. CdV-02-395-213 0.08g 6x6mm
- 213.** Inv. CdV-02-395-214 0.30g 12x6mm; obv. central legend in only one pelleted circle border ringlet with central pellet, marginal legend: (...) *arba' wa-sittīn* (?). The style is different from what one would expect in 264h.; contemporary forgery? Cp. Inv. CdV-02-395-116.

- 214.** Inv. CdV-02-395-215 0.29g 19x5mm; three pelleted circles
- 215.** Inv. CdV-02-395-216 0.17g 8x6mm
- 216.** Inv. CdV-02-395-217 0.25g 9x7mm; obv. central legend in two pelleted circles, legible *tis* ' or *thalathīn*?
- 217.** Inv. CdV-02-395-219 0.09g 9x6mm
- 218.** Inv. CdV-02-395-222 0.13g 8x6mm; almost blank
- 219.** Inv. CdV-02-395-223 0.13g 8x7mm
- 220.** Inv. CdV-02-395-224 0.43g 12x11mm; obv. two pelleted circles
- 221.** Inv. CdV-02-395-225 0.30g 12x11mm
- 222.** Inv. CdV-02-395-226 0.16g 8x7mm
- 223.** Inv. CdV-02-395-227 0.20g 9x9mm
- 224.** Inv. CdV-02-395-228 0.09g 10x3mm; blank fragment
- 225.** Inv. CdV-02-395-229 0.07g 6x6mm
- 226.** Inv. CdV-02-395-230 0.14g 10x8mm
- 227.** Inv. CdV-02-395-231 0.08g 8x4mm
- 228.** Inv. CdV-02-395-232 0.23g 9x6mm
- 229.** Inv. CdV-02-395-233 0.10g 6x5mm
- 230.** Inv. CdV-02-395-234 0.39g 15x7mm; obv. three line-circles, thick pellet and outer circle; legend: *bismill(āh ...)wa-mā'itayn*
- 231.** Inv. CdV-02-395-235 0.39g 11x10mm; obv. three pelleted circles; ringlet

232. Inv. CdV-02-395-236 0.17g 9x6mm

233. Inv. CdV-02-395-237 0.17g 9x8mm

234. Inv. CdV-02-395-238 0.05g 8x3mm

235. Inv. CdV-02-395-239 0.15g 9x5mm

Charles the Bald (r. 225-264 / 840-877)

Denier, mint Orleans, cp. Grierson and Blackburn, *Medieval European Coinage I*, no. 877.

Obv. AV(RELIANVS CIVITAS). Rev. (...RE)X+ (...)

***236.** Inv. CdV-02-395-070 0.30g 9x11mm; fragment

Unidentified Carolingian Ruler

Denier, Obv. (...)X(...) or (...)V(...)

***237.** Inv. CdV-02-395-091 0.11g 10x6mm; fragment

Silver wire and a silver strip

***238.** Inv. CdV-02-395-191 0.32g 9x3mm; silver wire, possible for or from plugging

***239.** Inv. CdV-02-395-220 0.18g 14x4mm; almost rectangular strip of silver

Bibliography

Alarcão, Jorge de, *Roman Portugal II, Gazetteer (Inventário) Fac. 3,8*, Warminster, Aris & Phillips, 1988.

Amorós Ruiz, Victoria, Gamó Parras, Blanca and Gutiérrez Lloret, Sonia, “Los contextos cerámicos altomedievales del Tolmo de Minateda y la cerámica altomedieval en el sudeste de la Península Ibérica”, in Luis Caballero Zoreda, Pedro Mateos Cruz and Manuel Retuerce Velasco (eds), *Cerámicas tardorromanas y altomedievales en la Península Ibérica. Ruptura y continuidad*, Madrid, Consejo Superior de Investigaciones Científicas, CSIC, Instituto de Historia, 2004, *Anejos do Archivo Español de Arqueología*, 28, pp. 119-168.

Ariza Armada, Almudena. “Un tesoro de dirhames de Baena (Córdoba),” *Gaceta Numismática*, 109 (1993), pp. 33-39.

- Ariza Armada, Almudena. “El tesorillo de dirhams de Izcar,” *Baena archeológica. Boletín informativo del Museo Histórico Municipal de Baena* no. 5 (March 2008), pp. 6-8.
- Arruda, Ana Margarida, Almeida, Rui Roberto de and Teixeira de Freitas, Vera, “O sítio islâmico do Tejo do Praio, Quinta do Lago, Loulé: uma primeira análise e caracterização”, in *Actas do 1º Encontro de Arqueologia do Algarve = Xelb* (Silves) 4 (2003), pp. 247-264.
- Bazzana, Andrés, *Maisons d'al-Andalus. Habitat medieval et structures du peuplement dans l'Espagne orientale*, Madrid, Casa de Velázquez, 1992, Publications de la Casa de Velázquez, Série Archéologie, 17 = Collection de la Casa de Velázquez, 37.
- Bazzana, Andrés, “La maison rural dans la péninsule ibérique: un atelier d’ethno-archéologie”, in Jan Klápště (ed.), *The Rural house from the migration period to the oldest still standing buildings*, Bad Bederkesa, 8. – 13. September 2001, Prague, Academy of Sciences, Institute of Archaeology, 2002, *Ruralia IV = Památky Archeologické Supplement*, 15, pp. 216-231.
- Boone, James L., “The Third Season of Excavations at Alcaria Longa”, *Arqueologia Medieval* (Mértola) 2 (1993), pp. 111-125.
- Boone, James L., Tribalism, Ethnicity and Islamization in the Baixo Alentejo of Portugal. Preliminary Results of Investigation into Transitional Period (AD 550-850) Rural Settlements. ERA-Arqueologia (Lisbon) 4 (2001), pp. 104-121.
- Catarino, Helena M. Gomes, “O Algarve oriental durante a ocupação islâmica”, *Al-`ulyā* 6 (1997/98).
- Cano Ávila, Pedro and Martín Gómez, Carmen Inés, “Tesoro de dirhemes hallado en La Rinconada (Sevilla)”, in Carmen Alfaro – Carmen Marcos y Paloma Otero (eds): *XIII Congreso Internacional de Numismática*, Madrid 2003. Actas – Proceedings – Actes, Madrid, Ministerio de Cultura, 2005, pp. 1553-1566.
- Cano Ávila, Pedro and Martín Gómez, Carmen Inés, “Hallazgo de dirhemes del emirato omeya de al-Ándalus en Niebla (Huelva)”, Julio Torres (ed.), *XIV Congreso Nacional de Numismática. Ars metallica: Monedas y medallas, Nules-Valencia, 25-27 de Octubre de 2010*, Madrid, 2011, pp. 817-834.
- Canto García, Alberto, “Tesoro de moneda emiral del siglo II de la Hégira, conservado en el MAN [Museo Arqueológico Nacional]”, in *Actas I Jarique de Estudios Numismáticos Hispano-Árabes*, Zaragoza, Institución Fernando el Católico, 1988, pp. 147-162.
- Canto García, Alberto, “Sobre un pequeño hallazgo de moneda emiral en Martos”, *Antiquitas*, 4 (1993), pp. 63-67.
- Canto García, Alberto, “Moneda foránea en al-Andalus”, *Actas X Congreso Nacional de Numismática, Albacete, 1998*, Madrid, Museo Casa del Moneda 2002, pp. 107-128.

- Canto García, Alberto, “Tesoro de la Sagrada Familia Campo de la Verdad (Córdoba)”, *Maskukat. Tesoros de monedas andalusies en el Museo Arqueológico de Córdoba, Catálogo de la exposición Enero-Marzo 2007*, Córdoba, Consejería de Cultura, 2007, pp. 21-23 and 68.
- Canto García, Alberto and Marsal Moyano, Eduardo, “On the Metrology of the Silver Coinage of the Spanish Emirate,” in Mário Gomes Marques – M. Crusafont I Sabatier (eds.), *Problems in the Medieval Coinage in the Iberian Area 2*, Aviles 1986, pp. 167-180.
- Canto García, Alberto and Marsal Moyano, Eduardo, “Hallazgo de moneda emiral de Iznájar (Granada)”, *Al-Qanṭara* 9/2 (1988), pp. 427-471.
- Coutinho, Helder Manuel Ribeiro, *As ruínas do Montinho das Laranjeiras: Alcoutim*, Alcoutim, Câmara Municipal de Alcoutim, 2005.
- Edmondson, Jonathan C., *Two Industries in Roman Lusitania: Mining and Garum Production*, Oxford, British Archaeological Reports, 1987, British Archaeological Reports, International Series, 362.
- Fierro, Maribel, “Cuatro preguntas en torno a Ibn Hafsun”, *Al-Qanṭara*, 16/2 (1995), pp. 221-258.
- Frchoso Sánchez, Rafael, *El Dirhem Andalusí. En el emirato de Córdoba*, Madrid, Real Academia de la Historia, Real Academia de Córdoba, 2009, Bibliotheca Numismatica Hispana, 7.
- Gamito, Teresa Judith, “Povoamento rural no Gharb”, in Claudio Torres and Santiago Macias (eds), *Portugal Islâmico. Os últimos sinais do Mediterrâneo*, Catálogo de la Exposición, Lisbon, Museu Nacional de Arqueologia, 1998, pp. 143-173.
- García Ruiz, Gloria and Ruiz Quintanar, Lourdes, “Fragmentos de monedas en el hallazgo califal “Haza del Carmen”. II Congreso de Arqueología Peninsular. Arqueología romana y medieval, vol. IV, Zamora 1996, pp. 723-730.
- Gomes, Rosa Varela, Teixeira, Vera and Miranda, Maria João, “Povoado Muçulmano na Ponta do Castelo (Aljezur), Notícia Preliminar”, *Al-Madan* II 10 (2001), pp. 200-201.
- Grierson, Philip and Blackburn, Mark A., *Medieval European Coinage I, The Early Middle Ages (5th-10th Centuries)*, Cambridge, Cambridge University, 1986.
- Hauschild, Theodor and Teichner, Felix, „Der römische Tempel in Évora (Portugal): Bauaufnahme, Wertung, Ausgrabung“. *Madridrer Beiträge* 20, Wiesbaden, Reichert Verlag 2017.
- Heidemann, Stefan, *Die Renaissance der Städte in Nordsyrien und Nordmesopotamien. Städtische Entwicklung und wirtschaftliche Bedingungen in ar-Raqqa und Ḥarrān von der Zeit der beduinischen Vorherrschaft bis zu den Seldschuken*, Leiden et al., Brill 2002, Islamic History and Civilization. Studies and Texts 40.
- Ibrahim, Tawfiq and Canto, Alberto, “Hallazgo emiral en Puebla de Cazalla (Sevilla)”, *Numisma* 229 (1991), pp. 69-86.

- Ilisch, Lutz, "Whole and Fragmented Dirhams in Near Eastern Hoards", in Kenneth Jonsson and Brita Malmer (eds), *Sigtuna Papers, Proceedings of the Sigtuna Symposium on Viking-Age Coinage 1-4 June 1989, Stockholm, Commentationes de Nummis Saeculorum in Suecia repertis, Nova Series 6*, London, Spink and Son, 1990, pp. 121-128.
- Ilisch, Lutz, "Der Steckborner Schatzfund von 1830 und andere Funde nordafrikanischer Dirhams im Bereich des Karlsreiches," in Giovanni Gorini (ed.), *Simposio Simone Assemani sulla monetazione islamica / Simone Assemani Symposium on Islamic Coinage*, Padua, Esedra 2005, pp. 67-92.
- Ilisch, Lutz and Zeiler, Manuel, "Eine seltene frühmittelalterliche Münze der Umayyaden aus Schwerte," *Archäologie in Westfalen-Lippe*, 4. (2012), pp. 73-74.
- Macias, Santiago, *Mértola. O último porto do mediterrâneo. Catálogo da exposição Mértola – História e património (séculos V-XIII)*, Mértola, Campo Arqueológico de Mértola, 2005.
- Martín Escudero, Fátima, "Hallazgos de dirhames omeyas: estudio e interpretación", in Carmen Alfaro and Carmen Marcos and Paloma Otero (eds), *XIII Congreso Internacional de Numismática*, Madrid 2003. Actas – Proceedings - Actes, Madrid, Ministerio de Cultura, 2005, pp. 1615-1623.
- Martín Escudero, Fátima, *El tesoro de Baena. Reflexiones sobre circulación monetaria en época omeya*, Madrid, Real Academia de la Historia, 2005, Bibliotheca Numismatica Hispana, 2 = Numismática árabe-hispana, 1.
- Martín Escudero, Fátima, "Monedas que van, monedas que vienen..., circulación monetaria en época de cambios", in Philippe Sénac (ed.), *De Mahoma a Carlomagno. Los primeros tiempos (siglos VII-IX), XXXIX Semana de Estudios Medievales*, Estella 17-20, Julio 2012, Pamplona, Gobierno de Navarra, 2013, pp. 311-350.
- Martín Escudero, Fátima, "Tesoros numismáticos. Mucho más que monedas acumuladas. Hallazgos monetarios de los Emiratos Dependiente e Independiente", in Philippe Sénac and Sébastien Gasc (eds.), *Monnaies de haut Moyen Âge: histoire et archéologie (péninsule Ibérique – Maghreb, VIIe-Xie siècle)*, Villa 5, Toulouse: Presses universitaires du Midi, 2015, pp. 173-210.
- Matos, José L. de, "Cerro da Vila. Escavações em 1971", *O Arqueólogo Português* III 5 (1971), pp. 201-214.
- Matos, José L. de, "Loulé. Forno de cerâmica (Cerro da Vila) – 1982", *Informação Arqueológica* 5 (1982/83), p. 77.
- Matos, José L. de, "Malagas árabes do Cerro da Vila", *O Arqueólogo Português* IV 1 (1983), pp. 375-390.
- Matos, José L. de, "Estações e monumentos – Cerro da Vila (Algarve)", *Arqueologia* (Porto) 10 (1984), pp. 137-142.
- Matos, José L. de, "Mausoléus do Cerro da Vila", *Arqueologia e História* X 1 (1984-88), pp. 119-122.

- Matos, José L. de, “Cerâmica muçulmana do Cerro da Vila”, in *A Cerâmica Medieval no Mediterrâneo Ocidental, Actas IV Congresso Internacional, Lisboa 1987*, Mértola, Campo Arqueológico de Mértola, 1991, pp. 429-456.
- Matos, José L. de, “Influências orientais na cerâmica muçulmana do sul de Portugal”, in *Estudos Orientais 2: O legado cultural de judeus e mouros*, Lisbon, Instituto Oriental, Universidade Nova de Lisboa, 1991, pp. 75-83.
- Matos, José L. de, “Cerro da Vila”, in *Noventa séculos entre a serra e o mar*, Lisbon, Instituto Português do Património Arquitectónico, 1997, pp. 387-394.
- Matos, José L. de, “O período Islâmico no Cerro da Vila”, in *Noventa séculos entre a serra e o mar*, Lisbon, Instituto Português do Património Arquitectónico, 1997, pp. 459-468.
- Melro, Samuel, Gonçalves, Alexandre and Clélia, Sandra, “Intervenção arqueológica nos Alcarias dos Guerreiros de Cima: Resultados preliminares”, *ERA – Arqueologia* (Lisbon) 6 (2004), pp. 62-81.
- Miles, George C., *The Coinage of the Umayyads of Spain*, New York, American Numismatic Society, 1950, Hispanic Numismatic Series, Monograph, 1.
- Miles, George C., “A Hoard of Arab Dirhems from Algarve, Portugal”, *American Numismatic Society Museum Notes* 9 (1960), pp. 219-230.
- Navarro Oltra, Carlos Vicente, “Un tesorillo de dirhemes emirales en Pedreguer (Alicante)”, in *Arqueologia Medieval Espanola. // Congreso Madrid 19-24 Enero 1987*. Vol. 3, Communicationes. Madrid, 1987, pp. 53-61.
- Noonan, Thomas S, “Dirhems Omeyas de al-Andalus en los hallazgos del Proximo Oriente, Norte de Africa, Sicilia y el Caucazo”, *Gaceta Numismática* 92 (Marzo 1989), pp. 25-27.
- Paço, Afonso do and Farrajota, José, “Subsídios para uma carta arqueológica do concelho de Loulé”, *Arqueologia e História* VIII 12 (1966), pp. 65-92.
- Parverie, Marc, “Questions sur l’importation de dirhams d’al-Andalus dans l’empire carolingien”, *Bulletin du cercle d’études de numismatique, Bruxelles* 49/1, (2012), pp. 14-23.
- Pires, Alexandra and Ferreira, Mulize, “Povoado Islâmico da Portela 3: Resultados preliminares”, in *Actas do 1º Encontro de Arqueologia do Algarve = Xelb (Silves)* 4 (2003), pp. 279-324.
- Rodrigues Marinho, José, “Uma prática singular em moedas do Emirato do Andalus”, *O Arqueólogo Português*, IV 1 (1983), pp. 347-374.
- Rodrigues Marinho, José, “Um Achado de Dirhames do Emirado Ândalus em Castro Marim”, *O Arqueólogo Português* IV 13-15 (1995-1997), pp. 441-456.
- Ruiz Asencio, José M., “Tesorillo de dirhemes del Emirato, hallado en La Lantejuela (Sevilla)”, *Numisma* 84-89, XVII, 1967, pp. 27-50.
- Ruiz Quintanar, Lourdes, “La fragmentación de moneda en época Omeya”, *Actas X Congreso Nacional de Numismática*, Albacete, 1998, Madrid, Museo Casa del Moneda 2002, pp. 533-541.

- Saget, Yves and Ménanteau, Loïc, “Des monnaies carolingiennes trouvées dans le lit de la Loire, entre Ancenis et Oudon”, *Histoire et Patrimoine au Pays d’Ancenis* 18 (2003), pp. 47-52.
- Santos, Ana L., “Antropologia de campo e paleodemografia em necrópoles Romanas Algarvias”, in *Noventa séculos entre a serra e o mar*, Lisbon, Instituto Português do Património Arquitectónico, 1997, pp. 395-406.
- Santos, Ana L., Cunha, Eugénia and Silva, Ana Maria, “Os habitantes de Cerro da Vila (século I-XI)”, in *Actas do 7º Congresso do Algarve, Vila Moura*, 1992, pp. 11-17.
- Santos, Maria L. Estácio da Veiga Affonso dos, *Arqueologia Romana do Algarve, I*, Lisbon, Associação dos Arqueólogos Portugueses, 1971-1972.
- Santos Gener, Samuel de los, “Monedas carolingias en un tesoro de dirhemes del emirato cordobés”, *Numario Hispánico* 9 (1956), pp. 79-87.
- Teichner, Félix, “Cerro da Vila – aglomeração secundária e centro de produção de tinturaria no sul da Província Lusitânia”, in *Actas do 2º Encontro de Arqueologia do Algarve*, Silves, 17 e 18 de Outubro de 2003 = *Xelb* 5 (2005), pp. 85-100.
- Teichner, Félix, “«De lo romano a lo árabe». La transición del sur de la provincia de Lusitania a al-Gharb al-Andalus: nuevas investigaciones en los yacimientos de Milreu y Cerro da Vila”, in Alexandra Chavarría, Javier Arce and Gian Pietro Brogiolo (eds), *Villas Tardoantiguas en el Mediterráneo Occidental = Anejos de Archivo Español de Arqueología* 39, 2006, pp. 207-220.
- Teichner, Félix, *Entre tierra y mar. Zwischen Land und Meer. Architektur und Wirtschaftsweise ländlicher Siedlungsplätze im Süden der römischen Provinz Lusitanien (Portugal)*, Zaragoza, Pórtico Librerías 2008, Studia Lusitania, 3.
- Teichner, Félix, “El territorium de Ossonoba (Lusitania): economía agrícola (oleum et vinum) y «no-agrícola» (garum et purpura)”, in J.-L. Fiches, R. Plana Mallart et V. Revilla Calvo (eds.), *Paysages ruraux et territoires dans les cités de l’Occident romain. Gallia et Hispania. Paisajes rurales y territorios en las ciudades del Occidente romano. Gallia e Hispania, actes du colloque international AGER IX, Barcelone, 25-27 mars 2010, «Mondes anciens»*, Montpellier, 2012, pp. 131-142.
- Teichner, Félix, “Mensch, Umwelt, Wirtschaft: zum Landschaftsbezug wirtschaftlichen Handelns im antiken Hispanien”, in Fleur Kemmers, Thomas Maurer und Britta Rabe (eds), *Lege Artis. Festschrift für Hans-Markus von Kaenel = Frankfurter Archäologische Schriften* 25, Bonn, Habelt, 2014, pp. 61-7.
- Teichner, Félix, “Von Exportschlagnern und Cash Crops – Zum Wirtschaftsleben Hispaniens”, in Sabine Panzram (eds), *Städte in Spanien. Moderne Urbanität seit 2000 Jahren*, Mainz, Nünnerich-Asmus Verlag, 2014, pp. 81-92.
- Teichner, Félix, “O estabelecimento portuário do Cerro da Vila (Vilamoura): de aglomerado romano a aldeia islâmica. Catálogo de exposição “Loulé – Território, Memória e Identidade”, Museu Nacional de Arqueologia, Belem, Lisbon, 2017, pp. 278-291.

- Teichner, Félix, “Cerro da Vila: A Rural Commercial Harbour Beyond the Pillars of Hercules”, in Juan M. Campos Carrasco (eds.), *Los puertos romanos Atlánticos, Béticos y su relación comercial con el Mediterráneo*, Hispania Antigua ser. Arqueológica 7, Rome, 2018, pp. 403-435.
- Teichner, Félix and Schierl, Thomas, “Cerro da Vila (Algarve, Portugal). Aldeia do Mar na época islâmica”, in *Al-Ándalus. Espaço do mudança. Balanço de 25 anos história e arqueologia medievais. Homenagem a Juan Zozaya Stabel-Hansen*. Seminário Internacional Mertóla, 16, 17 e 18 de Maio de 2005, Mértola, Campo Arqueológico de Mértola, 2006, pp. 123-139.
- Teichner, Félix and Wienkelmeier, Anja, “Cerro da Vila (Portugal) - An Example of a Harbour Infrastructure Typical of the Rural Maritime Economy of Roman Lusitania”, *Atti Congresso Livorno “Porti antichi e retroterra produttivi”*, (in press).
- Teichner et al.: Teichner, Félix, Mäusbacher, Roland, Schneider, Heike, Höfer, Dana and Daut, Gerhard, “Investigações geo-arqueológicas sobre a configuração do litoral algarvio durante o Holoceno – Resultados preliminares,” *Revista Portuguesa de Arqueologia* 17 (2014), pp. 141-158.
- Vega Martín, Miguel and Peña Martín, Salvador, “Del hallazgo de dirhames emirales en Domingo Pérez (Iznalloz, Granada)”, *Al-Qanṭara* 23/1 (2002), pp. 155-192.
- Veiga, S. P. M. Estácio da, *A tabula de bronze de Aljustrel*. Memória apresentada à Academia Real das Sciencias de Lisboa, Lisbon, Academia Real das Sciencias de Lisboa, 1880.
- Veiga, S. P. M. Estácio da, “Antiguidades monumentaes do Algarve – Capitulo V”, *O Arqueólogo Português* 15 (1910), pp. 209-233.
- Vives y Escudero, Antonio, *Monedas de las dinastías árábigo – españolas*, Madrid, 1983, reprint 1998.

Sources:

- Map 1: Coin hoards mentioned in the article.
- Map 2: Closing dates and foreign elements in the coin hoards.
- Fig. 1: Teichner, “El territorium de Ossonoba”, fig. 1 with modifications.
- Fig. 2: Teichner and Schierl, “Aldeia do mar” p. 124 fig. 1 with modifications
- Fig. 3a and 3b: Teichner, *Entre tierra y mar*, pp. 491-3 fig. 277-8
- Fig. 4: Katja Bieber, Marburg University
- Fig. 5: Teichner, *Entre tierra y mar-II*, p. 130 pl. 201 CdV XXIV
- Fig. 6-7: Thomas Schierl
- Fig. 8: Archäologisches Museum Frankfurt am Main (Germany)
- Fig. 9-1: Photos by Dr. Babett Forster, Universität Jena, plates by Matthias Naue, Universität Hamburg

List of evidence for figure 3:

A: Multiroom buildings of the early post-Roman, Visigothic and Islamic period (Teichner, *Entre tierra y mar-I*, p. 492-493 fig. 278):

- 1) Cerro da Villa (Quarteira, Loulé, Algarve, Portugal): building H5/6 (phase IV); Teichner, *Entre tierra y mar-I*, fig. 209C.
- 2) Quinta do Lago (Quarteira, Loulé, Algarve, Portugal): building NH1; Arruda et al. "O sitio islâmico do Tejo do Praio", fig. 2.
- 3) *ibid* building NH2.
- 4) Alcaria Longa (Mértola, Beja, Alentejo, Portugal): compound 2; Boone, "The third season", pp. 113f. fig. 1-2; Bazzana, "La maison rural", p. 224 fig. 13.
- 5) Portela 3 (Silves, Faro, Algarve, Portugal): Building A; Pires and Ferreira, "Povoado Islâmico da Portela 3", fig. 5.
- 6) *ibid* building C.
- 7) Alcarias dos Guerreiros de Cima (Almodôvar, Beja, Alentejo, Portugal): building (without no.); Melro et al., "Intervenção arqueológica", fig. 1.
- 8) *ibid* building 5; *ibid* fig. 1 and p. 74.
- 9) *ibid* building 1; *ibid* fig. 1 and p. 75.
- 10) Solana (Vall de Gallinera, Alicante, Spain): building C; Bazzana, *Maisons d'al Andalus*, p. 442 pl. 75 fig. 109.
- 11) Beniomamet (Vall de Gallinera, Alicante, Spain): Bazzana, *Maisons d'al Andalus*, p. 405 pl. 76 fig. 111.
- 12) Montinho das Laranjeiras (Alcoutim, Faro, Algarve, Portugal): Veiga, *A tabula de bronze de Aljustrel*, fig.; Coutinho, *As ruínas do Montinho das Laranjeiras*, pp. 9 f. fig. 11.31.
- 13) Mértola (Beja, Alentejo, Portugal): building V; Macias, *Mértola*, map IV 11.
- 14) *ibid* building VI.
- 15) *ibid* building I.

B: Singleroom buildings of the Islamic period (Teichner, *Entre tierra y mar-I*, p. 492f. fig. 277):

- 1) Cerro da Villa (Quarteira, Loulé, Algarve, Portugal): building H3 (phase IV); Teichner, *Entre tierra y mar-I*, fig. 209C.
- 2-3) Ponta do Castelo (Aljezur, Faro, Algarve, Portugal): Gomes et al., "Povoado Muçulmano na Ponta do Castelo", fig. 1.

- 4) Mollet (Villafanés, Castellón de la Plana, Spain): building V-73; Bazzana, *Maisons d'al Andalus*, p. 426 pl. 271 fig. 396; Bazzana, "La maison rural", p. 227 fig. 10.
- 5) Tolmo de Minateda (Hellín, Albacete, Spain): GU36/38; Amorós Ruiz et al., "Los contextos cerámicos", fig. 18.
- 6) ibid GU29.
- 7) Aldeia dos Mouros (Faro, Algarve, Portugal): Gamito, "Povoamento rural no Gharb", p. 145 fig. 1.
- 8) Raposeira (Mértola, Beja, Alentejo, Portugal): Boone, "Tribalism, ethnicity and islamization", p. 113 fig. 5.
- 9) Costa no. 2 (Mértola, Beja, Alentejo, Portugal): ibid
- 10) Queimada (Mértola, Beja, Alentejo, Portugal): ibid

Recibido: 03/09/2017

Aceptado: 15/04/2018

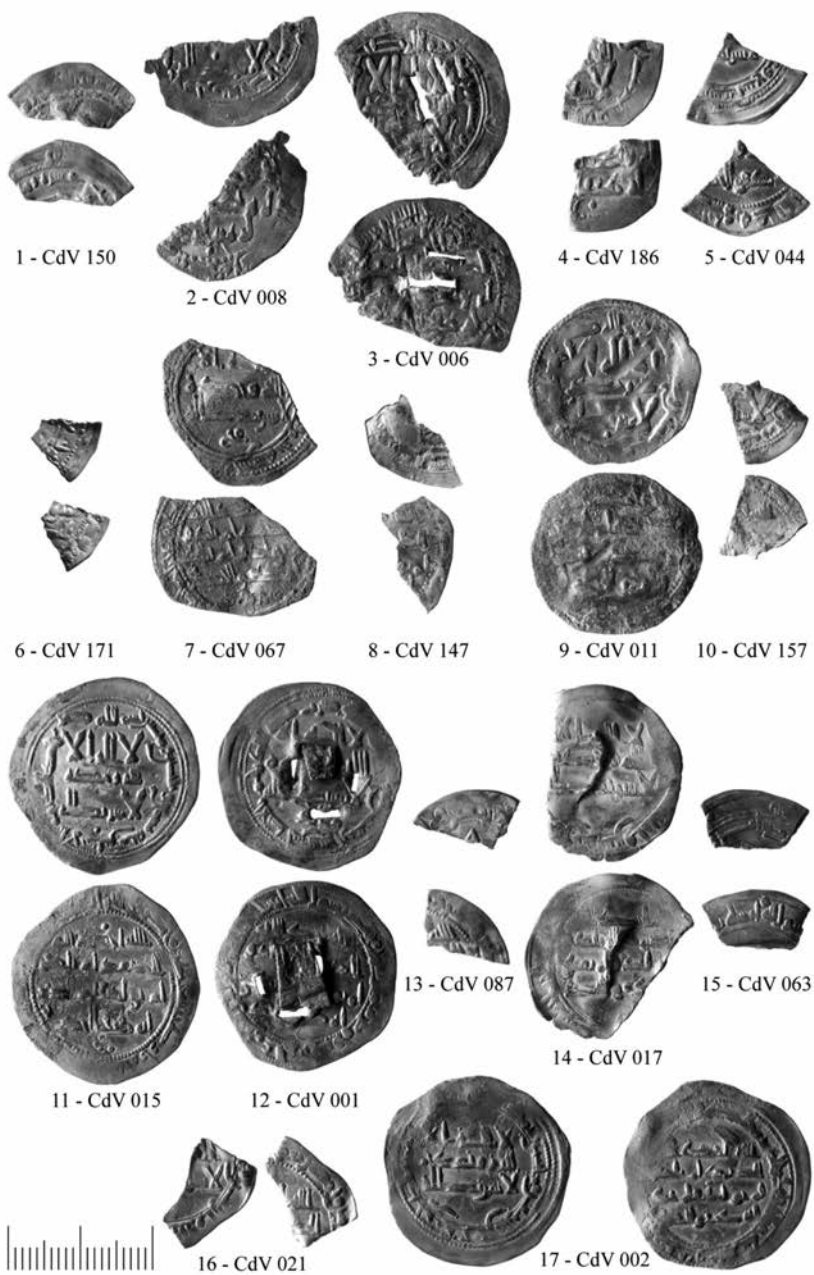


Fig. 9.



Fig. 10.

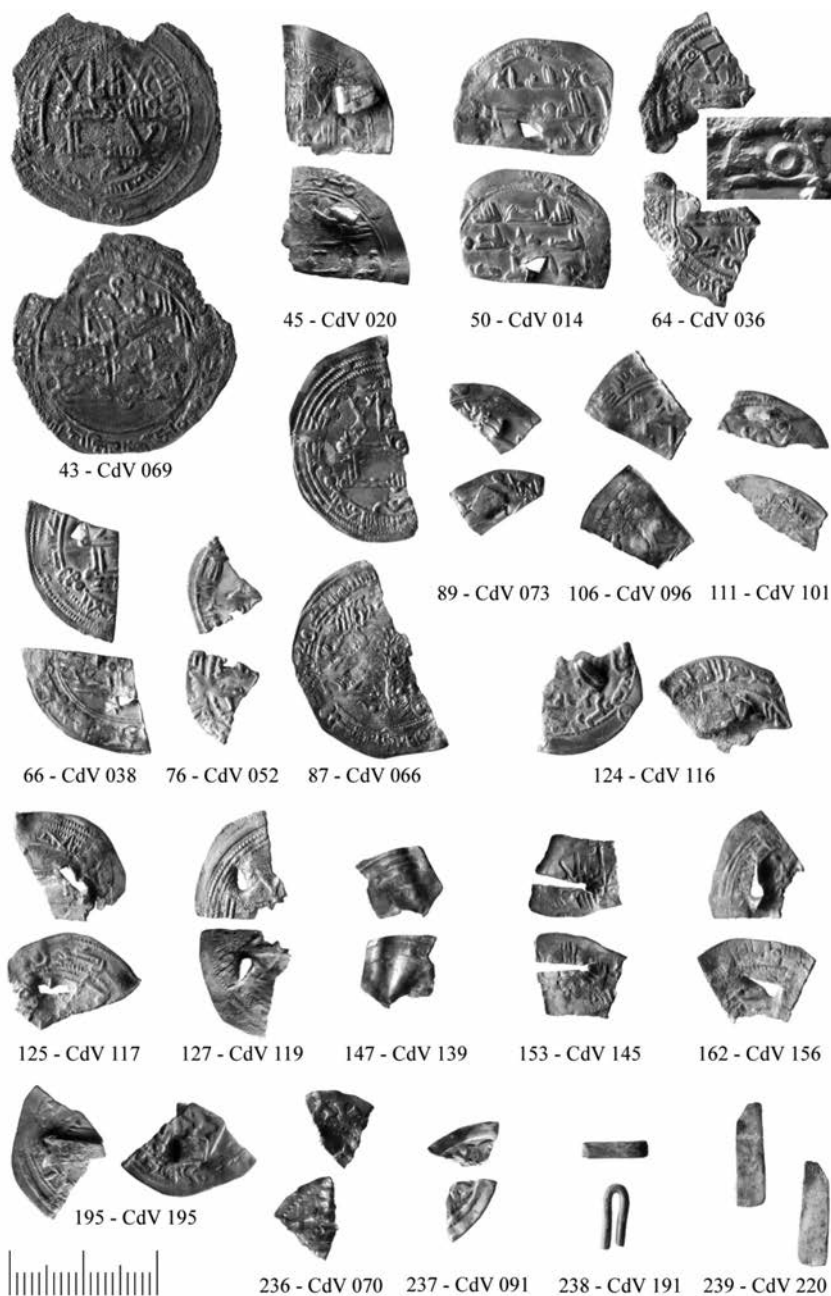


Fig. 11.