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EARLY BYZANTINE LAMELLAR ARMOUR FROM *CARTHAGO SPARTARIA* (CARTAGENA, SPAIN)

CORAZA LAMINAR PROTOBIZANTINA PROCEDENTE DE *CARTHAGO SPARTARIA* (CARTAGENA)

POR

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RESUMEN - ABSTRACT

This article presents an Early Byzantine lamellar armour, retrieved in the excavations at the quarter built over the Roman Theatre of Cartagena. The armour has close parallels with contemporary known material from the central and eastern Mediterranean or other sites, and it is an important find which increases the body of archeological evidence about Byzantine presence in *Spania*.

Este artículo presenta una coraza laminar protobizantina hallada en las excavaciones del barrio construido sobre el teatro romano de Cartagena. La coraza tiene estrechos paralelos con materiales contemporáneos del Mediterráneo Central y Oriental u otros lugares, y es un importante hallazgo que incrementa la nómina de evidencias arqueológicas acerca de la presencia bizantina en *Spania*.

PALABRAS CLAVE - KEYWORDS

Early Byzantine; Lamellar armour; Quarter; Roman Theatre; Cartagena; Byzantine presence; *Spania*.

Protobizantino; coraza laminar; barrio; teatro romano; Cartagena; presencia bizantina; *Spania*.

INTRODUCTION[1]

Byzantine presence in *Spania* is included in the *Renovatio Imperii*'s extensive project, when Emperor Justinian claimed recovery of the territories that belonged to the old Roman Empire in the West. The result was the incorporation of Africa, which was in vandals' hands, Italy from the Ostrogoths, and lastly Spain, after Atanagildo's request for help against the Visigothic king Agila. This help would come in the year 552, and, according to various modern authors, there was another landing in 555, perhaps in Cartagena. The city, named *Carthago Spartaria* by authors such as Saint Isidore, is together *Malaca* (Málaga) and *Septem* (Ceuta)

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one of the most important cities in Byzantine *Spania*, possibly the capital of the province, thanks to its strategic position with respect to the Byzantine territories of Africa and Italy (Vallejo, 1993).

During this period *Carthago Spartaria* was converted into an important redistribution centre for the products imported from Constantinople or North Africa, with a local mint, perhaps of *tremisses* (Grierson, 1955) and, especially, of small copper coins that guaranteed commercial transactions (Lechuga, 2000).

The archeological data that we have about the city in this period basically indicates the area of the Roman theatre and its surroundings with some remains of a port neighbourhood and a cemetery (Ramallo, 2000; Vizcaíno, f.c. 1) (fig. 1).

Before beginning on the subject of our study, it is necessary to outline the historical evolution of the Roman theatre, which has provided us with information about a long stratigraphic sequence which covers levels from the 2nd century BC until today (Ramallo y Ruiz, 1998). The Augustan building remained in use until Phase 6, dated at the end of the 2nd century AC, when we found irrefutable evidence of a partial destruction. In fact, in *Carthago Noua* we find other evidence of abandonment related to these events (Ruiz, 1996), reflection of a temporary instability and weakness, indications which must be linked to the economic and structural crisis of the time and not to a question of violence. During this period, a sizeable part of the city was abandoned and remaining activity was concentrated in the area closest to the port,

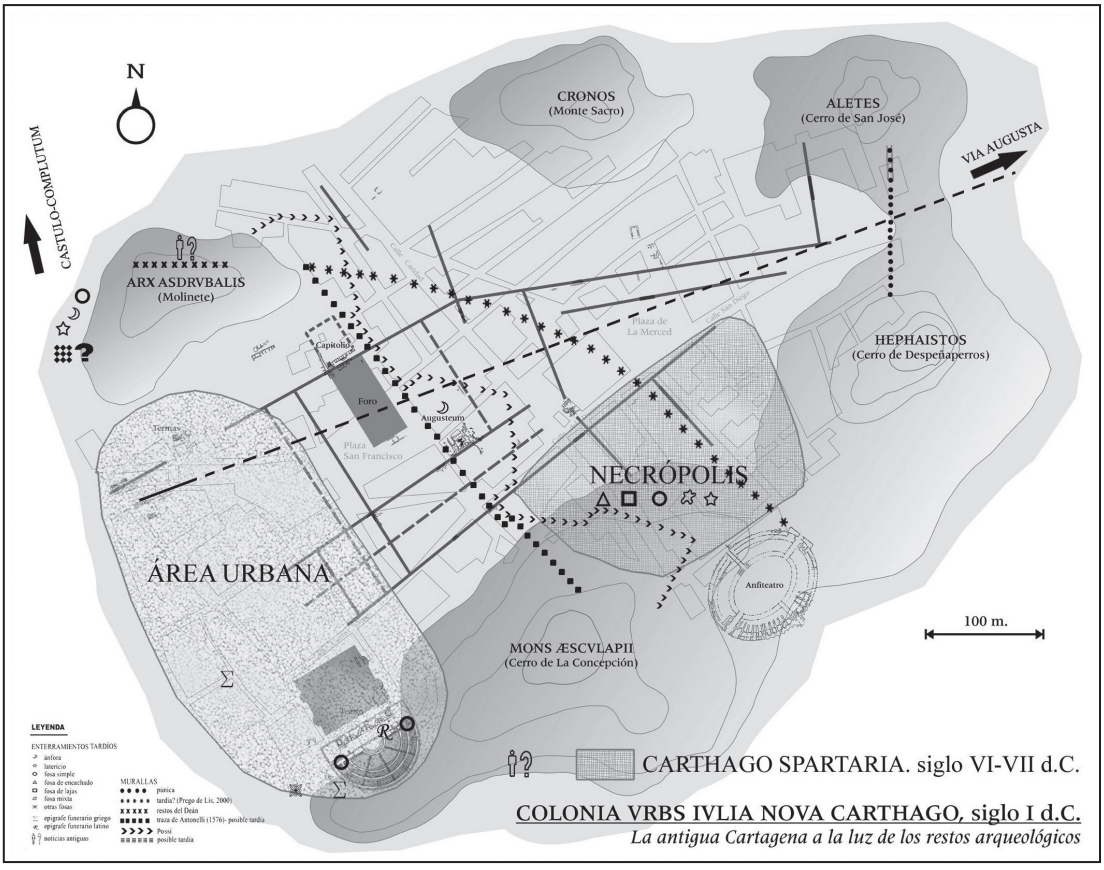

Figure 1. Carthago Spartaria in Late Antiquity (Ramallo and Vizcaíno, 2007).

between the hills of Concepcion and Molinete, a situation which continued with the promotion of Cartagena as the capital of *Carthaginiensis,* granted by the Emperor Diocletian. Later, during the fifth century, the theatre became a public market, consisting of an exedra and 15 lined compartments (Murcia *et alii,* 2005). Finally, during the Byzantine reconquest, its distribution was changed, the level of circulation was raised and the place was altered with the construction of a quarter over the old *cavea*, *orchestra*, *scaena* or *porticus*, involving a complete break with the previous building (Ramallo y Vizcaíno, 2003).

In addition to the appearance of rubbish dumps in the old urban centre and their nearness to the dwellings (Vizcaíno, 1999), another characteristic of the late antique city is the evidence of something already known from other sites: areas for the dead and for the living are in close proximity. Therefore, we have excavated a late antique necropolis which is located inside the old Roman town. Here, two phases of use are distinguished, with different types of tomb, funerary offerings, and ritual aspects (Madrid and Vizcaíno, 2006a). The study of these materials has permitted us to recompose a quite complete portrait of the funerary offering between the fifth and seventh centuries, which includes not only ceramic jars and glass unguentaria (Vizcaíno and Madrid, 2006; and *Idem,* f.c.) but also different types of pendants, bracelets, necklaces or clothing accessories (Madrid and Vizcaíno, 2006b; 2007a; 2007b; and Vizcaíno and Madrid, f.c.).

A detailed analysis of these areas, especially the Byzantine-age quarter, allows us to come to a series of conclusions that improve our overall knowledge of the Byzantine domain of *Carthago Spartaria* in particular, and of Byzantine Spain in general. Thus, this quarter is currently a settlement under scientific scrutiny and has provided us with various works which reflect the improvement in our knowledge of it. From the archeological point of view, we can refer to brief synthesis (Ramallo, 2000; Ramallo and Vizcaíno, 2003; VV. AA., 2005; Vizcaíno, f.c.) and different lines of research, such as the study of pottery (Ramallo *et alii,* 1996 and 1997; Murcia and Guillermo, 2003; Vizcaíno y Pérez, f.c.), glass (Sánchez de Prado, 1999; Vizcaíno, 2005a), numismatic (Lechuga, 1989-1990 and 2000) or dress accessories (Vizcaíno, 2003-2004; 2005b, 2007a and 2007b).

The quarter, which is built on the North-West slope of the Concepcion mountain, includes rooms and different areas of little architectural significance with a complete absence of remains of wall-covering plaques, stone paving or other ornamental material. Thus, we find mostly stone baseboards bonded by clay or mud, with reused materials from the immediate area, now without their old significance (Vizcaíno, 2002), and adobe walls, covered with wooden beams and a local slate. Moreover, the architectural layout of this quarter, with a highly functional distribution and a lack of reception areas or other rooms of a social function, is another element that shows the change in relation to the Roman phase. This quarter was organised in quadrangular or triangular rooms and open-air places, where basic infrastructures were provided, pipework for drainage, silos for storage, or cesspools to dump rubbish. The streets were planned in an irregular way due to the artificial topography and the slope caused by the previous structures. We should also like to emphasise the similarity of the architectural plans of the quarters of Byzantine age built over the theatres of Cartagena (fig. 2) and *Heraclea Lyncestis*.

Nevertheless, despite its appearance as a humble area (pl. 1), considering the material recovered inside the rooms, we can state that the Byzantine period shows clear signs of revitalisation and intense activity in the 6th and 7th centuries. Thus, the recent discoveries in Cartagena, currently in the phase of global comprehension, plus the epigraphic and historical data, add to the idea of the full integration of the city into the commercial and cultural currents of the 6th and 7th centuries (Vizcaíno, f.c. 1).

Figure 2. Byzantine-Age quarter built over the Roman Theatre of Cartagena. We can see the rooms in which lamellar armour and avar arrowheads were recovered (Archivo de la Fundación Teatro Romano de Cartagena).

Carthago Spartaria maintained an outstanding dynamism which ended in 623/625 when King Suintila's Visigothic troops destroyed the city. This chapter of the History is recorded by Saint Isidore (*Etym.*XV, I, 67), who describes the heavy destruction of the city, which can also be seen through the archeological remains at the quarter over the Roman theatre (Ramallo *et alii,* 1997). Trousseous made an appearance in ashes and from that moment on we do not have much data until Islamic times.

Precisely, the lamellar armour was recovered in the level of the subsequent temporary abandonment level of the site, after the destruction atributed to the Visigothic troops *circa* 625. Therefore, this important find is dated in the first decades of the seventh century. We reached this conclusion after studying the chronology of pottery recovered in the room (which is dated between 550 and 625), and, especially, the stratigraphic logic.

Plate 1. Byzantine-age quarter at the beginning of excavations (1995). We can see the structure B and the Room 9 in the lower left corner. (Archivo de la Fundación Teatro Romano de Cartagena).

THE LAMELLAR ARMOUR

The remains of the lamellar armour (CP 4325-904) were found inside the small quadrangular room 9 (pl. 2), which belongs to a bigger structure named «B» (pl. 3), built over the Augustan *ima cavea* and *orchestra.* This structure has two other rectangular rooms (10, 13) and a trapezoid room (12) organised opposite an open-air space arranged in an «L» shape (8, 14, 15). In this last area we found the usual fireplace, cesspools or pipework for drainage, but also there is a stone pavement, when the other rooms have only a ground pavement. In the same way, it is strange the presence of a stone circular base in the pavement of the room 10 (perhaps a grinder base?) or the abundant presence of lime inside room 12. In any case, the material recovered inside structure B is so normal in this quarter, and we think its character has also got to do with dwelling and storage, usual in this area so near to the ancient port, the true heart of the city, where the proliferation of pottery and various materials reflects the increase in consumption from the time of the Byzantine occupation.

The abandonment level of room 9 in which the lamellar armour was retrieved shows a collection of ware, characteristic of Byzantine presence[2], despite the presence of abundant residual forms. Thus, African red slip ware includes Forms 91 A or 99 datable after late fifth century or the beginning of the sixth century. Other datable materials include the widely

[2] *Vid*. Ramallo *et alii*, 1996 *et Idem*, 1997. In this article, we follow the tipology and chronology established by different authors: Hayes, 1972 and Tortorella, 1998 (African Red Slip Ware); Keay, 1984; Remolà, 2000 and Bonifay, 2004 (Amphorae); Laíz y Ruiz, 1988 and Murcia y Guillermo, 2003 (Coarse cooking Ware); Atlante, 1981 and Hayes, 1972 (African Lamps); Hayes, 1971, Berrocal, 1996, and Vizcaíno y Pérez, f.c. (Unguentaria).

Plate 2. The room 9, in which the lamellar armour was retrieved. (Archivo de la Fundación Teatro Romano de Cartagena).

Plate 3. Detail of the different rooms of structure B. We can see the room 9 in the left corner. (Archivo de la Fundación Teatro Romano de Cartagena).

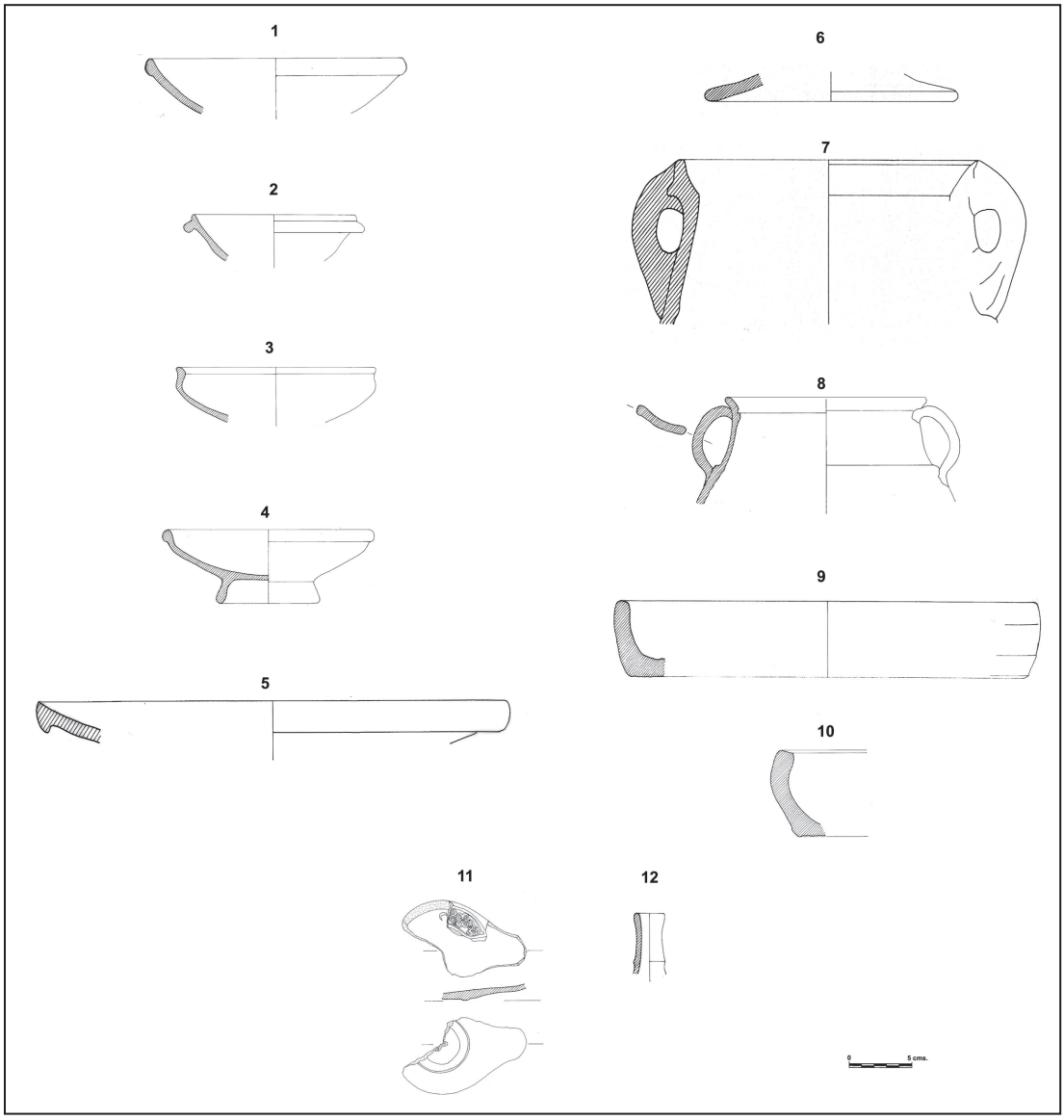

Figure 3. Pottery Recovered Inside Structure B. (Archivo de la Fundación Teatro Romano de Cartagena).

diffused Eastern Mediterranean amphora LRA 1/Keay 53 or, especially, the usual small-sized late antique containers called *spatheia*, which are found in great abundance in Byzantine settlements in the late 6th/7th centuries. This archeological layer also contained a lot of coarse cooking ceramics manufactured in the area of Cartagena during the late antique period (forms C. 1.1, C. 1.2, C. 3.2, C. 4, C. 10, C. 14). Besides, we must consider the materials retrieved in structure B, inside the near rooms, in different destruction (3649, 4313, 3648) or abandonment levels (4631, 4630), or also layers inside a pit (3654, 3656), where we can document the latest forms of African red slip ware, as the Hayes bowls 99 B/C (CP 3649-127-5, fig. 3.1), 91 D (CP 3654-127-4, fig. 3.2) and 100 (CP 3654-127-5, fig. 3.3), the Hayes footed-dish 101 (CP 3654-127-1, fig. 3.4), or the Hayes large plate 106 (CP 3649-127-4, fig. 3.5), all dated

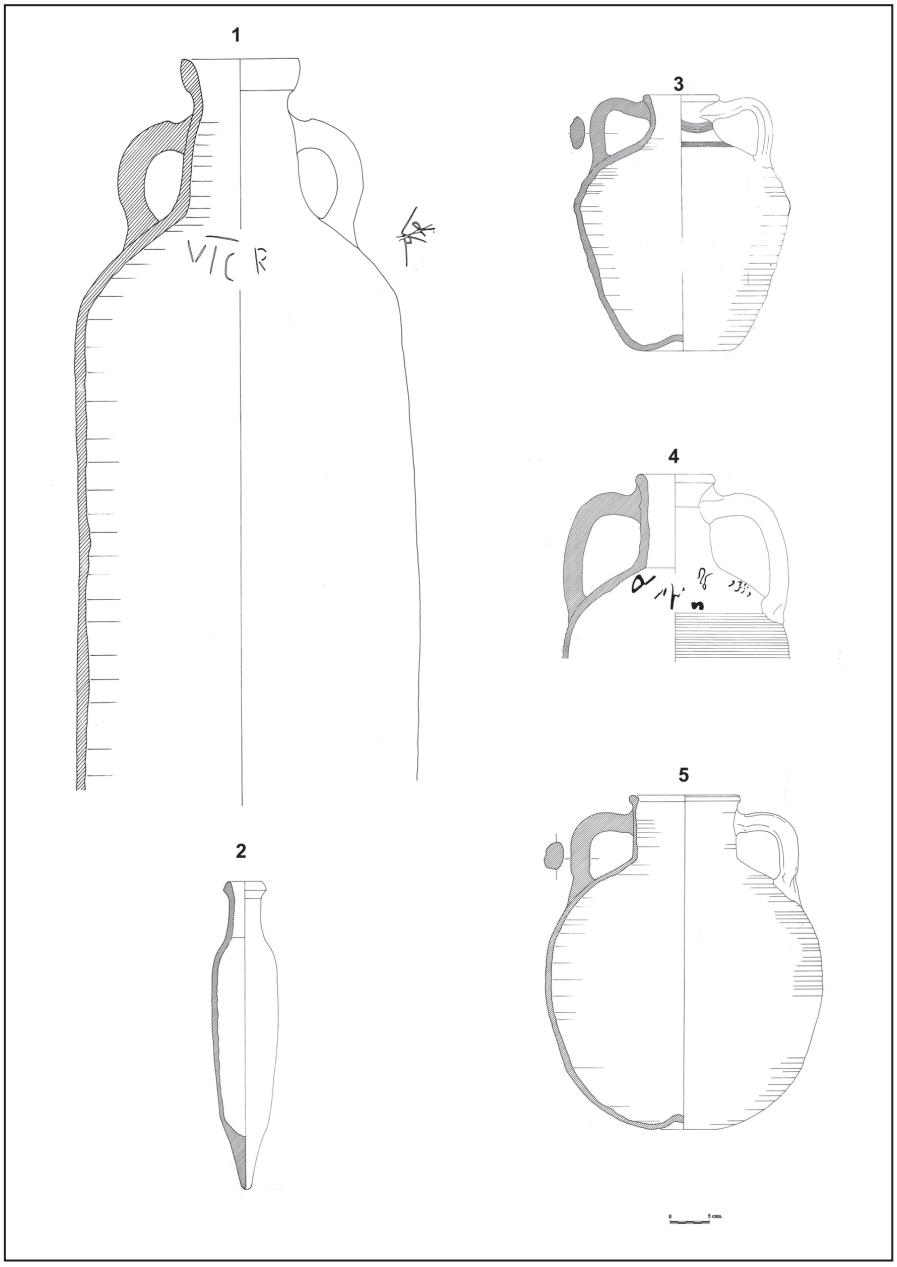

Figure 4. Amphorae Recovered Inside Structure B. (Archivo de la Fundación Teatro Romano de Cartagena).

between the second half of the sixth century and the first decades of the 7th. In the same way, the chronology is reinforced by other evidence. Thus, there are amphorae such as the Keay type LXXIX/RE-0314b (CP 4630-259-1), LRA 1/Keay LIII (CP 3654-256-1, fig. 4.4), Keay LXI (CP 3648-157-4, fig. 4.1), *spateion* Bonifay 33 D (CP 4313-148-1, fig. 4.2) or a African container similar to the globular type with a convex base (CP 3649-157-4, fig. 4.5), forms datable in the 7th century, a period in which, we can also retrieve local amphora similar to oriental types (CP 3648-159-1, fig. 4.3). Other characteristic forms are the African lamp Atlante XA1a/

Hayes IIB (CP 3656-146-1, fig. 3.11) or a Late Roman Unguentarium (CP 4313-178-1, fig. 3.12). We can also find the late antique coarse cooking ware manufactured in Cartagena (fig. 3.6,7,9,10), and an unusual form in Cartagena, an Aegean coarse ware pot (CP 3654-184-11, fig. 3.8) which has close parallels with a pot retrieved in Marseille and dated seventh century (Murcia and Muñoz, 2003: 182, pl. 8.64).

The lamellar armour was precariously preserved (Vizcaíno, 2005c). It was possible to recover around 114 fragments of iron plates (pl. 4), some damaged by corrosion, which have not been completely assembled as armour, only some rows. We must consider that an armour has

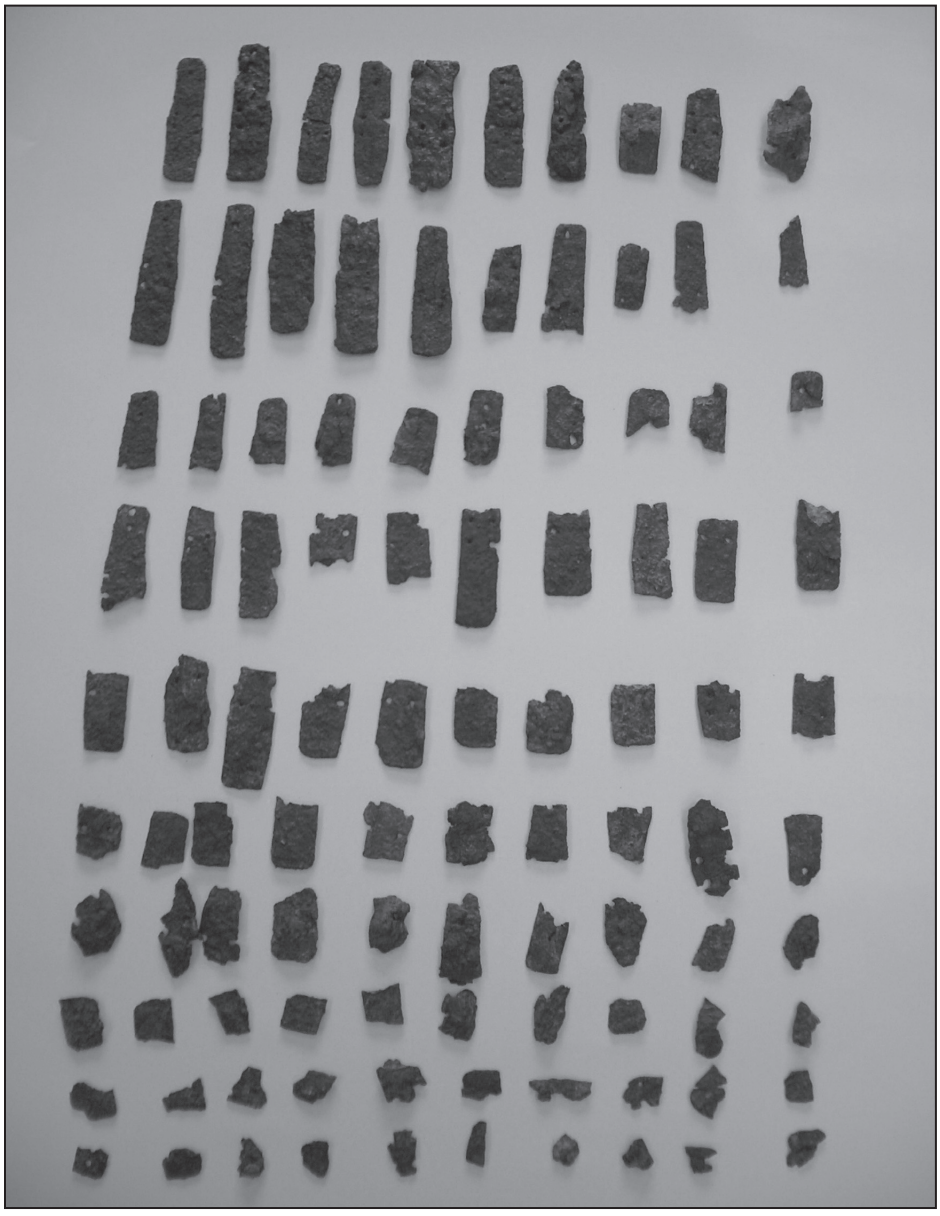

Plate 4. Fragments of lamellar armour.

more than five hundred lamellae arranged in thirty of horizontal rows, whose weight is more than 16 kg (Bugarski, 2005: 161-166, 172).

The lamellar armour, of Oriental origin (Russel, 2002; Bugarski, 2005: 172-174), continues until the final years of the 6th and the beginning of the 7th century, when, despite the striking absence of any mention of this type of armour in Prokopios and the *Strategikon* attributed to Maurice, it was introduced in the Byzantine army and among Germans and Avars, as a result of changes in warfare techniques, where the archer's role in the initial stages of the battle was of utmost importance. From this moment onwards, it will for centuries form part of the Byzantine army, as of other soldiers, although the first mention of its use is include later, in the *Taktika* of Emperor Leo VI (Bugarski, 2005: 171-172, 174; Dawson, 2007: 6; Vizcaíno and Sancho, f.c.).

The lamellar armour is similar to the Roman *lorica squamata* or scale armor (Southern and Dixon, 1996: 97-98), but with constructional and functional differences. This is because in this last-mentioned type, the plates are shorter and slightly narrower than the *lamellae* from the 6th/7th century, or, normally, they are much more frequently made of bronze and not iron as the lamellar plates. At the moment, although not everyone agrees with this (Parani, 2003: 104; Bivar, 1972: 273), modern authors think the scale armor is very much more flexible than any form of lamellar.

Lamellae discovered at Cartagena (pl. 5, fig. 5) were modeled as rectangular plates whose height is 6/7 cm and width 2 cm, a little shorter but also wider than *lamellae* of the better-preserved armour from the Early Byzantine Svetinja (Bugarski, 2005: 162). They all have

Plate 5. Detail of some lamellae.

rounded corners, most probably to reduce the sharpness of their edges to prevent damage to leather straps, here not conserved. As opposed to other finds, none of those recovered have concave notches in the middle of a longitudinal side, whose purpose should be related to the desired flexibility of the rows. In any case, some lamellar armours (such as the ones from Svetinja mentioned above) have both types, with and without notching, perhaps for functional reasons. It is not possible to determinate the number of each one or to establish for which part of the armour they have been used (Bugarski, 2005: 163, fig. 2).

Nevertheless, these lamellae show another common feature, all of them are perforated. The perforations are of small diameter, and normally, as we can see in the complete plates, there are six of them, arranged in pairs, one pair along the top, and two pairs in the middle of the longitudinal sides. Only our type B has seven perforations, with one of them along the bottom edge. Those holes were used to link the *lamellae* to each other in overlapping horizontal rows. That may be the reason why some of the holes are broken, due to the pressure of the thongs used in sewing.

In any case, it should be noted that our plates are not perforated in the same way as others, with different number of perforations or a different lay-out. Thus, for example, the *lamellae* from Svetinja in some cases have as many as ten holes. In the case of one of them, it is set out in the form of a triangle (Bugarski, 2005: fig. 2).

Finally, the weight of each *lamella* is different: the smallest is around 5,50 gr, but the biggest is around 10,50 gr.

In fact, despite the homogeneous appearance, six types of *lamellae* are identified (fig. 5), but the differences are very small, involving only their shape, thickness or size. Therefore, on the whole, the plates have a wider upper edge (type A), but other plates are also fusiform (B). Sometimes they are rectangular (C) or have a sharp and not completely rounded upper edge (D). In type C, in which the thickness or the weigh are a little bigger, such as the *lamellae* from the Early Byzantine context of *Crypta Balbi* (Ricci, 2001: 400, II.4.764-777), two variants are also identified, one smaller, of height 5,9 cm and the other bigger one (incomplete), is more than 6,5 cm high. Perhaps, the type showing the biggest difference is type B, because it has seven and not six holes. Moreover there are some folded plates (type E) and there are also other differences (F).

At the moment, we cannot establish for which part of the armour they had been used, because modern authors can only conclude with certainty that lamellae of smaller size were arranged in the armour's shoulder section, due to the more intensive movements of that part of the soldier's body (Bugarski, 2005: 163-164). Moreover, concerning the original appearance of Early Byzantine lamellar armour, these authors assume that the plates were arranged to overlap by circa one third of the width, corresponding to the holes (around 60% of each lamella was visible while the remaining 40% was covered), thus creating horizontal rows of approximately thirty of overlapping *lamellae* (Bugarski, 2005: 165-166).

The lamellar armour from the Early Byzantine quarter at Cartagena presents close analogies among other Early Byzantine, Germanic or Avar finds. Thus, this type is encountered in Early Byzantine settlements, especially in the Balkans, such as finds dated to the 6th century or the beginning of the 7th in Caricin Grad (Bavant and Ivanisevic, 2003: 73) or Svetinja (Bugarski, 2005). In the same way, a similar lamellar armour has been retrieved in the already-mentioned Early Byzantine context of *Crypta Balbi* (Rome), dated in the 7th century (Ricci, 2001: 400, II.4.764-777). Obviously, there are differences between these finds, such as the size. Thus, for example, some *lamellae* from Niederstotzingen are longer, measuring 11 cm (Paulsen, 1967: 127, taf. 21).

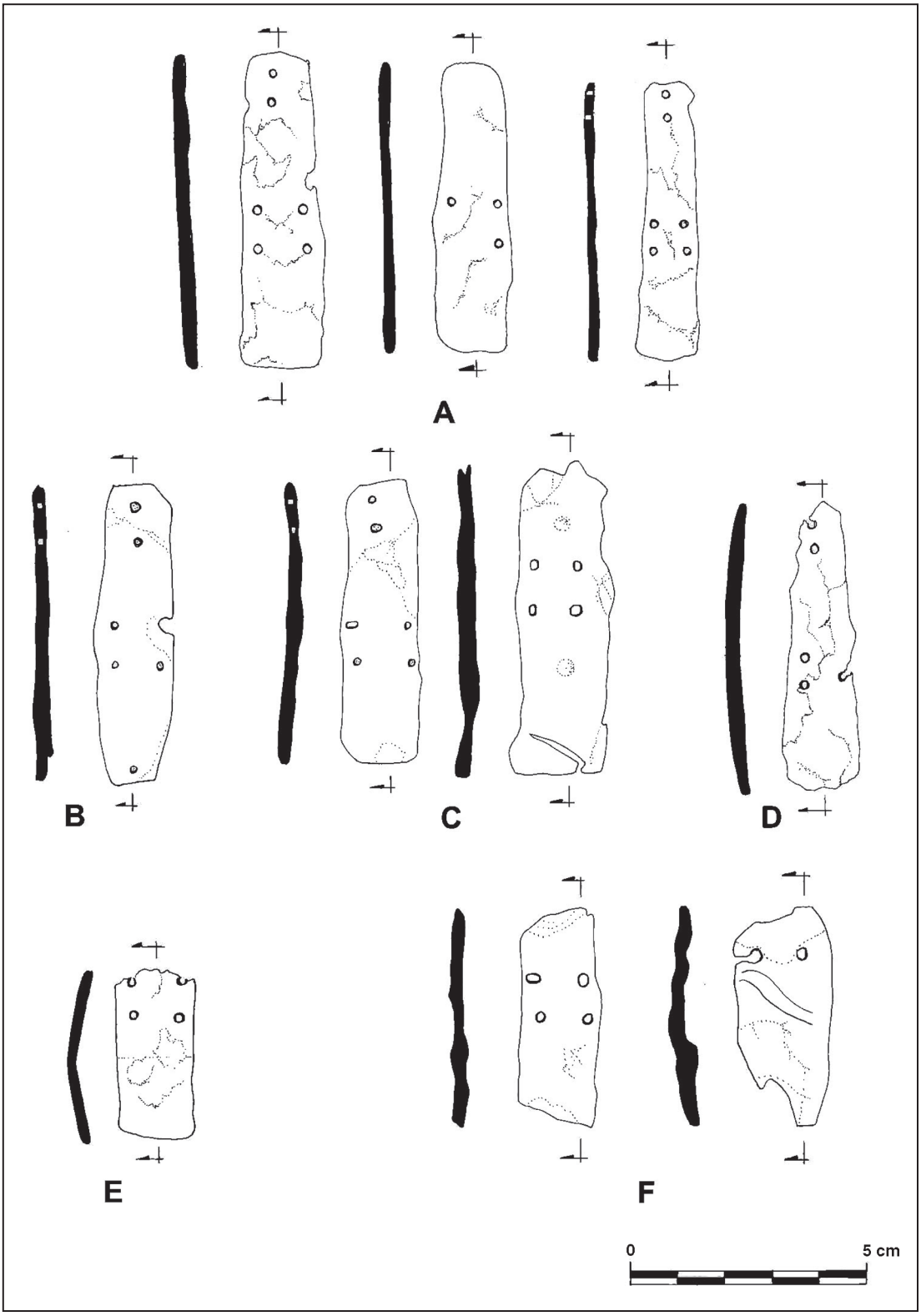

Figure 5. Lamellar plates retrieved in Cartagena. Draws: Soledad Pérez Cuadrado.

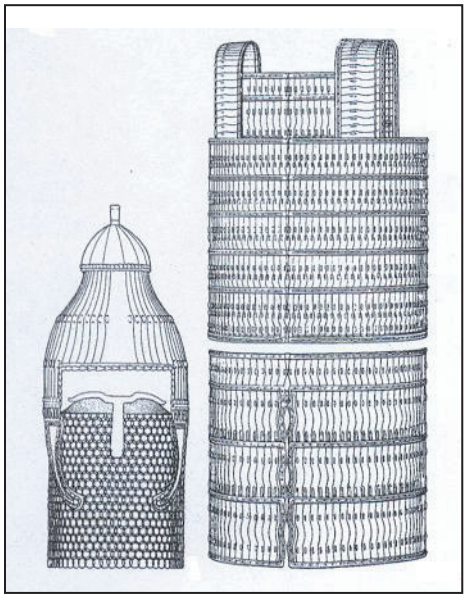

Figure 6. Reconstruction of helm («Spangenfederhelm») and lamellar armour from Niederstotzingen, Baden-Württemberg (Paulsen, 1967).

As we have mentioned, the lamellar armour is not present only in Byzantine contexts. In fact, according to some authors, its widespread use, as stirrups or horse armour was copied from the Avars. Nevertheless, we must conclude a generic eastern origin. This is another example of military equipment the Byzantines took over from peoples in the East with whom they had come in contact. Another case of the Barbarian influence is, for example, the use of the «Gothic» boots, which is noted by the *Strategikon* (Haldon, 1999: 129-134).

Thus, we must remember the finds from the necropoles of the Gepids, such as Szentes-Berekhát; from Alamannian territory, where the most representative find is from the Schretzheim necropolis, and also, the Lombardian or Avar territory (Nicolle, 1997: 68-70; Bugarski, 2005: 168-171). In fact, this type of armour became increasingly popular during the 6th century (Macdowal, 1996: 60-62), perhaps because it was probably easier to make than others. Perhaps also, it may well have been much more common than is often supposed. Therefore, besides the archeological remains, there are abundant iconographic data, such as the Isola Rizzi dish (Hallsall, 2003: 169). Both allow us to make a reconstruction (fig. 6). In any case, other modern authors think that lamellar armours were not used widely (Haldon, 1999: 129-134). We mustn't forget that the lamellar armour seems to have been used only by officers and some heavy cavalrymen, not infantrymen (MacDowal, 1994: 59; Ravegnani, 2004 and 2007).

Among these armours, the closest parallel is from the Early Byzantine settlement of Jelica (Milinkovic, 2001: plate 15.2), which doesn't have concave notches, but has the same shape or number and distribution of perforations.

On the other hand, of no lesser interest is the finding of two trilateral «Avar» arrowheads (Vizcaíno, 2005c) in the Byzantine-age quarter of Cartagena. One of them (CP 4720-904-1) was recovered inside the preparation of the third paving in room 13, in front of room 9, where the lamellar armour was recorded together with abundant African Red Slipe Ware forms (Hayes 80B/99, 91, 99, 101, 104 y 107), African (Keay XXVI y LXI) or Eastern amphorae (LRA 1/Keay LIII and LRA 2/Keay LXV), and a complete sample of the late antique coarse cookingware manufactured in Cartagena (C. 1.4, 3.1, 3.2, 3.3, 5, 11, 14, or a jar). The other arrowhead (CP 6509-904-1) was located inside a rubbish dump over the old *porticus post scaenam*, which includes African red slip ware (Hayes 91 A/B, C y D, 99B/C, 99C, 105 y 109) or African (Keay XXVI/spatheia), and Eastern amphora (LRA 1/Keay LIII, LRA 3/Keay LIV bis and LRA 2/Keay LXV). These finds have close parallels among contemporary known material from Byzantine sites such as *Crypta Balbi* (Ricci, 2001: 398-399) or the *castrum* of San Antonino di Perti (De Vingo *et alii,* 2001).

Besides, there is a bone piece which we think could be possibly identified with a bone plate or lath, possibly belonging to a composite bow, since it also has parallels in Early Byzantine contexts (Vizcaíno, 2005c).

In fact, the widespread use of these materials is not unusual, because, although there are strict regulations on the shipment and possesion of weapons from the time of Justinian's legislation onwards (novel 85), we suspect that there was a relatively wide private production in existence (Haldon, 1990: 242).

CONCLUSIONS

The Early Byzantine lamellar armour retrieved in Cartagena can be dated between the second half of the 6th century and the first decades of the 7th (especially this latter), thanks to the pottery, the stratigraphic logic and the abundant close parallels. Thus, it becomes an obligatory point of reference in our knowledge of Early Byzantine military equipment in Spain, and, widely about the presence of the *milites Romani* in this territory, especially given the paucity of excavations carried out in Byzantine Spain (Ramallo y Vizcaíno, 2002; Bernal, 2004).

On the other hand, another trait we can highlight is the fact that the localisation of the lamellar armour or the Avar arrowheads doesn't necessarily imply the military character of the settlement; however a series of indicators, evaluated as a whole, allow us define this quarter as a storage and residential place related with the Byzantine garrison. In fact, while it is true that the remains make up a complex which is independent of the medieval Castle of La Concepción, we cannot deny that between the two there is a relationship which is so intimate that one should treat them as one site in the Byzantine period (Ramallo y Vizcaíno, 2007).

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