

Livorno, 26-28 Marzo 2009

## Congresso Internazionale

Contribution for the Atti or the Congress at Livorno. Porti antichi e retroteria produttivi

## Cerro da Vila (Portugal)

The Port of a Center of Production of Dye and Garum in the Roman Province Lusitania

The south coast of the Roman province Lusitania, i.e. the Algarve coast of today's Portugal, has been in contact with the Mediterranean world from ancient times through the Gulf of Cadiz and the Strait of Gibraltar<sup>1</sup>. The products of agriculture, which was practiced extensively during the Roman Empire, and those of seafood processing were demonstrably traded through the sea route to the whole western Roman Empire<sup>2</sup>. Having hitherto focused mainly on the transport containers – the amphorae – and the related potter's workshops, in recent years the focus of the archaeological research has also been on that of the sites at which the overproduction was stored, the rural villas and aglomerciónes (vici)<sup>9</sup>. Due to the continuous shifting of the coastline of the Spanish Atlantic, the signs of port and load installations are rarely seen. Of course, the use of the lower courses of large rivers for anchorage, such as the Tejo between Santarem (Scallabis) and Lisbon (Olisipo Iulia), the Sado between Alcacer do Sal (Salacia) and Setubal (Caetobriga) and the Arade near Portimão (Portus Hannibalis) is documented already from the Phoenician-Punic period at the latest<sup>4</sup>. Accordingly, the lower courses of such rivers also stand out because of the high

<sup>&</sup>lt;sup>1</sup> Special gratitude is dedicated to Maria Anastasiadou and Annemarie Catania for their help with the translation.

<sup>&</sup>lt;sup>2</sup> Étienne – Mayet 2000–2004; Teichner – Pons 2008.

<sup>&</sup>lt;sup>3</sup> Alarcão – Étienne – Mayet 1990; Lagostena 2001; Teichner 2008.

<sup>&</sup>lt;sup>4</sup> Arruda 1999/2000. – The information for the Roman harbor of Lisbon in Blot 2003, 240 and Mantas 2003, 25 is to be evaluated as an *ex silencio* speculation.

up. As a result of the project 'Cidade Lacustre' plans are afoot to expand the already existing holiday resort of Vilamoura by an area of 1.680.00 m². To this end, a number of construction projects are planned including the construction of a second marina in the area adjacent to the ruins. For that reason, in the years 2007–2008, an extensive rescue excavation was carried out in this area on behalf of the Estate/Touristic Concern Lusort and following the specifications of the Portuguese Service for the Conservation of Archaeological Monuments (IGESPAR I.P.).

In the first campaign of the summer 2007, five trial trenches were opened in the relevant area with the objective of obtaining a general idea of the extent to which further archaeological structures should be anticipated and mainly of whether the ancient frontier of the settlement of Cerro da Vila could already be detected. The six meters broad trial trenches, which were between 50 and 100 m long, were directed from east to west. In the western offshoots and among modern debris filling we came upon a homogenous sediment of a fluvial character. This way, by the end of this campaign, it was possible through concrete statigraphical observations to verify the assumption that the Roman settlement was founded in a branch of the stream course of the Riberia de Quarteira, which extended into the slowly silting up estuary.

Extensive geophysical prospecting during the winter 2007/2008 produced the first indications of concrete building structures in the former riverbank, on the outskirts of the already known settlement area (fig. 2). In the following summer, an area of approximately five hectares was thereupon archaeologically investigated. Generally, the first Roman structures and architectural elements were revealed as soon as the modern layer was removed by mechanical means. The subsequently manually excavated structural elements, which are of special interest to the question of the Cerro da Vila's ancient access to the sea (harbor), and which enrich an understanding of the site, particularly with respect to its economic functions, are concentrated in the southern half of the excavation area.

The excavated area as a whole has a high building density, but only rarely do buildings overlap. To the east, the remains of a large *fabrica* were excavated (fig. 3, up). Upstream to the south of this stands a **portico** (fig. 3, middle). To the west of the portico there is a complex (fig. 3, foreground) which can probably be interpreted as a **nymphaeum**. The orientation and height of the individual features suggest a natural subsidence of the terrain to the west towards the silted up river arm. These indications on the palaeo-relief were supplemented by systematic geological large-area drillings in the area of the riverbank and the lagoon territory. Directly on the riverbank, a stone setting was excavated which has been interpreted as a **quay wall** (fig. 4). To the west of the wall, it was possible to identify more than one sediment layer, which sweeps directly past the bank reinforcement; it was

boats with a small draft. Furthermore, the ramp that was added later, with a rather narrow breadth of five meters, indicates a loading and unloading operation of smaller proportion.

In addition to the already known buildings on the hill of Cerro da Vila, which are indentified by their workstations as *caetariae* for the production of dye and *garum* – indecated by H–J and L–M (fig. 2), there was another large building used for trade purposes (*fabrica*) loacated within the range of the rescue excavation in the area of the bank parallel to the quay wall. This building had a rectangular ground surface with an area of nearly 480 m² with an east-west oriented long axis. The division of the building's interior into three equal parts is discernible. The middle section can be seen as a corridor. The two side-wings on the east and the west were divided into smaller rooms according to a nearly symmetrical plan. These could be reached through the corridor.

The course of the walls themselves can only be determined through the remains of the foundation. In one part of the smaller rooms parts of the tile floor remain, whereas the floor in the corners of the room was intentionally left open. What was found there instead was half of an amphora embedded in the ground, which very probably is related to the operational procedures in the building. For a simple storage space one would expect several well-preserved storage vessels, but this type of half-amphora is known rather as a collection-basin in the floor areas of workrooms, perhaps for the production of  $garum^{10}$ . Additionally, a square fountain that would have provided an indoor water supply was found inside the southernmost room in the west section of the building. One fact demonstrates the complexity of the geological and hydrographic relationships at the edge of the former estuary; although the river is influenced by the sea from the tidal range, only few meters east of the river there is a fountain with fresh-water levels.

A portico (columned hall) was added to the southern side of the *fabrica* from the mid-Empire during a later building period. From the surviving remains of the brick columns, which rest on small fundaments, one can reconstruct a three-aisled structure that contained at least five span along the east-west axis. The portico, however, does not extend to the full length of the southern façade of the *fabrica*, although this may have to do with the state of preservation of the structure. The columns themselves were constructed from semi-circular bricks, with the exterior spread with mortar. Bricks of differing sizes were put together for the square bases with a side length of 44 cm.

With the addition of this portico, the area south of the *fabrica* was newly designed. In the first phase, the building's main alignment remained ambiguous, but with the construction of the portico, the building's southward orientation was established.

<sup>&</sup>lt;sup>10</sup> Cf. Teichner 2008, 559.

(Sevilla)<sup>12</sup>, *Oiasso* (Irún)<sup>13</sup>, Cano de Sancti Petri (Cádiz)<sup>14</sup> or *Carteira* (San Roque)<sup>15</sup> – the concrete feature of a stony quay mole can most likely be compared with the spectacular feature from the provincial capital *Tarraco* (Tarragona). So, there was not a single *fabrica* in the bank area, but rather several buildings, which were interpreted as *horrea*, arranged on the bankline<sup>16</sup>.

## Bibliography:

Adserias - Pociña - Remolà 2000

M. Adserias Sans + C. A. Pociña López - J. A. Remolà Vallverdú, L' hàbitat suburbà portuari de l'antiga Tàrraco. Excvacions al sector afectat pel PERI 2 (Jaume I - Tabacalera) in: J. Ruiz de Arbulo (ed.), Tàrraco 99. Arqueologia d'una capital provincial romana. Actes de les "jornades d'arqueologia sobre intervencions a la ciutat antiga i al seu territori (1993-1999). Doc. Arqu. Cláss. 3 (Tarragona 2000) 137–154.

Alarcão - Étienne - Mayet 1990

J. de Alarcão R. Étienne - F. Mayet, Les villas romaines de São Cucufate (Portugal) (Paris 1990).

Arruda 1999/2000

A. M. Arruda, Los Fenicios en Portugal. Fenícios y mundo indígena en el centro y sur de Portugal (siglos VIII–VI a.C.), Cuad. Arqu. Mediterránea 5/6 (Barcelona 1999/2000).

Bernal et al. 2005

D. Bernal – A. M. Sáez – R. Montero – J. J. Díaz – A. Sáez – D. Moreno – E. Tobosco, Instalaciones fluviomarítimas de drenaje con ánforas romanas: A propósito del embarcadero fluvio del Caño de Sancti Petri (San Fernando, Cádiz), SPAL 14, 2005, 179–230.

Blánquez et al. 2005

J. Blánquez – D. Bernal – L. Roldán – J. J. Díaz – F. Prados, Primeiros datos acerca de las posibles instalaciones portuarias altoimperiales en Carteia y la

<sup>&</sup>lt;sup>12</sup> Urteaga 2001; 2003.

<sup>&</sup>lt;sup>13</sup> Ordóñez 2003, 66.

<sup>14</sup> Bernal et al. 2005.

<sup>15</sup> Blánquez et al. 2005.

<sup>16</sup> Remolà – Vilaseca 1997/98; Adserias – Pociña – Remolà 2000; Pociña – Remolà 2001.

in: Akten des Kollquiums Vesprem 2004. Balácai Közlemények 9 (Vesprem 2005) 117–132.

Teichner 2005c

F. Teichner, Arquitectura doméstica romana no litoral algarvio: Cerro da Vila (Quarteira), Estudos IPPAR 7, 2005, 206–211.

Teichner 2006a

F. Teichner, "De lo romano a lo árabe". La transición del sur de la provincia de Lusitania al Gharb al-Andalus. Nuevas investigaciones en los yacimientos de Milreu y Cerro da Vila, Anejos Archivo Español Arqu. 38, 2006, 207–220.

Teichner 2006b

F. Teichner, Cerro da Vila: paleo-estuário, aglomeração secundária e centro de transformação de recursos marítimos, in: Homenagem a F. Mayet, Setúbal Arqu. 13 (Setúbal 2006) 69-82.

Teichner 2007

F. Teichner, Casais Velho (Cascais), Cerro da Vila (Quarteira) y Torreblanca del Sol (Fuengirola): ¿Factorias de transformación de salsas y salazones de pescado o de tintes?, in: Actas del Congreso Internacional CETARIAE. Salsas y salazones de pescado en Occidente durante la Antigüedad. BAR Internat. Ser. 1686 (Ort 2007) 117–125.

Teichner 2008

F. Teichner, Zwischen Land und Meer – Entre tierra y mar. Studien zur Architektur und Wirtschaftsweise ländlicher Siedlungen im Süden der römischen Provinz Lusitanien. Stydia Lysitana 3 (Merida 2008)

Teichner, in preparation

F. Teichner, Beispiele ländlicher Besiedlung in den hispanischen Provinzen Roms - die "Nicht-Villen", in: Kolloquium Jena 2009 (in preparation).

Teichner - Pons 2008

F. Teichner – L. Pons Pujol, Roman amphora trade across the Straits of Gibraltar: An ancient "anti-economic practice"? Oxford Journal Arch. 27 (3) 2008, 303–314.

Teichner - Schierl 2006

F. Teichner – Th. Schierl, Cerro da Vila (Algarve, Portugal). Aldeia do mar na época islâmica, in: Al-Ândalus. Espaço de mudança; Homenagem a Juan Zozaya (Mertola 2006) 123–139.

## Text for the illustrations:



1. View from southeast to the silted up lagoon of Riberia de Quarteira (see in the middle), together with the Roman settlement Cerro da Vila (yellow point) and the marina of the holiday resort of Vilamoura (see below).

Marburg/Lahn



4. Overview of the excavated area, campaign in summer 2008. View to north. In front: columns of the portico, see left: remains of the Nymphaeum, in the middle: fabrica.

