



The Roman Ruins of Tróia were a large fish-salting complex built in the first half of the 1st century and continuously occupied up to the 6th century AD.

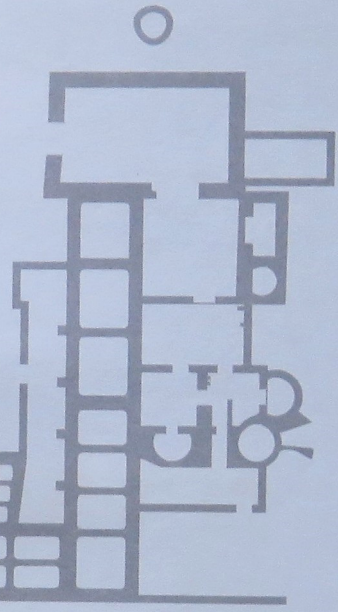
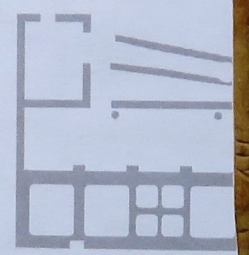
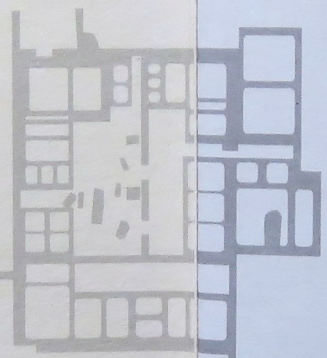
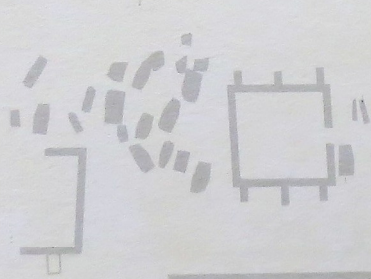
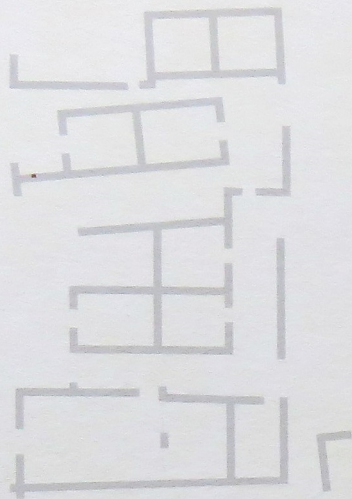
This complex became an urban-type settlement with many fish-salting factories of different dimensions but also houses, baths, cemeteries, a mausoleum and an early Christian basilica.



tróia roman ruins

visitors'
guide





**tróia
roman
ruins**
visitors' guide

The Roman Ruins of Tróia were a large fish-salting complex built in the first half of the 1st century and continuously occupied up to the 6th century AD.

It produced salted fish and fish sauces, including the famous *garum*. The products were stored in amphorae and shipped by sea to Rome and other provinces of the Empire.



troiaruinas



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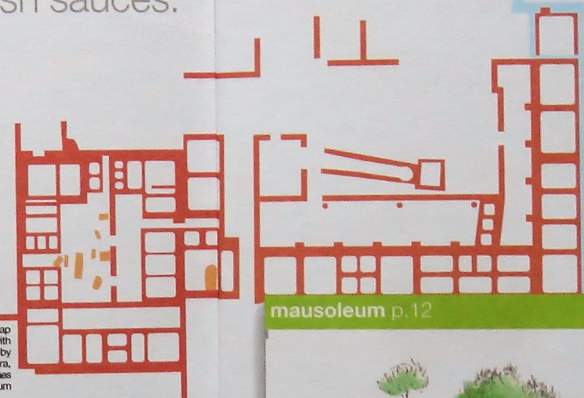
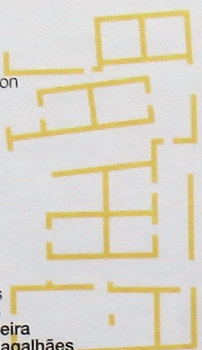
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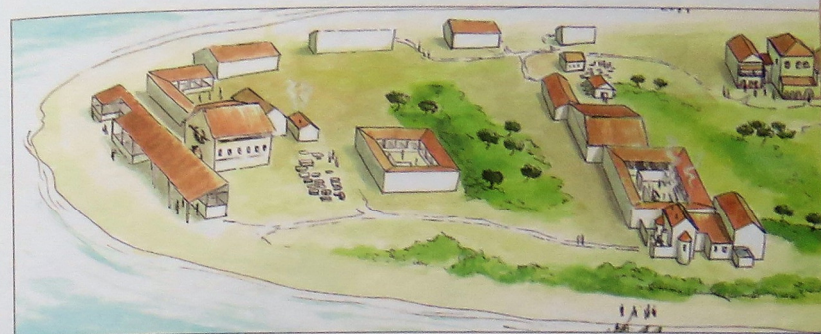
edition
July 2011

introduction

Welcome to the Roman ruins of Tróia, a Roman settlement occupied from the 1st to the 6th century AD and specialized in the production of salted fish and fish sauces.



N
K
schematic map
IGESPAR (2006) with
updates by
José Luis Madeira,
Ana Patrícia Magalhães
and Patrícia Brum



suggested reconstruction of the buildings excavated at the site.

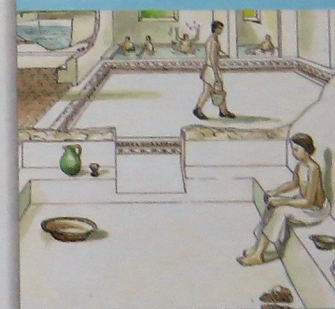
rua da princesa p.16



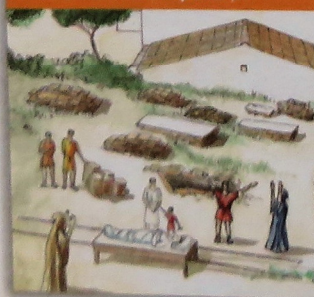
mausoleum p.12



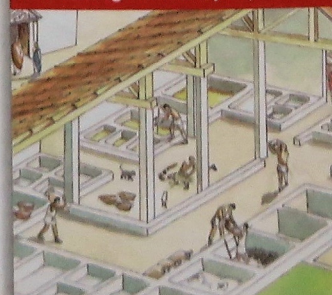
baths p.15



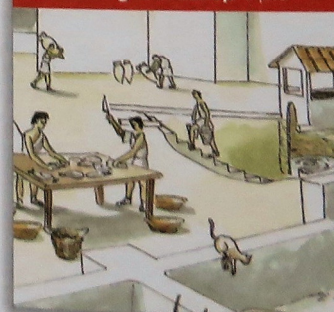
mausoleum necropolis p.14



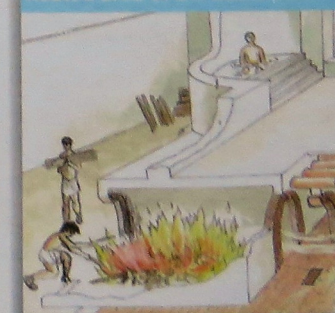
fish-salting workshop 2 p.10



fish-salting workshop 1 p.8



heated area of the baths p.20



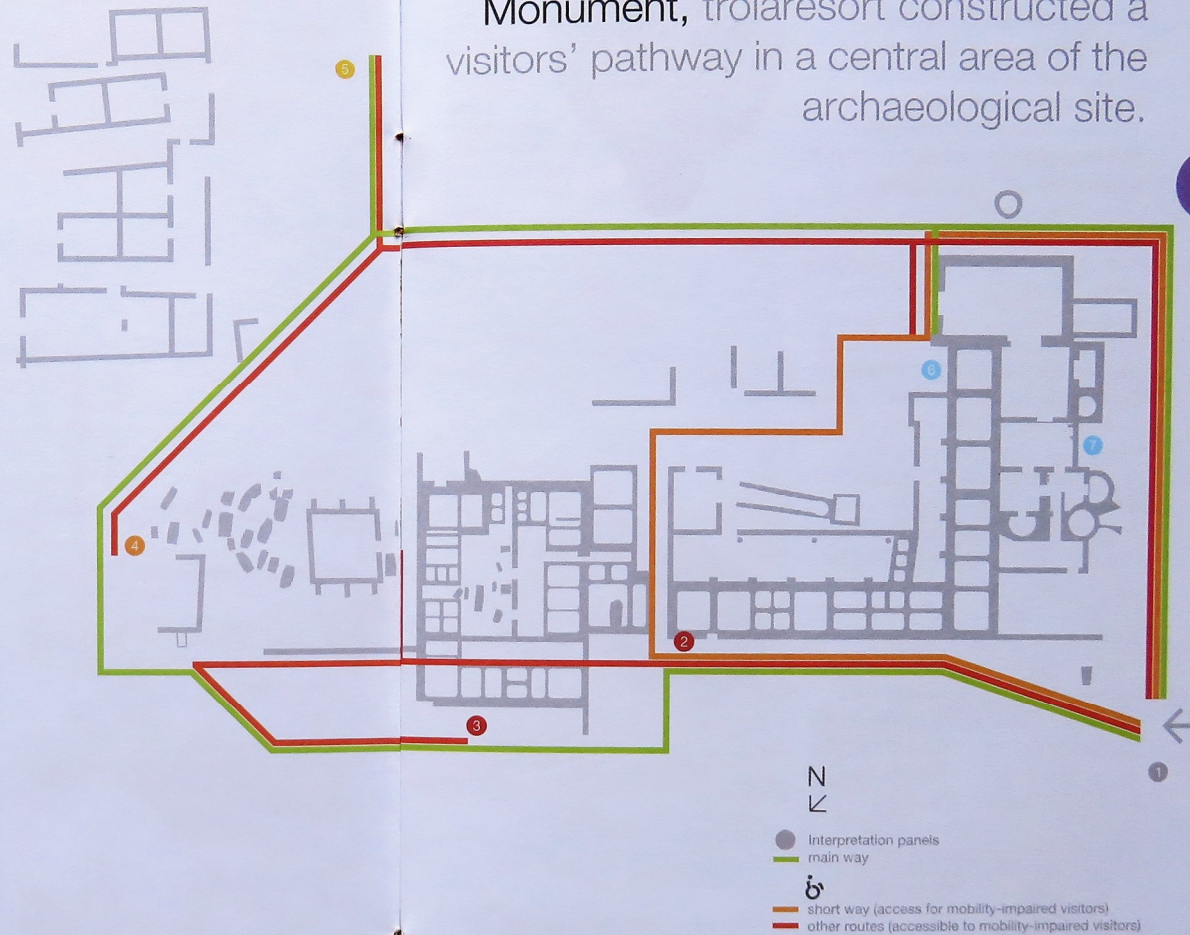
The new visitor walkways were set up in the ruins of Tróia along two of the largest workshops identified in this archaeological site, the baths, the mausoleum and its nearby necropolis, and the residential area of Rua da Princesa.

Other areas, no less important, like the *mensae* tombs necropolis and the early Christian basilica complex, will be prepared for presentation in a second phase, when the restoration of the surroundings will take place. The goal is to emphasize the importance of the largest fish-salting production center known in the Roman world. Among the things made here was *garum*, a fish sauce often mentioned by Latin writers that was used to salt and flavor a variety of dishes and foods. This sauce was produced on a large scale and exported from the site of Tróia. Known since the 16th century, the ruins of Tróia were mentioned by the Portuguese humanist André de Resende, and for many years were mistaken for the Roman city of *Caetobriga*, today identified with the city of Setúbal. The Portuguese Royal House took interest in these ruins and they soon became an attraction to scholars and antique collectors, as well as other interested visitors. For years it was believed that the settlement was abandoned in response to natural causes, but this is not supported by the archaeological evidence at the site. In 1910 the ruins were classified as a National Monument (decree of June 16th),



Photo by Miguel Correia

On the Centennial of the classification of the Ruins of Tróia as a National Monument, troiaresort constructed a visitors' pathway in a central area of the archaeological site.



"Seeing the interest His Majesty (King D. Carlos) shows in archaeology, I would take the liberty of recalling again the great convenience of ordering methodical and extensive explorations in Tróia. Who knows how many scientific treasures are hidden under the sand?"

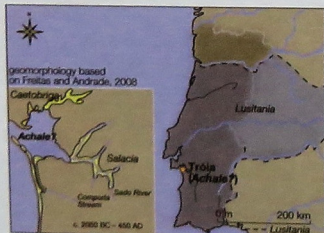
And perhaps by its study it would be possible to decide, once and for all, where was Caetobriga! In any event, our ancient history, still so imperfectly known, would certainly gain a shining light that would clarify it a bit."

José Leite de Vasconcelos, *O Archeologo Português*, vol. III, 1897

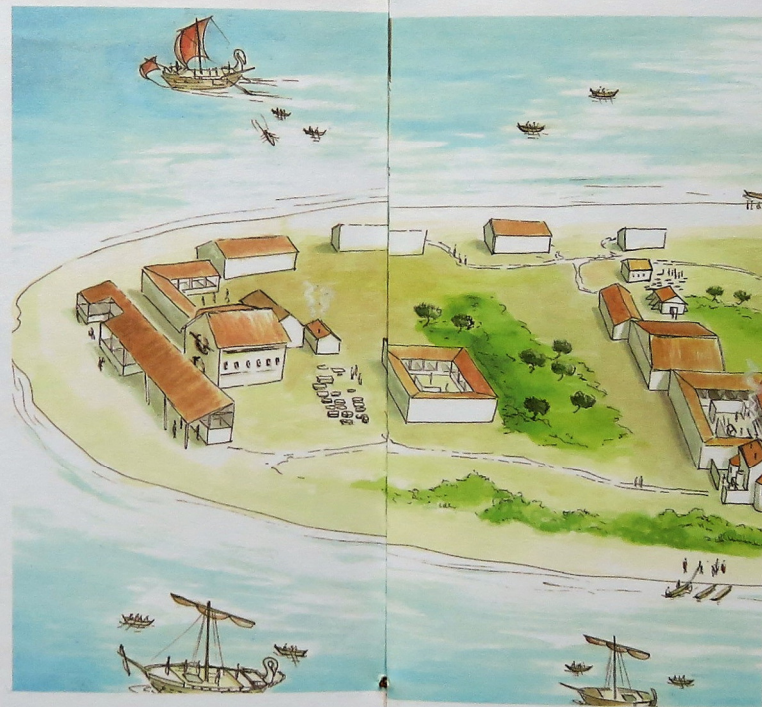
The roman ruins of Tróia were a large fish-salting complex that grew into an urban-type settlement. There is no secure indication yet that the settlement gained the administrative status of "city".

general framework

Profiting from the abundance of fish in the Atlantic Ocean and the outstanding salt production of the Sado river, salted fish and fish sauces were produced here, among which was the famous *garum*. The fish products were stored in amphorae and shipped by sea to Rome and other provinces of the Roman Empire. The fish-salting production that developed in Tróia implies a number of related economic activities: fishing in the mouth of the river and in the sea, the production of salt, the production of amphorae on the northern bank of the river, and the maritime transport of goods via the Atlantic and Mediterranean routes.



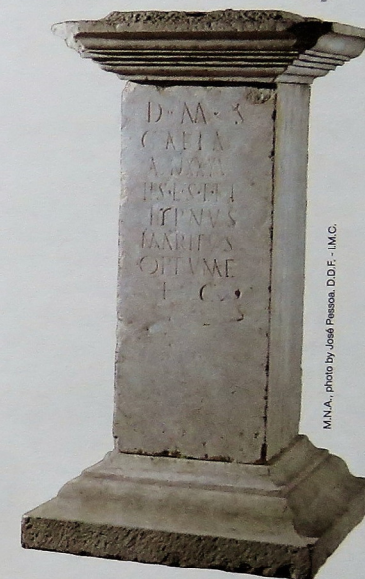
This settlement developed on a sand formation that in Roman times would have been an island, possibly the *Achale* island mentioned by the Latin writer Avienus in his book *Ora Maritima*. The settlement would have been on the Atlantic shoreline. It belonged to the Roman province of *Lusitania* and was located within the territory of the city of *Salacia* (Alcácer do Sal), across the river from the city of *Caetobriga* (Setúbal), with which it surely would have had a close connection.



Lamp representation of Helios, the sun god, a common figure in the cult of Mithra.

Museu Nacional de Arqueologia (M.N.A.), photo by José Pessoa, D.D.F. - I.M.C.

Due to the intense commercial contacts with other parts of the Roman Empire, the cult of Mithra was practiced in Tróia, and there are significant vestiges of the presence of a Christian community.



Galla tomb
Funerary monument with a dedication by *Hypnus* to his wife *Galla*, deceased at the age of 35, with the formula *D.M.S.* (consecrated to the Manes deities), typical of the Roman religion.



M.N.A., photo by José Pessoa, D.D.F. - I.M.C.

Cross Pattée
Wall painting which decorated an early Christian tomb found on the shore of the Sado river.

Sarcophagus frieze
Frieze that belonged to the lid of a sarcophagus, probably Italic, showing a banquet scene.

In the first phase (1st and 2nd centuries AD) workshop 1 was a single space with fish-salting tanks on its four sides and a large central patio with a well containing stairs. It had an estimated area of 1106 m². At the end of the 2nd or the beginning of the 3rd century AD, the production was interrupted and the roofs collapsed onto the empty fish-salting tanks.

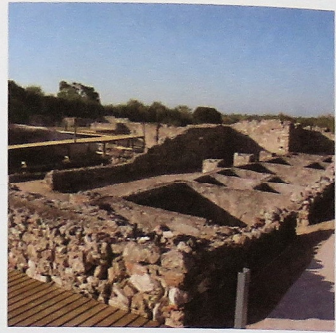
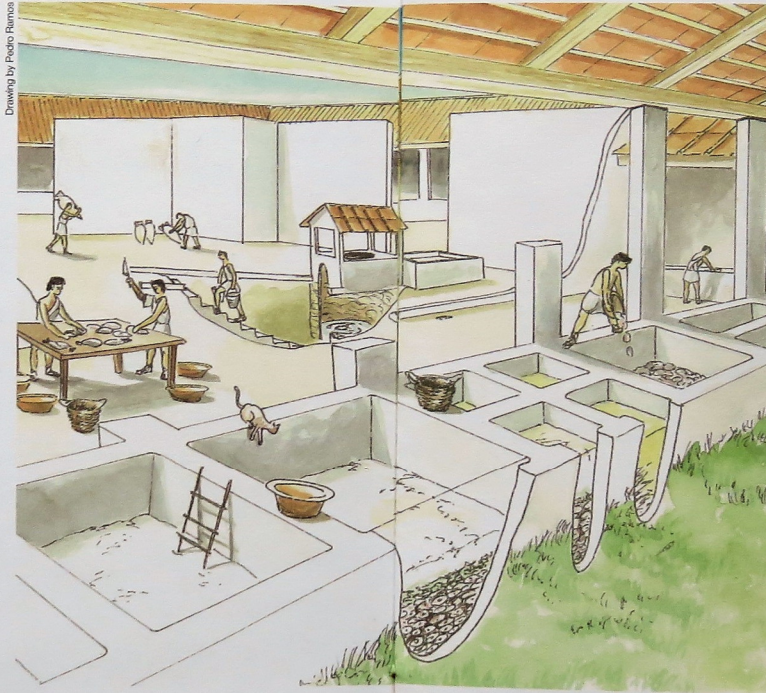


foto: IM&S, V&Z Pinto

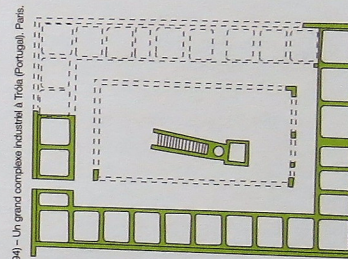
This discontinuance of activity might have been caused by a natural catastrophe, but the archaeological record has not revealed evidence of any such event. The temporary interruption of the production was probably caused by a severe economic crisis that prevented the normal flow of the products. In the 3rd century, the salted fish and fish sauces were again being produced, but the workshop had undergone a transformation. It was now divided into several smaller workshops by means of the construction of walls, which also divided the patio, each one maintaining access to the well. The fish-salting production lasted until the first half of the 5th century AD. A garbage dump then accumulated on the patio, indicating that people were still living nearby, but the fish-salting industry had ended. The nineteen fish-salting tanks excavated until now have a capacity of 465 m³, which would demand 13,500 amphorae of 32 liters to accommodate the entire production. It is believed that there are still eight fish-salting tanks remaining to uncover.



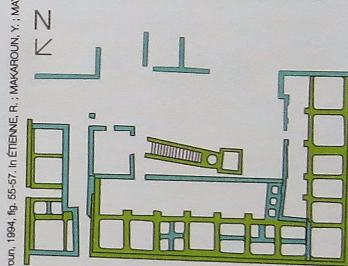
Drawing by Pedro Ramos

Even though it has not been fully excavated, workshop 1 is the largest workshop known in Tróia and one of the largest in the Roman world.

Main construction phases of workshop 1



1st phase Proposed plan of workshop 1 (1st and 2nd centuries AD)



last phase Final plan of workshop 1, remodeled, with walls dividing it into smaller workshops (3rd - 4th centuries AD)

Depois de fotografar as diversas fases de exploração do sítio, retirei os moedas de cobre: estão quase todas bem conservadas, são 1.612 (mil seiscentas e doze) e, desta do que me foi possível observar, datam do século III.

excerpt of a letter Arquivo Histórico do Museu Nacional de Arqueologia

Letter from 1961
Excerpt of a letter from M. Farinha dos Santos, the archaeologist who discovered a hoard of 1612 coins while excavating one of the workshop's fish-salting tanks.



Amphorae were vessels for transporting goods and were used to sell and export the salted fish and fish sauces produced in Tróia.

Well with stairs and reservoir in the middle of the patio of the workshop.



photo by IM&S, V&Z Pinto

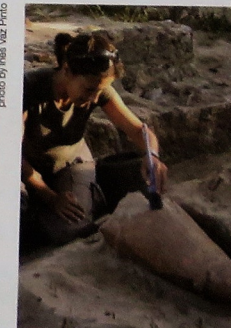


photo by IM&S, V&Z Pinto

One of the amphora burials of a child found in the sand layer that covered the garbage dump.

panel 3

Workshop 2 was also divided into two smaller workshops in the first half of the 3rd century AD: workshop 2A, in an L shape, which includes the northwest and southwest rows of fish-salting tanks; and workshop 2B, which included the northeast row and part of the southeast.

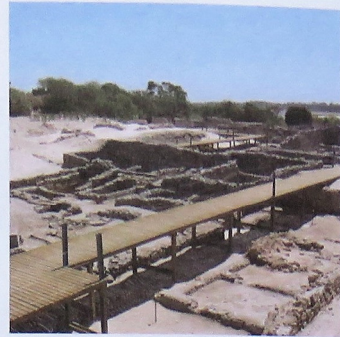


photo by Inês Vaz Pinto

fish-salting workshop 2 and mausoleum

Recent excavation of some of its tanks revealed that in the bottom of these tanks there was still a layer with many fish bones and cartilage from several fish, belonging to the last batch of fish-salting production that took place in that tank.

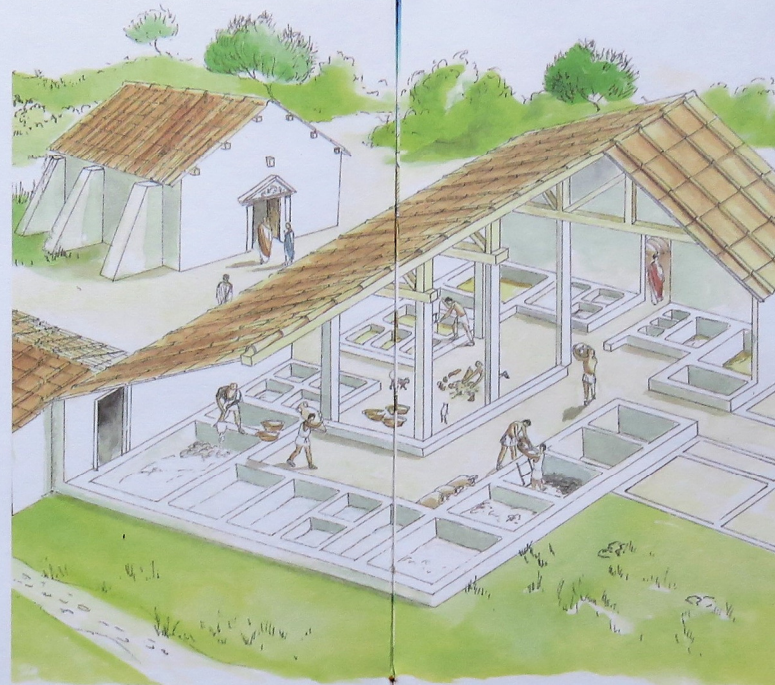
The most abundant fish was the sardine, showing that that was already a common catch, and was appreciated in the region.

After the abandonment of the fish-salting production in the first third of the 5th century AD, the tanks of workshop 2 were filled with garbage, and burials in graves of stone and brick construction were built in the patio area.



photo by Inês Vaz Pinto

In the bottom of some fish-salting tanks there was still residue of the last production, with many fish bones and cartilage from different species of fish.



drawing by Pedro Ramos

Workshop 2, with a total of 19 fish-salting tanks and an area of 343 m², was far smaller than workshop 1, but both belonged to the same fish-salting factory, and were connected by a corridor.

Gaming piece made of bone



photo by João Almeida

Excavation and cleaning of workshop 2 in 2007

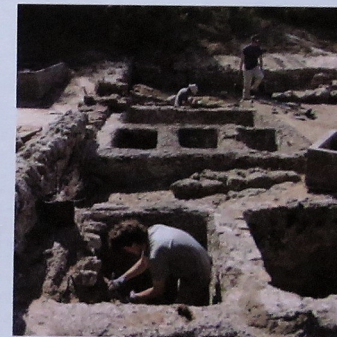
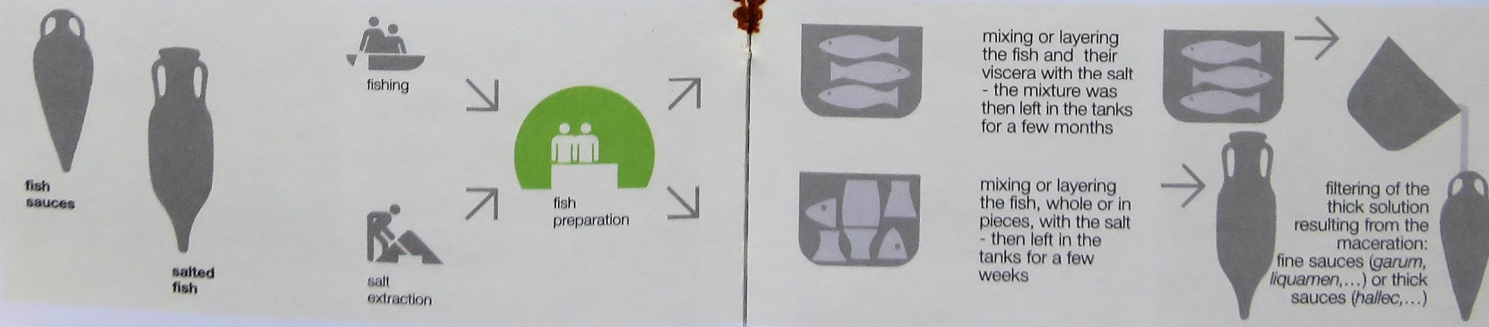


photo by Inês Vaz Pinto



panel 3

Lamp of Baetican origin (from Andalusia) found next to the mausoleum.



photo by João Almeida

The mausoleum was built over an old amphorae storehouse (today covered with sand), when the large southwest factory was divided into smaller workshops.

fish-salting workshop 2 and mausoleum

It probably belonged to the owner of workshop 2B, who built a new entrance to his workshop over a filled tank, just in front of the door of the mausoleum. The mausoleum reflects two different funerary rituals. Its walls have niches where urns would have been placed with the ashes of the deceased, according to the practice of incineration, typical in Rome in the first centuries of our era and common in Tróia until the beginning of the 3rd century AD. On the ground, tombs were built for burying corpses in graves. This new practice of inhumation, adopted in Tróia at the end of the 2nd century AD, emerged through the influence of oriental religions such as Mithraism or Christianity, both present in Tróia.

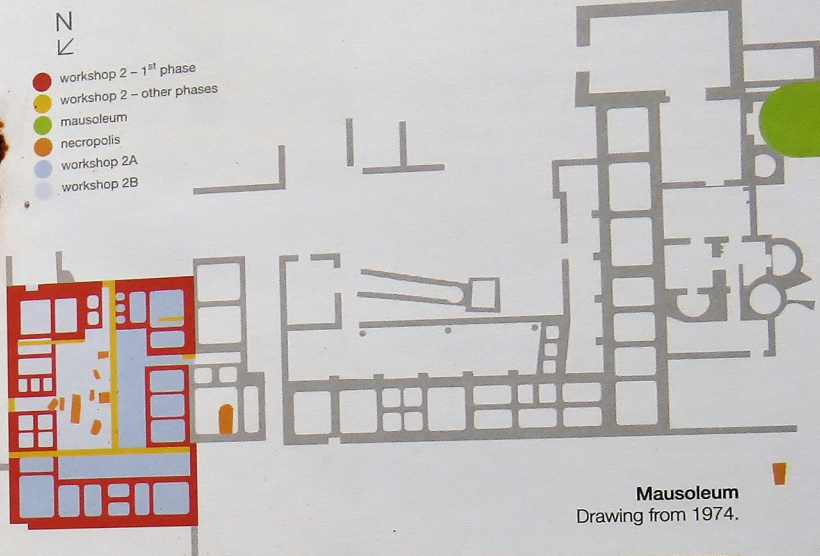


photo by Joaquina Maceira

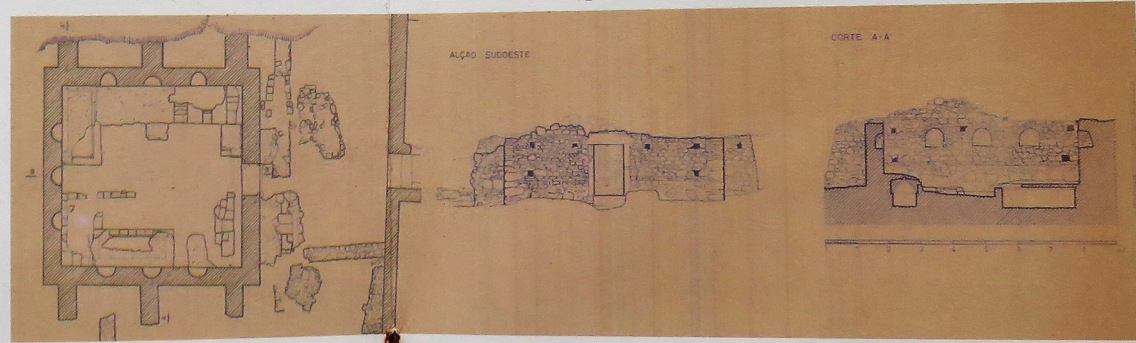
Mithraic relief
Plaque of marble found in another area with the typical Mithraic cult scenes.

Although excavated for the first time in the 19th century, it was only in the 1960s that the mausoleum was finally completely exposed. In the 1970s, it was rebuilt from the top of the door up.

The mausoleum was a family burial chamber that probably belonged to the owner of workshop 2B.



Mausoleum
Drawing from 1974.



map from Arquivo Histórico do MNA



photo archive of Prof. Manuel das Neves, kindly provided by João L. Cambaço



photo by Inês Vaz Pinto

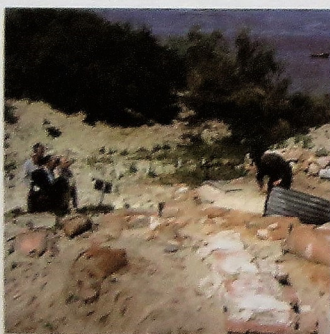
The location of the mausoleum necropolis is explained, to a certain extent, by the proximity of the funerary building that is the mausoleum. The burials that were placed inside since the 3rd century AD made the space sacred and in later years graves extended all around the area.



Museu de Arqueologia e Etnografia do Distrito de Setúbal, photo by Jolío Almeida. **Plaque with chi-rho** Marble plaque with part of a chi-rho, Christogram introduced during emperor Constantine's time (4th century AD).

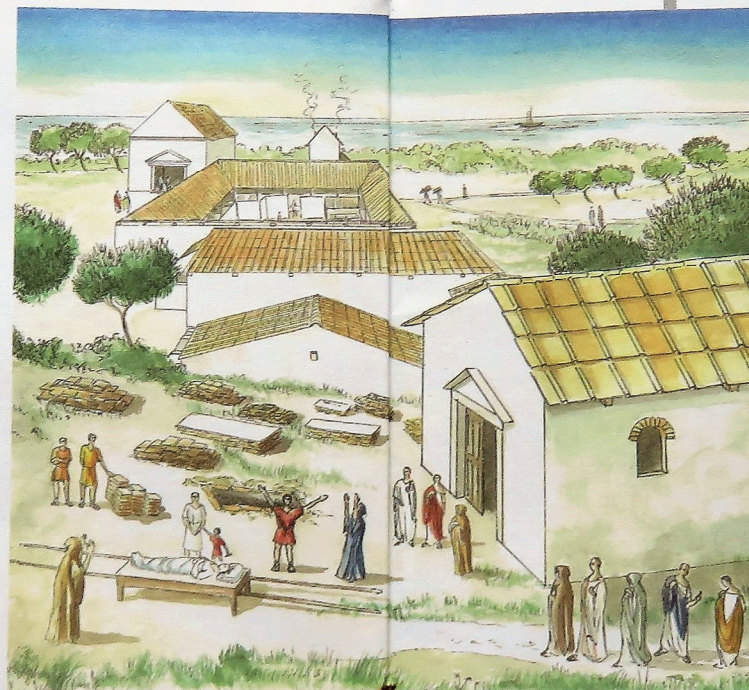
mausoleum necropolis

The tombs that belong to this necropolis are mostly oriented northwest-southeast, typical of the Christian ritual. It was believed that when the deceased would rise, they would face Jesus Christ resurrected in Jerusalem. Since the Christian funerary rituals were not allowed in the open air, it is believed that the foundations of a building next to the graves belonged to a small church. This necropolis is another trace of the penetration of Christianity in Tróia, also testified to by the early Christian basilica and lamps and ceramic vessels decorated with symbols such as the cross and the *chi-rho* (also known as the Christogram). This necropolis certainly dates to the 5th century AD, and it may have continued in use into the 6th century AD.



Necropolis with amphorae View of the necropolis with child burials in amphorae during its excavation in 1967.

photo by Helena Correia de Barros, Arquivo Fotográfico de C.M. Lisboa

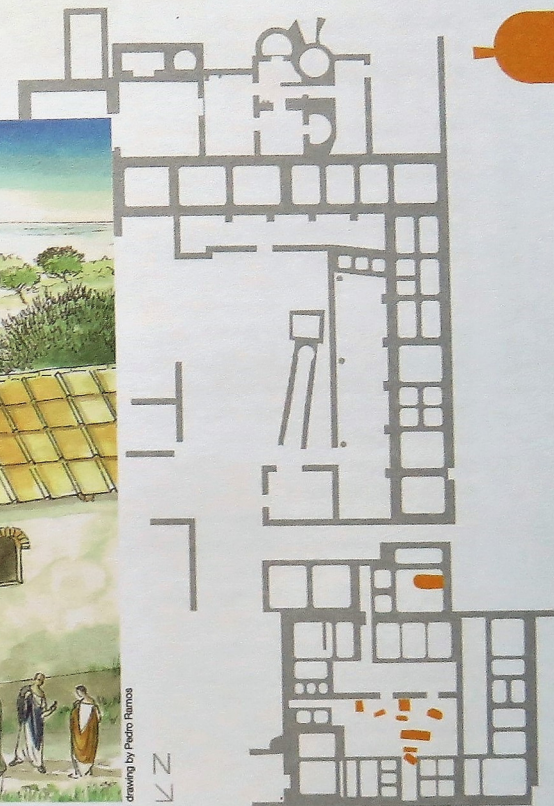


drawing by Pedro Ramos

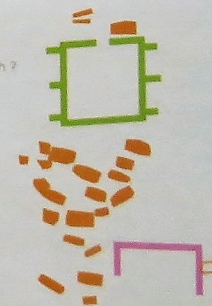


photo by Miguel Costa

The mausoleum necropolis sits on top of a large mound of sand and garbage that accumulated against the back wall of that building during a late phase.

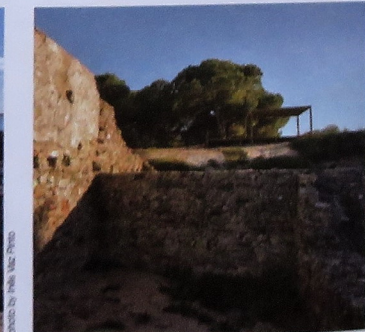
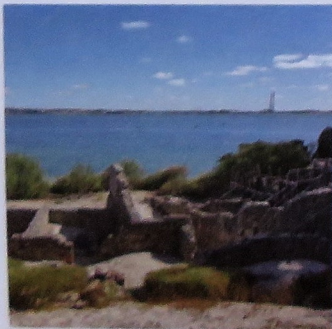


- necropolis
- mausoleum
- small church ?

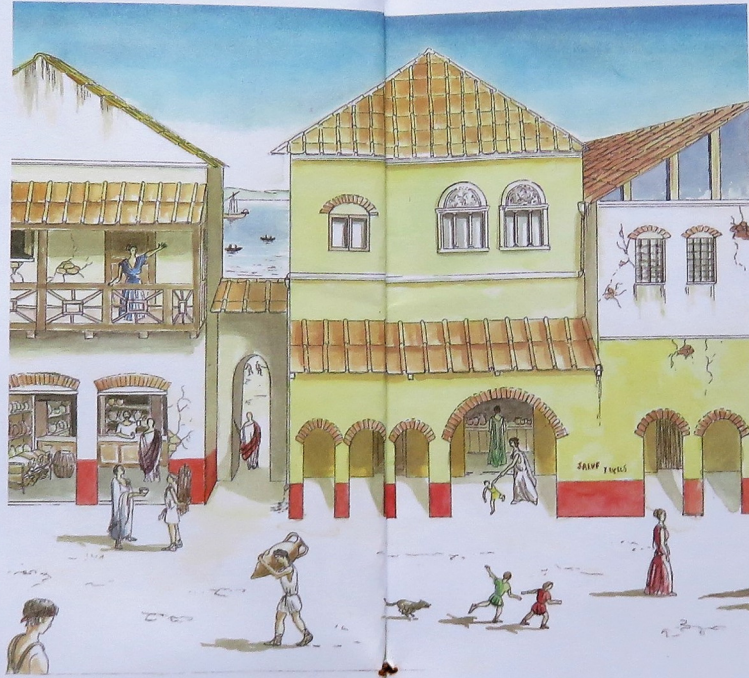


Rua da Princesa is a set of constructions aligned along a street next to the shore.

This area owes its name to the Portuguese queen D. Maria I, who, while still a princess, in this area ordered the first known excavations in Tróia, back in the 18th century. In the 19th century this area was excavated by the Sociedade Arqueológica Lusitana, the first archaeological society in Portugal, established by the Duke of Palmela, for the sole purpose of excavating Tróia. The diaries of the excavation describe the discovery of constructions with a ground floor and a second storey. The second-storey debris included fragments of mosaic pavements and wall paintings. These buildings cannot be easily interpreted since they were not sufficiently excavated and studied. However, everything indicates that these structures formed part of a great *domus*, a house for wealthy people with a central patio that probably continues to the southwest.

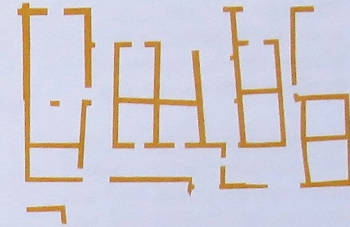


Roman ceramic wares



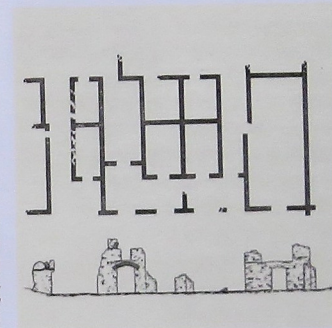
drawing by Pedro Baines

The Rua da Princesa, excavated for the first time by Portuguese queen D. Maria I, is the only residential area known to this date in the settlement of Tróia.

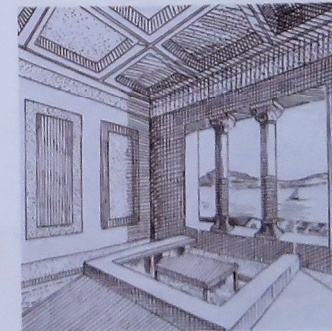


● residential area

Drawings by Manuel José de Aguiar Trigo, published in 1898 by Inácio Marques da Costa, reproducing the top plan and vertical projection of the features then visible.



Proposed reconstruction by Inácio Marques da Costa of one of the compartments of the first floor of a house, according to the descriptions in the texts of Sociedade Arqueológica Lusitana.

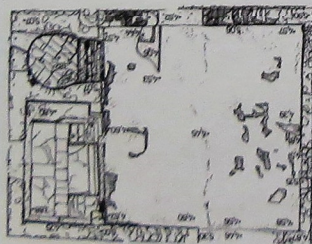


The bath complex was essential in daily life in Roman times, combining hygiene with socializing.

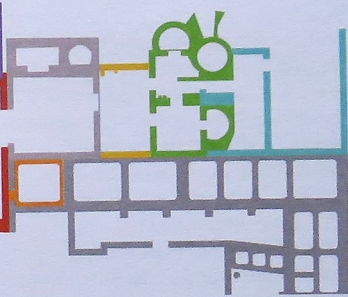
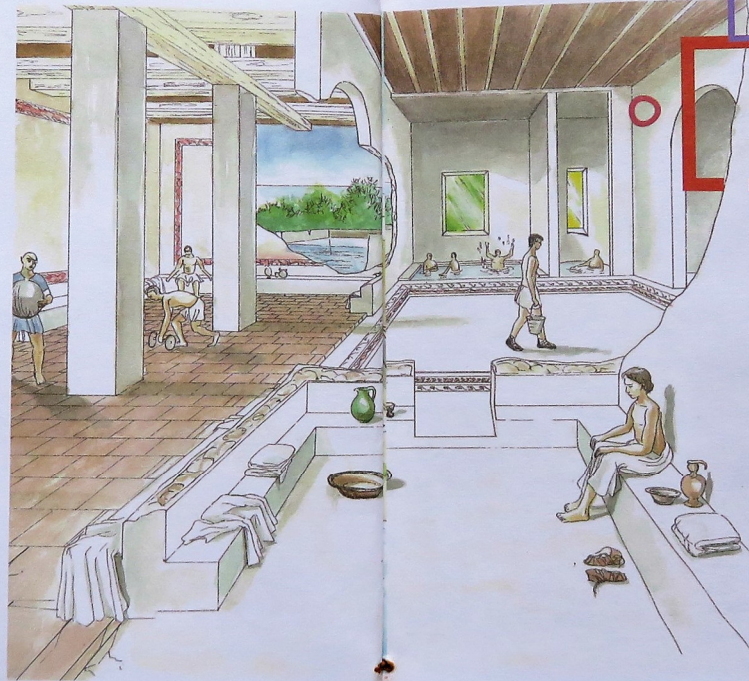
baths

Bathing was a daily practice that normally took place in the afternoon, after work. Men and women bathed separately, and some baths reserved the mornings for women. These baths have the spaces that are typical of Roman bath complexes: a room next to the entrance for exercising and socializing (the *palaestra*); a dressing room where the bathers left their clothing (*apodyterium*); a cold temperature area (*frigidarium*) with pools for bathing; a mid-temperature room of transition (*tepidarium*); and a heated area (*caldarium*) with small pools for steam and hot water bathing. Their rather large dimensions (450 m²) suggest they might have been opened to outside bathers paying for entry.

Map by Yasmine Mekaroun. In *Etienne Mekaroun, Maynti, 1994, fig. 50.*



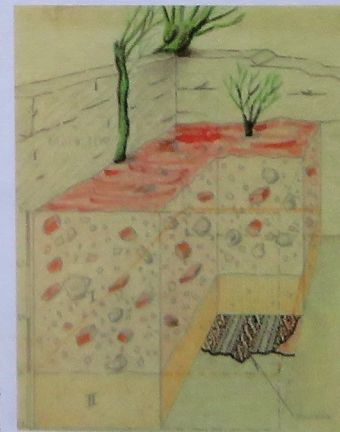
The water for the baths came from a nearby well. It was raised by an elevation system, and then channeled to this reservoir by a small aqueduct. From the reservoir the water was distributed through lead pipes, and beneath the drain a small tank was built.



- palaestra
- apodyterium
- frigidarium
- tepidarium
- caldarium
- reservoir
- well
- service area

drawing by Pedro Ramos

1956 drawing showing the mosaic that appeared in the *frigidarium*.



Arquivo Patezal de Manuel Heitor, Arquivo Histórico do M.N.A., drawing by Bárbara Ferreira, 1956

The absence of water springs explains the small size of the pools. In the cold area, two small pools can still be seen, a square one and another in the form of a horseshoe. Both retain some of their marble facing.

Fish-salting tank reused as the dressing room (*apodyterium*) of the baths in the 3rd century.

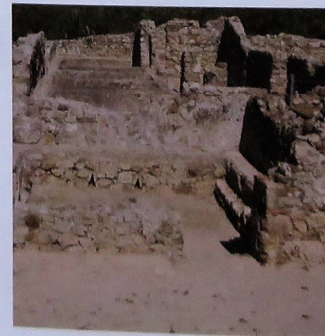


photo by João José Pinto

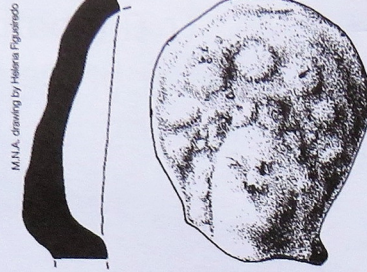
The baths belonged to the owner of the fish-salting factory next door, and would have been for both the owner's family and his employees / household, either freemen or slaves.

The heating system of the baths (the hypocaust) was an underground chamber with a channel system formed by arches that supported the upper floor. This chamber was connected to a furnace, where fires produced the heat.

heated area of the baths

The hot air flowed through the channels and into a flue at the far end of the tepid room. Here it would rise and heat the rooms in the upper floor. In the hot area the small semicircular pools supported by arches can still be seen. They were meant for steam and hot water baths. The water was usually heated in a bronze cauldron next to the furnace. The system of hypocaust arches is almost completely lost today, and only the brick pavement upon which it stood is still visible.

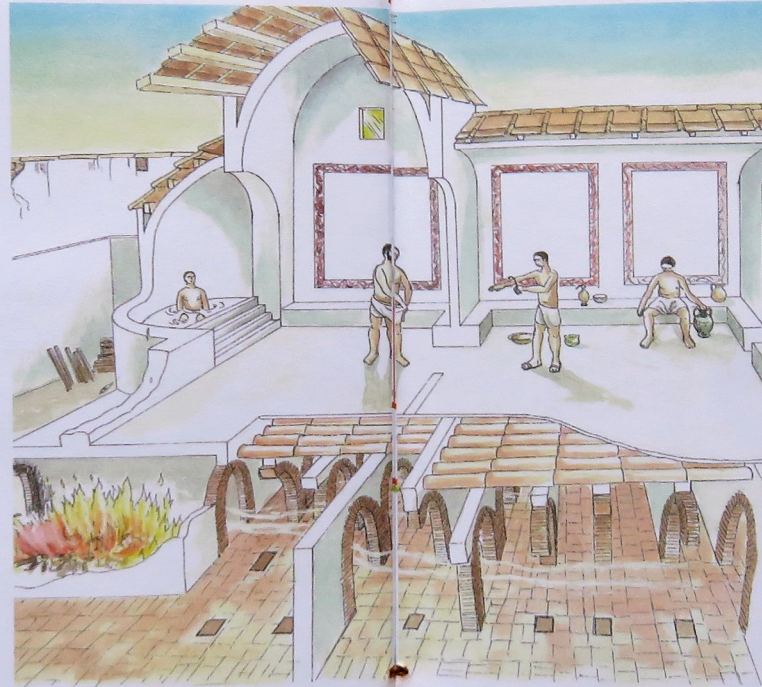
A typical bath started in the dressing room, where the bather left his clothes. Then he would anoint himself with oils, take a steam bath followed by a hot bath, and would then pass through the tepid room to cool down. Following this came the cold bath. Finally the bather would remove any remaining oil with a *strigil*, a small curved metal hand tool.



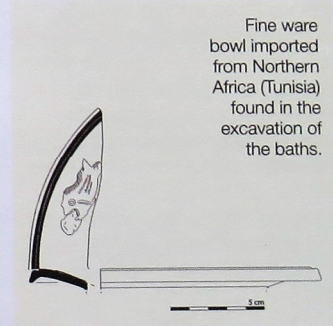
M.N.A. drawing by Helena Figueiredo

Head of small terracotta statuette found in the baths.

The heated part of the baths comprised the hot area (*caldarium*), located next to a furnace (*praefurnium*), and the tepid room (*tepidarium*), providing access to the cold area (*frigidarium*).



drawing by Pedro Ramos



Fine ware bowl imported from Northern Africa (Tunisia) found in the excavation of the baths.

M.N.A. drawing by Helena Figueiredo



Marble plaque of a decorated frieze found near the baths.

photo by Inês Vaz Pinto

Heated tank supported by an arch



photo by Miguel Coimbra



photo by Miguel Coimbra



photo by Inês Vaz Pinto



photo by Inês Vaz Pinto

"In the docks there were fishing boats that could be rented for a ride, sailing or paddling, if one wanted to visit Setubal's Pompeii (...). A large excavation had begun and had been interrupted again for lack of funding.

The exploitation did not go too far, but foundations of houses, as well as several walls and the remains of a street, could be seen. In this street there was a fairly well preserved bath house, with a mosaic floor and walls with marble slabs. In a large area underwater there are fragments of old vessels and stones from large walls, being also possible to find coins from other times."

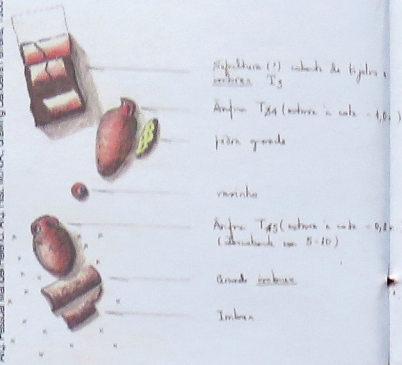
Hans Christian Andersen, *Uma visita em Portugal em 1866*, 2003.

In an alignment parallel to the shoreline of Tróia, in the Sado estuary side and a few meters distant from that line, between Ponta do Verde and Bôca da Lagoa, a series of houses in ruins can be seen (...).

This row of houses impressed so much the princess that later became queen D. Maria I while travelling in the Sado on the way to the farm of Pinheiro, at the time belonging to Casa do Infantado, that on the way back she wanted to observe the ruins closely and so, landing in Tróia, she ordered excavations there, that brought to light many archaeological specimens, some of which were distributed among the nobleman of the court that accompanied her (...).

Inácio Marques da Costa, *O Archeologo Português*, vol. 300X, 1930/31.

Arq. Passal Manuel-Helenc. Arq. Hist. M.N.A., drawing Bandeira Ferreira, 1966



Diário da Manhã, September 25th 1958.

"Caetobriga – the ptolomaic Cetobrix – was an ancient coastline city, at the entrance of the estuary of Salacia. Devastated by the sands, if not by a violent maritime irruption, its vestiges are barely noticeable: from time to time, underwater, or when the wind blows a pile of sand, remains of constructions come to sight."

André de Passalido, *De Antiquitatibus Lusitaniae*, 1593 (ed. por F. Castelo-Branco, 1965).

"In some areas up to 200 meters off the coast of Tróia, the existence of ruins of Roman buildings was verified, up to 13 meters of depth, especially next to the entrance of the so called Caldeira, and the existence of many construction ceramics, indicating many buildings from the same timeline."

António Marques da Costa, *O Setubalense*, 12th October 1950.

"(...) For the length of a league, in an area that the sea bathes at the end of the site of Tróia many very ancient ruins are found buried mostly by heavy piles of sand, which have made it hard for me to undertake excavations unaffordable for my means (...)."

Frei Manuel do Cenáculo, *Sizenando Martyr e Baja sua Pátria* (quoted by F. Castelo-Branco, 1965).

Apodyterium Dressing room of the baths

Caldarium Heated area of the baths with pools for steam and hot water baths

Chi-rho Monogram with the initials of Christ in Greek, X and P, sometimes completed by the letters alpha and omega, first and last letters of the Greek alphabet meaning "Christ, beginning and end of all things". Also known as cross of Constantine, the emperor who introduced it in the 4th century.

Cross Pattée Cross whose arms are narrow in the center and large at the ends, often used in Christian symbology

Fish-salting factory Factory comprising the spaces related to the fish-salting production, which may include one or more fish-salting workshops, areas for the fish cleaning and preparation, storerooms, and perhaps an administrative area.

Frigidarium Cold area of the baths with pools for cold baths.

Garum Sauce, very popular in Roman dining, which was made of fish, fish entrails, and salt. These ingredients macerated and "steeped" inside tanks for several months. This produced a substance that was filtered and stored in amphorae. Other sauces were called *liquamen*, *muria* and *hallec*.

Incineration Funerary practice, which implies the reduction to ashes of the body of the deceased through the action of fire. The ashes were stored in urns or buried in tombs.

Inhumation Funerary practice, which consists of burying the corpse in tombs of the appropriate size.

Lamp Vessel for oil and wick for lighting.

Mithraism Religious cult that originated in the Eastern Mediterranean in the Hellenistic period, and became very popular in the Roman Empire in the following centuries. It was based on the cult of the god Mithra, a Persian god representing light. Its best known rituals are the bull sacrifice, the baptism of novices in the bull's blood, and the ritual banquet with bread and water.

Fish-salting workshop Compartment with fish-salting tanks and a patio or corridor. Tróia's workshops have their tanks arranged around a central patio along the four (or three) walls.

Palaestra Room in the bath complex for socializing and exercising.

Tepidarium Room with tepid temperature between the hot area (*caldarium*) and the cold area (*frigidarium*) for adjusting the body temperature in preparation for the final, cold plunge.

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