

Marta Prevosti Monclús<sup>1</sup> & Joan Francesc Clariana Roig<sup>2</sup>**TORRE LLAUDER, FIGLINA AMPHORALIS**

The Torre Llauder pottery workshop, where evidence was found of the manufacture of Pascual 1 and Dressel 2–4 amphoras in the 1960s and 70s, is one of the most emblematic of the Laietania region. Marià Ribas had already expressed her opinion that *tegulae* with the L-HER-OPT stamp had also been manufactured there. In addition, it was theorised that this pottery had also produced plain ware. In this paper we present the results of the analysis<sup>3</sup> of samples of the above mentioned types of pottery, carried out with the aim of shedding some light on these questions.

**Precedents**

M. Ribas' excavations of the Roman *villa* of Torre Llauder revealed three rectangular pottery kilns, situated in parallel on the southern edge of the terrace on which the residential sector of the *villa* was subsequently built. The large number of amphora fragments found at the site, many of them with stamps, as well as firing rejects, already constituted evidence of the existence of the pottery. The Torre Llauder finds led Ricard Pascual, among others, to come to the conclusion that the Laietania region manufactured its own pottery, a fact also attested to by references in the works of the classical writers<sup>4</sup>. At the colloquium on *El vi a l'Antiguitat. Economia, producció i comerç al Mediterrani occidental* (Wine in the Antiquity. Economy, production and trade in the western Mediterranean), held in Badalona in 1985, we spoke of our initial ideas about the amphora workshop resulting from the then recent excavations below the mosaics of rooms 2, 3 and 4 in the villa (**fig. 1**). In addition, we raised the possibility that the workshop had also made plain ware (PREVOSTI/CLARIANA 1987). It was also believed that *tegulae* may have played an important role in the production; M. Ribas even thought that Torre Llauder could have been one of the production centres for the pieces with the L-HER-OPT stamp.

**Renewal of the research**

Faced with these questions, it was decided to carry out a more in-depth study, analysing the pastes used to make the different types of pottery in order to clarify whether they could have been manufactured in the villa's own workshop.

Below room 6 (**fig. 1**), located to the south of the preserved site, M. Ribas excavated an amphora kiln (**fig. 2,1**), which he initially interpreted as a heating system for the rooms above, the northern end of which was discovered in the 1982 excavations. It is a Type II-c Cuomo di Caprio kiln (1985), the second most commonly found type in Girona province, according to Tremoleda (1995). When it was abandoned and the new residential rooms were built above it, many remains of the pottery workshop and even parts of the kiln found their way into the strata of the new building. Evidence of this industry is abundant in the building base sand strata and in the fill strata of the foundation trenches of the building constructed above the pottery. There are many sherds of burned, rough amphora, pieces of clay (on some of which you can see the potters' finger marks), parts of the kiln walls, elements that separated the amphoras in the kiln, etc. The predominance of the Pascual 1 form, compared to the few fragments of Dressel 2–4 found, and a single fragment of Laietana 1 date the beginning of the workshop to no earlier than 40 or 30 BC, and its end to the change of era. This coincides with the stratigraphic chronology of its abandonment in around 15 BC. The residual materials, going back to late Campanian A and Campanian B black-glazed ware that are found in relative abundance in these strata, as well as in the rest of the excavation, lead us to believe in an earlier origin for the establishment, although not as an amphora workshop, for which we have found no structural remains.

The presence of the small kiln excavated by Ribas in the south-west of the peristyle, as well as the small, round-shaped kiln, a variation of the Cuomo di Caprio I-d type, that we excavated beneath the walls of Aula 3 (**fig. 2,2**), lead us to believe that plain ware may also have been manufactured there.

<sup>1</sup> Catalan Institute of Classical Archaeology, Tarragona.

<sup>2</sup> Archaeological Section of the Museum of Mataró.

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<sup>4</sup> PASCUAL 1960; ID. 1977. In his index of stamps (ID. 1991), the author compiled the different variations of the many stamps found at the *villa*.

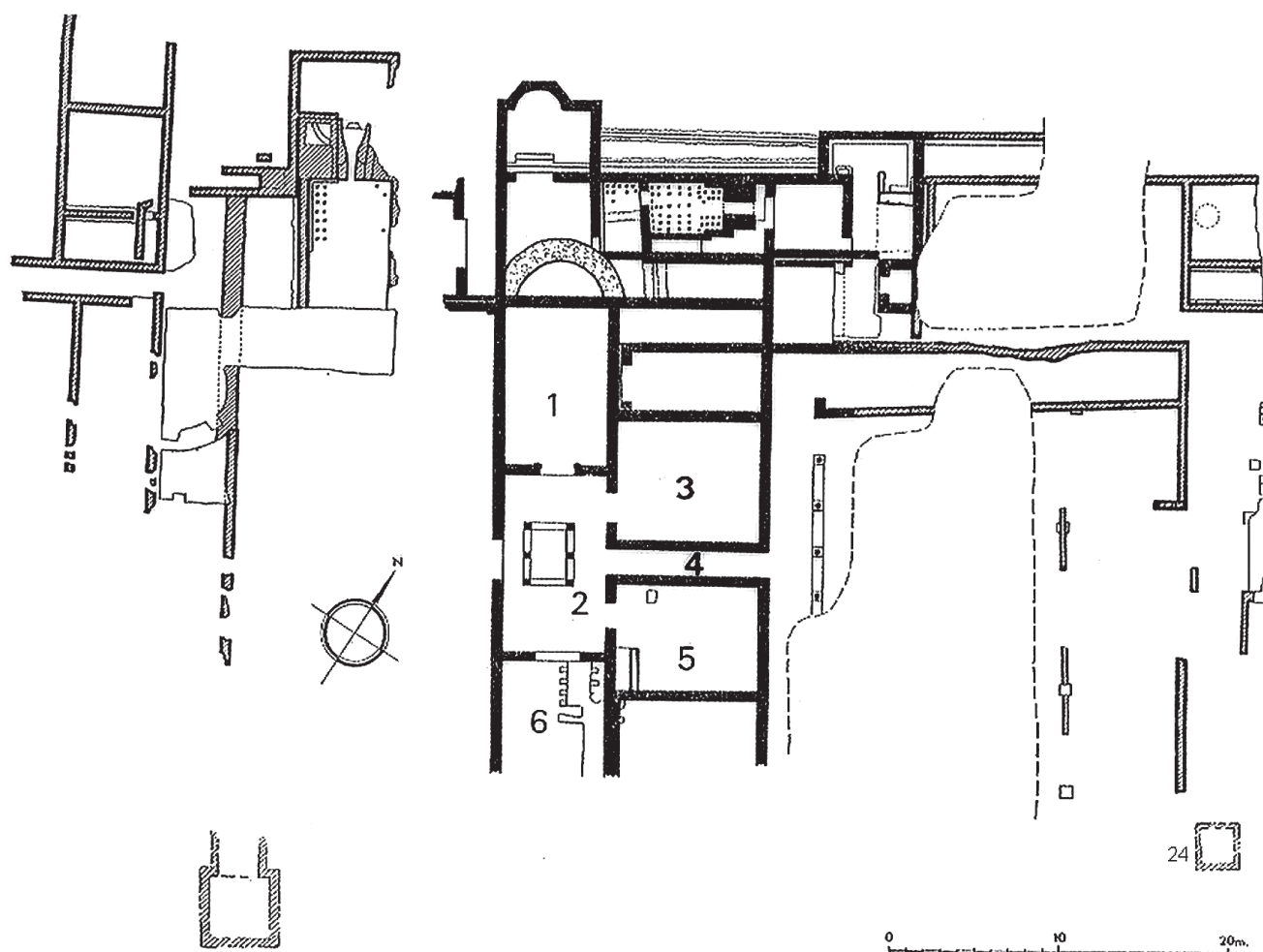


Fig. 1. Plan of the villa of Torre Llauder.

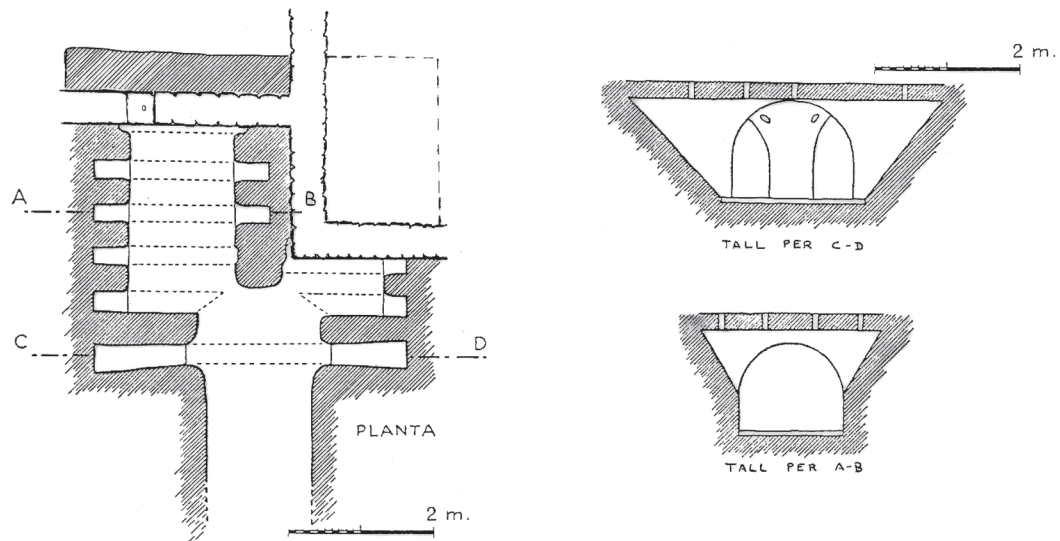
### 1. The coarse ware

Very little clear evidence of the manufacture of coarse ware has been found at Torre Llauder, except for a *pondus* deformed in firing and a few fragments of deformed pot rim. However, the abundance of some types of coarse ware (some jars, imitations of HAYES 1972 form 196), that are found repeatedly, has led us to believe that these also may have been manufactured at the site. It is of interest to highlight the presence of fragments of *dolium* in the foundation levels of some of the walls of the villa's *pars urbana*, which may have been manufactured in its own pottery.

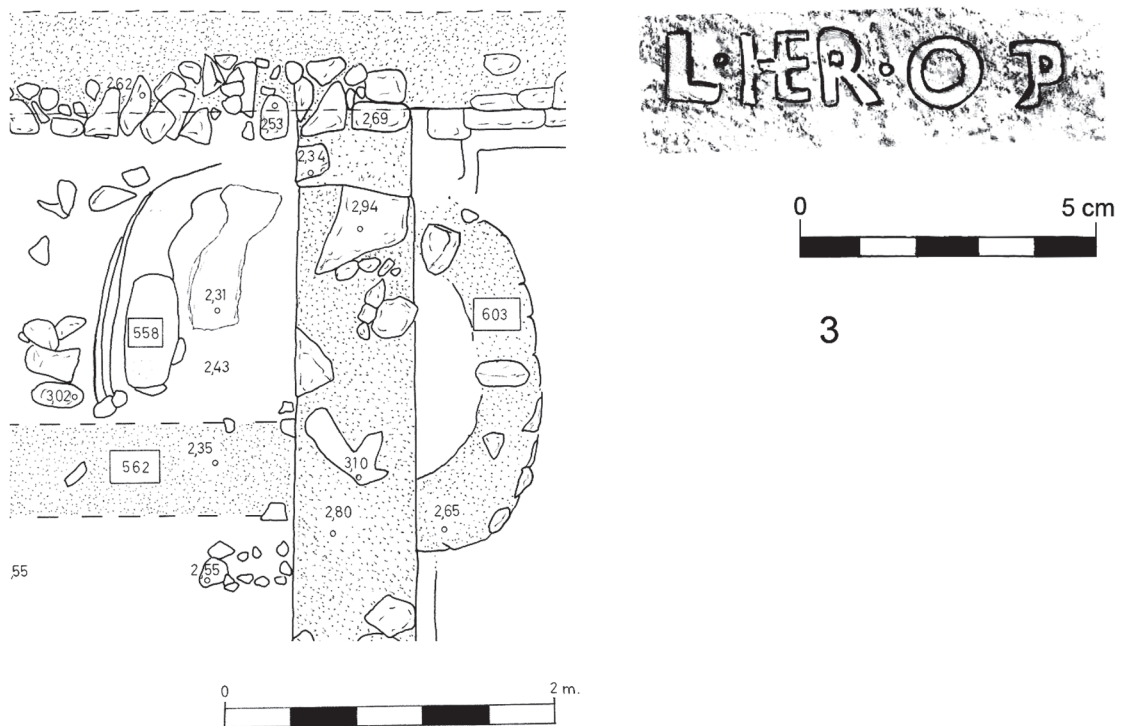
The pottery that appears to have been manufactured in this workshop presents common paste characteristics, similar to those of the Iberian amphoras and the Iberian pottery. They are brown pastes, generally quite dark, of low porosity and with the characteristic temper of quartz and golden mica, the latter being very abundant. The clay in the smaller pieces is more refined, with a certain laminar structure; the firing is often only just sufficient or even somewhat defective, the quartz grains are small (maximum 1 mm) and the mica is fine, although very abundant. In large pieces, such as tiles, *dolia* and the amphoras themselves, the temper is extraordinarily coarse and abundant.

PUERTA (1998, 258), when discussing the coarse ware production from kilns used to manufacture Pascual 1 and Dressel 2–4 amphoras in Laietania, states that “alongside these amphoras we begin to find the first coarse ware vessels, which correspond to a new typology and appear to come from the same workshops as the amphoras. These pieces remain in the minority if we compare them to the rest of the coarse ware found, which still corresponds to the typical Iberian forms characteristic of the period prior to the establishment of the workshops.” “These new coarse ware vessels were first made using hard pastes with very similar features to late Iberian pastes and, like the wine amphoras from the end of the 1<sup>st</sup> century BC, they were already being made with what we call the Laietana pastes. These pieces are characterised by having thicker walls than the Iberian examples, a temper made up of average-sized (approx. 1 mm) and large (up to 3 mm) quartz particles, with or without mica laminas”. She believes that by the last quarter of the 1<sup>st</sup> century, the large pottery production centres had disappeared and only a few small workshops remained active.

Among the pieces classified as possibly having been manufactured at Torre Llauder we find bowls (fig. 3, 1–5), mortars (fig. 4, 1), flagons (fig. 4, 2–3), plates, plate-lids (fig. 5, 1–3), jars, (fig. 5, 4–5), and large receptacles or pots (fig.



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**Fig. 2.** Kilns and *tegula* stamp.

5,6–8). In order to ascertain whether they really had been manufactured in the Torre Llauder pottery workshops, six samples were analysed with an optical microscope (petrography) at the Archaeometric Studies Unit of the Catalan Institute of Classical Archaeology by Álvarez, Gutiérrez and Pitarch (ÁLVAREZ/GUTIÉRREZ/PITARCH 2007). In all cases they reached the conclusion that the pottery had been manufactured in that area. The objects analysed were a bowl with an applied handle (fig. 3,3), a plate/lid (fig. 5,3), a mortar (fig. 4,1), a pot rim, a flagon (fig. 4,3), and a fragment of *dolium*.

In conclusion, it does in fact appear that the pottery workshop that occupied the Torre Llauder site before the *villa* was built also manufactured coarse ware with the previously described forms and characteristics. Therefore, the coarse ware forms considered to have been manufactured at Torre Llauder should correspond chronologically to the period when the amphora workshop was active. However, they are forms of coarse ware with a long life and, judging by the parallels we have found, they correspond to types that were often manufactured over a long period.

## 2. Amphoras

The largest number of amphoras produced in the workshop was clearly of the Pascual 1 type (fig. 6,1–13). The paste tends to be brown or dark reddish, with a high density of quartz, feldspar and mica temper, with small grains; it is porous and small vacuoles are visible. We have only found one example of a Laietana 1 amphora neck that was probably manufactured at Torre Llauder; this can be categorised as the transitional type, according to the Cal'Arnaú - Cabrera de Mar amphora classification (MARTÍNEZ/BUXEDA/MARTÍN 2005, 393 fig. 5) (fig. 6,14). However, we do find a few scarce examples of local Dressel 2–4 amphoras (fig. 6,15–17). In order to obtain a reference for the pieces we know were definitely manufactured at Torre Llauder we analysed two fragments of amphora from the waste dumped in the base strata and foundation trenches, one with a crack caused by firing and the other burnt by over-firing, as well as a fragment of clay used to separate the pieces in the kiln.

## 3. The amphora stamps

Although the site has given us a particularly large number of stamps, we can classify the examples most likely to have been manufactured at this pottery into two groups. The first group is based on the finds recorded in the foundation trenches (PREVOSTI/CLARIANA 1987, 207) and the pieces that made up part of the surface of the ancient Via Augusta (CLARIANA 1978, 170), which we can be particularly confident were produced locally in the workshop; thus, we read AS, AR, B, P, VER and VERD and the graffiti as signatures D (in two examples), X, I, CAI (?), and N. In the second group of stamps, which we can see on the pieces included in Pascual's compilation (PASCUAL 1977, 87–89), excluding those already mentioned, we can read AT, AVE, BL, NC, NG, VS and graffiti as signatures C NP, F, PF, R and SA

(fig. 7). A particular characteristic of the Laietana pottery is the fact that the stamps and graffiti are all found in the area of the amphora point.

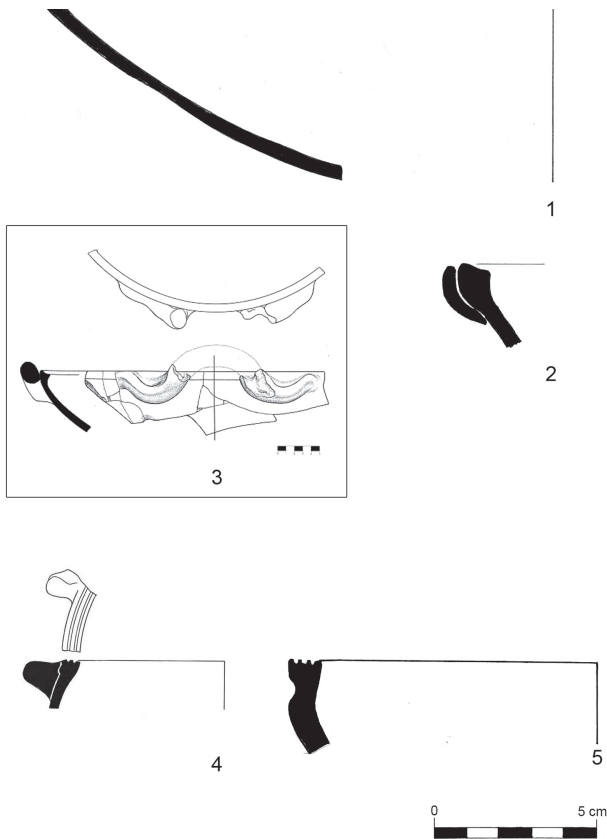
## 4. Tegulae

The *tegulae* nos. 1, 4, 7, 8 and 9 from the drain excavated below the passageway (area 4 in fig. 1) are stamped L-HER-OPT (fig. 2,3). Ribas (1966) had already found similar stamps and believed them to have been manufactured at Torre Llauder, together with amphoras with the same stamp. *Tegulae* with the stamps MARI, CF and CLP (RIBAS 1972 fig. 47,1.4) have also been found at Torre Llauder. In the same county, the L-HER-OPT stamp has also been found at the *villa* of Can Rafart in Mataró, at Can Torradeta in Vilassar de Dalt<sup>5</sup> and at Can Modolell in Cabrera de Mar (GARÍ 2008, 42); while at Torre Llauder itself, Can Verboom in Premià de Mar (COLL 2004, 183) and Turó d'En Seriol in Badalona, the variation L-HERENNI (PREVOSTI 1981a; EAD. 1981b) has been found.

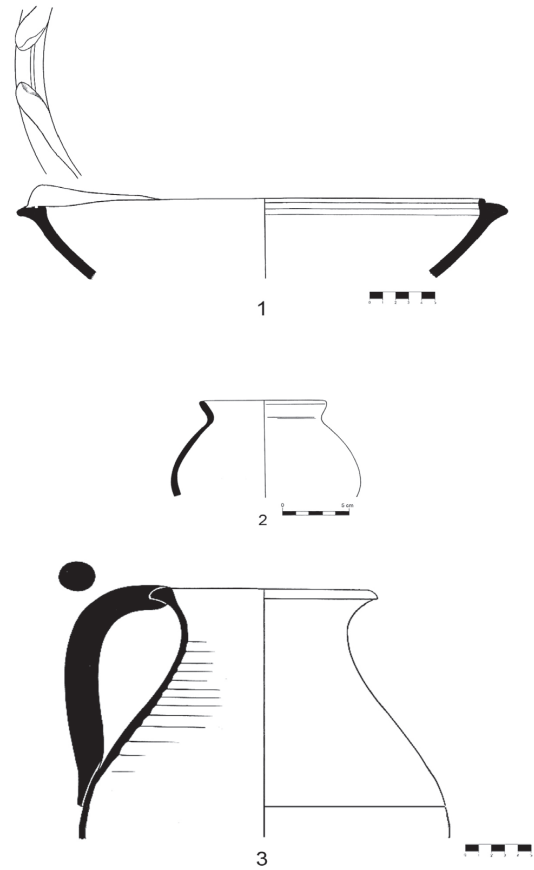
In several of her publications, M. Ribas stated that the *tegulae* with the L-HER-OPT stamp were manufactured at Torre Llauder. In the description of the objects kept in the tower of Can Llauder, which disappeared during the 1927 renovation, Ribas (RIBAS 1966, 7) states: "Various earth movements had uncovered pieces with manufacturing defects, including amphoras that repeated the L-HER-OP stamp" "...more than a dozen amphoras, among which were the marks of the potters PANSCAVRI, a B in relief within an indented square, and L-HER-OP several times;...". This data has been placed in doubt, as no other amphora with this stamp has ever been found and the examples described by Ribas have been lost. Amphoras and *tegulae* with this stamp may well have been manufactured at Torre Llauder, although the indications are doubtful. Lamboglia (LAMBOGLIA 1950, 158) found them at Ventimiglia and believed them to have been manufactured there, while Février (FÉVRIER 1956, 178) thought they were made in Fréjus.

It is a well known tegula stamp, common in the Mediterranean arc between Naples and Elx, thought to have been manufactured in many different *figlinae* (ARANEGUI, 1978; PREVOSTI, 1981a, 284; RODÀ 1991, 397; ID. 1994, 324) belonging to members of the same family or a single proprietor of *figlinae* spread over all or part of this geographical area. Bermúdez (BERMÚDEZ 1987) and Rico (RICO 1993; ID. 1995) do not agree; the former believes the production could have been centred in Sagunt, Mataró and Fréjus, while the latter thinks it was based in Fréjus. Bermúdez was unable to date any of the pieces he studied and only suggests they may be from between the 1<sup>st</sup> and the 3<sup>rd</sup> centuries AD, judging from the chronology of the burials that used similar types

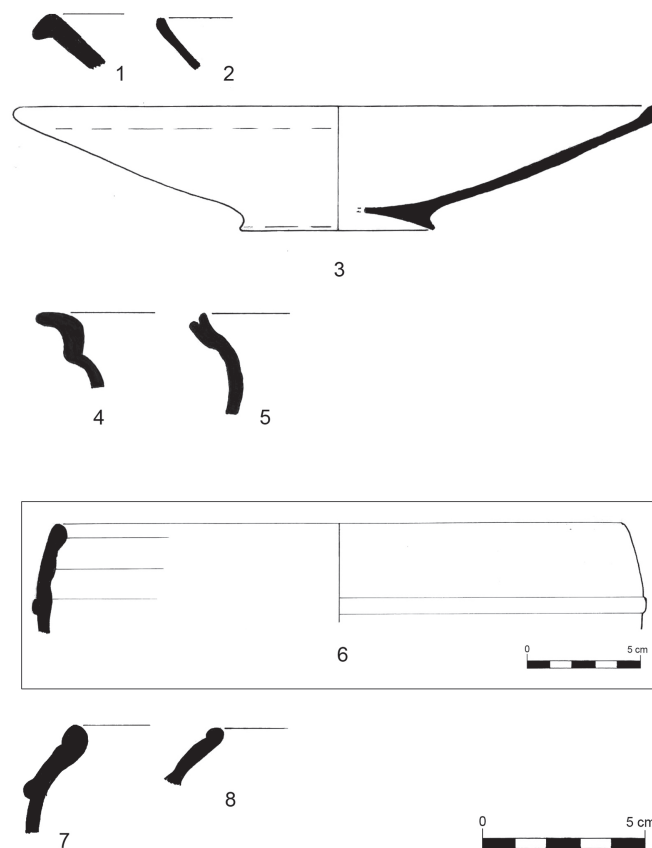
<sup>5</sup> Rico (RICO 1995, 202), in giving the distribution of this stamp, repeats the site of Can Torradeta in Vilassar de Dalt under the name of Sant Ginés de Vilassar. In the first he refers to Prevosti (1981b: 133–134) and in the second to Balil and Ripoll (BALIL/RIPOLL 1952), which is also clearly and explicitly cited in Prevosti (PREVOSTI 1981b, 133–134) as the same place. Vilassar de Dalt and Sant Ginés de Vilassar are the same town.



**Fig. 3.** Coarse ware. Bowls.



**Fig. 4.** Coarse ware. Mortars and flagons.



**Fig. 5.** Coarse ware. Plates (lids), jars and large storage vessels.

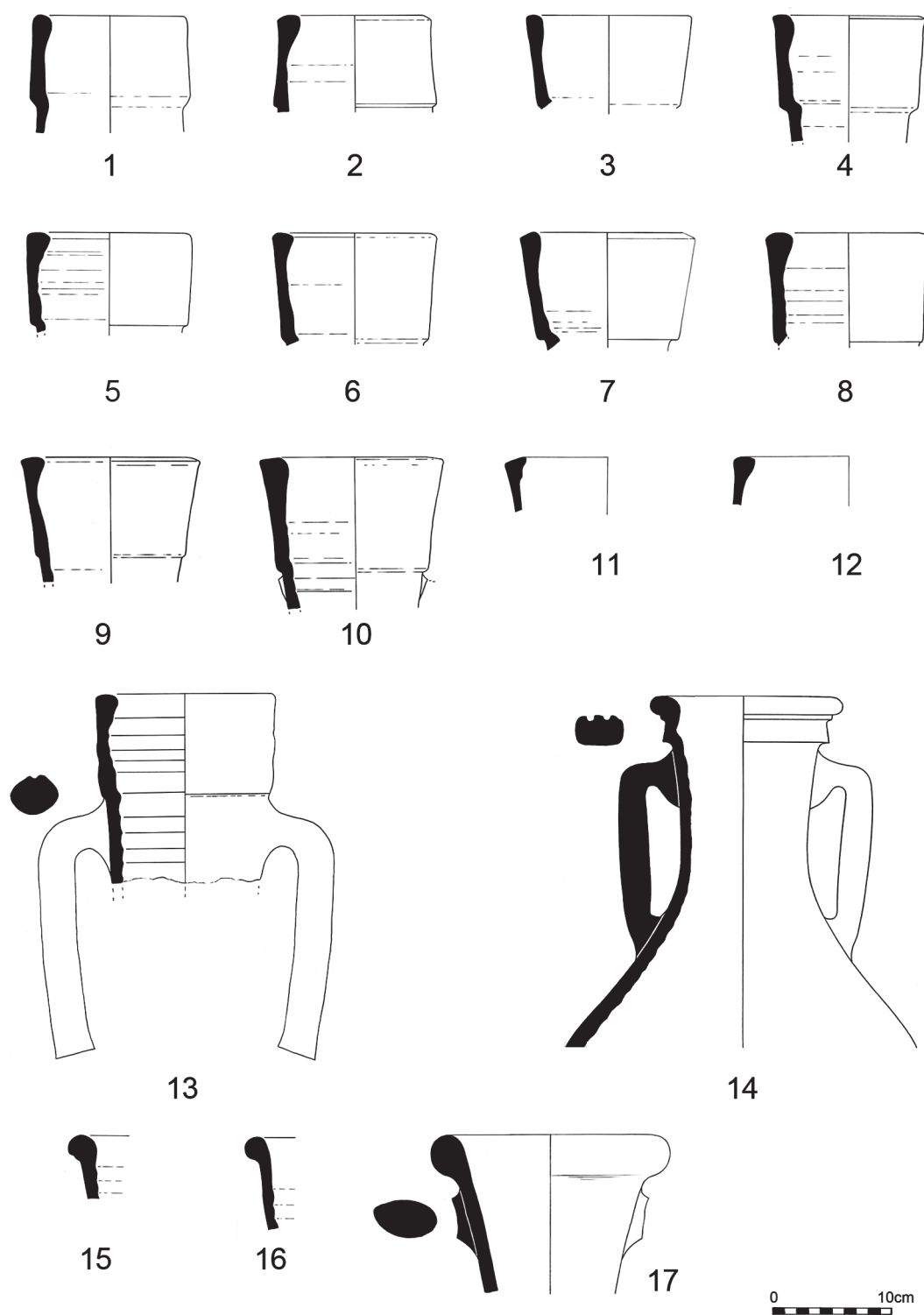


Fig. 6. Amphoras.



of *tegulae*. He shows a preference for the second half of the 1<sup>st</sup> century and the first half of the 2<sup>nd</sup> century, which he justifies with the fact that in the 2<sup>nd</sup> century the aediles of *Tarraco* were very active. Rico bases his theory on the find of the stamps L-HERENN, CASTORIS and MARI in the late 1<sup>st</sup> century dump of “Pauvadou” in Fréjus, confirmed by the excavations at “la Porte d’Orée”, also in Fréjus (LAUBENHEIMER 1991), where MARI also appears in a Flavian context, and from which samples have been analysed by X-ray fluorescence that confirm the local origin of the products with the Mari stamp (PICON 1991). Based on this, he considers that if *Marius* was manufacturing in Fréjus, then *L. Herennius Optatus* and *Castor* must have been from the same place, arguing that the coincidences in the distribution, dating and morphology of the stamps, as well as in the materials, cannot be fortuitous and are therefore not open to doubt. The weakness of this argument is obvious: there is nothing to contradict the possibility that they were produced in *fundi* belonging to the same owner scattered across the territory of the Mediterranean arc between Elx and Ventimiglia. In that case, it would also be natural to think that the *tegulae* found in Fréjus had also all been manufactured locally. The logic of the diversity of workshops is based on the fact that *tegulae* were a low value product for trade and were therefore distributed locally, although we know that they also travelled between the 1<sup>st</sup> and the 3<sup>rd</sup> centuries, probably as ships’ ballast<sup>6</sup>.

Fedièrre indicates that the L-HERENNI stamps, together with those of CASTORIS, were found in the dumps of *Pauvadou* and *Porte de l’Agachon* (Fréjus), the former from the late 1<sup>st</sup> century and the latter from the period of Domitian-Trajan, a fact that leads him to conclude that the stamp is not later than the Flavians and may even be earlier. He believes the examples he found in the 2<sup>nd</sup>-century tombs at *Pauvadou* had been reused. He found fragments of the L-HER-OPT stamp in the baths at *St-Antoine*, in a phase datable to the end of the 2<sup>nd</sup> century or the beginning of the 3<sup>rd</sup> century, although he did not believe they should be dated to that period and suggests the reuse of *tegulae* manufactured in the 2<sup>nd</sup> century, as this pottery “pourrait être, de par son surnom, un affranchi d’un descendant de L-HERENNIVS, dont l’activité comme on vient de le voir pourrait se situer dans la 2e moitié du 1er s.” It is curious to note that the *tegulae* with the L-HER-OPT stamp we have from a well-dated stratigraphic context at Torre Llauder also correspond to a Severan period drain.

Jordi Lopez’s excavations (1993) at the *villa* of La Barquera (Perafort, Tarragona) produced two *tegulae* with the MARI stamp in a stratum dated to the time of Nero, as well as two L-HER-OPT stamps in superficial strata.

Rodà (RODÀ 1991; ID. 1994) believed there had been an extensive network of *officinae* distributed around the north-western Mediterranean arc, in the hands of a large manufacturer and merchant, possibly the owner of Torre Llauder. According to her, there is no record in Barcelona of a *Lucius Herennius Optatus*, although there is a *Gaius Herennius Optatus*, a friend of *Lucius Licinius Secundus* and father of a municipal magistrate (IRC IV, 52; 61; 97). The onomastic and supposedly chronological coincidence led her to believe

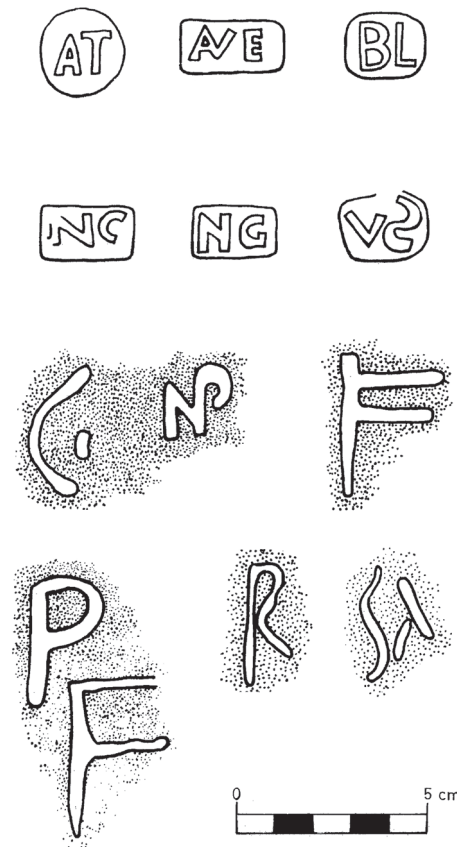
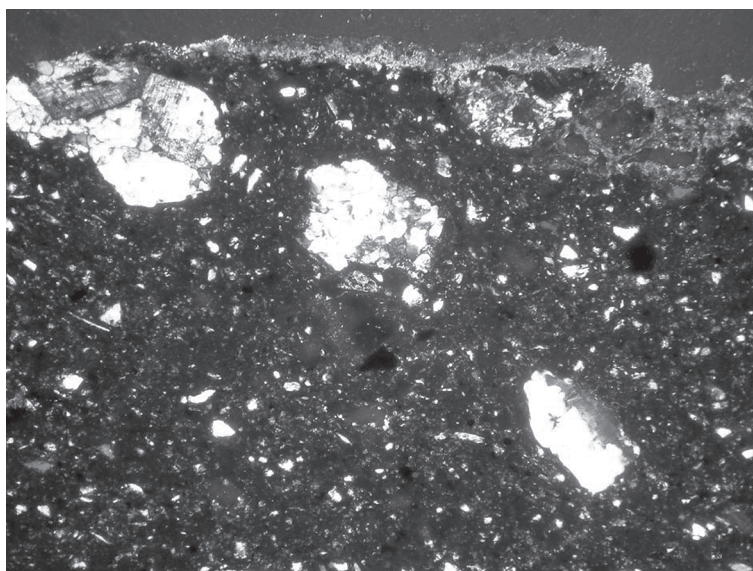


Fig. 7. Stamps and graffiti published by Pascual.

in the likelihood that both persons were related, which means that Torre Llauder may have belonged to the circle of a wealthy family of manufacturers and merchants, a branch of which would have belonged to the municipal aristocracy of *Barcino*.

Nevertheless, the chronology of these *tegulae* has not been sufficiently studied. On the one hand, the palaeographic similarity and the types of stamps lead us to believe that those of *Lucius Herennius Optatus*, *Marus* and *Castor* must be contemporary. On the other hand, we have to note the coincidence that those dated to the Flavian or even Neronian periods are those of the L-HERENNI form or the MARI stamp. However, the L-HER-OPT stamps found in datable contexts are later, from the Severan era, as is the case of the Torre Llauder drain and the baths at *St-Antoine* (Fréjus). Perhaps we need to make a chronological distinction between the two types, as Fedièrre suggests, although it is also quite possible that we are dealing with reused pieces, which would have continued in use over time, as appears to be the case of those

<sup>6</sup> Without venturing farther afield, *tegulae* with the *orbiculus* stamps from Italian *figlinae* CN DOMITI CLEMENTIS have been found at Ca l’Alemany (Badalona); EXPRPLAVG/T· CAMIDIE· ATIMET· DOL and CN DOMATIC at Ca l’Andreu and Can Fàbregues in Tiana (PREVOSTI 1981a, 70–72; 199–203); L BRVTT[IDI AVGUSTALIS FEG OP DO]/ EXF {I} G OG M CAE N PAET/ COS at Can Xammar (Mataró) (FEDIÈRRE 1979).



**Fig. 8.** Thin section of *tegula* with stamp L·HER·OPT. MAT-60129.

found in the tombs of the Tarragona necropolis, as well as those found in a late-period tomb at Torre Llauder. However, at this stage of our research we need to be prudent and leave the question open until we have more data.

In order to investigate their origin as part of this study, we analysed three fragments of *tegulae* from Torre Llauder: a plain sherd found in the refill stratum of a trench in the pottery workshop, which had probably been manufactured there, and two fragments with the stamp L·HER·OPT (**fig. 8**). According to the results obtained by Álvarez, Gutiérrez and Pitarch (ÁLVAREZ/GUTIÉRREZ/PITARCH 2007), they appear to have been manufactured in the Torre Llauder area. These conclusions were based on the fact that the petrographic characteristics of the samples were similar to those of the Riera l' Argentona area, where Torre Llauder is located. It is not possible to compare them to M. Picon's results (PICON 1991), as those were obtained by a chemical process. Picon refers to the presence of coarse quartz, feldspar and black mica temper in his group D amphoras, which leads him to believe that they could either have originated in the region of Maures and L'Estérel (Var) or the Tarraconensis. On the other hand, the petrographic analyses published by Southampton University (Roman Amphorae: a Digital Resource) [http://ads.ahds.ac.uk/catalogue/archive/amphora\\_ahrb\\_2005/index.cfm?CFID=411470&CFTOKEN=23091478](http://ads.ahds.ac.uk/catalogue/archive/amphora_ahrb_2005/index.cfm?CFID=411470&CFTOKEN=23091478) on the Fréjus August 33 amphora also describe volcanic material,

which leads us to believe in a particularly decisive difference for the region. This data strengthens the theory that those from Torre Llauder were produced locally, given that items manufactured in Maresme county would never contain volcanic lava in the composition of the clay, whereas those from Fréjus would. The solution therefore would be to place thin sections of samples of *tegulae* manufactured in Fréjus next to those found at Torre Llauder, allowing us to see the differences even more clearly.

The fact that the *tegulae* with the L·HER·OPT stamp were manufactured in the Maresme, whether at Torre Llauder or not, once again opens up the possibility that there was some merit to the old hypothesis of a series of *figlinae* spread over the territory of the Mediterranean between the Valencian Region and Italy. If this were to be confirmed, it could possibly be evidence of the existence of a series of *fundi* belonging to the same owner or to one family, an example of large landowners with properties containing brick-kilns in various geographical locations that could be the origin of the respective local dispersions of the types manufactured. However, we do not wish to get ahead of ourselves. It is quite clear how we have to continue the work: we need to collect samples of L·HER·OPT, MARI and CASTORI *tegulae* from the places they have been found, make thin sections of them, compare their petrology and determine to which manufacturing centres they correspond.



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