

Interdisciplinary Studies on Ancient Stone

Proceedings of the IX ASMOSIA Conference

(Tarragona 2009)

Edited by

Anna Gutiérrez García-M., Pilar Lapuente and Isabel Rodà

Institut Català d'Arqueologia Clàssica

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Proceedings of the IX Association for the Study of Marbles
and Other Stones in Antiquity (ASMOSIA) Conference
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Anna Gutiérrez García-M.
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THE IMPORTED MARMORA FROM THE JAUME I SCHOOL: AN ASSEMBLAGE FROM THE PROVINCIAL FORUM OF TARRACO

R. Arola, J. Á. Domingo and N. Gasull

Abstract

The excavation of the plot of the former Jaume I School has provided a stratigraphic sequence that tells us of a long period of occupation between the Republican period and the present day. Although no structures were documented in the Late Roman contexts, they did give us the marble assemblage that is the object of this study. The majority of the coloured marble plaques found in the excavations belong to the types of marble and ornamental stone most commonly used in Roman imperial forums. This circumstance, together with the dating of the levels in which the marble fragments were found, suggests that the pieces were probably from the Tarraco Provincial Forum.

Keywords

Excavation, Tarraco, Provincial Forum, marble, workshop.

The archaeological excavation

In 2002 when a car park was being built on the former site of the Jaume I school in Tarragona (Lloret Street, PEPA Block 51) a full archaeological excavation was directed by R. Arola and N. Gasull (Fig. 1). The site is located on the upper terrace of the ancient city of Tarragona. The different kinds of occupation of this area in the Roman period are largely unknown; the excavations carried out so far in the area have not provided enough archaeological data to clearly define them.

In our case, the proximity to the surface of the rock in the northern part of the site and the intensive urban occupation of the zone were determining factors in the destruction of the remains and the archaeological evidence from prior to the medieval period. This meant that Roman traces were only found in a few strata and none of them was associated with any structure. Nevertheless, we can distinguish two main chronological horizons: one ascribed to the Republican period and the other to the Late Roman period.

Little context for the Republican date has been documented in the rock hollows; pottery finds, which included Campanian B and Iberian painted ware, were scant. At the beginning of the Roman occupation, the area inside the city walls was supposedly used as a military zone, perhaps with a settlement or a military camp for the troops fighting the Carthaginians, as interpreted from the excavations in the Col·legi d'Arquitectes (Aquilué 1993).

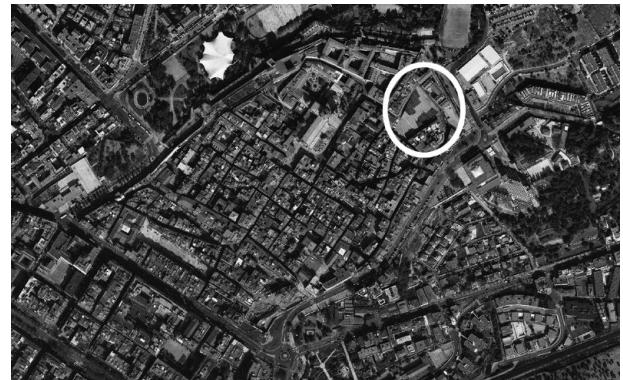


FIG. 1. Aerial sight of the college Jaume I site, within the upper part (Part Alta) of Tarragona, Spain.

During the 1st century AD, following the construction of the main temple and its *temenos*, we have no documents referring to this area and its possible buildings and functions. However, archaeological finds suggest that there would have been a building-free zone occupied by a *hortus* or a recreational area linked to the temple.

This lack of information lasts until the Visigothic period, from which there have been archaeological finds in most of the old town excavations in Tarragona. The nearest finds have been made in Puig d'en Sitges and Arc de Sant Llorenç streets. Some marble items were recovered from other nearby sites, particularly a Jupiter Ammon clypeus fragment, a Visigothic gravestone and a marble cornice (in Puig d'En Pallàs Street 8-12).

Some late Roman levels were found on the site of the Jaume I school, although without any associated structure; they would have regularized the parent level and followed the natural slope. It was in those levels that the enormous amount of marble fragments and other ornamental stones were found – precisely on the highest and flattest part of the site (Fig. 2). We have interpreted those levels as a nearby place for collecting pieces of stone, including marble, for recycling. Unusable pieces would have been cut up and burned to obtain lime, as most of them showed combustion traces.

In Late Medieval and Modern times we have the first (archaeologically confirmed) written information referring exclusively to this zone and we are able to establish the urban evolution of the whole area from the 15th century until the present day. In general terms, we can highlight the following phases:

- Demographic occupation until the late 16th century
- Church and convent construction 16th to 17th centuries



FIG. 2. East sight of the archaeological site; the zone with a highest density in marmora finds is shown.

- Convent demolition¹ and military occupation in 1835
- Barracks demolition and school building in 1953
- School demolition and parking building in 2003

The marble assemblage

during the excavation of the former school site 4,500 marble fragments were found, most of them corresponding to wall and floor covering plaques (for the latter type cf. Guidobaldi and Olevano 1998). Next to these, very fragmented pieces, cornices, friezes and shafts were found (Fig. 3, 6).

Examining only the coloured marbles we observe that more than 75% of them belong to some kind or other of the most highly appreciated marbles of the period: cipollino, africano, pavonazzetto, and giallo antico (Fig. 4). All of these were common in the 1st century AD in large architectural complexes (Pensabene 2002, 46) and underline the importance and wealth of the building in which they are found. Most of them came from imperial quarries, were highly prestigious and commanded a very high price (Pensabene 1998, 334-335). The high cost could only be afforded by the upper classes or wealthy cities, usually helped (in case of public buildings) by imperial munificence or a figure connected to the imperial court (Pensabene 1998, 337).

The luxury and variety of pieces, the great quantity of materials found and the uniform thickness of most of the marble plaques suggest that they came from a single, exceptionally opulent public building. Furthermore, the place where they were found is very close to the upper terrace of the Tarraco Provincial Forum, suggesting they may have come from that complex, which was built in the Flavian period and laid out over three terraces. The upper terrace (90 m long) was devoted to the Imperial cult; it probably contained a temple dedicated in 15 AD to the deified Augustus (Macias *et al.* 2007, 764-787;

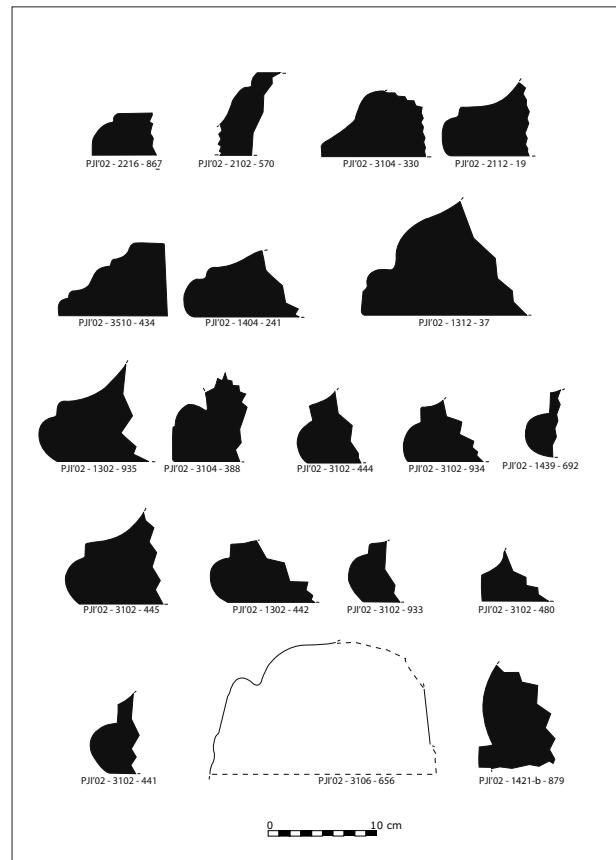


FIG. 3. Some of the architectonic elements found during the excavation.

Casas *et al.* 2007a, 2007b, 423-426), as well as a large Flavian cult *aula* in an axial position closing the perspective of the rear portico. The middle terrace measured 300 x 150 m and was connected to the upper terrace by a monumental stairway and an axial propylon (Mar 1993); the lower terrace was occupied by a circus in the time of Domitian.

In fact, many of the marble and other ornamental stone pieces from the forum have been discovered in archaeological excavations undertaken outside that architectural complex, specifically south and east of the upper terrace. Some examples are the fragments of large friezes, capitals and marble clypeii found behind the Cathedral apse; a capital and a fragment of a large column shaft found in Sant Llorenç Street; some parts of a clypeus located very close to the Jaume I excavation; a large quantity of marble pieces found in the Plaça del Fòrum (Hauschild 1992, 107-112); and the marble fragments found in Peixateries Velles Street that were reused in the 14th century in Alfons III's tomb in Lleida (Mar 1993, 107-108). Therefore the Jaume I marbles can be attributed with certainty to the Tarraco Provincial Forum complex and were left there when it was abandoned, as we will see below.

1. Note that the convent demolition uncovered some ancient architectural elements as well as Roman marble fragments. In this case, the convent door was again put in the main entrance of St Llorenç church; some gravestones were moved to the Casa Castellarnau and Santa Tecla la Vella and others were cut up and added to the exterior wall of the school.

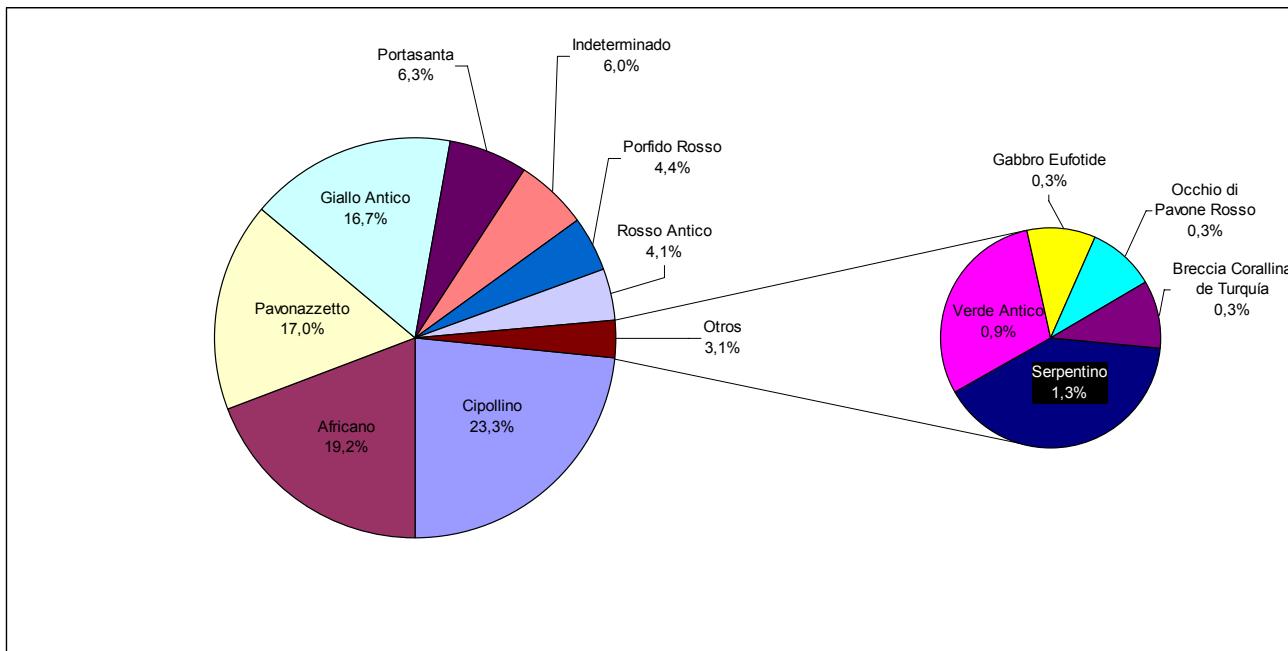


FIG. 4. Percentage of coloured marble typologies.



FIG. 5. Flooring of the Flavia's Cult Room.

It is known that Tarraco's upper Provincial Forum terrace was inspired by the Forum of Augustus in Rome, especially in its architecture and decoration. We would like to note the existence of different clypei with the representation of Jupiter Ammon, Medusa and another unidentified bearded divinity in the attic of the columns on the upper terrace portico. Furthermore, the large worship *aula* on the axis of the rear wall of the square would have been influenced by the Forum Pacis in Rome. Referring to the Mars Ultor temple in the Forum of Augustus, where emperor worship took place for almost 25 years (Hänlein-Schäfer 1985, 124), this building became a model for the rest of the western capital cities. In addition, the different kinds of marble used in this complex are very similar to those observed in the Tarraco forum, in the construction of which *urbs* workshops took part. For example, the pavement of the Mars Ultor temple



FIG. 6. Fragment of shaft.

was composed in the *pronaos* of alternating rectangles of giallo antico, pavonazzetto and africano. In the *cella*, giallo antico alternated with pavonazzetto (Ungaro 2002, 112), while the square floor was made up of white marble plaques and the porticos presented a large *opus sectile* floor of rectangular plaques with an external border of

bardiglio that delimited squares with an edge of giallo antico alternating with africano (Ungaro, Ponti, Vitti 2001, 565-567). The portico façade displayed fluted columns in giallo antico, while the columns between the portico and the exedras were made of cipollino. At the end of the exedras, the semi-detached columns on the ground floor were made of cipollino and on the first floor of giallo antico (Ungaro 2002, 110).

The original marble covering of the other architectural complex that inspired the creation of Tarraco's Provincial Forum, the Forum Pacis in Rome –built by Vespasian– has not been preserved. In 192 AD a fire affected the whole building and destroyed all the covering; this forced an important restoration in the Severian period. Thus the preserved coverings correspond to this stage, as does the interior paving of the cult *aula*, built using a large unit network of rectangular pavonazzetto plaques followed by large squares of giallo antico. Inside those squares there were alternate marble discs of pavonazzetto, forum granite and porfido rosso. This was all surrounded by a wide band of porfido rosso, except porfido disc one, which was surrounded by a band of pavonazzetto (Pensabene 2002, 11; Fogagnolo and Mocchegiani 2009, 185-187).

Consequently, we could assume a similar decoration in the Tarraco Provincial Forum composed of large squares or rectangles of alternating giallo antico, pavonazzetto and africano. In fact, it may have some similar features to Rome's buildings, since in Tarraco some small granite and pavonazzetto shafts and also a giallo antico pilaster base have been documented (MDT, inv. num. 3833). However, with the exception of the white marble plaques that pave the cult *aula*, in situ coverings in the Tarraco complex have not been preserved to corroborate this hypothesis, even though they were installed during the Late Roman period (Sánchez Real 1969, 293) (Fig. 5). Other evidence of marble covering includes the fixing marks on the interior walls of the cult *aula* (Mar 1993, 113-115) or even the slot at floor level in the back wall of the upper forum terrace, where marble plaques would have been fixed. Those plaques would have covered the terrace's surface, in the wall of which semi-detached pilasters would have been arranged at regular intervals. In fact, in Flavian and Trajanic times the provincial ruling class had deep roots right in the centre of Rome, which would explain its immediate projection in Tarraco's urban architecture, the huge quantity of marble supply in that period, and the *urbs* workshop coming to the provincial town (Mar and Pensabene 2011).

Despite this, with the information we have at the moment it is premature to propose a major reconstruction of the Tarraco imperial complex pavements and wall elevation. Moreover, in this analysis we have to consider the existence of a previous *temenos* around the Augustus Temple – known thanks to the wall foundation trenches that were refilled with earth during the *temenos* extension in the Flavian period. While the temple was being transformed, most of the marble that had decorated the first complex (including moulding architectural

elements) were discarded in the fill layers below the Flavian level (Balil 1969, 21-27; Aquilué 1987, 165-169). Then, as can be deduced from several excavations carried out in the area, architectural marble elements from the Julio-Claudian and Flavian periods were mixed up during the mediaeval abandonment and plundering of the forum structures (Mar and Pensabene 2011, 365-366). Therefore at least part of the marble found at the Jaume I site could have come from that Julio-Claudian *temenos*.

A possible marble recycling workshop

High marble concentrations in this city zone situated to the south of the Provincial Forum upper terrace suggest the existence of a workshop focusing on dismantling structures from the huge architectural complex; reusable remains or pieces destined for the lime furnaces would have been placed together at that site.

At the beginning of the 5th century, when some of the Provincial Forum areas were abandoned (Aquilué 1983; Hauschild 1983; Dupré 1989, 125; Macias 1999, 196ff.; Remolà 2000, 35-43), decorative elements were dismantled and removed. Thus, for example, some 5th-century trenches were documented in the Cathedral garden; in them were marble fragments from the destruction of the forum and next to the Cathedral cloister chapel a large quantity of shaft mouldings were found. Those fragments did not come from a fallen column, but from smoothing the shafts in order to reshape them into flat pieces suitable for reuse (Hauschild 1992, 114-117). Other finds of forum decorations and 6th-century pottery were documented inside the perimeter corridor between the external west portico wall (upper terrace) and the rock cut to level the terrain (Macias *et al.* 2008, 288-291). Some of the granite shafts from the forum portico were reused in the basilica built in the second half of the 6th century inside the nearby Roman amphitheatre and dedicated to the memory of the 259 AD martyrdom of the city's bishop and two deacons (Ventura 1954, 277; TED'A 1990, 226-229, 234).

Despite this, at the same time as some Provincial Forum sectors were being methodically dismantled, other spaces preserved their representational function until at least the late 5th century. The inscription dedicated to Emperors Leo and Anthemius is dated to this time (Alföldy 1975, no 100; 1991, 85; 2004, 14). Consequently, the dismantling of forum structures would have been executed under supervision and order, only removing pieces in sectors that had lost their function.

This circumstance suggests the presence of workshops specializing in the clearing, reusing, remaking or burning of marble. Pieces found at the Jaume I site, as well as others found in the surrounding areas, may have belonged to an *officina marmoraria* located very close to the Provincial Forum; we can recall finds of such large architectural elements beside the Cathedral apse or in the Plaça del Fòrum. This large supply source of material

served to build the majority of the Visigothic decorative elements in the city.

There are many examples showing how systematic marble cutting was carried out in this sector of the city's upper part (Hauschild 1992, 114-117; Macias *et al.* 2008, 287-293). That activity generated an accumulation of pieces ready to be reused or converted into lime: a small accumulation of marble was located in front of the Santa Tecla chapel, next to the Cathedral (Hauschild 1992, 111); another was found in the Plaça del Fòrum, where pieces of marble had been thrown into a ditch (Hauschild 1992, 110).

Some pieces from the Jaume I excavation corroborate this hypothesis; for example the Carrara shaft fragment with wedge signs that was ready to be broken up and reused (Fig. 6). Another example is the presence of many marble fragments with traces of burning, possibly from any of the lime furnaces distributed around this area, which was then part of the marginal Late Roman city. Activity in this enormous workshop must have extended to the northern side of the Jaume I site, as at no. 5 Portal del Carro Street a partially prepared Visigothic plaque made from a reused early-Christian sepulchral *lauda* was found (Fig 7). This plaque was found in the rubbish layer next to a large amount of piled-up Roman marble fragments and pottery of diverse chronology (Morant 1969-70, 125, plate. II; Alföldy 1975, 449, nº 1019, Taf. CLX, 7).

Conclusions

The stratigraphy documented during the extensive excavation of the plot tells us of its long occupation from the Republican period to the present day. Republican levels are scant and partial and do not have any associated structures; so we can deduce that it was a building-free zone inside the city walls. No structures are documented in the Late Roman layers either, although those layers provided the marble assemblage which is the subject of this study. The following occupation phases belong to the medieval period and are linked to the development of the area between the 12th and the 16th centuries, when homes were expropriated to build the church and the Pares Carmelites Descalços monastery, which was in use until 1835, when it was demolished to make way for a military barracks. In 1953, the barracks were demolished to build the Jaume I school. In 2002 the school was demolished to prepare for the construction of the new underground car park.

Most of the coloured marble plaques found in the excavation of this plot correspond to the types most commonly used in Roman imperial forums, particularly in the Forum of Augustus. This circumstance suggests that the pieces came from that imperial complex. Moreover, the chronology of the levels in which marble fragments were located (the Late Roman period) coincides with the beginning of the abandonment and dismantling of the Provincial Forum remains.

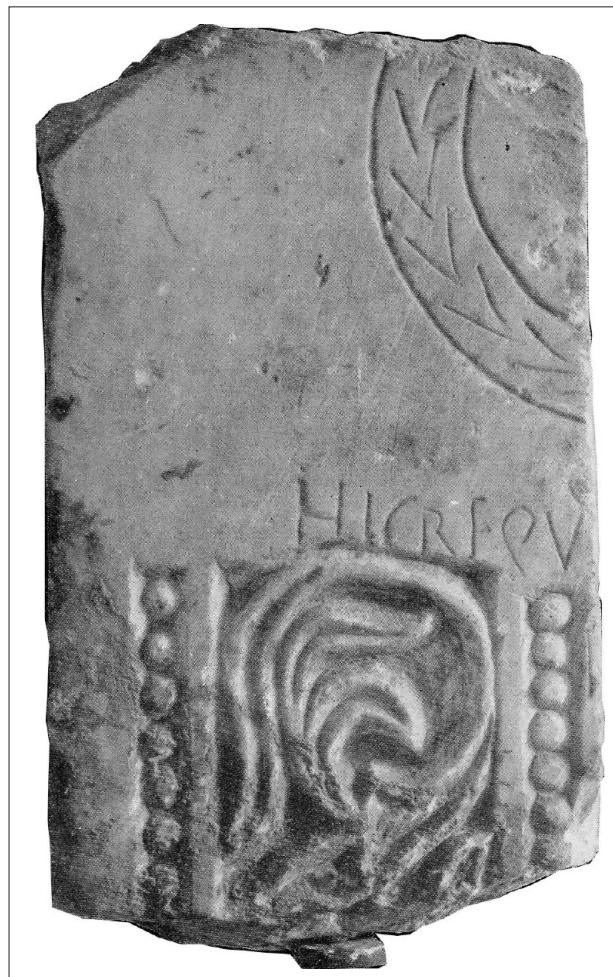


FIG. 7. Fragment of the tombstone.

In addition, the presence of large quantities of accumulated material associated with some partially burned fragments (or those in process of re-working) suggests they were placed here by a workshop specializing in dismantling the nearby forum structures, reworking useful pieces and turning the rest into lime. The location of the workshop, in the highest part of the city, next to the walls and well ventilated, would have made this activity easier.

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