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THE AUGUSTAN TEMPLE AND FORUM OF THE COLONY OF BARCINO: A 90 DEGREE TURN

Summary. *The Augustan Roman temple at Barcino has been a key element during the last 60 years in the research of the colony's urban development. Its peculiar elongated and narrow plan, first proposed in 1835, and its location at the highest point of the ancient city have dictated our understanding of the urban layout of Barcino by conditioning the shape of the city's forum and affecting the interpretation of the archaeological excavations carried out in the area since then. This paper proposes an alternative plan of the temple, based on data drawn from recent archaeological excavations, topographical analysis, typological comparisons, and the study of written sources. Our alternative hypothesis for the temple permits an in-depth reinterpretation of the plan of the forum and the evolution of the urban plan.*

INTRODUCTION

Barcino (modern Barcelona) was an Augustan foundation, the importance of which far exceeded its small size. It is one of the few cities created *ex novo* under Augustus that 'has been studied sufficiently to allow for some general observations about the nature of early Roman imperial urban planning in the [Iberian] Peninsula' (Mierse 1999, 91).

Despite the fact that the available archaeological information is only partial, the forum area is considered to be well understood, occupying a considerable area on the Roman city's plan (Fig. 1). The so-called Temple of Augustus is situated in a prominent part of the forum, the plan of which is determined by the temple's shape and orientation. The remains of this structure, located now in the courtyard of the house at 10 Paradís Street, the highest point of the ancient city, were listed as a National Monument in 1924. Although only three original columns of this temple remain today, its plan is considered to be well known owing to a report written by A. Celles (1835). Celles' plan of the temple has been widely accepted and has remained unaltered until the present day: it has exerted a great influence on the reconstruction of the forum and, by extension, on the layout of the city (e.g. Beltrán de Heredia 2001; Puig 2009).

This paper draws on new archaeological and topographical evidence, written and iconographical data, and typological comparisons to reinterpret the shape and orientation of

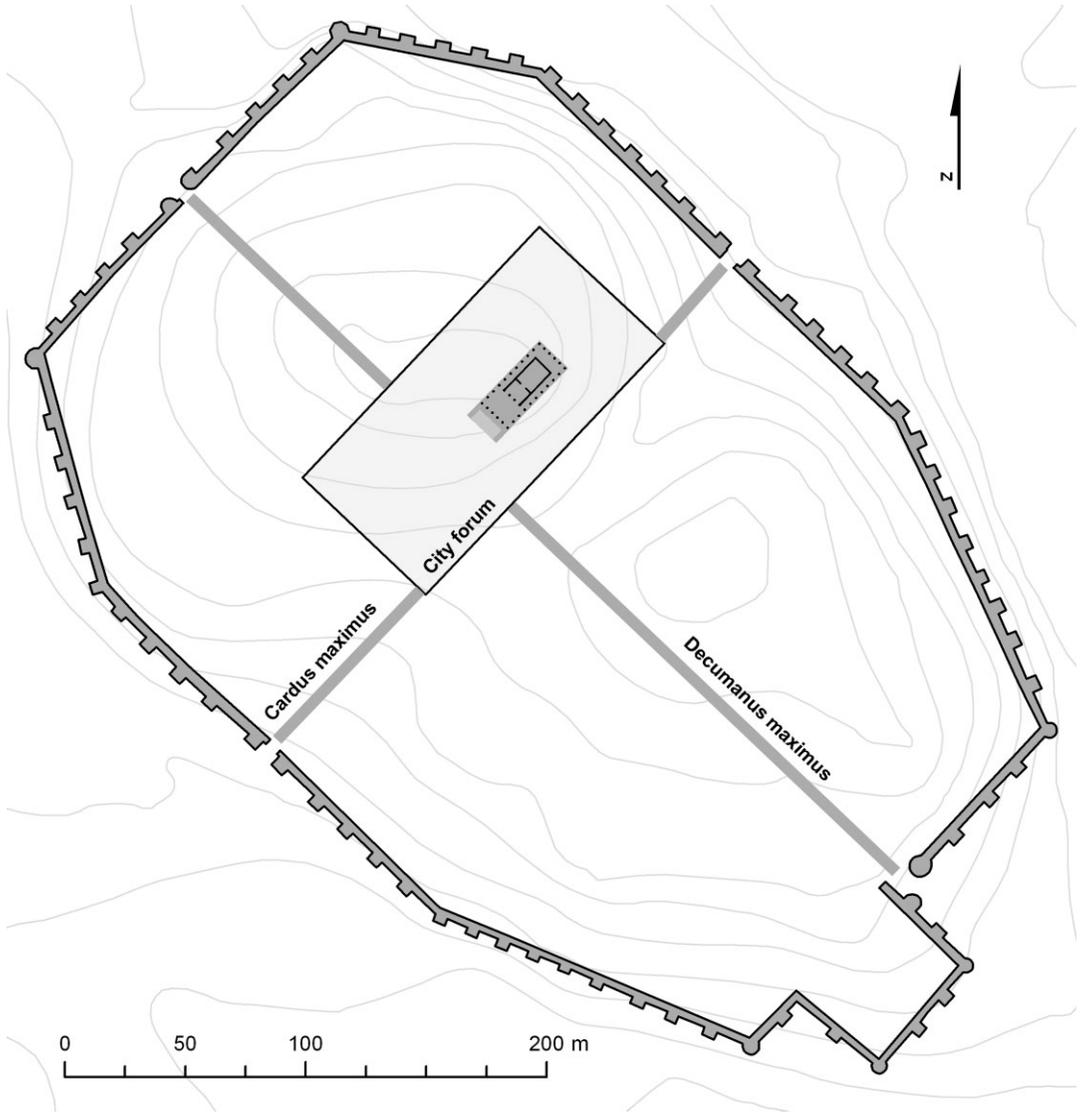


Figure 1
Traditional interpretation of the temple and forum of Barcino. Drawing by H.A. Orengo.

the temple and thus the forum of Barcino. These new hypotheses aim not only to produce a better understanding of the urban plan of Barcino, which has been for too long dependent upon previous untested suggestions, but also to provide new examples and methodological tools for the advancement of the international research on Roman urbanism and architecture.

THE TEMPLE OF AUGUSTUS

Background

In 1835 the Real Junta Particular de Comercio de Barcelona commissioned the architect Antonio Celles, together with Mariano de Cabanes and José Arrau, to study the remaining columns of this structure. There were then still six columns standing: five oriented on a NE–SW line and one on a NW–SE line. After measuring and studying the columns, Celles made nine test pits to verify his hypotheses on the shape and orientation of the temple. He concluded that the temple was Carthaginian in origin; his report is now housed in the Biblioteca de Catalunya. The epigraphist Fidel Fita (1875) first suggested that the temple was rather of Roman origin, dedicated to the tutelary gods of the colony and the house of the *flamines Romae divorum et augusti*, so relating it to the imperial cult.

Puig i Cadafalch *et al.* incorporated in their works (1909; 1934) the information from Celles' report: they suggested a reconstruction of the temple based on this and on the few remaining drawings made by Celles. Puig i Cadafalch (1936) also catalogued some decorative elements of the temple deposited in the Museu d'Arqueologia de Catalunya. Henceforth, Celles' plan became a key element in the studies of Roman Barcino, for the most part in relation to its urban arrangement and, in particular, to the reconstruction of the forum (e.g. Balil 1964; Beltrán de Heredia 2001; Puig 2009). Gutiérrez (1991) studied the decoration of the temple and placed its erection in the last quarter of the first century AD. He attributed it to a local workshop that seems to have incorporated both contemporary ideas practised in Rome and local preferences.

The remains

The remains of the temple at 10 Paradís Street today consist of four complete columns with their architrave and part of the podium of one of the corners of the structure. The column located at the northern extreme has been recreated from the remains of several others originally belonging to the temple; they were transported to this spot in 1956. The material employed for the construction of the temple was a local sandstone from Montjuïc Hill. According to Celles' report the structure was, at least partially, plastered over. The podium (Fig. 2) displays an external face made of large regular blocks with a filling of *opus incertum*, and it reaches one third of the height of the columns including their base and capital. On its top a *cyma reversa* can still be delineated.

The bases of the columns (Fig. 3) are of the Attic type. They sit directly on the stylobate without any plinth. The columns' shafts are formed by drums (the lowest one forming a single piece with the base), with 20 flutes separated by small flat fillets. The capitals are 1 m high and of the mixed Corinthian type, a combination of the Italic Corinthian and the Classic Corinthian (Gutiérrez 1991, 99), decorated with stylized acanthus leaves that are arranged in three tiers. Those on the second level protrude slightly over those on the first. The uppermost level hides the volutes, which are scarcely developed.

The preserved part of the architrave is flat: each of its component blocks spans the gap between a pair of columns. Although no part of the frieze remains *in situ*, elements of the temple's cornice decorated with plant motifs have been preserved. The soffit was ornamented with coffers and corbels; the entablature ends with a cymation. The cyma was decorated with



Figure 2
Image of the podium of the temple. Photograph by Núria Romaní.

lion heads, which acted as water-spouts (Gutiérrez 1991, 99). The roof was probably gabled, as is standard practice for this type of building.

The diameter of the columns ranges between 1.18 and 1.26 m and that of the bases between 1.54 and 1.60 m. The space between the columns differs according to which side of the temple is involved: those on the NW–SE axis have a distance of around 1.7 m between them, while the intercolumniation of those oriented NE–SW equals 2.19 m. The bases of the columns and the style of the capitals both point to an Augustan date for the temple's construction. These elements were first employed in Italy towards the end of the republic but they continued in use under Augustus, mainly in neighbouring Gallia Narbonensis (Gutiérrez 1991; Mierse 1999, 110). Nowadays the temple is considered to be one of the earliest Roman buildings in the Augustan foundation of the city, together with the first city walls (Rodà 2007, 748).

Although it had been traditionally claimed that the temple was dedicated to Hercules or Jupiter (Bassegoda 1974), the currently accepted hypothesis is that it was dedicated to the imperial cult (Balil 1964, 93–5). This last was important in Barcino during the second century AD, according to epigraphic evidence (Rodà 2004, 315–19).

THE SHAPE AND ORIENTATION OF THE TEMPLE

The traditional orientation of the temple is determined by the remains at 10 Paradís Street: these belong to its easternmost back corner. However, these remains are in fact open to two different interpretations: hypothesis A, proposed initially by Celles, according to which the



Figure 3
Image of the columns of the temple. Photograph by Núria Romani.

plan of the temple has its longer axis oriented NE–SW, and hypothesis B, our new interpretation, which places the longer axis on a NW–SE alignment. The acceptance of the A orientation has been key in shaping the temple’s plan so far. This is so because, on the assumption that the temple was hexastyle peripteral in plan, the distance between the remaining columns was multiplied by five for those on the NW–SE axis and by ten for those on the NE–SW. However, since the intercolumnial distance is greater for the latter set, the A orientation results in a remarkably elongated temple plan, not seen in any other example of the period.

In the following sections, we describe in detail both hypotheses, analyse the data on which they are based, and consider the temple plan reconstructions that they imply.

Hypothesis ‘A’: Celles’ interpretation

Despite his belief that the temple was a Carthaginian work, in his report Celles followed Vitruvius (4.5.1) in suggesting that it should be oriented towards the west: he proposed a hexastyle peripteral plan. He then described the results of the nine test-pit excavations (Fig. 4) that he conducted to prove this hypothesis. In each of the excavations, Celles documented the presence of the diverse elements of the temple corresponding to his proposed hypothesis although he did not provide any further details.

However, georeferencing Celles’ proposed plan and integrating it into a GIS environment allows a direct comparison with Garriga Roca’s highly accurate maps of the



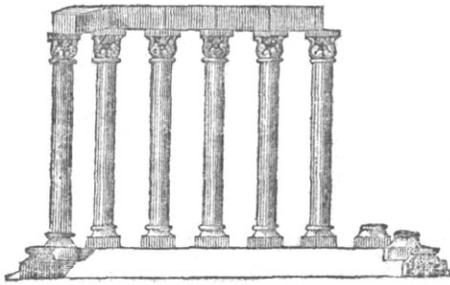
Figure 4
Location of Celles' excavations. Drawing by H.A. Orengo.

area:¹ certain problems are at once highlighted. As indicated in Figure 4, the columns were preserved in walls dividing different houses, but most of Celles' excavations were conducted inside the living areas of houses on Paradís Street: test pits 'b', 'c', 'd', 'f' and 'i'. The street level of the time varied between 16.9 and 15.3 m and the podium surface (above which the different elements found by Celles would have been located) was at a height of 18.7 m. Thus, if the podium surface level had been preserved, the habitation level of the houses would then have been around 2.7 m *higher* than the street level, a discrepancy which seems unlikely. Another problem revealed by the recent accurate referencing of these excavations is that some of the tests are seen to be positioned over the walls of buildings (e.g. Figure 4, test pits 'a' and 'e'), which would surely have prevented or limited the excavation at these points.

Hypothesis 'B': a right-angle turn

A series of data drawn from different sources is evaluated here: it points to a NW–SE orientation of the temple, i.e. one standing at 90 degrees to that proposed by Celles.

1 A topographical map of the inner city (scale 1:250, 1856–58), a topographical-geometrical map of Barcelona and a reformation project (produced from the former in 1861).



View of the columns from Paradís street according to Pujades



View of the columns from Llibreteria street according to Pujades



Columns and bases as drawn by Pujades in 1595

- Columns
- Bases

Figure 5

Reconstruction of the state of the temple in 1595 according to J. Pujades. Drawing by H.A. Orengo.

Documentary data J. Pujades was the first to draw and describe the temple in detail as early as 1595 (Fig. 5). Six columns then remained, with part of the cover and some friezes. Pujades also drew the bases of four columns that had disappeared by the nineteenth century when Celles made his report. Three are situated in the south-western part of the temple, including those of the columns forming the southernmost corner of the temple. He also drew one column base on the north-eastern side of the temple. The description and drawing of the temple made by Pujades (1829, Book 1, 85), 240 years before Celles' report, show a hexastyle temple oriented NW–SE.

Archaeological data Recently, two new archaeological excavations were conducted in the area around the temple. Both of them were very small rescue excavations, restricted to zones where lifts were to be installed, but the data they provided still allow significant insights.

(a) The excavation at 5 Paradís Street (Fig. 6) revealed some remains of Roman origin (Marín 2007). Two aligned and well-cut blocks of Montjuïc sandstone were revealed: they are 83 cm long and 35 cm wide, oriented NW–SE. Attached to their north-eastern side was a mass of *rudus*, composed of uncut stones joined by concrete, which is seen as the filling of the temple's podium. One interesting aspect of these blocks is that they preserved remnants of blue- and yellow-painted plaster on both their upper surface and their south-western side. The height of the upper surface of the blocks is equal to that documented there for the remains of the temple.

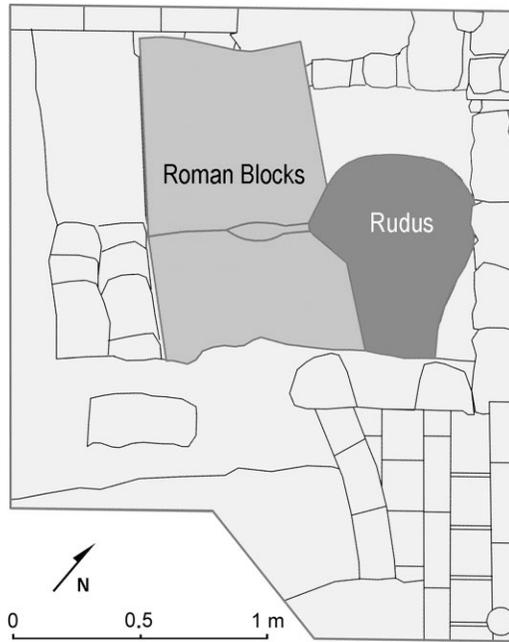


Figure 6
Plan of the excavation at 5 Paradís Street. Adapted from Marín 2007.

They are also similar in material and size to those documented at the base of the temple's podium at 10 Paradís Street.

Both blocks and *rudus* were georeferenced and integrated into the GIS project. Both their location and orientation coincide with the south-western limit of the podium of the temple, according to the B orientation (Fig. 7). The presence of *rudus* on the north-eastern side of the blocks can thus indeed be interpreted as the inner filling of the temple's podium.

The presence of blue- and yellow-painted plaster on the blocks (also documented in the preserved part of the temple) indicates firstly that these blocks were on the surface and visible, secondly that they formed part of a public building, and thirdly that they were not meant to be a surface to be trodden on. Very few examples exist of Iberian Roman temples that preserve remains of pictorial decoration. However, some fragments of lively colours, such as red, have been recovered from the temple of Jupiter in Caparra and in the Capitolium at Baelo Claudia (Abad 1982, 435–7). Further, both the temple of Diana in Emerita Augusta and the temple of Augustóbriga still retain a coating of plaster on some parts of the columns and capitals (Mierse 1999, 71, 109).

(b) The excavation at 12 Paradís Street (Puente 2005) recorded a structure fashioned with lime mortar and covered with *opus signinum* hydraulic mortar. This feature, at 2.21 m long by 42 cm wide, was set 1.08 m below the modern level of the street: it was oriented NE–SW. The *opus signinum* hydraulic mortar extended for 1.40 m in length, and was 44 cm wide and 10 cm deep. The structure continued beyond the north-eastern limits of the excavation. Both its north-western and south-western sides were destroyed when the modern building was constructed.

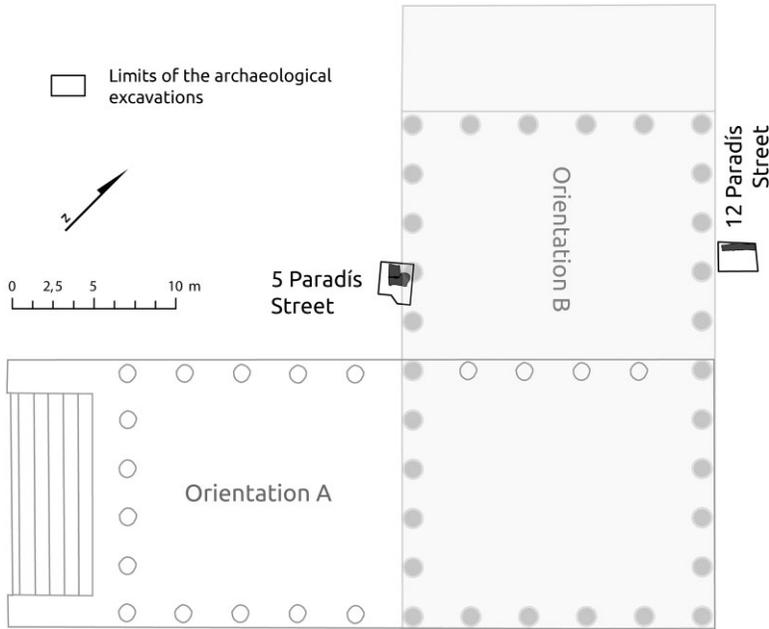


Figure 7

Orientations A and B with the location of archaeological finds in Paradís Street. Drawing by H.A. Orengo.

As with the finds at 5 Paradís Street, the excavation at number 12 was georeferenced and integrated into the GIS. As a result, the hydraulic structure is verified as potentially related to the temple, if hypothesis B is accepted (Fig. 7). It was located some 38 cm lower than the base of the temple and 35 cm lower than the blocks documented at 5 Paradís Street. This structure would run at a distance of 46 cm south-west of the podium and parallel to it, again as reconstructed in hypothesis B. Though a full excavation was impossible, the presence of the hydraulic feature in this position is consistent with the presence of a *lacus* or pool surrounding the temple (Orengo and Miró 2013). The existence of pools surrounding temples has been documented in the few other well-studied temples in the Iberian Peninsula: the temple of Diana in Évora (Hauschild 1991) is surrounded by a *lacus*, and the temple of Diana in Emerita Augusta (Álvarez and Nogales 2003) has a pool at each of its sides. Further, the temples of Carteia (García and Gómez 2009, 219) and Écija (García-Dils *et al.* 2007) present evidence for cisterns or pools at the rear of the temple. Given the height difference (35–38 cm) between the walking level of the holy precinct or temenos and the surface of the hydraulic structure, this last would seem to have been a pool rather than a cistern, probably in an arrangement similar to that at the temple of Diana in Évora.

Figure 8 presents a hypothetical reconstruction of the plan and section of the temple, according to the B orientation, following the archaeological evidence provided by the excavations at Paradís Street.

Typological comparison The only two other temples of similar date in the Iberian Peninsula where enough standing remains allow a reliable comparison are the temples of Diana in Évora and in Emerita Augusta. Both temples are thought to be very similar in terms of their plan and concept

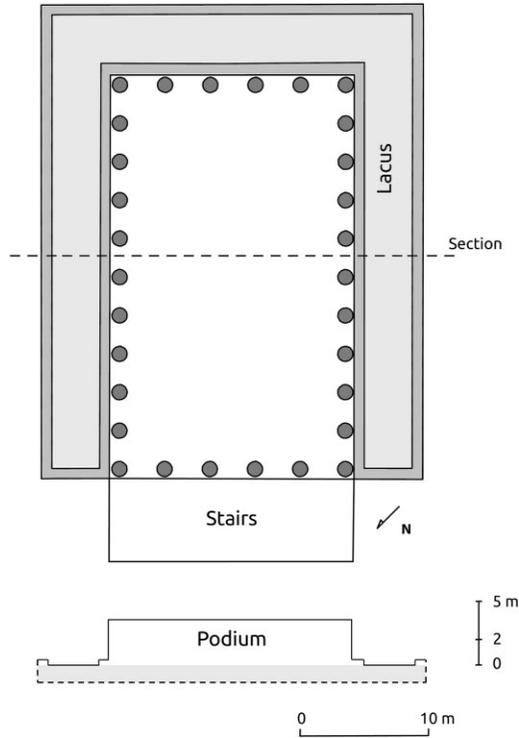


Figure 8

Hypothetical reconstruction of the plan and section of the temple following the B hypothesis and the archaeological data provided by the excavations in Paradís Street. Drawing by H.A. Orenco.

(Mierse 1999, 101, 107), sharing a hexastyle peripteral plan, as has also been proposed at Barcino. Peripteral temples are rare in Roman contexts but some examples of similar chronology exist, such as the Temple of Minerva on the Aventine and the Temple of the Dioscuroi in the Roman forum, both reconstructed during the Augustan period (Mierse 1999, 98).

The temple of Barcelona is necessarily hexastyle peripteral: the preserved colonnade belonged to one of the back corners of the temple and not to the main façade, which could have displayed free-standing columns even if it was not a peripteral temple. This corner therefore belonged to the back of the temple, and to propose otherwise would imply a forum awkwardly placed in the city's plan. It is also a logical assumption to consider the temple as hexastyle, as there were five columns standing on one of its short sides. As all known Roman temples have an even number of columns on their shorter sides, this leaves a minimum of six columns for this temple. The next increase in column numbers would mean a temple with eight columns on its short side: such a pattern would be both too large for the elevated space where the temple stands and, further, would displace the temple from a central axial position with respect to the city's *decumani*.

The plan of the temple proposed for the B orientation hypothesis would result in a podium size of 31.69 by 19.1 m. These measurements would closely correspond to the so-called 'golden ratio', of 1.618. The golden ratio is also present in the proportion of the plans of the

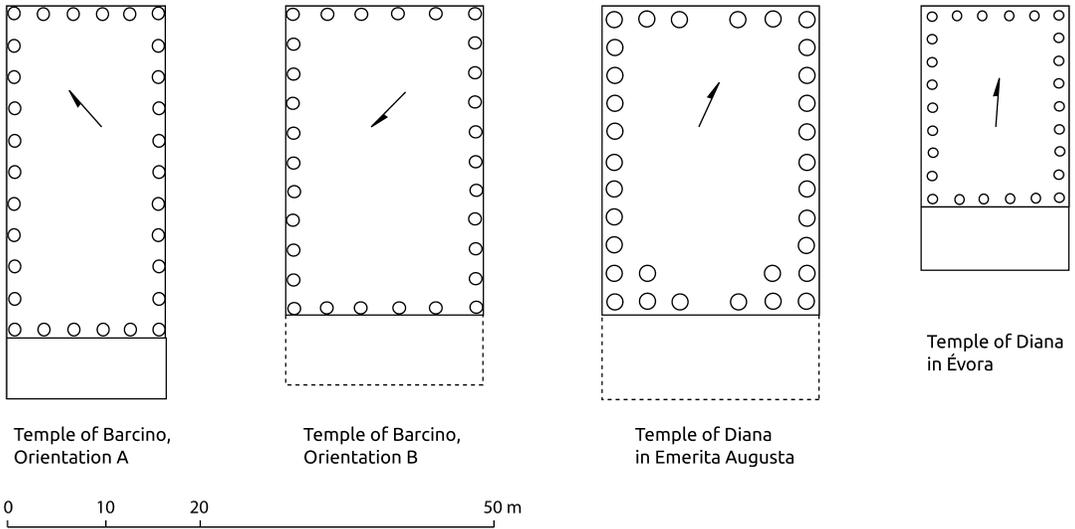


Figure 9

Typological comparison between the different hexastyle peripteral temples of the Iberian Peninsula. Drawing by H.A. Orengo, adapted from Hauschild 1991.

temples at Emerita Augusta and Évora: for the temple at Emerita Augusta it works out at 1.675, for the temple at Évora 1.6. The equivalent value of the B orientation for the temple at Barcino is 1.66.

The plan of the temple, according to the A orientation hypothesis, is currently thought (Puig 2009, 9) to have measured 35 by 17.5 m (i.e. 1 *actus* by 0.5 *actus*, following the proportions recommended by Vitruvius), which would result in a proportion of 2.18. Other reconstructions of the temple, following Celles, vary between 35.7 by 16.44 m in the plan made by the city's museum in 1992, and 37.85 by 17 m in the plan published by Beltrán de Heredia (2001, 99). In fact, Celles' measurements were made in a unit in use during the nineteenth century (namely a 'foot', corresponding to 27.86 cm): this, when translated into metres, gives a temple of 34 by 15.6 m. Figure 9 shows a comparison between the temples of Barcino (both A and B orientations), Emerita Augusta and Évora. The difference in proportions between the A and B orientations is starkly evident.

THE LOCATION OF THE TEMPLE WITHIN THE CITY'S FORUM

Very few actual archaeological data are available for the forum of Barcino: its reconstruction has been based on the shape and orientation of the temple (Puig 2009, 9). Topographical factors were influential in the location of the temple, which is located at the highest point of the city. Thus, an analysis of the ancient topography of the city is useful in order to contextualize the plan of the forum. A digital terrain model was developed from a 1-m contour topographical map drawn in 1861 (for details, see Orengo and Miró 2013): this was combined with archaeological spot heights both from Roman levels extracted from recent excavations, and from a plan drawn by F. Cardoner in 1985 with the results of previous Roman excavations. The

conjunction of the modern topography of the city with the archaeological spot heights provided a good indication of how the city's topography had evolved from the Roman period.

The plan of the forum that derives from the A orientation of the temple – the accepted version in all recent publications (e.g. Beltrán de Heredia 2001; Puig 2009) – runs parallel to the *cardo maximus* and crosses the *decumanus maximus*. According to height data interpolated from archaeological excavations, this account would present a drop of c.4 m between the temenos and the *decumanus maximus* level. Since the steps of the temple are only 12 m away from the *decumanus maximus*, the forum would have had to be divided into two terraces – the higher corresponding to the temenos and the lower to the civic area.

If the B hypothesis were to be accepted, the temple orientation and its shape would dictate a different area for the forum. This alternative forum B would have had a similar orientation to that of temple B. The forum would thus be delimited on its south-eastern and south-western sides by the *cardo* and *decumanus maximus*. Similarly, it would stretch towards the north-west, filling most of the north-eastern sector of the city. This is not the first time that this area has been suggested as the forum of the city. Durán i Sanpere (1957), director of the excavations in the area, had already proposed the idea, basing it on the quantity of plinths of monuments (more than 40) found.

The analysis of those archaeological structures closest to the temple can help further delimit the forum area. Two structures – Sant Iu, until recently considered a domus or private house, and the Sant Honorat domus – are instrumental here.

Sant Honorat domus

This wealthy domus was constructed in the fourth century AD around a peristyle paved with *opus sectile*. Attached to the domestic space are a series of *tabernae*, open to one of the minor *decumani* (Florensa and Gamarra 2006). These *tabernae* 'invade' the space traditionally considered as part of the forum. The results of this excavation cast doubts on the previously accepted hypothesis concerning the forum's shape. Puig, acknowledging this problem, recently proposed a shorter forum composed of two and a half *insulae* of 1.5 *actus* each, whilst at the same time recognizing the disproportionate size of temple A with respect to the proposed forum's area (2009, 9–10).

The presence of *tabernae* does not necessarily invalidate the presence of a shorter forum in this area in the fourth century or imperial period, but it certainly renders unlikely the location of buildings with political or civil functions at this end of the forum.

Sant Iu domus

The location of the Sant Iu domus at approximately 37.5 m north of the B temple and inside the B forum renders the study of this structure particularly pertinent for the evaluation of the B forum hypothesis.

The Sant Iu domus was built in the second century AD according to the stylistic analysis of its mosaics (Balil 1962, 43–4; Barral 1978, 62–3), although archaeological data suggest there is a previous phase of uncertain date (Cortés 2009). The construction of the Bishop's palace in the fourth century AD (Bonnet and Beltrán de Heredia 2000, 470) on this spot marks the end of this structure. The plan of the preserved part of the building (Fig. 10) shows a rich peristylum with a three-sided colonnade open at its south-western side. Also preserved is a courtyard with a

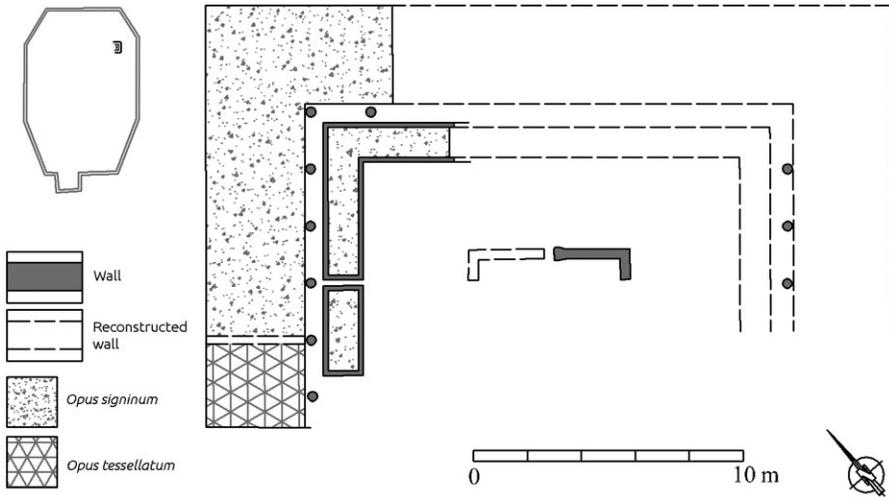


Figure 10

Remains and hypothetical reconstruction of Sant Iu. Drawing by A. Cortés, adapted from Adroer 1979.

nymphaeum that included a fountain and several pools. Nearby the north-western colonnade, open to the peristylum, the so-called ‘mosaic room’ can be viewed as one of the banquet halls under the portico: these last are characteristic of *collegia*, such as that found in the monument of Ucuétis in Alesia (Martin and Varène 1973). In fact, following architectural analysis, the Sant Iu domus has been recently reinterpreted as a possible *collegium* (Cortés 2009, 272–9; 2011, 26–32). The size and morphology of the three-sided colonnade, the richness of the ornamentation, including marbles from Carrara and also *greco scritto* and Afyon, and the closeness of Sant Iu to the temple declare this *collegium* to be a clear example of a public building. That Sant Iu was not earlier recognized as a public building was due to its location outside the forum area, according to previous hypotheses. With the new hypothesis B, however, the three-sided colonnade of Sant Iu has its open south-western side facing the B forum. Its placement and orientation are therefore consistent with the new interpretation proposed for the forum.

Many examples exist of *collegia* located in the forum area or nearby: the monument of Ucuétis in Alesia, where a side of the building is also open to the forum (Martin and Varène 1973, 155–6), the Caseggiato dei Triclini in Ostia (Pavolini 1983), the Eumachia building in Pompeii (Richardson 1988), and the building in Caballero Street at the south-eastern extreme of the forum of Carthago Nova (Fuentes 2006). This last example has been compared to the Augusteum at Miseno (de Miquel and Subías 1999). Some other examples of possible Augusteum inside forum areas are the so-called ‘Marble Forum’ at Augusta Emerita (Álvarez and Nogales 2003) and the Augusteum at Paestum (Greco and Theodorescu 1980).

There is evidence indicating that the Sant Iu *collegium* could be considered as a *collegium Augustalium* or *Augusteum*, i.e. one dedicated to the cult of Augustus. The existence of a *collegium Augustalium* in Barcino is well attested epigraphically with the dedication of monuments and inscriptions to *Augustae* divinities from Vespasian down until the middle of the second century AD (Rodà 2004, 315–18). The inscriptions are related to magistrates from Barcino holding the position of *flamines Augustales* (Fabre *et al.* 1997, documents 42, 43, 50, 55,

61, 67) and to *liberti* with the position of *seviri Augustales* (Fabre *et al.* 1997, documents 1, 10, 11, 14, 33, 66, 76–119). Two of them referring to a Caius Trocina Onesimos, a *libertus* who was *sevir Augustalis*, were exhumed in Sant Iu (IRC IV 110 and IRC IV 111 in Fabre *et al.* 1997, document 110). Another inscription found in Sant Iu documents the honorific dedication made by the *sevir Augustalis* to Marcus Cornelius (Fabre *et al.* 1997, document 116). These data suggest that the Sant Iu *collegium* could have been an Augusteum: this would explain not only the position of this public religious building inside the B forum but also its closeness to the sacred area of the temple's temenos.

The information from the Sant Honorat domus and Sant Iu *collegium* indicates that the A forum should be reduced on its south-western side while expanded on its north-western side in order to include in its area, at least, the Sant Iu's *collegium*. This is also consistent with the new B orientation of the temple. Also of significance is the topographical drop between the temenos area where the temple is located and the rest of the forum as implied by the B hypothesis: a difference of c.6.5 m between the temenos and Sant Iu exists. This disparity suggests that the B forum was divided into two areas, set at different heights, probably by means of a cryptoporticus. The first level would embrace the temple's temenos (Fig. 11, area 1); the second lower area would include the Sant Iu *collegium* and other public, representative and political buildings

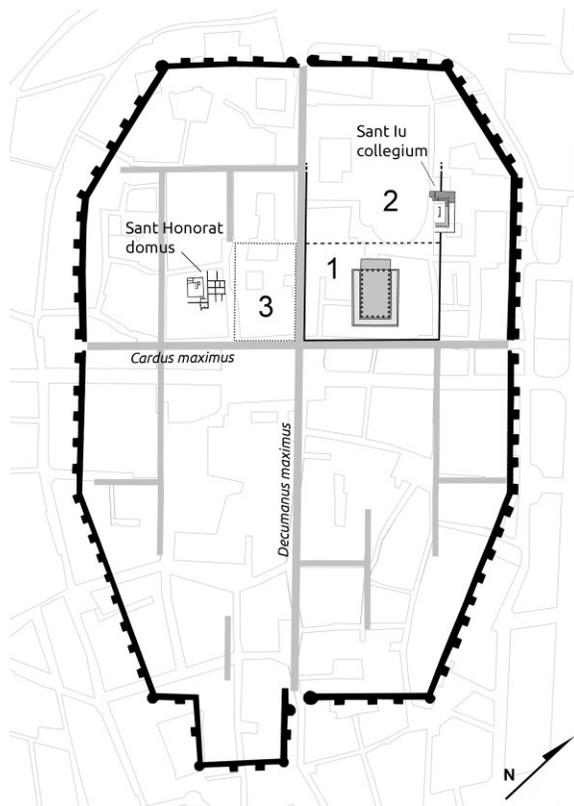


Figure 11

Hypothetical plan of the B forum (areas 1 and 2) inside the urban plan. Drawing by H.A. Orengo.

(Fig. 11, area 2). Such height differentials in forum areas, indicative of representative importance, have been recorded in various Roman cities in the Iberian Peninsula, such as Carthago Nova (Ramallo 2007), Écija (García-Dils and Ordóñez 2007), Emerita Augusta (Álvarez and Nogales 2003, 309–11), and the provincial forum of Tarraco (Orongo *et al.* 2011). In the case of Barcino, the analysis of the height data suggests that the topography of the Roman city would have been more even than in later periods, the only exception being the temenos of the temple with its dramatic elevation in relation to its surroundings. It is impossible to determine whether this elevation was artificially made to accommodate the temple, as can be seen to be the case with the Augustan forum in Conimbriga, where the temple was raised artificially into a dominant position by a terrace that served as a cryptoporticus (Alarcão and Étienne 1973, 373). Whatever the case, the elevation of the temenos would enhance the temple's visual dominion over the city, providing the temple with a strong symbolic dimension.

THE URBAN LAYOUT ACCORDING TO HYPOTHESIS B FOR THE TEMPLE AND FORUM

The area proposed in the new interpretation of the forum of Barcino would not include the crossing of *cardo* and *decumanus* (Fig. 11). Rather, they limit the forum at its south-eastern and south-western sides. Many Iberian fora built during the early Empire have a similar arrangement, being delimited by the main city axes: such are the forum of the colonia at Emerita Augusta (Álvarez and Nogales 2003, 309–11) and the forum of Conimbriga (Alarcão *et al.* 1979, 252–3). From the Augustan period the location of the forum seems to avoid impinging upon the streets; where a street is included, it is used to divide the forum into zones intended for different functions (Jiménez 1987, 174–5). The B forum accords with the urban conception dominant in the Augustan period and the early Empire. Lack of archaeological data prevents the outright rejection of the A forum as part of the city's public space. Nevertheless, if the A forum had formed a public space prior to the fourth century AD, it would have had a different function from that of the B forum area, from which it was separated by the *decumanus maximus*. The presence of *tabernae* after the fourth century AD may point to a potential commercial area (Fig. 11, area 3).

The new hypothesis also offers an intriguing coincidence between the B temple's main axis and one of the city's *decumani*. Further, the B forum is sited more comfortably within the city's urban layout, since its shorter sides are enclosed in the space delimited by two *insulae*, thus maintaining the symmetry with the other side of the *cardo maximus*.

The analysis of the urban changes in the north-eastern sector of the city can also help comprehend the limits and borders of this area. Christianity had been adopted in Barcino by the fourth century AD when the Roman temple was still in use: the temple could not therefore have been employed by the early Christian communities as is documented in many other cities, such as Tarraco where the cathedral is located on the same site as the Roman temple.

Nonetheless, the cathedral of Barcelona, under which is located the much smaller early Christian church according to Beltrán de Heredia (2001), falls inside the B forum area: it lies 45 m north of the preserved columns of the Roman temple, on the same axis and with the same orientation as the B temple. It is worthwhile to note that early Christian complexes, in addition to the cathedral itself, included also the baptistery and the Bishop's palace (Knight 1999, 68) – both of which have been found in Barcelona. The former is located at the northern extreme of the B forum, while the latter was constructed on top of the Sant Iu *collegium*. Similarly, in many other cities, such as Valentia (modern Valencia) or Aix-en Provence, the early Christian

complexes were also located inside the forum limits (Knight 1999, 68; Ribera 2003). By occupying these spaces, early Christian communities sought to assert their recently earned legitimacy by positioning their buildings in the most prestigious part of the colonia. In the case of Barcino, the profound changes in the organization of power during late antiquity occurred without displacing the existing political and religious centre of the city.

CONCLUSIONS

This research serves to illustrate how careful examination and employment of diverse lines of evidence can lead to a holistic appreciation of the urban environment of a Roman city: it can stand as an example for the understanding of provincial urbanism in other places.

According to the data presented here, enough indications exist to cast doubts on the current plan of the temple of Barcino. The alternative 'hypothesis B' allows a reconstruction which is in agreement with other well-known Iberian hexastyle peripteral temples of the same time span. This newly proposed temple plan also accords with the results obtained by recent archaeological excavations in the temenos area and the earlier description and drawing of the temple made by Pujades in 1595. Acceptance of this hypothesis entails a reinterpretation of the city's forum: this would fit better with the city's urban layout, the available archaeological data, and other parallels of the same period in the Iberian Peninsula.

If the Augustan dating of the temple is accepted, it is unlikely that it was in fact dedicated to Augustus, as the imperial cult was not permitted in the western provinces prior to Tiberius (Mierse 1999, 84–5, 121). This function instead would have been covered, at a later stage, by the construction of an Augusteum located close to the temple's temenos and open to the forum square. With the permission and encouragement of the imperial cult from Tiberius' reign, provincial cities began developing new specific spaces and buildings where the recently institutionalized cult's needs could be met (Mateos 2004, 144). The construction of the Sant Iu's Augusteum probably was a response to this need.

The three Iberian peripteral temples are unusual examples of Augustan buildings. Although they may have followed some Augustan models from Rome (Mierse 1999, 98), they yet provide examples of local preferences within the so-called Augustan homogenization. The specific topography of Barcino was employed to place the temple at the most visible point of the city and close to the crossing of *cardo* and *decumanus maximus*. Two urban design parameters of the Augustan period determined the location of the forum in the north-western sector of the city: firstly, the need to employ the local topography to raise the temple to a dominant position in turn forced the initial construction of the forum area to be positioned in the north-western sector of the city. Secondly, the preference for a forum delimited by the *cardo* and *decumanus maximus*, instead of one centred on the crossing of these main thoroughfares as suggested until now, would compel the employment of most of this north-western sector of the city. In a larger city such as Emerita Augusta this act would have resulted in a fairly central location for the forum. The small size of Barcino, however, makes the forum seem displaced with respect to the city's geometric centre.

The urban layout of the city, therefore, corresponds to Augustan planning further adapted to the topography of the area and the specific Iberian provincial preferences, all centred on the particular plan of the city's temple. As the city was planned *ex novo*, the large size of both temple and forum relative to the colonia's size cannot be the result of later urban development. This distortion, together with the sophistication of the Sant Iu's *collegium*, can be added to the

previously published data on the city's private houses (Cortés 2011), water distribution, public and private *thermae* (Orengo and Miró 2013), and landscape (Palet *et al.* 2011) to provide an indication of the function of the colonia as a representational, political, administrative and religious centre, rather than a habitation or colonial one. Barcino was a city designed as an *urbis simulacrum Romae* where the Augustan conception of the new Empire was reflected and clearly advertised.

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REFERENCES

- ABAD, L. 1982: *La pintura romana en España* (Alicante–Sevilla, Universidad de Alicante, Universidad de Sevilla).
- ADROER, A.M. 1979: Restos romanos en el palacio de los Virreyes de Barcelona. *Rivista di Studi Liguri* 45, 247–52.
- ALARCÃO, J. and ETIENNE, R. 1973: L'architecture des cryptoportiques de Conimbriga (Portugal). In *Les cryptoportiques dans l'architecture romaine* (Rome, École Française de Rome), 372–405.
- ALARCÃO, J., ETIENNE, R., MOUTINHO, A. and DA PONTE, S. 1979: *Fouilles de Conimbriga. VII: Trouvailles diverses – Conclusions générales* (Paris).
- ÁLVAREZ, J. and NOGALES, T. 2003: *Forum Coloniae Augustae Emeritae. Templo de Diana* (Mérida, Asamblea de Extremadura).
- BALIL, A. 1962: Mosaicos ornamentales romanos de Barcelona. *Archivo Español de Arqueología* XXXV 105/106, 36–69.
- BALIL, A. 1964: *Colonia Iulia Augusta Faventia Paterna Barcino* (Madrid, Instituto Español de Arqueología, CSIC).
- BARRAL, X. 1978: *Les mosaïques romaines et médiévales de la Regio Laietana* (Barcelona, PPU).
- BASSEGODA, J. 1974: *El templo romano de Barcelona* (Barcelona, Real Academia de Bellas Artes de San Jorge).
- BELTRÁN DE HEREDIA, J. 2001: Continuitat i canvi en la topografia urbana. Els testimonis arqueològics al quadrant nord-est de la ciutat. In BELTRÁN DE HEREDIA, J. (dir.), *De Barcino a Barcinona (segles I–VII). Les restes arqueològiques de la plaça del Rei de Barcelona* (Barcelona, Ajuntament de Barcelona), 96–108.
- BONNET, C. and BELTRÁN DE HEREDIA, J. 2000: El primer grupo episcopal de Barcelona. In RIPOLL, G. and GURT, J.M. (eds.), *Sedes Regiae (400–800 dC)* (Barcelona, Reial Acadèmia de Bones Lletres), 467–90.
- CARDONER, F. 1985: *Origen i historia de la ciutat de Barcelona. Pla de la ciutat romana: muralla* (Original map in the archive of Francesc Cardoner in the Documentation Centre of the MUHBA).
- CELLES, A. 1835: *Memoria sobre el colosal templo de Hercules que se halla en la ciudad de Barcelona* (Unpublished manuscript in the Biblioteca de Catalunya, Ms. 2497).

- CORTÉS, A. 2009: *L'arquitectura domèstica de les ciutats romanes de Catalunya. Època tardorepublicana i altimperial* (Ph.D. thesis, Universitat Autònoma de Barcelona).
- CORTÉS, A. 2011: L'arquitectura domèstica de la ciutat romana de Barcino. *Quaderns d'Arqueologia i Història de la Ciutat de Barcelona* (època II) 7, 16–66.
- DE MIQUEL, L.E. and SUBÍAS, E. 1999: Un edificio de culto en la calle Caballero (Cartagena). *Congreso nacional de arqueología. Cartagena 1997. 4. Romanización y desarrollo urbano en la Hispania republicana* (Murcia, Instituto del Patrimonio Histórico), 49–56.
- DURÁN I SANPERE, A. 1957: *Noticia y guía de las excavaciones de la calle Condes de Barcelona* (3rd ed.) (Barcelona, Ayuntamiento de Barcelona).
- FABRE, G., MAYER, M. and RODÀ, I. 1997: *Inscriptions Romaines de Catalogne. IV: Barcino* (Barcelona, Universitat de Barcelona).
- FITA, F. 1875: Estatua marmórea de estilo griego recién hallada en Barcelona. *Revista Històrica Latina* [1 July 1875].
- FLORENSA, F. and GAMARRA, A. 2006: L'excavació del jaciment arqueològic del carrer Sant Honorat 3 de Barcelona. *Tribuna d'Arqueologia* 2003–2004, 189–209.
- FUENTES, M. 2006: Novedades en el extremo sureste del foro de Cartago Nova: El porticado de la sede colegial. *Mastia* 5, 141–55.
- GARCÍA, M. and GÓMEZ, M. 2009: Sistema hídrico de Carteia. In LAGÓSTENA, L.G. and ZULETA, F. DE B. (coords.), *La captación, los usos y la administración del agua en Baetica: Estudios sobre el abastecimiento hídrico en comunidades cívicas del Conventus Gaditanus* (Cádiz, Universidad de Cádiz), 203–56.
- GARCÍA-DILS, S. and ORDÓÑEZ, S. 2007: Nuevos datos para el estudio del culto imperial en la colonia *Augusta Firma* (Écija–Sevilla). In NOGALES, T. and GONZÁLEZ, J. (eds.), *Culto Imperial: política y poder* (Roma), 275–98.
- GARCÍA-DILS, S., ORDÓÑEZ, S. and RODRÍGUEZ, O. 2007: Nuevo templo augusteo en la *Colonia Augusta Firma Astigi* (Écija–Sevilla). *Romula* 6, 75–104.
- GRECO, E. and THEODORESCU, D. 1980: *Poseidonia-Paestum. 1: La curia* (Roma, École Française de Rome).
- GUTIÉRREZ, M.A. 1991: El templo romano de *Barcino*. Análisis de la decoración arquitectónica. In RUIZ DE ARBULO, J., *Templos Romanos de Hispania* (Murcia, Cuadernos de Arquitectura Romana 1), 95–105.
- HAUSCHILD, T. 1991: El templo romano de Évora. In RUIZ DE ARBULO, J., *Templos Romanos de Hispania* (Murcia, Cuadernos de Arquitectura Romana 1), 107–17.
- JIMÉNEZ, J.L. 1987: Los modelos constructivos en la arquitectura forense de la Península Ibérica. In *Los foros romanos de las provincias occidentales* (Madrid, Ministerio de Cultura), 173–8.
- KNIGHT, J.K. 1999: *The End of Antiquity. Archaeology, Society and Religion AD 235–700* (Stroud).
- MARÍN, S. 2007: *Memòria del sondeig arqueològic realitzat a la finca núm. 5 del carrer del Paradís de Barcelona* (Barcelona, Centre de Documentació del MUHBA, unpublished field report).
- MARTIN, R. and VARÈNE, P. 1973: *Le monument d'Ucuétis à Alésia* (Paris, CNRS, Gallia Suppléments 26).
- MATEOS, P. 2004: El templo de culto imperial de Augusta Emerita. In RUIZ DE ARBULO, J. (ed.), *Simulacra Romae: Roma y las capitales provinciales del Occidente Europeo: estudios arqueológicos* (Tarragona), 129–47.
- MIERSE, W.E. 1999: *Temples and Towns in Roman Iberia. The Social and Architectural Dynamics of Sanctuary Designs from the Third Century B.C. to the Third Century A.D.* (Berkeley).
- ORENGO, H.A. and MIRÓ, C. 2013: Reconsidering the water system of Roman Barcino (Barcelona) from supply to discharge. *Water History*, DOI 10.1007/s12685-013-0090-2
- ORENGO, H.A., FIZ, I. and MACIAS, J.M. 2011: Restitución 3D de la topografía de la antigua ciudad de Tarraco en un entorno SIG. Propuestas metodológicas y primeros resultados. In MAYORAL, V. and CELESTINO, S. (eds.), *Tecnologías de información geográfica y análisis arqueológico del territorio* (Mérida, CSIC), 717–26.
- PALET, J.M., ORENGO, H.A. and RIERA-MORA, S. 2011: Centuriación del territorio y modelación del paisaje en los llanos litorales de *Barcino* (Barcelona) y *Tarraco* (Tarragona): una investigación interdisciplinar a través de la integración de datos arqueomorfológicos y paleoambientales. *Agri Centuriati. International Journal of Landscape Archaeology* 7, 113–29.
- PAVOLINI, C. 1983: *Ostia* (Roma-Bari).

- PUENTE, S. 2005: *Memòria científica del control arqueològic al carrer Paradís núm 12*. Barcelona (Barcelona, Centre de Documentació del MUHBA, unpublished field report).
- PUIG, F. 2009: Barcino: continuïtats i discontinuïtats morfològiques. El procés urbanístic de la colònia entre la seva fundació i l'Antiguitat tardana. In *XI Congrés d'Història de Barcelona. La ciutat en xarxa* (Barcelona, Ajuntament de Barcelona).
- PUIG I CADAVALCH, J. 1936: El temple romà de Barcino. Descoberta d'elements de la cornisa. *Anuari de l'Institut d'Estudis Catalans* 7, 89–97.
- PUIG I CADAVALCH, J., DE FALGUERA, A. and GODAY, J. 1909: *L'Arquitectura romànica a Catalunya. I: Precedents: L'Arquitectura Romana* (Barcelona, Institut d'Estudis Catalans).
- PUIG I CADAVALCH, J., DE FALGUERA, A. and GODAY, J. 1934: *La Arquitectura romana a Catalunya* (Barcelona, Institut d'Estudis Catalans).
- PUJADES, J. 1829: (reprint of the 1609 original): *Crònica Universal del Principado de Cataluña, escrita a principios del siglo XVII*, Vol. 1 (Barcelona).
- RAMALLO, S.F. 2007: Culto imperial y arquitectura en la Tarraconense meridional: Carthago Nova y sus alrededores. In NOGALES, T. and GONZÁLEZ, J. (eds.), *Culto Imperial: política y poder* (Rome), 275–98.
- RIBERA, A. 2003: Valentia del foro al área episcopal. In BOSCH, C., GARCÍA MORENO, L.A., GIL, M.E. and VALLEJO, M. (coords.), *Santos, obispos y reliquias: Actas del III Encuentro Hispania en la Antigüedad Tardía, Alcalá de Henares, 13 a 16 de Octubre de 1998* (Alcalá de Henares, Universidad de Alcalá), 45–83.
- RICHARDSON, L. 1988: *Pompeii. An Architectural History* (Baltimore).
- RODÀ, I. 2004: El culte imperial i el seu reflex a la colònia de Barcino. In MARIN, E. and RODÀ, I. (eds.), *Divo Augusto. La descoberta d'un temple romà a Croàcia* (Split, Archeoloski Muzej), 311–22.
- RODÀ, I. 2007: Documentos e imágenes de culto imperial en la Tarraconense septentrional. In NOGALES, T. and GONZÁLEZ, J. (eds.), *Culto Imperial: política y poder* (Rome), 739–61.