

ARCHITECTURE TO EXPLORE INTERACTIONS IN THE PROTOHISTORIC MEDITERRANEAN: AN APPROACH TO PUNIC ARCHITECTURAL CULTURE AS A CASE STUDY

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ABSTRACT

This paper addresses the potential of architecture to explore the phenomena of contact between different communities. To this end, the theoretical bases of the proposal are presented, which revolve around the concept of architectural culture. The case studies are centred on the protohistoric Mediterranean, focusing on Punic culture in constant interaction with other contemporary territories and societies, such as the Balearic Minorcan culture.

KEYWORDS: architecture, colonial contact, Mediterranean, Punic archaeology, protohistory.

LA ARQUITECTURA COMO MEDIO PARA EXPLORAR LAS INTERACCIONES
EN EL MEDITERRÁNEO PROTOHISTÓRICO: UN ACERCAMIENTO A LA CULTURA
ARQUITECTÓNICA PÚNICA COMO CASO DE ESTUDIO

RESUMEN

En este trabajo se aborda el potencial de la arquitectura para explorar los fenómenos de contacto entre diversas comunidades. Para ello se presentan las bases teóricas de la propuesta que giran en torno al concepto de cultura arquitectónica. La casuística de estudio se centra en el Mediterráneo protohistórico, pivotando sobre la cultura púnica en constante interacción con otros territorios y sociedades contemporáneas, como el caso de la balear menorquina.

PALABRAS CLAVE: arquitectura, contacto colonial, Mediterráneo, arqueología púnica, Protohistoria.



1. ARCHITECTURE: REPOSITORY OF SOCIAL AND HISTORICAL CONTENT

One of the most important human productions of both modern and past societies is architecture, the art of projecting and building the immovable material culture of a community. Constructed forms represent the expression of a human community or individual in a given time and space, from the development of dwellings to the construction of walls, graves or any structure of the time. They are, therefore, the best illustration of the passing of time, the vicissitudes, conditions and conditioning factors of the groups developing and creating them. Similarly, as far as studies have shown, these also serve in a bi-directional manner to discover the qualities, needs and desires of those behind them (Giedion, 1941: 55-56). A detailed analysis of the formal and syntactic structure reveals the entire technological process. From the necessary acquisition of raw materials and techniques for their use, to the outcome in terms of structures and spatialities, this, to a varying degree, expresses many of the characteristics of a settlement, group or an individual applying them. These are interpreted from their functionality and socioeconomic attributes.

Architecture, therefore, transcends a mere physical entity. It is a tool that generates spatiality, containing an inherent meaning that not only announces its purpose but also an idiosyncrasy or a specific epistemology (Hildebrand, 1893; Schmarsow, 1894). Tracing and identifying the great number of changes occurring in the architectural practice of every culture at different times and in different forms is an excellent way to understand their socioeconomic transformations. These transformations are demonstrated through different architectural languages (Lefebvre, 1974). Buildings, on the other hand, are the physical support and space where time gives shape to the social settings where everyday activities are carried out and where relationships between people are woven. These metaphorical props, far from being trivial, are created with care by the people who use them, thus developing the form of the setting and its constraints. This means that architecture should be understood as a production *per se* but also as the producer and reproducer of space (Waisman, 1972: 147; Zevi, 1978: 63). It is ultimately an exceptional means to understand modern and past societies.

These built-up spaces are therefore cultural material. They are a social, tangible and constant product, which has been developed within the framework of a socioeconomic structure, and within the framework of a specific ideology. This contributes to their creation and re-creation from patterns of concrete activities. The spaces are therefore the repositories and contents of a cultural essence and the actual personality of every society. This will occur to varying degrees and through varying significance, depending on the type of building (Rossi, 1977: 77). Their characterisation discloses all types of human phenomena, formulas of inclusive

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and exclusive representation, and internal and external relationship mechanisms. These complex procedures require *ad hoc* settings, i.e. forms of communication for ratification or rejection. Everything is encoded in architecture through a symbolic language that includes and discloses attributes and features of the communities and individuals who built them (Bendala, 2000: V). It is a field of semiotics of unquestionable importance for anthropogenic understanding.

These considerations underpin the concept of “architectural culture”, developed at the Autonomous University of Madrid by Professor M. Bendala Galán (1976; 1995; 2003; among others), and by his school (Bendala and Roldán, 1999; Roldán, 1992; 2017; Prados, 2003; Prados *et al.*, 2015; etc.). Included in this category are all the constructed spatialities attributed to a given society, understood from a holistic viewpoint, with their formal, functional, spatial and symbolic aspects. This collection of constructions belongs to a given group, in a fixed spatial and temporal context. They are acknowledged as unique, representative, and as an identification for themselves and their contemporaries. By specifying their defining features, a number of distinct, specific, historical issues can be addressed. These include the essential components of their economic basis, the social coordinates of political power, and beliefs with regard to death and the unknown.

This paper focuses on the nature of architecture as a tool of self-representation and projection of each society, especially eloquent when it is connected to other communities or groups. It is one of the most expressive materialities to help gauge such contact. It reveals common spaces or internal conflicts by identifying architectural techniques or formulas that illustrate substantial changes in everyday life and socioeconomic structure (Prados *et al.*, 2015: 185). This structure is often diluted to a greater or lesser degree as part of macro processes of acculturation, hybridisation or cultural transfer. The context of this case study includes Punic culture, understood as a collection of towns and territories scattered along the western protohistoric Mediterranean, with Carthage leading the way throughout the second half of the 1st Millennium BC. Albeit in varying degrees, and with their own historical paths, these towns and their territories were in contact with different indigenous communities of the Mediterranean basin and with part of the European and African Atlantic façade. By assuming the existence of a Punic architectural culture, the goings-on of these colonial interactions must have left their mark on local architecture and local people.

2. APPROACHES TO PUNIC ARCHITECTURAL CULTURE

The definition of the types, materials or building techniques that characterise an ancient society has been a frequent exercise in protohistoric Mediterranean historiography, which is especially connected to the knowledge of our Graeco-Latin and artistic heritage. Several classical works by R. Martin (1965), J.P. Adam (1989), and P. Gros (1996; 2001) are today indispensable references that help us understand specific architectural vocabulary, and to a great extent, how this is shared with artistic language. The centrality of Classical Antiquity in the historic



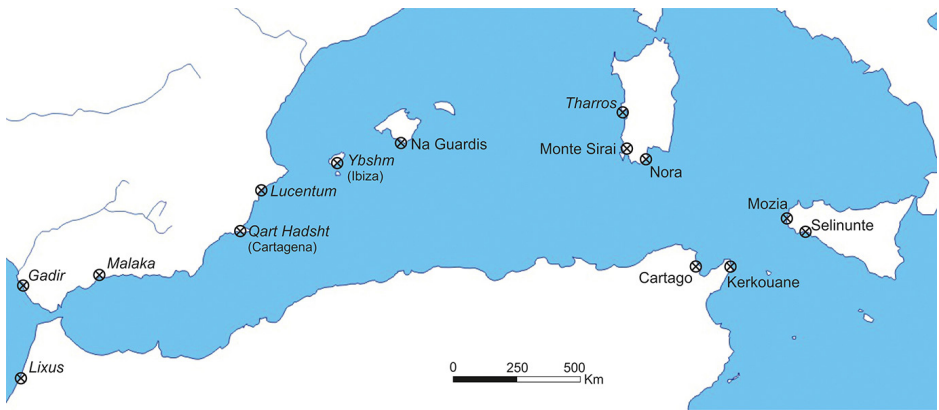


Figure 1. Map with the main Archeological sites of Punic influence cited in the text (taken from Mediterranean sea and from d-maps.com)

discourses of our past has been to the detriment of other legacies that are also present in our roots, such as those from our oriental components. This can be seen in certain statements and convictions that derive from an underestimation of the origin or the actual history of such elements. These are generally diluted with the extrapolation and homogenisation of Greek and Latin terminology. It focuses on the great volume of information conserved in the texts of classical authors –Vitruvius being the paradigm– and it colludes with the deliberate forgetfulness of our oriental origins implemented in current “Western” policies.

In spite of this, a lot has been written on Punic architecture. Such an intense historical journey would go beyond the purpose of this text. From the foundations laid by P. Gauckler (1899) and S. Gsell (1913; 1918; 1920), most of the information available is found in a vast collection of works, which constitute a response to archaeological campaigns in different places, times and languages (fig. 1). For example, in North Africa, the principal setting of Punic interest, the publications of the first works in Lixus (Tarradell, 1951), Mogador (Jodin, 1966), and Kerkouane (Fantar, 1984; 1985; 1986) fuelled the first synthetic references for the study of architecture (Cintas, 1970; 1976; Moscati, 1988; Lipinski 1992; Krings, 1995). The excavations conducted in Carthage occupied a favourite place in this historiographic web. Examples of these are the interventions within the scope of UNESCO’s international campaign (1974-1986) (Ennabli, 1992; Fumadó, 2009), which discovered Hannibal’s District (Lancel, 1979; 1982); that of Magon and Dido (Rakob, 1991; 1997; 1999); and many other structures that made up the city (Chelbi, 1980; 1984) or, later, the structures underneath the *decumanus maximus* (Niemeyer *et al.*, 2007).

The great number of excavations, together with the studies conducted in different Mediterranean settings of Phoenician-Punic colonisation, have succeeded in portraying those features that could define their architectural culture. This precise



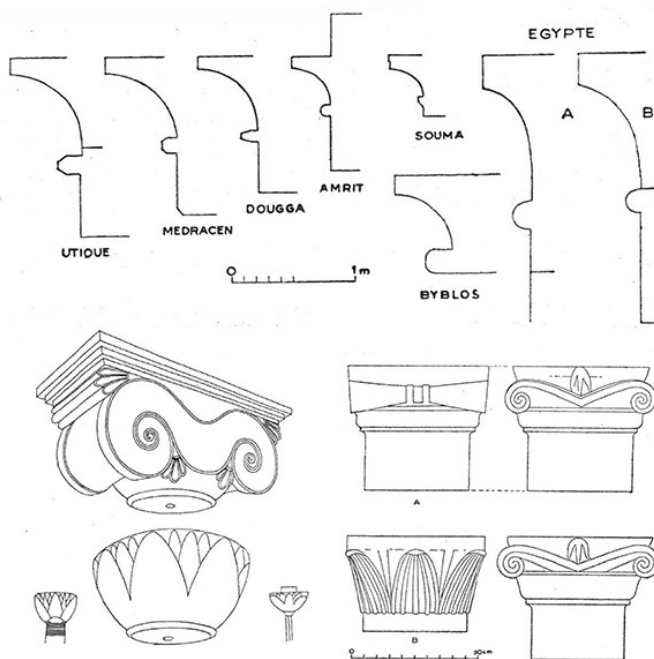


Figure 2. Egyptian and Greek features seen in Punic architectural structures: Egyptian golas (above) and Ionic / Aeolian capitals with lotiform motifs (taken from Lézine, 1962: figs. 30, 37, 52).

part of the recognition of their pre-existing substrates, were adopted and reformulated to produce its own code at the same time, in common with the rest. F. Barreca (1974: 250) described the Punic style of construction as the conjunction of three different factions, Oriental or Syrian and Palestinian as the original foundation, to which were added Egyptian and Greek (fig. 2). The former is enrooted in the different historical and cultural entities that made up the Near East. This absorbed the pre-eminence of a quadrangular plan, a spatiality articulated around a central spot, with columns and pilasters, and the use of earth and lime as building materials (Braemer, 1982). The Egyptian influence can be observed in the rigidity and symmetry and the incorporation of architectural motifs such as cornices, cavettos, and Egyptian capitals (Prados, 2000). From the Hellenic Greek world this acquires and reconverts its classical order for the supporting elements and for the addition of decorative frames and stuccos (Di Vita, 1968; Fantar, 1985; Prados, 2004).

One of its main features is thus its dichotomy between the sustainability of previous building designs, inherited from its oriental tradition, where functionality prevails over aesthetics and that which is accompanied by a syncretism mainly enriched from its contact with the Greek world (Prados, 2003: 199). This duality is linked to the actual evolution of these communities, Phoenician first and then Punic



(Aubert, 1987; Wagner, 1994; Blázquez *et al.*, 1999), known for their maritime and commercial vocation as a socio-economic driving force. It brought these groups into contact at a very early stage with a vast number of different indigenous settlements along the Mediterranean and a large part of the European and African Atlantic façade. This thus generated all types of very different “colonial” situations, contexts and processes. This complexity left its own mark on each individual architectural culture, being nuanced and measured depending on their original substrates and depending on the place, pace of that contact, as well as its own historic path. Therefore, even though the basis of the study is found in the settlements of the Tunisian plains, the Sardinia of the Punic conquest, the Sicily of the Graeco-Punic conflicts or the Iberian Peninsula with the passing of the Barcas, this also consists of a melting pot for Punic architectural culture, common albeit diverse in terms of space and time.

One of the features generally linked to this architecture is the variety of building materials used, among which, earth played a fundamental role (Picard and Picard, 1958: 22). The careful use of these materials is related to the abundance of clay and earth in the main places of origin of these people (Braemer, 1982: 109), such as the Phoenician Syrian-Palestinian strip or the North African coasts (López Pardo, 1996). Its new recurrent pattern of settlement was the establishment in diverse marine environments such as estuaries or marshlands (Zamora, 2006: 343-346), which secured, among other things, a supply of clay for construction. Its identification among Mediterranean protohistoric cultures transformed it into a diagnostic marker of Phoenician-Punic contact or presence. This is especially true in those societies where prior to this, its use was not so extensive and subsequently signs of its standardisation had been highlighted, such as adobes or mud walls, as seen in the case of the Iberian Peninsula (Díes 1994: 258; Abad and Sala 2009: 505). It is a functional and economical material, used to build walls but also used as a principal ingredient of mortar in flooring and roofing (Prados, 2003: 120-123).

In the latter cases, it was frequent to use lime as a binder to construct and produce hydraulic coatings, as it is waterproof, very resilient, and has a hygienic quality (Moscati, 1972: 490; Furlan and Bissegger, 1975). It is an aspect that is often recorded in classical sources (Diodoro Sículo XX, 8, 2) and archaeometric studies (Dietzel *et al.*, 2015). Although its use has been from ancient times documented in Anatolia and the Syrian-Palestinian coast (Kingery *et al.*, 1988), it has also been confirmed in other places such as Egypt, Greece and Cyprus (Philokyprou, 2012). However, it spread to other places in the Mediterranean thanks to the expansion of the Phoenician world, whereby the case of the Iberian Peninsula once again served as a paradigm (Díes 1994, 370; Blázquez 2008, 26-27), even though this has also been questioned on several occasions (Jover *et al.*, 2016). Likewise, and related to this is the refining technology of lime by the Punic people thanks to their links with Greek architecture (Prados, 2003: 138), especially during the Greco-Punic wars.

This debate on the origin and transmission of the use of lime can be extrapolated to another famous mortar: the *opus signinum*, made from earth, water and lime to which are added broken ceramic shards, thus obtaining a waterproof outcome used especially on flooring, cisterns and bathrooms. A good example of its use can be seen in the district of Punic houses in the city of Selinunte (Helas,





Figure 3. A telaio framework or pillar wall in a house in Nora (Sardinia) (courtesy of F. Prados Martínez).

2012: 253) or the cisterns of the Punic-Ebusitan capital (Ramon, 2014: 216-217). Although the use of a common term for this mortar is defended, *cocciopesto* (Braconi, 2009), it is normally known as *opus signinum* because of its existence in the Roman world (Gros, 2001; Vassal, 2006; Puche 2014-2015), and was identified as such from its description by Vitruvius (VIII, 6, 14-15). Notwithstanding, despite it being generally attributed to Roman architectural culture, a recent discovery has revealed a structure built around the 7th century BC in Tell el Burak with mortar of these characteristics (Orsingher *et al.*, 2020). This clearly shows the prior existence, development, and extension of this building technique in Phoenician towns.

Something similar occurs with the pillared walls or *opera a telaio*, or in Latin *opus africanum*, a name which implicitly demonstrates its nature and origin. This technique is rooted in the Near East (Elayi, 1980; Sharon, 1987) and is characterised by placing pillars or vertical chains of ashlar which regularly dot a wall of masonry or ashlar. It is designed to bear structural lateral and upward thrusts, thus allowing for the projection of tall buildings (Prados, 2003: 156). It was identified in the Phoenician cities of the Syrian-Palestinian strip (Bikai, 1978: 10-11) and in the first colonial settlements founded by the Phoenicians, such as Huelva (Belén and Escacena, 1993) or Cadiz (Gener *et al.*, 2014). Since then, this type of structure has been encountered throughout the whole Mediterranean basin, especially in the territories that make up the aforementioned Punic world, from North Africa (Prados, 2014) to Sardinia (Morigi, 2006), and Sicily (Helas, 2012) to Cyprus (Pittaccio, 2007) (fig. 3).

As has been pointed out in the cases of Carthage itself (Niemeyer *et al.*, 2007: 188-190), Kerkouane (Fantar, 1984: 335-344), Monte Sirai, Nora (fig.2) or Mozia (Morigi, 2006: 38-51), such extensions resulted in the widespread acceptance of the existing link between its appearance and first arrival of the Punic society. This hypothesis has been reinforced with the Punic houses of Selinunte, where such a technique has been observed in a temporary district of this Greek city during the Siculo-Punic Wars (Helas, 2012: 40). Along these lines, it has been suggested that the presence of the *a telaio* structure in areas of Punic contact, such as Campania, reveals the existence of prisoners of war (Fentress in Wallace Hadrill, 2013: 40) or the result of mutual visits between local and foreign elites (Fentress, 2013: 177). The fact it has been identified in Etruria and Campania, however, has questioned this link with the Punic world (Camporeale, 2013; 2016) by pointing to a more diffuse origin or to a spontaneous introduction at a time of transformation and social and technical adaptation (2013: 204).

A third way to explore Punic architectural culture is through modulation, the application of a standardised pattern of measures recognisable in the construction of walls and spatial distribution. The Punic architectural module is based on its projection through a concrete unit, the “cubit”. Such measurement is once again rooted in the Orient, in the Babylonian cubit of 0’50-0’51 m and is specific to the first Phoenician colonial phase (Barresi, 2007: 33). Between the 6th and 5th centuries BC the large Egyptian cubit of 0’52 m was used in public or defensive constructions and another of 0’45 m (small Egyptian cubit) was used for domestic architecture. However, the similarity between both and the sometimes-indiscriminate use and the problems related to the conservation of archaeological records allow us to talk about a fluctuation in the Punic cubit between 0’45 and 0’52 m (Montanero, 2014: 75). Some paradigmatic examples are the houses on Byrsa Hill (Lancel, 1983: 27; Prados, 2003, 196), Mozia (Nigro *et al.*, 2004: 183, 211; Nigro, 2007: 38), Nora (Bonetto, 2009: 89) or Monte Sirai (Montanero, 2014: 92).

This modulation has been widely identified in other contemporary Mediterranean societies, having been interpreted in terms of transmission and cultural adoption that through its use, has enabled us to characterise the contact between both social spheres. However, due to its methodological and historical complexity, this is still a topic for debate. Additionally, there are problems arising from direct extrapolation that can overlook others related to historical conservation or reductionisms. The adoption of the Punic-Phoenician cubit must also be understood in a dialectical manner as a multifaceted use, depending on the place and time. The Iberian case is once again an example of this dilemma, where the Punic cubit has been identified dynamically and ambivalently, having been adopted and transformed by these protohistoric communities (Olmos, 2010; Montanero and Olmos, 2019). On the other hand, the identification of this modulation has been essential for the recognition of settlements linked to the time of the initial arrival and colonisation on Iberian soil in the Iron Age I (García Menárguez and Prados, 2014; Carlos Silva *et al.*, 2019) (fig. 4).



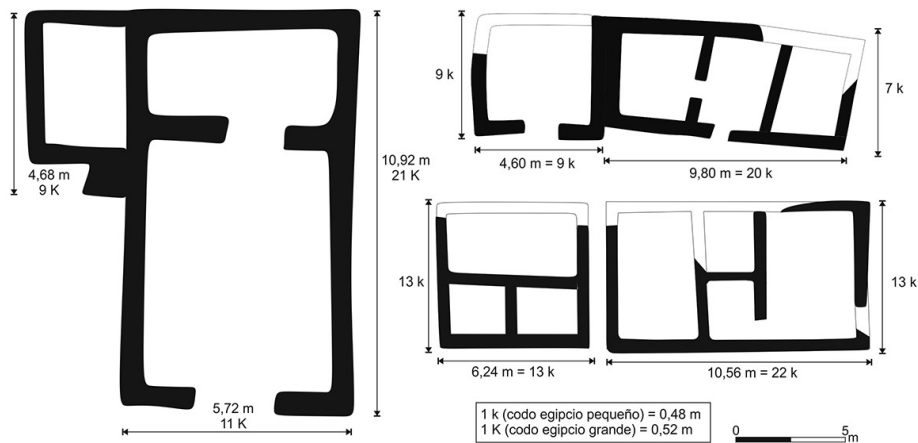


Figure 4. Plan and modular arrangement of the Castro dos Ratinhos temple (left) as well as the Cabezo Pequeno del Estañ (upper right) and Chorreras (lower right) dwellings (from Carlos Silva *et al.*, 2019: fig. 8; García and Prados, 2014: fig. 5; Arnold and Marzoli, 2009: fig. 8).

3. A CASE STUDY: PROTOHISTORIC MINORCA

The Protohistory of the Balearic Islands (6th-2nd century, The Iron Age II) is an exceptional study lab for the application of these assumptions. Strabo's Gymnesian Islands (III, 5, 1), Mallorca and Minorca, were inhabited by indigenous human communities with their own history. On the other hand, the Pityusic Islands, Ibiza and Formentera were the location of a Punic city state, *Ybshm* (Ramon, 2010; Costa and Fernández, 2006; Gómez Bellard, 2003). Around the 7th-6th centuries BC, the groups of the eastern islands were faced with a profound crisis which uprooted their socioeconomic foundations (Lull *et al.*, 2001). Likewise, in light of a Carthaginian hegemony that was in full force (Aubet, 1987), the flourishing Ebusitan colony commenced its territorial and commercial separation from the island (Costa, 1994). It then established commercial relations with the coast of the Iberian Peninsula and neighbouring islands (Ramon, 2008). Specifically, in the case of Minorca (fig. 5), such disintegration is reflected in the abandonment of the previous monumental architecture of the community, the talayots and other buildings such as that of Cornia Nou (Anglada *et al.*, 2012: 31). These are the monuments that consolidate a new model of circular dwellings (Serra, 1965). Its morphological and spatial characteristics take over the redistributive and communal organisation of past models and bring to light a clear process of privatisation which tends towards social inequality (Salvà and Hernández-Gasch, 2009: 318). This panorama is reflected in burials, where one sees a clear tendency towards the use of burial grounds as a form of ostentation (Sintes and León, 2019: 42-43). This is also seen in mentalities with the organisation of a new religiousness based on a new monumental architecture:



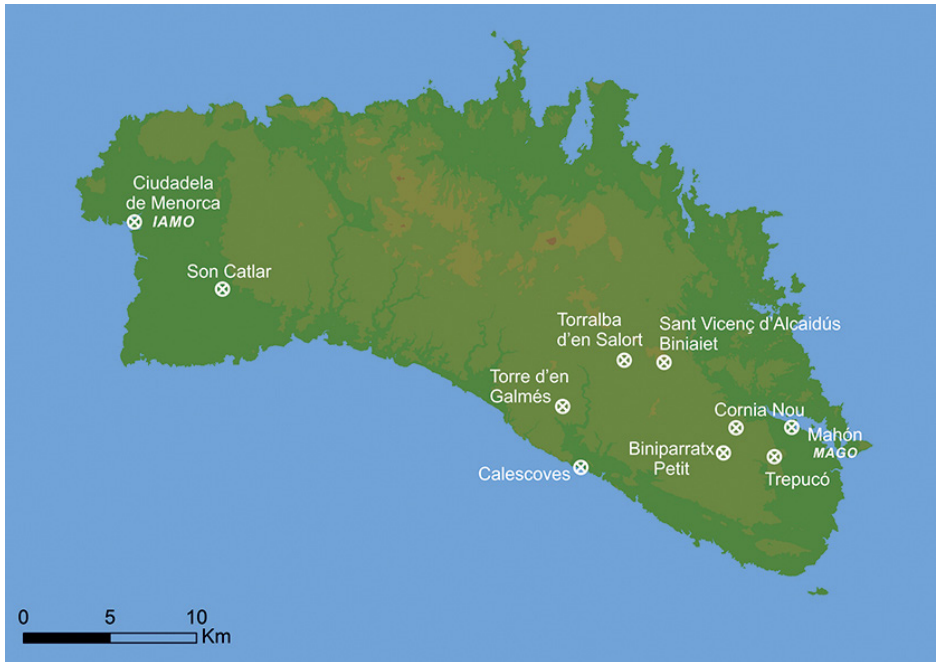


Figure 5. Map of the island of Menorca with the aforementioned sites (from the Digital Terrain Model, or MDT, of the Instituto Geográfico Nacional).

the Taula sanctuaries (Plantalamor, 1991: 333), those which Torralba d'en Salort considered to be a paradigmatic example.

It is in this context that there is a clear move by the indigenous world towards the sea around it (Anglada *et al.*, 2017: 229). This is unlike the previous period, which is materialised with the occupation of anchorages and coastal settlements (Sánchez López *et al.*, 2013) of a marked religious nature, such as Calescoves (Orfila *et al.*, 2015); as well as the use of marine resources (Ramis, 2017) that were notably absent in the past. These traits are set against a background of the integration of the island in Punic commercial circuits, which is embodied in the abundant quantities of products coming from neighbouring Ibiza and the Iberian coasts, as well as from the central Mediterranean (Juan *et al.*, 2004; Castrillo, 2005). These times contextualise the references of classical texts (Diodorus Siculus V, 16-18) to the recruitment of the famous Balearic slingers in the Carthaginian army (Domínguez Monedero, 2005) or the time spent by Magon Barca on the island in the winter of 206-205 BC (Titus Livius XXVIII, 37, 8-9).

With this archaeological and textual evidence, the historiographic debate on the nature of colonial contact between Minorcan indigenous communities and Punic groups is still controversial today. V. Guerrero Ayuso (1984; 2004; among many others) was one of the first to theorise a model for the relationship of the Gymnesias



Figure 6. Southeastern corner of the fortified Son Catlar enclosure where cushioned ashlars arranged in alternating headers and stretchers are observed (above); and adjoining bastions that are attached to the east and north of the aforementioned Menorcan town (courtesy of Proyecto Modular).

islands with the Punic world, which was especially focused on Mallorca, and has been questioned or nuanced up to a certain extent nowadays (Hernández-Gasch and Quintana, 2013; Calvo and García Rosselló, 2019). For the Minorcan case, *grosso modo*, the interpretative pendulum has varied up to modern times between different positions. One links the interest of the colonial power to a purely economic one (Gornés *et al.*, 1992; Fernández-Miranda and Roderó, 1995) or that circumscribed to Mediterranean military confrontations (Plantalamor, 2000). Another considers a cultural hybridisation that affected the mentalities and the daily lives of the Minorcan groups (De Nicolás, 2015; 2017).

As a contribution to the debate, it has recently come to light that a few Minorcan settlements had adopted architectural solutions typical of Mediterranean war systems of the Iron Age II. These included towers and abutted bastions, antemurals or dovetail blocks in Torrellafuda, Trepucó and Son Catlar (Prados and Jiménez, 2017: 134). All of this is best reflected in the latter settlement, where a refortification phase of its spectacular wall was identified. It is almost 1 km long and was built according to an indigenous architectural technique based on large orthostates between the 6th and 5th centuries BC. However, around the 4th-3rd centuries BC, abutted bastions were added with a metrology based on the Punic cubit of 0'52 (fig. 6); a zig-zag access with dovetail walls; as well as a bent gateway



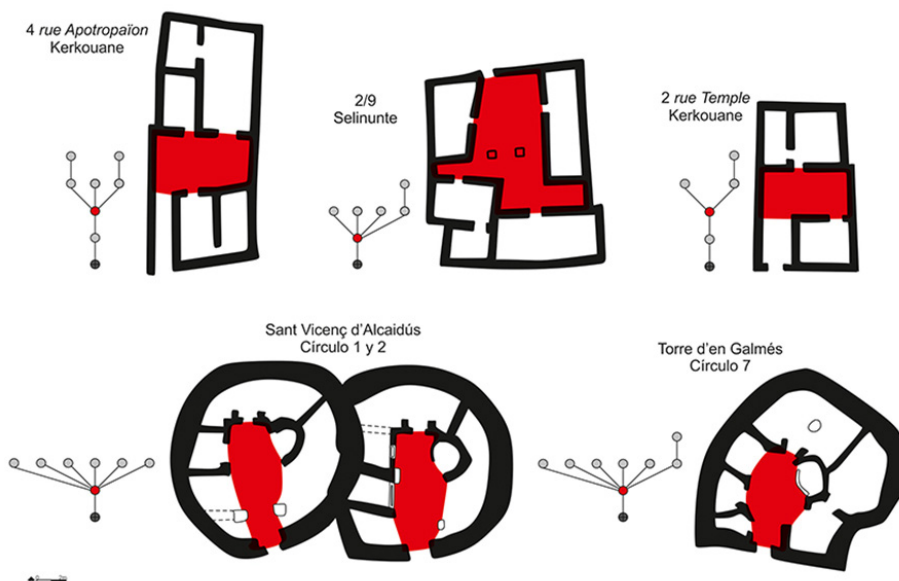


Figure 7. Plan and spatial linkage comparison of Punic and Menorcan protohistoric dwellings. The interior patios are shown in red (from Fantar, 1985; Helas, 2012; Salvà and Hernández-Gasch, 2009).

(Prados *et al.*, 2017; 2020), which is the only one found up to now in the Balearic Islands. The best parallels to these fortifications are found in the well-known Iberian Punic settlements, such as *Lucentum* or Cartagena itself (Prados *et al.*, 2020: 145).

On the other hand, the homes of this time, normally known as dwelling circles or *cercles*, are a unique product of the island, which is unequalled in the rest of the Mediterranean. They are large dwellings (80-120 m²) and normally circular or horseshoe-shaped with an inner area fragmented into several rooms, which give access an interior patio. Among its specificities –widely analysed in other works (Hernández-Gasch, 2011; Pons, 2016; Torres, 2017; 2020)– we can highlight several of its documented architectural techniques and building materials, which can fuel the debate on architecture as a means to discover colonial contact.

Firstly, attention is drawn to the standardisation of this spatial pattern in those times. This was dominated by a central cell, which contrary to usual belief, recalled the original and consolidated models of oriental societies, long before the Greeks and Romans. Central patios were typical of Phoenician houses (Braemer, 1982) and also characterised the domestic plans of Punic homes (Fantar, 1985: 649). These inward-looking houses (Markoe, 2000: 73) provided the patio with a fundamental role that acted as a control cell of the spatial movement, an ambivalent meeting place, but also a place of surveillance. These patios, both Minorcan and Punic, were generally arcaded and open, with documented areas of different types of production having structures for storage and leisure within (Mezzolani, 1999) (fig. 7). This articulation



Figure 8. Pillar arrangement in the interior walls of the Torre d'en Galmés dwellings.

doubtless responds to a specific behaviour of the Minorcan protohistoric domestic group. This breaks with previous characteristics and moves forward with a new purpose and structure, which, among others, is similar to that of the Punic groups (Torres, 2020; Torres and De Nicolás, 2020).

Another indicative element is the interior walls of most of these houses which consist of pillared walls or *opera a telaio*, described above, and as seen in Sant Vicenç d'Alcaidús/Biniaiet, Trepucó or especially in the examples of Torre d'en Galmés (fig. 8). Maria Luisa Serra Belabre observed the qualitative novelty that this technique implied on a structural level and considered it as specific to these dwellings (1961: 73-74; 1965: 157), that she herself placed in the second half of the 1st Millennium BC and where she recovered a great deal of mostly Punic imported material (Pons, 2016: 66). The adoption of such a technique may have been for functional reasons,



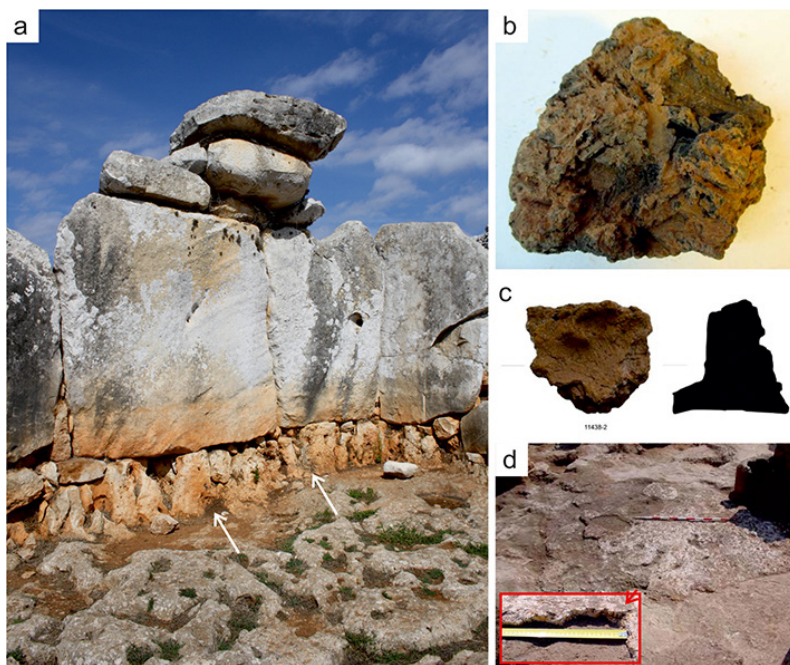


Figure 9. Interior of the Torre d'en Galmés taula enclosure where orange deposit marks belonging to the clay deposits that made up part of its architecture, can be seen (a). Architectural remains from Torre d'en Galmés made from earth (b) (Pons, 2016: fig. 66) and Calescoves (c) (Gornés and Gual, 2018: plate 82). Lime pavement in the central patio of Biniparratx Petit (d) (Hernández-Gasch, 2009: photo 77).

providing the perimeter walls with greater sturdiness and resistance. This would ensure their sustainability as well as the use of the upper part as a second floor, for which there is not much evidence as of yet; or an open-air lintel area on which everyday activities could be carried.

More common, albeit not for this reason better known, is the example of earthen architecture in these constructions (fig. 9). Given the hegemonic use of stone in Minorcan insular architecture, up until now, this issue has been a subject for debate. However, archaeological and archaeometric studies (Pérez-Juez, 2011; Goldberg and Pérez-Juez, 2018) on large sedimentary deposits accumulated inside these dwellings and other contemporary buildings have helped identify this as the slow and progressive decomposition of roofs, plaster and mortar which made up the basic architecture. Furthermore, in the settlement of Biniparratx Petit, a succession of floorings made with lime mortar and sand was documented in the central patio (Hernández-Gasch, 2009: 19) (fig. 9d). Despite the case being currently the only one that has been documented, its existence calls our attention to the technological knowledge required for the preparation of these mortars. As previously described, these were common in the domestic contexts and settings of the Punic world.



4. CONCLUSIONS

This overview of some of the characteristics that make up Punic architectural culture mainly reveals two fundamental traits. The first refers to what we understand by this collection of architectural techniques and includes a historical and technologically enriched reference to their common heritage and the development they later acquired. The second, that this is a product as well as the intersection of varied merging and overlapping architectural traditions. Can one thus identify the existence of architectural solutions as Punic and which therefore evidentiary and indicative of their presence, mobility or contact with the rest of contemporary societies? Fantar (1998: 463) said that there were as many Punic worlds as the places in which they settled. According to Moscati (1988) the Punic world means all those populations descendant from the Phoenicians and who lived in the western Mediterranean basin from 550 BC. What happens with those scenes of contact? For example, who is less Punic, the Greek women who married them (Prados, 2006) or those who married Iberian princesses (Titus Livius, XXIV, 41, 7)?

Punic and colonial territories are dialectic spaces that do not respond to identities as such, but rather articulate as regions with distinctive features that result in specific situations in both space and time (Van Dommelen and Gómez Bellard, 2008). That is why one has to talk about plural identities that use their materialities as a manifestation of their self-determination and self-assertion (Pedrazzi, 2012: 155). It should, however, be recalled that even though one calls the society, culture or world Punic, there is no state or political unit as such. The label or identity as Phoenician or Punic is a subsequent historiographic attribution. Documentary evidence points towards the existence of civil communities, civic entities that, on the other hand, did not exclude the possibility that these populations were aware that they belonged to a common group (Zamora, 2006: 333).

In these contexts, Punic architectural culture represents an instrument to gauge these contacts, both of the actual Punic communities and those with whom they coexisted. As is envisaged in the case of Minorca, it is by contrasting them that we can observe more clearly the actual entity and its transformations.

To this regard, the inclusion of non-native techniques and formulas in these insular communities should not be understood as a mere extrapolation. This should be regarded as a deliberate incorporation in a process of adoption and adaptation creating a product specific to a given architectural culture, which neither cancels out the initiative of the locations nor invalidates the role of the Punic case as a reference. The motivations of this phenomenon may vary, from structural motivations, such as what could occur with the pillared walls (Montanero, 2014: 75); to a desired emulation or tool of distinction for the articulation of certain socioeconomic phenomena, especially in turbulent historical settings (Torres, 2020: 666). The pursuit of clear historical identities implies a category risk that is inherent with architecture being itself a potential albeit insufficient materiality (Fumadó, 2016: 189-190). This should not make us lose sight of the socio-economic inequalities hidden beneath apparent architectural hybridisations or the innocuous cultural transfers that are generally concealed under these phenomena.



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