The earliest evidence of Phoenician presence in Lisbon: the Sommer Warehouses interventions (Rua Cais de Santarém, Lisbon, Portugal)

Las evidencias más antiguas de la presencia fenicia en Lisboa: las intervenciones en los almacenes Sommer (Rua Cais de Santarém, Lisboa, Portugal)

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Abstract: Archaeological excavations carried out at the ancient Sommer Warehouses, in Lisbon (Portugal), have allowed the identification of a complex phasing related to the Iron Age occupation, incorporating distinct construction phases. In this study, architectural, stratigraphic, and material data from the earliest moments of this occupation (phases II to IV) are analysed. Their chronology seems to span from the second half of the 8th century BC to the beginning of the following century. Elements of both defensive and port-related character were identified. The associated archaeological material is significant, including handmade ceramics and wheel-thrown vessels, with possibly an exogenous origin for the latter. This constitutes a body of evidence of great importance in the context of urban archaeology in Lisbon, allowing for a characterization of the early moments of Iron Age occupation.

Keywords: Western Iberian Peninsula; Iron Age; defensive and port-related structures; material culture; Phoenician colonization.

Resumen: Las excavaciones arqueológicas realizadas en los antiguos almacenes Sommer, en Lisboa (Portugal), han permitido la identificación de una compleja secuencia relacionada con la ocupación de la Edad del Hierro, que incorpora distintas fases de construcción. En este trabajo se analizan datos arquitectónicos, estratigráficos y materiales de los primeros momentos de esta ocupación (fases II a IV), cuya cronología abarca un periodo desde la segunda mitad del siglo VIII a. C. hasta el comienzo del siglo siguiente. Se identificaron elementos de carácter defensivo y relacionados con estructuras portuarias. El material arqueológico asociado es significativo, incluyendo cerámica a mano y a torno, esta última posiblemente de origen exógeno. Todo ello constituye un conjunto de evidencias de gran importancia en el contexto de la arqueología urbana en Lisboa y permite caracterizar los primeros momentos de la ocupación de la Edad del Hierro.

Palabras clave: occidente de la península ibérica; Edad del Hierro; estructuras defensivas y portuarias; cultura material; colonización fenicia.


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1. INTRODUCTION

The settlement located on the hill of São Jorge Castle (Lisbon, Portugal) is one of the most significant sites of the Iron Age on the Portuguese Atlantic coast. However, the characterization of its various occupation phases, especially the earliest one, is strongly limited by its continuous urban nature. Nevertheless, the data recovered during multiple preventive archaeology interventions in the city, especially in the last two decades, have substantially increased the elements available for its study (Fig. 1).

In this context, archaeological excavations carried out at the foot of the hill, in the spaces of the former Sommer Warehouses (currently Hotel Áurea Museum), conducted by the archaeological company Neoépica, revealed data of exceptional importance.

The most extraordinary finding undoubtedly lies in the stele dating back to the 7th century BC, containing a funerary inscription in Phoenician language and characters (Neto et al., 2016). Unfortunately, this unique discovery was not found in its original context as it was reused as construction material for a Roman structure. No other funerary elements were documented. The works carried out by Neoépica allowed for the recovery of other evidence associated with the Iron Age occupation (Ribeiro et al., 2020), with particular emphasis on the earlier horizons of this period.

The interventions were constrained by the current construction project of Hotel Áurea Museum and took place in 11 sectors (Fig. 2). Three of them, specifically sectors 1, 11, and 4, provided contextual data from the Iron Age. Given the volume of data obtained and to timely disseminate the most relevant contexts, it was decided to prioritize, within the scope of this work, the earliest occupational phase of the Iron Age identified in the adjacent sectors 1 and 11.

2. STRATIGRAPHIC AND ARCHITECTURAL DATA FROM THE EARLIEST IRON AGE PHASE IN SECTORS 1 AND 11

The work carried out in sectors 1/11 identified well-preserved levels from the Iron Age at approximately 3 m below the current ground surface. In total, twelve
construction phases were distinguishable, chronologically reflecting three major occupation periods. Among these, the oldest stands out due to the architectural remains recovered.

The earliest detected Iron Age levels were deposited directly on the limestone geological substrate, which is slightly elevated in this area. Only a grayish-toned alluvial sediment (S. U. [100403]) was observed in some areas, which still yielded some archaeological materials at its higher levels.

The first construction phase (Phase II) built on this stratum incorporates two perpendicular structures (Fig. 3). The oldest one (S. U. [100441]), oriented north-south, was the most challenging to characterize as it was identified near the western profile of the excavation area, partially beneath the facade of the current building. Consequently, only its eastern face was visible. Structure [100440] is attached against it, forming an essentially right angle (Figs. 4 and 5) with an east-west orientation nearly parallel to the Tagus River. Its thickness is approximately 1.20 m, with a preserved length of 5.90 m. In terms of masonry, it was built using local raw materials (limestone and calcarenite). The larger blocks were generally sub-angular and sub-rounded in shape and were molded both internally and externally. They were primarily arranged on the structure’s faces and bound together by clayey sediment. Inside there is a greater prevalence of small and medium-sized blocks. Presumably, this wall would have continued westward toward the present Arco de Jesus. On the eastern side, there is an alignment that roughly corresponds to the line of this structure but at a considerably lower elevation as it was partially dismantled by later constructions (S. U. [100438]) (Fig. 3).

The considerable thickness of both structures, which has no parallel to other Iron Age constructions documented in the Lisbon area, may indicate that they served as defensive equipment and possibly also as space delimiters (Ribeiro et al., 2020). In this regard, it is interesting to note that the best-preserved structure is practically parallel to the one built later in the Roman period, suggesting the retention of certain defensive criteria in the history of the city of Lisbon, at least in this riverside area.

In addition to S. U. [100403], the only other level associated with this phase corresponds to a sandy
sediment with a light brown tone (S. U. [100409]) identified to the north of S. U. [100440] against which it leans.

The subsequent construction phase (Phase III) brought significant changes to this space (Fig. 6). A perpendicular structure (S. U. [100412] = [100381]) was built partially overlapping S. U. [100440] but with a thinner thickness of about 0.8 m. Only two rows of calcarenite blocks bonded by clayey sediments were preserved. In this remodeling, structure [100440] was further reinforced on the interior (north) face. This construction was designated as S. U. [100429], culminating in a total thickness increase of the putative wall to 1.60 m.

However, in its eastern extent, the original structure S. U. [100440] was partially dismantled to facilitate the construction of an area with possibly port-related functions, including a foundational ditch (S. U. [100431] = [100405]). On top of this foundational ditch, a series of stone blocks were arranged to create a kind of ramp (S. U. [100415] / [100436]), leaning against structure [100412] = [100381]. This ramp is once again composed of large calcarenite blocks, 1.80 m wide, with a clear downward slope from north to south. The blocks placed on the upper part of the ramp seem to have been shaped, perhaps to achieve a smoother surface. The stone blocks in the surrounding area (S. U. [100431] = [100405] = [100395]) appear to have served as some kind of cofferdam. As previously proposed (Ribeiro et al., 2020), it can be considered that these constructions from Phase III aimed to create access to the Tagus riverbank, with the cofferdam area serving to extend the ramp’s reach during low tide (Fig. 7).

Between the ramp and the cofferdam, it was possible to delineate two physically separate strata: one layer of fine-grained sand with a reddish-brown tone, containing some inclusions of mammalogical and malacological fauna (S. U. [100435]), and another sandy layer characterized by the presence of small pebbles and shells (S. U. [100434]).

In the western area, leaning against S. U. [100412], a sequence of two strata corresponding to a level of brownish sand with small pebbles and rolled ceramic fragments was detected (S. U. [100439]), over which a clay layer with a greenish coloration was deposited (S. U. [100437]).

Phase IV corresponds to the abandonment and amortization of a significant part of the preceding structures.
It is characterized by a sequence of three strata that were used, at least in part, as fill levels in preparation for the subsequent construction phase (Phase V), when a significant redevelopment of this riverside area is observed. The layers from Phase IV consist of a greenish clayey sediment (S. U. [100417]), on which a sandy layer with traces of combustion was detected (S. U. [100430]), and finally, a sandy deposit with a greenish tone and coal inclusions (S. U. [100425]) (Figs. 8 and 9).

3. MATERIAL CULTURE

Although the artifact assemblages collected in Phases II to IV are not particularly abundant, they exhibit unique characteristics within the framework of material culture known so far for the Orientalizing phase of the São Jorge Castle Hill. Wheel-thrown productions stand out while the typical manufactures from the Tagus estuary area seem to be entirely absent (Sousa, 2014;...
Fig. 5. Photograph of S. U. [100441], ancient Sommer Warehouses (Lisbon).

Fig. 6. Plan of the structures identified in Phase III, ancient Sommer Warehouses (Lisbon).
Sousa and Pimenta, 2014; Ferreira et al., 2020; Sousa et al., 2020).

Indeed, all the identified wheel-thrown materials appear to be predominantly of exogenous origin, even if these observations are derived, so far, from macroscopic study. Given this particular situation, it was decided to proceed with the analysis of all collected fragments, classifiable and unclassifiable, to confirm the observed trends among diagnostic elements. Their quantification followed the criteria proposed by the Mont Beauvray protocol (Arcelin and Tuffreau-Libre, 1998), establishing the minimum number of individuals (MNI).

The locally produced items consist solely of fragments of handmade production, which are still relatively expressive in the artifact assemblages analyzed here.

3.1. Fabrics

Eleven manufacturing groups, eight of which correspond to wheel-thrown productions (amphorae/plain ware – AMP./PL.; red slip ware – RSW; grayware – GRAY) and three to handmade productions (HM), were distinguished (Fig. 10; Tab. 1).

3.1.1. Handmade productions

Fabric HM. F1: Moderately compact pastes with irregular fracture and sparsely levigated (10-20 % non-plastic elements). Macroscopically, frequent small-sized calcites, occasional small and medium-sized quartz, and occasional black, slightly shiny particles, also small and medium-sized, can be observed. Their color is predominantly dark (Munsell 3/1 10YR very dark gray), although in some cases, the surfaces show more reddish hues (Munsell 5/4 5YR reddish brown). The surface finish varies, with larger pieces being either simply smoothed or even rough, while smaller vessels may have a polished surface.

Fabric HM. F2: Moderately compact pastes with irregular fracture and limitedly levigated (10-20 % non-plastic elements). Macroscopically, there are...
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Fig. 8. Harris Matrix of stratigraphic units from Phases II, III, and IV, ancient Sommer Warehouses (Lisbon).

frequent small and medium-sized calcites, occasional medium-sized quartz, occasional black minerals, and abundant small and medium-sized golden mica particles, which are mainly visible on the surfaces. Their color is dark (Munsell 2.5/1 7.5YR black), with the external surface being reddish-brown (Munsell 6/6 7.5YR reddish yellow), and they have either poorly finished or polished surfaces.

Fabric HM. F3: Relatively compact pastes with irregular fracture and limitedly levigated (10-20 % non-plastic elements). Macroscopically, there are only frequent small-sized calcites and rare small and medium-sized quartz. The color is generally dark (Munsell 2.5/1 5YR black), with the only case being reddish (Munsell 4/6 5YR yellowish red). The surface finish can be smoothed or polished, with the latter being more frequent on smaller pieces.

3.1.2. Wheel-thrown productions

Fabric AMP./PL. F1: Relatively compact pastes with regular fracture and sparsely levigated (10-20 % non-plastic elements). Macroscopically, there are frequent small-sized calcites, rare small and medium-sized quartz, and occasional small shiny mica particles, and some small-sized quartz. Their color varies, often exhibiting grayish tones in the cores (Munsell 5/1 10YR gray) and becoming more brownish or orangish near the surfaces (Munsell 6/4 7.5YR light brown or 5/6 5YR yellowish red). Possible origin: Málaga area.

Fabric AMP./PL. F2: Pastes with somewhat heterogeneous compaction, sometimes porous, with regular fracture and limitedly levigated (10-20 % non-plastic elements). Macroscopically, there are abundant small, medium, and occasionally large-sized quartz, some iron-bearing elements, irregularly shaped black particles (possibly schist), and occasional small-sized calcites. Their color is orangish (Munsell 6/6 5YR reddish yellow), with cores sometimes exhibiting grayish tones (Munsell 6/1 5YR gray). Possible origin: Málaga area.

Fabric AMP./PL. F3: Compact pastes with regular fracture and moderately levigated (5-10 % non-plastic elements). Macroscopically, there are a few small-sized calcites, rare small and medium-sized quartz, and occasional small and medium-sized iron-bearing elements. Their color is orangish (Munsell 7/6 5YR reddish yellow). Undetermined origin.

Fabric AMP./PL. F4: Moderately compact pastes, quite porous, with regular fracture and levigated (about 5 % non-plastic elements). Macroscopically, only occasional small-sized quartz, some small-sized shiny mica particles, and rare small and medium-sized iron-bearing elements are observed. Their color is homogeneous,
yellowish (Munsell 7/2 5Y light gray). Possible origin: Cádiz area (?).

Fabric AMP./PL. F5: Compact pastes with regular fracture and moderately levigated (5-10 % non-plastic elements). Macroscopically, there are some small and medium-sized quartz, occasional small shiny mica particles, elongated black particles of small and medium size (possibly schist), and rare medium and large-sized iron-bearing elements. Their color is yellowish (Munsell 7/2 10YR light gray). Possible origin: Málaga area.

Fabric RSW. F1: Compact pastes with regular fracture and well-levigated (less than 5 % non-plastic elements). Macroscopically, only a few small-sized calcites and quartz are present. Their color is beige (Munsell 8/3 10YR yellow). The slip is fine and adherent, with a reddish color (Munsell 5/8 10R red). Undetermined origin.

Fabric RSW. F2: Compact pastes with regular fracture and also well-levigated (less than 5 % non-plastic elements). Macroscopically, there are only a few small-sized calcites and occasional dark particles (biotites) of small size, along with rare medium-sized iron-bearing elements. Their color is orangish (Munsell 6/6 7.5YR reddish yellow). The slip is fine and relatively adherent, with a reddish color (Munsell 5/6 10R dark gray). Local origin (?)..

3.2. Ceramic assemblage from Phase II

The only strata that yielded diagnosable materials in the earliest phase documented in these excavations were S. U. [100403] and [100409] (Fig. 11).

The most ancient (S. U. [100403]) provided 44 ceramic fragments, corresponding to 11 MNI. Handmade pottery includes 22 fragments (5 MNI), of which two certainly belong to small open forms, specifically a semi-hemispherical bowl with a small protrusion on the rim (1 MNI – Fig. 11.1) and a carinated cup (1 MNI – Fig. 11.2), both with polished surfaces. The remaining fragments appear to belong to medium or large-sized containers, but unfortunately, their morphological...
characterization is not possible. In the wheel-thrown productions, 22 fragments were counted (6 MNI). There are at least three large containers (3 MNI), possibly amphorae, although no preserved elements allow for their typological classification. Red slip ware is represented by three fragments (3 MNI), two of which are flat-profiled bottoms (Figs. 11.4 and 11.5), and one fragment of a carinated cup (Fig. 11.3), generally assignable to Rufete Tomico’s Type C-3 (1988-1989) and covered with slip on both surfaces.

Regarding S. U. [100409], the assemblage comprises only four fragments (3 MNI). Three of them are handmade, with two being smoothed wall fragments (1 MNI), and the other a rim of a small carinated cup with carefully polished surfaces (1 MNI – Fig. 11.6), which left marks on the inner zone. The remaining fragment corresponds to a wheel-thrown piece, possibly from an amphora (1 MNI), that did not allow for a specific typological classification.

3.3. Ceramic assemblage from Phase III

The materials from this phase are slightly more abundant compared to the previous one (Figs. 11 and 12). Some were recovered during the dismantling of associated structures, illustrating the respective construction phase. In the case of the ramp (S. U. [100415] = [100436]), 23 ceramic fragments were collected (7 MNI). Handmade pottery includes seven fragments...
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Tab. 1. Table of fragments collected in Phases II, III, and IV, by stratigraphic unit and fabric characteristics.
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Fig. 11. Ceramic materials from Phases II and III, ancient Sommer Warehouses (Lisbon).
(4 MNI), two of which are carinated cups with polished surfaces (Figs. 12.18 and 12.19). The fragment of an omphalos base (Fig. 12.21) may correspond to one of these pieces. The remaining two are of undetermined form but possibly from medium or large-sized containers with rough and smoothed surfaces (Fig. 12.20). The 16 wheel-thrown pottery shards (3 MNI), all probably from large containers, only include a fragment of an amphora rim (Fig. 12.22) Type 10.1.2.1 (Ramon Torres, 1995). The fragment of a circular-section handle (Fig. 12.23) might also correspond to the same piece, although it is considerably worn.

The dismantling of the cofferdam area (S. U. [100431] = [100405] = [100395]) yielded 41 ceramic fragments (6 MNI). The 14 handmade ware shards (2 MNI) include a slightly convex base fragment (1 MNI – Fig. 11.13), a wall decorated on the outer surface with nodules (Fig. 11.14), and a more peculiar fragment, also from a wall but with multiple impressions on the outer zone, which, however, do not reach the interior of the vessel (1 MNI – Fig. 11.16). It partly resembles the impressed decorations of the Late Bronze Age Mesetian traditions that have been identified in Late Bronze Age levels at Alcáçova de Santarém, upstream of the Tagus River (Arruda and Sousa, 2015). Yet, the fragmentated state of the vessel does not allow us to confirm this relationship. Wheel-thrown pottery consists of 27 fragments (4 MNI). Among the large containers (2 MNI), a probable amphora from the Málaga area (Fig. 11.15), which can be integrated into Type 10.1.1.1 (Ramon Torres, 1995), is present. The rest remains undetermined. Red slip ware is represented by a Rufete Tomico’s Type C3a carinated bowl (1988-1989) (Fig. 11.17).

Additionally, five unclassifiable fragments of handmade pottery (1 MNI) were recovered during the dismantling of structure [100412].

The dismantling of structure S. U. [100429], which seems to have strengthened the defensive structure during this phase, yielded only one fragment (1 MNI). Interestingly, this is the only shard in the currently analyzed assemblage that fits into the gray ware productions (Fig. 12.25). It corresponds to a small bowl with tententially oblique walls, reminiscent of Type 3Fc from the Tagus estuary. This morphology appears in regional contexts, specifically in the earliest Iron Age levels at Alcáçova de Santarém (Sousa and Arruda, 2018), dated between the late 8th and early 7th centuries BC, and used until the 6th century BC (Sousa, 2021, p. 144).

Regarding the deposits associated with the structures, only three of them yielded ceramic materials. In S. U. [100439], 65 fragments were collected, corresponding to 11 MNI. Among the 36 fragments of handmade pottery, three are larger vessels (3 MNI), possibly used for storage or food preparation, with rough (Fig. 11.11), smoothed (Fig. 11.8), and even polished external surfaces (Fig. 11.10). The two rim fragments have an evverted profile, with one of them showing traces of red paint on the inner surface and signs of repair (Fig. 11.10). Handmade ceramics also include a bowl with truncated-conical walls (1 MNI – Fig. 11.7), with a slight inflection in the medial zone as well as a perforation near the rim, possibly for suspension, and a slightly convex omphalos base fragment from another small vessel, the morphology of which could not be specified (1 MNI – Fig. 11.9). Both have carefully polished surfaces. Wheel-thrown pottery, with a total of 29 fragments, includes large containers (3 MNI) of undetermined form and red slip pottery (2 MNI). The latter consists of a Rufete Tomico’s Type P1 (1989-1990) short-lipped bowl (Fig. 11.12), while the rest remain undetermined. Finally, an intrusive fragment (1 MNI) of a Roman Republican Italic amphora was identified.

In S. U. [100434] and [100435], located between the cofferdam area and the ramp, other wheel-thrown ceramic fragments were also collected. In the former, there are five fragments (2 MNI) of undetermined large vessels and in the latter, in addition to a single unclassifiable fragment from a large container (1 MNI), there are two red slip pottery fragments (1 MNI), one of them a Rufete Tomico’s Type P1 plate (1988-1989) (Fig. 12.24).

3.4. Ceramic assemblage from Phase IV

In the final phase of the stratigraphic sequence analyzed in this study, marking the abandonment of some of the previously used structures, only two stratigraphic units yielded ceramic materials, specifically [100417] and [100425] (Fig. 12).

In the first case, handmade ceramics are represented by two fragments (1 MNI), one of which is from a cup with a carinated profile and polished surfaces (Fig. 12.26). Wheel-thrown ceramics include eight fragments (3 MNI), two of which are large undetermined vessels. The rest correspond to a peculiar type of red slip ware (Fig. 12.27). It is a shallow piece with a short rim, followed by a well-defined carination from which concave walls develop. Its specific features make it difficult to find parallels, but in terms of morphology and size, it bears similarities with a red slip ware specimen from Phase II of Tyre (Lebanon), dated to the second half of the 8th century BCE (Bikai, 1978, tab. XI-19), or even with another specimen from Phase II of Castil-lo de Doña Blanca (El Puerto de Santa María, Cádiz) (Ruiz Mata and Pérez 1995, fig. 17-4), roughly contemporary with the former.

The stratigraphic unit [100425] contains ten fragments of manual ceramics (2 MNI), with the only classifiable piece being a medium-sized cooking or storage vessel with an evverted rim and smoothed surfaces (Fig. 12.28). Wheel-thrown ceramics include 14 fragments.
Fig. 12. Ceramic materials from Phases III and IV, ancient Sommer Warehouses (Lisbon).
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(3 MNI). Two of them correspond to amphorae, one of which is of Type 10.1.1.1 (Ramon Torres, 1995) (Fig. 12.30). The rest comprise a red slip plate, although its fragmented state does not allow for specific typological determination (Fig. 12.29).

4. DISCUSSION

The artifact assemblage collected from the three oldest phases of the Iron Age in sectors 1 and 11 of the former Sommer Warehouses consists of 225 ceramic fragments, amounting to 53 MNI, among which one corresponds to an intrusive piece found in S. U. [100439].

In terms of production, manual (42 %) and wheel-thrown wares (58 %) are quite balanced. However, when the evolution of different categories throughout the three phases is observed, there is a certain trend towards a reduction in manual productions in favor of a more recurrent use of wheel-thrown specimens (Fig. 13). Nevertheless, the limited sample here analyzed calls for further corroboration of these scenarios taking into account more substantial data from contemporary contexts.

The most distinctive aspect of our assemblage concerns the fabrics of wheel-thrown specimens, including amphorae and possibly also large storage containers, and tableware, specifically those covered with red slip. Even though these observations were based on macroscopic analysis, all these groups (including the non-diagnostic fragments) exhibit the absence of specimens with the typical fabric characteristics of the Lisbon area, which have already been established, both macroscopically and archaeometrically (Sousa, 2014; Sousa and Pimenta, 2014; Ferreira et al., 2020; Sousa et al., 2020).

Indeed, all the wheel-thrown fabric groups identified significantly differ, at least in macroscopic terms, from local/regional productions. The most prominent, AMP./PL. F1 manufacturing (15.1 % of the total assemblage), appears to correspond to productions from the Málaga area, encompassing all the diagnostic fragments (amphorae of Types 10.1.1.1 and 10.1.2.1; Ramon Torres, 1995). AMP./PL. F2 (5.7 % of the assemblage) and F5 (1.9 % of the assemblage) may also belong to the Málaga area, albeit from different zones. As for AMP./PL. F4 (1.9 % of the assemblage), the characteristics of its pastes suggest a southern origin, maybe from the Cádiz area, considering the similarities it shares with the typical productions of this region, though with slightly later chronologies. It is currently not possible to attribute any specific provenance to AMP./PL. F3 (13.2 % of the assemblage) (Fig. 14).

In the case of red slip wares, the degree of refinement in the two identified fabric groups makes it challenging to identify specific features that could point to more specific provenance areas. Nevertheless, the disparity with known local productions (Ferreira et al., 2020) typically have a higher number of inclusions, also larger in size, stands out. Therefore, these pieces may also come from the southernmost regions of the Iberian Peninsula, although for the time being it is not possible to pinpoint more specific origins.

Regarding the single fragment of gray ware (GRAY. F1), the quality of manufacturing prevents making concrete considerations about its origin. While bicolored pastes are typical in artifact assemblages from the Lower Tagus area (Sousa, 2021, pp. 129-130), it should not be ignored that these characteristics also occur in other areas of the Iberian Peninsula (Sala Sellés, 2007, p. 200; Furtado, 2013, p. 27-29; Sáez Romero, 2014, p. 81; among others).

The manual pottery assemblage also exhibits some heterogeneity in terms of manufacturing groups (HM F1, F2, and F3). The production technology itself suggests, to some extent, a local or regional origin, although the possibility of at least some specimens having a more distant provenance cannot be entirely ruled out. Certainly, further archaeometric analyses are needed to confirm or refute this hypothesis. In fact, the presence of exogenous handmade wares in early Phoenician contexts in ancient Iberia has been recognized in several sites such as Cádiz (Torres et al., 2014, p. 63), La Rebanadilla (Málaga) (Sánchez-Moreno et al., 2012, pp. 72-73), Cabezo Pequeño del Estaño (Guadamar del Segura, Alicante) (García Menárguez and Prados, 2014, p. 117), Sa Caleta (Ibiza) (Ramon Torres, 2008), as well as in other areas of the Mediterranean, like for example Utica (Tunisia) (López Castro et al., 2016, pp. 77-80).

Handmade wares’ morphologies, nonetheless, are in line with the known repertoires of well-preserved contexts from the Late Bronze Age of Lower Tagus (Cardoso and Silva, 2004; Neto et al., 2013; Arruda and Sousa, 2015; among others), for instance the assemblages recovered at Praça da Figueira (Lisbon) (Silva, 2013), located only about 800 m away from the Sommer Warehouses (Fig. 1).

Most of the 22 individuals recognized in this group likely belong to medium or large-sized containers used for food preparation or storage. Their diameters range from 17 to 28 cm. Among the morphologies used for individual consumption, which always exhibit polished surfaces and smaller diameters (between 10 and 14 cm), the most recurrent form is the carinated cup, while bowls are relatively rarer. Decorations are sparse, with only one fragment of a wall showing indentations on the external surface and another with impressed decoration that somewhat recalls the Mesetian traditions, as mentioned previously.

The persistence of these forms and even of handmade productions in the early stages of the Iron Age is a phenomenon already recognized in the
Iberian Peninsula (Aubet et al., 1999; Delgado and Ferrer, 2007; Rouillard et al., 2007; Torres et al., 2014; among others). In Lisbon, this scenario has also been identified in other interventions carried out in urban areas (Pimenta et al., 2014; Pimenta et al., 2015; Sousa and Pinto, 2016; Sousa and Guerra, 2018), attesting to the symbiotic relationship that developed between indigenous communities and Western Phoenician groups.
during the earliest phase of the Iron Age. However, the significant proportions of manual productions in the earlier contexts of the Sommer Warehouses, with 42% of the total analyzed, can be interpreted as reflecting the chronological expression of this repertoire.

Indeed, the remaining associated materials, clearly of Western-Phoenician origin, exhibit morphological characteristics that are clearly archaic in the context of Iron Age occupation in Lisbon.

In the red slip wares, all plates, with short lips, can be integrated into Rufete Tomico’s Type P1 (1988-1989). This production began in the second half of the 8th century BC and remained in use until the 6th century BC. The diameters themselves are relatively short, ranging from 16 to 22 cm. Even the two fragments of carinated cups, one of which is certainly a Rufete Tomico’s Type C3a, are compatible with this chronological framework. In the case of the piece with a more atypical profile (Fig. 12.27) that tentatively may be classified as a bowl, the closest parallels we have been able to identify once again refer to the second half of the 8th century BC.

The amphora assemblage is also reconcilable with an ancient chronological framework, given the presence of at least two containers of Type 10.1.1.1, whose production is attested between the second half of the 8th century and the beginning of the 7th century BC (Ramon Torres, 1995, p. 230). The only element that could indicate a slightly later chronology would be the fragment integrated into Type 10.1.2.1 from Phase III, dated to the second quarter of the 7th century BC (Ramon Torres, 1995, p. 231). Nevertheless, this same morphology has recently been identified in contexts from the late 8th century BC (García Menárguez and Prados Martínez, 2014; Ruiz Mata, 2022, pp. 219-222), suggesting an earlier beginning for this production.

Finally, the limited representation of gray pottery in the assemblage, with a single fragment, could also be a chronological reflection, considering that these productions only became frequent in Iberian contexts after the late 8th century BC, and especially during the following century (Vallejo Sánchez, 2015, pp. 122-123). Even its morphology does not deviate from these chronological boundaries as attested by the stratigraphic and contextual data from Alcácova de Santarém, where it appears associated with the earliest moments of the Iron Age (Sousa and Arruda, 2018).

5. THE ARCHAIC PHASE OF THE ANCIENT SOMMER WAREHOUSES IN THE CONTEXT OF PHOENICIAN COLONIZATION OF LOWER TAGUS

The establishment of the first Western-Phoenician groups in the Tagus estuary brought about structural changes in the territorial, cultural, economic, and social spheres of the region, marking the beginning of the Iron Age in the Western Atlantic area. Although the effects of this process are clearly reflected in the architectural and material evidence of various occupation centers, such as Alcácova de Santarém (Arruda, 1999-2000), Quinta do Almaraz (Almada) (Barros et al., 1993; Olaio, 2018), and in the urban area of Lisbon itself (Sousa, 2015), with the use of orthogonal plans and Mediterranean construction techniques as well as new metallurgical practices, animal species, crops, the introduction of the potter’s wheel and double-chamber kilns, and even writing, among other aspects, it has always been difficult to differentiate the singular stages that integrated these dynamics.

As such the data collected in the earliest phases of the Iron Age at the ancient Sommer Warehouses take on unique importance. The material associations described above suggest a conventional chronology centered between the second half of the 8th century BC and the beginning of the 7th century BC (750/725 – 700/675 BC) for Phases II, III, and IV. In view of the data published so far from Lisbon, the only preserved context that can be considered contemporary was documented on Rua de São Mamede ao Caldas (Context 1), where the remains comprise a rim of an amphora Type 10.1.1.1 (Ramon Torres, 1995), red-slipped wares of types P1, C1, and possibly Rufete Tomico’s C3, a Cruz del Negro type urn, a fragment of gray ware as well as a significant set of handmade vessels, including a fragment with burnished decoration (Pimenta et al., 2014, pp. 727-730). Likely, some of the materials collected in other interventions carried out in the riverside area, specifically at Casa dos Bicos, which are similar both in fabrics and morphologies, may originally have belonged to contexts of this chronology (Pimenta et al., 2015), although in this case their stratigraphic associations could not be recognized.

However, there is an apparent chronological discrepancy with the data obtained so far in the higher areas of the Castle of São Jorge hill, where several excavations that reached the bedrock have been conducted, already falling within the 7th century BC (Gomes and Gaspar, 2017; Sousa and Guerra, 2018, 2023).

Another suggestive detail provided by the analysis of the ancient Sommer Warehouses’ assemblage, that must be corroborated archaeometrically in the future, is the absence of wheel-thrown fragments resembling
the typical productions of the Lisbon/Almaraz area, which become the majority in all Lower Tagus from the 7th century BC onwards (Sousa, 2016) and were also documented in the subsequent phases of the Iron Age assemblage. This probably indicates that the archaic phase of this occupation occurred at a time when the productive structures associated with the manufacture of ceramic vessels were not yet operational in the Lower Tagus, so the supply of wheel-thrown vessels related to tableware, transportation, and storage would necessarily have been imported from outside the region. Such a scenario could also explain the significant quantities of handmade wares in the analyzed set, which would thus meet daily needs, while simultaneously indicating the active involvement of indigenous groups in these early moments of Phoenician presence.

Therefore, it is likely that the archaic phases of the ancient Sommer Warehouses’ occupation correspond to the first moment of the establishment of Western-Phoenician communities in Lisbon. The archaeological evidence suggests that this initial phase would have favored the lower areas in terms of altitude, near the banks of the Tagus River, and that the actual expansion of the nucleus, which in the Orientalizing period would cover about 15 hectares, only took place at a later stage. This first phase of occupation may even have been essentially emporial in nature and evolved, decades later, into an urban entity, incorporating a series of more specialized productive activities, such as ceramic production (Sousa, 2015).

In this context, the associated wheel-thrown materials take on added importance, as they may shed light on some aspects of the origin of these communities. As such, we must note the expressiveness of the productions that seem to originate from the Malaga area, which may have been essential not only in terms of supplying food products and manufactured goods but perhaps also in the dynamics of the colonization of the westernmost areas of the Iberian Peninsula.

In Lisbon, these exogenous groups chose, in this initial phase, a low-lying area in terms of elevation, near the banks of the Tagus River, apparently without any previous occupation, having nonetheless the concern to build defensive and/or delimiting structures (S. U. [100440] and [100441]–Phase II). These constructions seem to correspond to a “doble paramento” wall Type M.0 (Montanero Vico, 2020), although the size of the intervened area as well as the associated stratigraphic complexity do not exclude the possibility that these structures may have supported other buildings inside. Their relatively small thickness, with only 1.20 m in Phase II, reaching a maximum of 1.60 m in Phase III, contrasts with other known cases in the West (summary in Montanero Vico, 2020, pp. 359-367). They are, nonetheless, unique evidence in the context of Iron Age occupation in Lisbon, where the remaining identified structures are about half a meter in thickness (Sousa, 2014; Sousa and Guerra, 2018 and 2023). Structures with these characteristics also appear in other areas of the Portuguese territory, specifically in Santa Olaia (Figueira da Foz), where they reach a thickness of 2 m (Pereira, 1997).

In the case of the structures identified in the ancient Sommer Warehouses, their geographical location near the riverbank is rather unusual. Therefore, it is suggested that these constructions should be considered also as delimiting elements of the occupied space, with their protective nature possibly more directed towards fluvial dynamics than to potential human incursions. This concern may have persisted throughout the 1st millennium BC, up to the Roman era, as the wall from that period is located only a few meters to the south (Filipe et al., 2020; Ribeiro et al., 2020). However, it is also important to consider the symbolic and ideological significance of Iron Age constructions, serving as both deterrents to potential attacks and tools for the appropriation of physical spaces. Unfortunately, there is currently no data available to reconstruct the originally delimited area by these structures or to determine if they were built only along the coastline or also in more inland areas. Further archaeological urban studies are required to uncover additional elements that will enable a more detailed characterization of these realities as well as their main function.

The later phase of occupation, Phase III, demonstrates an alteration in the urban plan of the space, closely related to port activities. At some point in the second half of the 8th century BC, possibly close to the end of the century, there was a need to create an access area to the Tagus River. This involved dismantling the eastern part of one of the walled structures to create a ramped area surrounded by a cofferdam, which could extend the ramp’s length during low tide. The preserved width of this structure, at 1.80 m, indicates that its use was limited to small-sized vessels, which would later likely interact with larger ones, anchored nearby. Once again, this represents an exceptional finding in the context of Iron Age architectural elements in Portuguese territory, illustrating the significance of fluvial and maritime networks, not only in terms of communication and economic activities but also within the internal spatial organization of this earliest nucleus in the Lisbon area.

The final phase of this sequence includes deposits related to the abandonment of this zone, concurrently serving as preparation for a new construction phase, perhaps within the framework of urban reform affecting also other areas of the city, which will be analyzed in future works.
If the proposed interpretations mentioned above are confirmed, this scenario could offer new insights into distinct phases of intercultural contacts that occurred regionally at the mouth of the Tagus estuary during the early 1st millennium BC. This specifically refers to material evidence of Mediterranean origin found in locations with distinctly indigenous traditions, such as Santa Sofia (Vila Franca de Xira) (Pimenta and Mendes, 2010-2011; Pimenta et al., 2013), or even a wheel-thrown pottery fragment from the late Bronze Age levels of Alcáçova de Santarém (Arruda and Sousa, 2015, p. 183), originally considered intrusive but possibly related to this early chronological horizon. The dissemination of these materials may not have resulted from sporadic contacts (Non-Hegemonic Contact Mode–MCnH, Alvar Ezquerra, 2008) but rather from the effective presence of the first Phoenician groups in the territory, which were now establishing more systematic relationships with local communities. Despite their deeply asymmetric nature (Alvar Ezquerra, 2008; Wagner, 2001), these contacts, which involved negotiations, pacts, and distinct types of agreements, appear to have been successful judging by the presence of handmade products within the artifact repertoires of these early Iron Age moments, particularly in the ancient Sommer Warehouses, reflecting in turn an active collaboration by indigenous groups in the process of fixation of these exogenous communities in the Lower Tagus area. The Western-Phoenician foundation space at the mouth of the estuary would become, if it not already, a focal point of attraction and aggregation for these preceding communities, considering that the previous habitation spaces, dispersed throughout the territory, eventually disappeared at a contemporary or slightly earlier time to this phenomenon (Cardoso, 2015; Sousa, 2019).

The data gathered from the early phases of the Sommer Warehouses, along with those from Rua de Sào Mamede ao Caldas, correspond, in strictly contextual terms, to the oldest evidence of a permanent presence of Phoenician groups on the western Iberian façade, perhaps reflecting the initial stages of the effective colonization of the Far West. These findings appear to precede, by a few decades, the occupations of other important Phoenician coastal sites like Santa Olaia or Abul (Alcácder do Sal), indicating that the colonization process followed meticulously planned agendas which were established earlier on. Such agendas were undoubtedly linked to strategic resources enhanced by the Tagus River, encompassing both its natural resources and its facilitation of communication with more inland areas, whose wealth in metallic resources is widely known. This colonization strategy appears to have yielded success during the first half of the 1st millennium BC, evidenced by the growing importance of Lisbon within the regional context.

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Elisa de Sousa: conceptualization, formal analysis, investigation, methodology, visualization, writing – original draft, writing – review & editing.

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