

# THE EARLY BRONZE AGE IN TYRE

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## ABSTRACT

A reexcavation of an ancient sounding in the acropolis of Tyre uncovered an important sequence of Early Bronze Age occupation levels and the foundation of a strategic transit harbor at the beginning of the Early Bronze III, if not earlier. The ancient island connected the fertile plains of the interior, the access to resources through the important route of the Litani valley, and an inexhaustible source of water near mainland Tyre, in the so-called Ushu or Palaeotyros of the ancient sources. It does not seem coincidental that its role as a port of transit began in the third millennium BC, when maritime trade between Egypt and Byblos intensified.

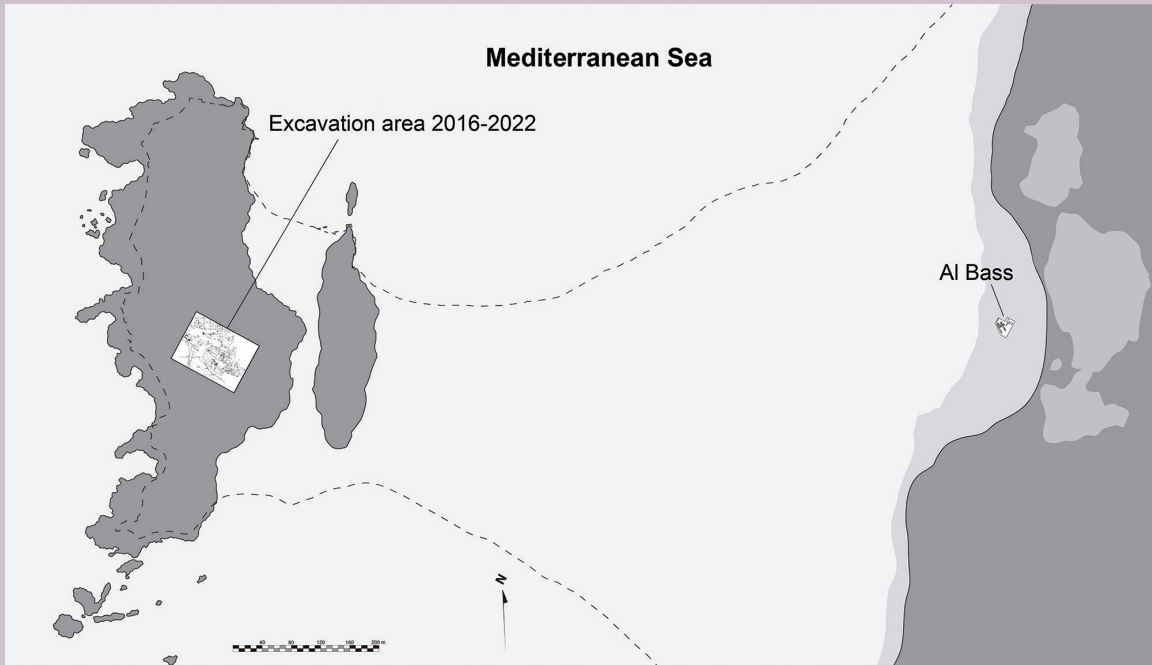
**KEYWORDS:** stratigraphical sounding, Tyre acropolis area, architectural levels, port of transit

Between 2014 and 2016, the first archaeological excavations were performed at one of the highest points of the acropolis of Tyre (Fig. 1). The Tyre Project, funded by the

Spanish Ministry of Culture and the Palarq Foundation, had theretofore focused on excavating the Iron Age acropolis in Al Bass (1997–2010), located on the mainland coast, facing the ancient island of Tyre. The objective of the new project was to unearth the occupation levels of the ancient Phoenician and pre-Roman city, which were barely identifiable under the compact archaeological remains of Ottoman, medieval, Byzantine, Roman, and Hellenistic monumental architecture.

During the work on the surface levels of the acropolis, the traces of a previous stratigraphic sounding were discovered under the remains of a Roman temple, at 5.92 m above sea level. Measuring approximately 5 × 6 m (Fig. 2), it is not known for sure when it was performed or by whom, for the results were never published. Corresponding to Sector 1 of the area of the acropolis granted to the project (Fig. 3), it has been provisionally called “Chéhab’s sounding,” owing to the fact that, in light of the dearth of information available, it has been conjectured that it was excavated at the end of the 1960s, probably by the team led by Emir Maurice Chéhab, who was in charge of the excavations in Tyre at the time. In all likelihood, the results obtained served as a reference for the excavations that Patricia Bikai carried out 50 m to the west of the sounding, promoted by Chéhab himself, during the 1973–1974 season (Bikai 1978).

The unearthing of part of the sounding revealed the stratigraphy of its western section, at a depth of a little



**FIG. 1**  
 Tyre in preclassical times. (Map by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



**FIG. 2**  
 General view of the acropolis of Tyre: (1) Excavation area of 1973–1974; (2) excavation area of 2014–2020; (3) Sector 1 or “Chéhab’s sounding”; (4) Crusader cathedral. (Photo by R. Yassine; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



FIG. 3

Sector 1 or “Chéhab’s sounding” in 2020. (Photo by R. Yassine; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

over 5 m (Fig. 4). In this section there appeared a complete sequence of the history of Tyre in the Bronze Age, reflecting how densely populated the site had been in the Late Bronze Age, as well as Iron Age levels containing abundant archaeological material. Part of the monumental pavement of the Roman temple, the construction of which had considerably diminished the oldest Iron Age levels, was identified on the surface. The monumental character and density of the architectural levels of the Early Bronze (EB) Age strata some 3.4 m below the current surface, which appeared directly on top of the original bedrock located at a little over 1 m above sea level, were both unexpected finds (Fig. 5).

In view of these initial results, **it was decided to reexcavate Chéhab’s sounding during the 2019–2020 season**, with the aim of reaching both the areas that had not been studied by his team and the deepest strata brought to light in the work performed in the 1960s. The main objective was to review the Bronze Age occupation strata that, at first sight and on the basis of Bikai’s previous excavations,

had been thought for some time to be the remains of a temporary camp or merely a fisherman’s shelter. The evidence obtained from the new excavations contradicted this hypothesis, while underscoring the island’s relevant role during the Early Bronze Age, in general, and in the EB III–IV (ca. 2800–2000 BC), in particular.

### Tyre, “the Rock”

Writing in the sixth century BC, the biblical prophet Ezekiel describes the arrogance of Tyre “in the midst of the sea” (Ezek 27:32, NRSV). The island city’s Greek name Τυρός comes from *šr* (*šour*), the Semitic word for “rock” or “crag”; in Hebrew, *šor*, in Babylonian and Ugaritic, *šurru*, and in Arabic, *šur* (Jidejian 1969: xvi; Katzenstein 1973: 8).

Tyre’s current morphology was the result of its conquest by Alexander the Great in 332 BC (Arrian, *Anabasis of Alexander* 2.18.3; Diodorus, *Bibliotheca historica*

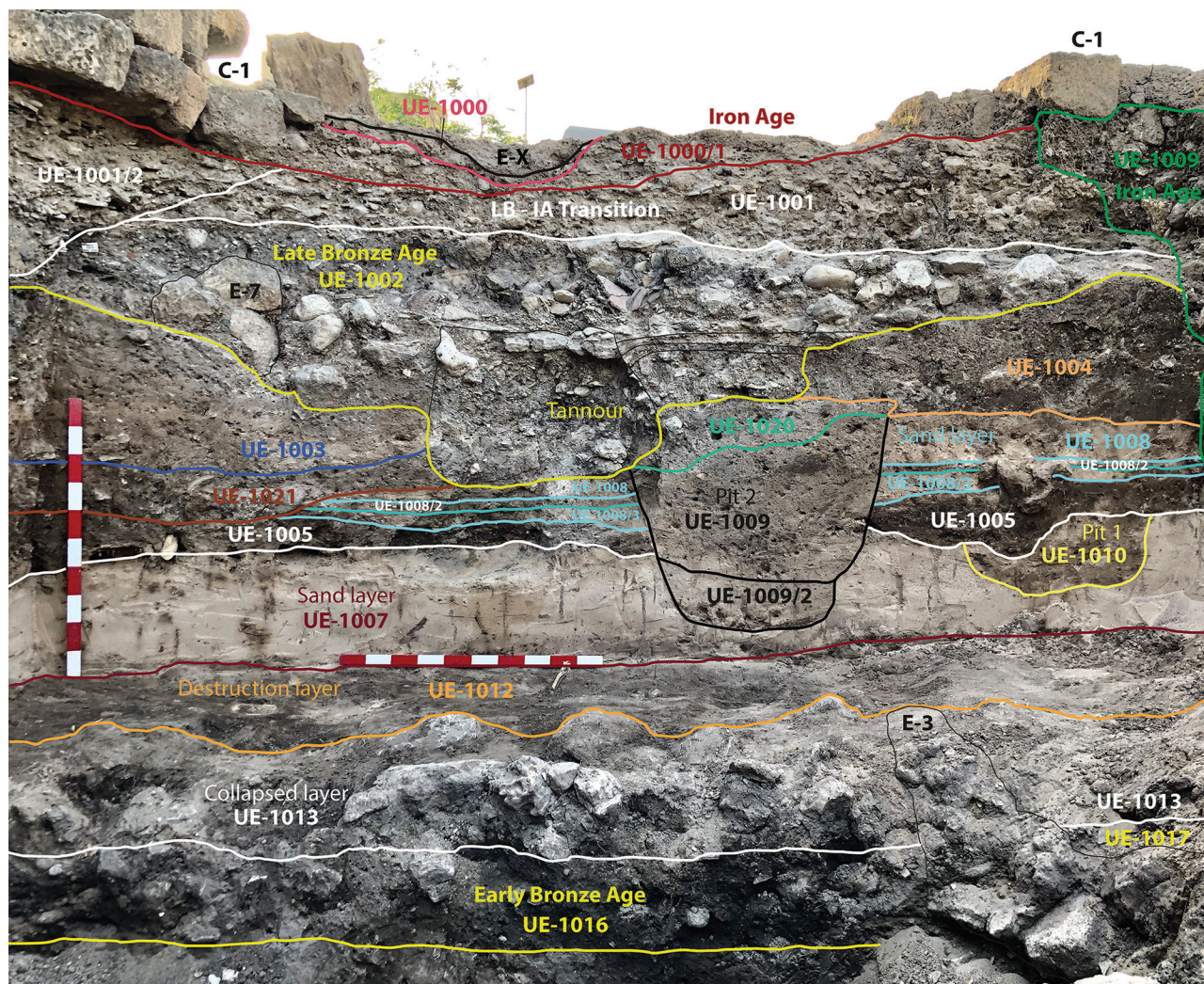


FIG. 4

**Sector 1: stratigraphy of the west section.** (Photo by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

17.40.4), when he built a causeway between the mainland and the island so that his troops could overwhelm the stronghold that was impregnable by sea. Over time, marine sediments, plus those generated by the river Litani, and sand were deposited on either side of the mole, gradually forming an isthmus, while there were also significant changes in the sea level, all of which ultimately converted the island into a peninsula (see Fig. 1) (Marriner, Morhange, and Carayon 2008: 1282; Carayon, Marriner, and Morhange 2011).

Both the ancient literature and recent geoarchaeological studies allow for a rough reconstruction of the original

features of the largest of the two islands. Originally a rocky and irregular sandstone reef, it was almost twice the size of modern-day Tyre (Fig. 6), for many of its ancient landmarks, including the Phoenician city's southern or "Sidonian" harbor, described in the ancient sources, have since disappeared into the waters. In light of the fact that 6,000 years ago the sea was between 8 and 12 m below its current level (Marriner and Morhange 2005: 183–84; Marriner et al. 2005: 1319), the first human settlement, discovered a little more than 1 m above the current sea level, was relatively well protected from the threat of sea floods and tidal waves.



**FIG. 5**  
**General view of Sector 1.** (Photo by M. E. Aubet; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

According to late classical mythology, Tyre was originally formed by the “Ambrosian Rocks,” two parallel and eternal floating islands united by the roots of a sacred olive tree and associated with a divine origin involving the god Melqart (Nonnus, *Dionysiaca* 40.468). As the story goes, in the tenth century BC King Hiram I united the two parallel islands and founded the city of Tyre (Flavius Josephus, *Contra Apionem* 1.113; see Aubet 2020).

The reef’s rocky nature meant that ancient Tyre had little in the way of natural resources, except for fishing grounds, which made it vulnerable and totally dependent on the mainland. Most importantly, there was practically **no drinking water available except for a number of underground springs in both the sandstone bedrock and the seabed. Accordingly, water had to be regularly transported by boat from the mainland, specifically from**

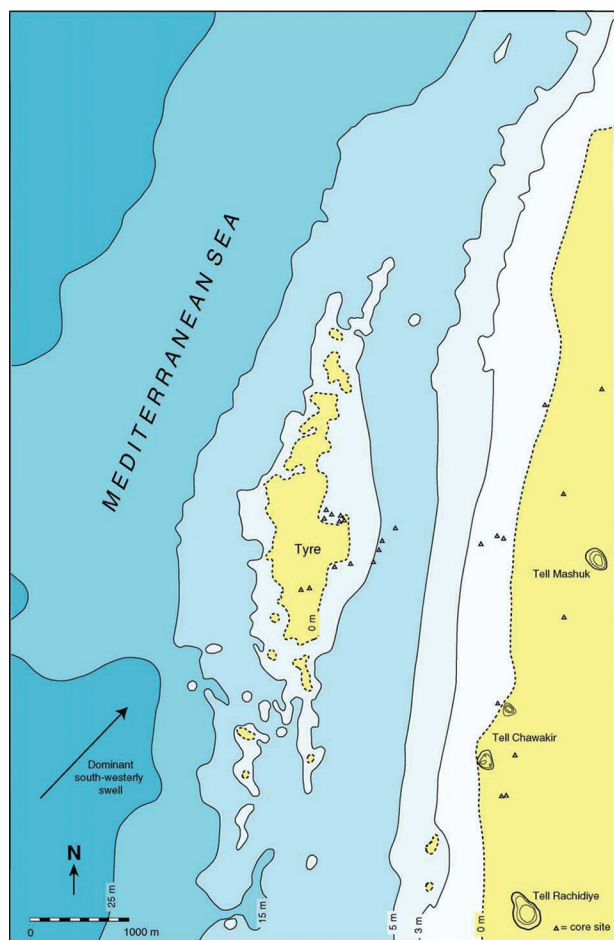


FIG. 6  
Tyre around 6000 BP. (After Marriner and Morhange 2005, fig. 14.)

Rass el-Ain (literally, the “head of the spring”), one of the most important karst springs on the Lebanese coast, located 5 km to the southeast of the island (Fig. 7).

In Roman times, Ras el-Ain continued to supply the city with water but now via an aqueduct. Some of the extant literature contends that during the Late Bronze Age the city depended on water transported by boat. Specifically, the Amarna letters, sent by King Abi-Milku of Tyre to Pharaoh Amenophis IV (Akhenaton) between 1365 and 1358 BC, describe an isolated city without a hinterland following the conquest of mainland Tyre—Ushu—by the king of Sidon (Albright 1937: 195; Moran 1992: 233–42):

Zimredda has taken the town of Usû from <his> servant; I have abandoned it and we have no water,

no wood, and there is nowhere that we can (bury) the dead. (EA 149.40–54; ed. Rainey 2015: 753–57)

The loss of Ushu would have been a severe blow for Tyre because it not only deprived the city of access to drinking water, grain, and wood but also of a mainland cemetery. Without Ushu, which was ruled by the king of Sidon for many years, Tyre was an isolated city, without a hinterland or natural resources. Indeed, an Egyptian school text, dating from the Nineteenth Dynasty, underscores the island’s vulnerability (Bikai 1978: 73):

They tell of another city in the sea, Tyre-the-port is its name. Water is taken over to it in boats, and it is richer in fishes than in sand. (Papyrus Anastasi I: 21.1; ed. Gardiner 1911: 1–34)

The location of Ushu, a city mentioned time and again in the Egyptian and Assyrian sources and called Palaetyros in the classical literature, can be established at Tell er-Rachidiyeh, located 4 km to the south of the island at a strategic site that not only overlooked one of the most fertile plains in southern Lebanon but also the route to the interior up the valley of the river Litani, 10 km to the north of Tyre. The city thus boasted a dual strategic advantage: its insular nature, which made it an impregnable port stronghold, and its domination of the mainland through Ushu/Palaetyros, which gave it control over a large variety of economic resources and communication routes. Regrettably, access to Tell er-Rachidiyeh for archaeological research purposes is currently restricted due to military presence.

During the 2019–2020 season, Chéhab’s sounding, which was renamed Sector 1 in the nomenclature of the acropolis, was reexcavated, reaching a depth of 3.4 m from the current surface and identifying quite a few intact areas. On a negative note, the site had been used as a dump for many years, with the subsequent accumulation of a large amount of debris, before also being used as an arms depot during the Lebanese Civil War. Moreover, a part of the sounding had been affected by the construction of underground rooms and chambers, as well as by sturdy, 2 m high ashlar walls (structures E-8 and E-9),



FIG. 7  
Tyre and the surrounding area. (Data source: Google Earth.)

which are associated with the Roman temple remains visible on the surface (Fig. 8).

It transpired that Chéhab's team had reached very deep levels, down to 1.57 m above sea level, excavating to a depth of 3.37 m, but without encountering bedrock. Notwithstanding this, it was possible to identify the Early Bronze Age levels, plus diverse overlapping architectural structures. Lastly, mention should go to the abundant archaeological material discovered in the Late Bronze Age levels, including some Mycenaean pottery.

The sequence of the identified Early Bronze Age strata is described below in chronological order, from the basal levels to the horizon of abandonment of the island during the Middle Bronze Age (Fig. 9). The reference stratigraphy is based on the superimposition of the architectural levels and of the associated materials—pottery, metals, organic remains—that have been preserved intact. Currently, samples of metals, fauna, and sediments are being analyzed, as well as organic remains, to obtain radiocarbon dates.







## The EB III Levels: Areas 5 and 3

### Area 5

The EB III (ca. 2850–2500 BC) is one of the most important periods of occupation identified in the sequence of the sounding. Not only the quantity and quality of the pottery—red burnished, combed ware, pattern

burnished, pot marks—but also the overlapping of several architectural levels and the thickness of the stratigraphy denote an intense occupation of this part of the acropolis during the first half of the third millennium BC. As already noted, Chéhab's sounding reached a depth of about 3.4 m but not the bedrock, owing to the overlapping of the remains of walls at the deepest levels, such as E-4 (Fig. 10). In the work conducted during the



FIG. 10  
Area 5 (EB III) architectural phases in Sector 1. (Photo and text overlay by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

2019–2020 season, the oldest intact levels were identified at a depth of 1.72 m above sea level, but the bedrock was not reached on this occasion either. The excavation of the occupation levels corresponding to the time when Tyre was founded (EB II ?) has been reserved for future interventions.

In the deepest levels reached in the excavations, down to 1.9 m above sea level, there appeared the remains of an intact area given over to domestic and artisanal activities. A sizable flat stone block (E-10), possibly a workbench, appeared next to a large intact globular combed vessel (Fig. 11), as well as a probable basalt crucible associated with a copper fishhook (Fig. 12 and a) large number of flint points. In the vicinity there

appeared a large black and white veined block of flint from which several chips had been extracted (Fig. 13). The intact nature of the assemblage suggests that this habitat (E-4), including the extant remains of a beaten-earth floor at 1.72 m above sea level, was abandoned relatively swiftly. Below the beaten-earth floor, two large slabs (E-11) were discovered on top of the remains of an older wall (E-6), which was not excavated but which might correspond to a moment in the EB II, to wit, to the city's foundation.

Noteworthy was the presence of the large building E-4 in the oldest Early Bronze Age levels, a phenomenon similar to that observed in the work performed during the 1973–1974 season, when the somewhat

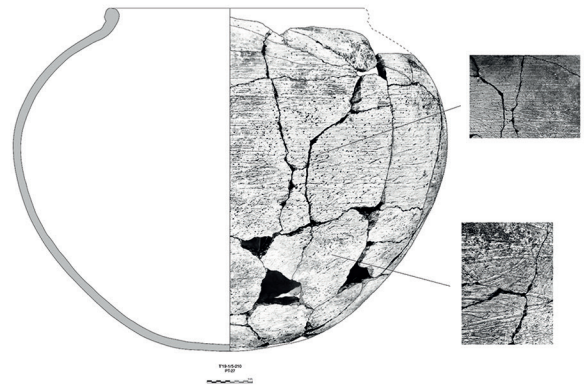


FIG. 11

Area 5 (EB III): combed ware globular vessel. (Photo and drawing by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



FIG. 12  
**Area 5 (EB III): basalt crucible and copper objects.** (Photos and drawing by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



FIG. 13  
**Area 5 (EB III): lithic industry.** (Photos by M. E. Aubet; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

monumental character of the first building, identified in Strata XXVII–XIX, was associated with the construction of what had possibly been a temple (Bikai 1978: 70–73).

The pottery from Area 5 stood out for its quantity, quality, and variety. The predominant type was the so-called combed ware, associated with a wide variety of forms, including ovoid jars for storage and transporting goods, globular pots with or without handles, and various kinds of vessels (Figs. 14 and 15). Other types of pottery included undecorated jars with or without handles (Fig. 16), plus vessels decorated with a burnished pattern or red slip (Fig. 17). Similarly, there was an abundance of lithic artifacts, mostly produced on the island itself (Fig. 18), plus small copper objects—needles and awls—associated with a basalt crucible or bowl (Fig. 19), all of which probably suggests the existence of local, small-scale metallurgy.

Lastly, the EB III deposits yielded several sherds with pot marks (Fig. 20).

### Area 3

A probable circular waterhole, with a diameter of 4 m and a depth of 2 m, was discovered to the southeast of Sector 1 (Fig. 21). The evidence may suggest that it was dug in one go and relatively quickly during the EB III (Fig. 22). Its clogging is associated with the intrusion of some of the materials characteristic of Area 5, including a pattern burnished jug in an excellent state of preservation (Fig. 23). Undoubtedly destined for storing or drawing drinking water, **the waterhole had been dug down to the bedrock, located at a depth of 0.42/0.05 m above sea level**, and one of its sides had been reinforced with a stone wall (E-1).

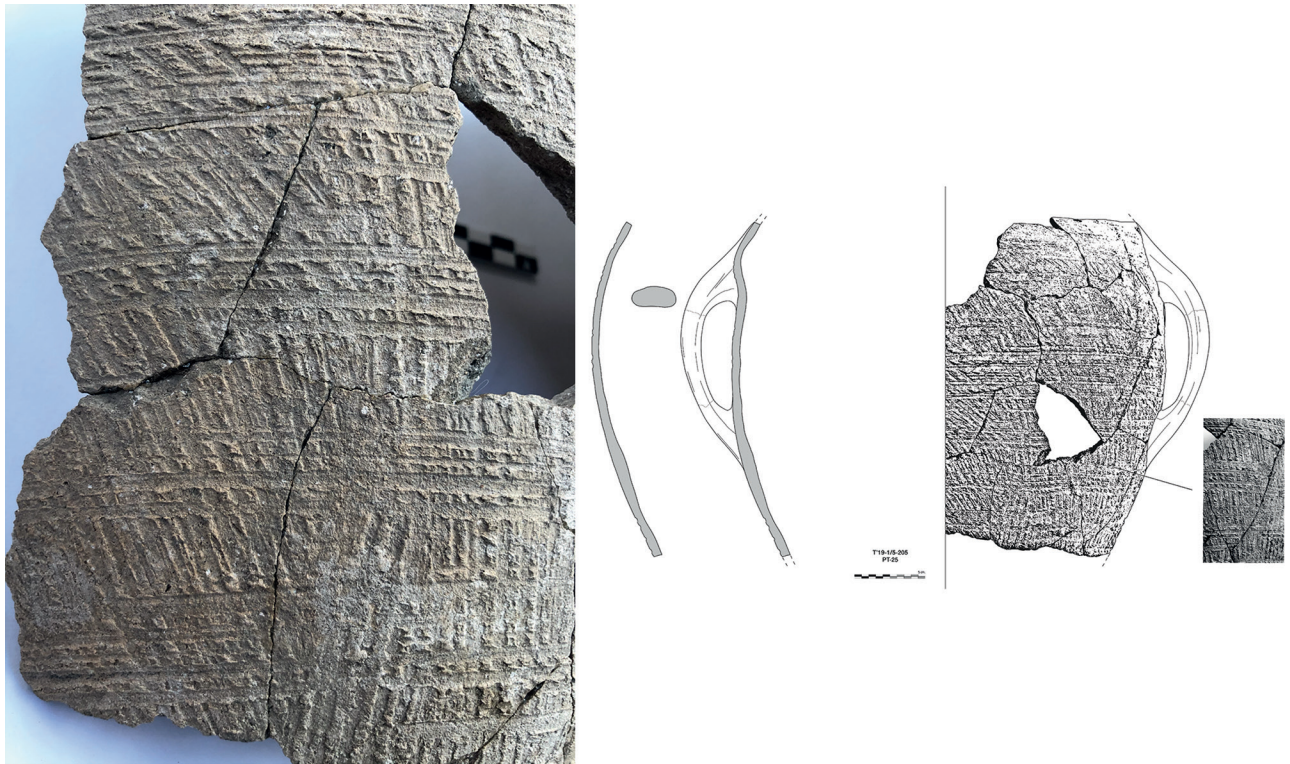


FIG. 14

Area 5 (EB III): combed ware container, detail. (Photos and drawings by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

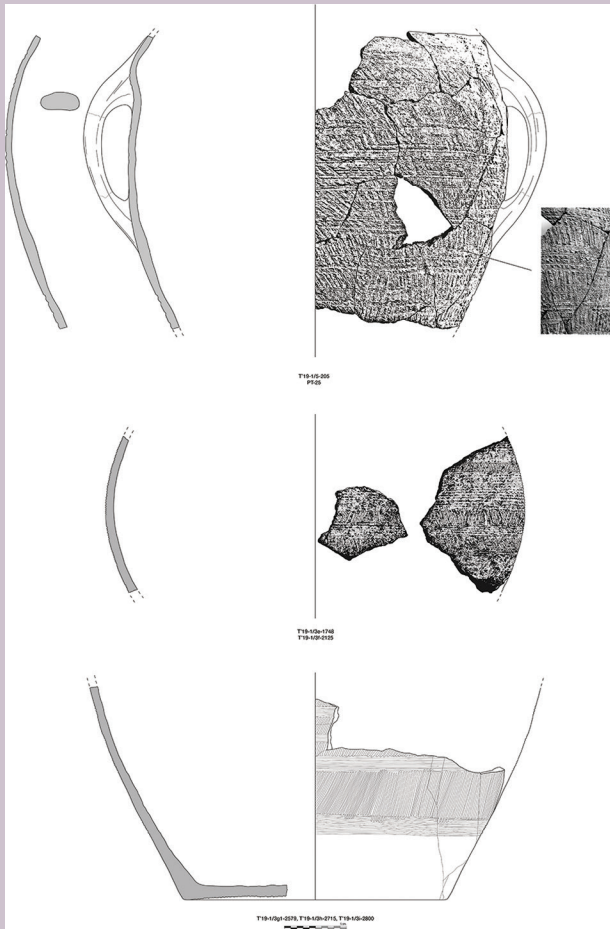


FIG. 15

**Area 5 (EB III): storage containers.** (Drawings and photos by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

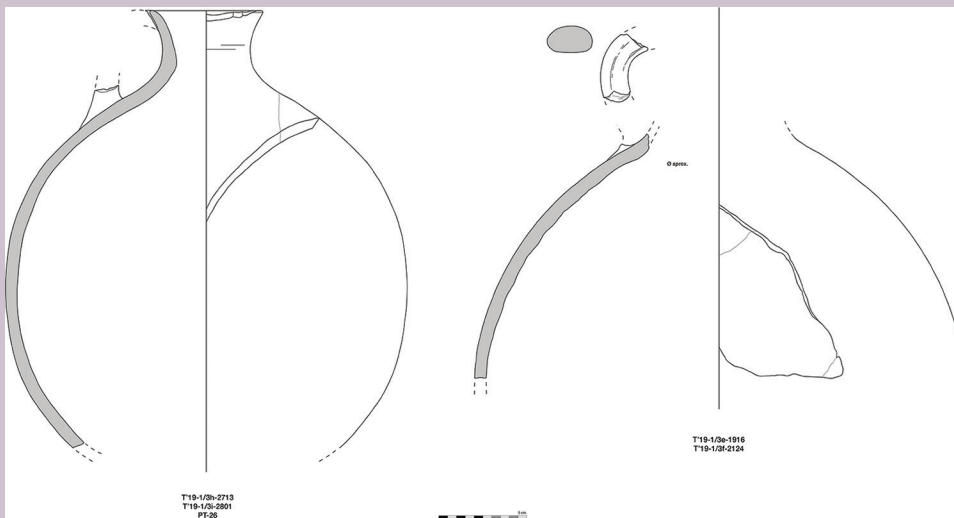


FIG. 16

**Area 5 (EB III): globular jars for storage.** (Drawings by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

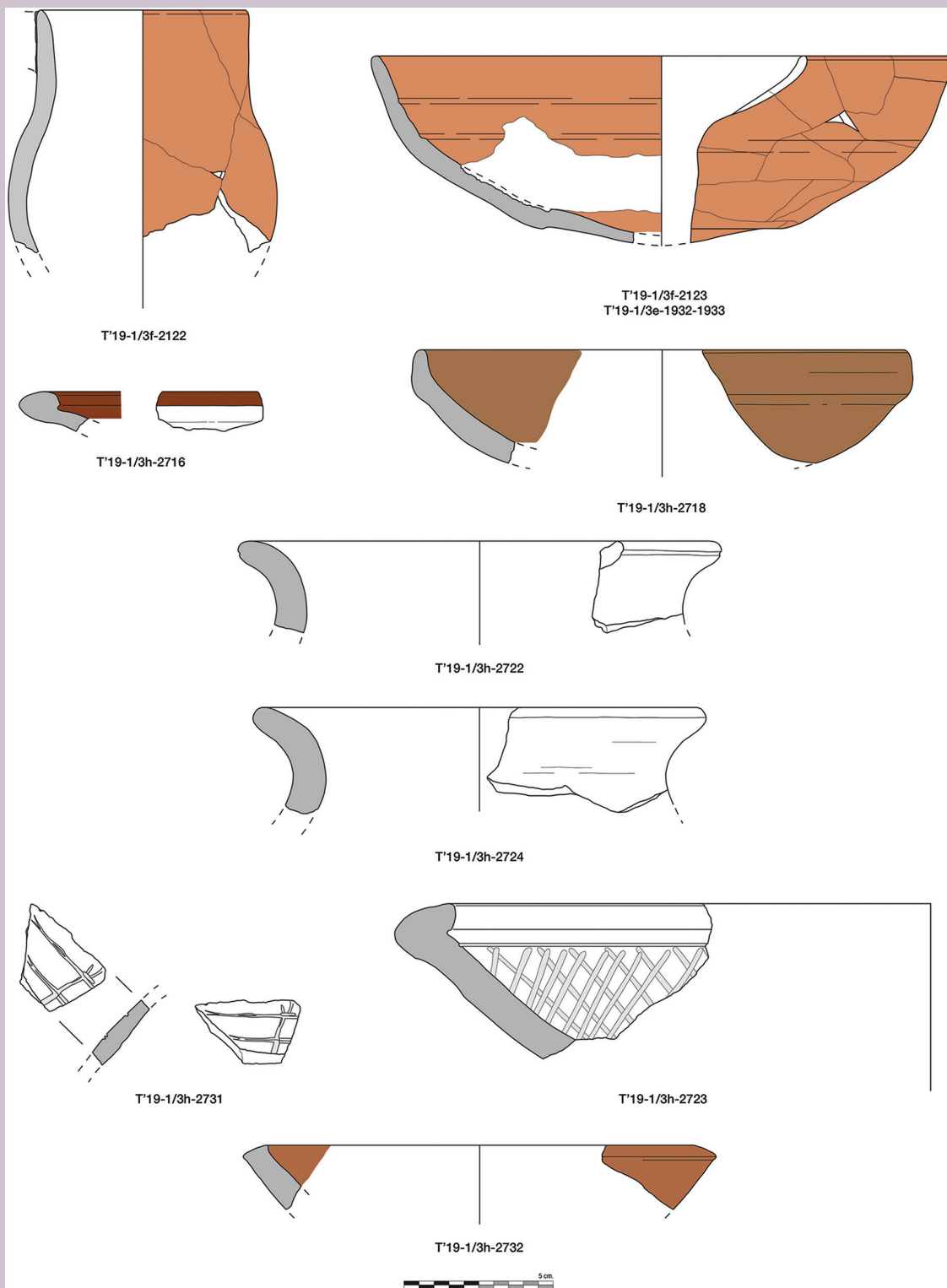


FIG. 17

Area 5 (EB III): red slip, red burnished, and pattern burnished ware. (Drawings by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

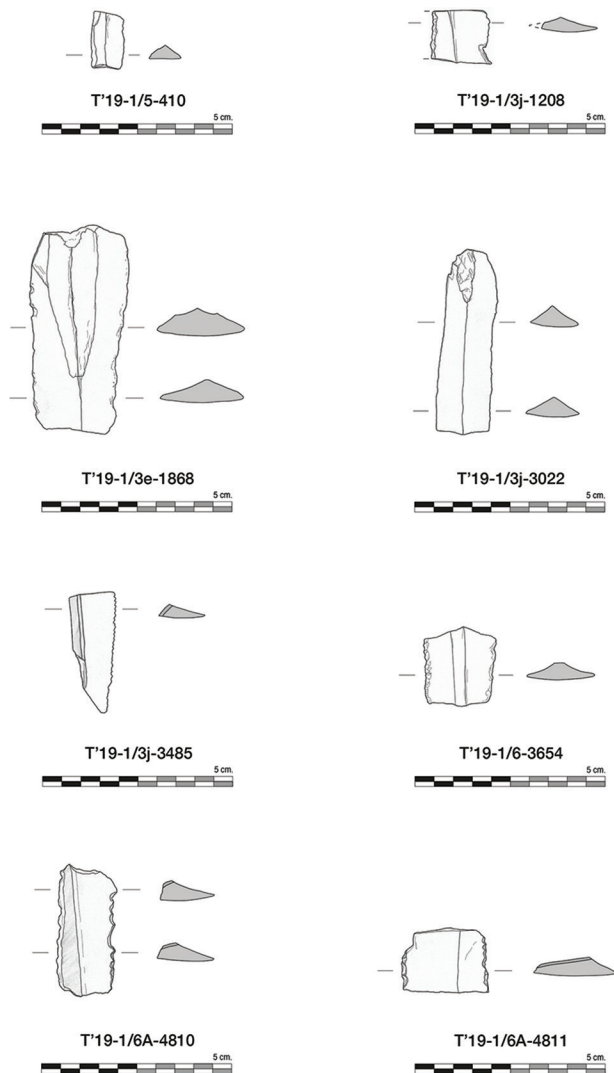


FIG. 18

**Area 5 (EB III): lithic industry.** (Drawings by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

### Conclusions for the EB III

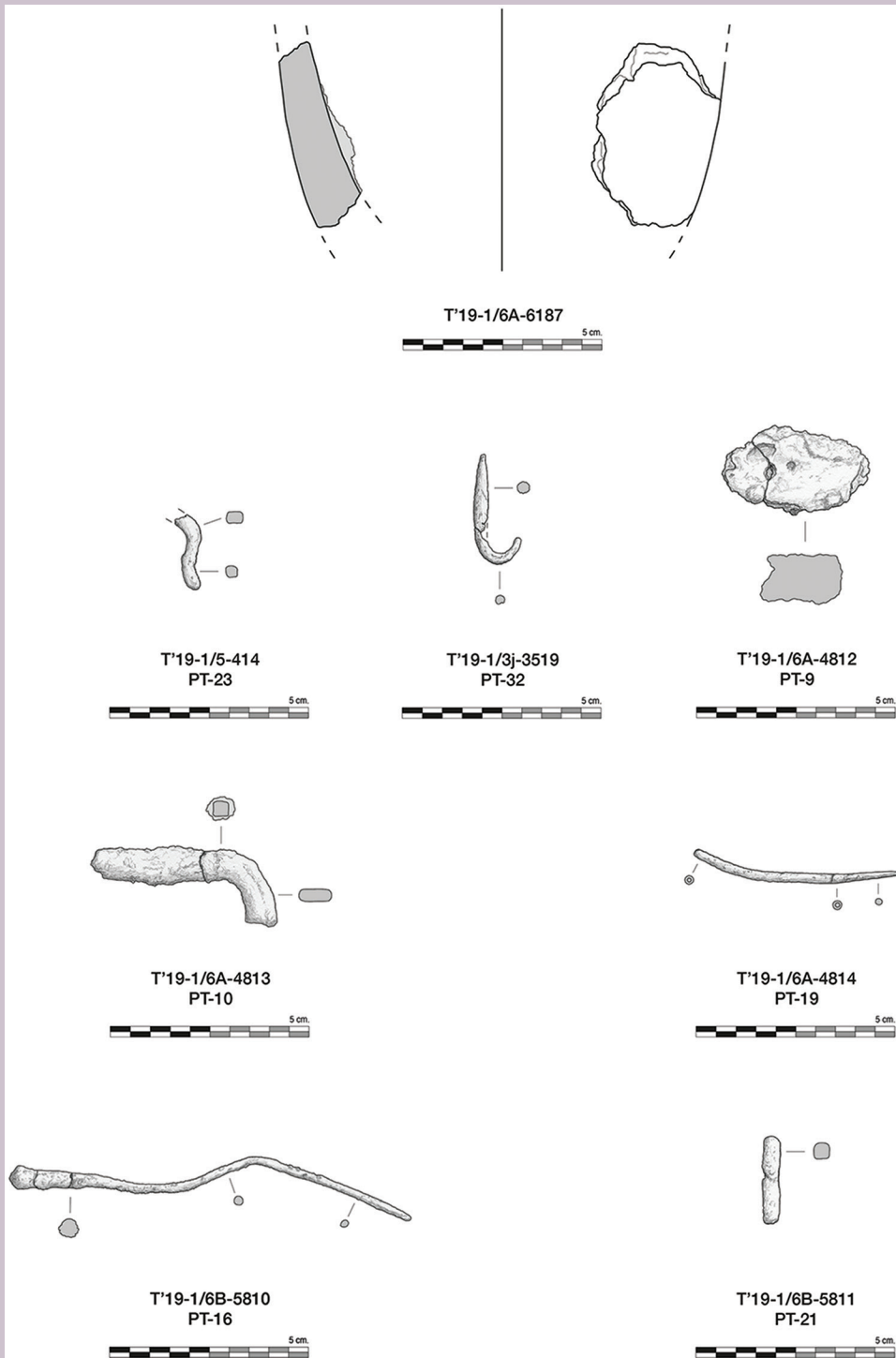
In Tyre, and on the Lebanese coast more generally, the EB III is a particularly relevant period for gaining deeper insights into the foundation and development of the first harbors and urban centers (Fig. 24). The progressive occupation of the coast started back in the Chalcolithic, called the *Énéolithique* in Byblos (ca. 3800–3200 BC), when small groups of people

occupied narrow coastal plains, bays, or coves, where they devoted their time to fishing and small-scale agriculture. This initial permanent colonization of the coast has been confirmed in places like Byblos, Sidon-Dakerman, Khaldé II, Tell Fadous-Kfarabida, and Minet ed-Dalieh, on the tip of the headland of Beirut (Saidah 1979; Artin 2010, 2018).

In difference to the southern Levant, where the EB III was characterized by the appearance of major urban centers with fortifications, public buildings, streets, and palaces—as in Megiddo, Yarmuth, Ashkelon, and Beth Yerah, to name but a few (Greenberg 2002, 2019; Greenberg and Eisenberg 2002; Richard 2020)—in Lebanon, according to what we know to date, only two settlements can be classified as urban centers: namely, Byblos and Tell ‘Arqa with surface areas of 5 ha and 7.5 ha, respectively, and archaeologically documented fortifications, temples, and public buildings. Other coastal settlements, like the tell of Beirut and Tyre, seem to have been occupied for the first time during this period (see Badre 1997: 14–22).

The results recently obtained from the excavations of Tell Fadous-Kfarabida are of particular interest. Located 12 km to the north of Byblos on a narrow coastal plain, without a suitable natural harbor, it had an imposing layout, including a considerable number of public buildings, warehouses, streets, and fortifications (Genz 2010a). The presence of seal impressions identical to those discovered in Byblos, among other finds, demonstrates that the place must have been in the economic and political orbit of Byblos (Genz and Ahrens 2023), specializing in stable dry farming and the growing and exportation of cash crops in the framework of an agrarian economy that focused on the cultivation of olive trees and grapevines, as well as on goat and sheep husbandry. The discovery of a scale beam, in addition to numerous seal impressions on ceramics, points to relatively sophisticated economic transactions—evidence of weighing and perhaps registering—and fairly complex administrative procedures (Genz 2012: 614–15; de Vreeze and Badreshany 2023; Genz and Ahrens 2023). Recent excavations of another small coastal settlement at Tell Koumba, 15 km to the north of Byblos (Badreshany, Philip, and Kennedy 2019: 170), have confirmed the development of a hierarchical





**FIG. 19**  
**Area 5 (EB III): crucible and metal objects.** (Drawings by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



FIG. 20

**Area 5 (EB III): pot marks.** (Photo by L. Trellisó; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



FIG. 21

**Area 3 (waterhole): general view.** (Photo by D. Montanero; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

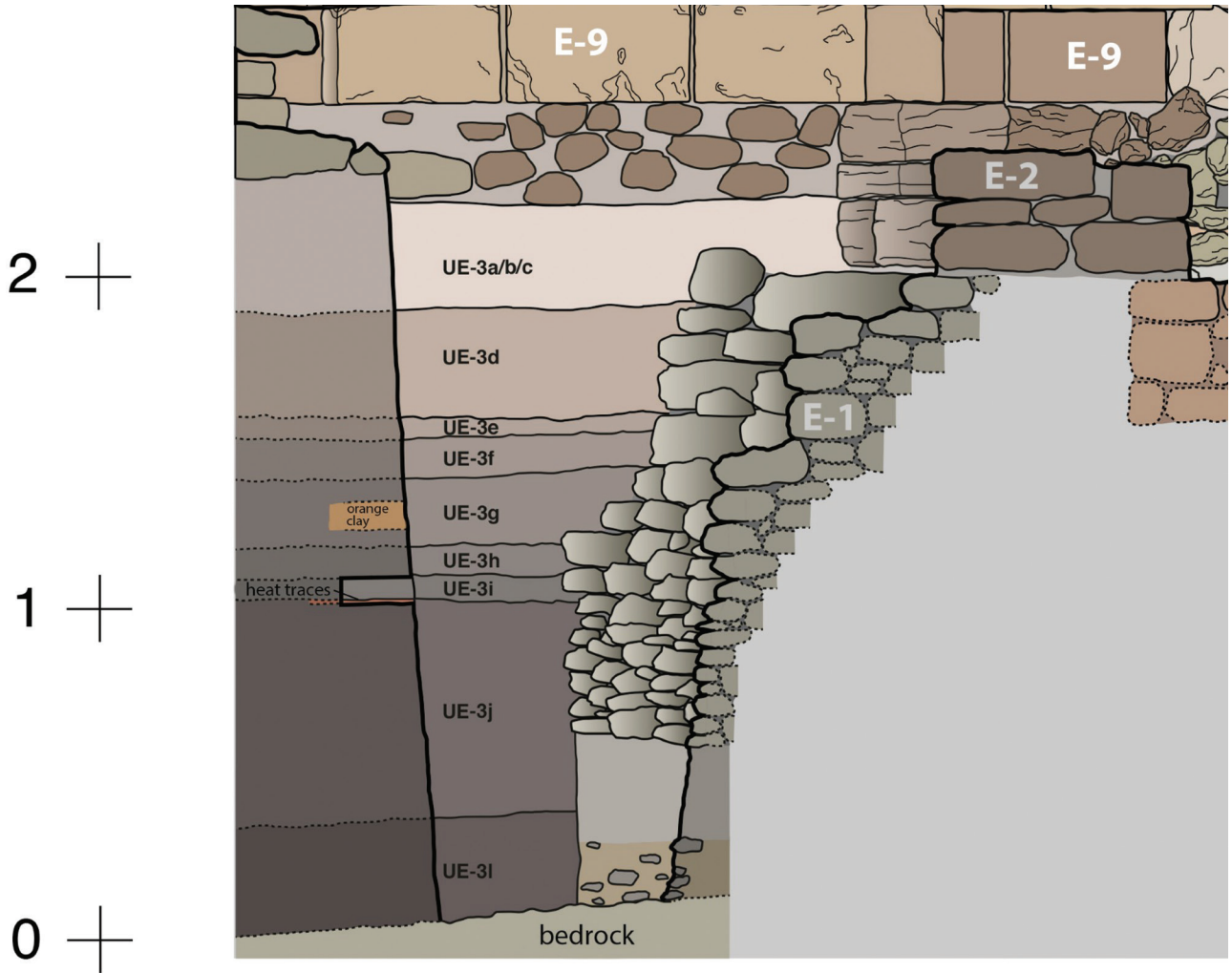


FIG. 22

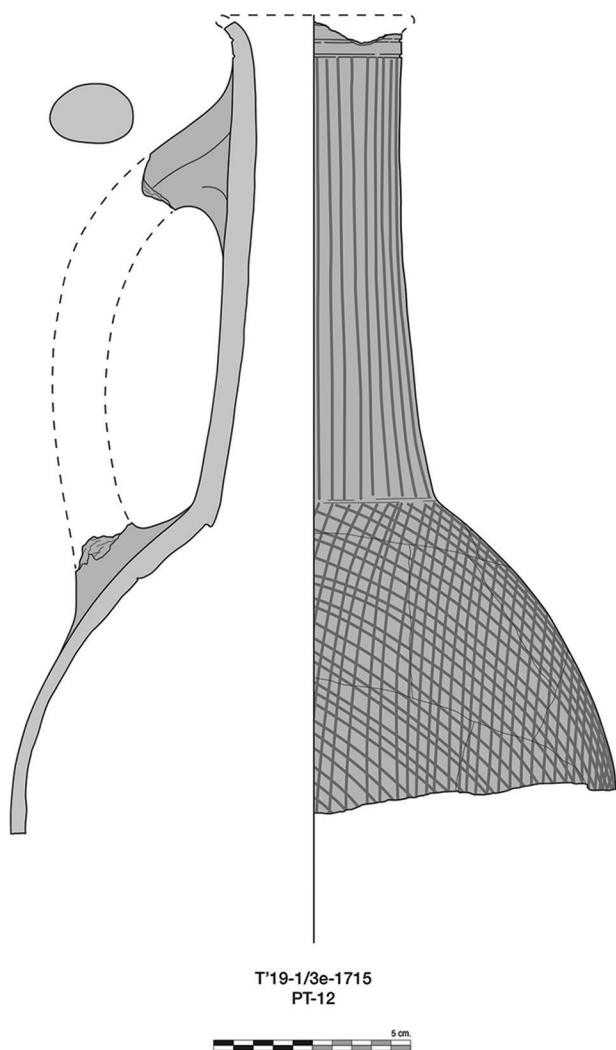
**Area 3: waterhole section.** (Drawing by J. L. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

and political system of fortified city-states with public and religious spaces in Byblos's area of influence. The pivotal role of these city-states, which held sway over rural territories and communities, was similar to that played by Tell 'Arqa on the fertile Akkar Plain (Thalman 2006: 215; 2007; 2010; 2016).

In Tyre, the identification of an offshore harbor linked to a mainland center bears witness to the rapid and complex evolution of coastal settlements on the Lebanese seaboard during the first half of the third millennium BC.

### The EB IV Levels: Area 6

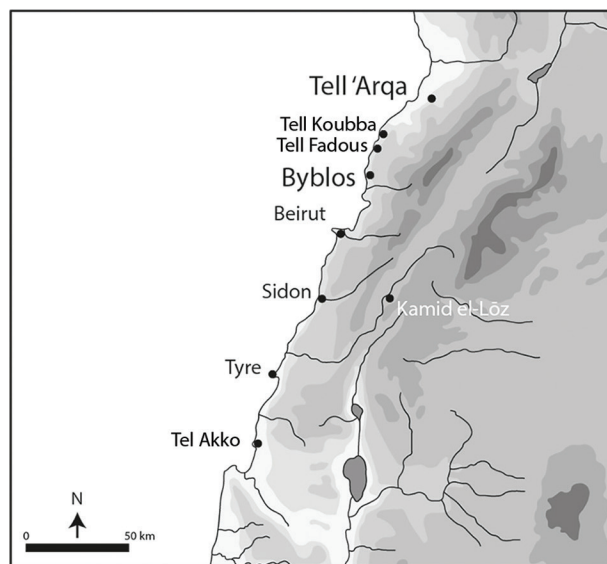
In the westernmost sector of Chéhab's sounding there appeared an intact area associated with EB IV materials (ca. 2500–2000 BC) (Fig. 25). With an average width of 1.2 m (and at a height of 2.87 m above sea level), the presence of certain characteristic pottery forms, like *amphoriskoi*, envelope ledge handles, and teapots, establishes these levels in the EB IV, corresponding to Strata XX and XIX of the 1973–1974 season (Bikai 1978: 70–73, pls. LIV–LVI).



**FIG. 23**  
**Area 3: pattern burnished jug.** (Drawing by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

From a stratigraphic and architectural point of view, however, it is possible to establish a continuum between the EB IV and III levels, with only the evolution of the pottery pointing to cultural changes, for they are only separated by a stratum some 0.23 m thick, formed by sands and sea pebbles deposited possibly as the result of an episode of flooding.

The oldest walls associated with the new materials (Fig. 25: E-3 and E-5, in blue) directly overlap the most recent EB III structures. Beneath them, at a height of 2.62 m above sea level, there is another sandy stratum



**FIG. 24**  
**Lebanon in the Early Bronze Age III.** (Map by F. J. Núñez; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

of a blackish color and a thickness of 0.13 m. Structure E-5, linked to a large quantity of EB IV pottery, lithic artifacts, fauna, seeds, and collar beads, is associated with the same blackish sandy sediments, probably the traces of an early fire. All this seems to have been formed at the same time, relating to the destruction of the large building E-2 that appears on top of a level of eolian sands barely 5 cm thick, at a height of 2.28 m above sea level, which might have been formed after the site's temporary abandonment.

The most recent EB IV levels are characterized by a large, regular wall (E-2, Fig. 25), measuring 0.6 m × 0.7 m, which must have formed part of what seems to have been an important monumental building, strikingly similar to that excavated during the 1973–1974 season (Fig. 26). Next to the western profile of the section there is a relatively intact space or pavement with a width of 1.2 m (Area 6A) on which there are some roughly aligned stones (P-1 and P-2) and two square impressions, presumably the marks of wood pilasters (Fig. 27; see Fig. 25).

The entire upper section of Area 6 is defined by the presence of the remains of collapsed walls associated with charcoal and abundant traces of a fire, which denote the violent destruction of the last EB IV structures.

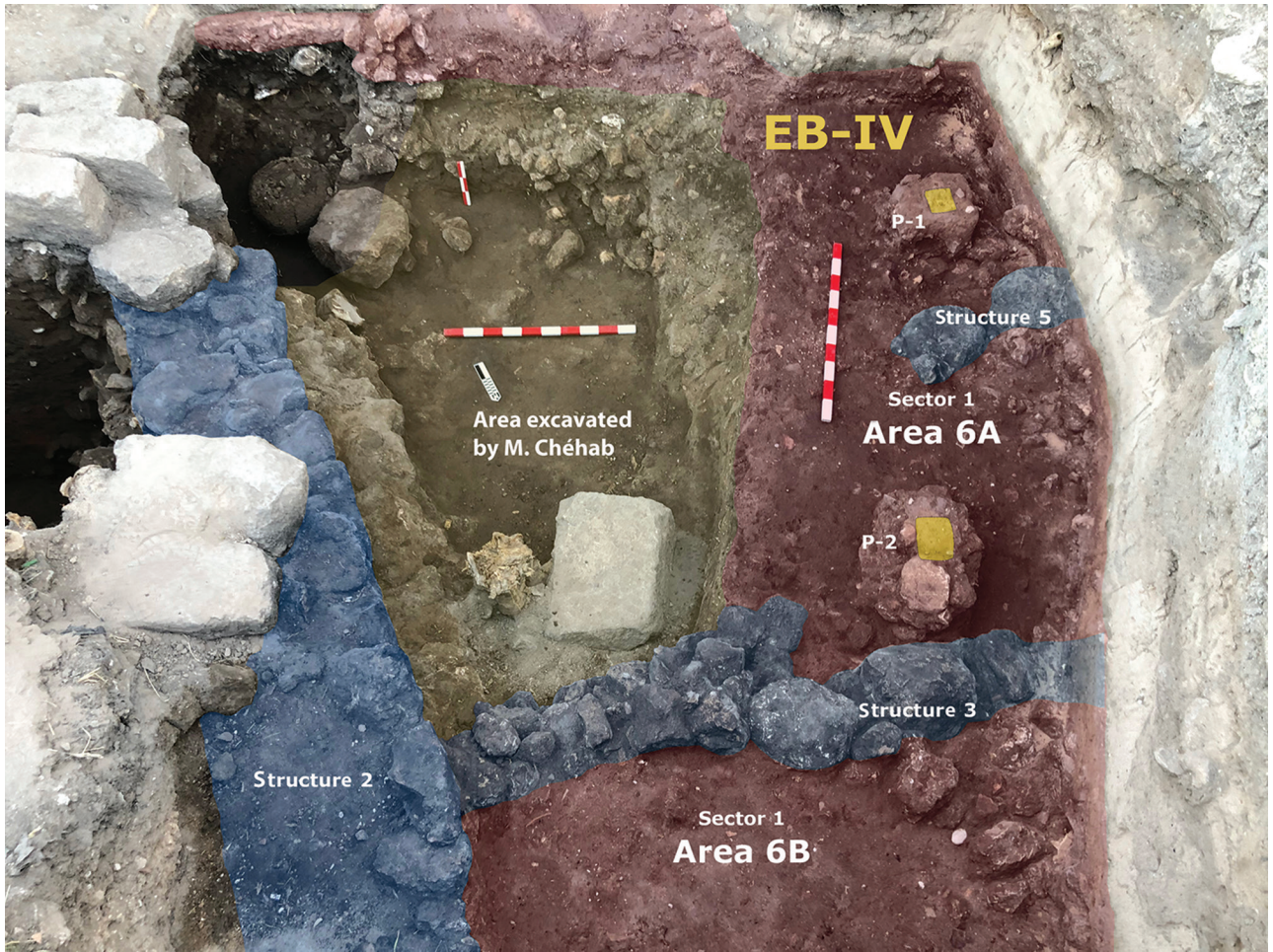


FIG. 25

**Area 6 (EB IV): general view and architectural phases.** (Photo and text overlay by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

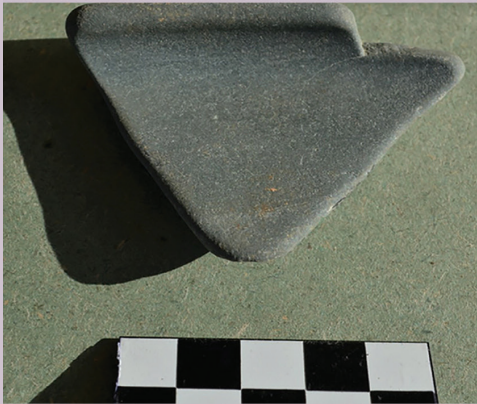


FIG. 26

**EB IV level in 1973–1974.** (Photo courtesy of P. Bikai.)

As to the materials discovered in the EB IV stratum, in the intact areas of the section, it is important to stress the large quantity of domestic and marine fauna, currently being analyzed, plus an abundance of seeds, vitis, olive pits, and carbonized cereal grains (Fig. 28). Just as noteworthy is the presence of fragments of rods, copper needles, and slag, in addition to those of basalt vessels.

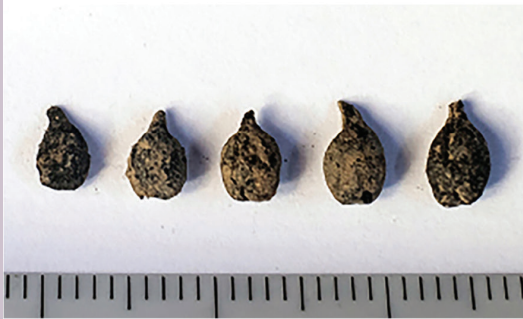
The pottery includes two fragments with cylinder seal impressions, one portrays part of an animal frieze (a pouncing lion) found out of context and the other with a net-pattern motif decorating the neck of the vessel (Fig. 29)—both the forms and the decoration are well-known in the glyptics of the period in places like Byblos,



**FIG. 27**

**Area 6 (EB IV) destruction level and pottery: black stone bowl, combed sherd and amphoriskos.**

(Photos by M. E. Aubet; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



**FIG. 28**  
**Area 6 (EB IV) plant remains: cereals, vitis, and olive pits.**  
(Photos by R. Buxó; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)



FIG. 29

**Area 6 (EB IV): out of context, two cylinder seal impressions.** (Photos by L. Trellisó, drawing by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

Tell 'Arqa, Sidon, and Tell Fadous-Kfarabida (Genz and Ahrens 2021: 62). Special mention should also be made of a black stone bowl, in all likelihood not produced locally (see Fig. 27).

Other forms include jars, bowls, and pottery with a burnished decoration and covered with red slip (Figs. 30–32).

As to the common EB IV pottery, there is a predominance of combed ware in the shape of large vessels and containers, including a practically complete exemplar of

an ovoid jar in Stratum XX of the excavations performed by Bikai (1978: 73, pl. LVI) (Fig. 33). Petrographic studies—petrographic thin-section—and the neutron activation analyses conducted on jars of this type, as well as the residue analyses performed on Levantine exemplars discovered in Egyptian tombs, demonstrate their importance, the extent to which they were regarded as prestige goods, their use for storage—holding between 20 and 30 liters—and for the transregional shipping of goods, such as cedar and olive oil, wine, and



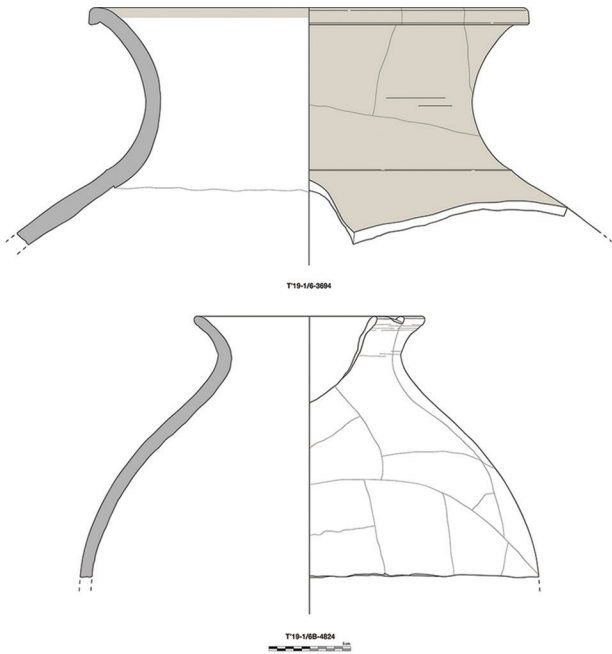


FIG. 30

Area 6 (EB IV): storage vessels. (Drawings by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

wood products, resins of conifers, vegetable oils, and so forth (Prausnitz 1954; Mazzoni 1987, 1992; Thalmann and Sowada 2014: 356–59; Badreshany, Philip, and Kennedy 2019; Badreshany et al. 2022; Sowada, Ownby, and Wodzinska 2019). Additionally, the clay analyses of exemplars from Giza point to the region of Byblos as one of the main production centers in the EB III (Sowada 2009: 9), although their arrival in Egypt, specifically in Abydos (Prausnitz 1954; Sowada 2009: 2), dates to the reign of the pharaoh Djoser (ca. 2667–2648 BC). Be that as it may, the exportation of large, combed storage jars peaked in Egypt between the Fourth and Sixth Dynasties (ca. 2600–2200 BC), namely, in the middle of the EB IV (Mazzoni 1985; Wodzinska and Ownby 2011; Sowada, Ownby, and Wodzinska 2019; Badreshany et al. 2022: 10).

In Lebanon, the EB IV remains a rather obscure period, with the new discoveries made in Tyre confirming the patchy nature of the archaeological record. The region contrasts with the southern Levant where, at the end of the EB III, specifically in the second half of the

third millennium BC, there was a sharp decline resulting from a major crisis associated with the subsequent collapse of many urban centers. Most of the major fortified settlements were abandoned, urban culture giving way to the appearance of small rural villages and the spread of pastoralism (Höflmayer 2017: 5–8; Greenberg 2019: 137–79; Richard 2020).

In most of the central Levant there was also a marked demographic decline, as borne out in Tell Fadous-Kfarabida, where only MB tombs and a few pits have been documented but no architectural remains at all—in marked contrast to the moment before the site’s abandonment (Genz 2010b: 207; Höflmayer et al. 2014: 529–30; Genz 2017: 77). A continuum between the EB III and IV has only been observed in northern Lebanon and western Syria (Ebla IVA). For their part, Byblos and Tell ‘Arqa continued to be prominent urban centers, with multiroom buildings, streets, and storage units (Thalmann 1991: 27–31; Genz 2010b: 208). In the case of Byblos, the hypothesis of a major conflagration at the end of the EB III, resulting in the destruction of the city after its conquest by the Amorites, has been widely held for some time (Dunand 1952). However, new studies have confirmed an unbroken continuity between the EB III and IV and the preponderance of its urban structure and walls during the EB IV or Phase P (Saghieh 1983).

Despite its limitations, the Tyre sounding demonstrates that the EB IV was one of the most dynamic periods for the island in the Early Bronze Age as a whole.

### A Crisis during the Middle Bronze Age? The Sterile Stratum of Eolian Sands

At a height of between 3.11 and 2.54 m above sea level, an eolian deposit comprising fine sand and silt fractions of a whitish color, some 0.5 m thick, had formed between the EB IV destruction level and the oldest Late Bronze Age stratum (see Fig. 10). In view of the characteristics of this deposit, it was assumedly the outcome of the wind-borne transport and deposition of fine particles in the form of sediments over a long period, originating from the erosion of rocks in regions located at some distance

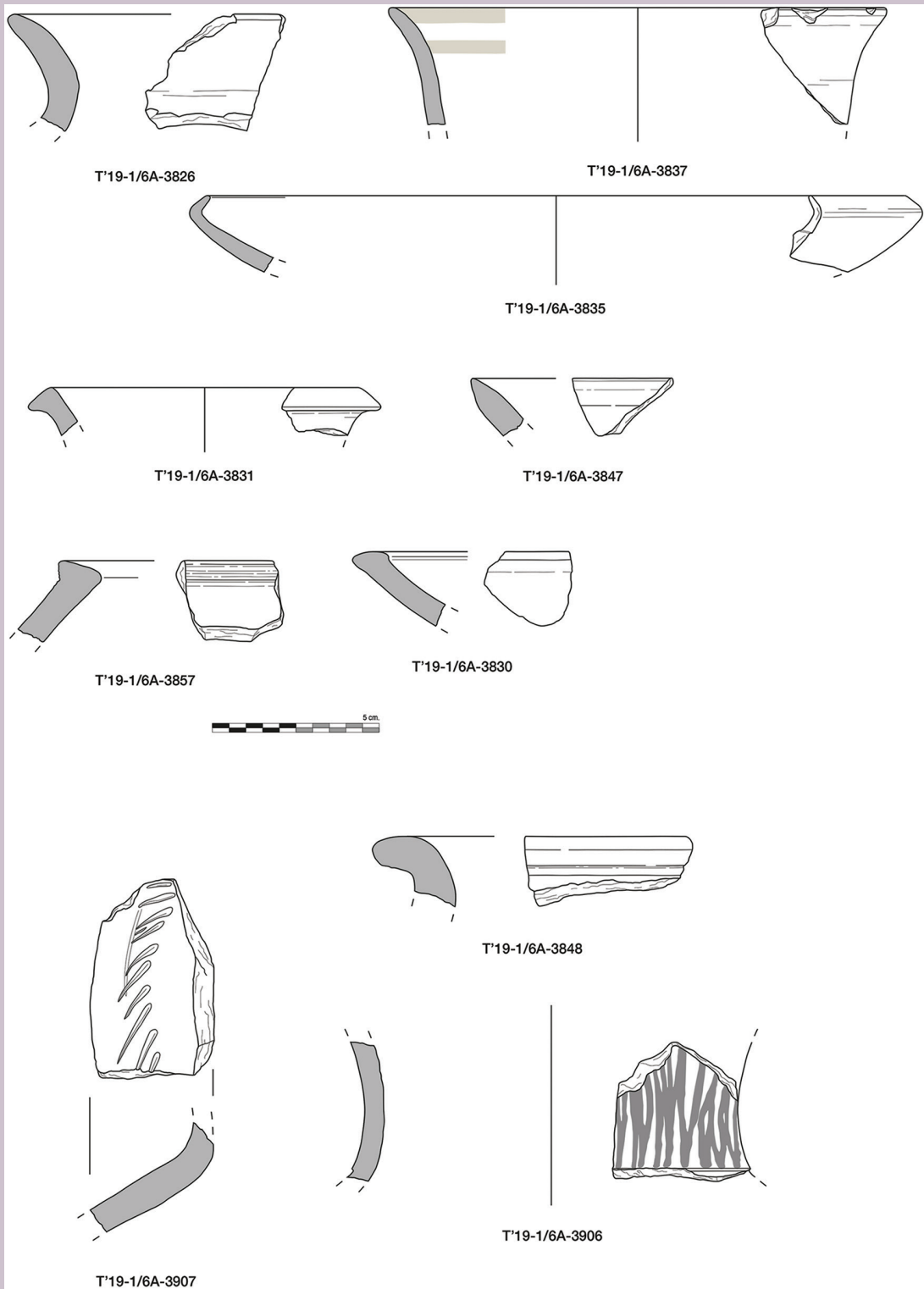


FIG. 31

Area 6 (EB IV): combed and pattern burnished ware. (Drawings by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

from Tyre. The formation of these thick eolian sediments would have coincided with the Middle Bronze Age (ca. 2000–1600 BC), a period when this area of the acropolis was no longer in use. Given that in the excavations carried out during the 1973–1974 season the same phenomenon was identified quite a few meters away, in the so-called Stratum XVIII (Bikai 1978: 72) (Fig. 34), this seems to suggest a general hiatus in the human occupation of the

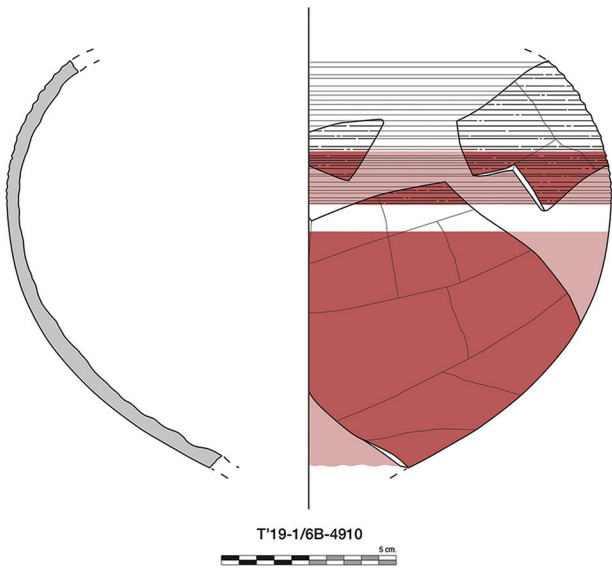


FIG. 32  
Area 6 (EB IV): decorated red slip globular vessel. (Drawing by J. M. López Garí; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

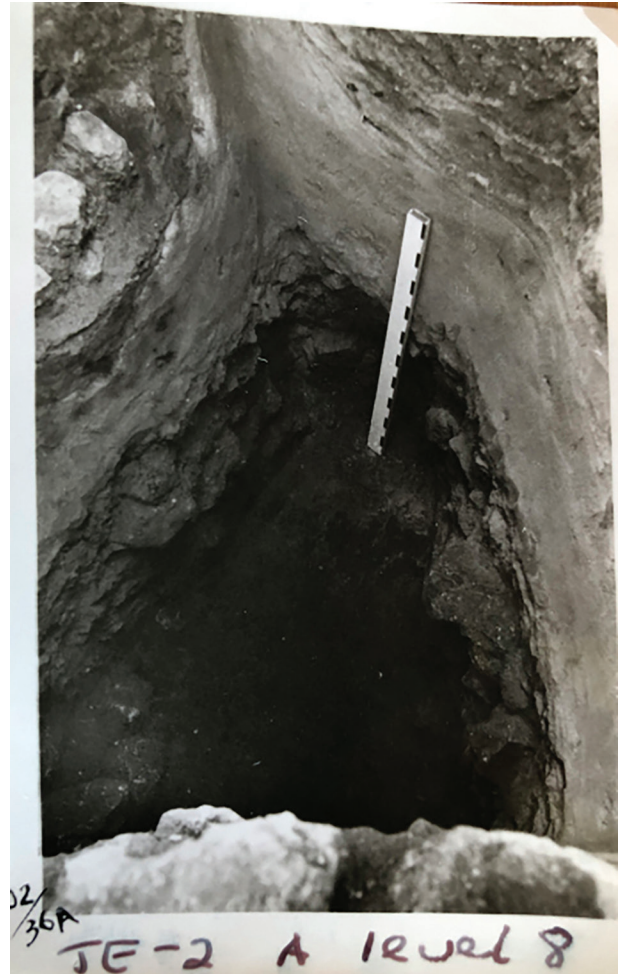


FIG. 34  
Sector 1: sand deposit in 1973–1974. (Photo courtesy of P. Bikai.)



FIG. 33  
Area 6, 1973–1974 (EB IV): ovoid jars for storage, Museum of Tyre. (Photos by M. E. Aubet; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

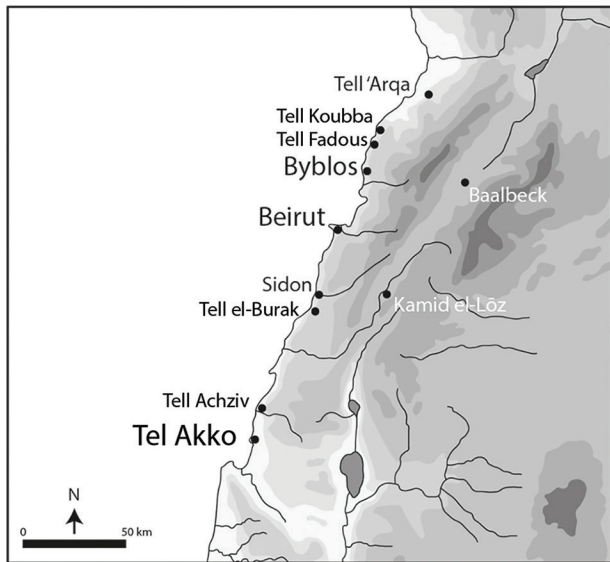


FIG. 35

**Lebanon in the Middle Bronze Age.** (Map by F. J. Núñez; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

main island of Tyre during the first half of the second millennium BC.

The break in the sequence in other Lebanese settlements (Fig. 35) and the abandonment of some fortified urban centers, which were replaced by small cemeteries during the Middle Bronze Age (ca. 2000–1550 BC), have fostered the idea of a widespread crisis that, nonetheless, apparently did not affect Byblos, where the contents of the famous Royal Tombs point to the resumption of contacts with Egypt following the political crisis that Egypt experienced at the end of the Sixth Dynasty (during the reign of Pepi II, ca. 2278–2214 BC). In the Middle Bronze Age, Byblos continued to be a prominent urban center. The resumption of its contacts with Egypt as of the Twelfth Dynasty (1991–1938 BC) is reflected by the wealth of its Royal Tombs (see, however, Kopetzky 2018), by its walls, by the construction of the famous Temple of the Obelisks, and by its first contacts with Crete, from where the luxury Kamares ware came (see Montet 1928). Similarly, it also coincided with the peak in Canaanite imports in Avaris in the Nile Delta (Bietak 1981, 1996).

However, small cemeteries and the abandonment of major fortified centers, as well as a drastic reduction in the size of settlements, can be observed in Tell 'Arqa

and Tell Fadous-Kfarabida (Thalmann 1991: 32; Genz et al. 2010; Genz 2010–2011, 2017; Höflmayer 2017; Charaf 2021). In the tell of Sidon, just 30 km to the north of Tyre, the large Early Bronze Age settlement was replaced by a cemetery, with 20 warrior burials, some of high status as documented by associated weapon, jewelry, and imported Minoan and Cypriot pottery finds (Doumet-Serhal 2004, 2006, 2013). The grave goods include objects fashioned in silver from Anatolia, which points for the first time to the use of this metal as a means of exchange, currency, and value (Eshel et al. 2023). In sum, the Middle Bronze Age was characterized not only by the decline of many urban centers but also by the resumption of contacts with Egypt and the initiation of those with Cyprus, Crete, and Anatolia.

The abandonment of the island of Tyre immediately after a destruction level at the end of the EB IV evinces the reputedly widespread crisis during the Middle Bronze Age. Nevertheless, as there is currently no information on what was occurring in mainland Tyre—Ushu/Tell er-Rachidiyeh—at the time, to talk about disruption in the area would be jumping the gun.

In other parts of the Lebanese coast the process was remarkably similar to that observed in Byblos during the Middle Bronze Age, although little is known about the reasons and circumstances behind the expansion of some urban centers with natural harbors, like Beirut. It was an urban phenomenon characterized by the appearance of full-fledged regional capitals, which were initiating contacts with previously unfamiliar Mediterranean regions and islands such as Cyprus and Crete. In Beirut, an impressive wall was built that enclosed a tell of 2 ha, of which a monumental gate of large stone blocks has been preserved (Badre 1997) (Fig. 36). Next to the acropolis, inside the walls, a cemetery formed by caves and rock chambers was found to contain high-status grave goods, including imported Minoan cups and Cypriot pottery (Saidah 1993–1994). A fort built on a headland in Tell el-Burak, located 9 km to the south of Sidon, features among other things mural paintings in the style of other Middle Bronze Age palaces like Tell el-Dab'a/Avaris, Qatna, Alalakh, and Tell Kabri (Kamlah and Sader 2019; Bietak 1996). In the Beqaa Valley, in the inland settlement of Kamid el-Löz, there are the



FIG. 36

Beirut: gate of the Middle Bronze Age wall. (Photo by M. E. Aubet; courtesy of the Lebanese-Spanish-Polish Archaeological Project in Tyre.)

remains of a palace, temples, and walls that indicate, as in Beirut, the presence of a strong central power in a regional capital that was in close contact with Palestine (Hachmann 1986; Marfoe 1977, 1995; Heinz 2009, 2010, 2010–2011, 2016).

The break in the sequence of the island of Tyre during the Middle Bronze Age has nothing to do with the situation of other southern central Levantine centers nearby. Tyre is located halfway between Sidon-Burak and Tel Akko, two important, strategic Middle Bronze Age sites. In the citadel of Tel Achziv, only 25 km to the south of Tyre, there are the remains of a Middle Bronze Age fortification with a glacis, overlooking the bay and the main inland communication routes (Jasmin, Thareani, and Abrahami 2015). The imposing site of Tel Akko and its fortifications, located 14 km to the south of Achziv,

controlled the bay of Haifa, the estuary of the river Na'aman, and access to the fertile lands of the hills of Galilee and the Jezreel Valley, serving as a harbor strategically placed between the maritime trade routes and the land route leading to the Jordan Valley (Artzy et al. 2020). To these should be added other Middle Bronze Age anchorages located further to the south in the vicinity of Mount Carmel, like Tel Nami, 12 km to the south of Haifa, where abundant remains of presumably Lebanese cedar wood, among other things, were discovered (Artzy 1995, 2007; Marcus 1991).

There was no obvious widespread or global crisis in the central Levant during the Middle Bronze Age. Quite the contrary was the case: the examples of Byblos, Beirut, Burak, Tel Akko, and Tel Nami reflect the apogee of some coastal cities in Lebanon and Galilee, the

important development of their harbors and fortifications, the resumption of increasingly more regular contacts with Egypt via Avaris, and the opening of the first regular maritime routes of exchange with Crete and Cyprus. The case of the island of Tyre probably has to do with a local phenomenon of a cultural and climatic origin—the destruction of the Early Bronze Age settlement and eolian erosion—which might have temporarily interrupted its role as a harbor. Future excavations in Tell er-Rachidiyeh should help to determine the length of this hiatus on the island.

### Tyre on the “Byblos Run”

Owing to the fact that the information obtained from the new excavations in Tyre comes exclusively from a sounding, it should be analyzed with caution pending future interventions in intact areas of the acropolis. Notwithstanding this note of caution, the archaeological record and, above all, the sequence of architectural levels highlight the presence of a permanent and stable population during most of the third millennium BC. The foundation and development of other coastal settlements in Lebanon throughout the Early Bronze Age allow for a clearer picture of the socioeconomic context in which the foundation of the harbor of Tyre occurred.

During the Chalcolithic and at the beginning of the Early Bronze Age, the gradual occupation of coastal sites was the result of the modest maritime activities of small groups of people who settled preferentially in the estuaries of rivers, in small bays, or on coastal plains. The abundance of remains of marine fauna found in places like Sidon and Tell Fadous-Kfarabida—mollusks, fish, including sharks—denotes a high level of maritime activity, initially revolving around the use of small vessels for fishing in shallow waters (Safadi, Sturt, and Blue 2020: 254–57). This maritime activity, which was originally small-scale but intensified during the Early Bronze Age, prompted increasing numbers of other groups to settle on the coast at sites with natural harbors. During the EB III, demographic growth, the adoption of large-scale pastoralism, and dry farming on the coastal plains of the immediate

hinterland would have transformed some of these small natural harbors into strategic anchorages as a result of the growth of trade.

The first appearance of Levantine combed jars and the establishment of trade contacts with Egypt have been documented as early as ca. 3000 BC. But it was during the EB III–IV, a period coinciding for the most part with the Fourth, Fifth, and Sixth Dynasties, when relations between Byblos and Egypt reached their peak, evidenced by the presence of Levantine combed jars in the tombs of Egyptian dignitaries (Mumford 2014; Thalmann and Sowada 2014: 358–59). The city of Byblos was the main beneficiary of this interregional trade, thanks to the abundance of cedar and other conifer forests in the mountains of the immediate hinterland and to the huge demand for cedar wood on the part of the Egyptian court. Indeed, the presence of a large quantity of Egyptian prestige goods, such as alabaster vases bearing the names of Fourth and Sixth Dynasty pharaohs—Mykerinos and Pepi I—in the temple of Baalat Gebal at Byblos, offers an idea of the scope of these commercial and diplomatic relations between the two royal houses and of the real interest of the pharaohs in the city through votive offerings and shared ideologies (Chéhab 1969; Sowada 2009: 3–4; Sowada et al. 2021; Aubet 2013: ch. 7). These relations not only involved commercial interests but were also related to mechanisms of prestige at a ceremonial level, to wit, to noneconomic factors (Liverani 1972: 299–300).

Several Egyptian texts allow to reconstruct some of the most significant aspects of trade with Byblos, as they describe maritime expeditions sponsored by the royal house itself and its immediate circle. The first reference to a maritime expedition to Byblos and to the use of larger ships, dating to the beginning of the Fourth Dynasty (ca. 2600 BC), during the reign of Snefru, appears on the so-called Palermo Stone. This inscription mentions 40 ships transporting cedar wood from Byblos (Mumford 2014: 72; Sowada 2009: 10). Similarly, the funerary boat of the Fourth Dynasty pharaoh Cheops (2589–2566 BC), which was discovered at the foot of the Pyramid of Khufu at Giza, contained 650 extant units of wood, plus trunks of cedar wood with a length of 13 to 43 m (Jenkins 1980; Lipke 1984). This find affords us an idea of the freight

capacity of the transport ships, called *kbn*, that plied the route from the Nile Delta to the port of Byblos.

Relations between Egypt and Byblos were at their height during the Sixth Dynasty (ca. 2345–2181 BC), as evidenced by a number of autobiographical inscriptions of high officials of the Egyptian court. One such inscription is that of Iny, a court official and governor of Upper Egypt, who served the last three pharaohs of the Sixth Dynasty (Pepi I, Merenre, and Pepi II). Eleven transport jars imported from the Levant, containing resins of conifers and olive oil, were discovered in his tomb in Abydos (Knoblauch 2010: 257). In his autobiography, this dignitary mentions military campaigns against Asiatic peoples during the reign of Pepi I, as well as royal expeditions to Byblos for the purpose of purchasing ships and cedar wood (Diego Espinel 2002; Marcolin and Diego Espinel 2011; Roccati 2015). Iny's commercial voyages, which should be established in the EB IV, just before the collapse of trade with Egypt, must have taken him beyond Byblos, probably as far as Anatolia, judging by the acquisition of some goods of a northern origin, including silver, tin/lead, and lapis lazuli (Biga 2017).

All the evidence points to the fairly regular use of the sea route between the Nile Delta and the city of Byblos throughout the EB III–IV (ca. 2800–2000 BC), which was basically monopolized by the Egyptian court for the purpose of purchasing goods much prized by the local elites. Bearing in mind the primitive sailing techniques of the period, the disproportionate organizational and operational costs of these sea voyages could only be offset by the acquisition of large quantities of valuable goods for the consumption of the elites. Later on, at the beginning of the Twelfth Dynasty (ca. 2000–1990 BC), there is further reference to military and commercial expeditions to the Levant using small fleets that set sail from Egypt in the winter months and returned in the spring, each ship transporting a cargo equivalent to 231 trunks of cedar wood (Marcus 2007: 145–50).

The coastal voyage of approximately 500 km (270 NM) from the Nile Delta to Byblos, the so-called Byblos run (Fig. 37), which has been described as a maritime trade corridor, took six or more days, whereas Mount Carmel could be reached in four and Ugarit in twelve days (Sowada 2009: 38 and 51). Along this coastal trade route,

ships needed to make landfall at ports of call or stopover points (islands, lagoons, bays, or the mouths of rivers), way stations offering easy access to the interior (Marfoe 1987: 26; Gophna 2002: 418–20; Marcus 2007: 164). The availability of cedar wood and products imported from Egypt in some of them, like in the ports of Ashkelon, Tel Nami, Tel Akko, Sidon, and Beirut, confirms their function as anchorages and stopover points on the coastal trade route to Byblos.

These ports of call correspond perfectly to the so-called port-power model, which highlights the role of ports of transit and cabotage at the crossroads between sea and land routes that served as stable anchorages, as trade brokers, and as integrating focal points between the hinterland and the sea—owing to the fact that they were well connected with the transversal arteries of access to agricultural and forestry products—and also supplied drinking water (Stager 2001, 2002; Moreno García 2022: 10–13).

The offshore foundation of Tyre, at a prudent distance from the coast and well protected thanks to its unassailable position, fully satisfied the commercial demands of the time in the framework of the Byblos run (Aubet 2023). It seems to be no coincidence that this strategic port, inhabited by a permanent population and relatively self-sufficient, on the coastal sea route from Egypt to Byblos, was founded at a moment in the EB III–IV when the intensification of trade called for multiplying the number of well-placed ports of call that guaranteed the supply of products from the interior via the Litani Valley and of drinking water from the inexhaustible springs of the area around Ushu–Tell er-Rachidiyeh.

#### Note

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FIG. 37  
The “Byblos run.” (After Sowada 2009, fig. 47.)

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