A VIEW FROM THE COUNTRYSIDE: THE NATURE OF THE LATE PUNIC AND EARLY ROMAN ACTIVITY AT THE ŻEJTUN VILLA SITE, MALTA

Nicholas C. Vella,* Anthony Bonanno,* Maxine Anastasi,* Babette Bechtold,** Rebecca Farrugia,* Katrin Fenech,* Dennis Mizzi,* Lieven Verdonck*** and Abigail R. Zammit*

Abstract: A legacy of antiquarian and archaeological explorations in the Maltese archipelago has long been identified with the rock-cut tombs and associated funerary remains of the Phoenician and Punic periods. By contrast, little is known about the islands' countryside in antiquity. Recent excavations at the site of a long-lived Roman villa complex in Żejtun (Malta) have begun to throw light on the rural world of the archipelago, unravelling the nature of the transition between the Punic and Roman periods where continuity rather than rupture implied by the phases of culture history is becoming clearer.

Keywords: Rural; Agriculture Vineyard; Malta; Pottery.

1. INTRODUCTION

It is only in the last two decades that the rural world associated with Punic settlements in the central and western Mediterranean has been discovered and explored. Topographic studies first and systematic fieldwalking projects later, coupled with site-specific excavations, have led to a revolution in our knowledge of agrarian landscapes and agro-economies all over the Punic Mediterranean.¹ A startling conclusion of this research effort has been the realization that the move into the countryside, from the long-lived small, coastal Phoenician settlements, started not before the 6th cent. BCE and increased markedly only from the 4th cent. BCE. It is thought, in fact, that the small labour force that these Phoenician enclaves could muster in the archaic period may not have produced anything beyond the subsistence level and that capital- and labour-intensive production of crops like olive and vine could only be sustained when the demography increased. Other factors would have been at play, of course, in «a complex and multifaceted process», as has been claimed.² No doubt, the ease of placing products meant for an export market in redistributive small-scale or regional networks would have been a determining factor in the outcome of such a process.

^{1 *} Vella (nicholas.vella@um.edu.mt), Bonanno, Anastasi, Farrugia, Fenech, Zammit: Department of Classics and Archaeology, Faculty of Arts, University of Malta, Msida MSD 2080, Malta; Mizzi: Department of Oriental Studies, Faculty of Arts, University of Malta, Msida MSD 2080, Malta; **Bechtold: Institut für Klassische Archäologie, Universität Wien, Franz Klein-Gasse 1, 1190 Wien-Austria; ***Verdonck: Department of Archaeology, Ghent University, Sint-Pietersnieuwstraat 35, B-9000 Gent, Belgium. The authors contributed to the sections as follows: 1. (NCV, AB), 2. (NCV, AB, MA, LV), 3. (NCV, AB, MA, RF, KF, DM), 4. (BB), 5. (AZ), 6. (NCV). On behalf of the team, the project directors would like to thank the following entities, institutions and individuals for their support: University of Malta, Superintendence of Cultural Heritage, Heritage Malta, St Thomas More College (Żejtun), Din I-Art Helwa, HSBC Malta Foundation, Farsons Foundation, General Soft Drinks Co. Ltd, Far Horizons Archaeological and Cultural Trips Inc. (USA), Prof. Patrick J. Schembri and Dr John C. Betts, Prof. Roald Docter, Prof. Cythianne Spiteri Debono, Dr Raimondo Secci and Dr José Ángel Zamora, Anna Spiteri Meilak, Maria Ciappara, Dario Nigro, and John Zammit. The team is grateful to an army of students from the University of Malta and elsewhere who, over the years, have carried out the work on site as part of their training in archaeological fieldwork techniques and recording systems. Especial thanks go to Chris Gemmell and Louisa Borg from the Department of Classics and Archaeology who see to the excavation logistics and administration every year. van Dommelen – Gómez Bellard 2008.

² van Dommelen - Gómez Bellard 2008, p. 236.

The Maltese archipelago, home to the Phoenicians since at least the 8th cent. BCE and poised as a sentinel to maritime traffic crossing the Mediterranean's largest basins, offers an interesting case study within this broad framework. The size and location of the islands, their geomorphology and ecology would have turned them into a possession for the voyaging Phoenicians almost by definition,³ as they did later in 218 BCE when they fell to Rome. What sets the islands apart, especially Malta, from the other Phoenician settlements, however, is apparent in the settlement pattern. The earliest tombs are to be found not on the coast but cluster around the later medieval city Mdina and its suburb Rabat, far in the island's interior on the uplands. On the coast, on a hillock overlooking Marsaxlokk Bay, developed the extra-urban sanctuary of Tas-Silg, a major ritual centre which years later was dedicated to Astarte and, later still, Juno. The potential for agricultural exploitation was certainly there from the very start if the take-over of the island's interior spaces – with or without indigenous intervention – is anything to go by. But the use made of the central plains, below the Rabat uplands, is not clear for the period before the 5th cent. BCE when rock-cut tombs start appearing around the head of the present-day Grand Harbour and elsewhere. Besides the tombs, indirect information about the agricultural exploitation of land in Punic times has been surmised on the basis of Roman villa sites of the rustic type, long thought to have been built on sites occupied in an earlier period, even if the pottery recovered has not been properly published and a similar agricultural function for the sites never properly ascertained.⁴ More recently a fieldwalking survey carried out in north-west Malta identified three sites that could be related to farmsteads of Punic date, one of which appears to have been turned into a villa-type establishment for the production of olive oil in Roman times.⁵ None of the sites have been excavated, though. On Gozo, another project has revealed the existence of an agro-landscape consisting mostly of rock-cut treading pans on the sides of a winding gorge at the head of the cove of Mgarr ix-Xini. Evidence for the laying out of a terraced field along the valley bottom and adjacent to one of the pans, would suggest wine production here going back to about the 6th or 5th cent. BCE, but the evidence awaits publication.⁶

In 2006, an opportunity arose for the Department of Classics and Archaeology of the University of Malta to return to the issue of the Punic origins of villa sites of Roman date, in particular a complex in Żejtun in the south-east of the island, just 1.6 km from Tas-Silġ, at a location perfectly placed to connect two major embayments in the area with the interior (FIG. 1).⁷ The site was discovered in 1961 when soil was being cleared for the construction of a school. Further discoveries were made in 1964 before full-scale excavations were undertaken between 1972 and 1976.⁸ Data that the site could have a Punic association were forthcoming from the sherd of a cooking bowl recovered in 1976 and found to be inscribed with the name of the goddess Astarte in Punic letters.⁹ Moreover, a selection of pottery from the 1970s excavations kept at the University of Malta was studied in 2002 and was found to contain pottery of Punic date.¹⁰ The same results were had when pottery recovered from the 1972 season now held in the reserve collection of Heritage Malta was studied between 2007 and 2009.¹¹ In the course of the renewed excavations at the Żejtun villa not only was new light thrown on the nature and extent of the Imperial Roman-period remains there but, more importantly, information was forthcoming to show that the villa site was built over, and in parts into,

7 Grima – Mallia 2011, pp. 230, 246.

³ Vella – Anastasi forthcoming.

⁴ Bonanno 1977; Vella 2007; Sagona 2015b, pp. 231-243, 275-277.

⁵ Docter et al. 2012.

⁶ Azzopardi 2014, p. 234, fig. 57.

⁸ Bonanno – Vella 2012; one of us (AB) took part in these excavations as reported on pp. 8-17.

⁹ See below, section 5.

¹⁰ Sagona 2015b, p. 231.

¹¹ Anastasi 2012.

A VIEW FROM THE COUNTRYSIDE 111



FIG. 1. Site location map (drawn by Maxine Anastasi; aerial photograph reproduced by courtesy of the Armed Forces of Malta).

a vineyard of earlier date. The aim of this contribution is to describe the nature of these activities at the site accompanied by an account about a selection of diagnostic pottery finds that span the late 5th/4th-2nd/1st cent. BCE, together with a description of a small number of inscribed sherds and a limestone press bed. A short preamble is devoted to the fieldwork design and a concluding part will consider briefly the significance of the finds in the context of the archaeology of the rural Punic world.

2. Fieldwork design

The fieldwork project embarked upon by the University of Malta under the direction of the two principal authors of this contribution was designed to take stock of the previous excavations through the investigation and recording of the exposed remains and further stratigraphic excavation. The former excavations, carried out in arbitrary spits within a series of areas and trenches, revealed a series of four contiguous rooms paved with ceramic lozenge-shaped tiles, bordered to the east by a series of walls built in a combination of ashlar masonry or rubble. An area devoted to the production of olive oil was identified on account of the discovery of a large counterweight block and a settling vat. A large cistern with what appears to be a twin entrance was located near the southern boundary wall of the site together with a well, further north, connected to a series of water channels. Other linear rock-cut channels or "conduits" were also noted. The University's excavation project had to contend with the fact that very little documentation from the previous dig existed. A sketch plan of the site dated 29th August 1972 and signed by the Director of the Museums Department Frans Mallia, reveals trenches and areas that were excavated during the first season, annotating most of the features just described. Although no field-notes have surfaced detailing the progress of the excavation apart from diary entries from one member of the current team, a selection of photographs taken in 1972 and several wooden boxes containing the finds discovered – each box labelled with the trench letter – are available and are currently curated by the National Museum of Archaeology. Taken together, this information was sufficient to enable us to draw a complete plan of the site showing the position of most of the trenches and defining the generic extents of the previous investigations.¹²

The University of Malta has conducted ten 4-week seasons at the site so far, running consecutively between 2006 and 2016, except for the years 2010 and 2015. In 2006, the entire site was divided into 10 by 10 m quadrants (referred to in the text as Areas) based on a grid system and a site benchmark (63.51 m above sea level) was established (FIG. 2). The method of excavation adopted was strictly stratigraphic, where each unit of stratification (stratigraphic unit, abbreviated SU) is identified and recorded as part of a stratigraphic sequence. By 2016 a total of 1212 SUs were identified and subjected to detailed recording. Deposits, features (such as, stone alignments) and negative features (cuts) are all considered SUs and their direct association with each other are being used to build a Harris Matrix for the entire site.

As an integral part of the investigations, the opportunity arose in 2008 to have part of the site where the large cistern had been identified in 1964 explored by Ground-Penetrating Radar (GPR) by Lieven Verdonck. An area of about 300 m² was investigated using a hand-towed Sensors & Software pulseEKKO PRO GPR with a 500 MHz antenna. Data were recorded every 0.05 m, along lines with an approximate N-S orientation, in accordance with the existing grid used for the excavations. Data processing followed standard procedures including dewow, gain, band-pass filtering, background removal, migration and timeto-depth conversion.¹³ This resulted in a series of horizontal slices at different depths (Fig. 2). In these slices, white areas represent zones where the GPR waves were reflected due to the presence of structures with a

¹² This was completed by one of us; see Anastasi 2010; Bonanno – Vella 2012, fig. 10.

¹³ For more details, see e.g. Leckebusch 2003; Conyers 2013; Verdonck 2016.



FIG. 2. Site plan complete to the 2016 excavation campaign (digitized by Dario Nigro) with the vine trenches marked out by type. Parts of Area D were also covered by GPR survey, not shown here (but see FIG. 3, a; b). The final plan put together by Maxine Anastasi.

moisture content different from the surrounding soil. Black areas are zones where the GPR waves were not reflected or where reflection was weak, because of the absence of contrasts in moisture.

In the interpretation (FIGs. 3.a and 3.b), features indicated in mid grey are interpreted as wall structures, those indicated in light grey as bedrock or natural phenomena. The features in dark grey are negative marks in the GPR data, i.e. areas with no reflections or weak reflections, contrasting with stronger reflections in the surroundings. Several walls have the same orientation as the walls discovered during the excavations. For example, feature 1 appears in horizontal slices with a depth from *ca.* 0.05 m down to 1.15 m, and 2-5 occur at a depth of ca. 0.15 to 0.60 m. Other linear features have a slightly different orientation, running NW-SE (6-8); 8 has been traced by excavation in Area D and is a covered drain. Features 9-11, at a depth of ca. 0.30 to 0.80 m, are interpreted as natural but a function in a building cannot be excluded. It can be assumed that anomalies 12-15 are also natural. Areas 12 and 13 are visible as bedrock outcrops. Features 16-18 appear as negative marks in the GPR data (low reflections in a strongly reflecting surrounding soil). They are perfectly aligned with the excavated structures. The interpretation of these GPR features as narrow trenches or channels cut in the strongly reflecting bedrock, later filled with loose soil causing the contrast in the reflection, has been confirmed by the excavations, with feature 18 to be equated with trench 31. Although most trenches seem to be associated with negative GPR anomalies (i.e., by an absence of reflections), in other cases they may be represented by positive anomalies (for example caused by the transition between the fill of the trench and the underlying bedrock). Such may, for instance, be the case for feature 4, which is related to the excavated vine trenches in area D, namely trench 34 (FIG. 3.d).

Although much post-excavation work remains to be completed a preliminary sequence outlining the main activities that took place on site has been established. This paper is concerned with two periods: Period 2 corresponds to the building of structural features which date to the 5th/4th cent. BCE; Period 3 represents the use of a vineyard that was abandoned sometime in the 2nd/1st cent. BCE to make way for the erection of a villa-type establishment thereafter. The selection of pottery presented here (section 4) considers both periods.

3. A description of the archaeological remains

3.1. Structural remains: description and interpretation

On the basis of current evidence, it is only in three areas -B, C and D - located along the eastern perimeter of the limits of excavation that Punic remains have been uncovered and consist of a series of walls and the double-headed cistern. Parts of these had already been explored in the 1970s with the result that the recent excavations had to contend with defining the limits and extent of the disturbance that in some instances went so far as digging right through the friable bedrock.

Two of the walls built from a combination of rubble and worked stone blocks run N-S and are found parallel to each other, about 1.28 m apart (1152/540 and 516) (Fig. 4). At right angles to the longer of the two walls (1152/540) which can be traced for about 11 m, extend two other walls, one at the southern end (1156/1037), built of 0.50 m-wide ashlar blocks interspersed with rubble, which extends eastwards for about 2.7 m, and another one at the northern end (508) which extends westwards for 5.10 m, into which wall 516 was built. The walls correspond to an area where an eastwards drop in the surface of the bedrock is noticeable until it meets a near-vertical rock-face, 0.85 m high defined by a cut (1147) revealed by excavation only in the south-east corner of Area C. It can be ascertained that in the 5th/4th cent. BCE, the foundations of these walls were in place since levelling deposits (576 for walls 508, 516) and fills (1167 for wall 1156) were found to come up against them in several instances, and in two locations those levelling deposits appear to have been filling long and narrow, shallow depressions in bedrock (531 and 555) – to which we shall

A VIEW FROM THE COUNTRYSIDE 115



FIG. 3. a, b: interpretation of GPR data; c: Area D with type 4 vine trenches 33-36 stopping short of the large cistern; d: Area F with type 1 vine trenches (21, 23) and type 2 vine trenches (22, 27, 29); e: section showing trenches 21, 27, 28 in Area F (drawn by Maxine Anastasi).



FIG. 4. a, b: Area B, elevations of walls 508 and 516 showing the height of deposits of Period 2 and rearrangement of the same walls in Period 3 (drawn by Maxine Anastasi); c: Area C, section showing construction cut 1168 for Period 2 wall 1037 and lower course 1156 with its fill 1167 (drawn by Maxine Anastasi); d, e: Area B, walls 508, 516 and 540 built on bedrock and rearranged over two successive periods. Trench 15 is seen below 516.

return below. These walls were re-built during Period 3 as revealed by additional fills that had later, 2nd/1stcent. BCE material in them (for instance, fill 551 for wall 508; levelling deposit 1113 for wall 1037) and others built as part of the villa-type complex.

On the basis of current evidence, the function of these walls can only be understood as an attempt to make up for a deficient terrain by building up strong foundations for a superstructure which is now missing and which was, in any case, transformed in the course of Period 3 most probably to serve the same purpose.

To the south, in Area D, excavations led to the rediscovery of the cistern with two entrances (FIG. 3c). The two cistern heads were built of large dressed stones placed in two cuts (1578, 1586) in bedrock that were easily traced extending southwards from the base of a rock ledge. Both entrances clearly had a second course of stones when they were explored and photographed in 1964, consisting of similar stones placed against the rock ledge defined by another cut (1502) which also contained a packing deposit (1504) of probably 4th-cent. BCE date.¹⁴ It is probable, however, that in this area the soil depth was high enough to suggest that more courses of large ashlar blocks were used to line the entrance to the cistern; several such stones lie by the site boundary wall having been disturbed from an original location by a mechanical shovel probably in the 1960s. The entrances had been blocked with large stones in the 1970s/80s and the material recovered from the first metre of deposit gathered within the western entrance was clearly of modern date. What was noticeable, however, was the lining that appeared on the rock wall, a clear attempt to render areas of the surface impermeable. Attempts to explore the cistern further in order to understand its form had to be abandoned because the bedrock was too friable and the entrances unstable. In addition, the GPR survey in the area to the south and west of the entrances failed to capture an anomaly that could be interpreted as an underground hollow. It is safe to assume that the structure was meant for the collection of water because in the course of the excavations a Period 3 stone drain (1563), consisting of lengths of shallow U-shaped stone channels covered with stones held in place by mortar, was found in a rock-cut trench heading from the villa-type remains towards the western end of the cistern.

3.2. A system of rock-cut trenches

3.2.1 Description

Throughout the site a system of linear trenches cut into the soft limestone bedrock were revealed by excavation in addition to those already recorded in the 1972 sketch plan. To date, a total of 36 trenches have been uncovered. Sixteen of these features were either truncated by walls or sealed by floor levels. In two cases, trenches (2, 19) cut a set of trenches (1, 18) and two rock-cut pits (17, 18) discovered in the 1970s. The majority of trenches can be classified into four types defined by formal similarities in their dimensions and alignment (FIGs. 2, 3c-e):

- Type 1. Long linear trenches, aligned along a N-S axis located about 1.9 or 2 m apart [1, 3, 4, 6, 7, 11, 17, 18, 21, 23, 24, 26, 28, 31];
- Type 2. Long linear trenches, aligned along a N-S axis and located about 3-4 m apart and 3.3 m from each other [10, 20, 22, 25, 27, 29];
- Type 3. Short, complete trenches (absolute length ranges between 0.90–1.54 m), aligned along an E-W axis and spaced every 3 m apart [2, 5, 8, 9, 12, 19, 32];
- Type 4. Trenches of indeterminate length, aligned along an E-W axis spaced approximately 0.50 m apart [13, 14, 15, 16, 30, 33, 34, 35, 36].

¹⁴ Four of the diagnostic fragments of this deposit have already been published. See FACEM – http://facem.at/m-115-2, FACEM – http://facem.at/m-114-6; FACEM – http://facem.at/m-114-7.

The first series is composed of up to at least eight rows of linear rock-cut trenches evenly spaced apart every 1.90-2 m. The surface width of each trench ranges between 0.30 and 0.40 m wide, extending from south to north and reaches varying depths between 0.50 and 1.08 m, with the steep sides tapering slightly to a base width of about 0.18-0.24 m. Only the limits of five of the trenches could be traced. These include the northern limit of trenches 3 and 18, and the southern limits of trenches 4 and 23. In all instances, the limits were neatly defined and guadrangular, with the sides of the trenches sloping steeply towards the base. Clear tool marks scar the sides and bases of individual trenches indicating the directional swing of the pick axes (blade width 3 cm) used to cut through the rock. Wherever possible, the limits of individual trenches were traced and these were found to extend beneath various parts of the villa structure of later Roman date, producing a clear terminus ante quem for the abandonment of the trenches. Several trenches had been identified in the 1970s; disturbed deposits were excavated from trenches 1, 3, 17 and 21, often in part. However, parts of these same trenches still retained untouched archaeological deposit and were given different stratigraphic unit numbers, excavated and when possible the deposit was sampled for environmental analysis (see 3.3 below). The pottery recovered from trenches 1, 3, 4, 18, 26 and 28 all date to the 2nd-1st cent. BCE. The composition of the deposits filling undisturbed trenches was generally homogenous throughout, and consisted of red stony soil above a layer of rubble stones at the base of each trench. One trench, 28, contained a different deposit composed of fine-grained soil and large stones tightly packed (3088, 3094), which was in turn sealed by a row of worked stone blocks (3014) (FIG. 3.e).

A second series of linear rock-cut trenches ran parallel to those just described. They were found to lie between 3.2 and 4.1 m apart along three rows. A gap of about 3.3 m was measured between the end of one trench and the start of another. The length of the trenches was found to vary between those which were traced in their entirety, one (22) measuring 1.10 m long. All the trenches in this series have varying depths, ranging between 0.35 and 0.80 m. The deposits filling these trenches were similar in composition to those which filled the type 1 trenches and one, 22, was undisturbed with pottery from the fill (3106) dating to the late 2nd-1st cent. BCE. One disturbed trench, 17, was found to extend southwards beneath later structural remains.

Aligned in the same E-W direction were another set of shorter trenches – type 3 – laid out every 3.6-3.7 m. The dimensions of these trenches could be defined and range 0.90-1.54 m in length, 0.38-0.50 m in width, and 0.16-0.83 m in depth from the rock surface. That these shorter trenches were cut after the type 1 series aligned N-S is suggested by the way two of them (2, 19) clearly cut across earlier trenches respectively (1, 18). Two of the deposits excavated from these type 3 trenches showed clear signs of modern activity (trench 19), most probably a consequence of the 1970s investigations. However, the rest did contain deposits that proved instrumental in dating the abandonment of the trenches; trench 9 (fill 2107 containing pottery of the late 2nd-1st cent. BCE), in particular, was found to be sealed by a later floor layer.

The fourth type trenches follow an E-W axis. These trenches displayed near identical features to those aligned N-S, however, no clear pattern relating to their spacing apart could be detected. Three of the trenches were heavily truncated by later foundation walls concentrated in Area B (14-16), whilst four trenches (33-36) in Area D which were clearly traced showed that they ended short of the 4th-cent. BCE cistern with a double entrance (Fig. 3.c).

3.2.2. Interpretation

Rock-cut trenches of the sort discovered at Żejtun, especially the shorter variety (types 2 and 4), have long been associated in the Maltese islands with the growing of vines, encouraging deep root growth in an archipelago marked for its limited soil depth.¹⁵ The antiquity of such vine trenches has never been ascertained

¹⁵ Borg 1922, pp. 2, 14, 457.

for Malta, however, even though many trenched plots brought to light over the last decade as a result of developer-funded excavations are being preserved by record when construction works cannot, for one reason or another, be halted.¹⁶ The excavations at the Żejtun villa prove beyond any doubt that all the four types of trenches pre-date the construction of the villa-type establishment, sometime after the 1st cent. BCE at the earliest. Moreover, the trenches at Žejtun fit nicely into the picture that has come to the fore thanks to modern archaeology in different parts of the Mediterranean where it is clear that the recommendations of the ancient agronomists, like Cato, Columella (who includes the experiences of Mago the Carthaginian) and Varro, reflect actual cultural practice.¹⁷ Indeed, planting vines in trenches (*sulci*) appears to have been preferred over the practice of planting in holes or pits (fori/scrobes), especially in nearby Italy throughout the Hellenistic and Roman periods,¹⁸ even though the origins of such a system go back further as has been shown by excavations at the site of La Orden-Seminario in Huelva, Spain.¹⁹ When the soil depth was limited, trenches were cut in the soil and extended into the rocky subsurface, such as at the oft-quoted sites of Megara in Attica (datable to the 4th-1st cent. BCE),²⁰ Antiparos in the Cyclades (pre-Classical),²¹ Megara Hyblaea in Sicily (after the 5th cent. BCE),²² and in the hilly suburbs of Republican Rome more generally,²³ Vines were propagated by selecting the trunks of the best vines, laying them flat and burying them in a trench dug next to the first one, taking care not to pull up the roots or break the trunk.²⁴ This process, known as propagation by layering, has been detected archaeologically in many places.²⁵ The system at Żejtun would fit into the general framework just described. The different trench types were dug to a uniform width and depth, and were properly spaced. The N-S orientation of types 1 and 2 follow the recommendations of Columella,²⁶ as does the spacing between the parallel rows of trench types 1 and 3: at 2 m it falls within the range suggested by the Roman agronomist (1.5-3 m).²⁷ The smaller trenches (type 2) alongside the longer ones (type 1) may well have been intended for vine propagation purposes.

Although the pottery in the vine trenches explored at Żejtun is predominantly of early Roman date, the question of when the vineyard, with its different types of trenches, was laid out remains. Stratigraphically, we can only establish that the short E-W oriented trenches (type 3) were dug after the long linear ones running N-S (type 1). The linear trenches, with their inter-row width of about 2 m, find very good analogies in Ibiza where rock-cut vine trenches, between 0.40 and 0.50 m wide and about 0.50 m deep, have been dated to the Punic period, more specifically to the 4th-3rd cent. BCE.²⁸ Whether the Żejtun examples go back to this period is not possible to tell on current evidence. Only two trenches (14, 18) were found to contain 4th-cent. BCE sherds together with the later ones. Certainly, the type 1 and type 4 trenches seem to steer clear of the Punic-period activity described earlier; indeed trenches 33-36 stop short of the cistern. Evidence

- 23 Santangeli Valenziani Volpe 2012.
- 24 Columella, De Agricoltura 3.13, 5; Boissinot 2001 where cross-trenches in the soil are visible.
- 25 Boissinot 2012, pp. 46-47.
- 26 De Agricoltura 1.6, 3.12.5-6, 4.2.
- 27 Thurmond 2017, p. 94
- 28 Marlasca Martín López Garí 2006, p. 93.

¹⁶ See, for instance, *Times of Malta*, 6th August 2016 (https://www.timesofmalta.com/articles/view/20160806/local/no-phoenician-ruins-just-recent-vineyard-trenches-in-madliena.621172 last accessed July 2017).

¹⁷ Thurmond 2017, p. 90.

¹⁸ Boissinot 2009, p. 127.

¹⁹ Vera Rodríguez – Echevarría Sanchez 2013.

²⁰ Pikoulas 2012, p. 48.

²¹ Renfrew 1982, p. 157.

²² Boissinot 2009.

that may be used to argue for an early date comes from two depressions – identified here as trenches 15 (FIG. 4d) and 16, which were sealed by 4th-cent. BCE levelling fills – that were found to contain only pottery of that period too. But their profile makes it hard to identify with the trenches described thus far and should not be considered as unequivocal evidence of viticulture. There is no reason to think that the remaining trenches may not have been in use for a long period of time and that the soil may have been dug up and added to in order to increase the yield at a later period, bringing in potsherds in the process.²⁹

3.2.3. Environmental analysis of deposit from trench 21

In order to complement the archaeological evidence, material filling trench 21 (SU 3041) was analysed (FIGS. 3d, e). It was sampled from one place of the exposed south section in 10 cm intervals down to bedrock for a total depth of 90 cm. The average weight of these spit samples was 1.3 kg after taking small subsamples for pollen analysis which, unfortunately, did not produce results.³⁰ The samples were wet-sieved and the organic matter was caught in a 500 micron sieve, while the remainder was then washed through nested 8 mm, 4 mm, 2 mm and 1 mm sieves to remove particles smaller than 1 mm. After drying, the contents were analysed.

The particle size distribution of the spit samples revealed that all size fractions were represented in the samples, which were fairly well sorted, with the soil fraction (<1 mm) dominating at over 50% in all samples except in the lowermost (80-90 cm), where large stones (>8 mm) made up more than 50% of the sample and the soil content was only 15%.

The way the trench was filled ensured proper drainage, which is a crucial factor in viticulture as the amount of irrigation water influences growth, quality and yield. The trench was slightly sloping, a characteristic which would have reduced the risk of waterlogging the roots and promoting fungal growth. The relatively high stone/gravel content (around 40%) throughout the spit samples made the soil relatively loose in texture and especially suitable for vineyards.

The analyses of the samples provided several pieces of evidence that topsoil had been used to fill the vine trenches. All samples contained plant matter and/or charcoal in varying amounts. While the plant material included some roots, which may, in part, have belonged to the vines themselves, the presence of charcoal points to surface sediments. Seeds were also found in many of the samples. Their survival in the archaeological record points to rapid burial, which prevented either their germination or decay or ingestion by animals. By far the most common seed found was the fumewort *Fumaria* sp.; the other seeds have not been identified to date but were generally of a very small size. The seed assemblages were often very diverse with many different kinds present. The two fractions between 30 and 50 cm contained no seeds.

Shells of land snails and marine molluscs were also found throughout the sample column. The land snails would have been introduced with the topsoil used for the fill. The presence of many juvenile and small land snail species indicates a natural assemblage. The few marine shells are likely to have been scattered food remains. It is assumed that the topsoil for the vine trench fills came from the vicinity of the site and the land snail assemblages point to predominantly open country with a little leaf litter at the time.

3.3. The press bed

Found in Area C, the press bed (Single Find 1195/1) is made from a slab of local Globigerina Limestone that measures 0.88 m long, 0.45 m wide and 0.18 m thick (FIG. 5). The shape is essentially rectangular with

²⁹ The difficulties of understanding depositional processes involving pottery found in vine trenches are discussed by Vera Rodríguez – Echevarría Sanchez 2013, p. 97.

³⁰ The pollen analysis was carried out by Michelle Farrell of Coventry University as part of the ERC-funded FRAGSUS project (PI: Prof. Caroline Malone) to provide comparative material. The analysis yielded no reliable results as the pollen had severely degraded and the concentration was far below acceptable thresholds for interpretation (Farrell 2017).



FIG. 5. The press bed in Area C: different sections and the stone in situ (drawn by Maxine Anastasi on images generated from a laser-scanning exercise by John Zammit).

rounded edges and has a triangular projection. The top surface of the block consists of an oval v-shaped groove, about 4.5 cm wide and between 2-3.5 cm deep, which joins a splaying spout or runnel. The underside has two shallow indentations or sockets, presumably intended to receive projections that would have kept the stone in place during pressing. Press beds of this sort are very common in Roman and Byzantine Cyprus, mostly associated with the processing of olives,³¹ but examples from elsewhere are also known to have been used for pressing grapes.³² The pitted surface in the area defined by the groove in the Żejtun example suggests that this slab was used in antiquity. An attempt to test samples of stone lifted off the surface for organic residue analysis – lipids or tartaric acid – were carried out but were not conclusive.³³ The press bed was found placed into a large wall running E-W, which had truncated a number of vine trenches (26, 24, 31), in an area where other worked stone blocks appear. These include also two large stones that may tentatively be interpreted as *arbores*, the pair of posts that keep the lever in a press in place. It is possible that the press bed formed part of an installation of an earlier date, possibly to be linked to the Period 2 structural remains described above. Indeed, a deposit (1119) with 4th cent. BCE pottery was found coming up against it.³⁴ This area, however, is still being investigated.

4. The pottery from selected stratigraphic units (4th-1st cent. BCE)

4.1. Introduction

The present section³⁵ includes a discussion of 55 diagnostic pottery fragments from nine selected deposits from the site. Since the excavation is still on-going, this preliminary study will only attempt to highlight some of the problems in relation to the pottery repertoire of Punic and Early Roman Malta, whilst a more in-depth analysis of the site's entire pottery assemblage will be presented as part of the final report.

Apart from a handful of fragments published for the Punic-Roman farmstead of San Pawl Milqi,³⁶ the finds from the recent Żejtun excavations currently represent the first ceramic sequence yielded by stratigraphic investigations of a Maltese rural-domestic, multi-phase site. Indeed, Phoenician and Punic-period pottery from Malta has almost exclusively been classified, studied and discussed on the basis of discoveries from funerary³⁷ and ritual³⁸ contexts, while published archaeological research for settlement sites³⁹ is still

³⁶ For a detailed overview, including a critical discussion, of the archaeological non-funerary sites of the Maltese archipelago see Vidal González 1996, pp. 19-22. The only settlement context partly published consists in a pit fill of the 1st cent. BCE-1st cent. AD with a lot of material dating to the 3rd or 2nd cent. BCE (*Missione Malta* 1968, pp. 99-101, figs. 8-9).

37 See most of all Sagona 2002, Sagona 2003 and Sagona 2011 with earlier references; Vidal González 1996. Excepting a rock-cut tomb published by Vella *et al.* 2001, the remaining grave inventories refer exclusively to early excavations, frequently lacking context information and archaeological associations.

38 For the Maltese excavations see Bonanno – Vella 2015 with earlier references; for the Italian investigations see the preliminary reports published in the *Missione archeologica a Malta* volumes (excavation campaigns from 1963-70); for the renewal of the excavations in the 1990s see Semeraro 2004-2005 and, most recently, Amadasi Guzzo *et al.* 2012. However, the closed deposits prior to the late 4th cent. BCE remain unpublished (Vidal González 1996, p. 10)

39 For preliminary remarks on pottery surface finds collected within the framework of the Malta Survey Project and related to three rural Punic-Roman sites see Docter *et al.* 2012, esp. pp. 133-140.

³¹ Hadjisavvas 1992, pp. 54-59.

³² See, for example, McGovern et al. 2013; also Brun 2004, pp. 208-209.

³³ Spiteri Debono et al. 2016.

³⁴ See below, section 4, nn. 23-26.

³⁵ The support of Austrian Science Fund (FWF: P 25046-G19) and the University of Malta is hereby acknowledged. Especial thanks are due to R. Lampl (Vienna) for digitizing the drawings composing Figs. 6-10 and to Maxine Anastasi for revising a first draft of this contribution.

lacking. In this sense, the recent typological study of about 360 ceramic fragments found in the earlier 1970s excavations at the villa site in Żejtun⁴⁰ appears all the more important and constitutes one of the most helpful reference points for the study of the pottery assemblage presented here. Other seminal contributions include three papers by Quercia⁴¹ on the 5th-1st cent. BCE plain and cooking wares from four large ritual deposits of the late Republican to early Imperial phases of the nearby Tas-Silg sanctuary, in which a large amount of residual finds of the Punic period were found.⁴² Comparative material for the Żeitun assemblage can be found among the impressive ceramic corpus from the University of Malta excavations at the same sanctuary very recently published by Sagona.⁴³ To a lesser extent, the often very fragmented pottery from the rural contexts of Żejtun find parallels with types from Sagona's diachronic classification⁴⁴ based on generally well-preserved finds from funerary contexts.⁴⁵ Due to the general dearth of published, stratigraphic sequences in Malta,⁴⁶ particularly illustrated groups of finds, one of the primary challenges facing the study of the present assemblage is the inability to attribute absolute chronologies to single stratigraphic units, which, more often than not, do not contain well-dated ceramic imports linked to recent, chrono-typological studies.⁴⁷ Quercia's research on the plain pottery from the Tas-Silg sanctuary has established that a change in surface treatment linked to the introduction of new pottery types took place towards the later 3rd or the early 2nd cent. BCE.⁴⁸ A similar surface treatment characterizes the local series presented in this paper, dating between the 2nd cent. BCE and the first half of the 1st cent. BCE.⁴⁹ However, because of the lack of well-dated imports, such as black-slipped vessels, lamps or transport amphorae, it remains unclear whether there is a clear distinction between the late 5th-4th and the 3rd-cent. BCE repertoires, since all the shapes attributed to this span of time appear to be coated with a yellowish slip, occasionally decorated by painted lines. In her work on the funerary material, Sagona distinguished between the pottery forms from her "Later Phase III-Early Phase IV (410-300 BCE)" and "Phase IV (300-100 BCE)", but admittedly only a very small number of tomb contexts were assigned to this latter, more recent phase, which covers two centuries.⁵⁰ However, on the basis of the funerary evidence, it is clear that the use of painted decoration on pottery vessels dating to the 3rd and 2nd cent. BCE declines - a technical shift which is paralleled by the restricted implementation of a similar technique in Carthage's local Late Punic I workshops.⁵¹

4.2. Methodology

All the diagnostic and undiagnostic pottery sherds presented in this section come from stratigraphic units selected by the excavators. Each fragment was studied macroscopically and entered into a database, with

46 For the latest information, see Sagona 2015, p. 43.

⁴⁰ Anastasi 2012.

⁴¹ Quercia 2002; Quercia 2004-2005; Quercia 2011.

⁴² Quercia 2004-2005, pp. 335-336, note 2, fig. 1

⁴³ Sagona 2015.

⁴⁴ Sagona 2002.

For the limits of the chronological series offered in Sagona 2002, due to the complex issue related to the archaeological interpretation of the earlier grave finds, see Quercia 2004-2005, p. 338. For the rest, one should keep in mind that the pottery *facies* reflected by the necropolis will necessarily always represent a rather conservative repertoire selected for the specific funerary ritual.

For the rareness, in all of the Phoenician-Punic Maltese archaeological deposits, of imported ceramic wares see Ciasca 1999, p. 75; for the Archaic period see specifically Sagona 2011a, p. 417; Sagona 2002, pp. 28-29.

⁴⁸ See below, note 56 and Quercia 2011, pp. 437, 441.

⁴⁹ Quercia 2011, p. 436, fig. 1. 4-8 (for the plates), p. 440, fig. 2. 6-8 (for the bowls).

⁵⁰ Sagona 2002, p. 64, figs. 345-346.

⁵¹ Bechtold 2007, pp. 330-333, figs. 149-151.

particular emphasis being placed on the distinction between local and imported fabrics. In 2011 and 2013, and within the framework of provenance studies of Phoenician-Punic amphorae from the south-central Mediterranean, a group of about 30 fragments from Żejtun, presumed to have been made locally, were analysed by binocular microscopy and digital photographs of freshly broken surfaces, according to the standardised method developed for the database of FACEM.⁵² As a result, five amphorae fabrics, two plain ware fabrics⁵³ and one handmade fabric were identified and published.⁵⁴ The treatment of the surfaces of the fragments allowed for the identification of seven local wares in the sample studied:

- 1. Local plain ware smoothened⁵⁵
- 2. Local plain ware slipped⁵⁶ (sometimes also smoothened)
- 3. Local plain ware painted (sometimes also smoothened and slipped) (PL. VII, 8)
- 4. Local plain ware (surfaces untreated or only roughly smoothened)⁵⁷
- 5. Local fine ware
- 6. Local cooking ware
- 7. Local handmade ware

The first four wares appear to be characterized by several variants of Anastasi's fabric 1,⁵⁸ while all fine ware vessels correspond to her fabric 4.⁵⁹ Cooking wares correspond to her fabrics 4 or 5⁶⁰ and handmade wares are equivalent to fabric 7.⁶¹

4.3. Preliminary observations on the Żejtun pottery assemblage of Periods 2 and 3

The finds documented here allow for some preliminary remarks related to the pottery repertoire in use at the site during the late 5th-4th cent. BCE (Period 2) and the late 2nd-1st cent. BCE (Period 3). Unfortunately, at this preliminary stage, little can be said about the 3rd-2nd cent. BCE repertoire of the site. In spite of this, the systematic recording of all of the fragments yielded from the selected stratigraphic units highlights two particular features, which are characteristic of the Żejtun assemblage, but which are unusual for contempo-

⁵² http://facem.at/project/about.php#photography.

All of these fabrics correspond to Sagona's "Crisp Ware" (Sagona 2002, pp. 79-81; Sagona 2015, pp. 43-68), "the hallmark of the Melitan Punic period" (Sagona 2011, 427), used for a wide range of plain wares and storage vessels.

⁵⁴ Schmidt – Bechtold 2013; for a detailed discussion of the amphorae fabrics MALTA-A-1 to 3 and preliminary remarks on the first archaeometric research on the Archaic productions MALTA-A-2 to 3 see Bechtold forthcoming and FACEM - http://facem. at/m-119-34 and FACEM – http://facem.at/m-119-41.

⁵⁵ According to Ciasca (1999, p. 77), this particular technique ("*lustratura*") characterizes the local series of the late 6th-5th cent. BCE.

The presence of a characteristic, yellow or whitish high-quality slip should point to a date within the 4th-3rd cent. BCE (Ciasca 1999, p. 77), or around the later 5th cent. BCE (Quercia 2004-2005, p. 342; Quercia 2011, pp. 434, 439), even if according to Sagona (2002, p. 54 "thick-slipped Crisp Ware") this particular technique can already be found in her phase III (500-410 BCE). From the later 3rd or early 2nd cent. BCE onwards, the uniform slip is replaced by a rather rough covering "[...] that can be in some vessels omitted" (Quercia 2011, p. 437).

⁵⁷ This ware is best attested among Żejtun's late 2nd-1st-cent. BCE deposits (see below, nos. 31-37, 45-50), presenting very often a fabric described by Sagona (2002, p. 83) as a variant of her Crisp Ware "with red inclusions", characterised by numerous, rounded grains of black or reddish-brown colour.

Anastasi 2015, pp. 359-360, fig. I. 5 and especially p. 361 with complete references for previous research on this fabric group; for the series of the Punic period see also FACEM - http://facem.at/malta-c-1 and FACEM – http://facem.at/malta-c-2, among the set below exemplified by nos. 1-4, 6-9, 11-15, 22-23, 27, 29, 39-42, 51-52.

⁵⁹ Anastasi 2015, pp. 363-365, fig. I.6.

⁶⁰ Anastasi 2015, pp. 363-365, fig. I.6.

⁶¹ Anastasi 2015, p. 364, fig. I.6, p. 367; Sagona 2015, pp. 41-43; see also FACEM – http://facem.at/malta-hp-1.

rary Punic-period domestic contexts found outside the archipelago (e.g. at Middle Punic Carthage⁶² or at *Motya*⁶³): (a) a very low incidence of imported wares – if imports are present, they usually belong to transport amphorae; (b) a high incidence of local handmade wares.

4.3.1. Some remarks on the 4th-cent. BCE pottery repertoire of the site (Period 2)

The only two imported dating elements within the selected assemblage belong to a red-figure *lekythos* (n. 10) and an Andalusian amphora (n. 25), which point towards a date between the later 5th and the first half of the 4th cent. BCE. Within the Period 2 deposits, the majority of local plain wares are covered with a yellow slip and often decorated with reddish lines, while items with carefully smoothened surfaces, typical of the earlier 6th-5th-cent. BCE series (see note 55), appear to be rare already. A small group of types could be confidently attributed to the late 5th, 4th or early 3rd cent. BCE, and seems particularly characteristic of the local ceramic facies of the Żejtun site. The most frequently occurring shape, attested by about 20 sherds, is a carinated bowl with a slightly everted rim (nos. 1, 3, 7), which is almost always slipped, but only occasionally painted. Also well documented are kylikes, often with painted lines (nos. 27, 29); plates with thick, flat rims, similar to Quercia's fig. 1.164 and handmade baking pans (nos. 16, 54). Among the cooking wares, pots close to Quercia's type B seem to be well attested,65 whilst lamps are uncommon throughout the whole occupation period of the site (only 6 items among nearly 6000 recorded fragments). Apart from the exceedingly rare imported fragments, dating of the Period 2 sherds has been based on the surface treatment and fabric of the vessels. The predominance of good quality, local plain wares, mainly slipped and often painted, suggests a chronological framing within the late 5th-early 3rdcent. BCE (see above, notes 51, 56). This date is also supported by the presence of Ionian-Adriatic amphorae (see below, 4.3.3) within the same units, which also date to this period.

4.3.2. Some remarks on the late 2nd and 1st cent. BCE repertoire of the site (Period 3)

One small and two larger, and homogeneous SUs (nos. 28-55) have been selected with the intention of highlighting the Early Roman pottery *facies* of the Żejtun villa site. The assemblage attributed to this *facies* is clearly different, in both form and fabric, from the Punic set discussed above, as well as confirming Quercia's observations on the Tas-Silġ pottery assemblage (see above, notes 48-49). The best documented are bowls with sinuous profiles of Quercia's fig. 2.7-8 (nos. 31-35, 44, 48-50) and plates with triangular-shaped rims of Quercia's fig. 1.6 (n. 45). These forms, as well as the majority of the undiagnostic fragments from the same contexts, are produced using a fabric characterized by rounded black or reddish inclusions (see above, note 57), which dominates the local pottery *facies* from the late 2nd-1st cent. BCE onwards. The recent quantification of the ceramic materials retrieved from a large dump excavated at the northern part of the Tas-Silġ complex⁶⁶ shows that bowls, plates and pots identical to the ones included in SUs 549 and 2107 represent the most common types among this 1st-cent. BCE deposit.⁶⁷

4.3.3. Imports at the site

Among the nine selected SUs, the five more numerous ones, consisting of 50-100 fragments, contain almost no imported pottery; only the two smaller deposits 1119 and 1122 with 22 and 17 fragments respectively,

⁶² Bechtold 2010. At Carthage, apart from *tabouna* ovens, no handmade wares were recorded in the analysed Middle Punic contexts from Bir Messaouda, site 2. For the incidence of imported transport amphorae between 10-15% in the late 6th-5th cent. BCE and 20-30% during the late 5th-4th cent. BCE see pp. 20, 32.

⁶³ For the western fortification (zone F) see Orsingher 2011.

⁶⁴ Quercia 2011.

⁶⁵ Quercia 2002, pp. 410-412, fig. 2.

⁶⁶ Notarstefano 2012, p. 121, fig. 2.

⁶⁷ For the dating of this context see Semeraro 2004-2005, p. 318, note 20.

show a higher incidence of imports (13.6% and 11.7% respectively). A preliminary overview of the pottery from the remaining SUs that await to be studied confirms very low occurrences of imported ceramics at the site.⁶⁸ When present, imports mainly consist of transport amphorae, showing that the food supply of the site relied on a small proportion of commodities, mostly wine, obtained from abroad. By contrast, imported fine and table wares are almost completely absent.⁶⁹ Within 12 SUs of the 2nd-1st cent. BCE deposited in the Late Republican period, but containing predominantly 4th-early 3rd cent. BCE residual material, 10 contained at least one Ionian-Adriatic amphora (PL. VII,1-3), mainly from *Corkyra* (fabric ION-ADR-A-1/3), which often constitutes the only imported fragment within the context. Among this set, the proportional incidence of imported amphorae in relation to local transport vessels can be indicated on average at about 12-14%.⁷⁰

Therefore, it seems clear that Ionian-Adriatic wine amphorae constitute the main class of imported pottery at Żejtun. These are followed by possible Calabrian amphorae (PL. VII,4-6), and to a much lesser extent, amphorae from the Punic world (Carthage, Andalusia, PL. VII,7). Similarly, Ionian-Adriatic amphorae, generally dated to the 5th-4th cent. BCE, might also represent the most frequent imported class within the amphora assemblage from the sanctuary of Tas-Silg.⁷¹ Although the general conclusions about the pottery presented here remain tentative, the evidence from Żejtun and Tas-Silg do indicate clear commercial ties linking the wine-producing area of *Corkyra* with North Africa though the eastern coasts of Calabria, Sicily and Malta. Malta's secure harbours were ideal for sheltering passing sea vessels and as ports where commercial exchange took place, as they were situated along the most common ancient sailing route between eastern Sicily and Carthage, but also towards the Lesser Syrtis region and Cyrenaica.⁷²

As with the new amphorae data from Malta, Ionian-Adriatic B-amphorae, associated with Attic black-slipped wares and Aegean amphorae within the Middle Punic II ceramic repertoire from Carthage (c. 430-300 BCE), also greatly outnumber all other classes of transport vessels. A high incidence (between 26-35%) of Ionian-Adriatic B-amphorae have also been recorded at Ghizène (Jerba), *Euesperides*, Sabratha and *Hadrumetum*.⁷³ Of particular interest is the recent identification of an assemblage of 34 Maltese Middle Punic (?) ceramic fragments (amphorae and plain wares) at the harbour site of Ghizène on the northern shores of Jerba. According to the excavator, this evidence might be related to either the movement of Maltese people, or secondary cargo on ships loaded with other goods.⁷⁴

To conclude, the ceramic data discussed above supports the view of identifying Malta as one of the possible ports of call along the most important trading route for Middle Punic Carthage, linking mainland Greece with various North African destinations. Furthermore, they might corroborate the hypothesis on "[...] un'apertura, nella media età punica, dell'arcipelago verso la piccola Sirte e l'area libica, già precedentemente ipotizzata."⁷⁵

⁶⁸ Apparently different, even if not clearly specified, appears the Phase III-IV repertoire identified among the grave inventories, see Sagona 2002, p. 60: "Imported wares are not uncommon in reflecting a great diversity in type and origin".

⁶⁹ A very similar picture has been outlined for Malta's Early Roman period (Anastasi 2015, p. 170).

⁷⁰ For comparison, at Carthage, during the contemporaneous Middle Punic II period (430-300 BCE), the incidence of imported amphorae has been indicated with 20-30% (Bechtold 2008, p. 32).

According to the microscopic fabric analysis of 12 amphorae from these excavations, 6 items can be attributed to the Ionian-Adriatic region (Bechtold 2013, p. 44, notes 10, 62, 97) and are now published in Sagona 2015, pp. 385-387, fig. 1:133.10; p. 139, fig. 1: 134.1-2, fig. 1: 135.3 (all ION-ADR-A-1), fig. 1: 134.4 (ION-ADR-A-8). Furthermore, two Calabrian amphorae have been identified (Bechtold 2013, p. 47, fig. 3), published in Sagona 2015, pp. 385-386, fig. 1: 133.7 (CAL-A-2), fig. 1: 134.3 (CAL-A-7). For the presence of *Corkyrian* amphorae among the materials of the Italian excavations see Bruno 2004, p. 139, note 4.

⁷² For a recent and very exhaustive discussion of all aspects of Malta's maritime location, see Arnaud 2008, esp. p. 26.

⁷³ Bechtold 2013, pp. 62-68, tab. 1 with earlier references.

⁷⁴ Ben Tahar 2014, p. 90, fig. 22.

⁷⁵ Bechtold forthcoming, sections 3.1 and 5 and, earlier, Ciasca 1985, p. 24, note 31.

4.3.4. The occurrence of local handmade wares

According to a preliminary evaluation of the entire assemblage, on average, local handmade wares represent about 35–60% of the undiagnostic fragments, and between 20–50% of the diagnostic assemblage. At Żejtun, the handmade vessels make up quite a wide range of forms – at least 10 different types have been identified – and they are related to the functional groups of cooking, storage and food preparation. The most common type belongs to large, shallow pans (nos. 16, 54), recorded in the majority of the SUs studied, and which are also common within assemblages from other Maltese sites from the 4th cent. BCE onwards. The complete lack of *tannur/tabouna* – the widespread ovens of the Archaic and Middle Punic *facies* of Tunisia, Sardinia and Andalusia – within the Żejtun set,⁷⁶ suggests that the inhabitants of the site used shallow pans for the baking of bread. More generally, the assessment of the Żejtun assemblage suggests that cooking wares are uncommon, but they do increase in late 2nd-1st-cent. BCE contexts. To date, however, additional evidence for the types attested, their distribution, and quantity of handmade wares within other domestic sites on the Maltese islands remains unknown. This class is apparently very rare among the local Phoenician/Punic funerary evidence,⁷⁸ but is well attested within the ritual deposits at Tas-Silg ("*olle*" and pans).⁷⁹

For the Phoenician-Punic Mediterranean world, the occurrence of handmade wares especially during the earlier settlement phases has been discussed in detail by Mansel.⁸⁰ The in-depth study of a large Carthaginian assemblage has distinguished between different local handmade pottery groups, ranging from original Phoenician types, their copies or imitations to the production of non-Phoenician shapes. The occurrence of handmade wares in Phoenician-Punic contexts is also related to the complex phenomenon of social and cultural contact between the early Phoenician settlers and the "indigenous" population, particularly the role played by women belonging to the native communities.⁸¹ Despite there being a high incidence of handmade wares at Żejtun, at this stage, the lack of additional comparative and supporting data from Malta, does not offer sufficient evidence to comment further on the socio-cultural traits of the island's Phoenician/Punic inhabitants.

5.4. List of the diagnostic fragments from selected SUs⁸²

5.4.1. Period 2 (later 5th-4th cent. BCE)

SU ZTN06/1166 (Area C): This deposit consists of a homogenous fill dated to the late 5th or earlier 4th cent. BCE, and contained five diagnostic and 44 undiagnostic sherds, all of which were in a local fabric.

Local plain ware, smoothed 1. 1166/3. Carinated bowl (Fig. 6.1).

⁷⁶ Campanella 2008, pp. 59-60, 214; Mansel 2007, p. 433; Mansel 2011, pp. 357-358; Bechtold 2010, p. 20 with further references for the use of *tabouna* until the Hellenistic period (in Sardinia).

A similar phenomenon has been observed with regard to the Middle Punic cooking set identified at Ghizène (Jerba) which at least in part might have been imported, however, from abroad (Sardinia, Malta, Pantelleria?), see Ben Tahar 2014, pp. 83, 91.

For the pots, see Sagona 2002, p. 220. More recently, cfr. Sagona 2015, p. 43.

⁷⁹ Quercia 2002, pp. 407-409, 414; Sagona 2015, pp. 241-243.

⁸⁰ Mansel 2007.

⁸¹ Cavaliere's paper on Olbia (Cavaliere 2010) exemplifies this debate for the Punic world, while a recent contribution by Spatafora (2012, p. 67) reminds us of the constant presence of the truncated, handmade *pignatte* in the western Sicilian colonies of *Panormos* and *Motya*.

⁸² For the sake of brevity, only the essential references are given in the catalogue.



FIG. 6. Pottery from deposits of Period 2. 1.-4. ZTN06/1166 (nn. 1-4). 5.-8. ZTN06/1202 (nos. 6-9). 9. ZTN06/1192 (n. 22). 10.-12. ZTN06/1119 (nn. 23-25).

Sagona 2002, p. 175, fig. 344.6, bowl Form III:3; Sagona 2015a, pp. 59, 156, 302, fig. 1:50:3, deposit of Punic period.

2. 1166/4. Deep cup (FIG. 6.2). Quercia 2011, pp. 440-441, fig. 2.5, 5th-3rd cent. BCE.

Local plain ware, slipped

3. 1166/1. Carinated bowl (FIG. 6.3).

Quercia 2011, p. 443, carinated bowl with slipped surface introduced into the local repertoire between the 5th-4th cent. BCE; for a good illustration see *Missione Malta* 1969, fig. 10.9, 400-300 BCE.

4. 1166/2. Closed shape (FIG. 6.4).

Local handmade ware 5. 1166/5. Pan (not illustrated). Cfr. below, n. 16.

SU ZTN06/1202 (Area C): Pure 4th-cent. BCE fill of cut 1145, composed of four diagnostic and 42 undiagnostic pieces, all of local fabric.

Local plain ware smoothened and slipped

6. 1202/1. Plate (FIG. 6.5). Similar to *Missione Malta* 1969, fig. 11.7; Sagona 2015a, pp. 63, 187, 342, fig. 1:90:3, from Punic period deposit, even if this item has a smaller diameter and a sinuous, external profile.

Local plain ware slipped 7. 1202/3. Carinated bowl (FIG. 6.6). Cfr. above, n. 3 and Sagona 2015a, pp. 156, 303, fig. 1:51:5 residual in 1st-cent. BCE-1st-cent. AD deposit.

Local plain ware slipped and painted 8. 1202/2. Open shape (Fig. 6.7).

Local handmade ware

9. 1202/4. Pot (Fig. 6.8).

Quercia 2002, 407-409, fig. 1, variant A10, handmade "*olla*"; the dating in Malta ranges from the Punic/ Hellenistic period onwards; Sagona 2015a, pp. 42, 279, fig. 1:27:3-4. For an excellent comparison from Ghizène (Jerba), see Ben Tahar 2014, p. 68, fig. 10.2, from a sealed 4th-cent. BCE level.

SU ZTN06/548 (Area B): Pure 4th-cent. BCE fill of a possible vine trench (555), composed of 12 diagnostic and 88 undiagnostic sherds (two of them are imported fabrics, see PL. VII,2).

Imported Attic (?) red-figure ware

10. 548/15. Palmette lekythos (FIG. 7.1).

Ivanov 1962/63, pl. 50, no. 111 (from Apollonia Pontica). In shape, most similar to Robinson 1950, pl. 110, nos. 100, 110, 161; for the high largest diameter, see the smaller *lekythos* pl. 112, nos. 128. All first half of the 4th cent. BCE, nos. 110 and 161 second quarter of this century (description and comparisons by W. van de Putt, Nederlands Instituut Athens). For the occurrence of palmette *lekythoi* in Maltese funerary contexts of Late Phase III-IV (410-300 BCE), see Sagona 2002, p. 57, notes 168-169; for the Tas-Silġ sanctuary see Sagona 2015a, pp. 85, 374, fig. 1:122:13.



FIG. 7. Pottery from deposits of Period 2. 1.-12. ZTN06/548 (nn. 10-21). 13. ZTN06/1122 (n. 27).

Local plain ware slipped 11. 548/3. Trefoil jug? (FIG. 7,2) 12. 548/8. Trefoil jug? (FIG. 7,3) Sagona 2002, p. 664, fig. 344, jug Form III:1?

13. 548/6. Closed shape (FIG. 7,4). Published: FACEM – http://facem.at/m-114-9.

Local plain ware slipped and painted 14. 548/1. Carinated basin (PL. VII,8; FIG. 7,5). Published: FACEM – http://facem.at/m-115-3. Similar to *Missione Malta* 1970, p. 37, fig. 14.9-10, from "fossa II", 325-300 BCE.

15. 548/2. Amphora (FIG. 7,6). Published: FACEM – http://facem.at/m-115-4.

Local handmade ware

16. 548/14. Pan with lug handle (FIG. 7,7).

Quercia 2002, pp. 414-415, fig. 4, variant D4, at Tas-Silġ mostly handmade and without grip, see also Sagona 2015a, pp. 42, 141, 283, fig. 1:31:1-6, all from 1st-cent. BCE-1st cent. AD deposits; Sagona 2002, p. 665, fig. 345, pan Form III-IV:2. For Sulcis see Campanella 2008, pp. 195-197 (cistern fill with late 5th- to 3rd-cent. BCE material). For Carthage see Mansel 2007, pp. 433-435, fig. 228, here from contexts date from the late 8th to the 3rd cent. BCE. At *Motya*, pans characterise the later 5th-4th-cent. BCE handmade repertoire (Orsingher 2011, p. 127, note 191). For a comparison from a sealed 4th-cent. BCE level excavated at Jerba (Ghizène) see Ben Tahar 2014, p. 68, fig. 10.4. For an in-depth discussion of the diachronic documentation of pans in the Phoenician-Punic Mediterranean see Cavaliere 2010, pp. 38, 43, with references therein.

17. 548/9. Open shape (FIG. 7,8).

18. 548/7. Large open shape (FIG. 7,9).
Published: FACEM – http://facem.at/m-116-2.
For an identical profile, here identified as a plate, see Ben Tahar 2014, p. 68, fig. 10.5, from a 4th-cent. BCE deposit.

19. 548/5. Carinated basin? (FIG. 7,10) Published: FACEM – http://facem.at/malta-hp-1.

20. 548/4. Deep storage vessel? (Fig. 7,11) Mansel 2011, pp. 364-365, fig. 6.6, here from a mid-7th-cent. BCE context.

21. 548/10. Large container of squared shape? (FIG. 7,12)

SU ZTN06/1192 (Area C): Fill of vine trench 1194 with only one small fragment.

Local plain ware slipped 22. 1192/1. Bowl (FIG. 6,9).

SU ZTN06/1119 (Area C): Associated with a channel-like structure, contains four diagnostic and 18 undiagnostic fragments among which two body sherds of imported amphorae attributed to *Corkyra* (ION-ADR-A-1, PL. VII,1) and an Eastern Calabrian fabric (CAL-A-9, PL. VII,5)

Local painted ware slipped and smoothened

23. 1119/3. Bowl (Fig. 6,10).

Quercia 2004-2005, pp. 343, 346, fig. 7.2, 5th-3rd cent. BCE; *Missione Malta* 1969, pp. 51-52, fig. 9.14; *Missione Malta* 1970, p. 65, fig. 19.7-8, form c) dated to the 6th-4th cent. BCE. The decoration has been interpreted as imitation of Ionian-Greek tradition (Ciasca 1999, p. 77, fig. 8).

Local plain ware slipped

24. 1119/2. Basin (FIG. 6,11).

Sagona 2015a, pp. 59, 160, 309, fig. 1:57:4, from 1st-cent. BCE-1st-cent. AD deposit.

Imported plain ware, Strait of Gibraltar

25. 1119/1. Amphora (PL. VII,7, FIG. 6,12)

Fabric similar to FACEM - http://facem.at/cde-a-1.

Of Ramon's T-11.2.1.4, production of the area of the Strait of Gibraltar of the last third of the 5th and the early 4th century BCE (Ramon 1995, pp. 236, 566, fig. 203). Recent research undertaken in the Gaditanean area has shown that this particular shape is related to workshops of the bay of Cádiz (Sáez Romero – Montero Fernández – Díaz Rodríguez 2005, pp. 488-489; Sáez Romero – Muños Vicente 2016, p. 27, fig. 4). Up to my knowledge, the only Andalusian amphorae of type T-11.2.1.4 so far published for the central Mediterranean area comes from the western necropolis of Himera (Bechtold – Vassallo 2018, p. 147, cat. 254, pl. 23.6). The steadily increasing number of 5th cent. BCE amphorae, generally of Ramon's earlier type T-11.2.1.3, attested in western Sicily and most of all in the *emporion* of Himera has to be linked to an important commercial route leading from the production area of salted fish conserves located in the area of the Straits of Gibraltar to the consumption markets in Sicily and Greece (Bechtold – Vassallo forthcoming, pp. 40-41). The identification of a late 5th-early 4th-cent. BCE fish amphora in a rural site at Malta is highly emblematic in view of the island's integration into international trading routes via ports of call most probably of the northern coast of Sicily or in Greece itself.

Local handmade ware 26. 1119/4. Pan (not illustrated).

Cfr. above, n. 16.

SU ZTN06/1122 (Area C): 4th-cent. BCE deposit with one diagnostic and 15 undiagnostic pieces among which two body sherds of imported amphorae from the Ionian-Adriatic area (ION-ADR-A-5, PL. VII,3) and Eastern Calabria (CAL-A-9, PL. VII,5).

Local plain ware slipped and smoothened

27. 1122/2. Kylix or deep cup (FIG. 7,13).

Quercia 2011, pp. 439-440, fig. 2.1-2, very frequent in Maltese funerary and sacred contexts of the late 5th and most of all of the 4th-3rd-cent. BCE; for the latest on Tas-Silġ see Sagona 2015a, pp. 49, 338, fig. 1:86:1-3 with comparisons in Melitan tombs of phases III-IV.

4.4.2. Period 3 (late 2nd-1st cent. BCE)

SU ZTN06/1199 (Area C): later 2nd-1st-cent. BCE foundation fill with only two diagnostic and two undiagnostic fragments.

Dating period (late 2nd-1st cent. BCE) Local cooking ware 28. 1199/2. Pot (FIG. 8,2).

Residuals Local plain ware slipped 29. 1199/1. Kylix or deep cup (FIG. 8,1). Cfr. above, n. 27

SU ZTN06/549/16 (Area B): Rubble levelling fill "sealing" a later phase of wall 508, 14 diagnostic and 81 undiagnostic elements among which one imported amphora (Calabria unidentified? PL. VII,6).

Dating period (late 2nd-1st cent. BCE) Local fine ware 30. 549/14. Bowl? (FIG. 8,3) Close to Sagona 2002, p. 84, fig. 349.4, bowl Form VI: 4c (100 BCE-50 AD).

Local plain ware

31. 549/4. Bowl (Fig. 8,4).

32. 549/5. Bowl (Fig. 8,5).

33. 549/10. Bowl (Fig. 8,6).

34. 549/8. Bowl (Fig. 8,7).

35. 549/9. Bowl (FIG. 8,8).

Quercia 2011, pp. 440-442, fig. 2.7, most common second half of the 2nd-1st cent. BCE bowl among the early Roman finds from Tas-Silġ, never smoothened and sometimes provided with a rough slip. For similar shapes see also Anastasi 2012, pp. 31-32, fig. 3.24-25.

36. 549/11. Plate (FIG. 8,9).

37. 549/7. Plate, externally traces of pinkish slip (FIG. 8,10).

Quercia 2011, pp. 436-437, fig. 1.4, type introduced probably already during the later 4th cent. BCE, but most are characteristic of late 3rd-and 2nd-cent. BCE deposits. Surfaces covered with a rough slip or left undecorated; *Missione Malta* 1969, p. 56, fig. 11.22, "m" usually unslipped or with traces of rough slip, 3rd-2nd-cent. BCE. Anastasi 2012, p. 31, fig. 3.15.

Local cooking ware

38. 549/13. Pot (Fig. 8,11).

Close to Quercia's type B5 (2002, 410-41, fig. 2); furthermore Sagona 2015a, pp. 75, 207, 367, fig. 1:115:3, from 1st-cent. BCE-1st-cent. AD deposit; Anastasi 2012, pp. 34-35, fig. 5.41.

Residuals (?)

Local plain ware

39. 549/16. Deep bowl (FIG. 8,12).

Quercia 2004-2005, p. 343, fig. 7.3; Quercia 2011, pp. 339-340, fig. 2.3, always undecorated, slipped and/ or smoothed, late 5th to 3rd cent. BCE; Sagona 2015a, pp. 59, 161, 310, fig. 1:58:4, from 1st cent. BCE-1st cent. AD deposit.



FIG. 9. Pottery from deposits of Period 3. 1.-2. ZTN06/1199 (nos. 28-29). 3.-15. ZTN06/549 (nos. 30-42).

40. 549/12. Carinated bowl (FIG. 8,13). Cfr. above, n. 1.

Local plain ware slipped 41. 549/6. Basin? (FIG. 8,14).

Local painted ware slipped 42. 549/15. Stemmed incense cup? (FIG. 8,15) Sagona 2002, pp. 60, 665, fig. 345, Form III-IV:1a, characteristic of the local 4th cent. BCE repertoire. For a good comparison see Vidal González 1996, p. 60, n. 88. SU ZTN06/2107 (Area G): 1st cent. BCE fill of sealed vine trench 2116. Contains 18 diagnostic and about 58 undiagnostic fragments, all of local fabric.

Local fine ware 43. 2107/9. Carinated bowl (Fig. 9,1) 44. 2107/10. Bowl? (Fig. 9,2)

Local plain ware
45. 2107/11. Plate (FIGS. 9,3; 10,6).
For the incised inscription "LT" see below, section 5.
For the type see Quercia 2011, p. 436, fig. 1.6, from the 1st cent. BCE onwards.
46. 2107/4. Plate (FIG. 9,4).
Close to Quercia 2011, p. 436, fig. 1.6 (for the rim profile), from the 1st cent. BCE onwards, even if the slightly concave underside of the vessel is reminiscent of earlier shapes (e.g. fig. 1.1-2). Good comparisons are published by Sagona 2015a, pp. 189, 345, fig. 1:93:7, 192, 349, fig. 1:97:6, both from 1st cent. BCE-1st cent. AD deposits.

47. 2107/5. Plate (FIG. 9,6). Quercia 2011, p. 436, fig. 1.2-4, 4th-3rd or 2nd cent. BCE?

48. 2107/2. Bowl (Fig. 9,5).

4 more rim fragments of the same shape.

Close to Quercia 2011, p. 440, fig. 2.7, second half of the 2nd-1st cent. BCE; Sagona 2015a, pp. 60, 177, 318, fig. 1:66:1-3, all from 1st cent. BCE-1st cent. AD deposits; Anastasi 2015, pp. 479-480, fig. I.43, bowl type 6, 3rd cent. BCE-1st cent. AD.

49. 2107/6. Bowl (FIG. 9,7)
50. 2107/7. Bowl (FIG. 9,8).
Quercia 2011, p. 440, fig. 2.8, second half of the 2nd-1st cent. BCE.

Local plain ware slipped 51. 2107/8. Bowl (Fig. 9,9). See above, n. 45.

Local plain ware smoothed 52. 2107/3. Bowl (FIG. 9,10). Close to Quercia 2011, p. 440, fig. 2.4, 5th-3rd cent. BCE; Sagona 2015a, pp. 59, 162, 311, fig. 1:59:7, from 1st cent. BCE-1st cent. AD deposit; Anastasi 2012, pp. 31-32, fig. 3.21.

Local cooking ware 53. 2107/1. Lid (FIG. 9,11). Bechtold 2007, pp. 424-425, of Vegas' F.70, fig. 222, cat. 2376, at Carthage documented from the late 3rd cent. BCE onwards.

Local handmade ware 54. 2107/13. Pan (FIG. 9,12). Cfr. above, n. 16.

55. 2107/12. Deep vessel (FIG. 9,13).



FIG. 9. Pottery from deposit of Period 3. 1.-13. ZTN06/2107 (nn. 43-55).

5. Inscribed potsherds

Of the eight areas under investigation, Areas B, C, F, G, H, and possibly D yielded pre-firing incisions on pottery sherds. Several of these fragmentary incisions are Punic letters, dated by their form to the 3rd-2nd cent. BCE, identified on diagnostic pottery pieces. At least another two inscriptions are known from the 1970s excavations.⁸³

A fragmentary bowl of local plain ware, 1043/1 (Area C) bears two Punic graphemes, a lamed (a diagonal-to-vertical stroke) and a taw, altogether flanked by ample spaces devoid of any incised writing (Fig. 10,1). The latter indicates that these two graphemes were the sole incisions on this bowl. The best philological conclusion is to read the inscription as "LT", which turned up in considerable numbers on ceramic sherds at the multi-period sanctuary site of Tas-Silg in Marsaxlokk, whilst two other instances are known from the farmstead at San Pawl Milqi in northern Malta.⁸⁴ This type of inscription has been argued to stand as an abbreviation for LTR(W)MH, meaning "for the offering", as suggested by the analogous examples of the letter *taw* incised on ceramic vessels at Masada, Israel.⁸⁵ Hence, it is a possible notion that the pottery vessel in question could have been produced and reserved for the use of offerings. Similar fragmentary inscriptions with two or more Punic graphemes are observed on pottery sherds from Area F: one on a rim fragment of a plate of local plain ware (3082/1) and another on a base fragment of bowl or plate of local plain ware (3084/1) (FIG. 10,2 and 3). The fragmentary state of either sherd, however, prohibits any conclusions, and the possibility of 3082/1 to bear another "LT" abbreviation is remote at best. Area G yielded a fragmentary rim of a plate of local plain ware (2107/11), retrieved from a late 2nd/1st-cent. BCE context (2107) (Fig. 10,6).⁸⁶ Like 1043/1 above, this rim sherd bears what seem to be the Punic *lamed* and *taw*, again flanked by spaces devoid of any writing and also likely to read "LT". A sherd belonging to a 3rd/2nd-cent. BCE squat cooking vessel with horizontal loop handles recovered in 1972 from that campaign's trench C preserves the letter lamed and taw but the piece is fragmentary (FIG. 10,4).87

A smaller rim fragment of a bowl of local plain ware (4049/1) from Area H bears three incised downstrokes of Punic graphemes similar to the above specimens (FIG. 10,5). The graphemes can either stand for a *lamed* and a *taw*, or else a *resh* and a *taw*. The former reading is highly likely the "LT" abbreviation as in 1043/1 and 2107/11, whereas the reading "RT" could be part of a longer inscription. One possible solution for the latter would be that "RT" stands for the final two letters of the name of the deity Astarte (*štrt*). Incidentally, a votive inscription, *prima facie* to Astarte, was discovered in one of the small expeditions of 1976 at our site, from that campaign's trench T (FIG. 10,7).⁸⁸ The sherd is also part of a cooking bowl with an inscription similar to the ones recovered at Tas-Silġ.⁸⁹ The likelihood that our highly fragmentary inscriptions pertained to longer inscriptions invoking deities, particularly Astarte, is not to be excluded. Their presence at a site linked with the cultivation of vines, as they are at the San Pawl Milqi agricultural establishment, is not anomalous if we assume, on the basis of evidence from elsewhere, that the annual harvest was accompanied by celebrations and religious rituals.⁹⁰

88 Bonanno – Vella 2012, pp. 15-16.

⁸³ Frendo 1999; Anastasi 2012, p. 34, fig. 5.41.

⁸⁴ For the San Pawl Milqi examples, see Garbini 1965, p. 159, Pl. 10.1, 72.2; Garbini 1967, p. 77, Pl. 51.4.

⁸⁵ See Frendo - Mizzi 2015, p. 547 and references there. See also Frendo 1996.

⁸⁶ This paper, cat. n. 45, FIG. 10,3.

⁸⁷ Anastasi 2012, p. 34, fig. 5.41.

⁸⁹ On the contrary, Frendo (1999) read a possible disjointed *šin* as two letters, namely as a *nun* and as an *'ayin*, and thus suggested an alternative reading: a votive inscription to the composite deity 'Anat-Astarte.

⁹⁰ Azzopardi 2014, pp. 234-235. Vine harvests were associated with rituals and festivals in the Near East; see Zamora 2005. On the Roman period see Thurmond 2017, pp. 218-219.



FIG. 10. Inscribed potsherds: 1. 1043/1, 2. 3082/1, 3. 3084/1, 5. 4049/1, 6. 2107/11, 4. and 7. are from the 1970s excavations.

6. CONCLUSION

The on-going excavations at the villa site in Żejtun have lived up to the original expectations, providing data for activity in a rural setting otherwise largely known through a number of rock-cut tombs in the vicinity and, more importantly, evidence that clearly precedes the setting up of the villa establishment.⁹¹ The site appears to have attracted human habitation already in the Late Bronze Age if one, possibly two, rock-cut pits, already excavated in the course of the 1970s' campaigns, are to be interpreted as silos of a type known from elsewhere.92 Pottery from the Late Bronze Age and the archaic period has also been recognized, as residual sherds, at Żejtun. The major novelty of the excavation project remains the discovery of the vineyard at a site which, like several others in the archipelago, is known exclusively for the production of olive oil that would appear to have reached a peak by the 3rd or 4th cent. AD.93 What is certain is that the transition from vines to the production of olive is clear at our site and is firmly placed at the end of the Late Republican period. Other places in the Punic western Mediterranean are faced with the problem of continuous exploitation of the same rural sites, in particular in Ibiza, where the "Punic"/"Roman" divide is more apparent than real.⁹⁴ At Żejtun, even if the data available so far put the vineyard's last phase of use in the Roman period, the possibility remains that the site's connection with the exploitation of the countryside started earlier - the structural remains and a press bed from the 5th or 4th cent. BCE would suggest so, as does the choice of rock-cut trench technology which finds good parallels in Punic Ibiza. Further investigations are required, however, to clarify this matter.

It is worth considering by way of conclusion the significance of the Żejtun vineyard. If we were to take a purely local view it could be suggested that the wine (rather than the grapes) produced here was meant for local domestic consumption or, possibly, to quench the thirst of the goddess or those who feasted in apposite rituals at Astarte's/Juno's precinct at Tas-Silg.⁹⁵ There is plenty more evidence to show that wine from abroad was being imported and was the preferred drink for celebration at that major sanctuary site.⁹⁶ If we were to consider a regional view, instead, we could think of a scenario where Malta produced a vintage, a desirable commodity which was sought after abroad for qualities that are yet to be defined – a classic example of the "coal to Newcastle" syndrome characteristic of ancient trade.⁹⁷ This suggestion is borne by the fact that one pot type – an elegant table amphora – produced in Malta certainly between the 4th and 2nd cent. BCE has turned up abroad: in Sardinia, western Sicily, Carthage, Pantelleria, Utica, Jerba, Leptis Magna and Sabratha.⁹⁸ Of particular interest in this distribution is the area of the south central Mediterranean to which the Maltese islands appear to have been linked at this time – participants in what can be termed "a maritime small world", micro-regions brought together by seaborne connectivity.⁹⁹ This view also ties in nicely with the significant innovation that from the end of the 3rd cent. BCE to the later 1st cent. BCE saw Malta (*Melita*) mint its own coins with polyglot legends in Punic, Greek or Latin script, followed by Gozo (*Gaulos*)

⁹¹ Sagona 2002, gazetteer nos 737-752; Bonanno – Vella 2012, pp. 10-11.

⁹² We have in mind the setting of the Bronze Age site at Tal-Mejtin near Luqa which is not a naturally defendable hilltop plateau as Bronze Age sites in Malta usually are (Evans 1971, p. 24).

⁹³ Anastasi - Vella forthcoming.

⁹⁴ van Dommelen - Gómez Bellard 2008, p. 66.

⁹⁵ There is evidence, currently awaiting publication, for two grape seeds occurring in earlier deposits in Malta and Gozo (dated by radiocarbon to 997-821 cal. BCE and 514-316 cal. BCE respectively).

⁹⁶ Bruno 2004, pp. 113-114. Imported amphorae were found at the Żejtun site too: see section 4, above, note 71.

⁹⁷ On this see Foxhall 2005, pp. 234-235. Traditionally the claim has been that despite poor soil and lack of water generally, the temperature in Malta is ideal for growing vines.

⁹⁸ Anastasi 2015, pp. 152-155, table 11 on pp. 159-160; Töpfer 2015, p. 931 notes 23-25 and references therein.

⁹⁹ The definition is from Tartaron (2013, p. 190).

which minted coins with Greek legends alone.¹⁰⁰ Even if the circulation of the coins was largely limited to the islands, the minting does suggest that the exchange was significant economically and that the coins, especially those of Malta, with their choice of religious symbols transcend nicely that Punic/Roman divide. The picture that emerges overall is one of the Maltese as enthusiastic hellenizers with their roots firmly set in a Phoenico-Punic tradition, all the time aware that the new tax collectors were Roman.

Whether it was solely wine that made our "small world" go round remains to be seen. To this end the excavations at Żejtun continue.

References

- Amadasi Guzzo et al. 2012 = M.G. Amadasi Guzzo F. Bonzano A. Cazzella W. Mayer M. Moscolini F. Notarstefano A. Pace C. Perassi D. Piacentini G. Recchia M.P. Rossignani M. Sannazaro G. Semeraro, *Tas-Silg. I millenni del tempio*, in «Archeo. Attualità del passato» 5, 2012, pp. 24-43.
- Anastasi 2010 = M. Anastasi, *Coarse and Fine wares: A Contextual Meaning of Pottery in Late Punic and Roman Malta*. 2 vols. Unpublished M.A. dissertation, University of Malta, 2010.
- Anastasi 2012 = M. Anastasi, The pottery from the 1972 excavation at the Żejtun Villa, in R. Abela (ed.), The Żejtun Roman Villa: Research Conservation Management, Malta 2012, pp. 26-41.
- Anastasi 2015 = M. Anastasi, *Small-Island Interaction: Pottery from Roman Malta*, Unpublished Ph.D. thesis, University of Oxford, 2015.
- Anastasi Vella forthcoming = M. Anastasi N.C. Vella, Olive Oil Pressing Technology in Roman Malta, in N.C. Vella A.J. Frendo – H.C.R. Vella (edd.), Essays on Malta and the Mediterranean in Honour of Anthony Bonanno, Leuven forthcoming («Ancient Near Eastern Studies»).
- Arnaud 2008 = P. Arnaud, Islands under Question: the Maltese Archipelago, Pantelleria and Marettimo and their Contexts in Classical Antiquity, in A. Bonanno – P. Militello (edd.), Interconnections in the Central Mediterranean. The Maltese Islands and Sicily in History, Palermo, pp. 21-36.
- Azzopardi 2014 = G. Azzopardi, *Religious Landscapes and Identities of the Maltese Islands in a Mediterranean Context:* 700 BCE - A.D. 500. Unpublished Ph.D. thesis, Durham University, 2014.
- Bechtold 2007 = B. Bechtold, *Die phönizisch-punische Gebrauchskeramik der archaischen bis spätpunischen Zeit*, in Niemeyer *et al.* 2007, pp. 327-431.
- Bechtold 2010 = B. Bechtold, *The Pottery Repertoire from Late 6th-mid 2nd Century BCE Carthage. Observations based* on the Bir Messaouda Excavations, Gent 2010 («Carthage Studies», 4).
- Bechtold 2013 = B. Bechtold, *Distribution Patterns of Western Greek and Sardinian Amphorae in the Carthaginian Sphere of Influence*, Gent 2013 («Carthage Studies», 7), pp. 43-107.
- Bechtold forthcoming = B. Bechtold, *La distribuzione di anfore da trasporto maltesi fuori dall'arcipelago: nuovi dati*, in N.C. Vella A.J. Frendo H.C.R. Vella (edd.), *Essays on Malta and the Mediterraenan in Honour of Anthony Bonanno*, Leuven forthcoming («Ancient Near Eastern Studies»).
- Bechtold Vassallo 2018 = B. Bechtold S. Vassallo, *Le anfore puniche dalle necropoli di Himera (seconda metà del VII fine del V sec. a.C.)*, Leuven 2018 («BABesch Suppl. Series», 34).
- Ben Tahar 2014 = S. Ben Tahar, Le site punique de Ghizène (Jerba). Premiers résultats des fouilles 2008-2009, in «RM» 120, pp. 59-98.
- Boissinot 2001 = Ph. Boissinot, Archéologie des vignobles antiques du sud de la Gaule: la viticulture en Gaule, in «Gallia» 58, 2001, pp. 45-68.
- Boissinot 2009 = Ph. Boissinot, Les vignobles des environs de Mégara Hyblaea et les traces de la viticulture italienne durant l'Antiquité, in «MEFRA» 121, 2009, pp. 83-132.
- Boissinot 2012 = Ph. Boissinot, L'archéologie des vignobles antiques en France, in A. Ciacci P. Rendini A. Zifferero (edd.), Archeologia della vite e del vino in Toscana e nel Lazio: Dalle techniche dell'indagine alle prspettive della biologia molecolare, Firenze 2012, pp. 41-54.

¹⁰⁰ The dating is tentative; see Perassi 2016.

- Bonanno 1977 = A. Bonanno, *Distribution of villas and some aspects of the Maltese economy in the Roman period*, in «Journal of the Faculty of Arts» 6(4), 1977, pp. 73-81.
- Bonanno Vella 2012 = A. Bonanno N.C. Vella, *The Żejtun Roman Villa: Past and Present Excavations of a Multi-Period Site*, in R. Abela (ed.), *The Żejtun Roman Villa: Research Conservation Management*, Malta 2012, pp. 8-25.
- Bonanno Vella 2015 = A. Bonanno N.C. Vella (edd.), *Tas-Silģ, Marsaxlokk (Malta) II: Archaeological Excavations Conducted by the University of Malta 1996–2005*, Leuven 2015.
- Borg 1922 = J. Borg, Cultivation and Diseases of Fruit Trees in the Maltese Islands, Malta 1922.
- Brun 2004 = J.-P. Brun, Archéologie du vin et de l'huile: De la préhistoire à l'époque hellénistique, Paris 2004.
- Bruno 2004 = B. Bruno, L'arcipelago maltese in età romana e bizantina. Attività economiche e scambi al centro del Mediterraneo, Bari 2004.
- Campanella 2008 = L. Campanella, Il cibo nel mondo fenicio d'occidente: un'indagine sulle abitudini alimentari attraverso l'analisi di un deposito urbano di Sulky in Sardegna. Collezione di Studi Fenici 43, Rome 2008.
- Cavaliere 2010 = P. Cavaliere, *Gli indigeni nella città punica di Olbia*, in *Meetings between cultures in the ancient Mediterranean* (International Congress of Classical Mediterranean. Roma 2008), pp. 36-46, http://www.bollet-tinodiarcheologiaonline.beniculturali.it/documenti/generale/5_Cavaliere_paper.pdf
- Ciasca 1985 = A. Ciasca, Note sulla distribuzione di alcune ceramiche puniche maltesi, in «Bulletin Archéologique du Comité des Travaux Historiques et Scientifiques» 19, 1985, pp. 17-24.
- Ciasca 1999 = A. Ciasca, Sicilia e Malta. Note su repertori ceramici a confronto, in A. González Prats (ed.), La cerámica fenicia en occidente: Centros de producción y areas de comercio. Actas del I Seminario Internacional sobre temas fenicios (Guadamar del Segura 1997), Alicante 1999, pp. 69-87.

Convers 2013 = L.B. Convers, Ground penetrating radar for archaeology, Walnut Creek 2013.

- Docter *et al.* 2012 = R. Docter N.C. Vella N. Cutajar A. Bonanno A. Pace, *Rural Malta: First results of the joint Belgo-Maltese survey project*, in «BABesch» 87, 2012, pp. 117-157.
- Evans 1971 = J.D. Evans, The Prehistoric Antiquities of the Maltese Islands: A Survey, London 1971.
- FACEM = V. Gassner M. Trapichler B. Bechtold (edd.), *Provenance Studies on Pottery in the Southern Central Mediterranean from the 6th to the 2nd c. BCE*, version 1 of 6.6.2011, http://www.facem.at/
- Farrell 2017 = M. Farrell, *Palynological Assessment of Samples from Żejtun Roman Villa, Malta*, Unpublished report, Malta, 2017.
- Foxhall 2005 = L. Foxhall, Village to City: Staples and Luxuries? Exchange Networks and Urbanization, in R. Osborne B. Cunliffe (edd.), Mediterranean Urbanization 800-600 BCE, Oxford 2005, pp. 233-248.
- Frendo 1996 = A.J. Frendo, What Do the Letters TT at Tas-Silġ, Malta, Mean?, in E. Acquaro (ed.), Alle Soglie della Classicità: Il Mediterraneo tra Tradizione e Innovazione: Studi in Onore di Sabatino Moscati, Pisa 1996, pp. 1127-1133.
- Frendo 1999 = A.J. Frendo, A new Punic Inscription from Żejtun (Malta) and the Goddess Anat-Astarte, in «PEQ» 13l, 1991, pp. 24-35.
- Frendo Mizzi 2015 = A.J. Frendo D. Mizzi, The Punic Inscriptions, in A. Bonanno N.C. Vella 2015, pp. 515-666.
- Garbini 1965 = G. Garbini, Segni punici (?) a San Paolo, in Missione Archeologica Italiana a Malta: Rapporto preliminare della Campagna 1964, Roma 1965, pp. 159-160.
- Garbini 1967 = G. Garbini, Le iscrizioni puniche, in Missione Archeologica Italiana a Malta: Rapporto preliminare della Campagna 1966, Roma 1967, p. 77.
- Grima Mallia 2011 = R. Grima J. Mallia, A Tale of Two Ridges: Topography, Connectivity and Use at Borg in-Nadur and Tas-Silg, in D. Tanasi – N.C. Vella (edd.), Site, Artefacts and Landscape – Prehistoric Borg in-Nadur, Malta, Monza 2011, pp. 225-250.
- Hadjisavvas 1992 = S. Hadjisavvas, *Olive Oil Processing in Cyprus from the Bronze Age to the Byzantine Period*, Nicosia 1992 («Studies in Mediterranean Archaeology», 99).
- Ivanov 1962-1963 = T. Ivanov, Apollonia. Les fouilles dans la nécropole d'Apollonia en 1947-1949, Sofia 1962-1963.
- Leckebusch, J. 2003. Ground-Penetrating Radar: A Modern Three-Dimensional Prospection Method, «Archaeological Prospection» 10, 2003, pp. 213–240.
- Mansel 2007 = K. Mansel, Handgemachte Ware und Schwerkeramik, in Niemeyer et al. 2007, pp. 432-448.
- Mansel 2011 = K. Mansel, *Carthage's vessel cupboard. Pottery of the Middle of the seventh century BCE*, in Sagona 2011b, pp. 349-372.

- 142 Nicholas C. Vella et alii
- Marlasca Martín López Garí 2006 = R. Marlasca Martín J.M. López Garí, Eivissa, la isla recortada. Las zanjas y recortes de cultivo deépoca púnico romana, in J. Morel J. Tresserras Juan J. Carlos Matamala (edd.), The Archaeology of Crop Fields and Gardens. Proceedings of the 1st Conference on Crop Fields and Gardens Archaeology, (Barcelona, 1-3 June 2006), Bari 2006, pp. 87-99.
- McGovern *et al.* 2013 = P.E. McGovern B.P. Luley N. Rovira A. Mirzoian M.P. Callahan K.E. Smith G.R. Hall T. Davidson J.M. Henkin, *Beginning of Viniculture in France*, in «Proceedings of the National Academy of Science of the United States of America» 110(25), 2013, pp. 10147-10152.
- Missione Malta 1968 = Missione Archeologica Italiana a Malta. Rapporto preliminare della Campagna 1968, Roma 1969.

Missione Malta 1969 = Missione Archeologica Italiana a Malta. Rapporto preliminare della Campagna 1969, Roma 1970.

Missione Malta 1970 = Missione Archeologica Italiana a Malta. Rapporto preliminare della Campagna 1970, Roma 1973.

- Niemeyer et al. 2007 = H.G. Niemeyer R.F. Docter K. Schmidt B. Bechtold (edd.), Karthago. Die Ergebnisse der Hamburger Grabung unter dem Decumanus Maximus, Mainz 2007.
- Notarstefano 2012 = F. Notarstefano, *Ricerche sui residui organici nella ceramica di età storica dal santuario di Tas-Sil*ġ, in «ScAnt» 18, 2012, pp. 119-130.
- Orsingher 2011 = A. Orsingher, La ceramica punica di IV sec. a.C. dalla fortezza occidentale, in L. Nigro (ed.), Mozia XIII. Zona F. La Porta Ovest e la Fortezza Occidentale, Roma 2011 («Quaderni di Archeologia Fenicio-Punica», 6), pp. 112-131.
- Perassi 2016 = C. Perassi, Melita e Gaulos: due identità territoriali a confronto attraverso il documento monetale, in A.L. Morelli – E. Filippini (edd.), Moneta e identità territoriali: dalla polis antica alla civitas medievale, Reggio Calabria 2016, pp. 197-212.
- Pikoulas 2012 = Y. Pikoulas, Oinon istoro (Narro il vino). La ricerca in Grecia (1990-2009), in A. Ciacci P. Rendini A. Zifferero (edd.), Archeologia della vite e del vino in Toscana e nel Lazio: Dalle tecniche dell'indagine alle prospettive della biologia molecolare, Firenze 2012, pp. 55-60.
- Quercia 2002 = A. Quercia, La ceramica da fuoco del santuario di Tas-Sil
 g (Malta): tipi attestati e proposte interpretative, in M.G. Amadasi Guzzo – M. Liverani – P. Matthiae (edd.), Da Pyrgy a Mozia. Studi sull'archeologia del Mediterraneo in memoria di Antonio Ciasca, Roma 2002 («Vicino Oriente. Quaderno », 3/2), pp. 403-424.
- Quercia 2004-2005 = A. Quercia, La ceramica punico-maltese del santuario di Tas-Silg: analisi tipologica e funzionale, in Un luogo di culto al centro del Mediterraneo: il santuario di Tas-Silg dalla Preistoria all'età Bizantina. Atti del seminario di studi (Roma 2005), in «ScAnt» 12, 2004-2005, pp. 335-354.
- Quercia 2011 = A. Quercia, *Typological and Morphological Remarks upon some Vessels in the Repertoire of Pottery in Punic Malta*, in Sagona 2011b, pp. 433-450.
- Ramon 1995 = J. Ramon Torres, Las ánforas fenicio-púnicas del Mediterráneo central y occidental, Barcelona 1995.
- Renfrew 1982 = J.M. Renfrew, *Early Agriculture in Melos*, in C. Renfrew M. Wagstaff (edd.), *An Insland Polity: The Agriculture of Exploitation in Melos*, Cambridge 1982, pp. 156-160.
- Robinson 1950 = D. Robinson, *Excavations at Olynthus, Part 13: Vases found in 1934 and 1938*, Baltimore 1950 («John Hopkins University Studies in Archaeology», 38).
- Sáez Romero Montero Fernández Díaz Rodríguez 2005 = A.M. Sáez Romero A.I. Montero Fernández J.J. Díaz Rodríguez, La producción alfarera de época púnica en Gadir (ss. VI-IV A.N.E.), in A. Blanco – C. Cancelo – A. Esparza A. (edd.), Bronce final y edad del hierro en la península ibérica. Encuentro de jóvenes investigadores, Salamanca 2005, pp. 479-501.
- Sáez Romero Muňos Vicente 2016 = A.M. Sáez Romero A. Muňos Vicente, Los orígines de las conservas piscícolas en el estrecho de Gibraltar en época fenicio-púnica, in D. Bernal Casasola J.A. Expósito Álavrez L. Medina Grande J.S. Vicente-Franqueira García (edd.), Un estrecho de conservas. Del garum de Baelo Claudia a la melva de Tarifa, Cádiz 2016, pp. 23-41.
- Sagona 2002 = C. Sagona, *The Archaeology of Punic Malta*, Leuven 2002 («Ancient Near Eastern Studies Supplement», 9).
- Sagona 2003 = C. Sagona, *Punic antiquities of Malta and other ancient artefacts held in ecclesiastic and private collections*, Leuven 2003 («Ancient Near Eastern Studies Supplement», 10).
- Sagona 2011a = C. Sagona, Observations on the Late Bronze Age and Phoenician-Punic Pottery in Malta, in Sagona 2011b, pp. 397-432.

Sagona 2011b = C. Sagona (ed.), *Ceramics of the Phoenician-Punic world: collected essays*, Leuven 2011 («Ancient Near Eastern Studies Supplement», 36).

Sagona 2015a = *The Pottery*, in Bonanno – Vella 2015, pp. 1-514.

Sagona 2015b = C. Sagona, The Archaeology of Malta from the Neolithic through the Roman Period, Cambridge 2015.

- Santangeli Valenziani Volpe 2012 = R. Santangeli Valenziani R. Volpe, Paesaggi agrari della viticoltura a Roma e nel suburbio, in A. Ciacci – P. Rendini – A. Zifferero (edd.), Archeologia della vite e del vino in Toscana e nel Lazio: Dalle techniche dell'indagine alle prospettive della biologia molecolare, Firenze 2012, pp. 61-69.
- Schmidt Bechtold 2013 = K. Schmidt B. Bechtold, *Fabrics of Malta*, in FACEM (version of 06/12/2013) (http://www.facem.at/project-papers.php).
- Spatafora 2012 = F. Spatafora, Interrelazioni e commistioni nella Sicilia nord-occidentale di età arcaica: I contesti funerari come indicatori archeologici, in F. Berlinzani (ed.), Convivenze etniche, scontri e contatti di culture in Sicilia e Magna Grecia. Aristonothos. Scritti per il Mediterraneo antico, Trento 2012, pp. 59-90.
- Spiteri Debono et al. 2016 = C. Spiteri Debono M. Rageot S. Cafisso N.C. Vella, *Report on the analysis of the pressing platform recovered from the Roman Villa at Żejtun, Malta*, Unpublished report, Malta, 2016.
- Tartaron 2013 = T.F. Tartaron, Maritime Networks in the Mycenean World, Cambridge 2013.
- Thurmond 2017 = D.L. Thurmond, From Vines to Wines in Classical Rome: A Handbook of Viticulture and Oenology in Rome and the Roman West, Leiden 2017.
- Töpfer 2015 = H. Töpfer, *Maltesische Keramik*, in Th. Schäfer K. Schmidt M. Osanna (edd.), *Cossyra I. Die Ergebnisse der Grabunger auf der Akropolis von Pantelleria/S. Teresa. Der Sakralbereich*, Raden/Westf. («Tübinger Archäologische Forschungen», 10), pp. 929-936.
- van Dommelen Gómez Bellard 2008 = P. van Dommelen C. Gómez Bellard, *Rural Landscapes of the Punic World*, London 2008.
- Vella et al. 2011 = N.C. Vella A. Borg D. Borg N.J. Cardona Ch. Chetcuti-Bonavita A. Corrado E. DeGaetano K. Fenech C. Sagona J. Samut-Tagliaferro I. Vella Gregory, *Report on the Excavation of a Punic Tomb*, in «Malta Archaeological Review» 5, 2011, pp. 16-22.
- Vella 2007 = N.C. Vella, Unravelling Past Agricultural Landscapes in the Maltese Islands: Making a Case for the Phoenician and Punic Periods, in A.M. Arruda – C. Gómez Bellard – P. van Dommelen (edd.), Sítios e Paisagens Rurais do Mediterrâneo Púnico, Lisbon 2007, pp. 69-85.
- Vella Anastasi forthcoming = N.C. Vella M. Anastasi, *Malta and Gozo: Pelagic Islands in a Sea of Connections*, in C. López Ruiz B. Doak (edd.), Oxford Handbook of Phoenician and Punic Studies, Oxford forthcoming.
- Vera Rodríguez Echevarría Sanchez 2013 = J.C. Vera Rodríguez A. Echevarría Sanchez, Sistemas agrícolas del I milenio a.C. en el yacimento de La Orden-Seminario de Huelva, in S. Celestino Pérez – J. Blánquez Pérez (edd.), Patrimonio Cultural de la Vid y el Vino, Madrid 2013, pp. 95-106.
- Verdonck 2016 = L. Verdonck, Detection of Buried Roman Wall Remains in Ground-Penetrating Radar Data using Template Matching, in «Archaeological Prospection» 23, 2016, pp. 257-272.
- Vidal González 1996 = P. Vidal González, *La isla de Malta en Época Fenicia y Púnica*, Oxford 1996, («BAR International Series», 653)
- Zamora 2005 = J.-Á. Zamora, *Jugo de cepas, sangre de uvas: la viticultura y la vinifacación en el antiguo Oriente Próximo*, in «Revista Murciana de Antropología» 12, 2005, pp. 69-99.