

REPORT ON THE EXCAVATION OF A PUNIC TOMB, BAJDA RIDGE, XEMXIJA (MALTA)

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The Excavation (NCV, AB, DB, NJC, EDG)

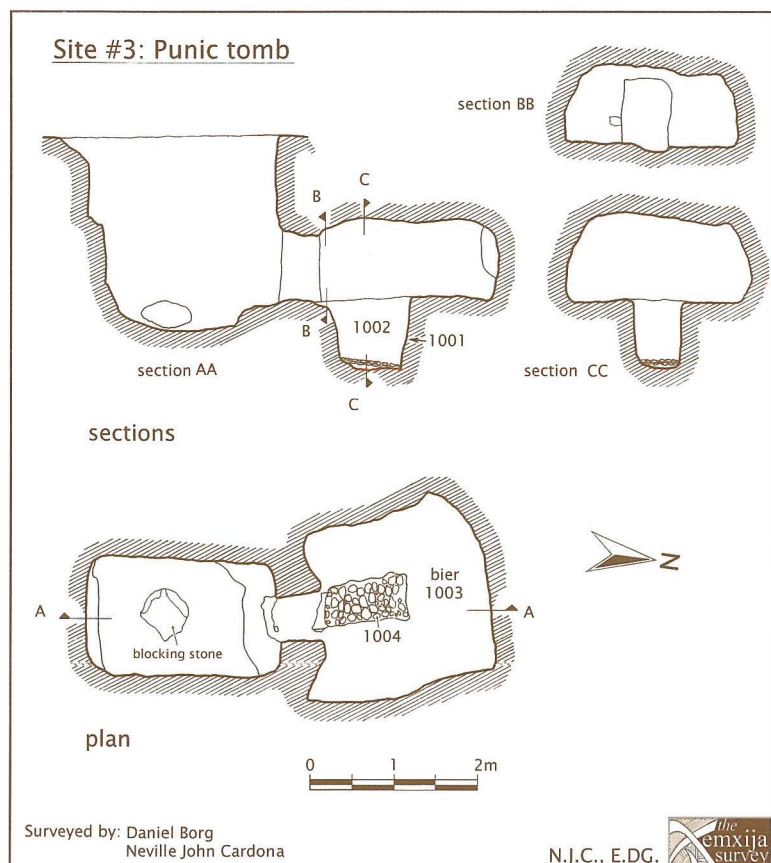
On 19th November 2001, while two of us (DB, NJC) were preparing a drawn record of the Punic tomb that is situated on Bajda Ridge, Xemxija, a small ceramic bowl (1002/1) was uncovered from below a few centimetres of soil that covered the inner part of the threshold to the rock-cut chamber (Fig. 1). An official from the Museums Department was informed of the discovery on the same day and a site inspection was carried out. It was realised that more artefacts could lie undisturbed within the chamber and a decision was taken to excavate the deposit. Authorisation for the Department of Classics and Archaeology, University of Malta, to undertake the excavation was received from the Director, Museums Department, and the excavation was completed on the 22nd November.

The tomb is located on the ridge, near a path that diverges eastwards from the track that links Pwales

valley to the Mistra valley. It is cut in the Upper Coralline limestone that outcrops in the area on a North-South axis and consists of a sub-rectangular chamber that is reached through a low entrance at the bottom of a rectangular shaft (Fig. 1).

The tomb appears in an inventory for the first time in 1996 when it was listed in the survey of archaeological sites prepared by Malta University Services for the Planning Authority by Anthony Bonanno in connection with the preparation of the North-West local plan for Malta. The tomb had been examined and photographed by one of us (NCV) in 1992. At the time, it was littered with debris and it was only with difficulty that a view of the chamber could be achieved through the entrance that was partly concealed by an irregular blocking stone. Late in 2000, members of the St Paul's Bay Heritage Group lifted the debris from the trench and cleared the area around the site.

Figure 1 Plan and sections of Punic tomb, Xemxija.



Excavation inside the chamber revealed a brown (Munsell 7.5YR 4/6), coarse sandy deposit SU 1002 filling a rectangular trench SU 1001 cut in the bedrock bier SU 1003. Several ceramic vessels of Punic date were found within deposit SU 1002 (Fig. 2). These included a trefoil-mouth jug found broken *in situ* (1002/2), a complete urn (1002/3), a bowl (1002/5), and a broken amphora (1002/4). Other finds from the same deposit included a metal earring (1002/6) and two fragments (1002/14, 1002/15) of what appear to be small bone rings or attachments (Fig. 4). A quantity of human and animal bones and molluscan remains were also recovered. Excavation of deposit SU 1002 revealed that the amphora had been placed vertically against the south side of the trench, resting above a layer of stone packing and fine limestone dust SU 1004 that lay at the bottom of the trench.



Figure 2 The trefoil jug, the urn and the amphora in situ inside the water trench of the Punic tomb, Xemxija.

Since the urn, the amphora and the jug were found to contain deposit inside them these were lifted and excavated in the laboratory. The molluscan remains and the bone assemblages were likewise studied in the laboratory. The ceramic material was cleaned using distilled water and awaits restoration by supervised undergraduates following the degree course in conservation at the Malta Centre for Restoration.

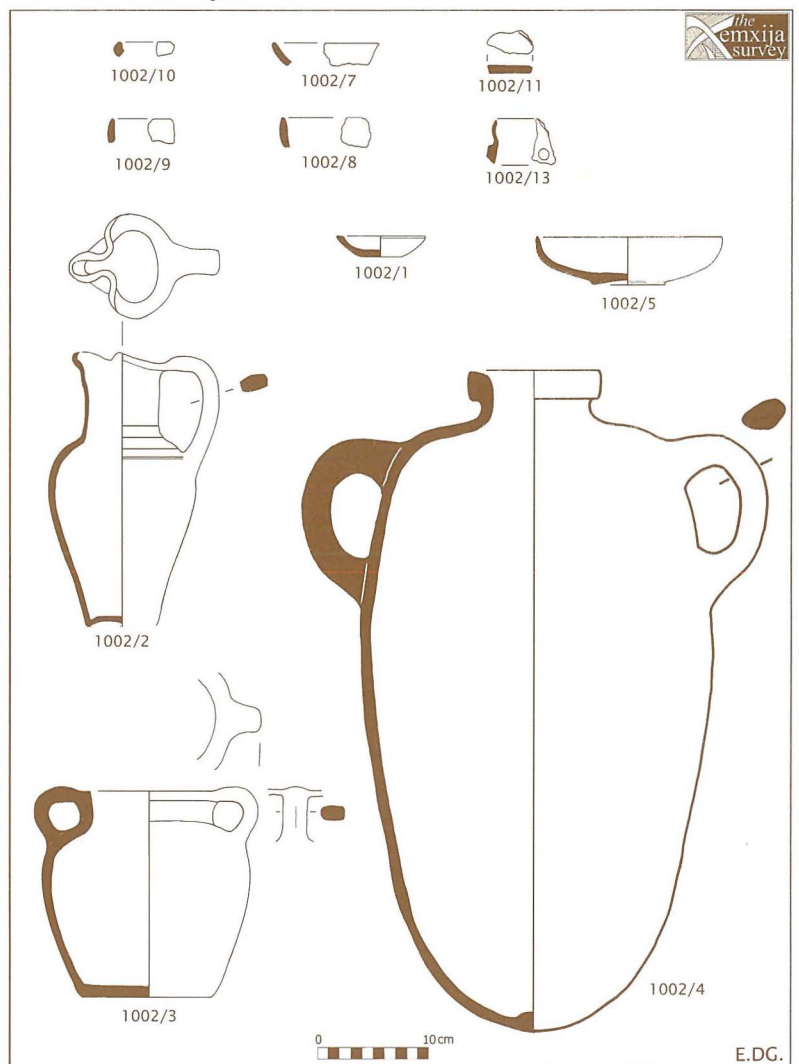
The Pottery (KCB, CS, IVG)

Among the sherds excavated, a number of fabrics and shapes were identified, which are characteristic of the Punic pottery found elsewhere on the Maltese islands. The crisp ware shapes, consisting of a trefoil-mouth jug and urn, together with the two soft brown bowls, are indicative of a 'classic' tomb repertoire, attributed to the Late Phase III-Early Phase IV Punic Period within the fourth century BC (after Sagona (2002)). The finds can be compared to tomb groups at Paola (M[useum] A[nnual] R[eports] 1964: 6, pl. 5; Sagona 2002, entry 335, fig. 95:9-12), and at Addolorata Cemetery, Tal-Horr (MAR

1960: 9, pl. 6; Sagona 2002, entry 670, fig. 239:1-9). The friable soft brown and soft orange sherds point towards an earlier date for the tomb, while the high-collared rim of the amphora becomes commonplace in the Late Phase IV Punic Period.

The pottery, through its analogies with tomb repertoires, can be separated and attributed to two clear chronological groups. It is possible that some pottery fragments are intrusive, which may be the case with regard to the earlier material (the well-eroded friable soft brown and soft orange sherds). The shape of the tomb – a variant of the large and wide, shaft and chamber tombs akin to Plan 7a-b devised by Sagona (2002) – is characteristic of an early Punic phase, possibly dating as early as the sixth century BC, and, judging by the extant repertoire of identifiable shapes, it experienced a late fourth century reuse.

Figure 3 The ceramic finds from the Punic tomb, Xemxija.



Catalogue of Pottery

Four distinct fabric ware types were identified, and named in accordance with Sagona's ware types (Sagona *et al.* 2000).

Friable Soft Brown

This fabric is characterized by a soft-fired friable consistency that has a soapy to powdery feel. The fabric has a dull sound. The surface is matt brown (5YR 6/8 Reddish Yellow) with a darker brown core (7.5YR 6/8 Reddish Yellow). This thin-walled coarse fabric easily fractures into hackly breaks due to the moderate amount of medium-sized, matt light orange inclusions that may be grog. The fabric is self-slipped and the inclusions are evident at the surface. All sherds in this fabric are heavily eroded.

Friable Soft Brown may be an earlier hand-made version of the more ubiquitous Soft Brown. The regular Soft Brown has been found at Tas-Silġ, Malta and is attributed to the Late Phase III - Early Phase IV Punic Period. However, no parallels of this particular fabric have been documented elsewhere.

Catalogue of Friable Soft Brown Shapes

(Fig. 3):

XMx01/1002/7

Rim sherd of a small, shallow conical-shaped bowl, possibly hand-made.

Diameter: 13 cm Range of Wall Thickness: 0.3 to 0.7 cm

XMx01/1002/8

Rim sherd of a small, shallow conical-shaped bowl,

Figure 4 The metal earring (left) and the worked bone fragments (right) from the Punic tomb, Xemxija. The scale is in millimetres.



possibly hand-made. A scratched line on the internal surface may be due to usage.

Diameter: approx. 8 cm Range of Wall Thickness: 0.3 to 0.7 cm

XMx01/1002/9

Rim sherd of a small, shallow conical-shaped bowl, possibly hand-made. A scratched line on the internal surface may be due to usage.

Diameter: approx. 8 cm Range of Wall Thickness: 0.3 to 0.7 cm

Five other body sherds were also found in this fabric.

Soft Orange

This fabric is characterized by a soft-fired clay that has a smooth texture. The fabric has a dull sound. The central core of the fabric is orange (5YR 7/6 Reddish Yellow), while the margins and surface are a lighter orange (5YR 6/8 Reddish Yellow). This thin-walled well-levigated fabric fractures into rounded well-eroded breaks. Probably wheel-made. Parallels of the Soft Orange fabric are found at Tas-Silġ and are attributed to the Late Phase III - Early Phase IV Punic Period.

Catalogue of Soft Orange Shapes (Fig. 3):

XMx01/1002/10

Rim sherd with everted lip, possibly of a jug or flask. Diameter: 13 cm Wall Thickness: 0.5 cm

XMx01/1002/11

Fragment of small, flat base with a red band painted on the outermost edge of the internal surface. Probably part of an open shape like a bowl.

Six other body sherds were also found in this fabric.

Soft Brown

This fabric is characterized by a soft-fired clay that has a soapy texture. The core and external surface are matt brown (7.5YR 6/8 Reddish Yellow) with a darker brown internal surface (7.5YR 7/8 Reddish Yellow). This thin-walled fine-textured fabric has irregular breaks and a dull sound. The fabric is thinly slipped and in the case of the medium-sized bowl is streak-burnished.

Soft Brown is probably contemporary to the 'classic' crisp ware mentioned below. Parallels of this ware type are found at Tas-Silġ.

Catalogue of Soft Brown Shapes (Fig. 3):

XXMX01/1002/1

Complete, small-sized shallow bowl with inverted round lip and flat base. Slightly under-fired, the surface has a thin pale slip, which is partially eroded. Wheel-made. A variant of this type of bowl has been found at Tas-Silġ.

Height: 2.1 cm Diameter of rim: 8.3 cm
 Diameter of Base: 3.4 cm Wall Thickness: 0.4 cm
 Depth of Bowl: 1.8 cm

XXMX01/1002/5

Medium-sized open bowl with simple tapered rim and slightly concave disc base. Self-slipped and streak-burnished throughout. Clean, sharp breaks. Wheel-made.

Height: 4.1 cm Diameter of Rim: 16.6 cm
 Diameter of Base: 6.4 cm Depth of Bowl: 3.5 cm
 Range of Wall Thickness: 0.3 to 0.7 cm

This bowl has parallels in the tomb repertoires and is attributed to the fourth century BC. They first appear in Phase III and continue well into Phase IV. In this respect, they are contemporary to the crisp ware trefoil-mouth jug and urn mentioned below.

Crisp Ware

This fabric is characterized by a hard-fired clay that has a distinctive clinker sound when tapped, hence its name. The fine-textured compact clay has a smooth feel on the surface. This fabric is not always evenly fired and has a grey core (10Y 6/1 Greenish Grey) and red to yellow margins and surfaces (5YR 6/8 to 7/8). The fabric tends to fracture in large, irregular sharp breaks. Although wheel-made, a moderate number of medium-sized, matt white inclusions, probably calcium grit, are found. The fabric is usually thin-slipped or self-slipped a reddish yellow colour (7.5YR 8/6). All the sherds are wheel-made. The trefoil-mouth jug has thin red (2.5YR 4/8 to 5/6) bands painted on its shoulders and neck.

	SU 1002 (water trench)	Amphora 1002/4	Urn 1002/3	Trefoil 1002/2
Cranium				1 fragment
Mandible	1 mentum			
Teeth	1 molar, 1 incisor, 2 premolars (one "juvenile")	1 premolar		1 incisor
Vertebrae	2 nd cervical fragment	✓		1 body
Sacrum	1 fragment			
Pelvis	✓			
Ribs	✓	✓		
Clavicle	✓			
Scapula	✓			
Humerus				
Radius	1 left tuberosity			
Ulna				
Carpals		1 left trapezoid		
Metacarpals				
Femur	1 right condyle			
Patella	1 right, 1 left			
Tibia				
Fibula				
Tarsals	1 right cuboid			
Metatarsals	1 right 5 th , 2 left 5 th , 1 left 2 nd	1		
<u>Phalanges</u>				
Proximal		6		
Intermediate		1		
Distal	2	3		
Unidentified fragments	✓	✓	✓	✓
Cremated fragments		✓	1	
Animal	✓	✓	✓	✓

*Table 1.
List of bones retrieved from the tomb.
✓= more than 10 fragments present in the sample.*

Extensive parallels of this fabric are found at Tas-Silġ, where this fabric is the dominant ware type. Tomb contexts suggest that it is the principal Punic ware from the late sixth century BC to the Romano-Punic period. Further chronological distinctions in crisp ware generally rely on changes in pottery shape or shifts in decorative features, such as the use of bands of red paint over the red or yellow slip.

Catalogue of Crisp Ware Shapes (Fig. 3):

XMx01/1002/2

Trefoil-mouth jug with ovoid-sectioned handle set straight from rim to shoulder. Flanged rim with pinched spout. Thick neck with a distinctive small swelling under the spout. Thin-walled. A cluster of three, thin red bands round the shoulder, single bands round the neck. Matt yellow slip. The base is concave, rising in the middle. Parallels to this jug are found in Sagona 2002: figs 95:11, 239:1, 9. Height: 25 cm Base: 7 cm Rim to Spout: 8.6 cm Outer Width of Mouth: 9.3 cm

XMx01/1002/3

Complete urn with two ovoid-sectioned strap handles attached at the rim and shoulder. Flat everted rim, angled down to the outer edge. Squat shape with flat base. Thick-walled. Well-fired. Parallels to this urn are found in Sagona 2002: figs 95:12, 239:5. Height: 18.7 cm Diameter of Rim: 14.3 cm Diameter of Base: 12 cm

The trefoil-mouth jug and urn together with the soft brown bowls have affinities with tomb repertoires that are attributed to the Late Phase III-Early Phase IV Punic Period, datable to the late fourth century BC.

XMx01/1002/4

Ovoid-shaped amphora with two handles joined at the shoulder. Almost horizontal carinated shoulders, short neck and distinctively thick high-collared rim. Wheel-ribbed interior. Probably an early appearance of the high-collared rim.

Parallels to this amphora are found in Sagona 2002: figs 95:9, 239:3, 7 and T2212 in Ramon Torres 1995: 179, figs 27, 153.

Height: 60 cm Diameter of Rim: 12 cm

XMx01/1002/13

Stump of handle, slight carination of shoulder, possibly from a jug or flask. Diameter at shoulders: approx. 16 cm

Remaining fragments include: two body sherds of a round, closed vessel, probably from a jug or urn (double band of red paint is on one of the sherds); four body sherds of a round, closed vessel, probably from a jug or urn; four other body sherds.

The Human Bones (JST)

Four groups of human bones were studied, those found in deposit SU 1002, those retrieved from within the amphora, those from the urn, and those

Table 2 Species-abundance matrix for land snails retrieved from the tomb with an indication of the habitat preferences of the species recovered. j= juvenile, u= ubiquitous, x= xeric, m= mesic, s= subterranean, v= on vegetation. The total number of shells includes juveniles.

SU	SU 1002	1002bag	Trefoil	Amphora	Urn	habitat
volume of sample (litres)	300	1.5	?	10?	1.3	
<i>Pomatias sulcatus</i>	84+3j	8+12j	9	115+51j	21	u
<i>Granopupa granum</i>		29		1		x
<i>Chondrula pupa</i>	1			3		u
<i>Vitrea</i> spp.		2				m
<i>Ceciliodes acicula</i>		3				s
<i>Gerussacia folliculus</i>	24	40+17j	9	371	24	m
<i>Rumina decollata</i>	137+45j	2+10j	2+6j	49+108j	5+5j	x
<i>Muticaria macrostoma</i>	8	9	5+1j	35	4	x
<i>Papillifera papillaris</i>	76	33+4j	47	319	62	u
<i>Trochoidea spratti</i>		9+3j	3	23	2	x
<i>Cernuella caruanae</i>	140	7	8	131+3j	9	u
<i>Caracollina lenticula</i>	10+1j	9+56j	6+4j	153		u
<i>Cochlicella acuta</i>		14+4j	1	35	6	u
<i>Theba pisana</i>	16	13+10j	2	8+19j	5+3j	u
<i>Eobania vermiculata</i>	55	f	2	14+11j	6	u
<i>Cantareus apertus</i>	17	1	1	25	3	v
<i>Cantareus aspersus</i>	1					v
TOTAL	620	296	106	1474	155	
diversity	12	15	11	12	11	

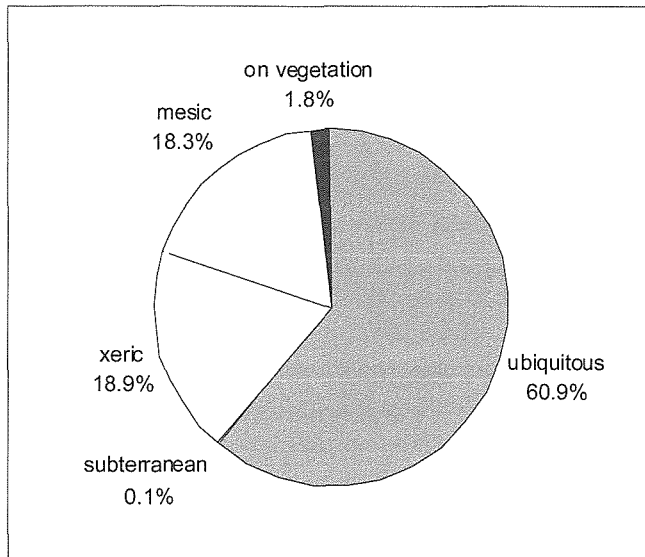


Figure 5 Percentage distribution of habitat-specific and ubiquitous land snails from the Punic tomb, Xemxija.

from the trefoil jug (Table 1). The bones were found to be in a very poor and fragmented state and together they constitute roughly less than one quarter of a skeleton. The total weight of the bones (including the animal bones) is 590 grams. No evidence of any anatomical articulation was noted. The bone group from the amphora revealed a few charred fragments and hand and foot bones, besides other bones. The presence of two left fifth metatarsals indicates the minimum number of adult individuals present in the tomb is two, one of which could be a male as suggested by large rough radial tuberosity. Moreover, the presence of a premolar tooth indicates the presence of a juvenile. This exception apart, the bones all belong to mature adults. Pathology was also noted. Attrition of the teeth with evidence of caries is present on a molar tooth, while an unusual concavity on the medial base of a left second metatarsal appears to be due to pressure erosion – probably from lateral dislocation of the 1st metatarsal – indicating arthritic changes at the first metatarsotarsal joint.

The Animal Bones (AC)

The assemblage of animal bones recovered from the tomb is small, containing 116 bones in total. Of these, 114 belong to microfauna (including amphibian and micromammals) and are probably of recent origin and, therefore, of no archaeological consequence. The remaining two bone fragments belong to macro mammals and consist of one ovicaprid phalange and the rib of an indeterminate species.

The Molluscan Remains (KF)

Introduction

A large number and variety of molluscs were collected from the Punic tomb. Most of these shells most probably found their way into the tomb with heavy rainfalls that washed them down from the surrounding slopes, together with small stones and soil. Therefore, they give some indication of the environmental conditions of the area above the shaft of the tomb.

Material and methods

SU 1002 was sieved through a 2.5 mm mesh on site by the excavators. Due to the large mesh size used, juveniles and smaller species are missing from this sample. Furthermore, the vast majority of snails collected after sieving were in fact large species that are easily picked out. The material found inside the trefoil jug, the amphora and inside the urn was dry-sieved in the laboratory using test sieves, the smallest of which had a 1 mm mesh. A 1.5 litre sub-sample of SU 1002 (“1002 bag”) was wet sieved and here the smallest sieve had a 0.5 mm mesh size. All material smaller than 2 mm from this sample was sorted under the microscope. Strangely, only fragments of the red-banded snail *Eobania vermiculata*, the goat snail *Cantareus apertus*, Caruana’s cernuella *Cernuella caruanae* and of the adult decollated shell *Rumina decollata*, were found. Compared to the overall amount of large shells retrieved, these appear to be underrepresented in the analysis of this sample. As this bag was originally intended to be a soil sample (as opposed to an environmental sample), any large components may, therefore, have been removed during sampling. It is thus uncertain, if any of the samples presents a complete qualitative or quantitative picture of the mollusc assemblage. However, some conclusions may nonetheless be drawn from the results of the various analyses taken together (Table 2).

General observations

Seventeen different species were found overall. The small 1.5 litre sample alone yielded 15 species, including small species that, predictably, were not recovered from the other samples processed using large mesh sizes. This wide variety of different species is indicative of a rather undisturbed generalised habitat (Evans 1972: 90-1). The low abundance of both the goat snail *Cantareus apertus* and the edible snail *Cantareus aspersus*, both of

which are normally abundant in agricultural areas, further indicates little, if any, cultivation in the vicinity. All species found are terrestrial snails. The presence of the subterranean species *Ceciliodes acicula* indicates that the deposit was in fact buried, while most of the other species recovered are indicative for an open country/garigue landscape (Giusti *et al.* 1995). Figure 5 shows the percentage distribution of the various snails. As expected, ubiquitous snails are the most abundant. In the Maltese Islands, these snails are found in most types of locally occurring habitats, both natural and anthropogenic (Schembri *et al.* 2000: 103). Since they also tolerate wide variations in environmental conditions, they are the least useful for reconstructing the environment (Gee and Giller 1991: 10). The habitat-specific species have nearly the same percentage occurrence; thus on the basis of these data, a xeric environment was as much present as one with leaf litter. Yet, despite the presence of mesic species that thrive in leaf litter, the absence of *Oxychilus draparnaudi* indicates a lack of humidity and dampness within the leaf litter. The location of the tomb being on a south-facing slope, this is no surprise. Also absent are any woodland species and, as may be expected, those associated with fresh water. Thus, if ever there was a woodland/maquis environment on this hill, it had certainly vanished by the time the tomb was opened and the first snails were washed in. In all, it seems that there was little change in the general environment from the time that runoff water started washing the snails into the tomb to the present.

Conclusion (NCV)

The excavation of the Punic tomb has provided the team with the opportunity of adding new information to the archaeological landscape of Bajda Ridge, Xemxija, while an extensive field survey was in progress. The evidence suggests that the tomb was disturbed at more than one instance in the past, the first possibly in the late fourth century BC when the ceramic repertoire was deposited in the tomb, replacing an older ceramic group. It is unclear whether the urn and the trefoil jug were intentionally placed above the broken amphora in the trench or whether they rolled off the bier, possibly through water action. The molluscan remains recovered suggest that the deposit that filled and covered the ceramic paraphernalia and the trench, accumulated through natural processes, aided by the fact that the blocking stone is irregular.

In view of this, it is difficult to read more into the discovery of a number of human phalanges inside the amphora, a practice that would appear to form part of a local burial rite in later centuries (pers. comm. Nathaniel Cutajar). Excavation of the debris that was noted inside the shaft in 1992 would perhaps have allowed the team to come up with evidence to sustain or refute the construction of events presented here.

It is unfortunate to finish this report on a sad note. In May 2002 vandals dismantled a stretch of rubble wall that members of the St Paul's Bay Heritage Group had patiently reconstructed, throwing stones and debris inside the tomb shaft. Entrance to the chamber is now blocked. The bedrock surrounding the tomb shaft was daubed with unsightly bright orange paint and the words "out" and "privet" (*sic*) can be easily made out. The damage done was reported in a circular released to the press (*The Times*, 25 May 2002) by the Museums Department who expressed dismay at such pointless damage.

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