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Butchery Waste or Ritual Sacrifice?

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4.5 A Dog's Head in a House Pit at the Early Iron Age Site of Verucchio. Butchery Waste or Ritual Sacrifice?

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Abstract

The settlement of Verucchio stands on a cliff in the Apennines, at 330 m a.s.l., characterised by an irregular plateau (Pian del Monte) surrounded by four hills not far from the Marecchia river. This area was occupied during the transition between the Late Bronze and the beginning of the Iron Age. During the 9th century BC, the protohistoric village became a central place for the nearby villages till the 7th century BC. After this period the village seems to have been scarcely populated. The site was again inhabited from the end of the 5th century, as testified by several buildings, including the famous House 4. The house is a rectangular-shaped building (20 x 18.5 m) and it is oriented along a NNE/SSW axis, divided into three rooms aligned on the eastern side (from north rooms A, B and C). During the recent archaeological excavations, carried out by the University of Pavia between 2012 and 2017, an oval ditch was recovered inside room C of the House 4 below the sub-foundations. The ditch develops along a NNE-SSW axis and contained fragments of Etrusco-Padano pottery (4th century BC), and abundant faunal remains including an upside-down dog skull. Excavations were carried out by the University of Pavia in 2011 and allowed to investigate three chronological phases of the inhabited area (D IX-VIII cent. BC, C VII-V cent. BC and B IV-III cent. BC). The archaeozoological analysis, still underway, involved a total amount of about 2700 remains. An interesting aspect of phase B is the presence of a young dog skull with deciduous dentition deposited in the house with other skeletal elements of domestic animals which could have several symbolic significances.

Keywords: dog, cut-marks, archaeozoology, Early Iron Age, Romagna, Northern Italy.

1 Introduction

The settlement of Verucchio rises on an Apennine cliff from which a ford of the river Marecchia to the north-west and a good part of the Adriatic coast to the east could be controlled, not far from Mount Titano that stands a few km south-east in a dominant position (Figure 1).

While for decades research was devoted to the famous necropolis of the Early Iron Age located at the steep sides of the plateau, for the settlement of Verucchio only synthetic reports of late-nineteenth century and preliminary news of some excavations conducted in the Sixties and Seventies of the last century were available.

The University of Pavia, in collaboration with the Soprintendenza Archeologica dell'Emilia-Romagna, launched the Verucchio-Pian del Monte Project in 2011 with the aim of updating the framework of the peuplement of the plateau between the first and second Iron Age (Harari *et al.* 2017). First a non-invasive field geomagnetic prospecting was carried out, which, despite the disturbances due to the intense urbanisation of the area, have produced a preliminary mapping full of anomalous signals, at least in part

attributable to the buried anthropic structures. The first field excavations (2012) were carried out for surveys north of Via Nanni, in the public gardens (Saggio Beta), where it was possible to document few evidences related to the Iron Age, mostly in secondary deposition, directly in contact with geological levels. South of Via Nanni, within the fenced area (Saggio Alpha), a section of a foundation wall, only partially excavated in the late 1970s, was brought to light (Figure 2).

The excavations were however concentrated inside a masonry building of the Late Classical age, already excavated, and restored by the Soprintendenza, with test pits that first concerned the three eastern rooms and extended in 2015 to three other rooms. Almost everywhere it has been possible to verify that the past excavations had completely removed the uppermost layers, related to the occupation of the masonry house, and preserved the lowermost levels, referable to the Early Iron Age. The oldest occupations lie directly on the geological substrate of the hill. It is a complex series of canals and ditches, necessary to ensure the static and drainage of the slope. A series of at least four shallow parallel grooves, altogether more than 11 m long and about 10 cm broad and north-south oriented, appear to be far from immediate interpretation. The

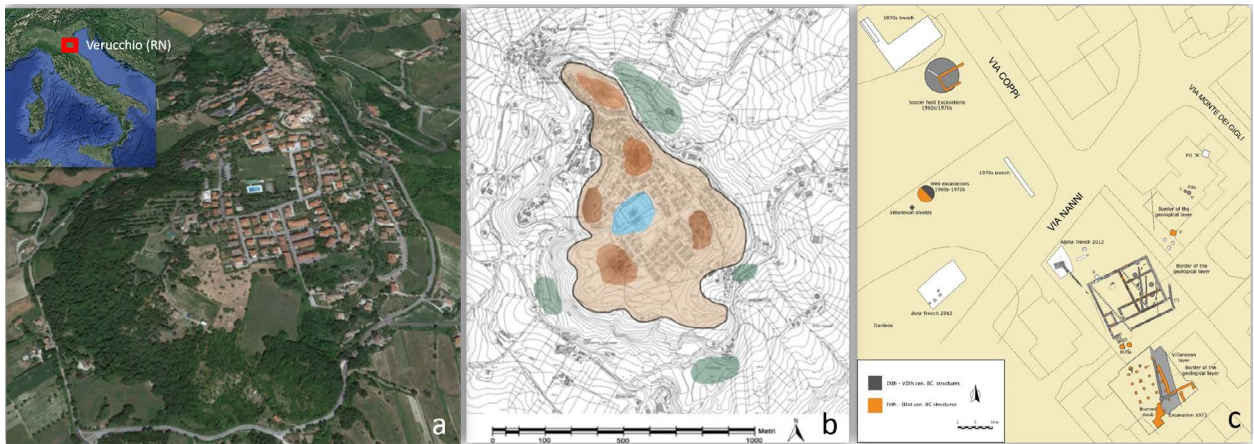


Figure 1. Location of the site of Verucchio (a) and the position of the archaeological area on the Plateau (Pian del Monte), (b). Maps of the most important archaeological evidence (c) (images are modified from Harari *et al.* 2017).

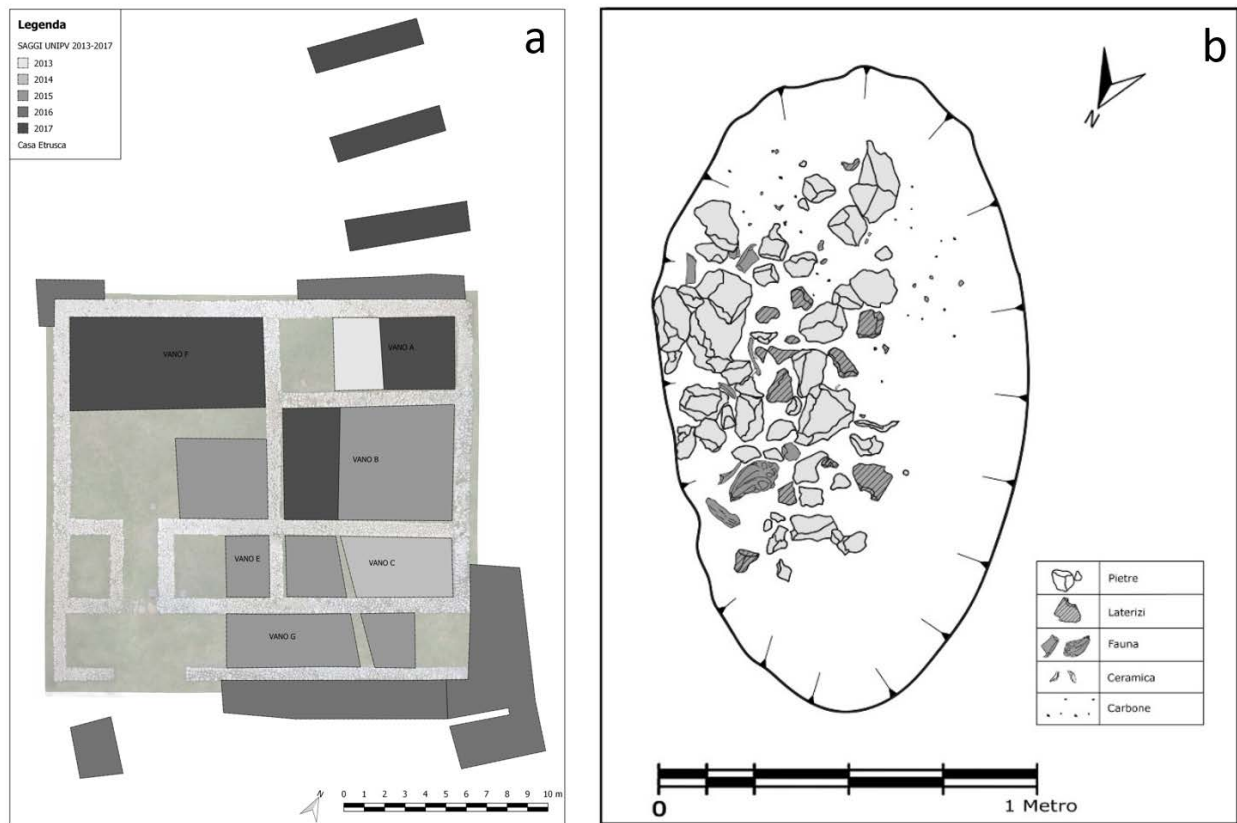


Figure 2. Map of the House 4 of Verucchio (a). Draw of the ditch (SU 1647) in the room C (b) (images are modified from Harari *et al.* 2017).

sections of these grooves are U-shaped, and the fillings are almost completely sterile.

On the left there are two large sub-excavated structures with the same north-south orientation. The two channels have been obtained inside a larger intervention, with wide V walls and stepped profile, up to 7–8 m wide and over 1 m deep for a length of about twenty metres. This evidence seems to document an impressive system of works which was useful for the

management of soil and water and was conceived in the framework of a clear delimitation of the settlement area.

This large structure built in the 9th century BC, was abandoned between the end of the 9th century and the beginning of the 8th century with a series of overflows rich in materials of possible domestic origin, such as charcoals, wooden, fauna and pottery remains. After the obliteration of the ditch, the presence of a small

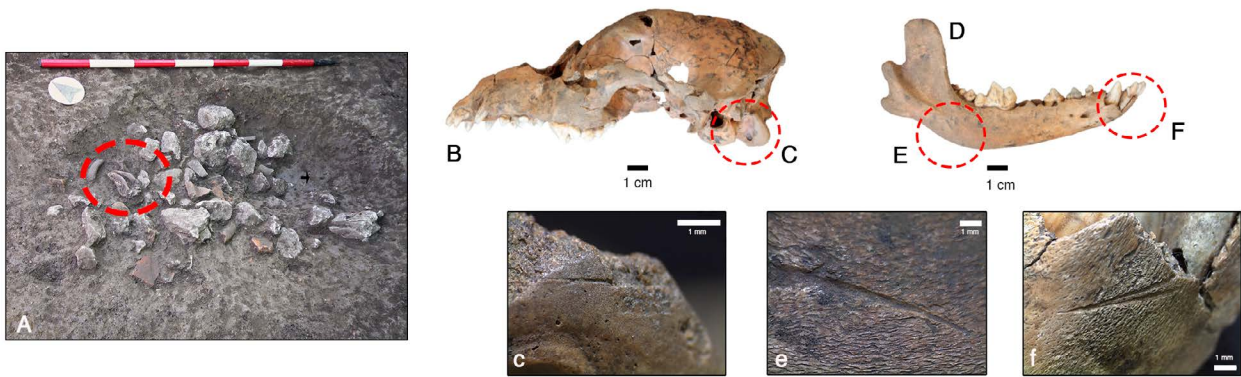


Figure 3. Pictures of the pit in the room C of the Late Iron age building of Verucchio (A) (courtesy of Zamboni and Rondini). The dog skull was in upside-down position. Left view of the skull (B). Disarticulation cut-marks are located on the occipital condyle (C-c stereomicroscope view). Right mandible (D) with cut-mark correspond to skinning activity (E-F, e-f stereomicroscope image) (Photos by U. Thun Hohenstein).

oval structure (8x4m) always oriented north-south was recorded. The absence of layers of occupation related to this phase, probably removed during the previous excavations, prevent other considerations. Some pottery fragments testify the occupation of the area during the late 8th and early 7th century BC (Zamboni 2018).

After an apparent hiatus of over two centuries, from the middle of the 7th to the end of the 5th century BC, the settlement at Pian del Monte shows a reoccupation only in the late-classic age, from the end of the 5th century BC. For which it concerns this recent phase, there is little information reported by the excavations of the seventies, when portions of masonry buildings were recovered, including the famous 'House of Verucchio 4'.

Precisely in this building, from a stratigraphic point of view, some postholes have been identified inside the Villanovan levels.

The only closed context attributable to this late phase is a large oval-shaped pit, recognised within room C, which was filled by a discharge of stones and bricks, with abundant domestic material, including faunal remains and pottery that can be dated to the manufacturing of the Padana Etruria between the late 5th and the 4th century BC.

2 Methods

Faunal remains were identified and quantified (NISp, MNI), using osteological manuals (Pales and Lambert 1971; Schmid 1972; Barone 1976) and the reference collections of the Laboratories of Zooarchaeology and Taphonomy and of Large Mammals and Birds at the Department of Humanistic Studies of the University of

Ferrara. Goats and sheep were distinguished according to the criteria elaborated by Zeder and Pilar (2010) for teeth and by Boessneck (1969) and Zeder and Lapham (2010) regarding the post-cranial skeleton. The discrimination between wild boar and pig was made according to the dimensions of the anatomical elements and the osteological reference collections. The minimum number of individuals (MNI) was estimated for each *taxon* combining age classes and laterality, and the data obtained from the teeth analyses. Age at death was estimated on the observation of tooth eruption and wear stage following Grant (1982) and Silver (1969) and on the epiphyseal fusion of long bones according to the methodologies proposed by Barone (1976) and Silver (1969). The taphonomic analysis was performed using a Leica S6D stereomicroscope (0.63x-4.0x magnification) equipped with an EC3 digital camera.

3 Archaeozoological analyses

The archaeozoological analysis, carried out on the faunal remains of Verucchio, has so far related to about 1548 osteological remains. The largest and most significant assemblage comes from the oldest phase of the settlement (D, 9th-8th century BC) with over 75% of the total remains recovered. The faunal assemblages from the phases C (7th-5th century BC) and B (4th-3rd century BC) are numerically poorly represented although the latter one has some peculiarities. For this reason, in this paper, we present the results of faunal remains coming from phases D and B (Table 1).

3.1 The faunal assemblage from the 9th-8th century BC

From phase D, dated between the 9th-8th century BC, 1411 faunal remains were analysed: 42% has been identified taxonomically while the remaining 58% is mainly composed of unidentified fragments and

Taxon	Phase D				Phase B			
	(9th-8th century BC)				(4th-3rd century BC)			
	NISp	%	MNI	%	NISp	%	MNI	%
<i>Ursus arctos</i>	2	0.47	1	3.9				
<i>Sus scrofa</i>	3	0.71	1	3.9				
<i>Cervus elaphus</i>	5	1.18	1	3.9	2	3.57	1	10
Total wild taxa	10		3		2		1	
<i>Canis familiaris</i>	14	3.30	2	7.8	1	1.79	1	10
<i>Equus caballus</i>	1	0.24	1	3.9				
<i>Sus domesticus</i>	142	33.49	9	34.3	17	30.36	3	30
<i>Bos primigenius</i>	101	23.82	4	15.6	23	41.07	1	10
<i>Ovis vel Capra</i>	107	25.24			10	17.85	2	20
<i>Capra hircus</i>	31	7.31	6	22.8	2	3.57	1	10
<i>Ovis aries</i>	18	4.25	2	7.8	1	1.79	1	10
Total domestic taxa	414	100	24	100	54	100	9	100
Aves	3							
Pisces	1							
<i>Emys orbicularis</i>	1							
Total other taxa	5							
Cardiidae	2							
Total NISp	431				56			
Carnivora	10							
Ungulata large sized	70				10			
Ungulata m-l sized	54				11			
Ungulata medium sized	68				12			
Unidentified	778				48			
Total NUSp	980				81			

Table 1. Composition of the fauna assemblage.

remains have only been determined anatomically and classified by size. The identified specimens consist mainly of domestic animals, followed by a smaller number of wild mammals. There are also other faunas such as marine mollusks, a vertebra of fish (probably marine), tortoise and birds. Among the wild ungulates red deer and wild boar were identified. Red deer is represented mostly by antler fragments and elements of the post-cranial skeleton. This allows us to assume the on-site transport of at least one carcass or part of it. Among the wild taxa the presence of two remains of brown bear is interesting, since this species is not very frequent in the fauna records of this period. Among the domestic animals, sheep and goats predominate with a clear prevalence of goats compared to sheep. Pigs follow with a slightly lower percentage while cattle are less represented. The horse is attested by a single tooth fragment, while the dog is present with few remains

attributable to at least two individuals. The rate between the main domestic taxa changes if analysed on the basis of the Minimum Number of Individuals, for which pigs are more frequent than sheep or goats. Concerning the anatomical representation, cattle, sheep or goats, and pigs are in toto represented with almost all the elements of the axial skeleton while the cranial skeleton consists mainly of mandibles and teeth. Age classes, estimated from the analysis of the eruption stage and dental wear and the fusion degree of the epiphysis, allow us to surmise that the slaughter or killing of livestock took place. Pigs, as in the Bronze Age, were mainly used for meat. It is quite clear from the killing of young and sub-adults before reaching the third year of age. Cattle were exploited for both meat and labour power and by-products. While goats and sheep appear to have been mainly exploited for secondary products given the higher incidence of adult individuals.

3.2 The faunal assemblage from the 9th-8th century BC

The fauna coming from phase B, dated between the 4th and the 3rd century BC, is interesting too. In fact, 137 fragments have been analysed, 41% of which have been identified at taxonomic level and almost all belong to domestic fauna.

It is difficult with such a small assemblage to obtain useful data concerning the management of animal resources. Cattle are however slightly preponderant compared to those of pigs and sheep/goat. Estimating the MNI, pigs and cattle are attested with the same number of individuals. This data must be considered preliminary because of the scarcity of the assemblage and other taphonomic factors, both edaphic and anthropic. Concerning the skeletal representation, sheep/goat and pigs are represented by all the skeleton districts. Pigs show some gaps especially in the forelimbs. The estimated age classes do not allow for any interpretation. An interesting aspect of this phase is the presence of a complete dog skull recovered inside a pit of the building. Four other bone fragments were found associated with the dog's skull: a sheep's scapula, an unidentified fragment of skull, a pig's mandible and a bovine horn core. It was a very young individual, less than one year old, with part deciduous dentition. An interesting detail is certainly the fact that the skull and mandibles were still found in anatomical connection documenting that the skull was thrown inside the pit still with the soft tissues attached.

3.3 Taphonomy

The faunal assemblage presents a good state of preservation of the bone surfaces with a high degree of fragmentation. Taphonomic analysis has shown that bone surfaces are predominantly affected by manganese oxides and modified by root-etching. The low percentage of other modifications such as weathering, exfoliation, erosion is likely to indicate that osteological remains have been rapidly buried. This is confirmed by the scarce traces left by carnivores that affect about 3% of the fauna sample of phase D. Despite the good conservation of the surfaces, the number of anthropogenic traces is quite small, just over 4% of the remains, which were mostly unidentified fragments. These are mostly linear striae located near the joints and therefore traceable to disarticulation for the exploitation of the carcass in order to obtain smaller portions suitable for cooking, although there is very few evidence of heat exposure. Only on a few remains of wild mammals, butchery traces were found. It's interesting that the bear also has evidence related to its slaughter, reinforcing the hypothesis that it was hunted and slaughtered. On the remains of red deer traces were found which mainly related to the manufacturing of animal hard material to produce handles or composite

elements, despite there being a fragment of tibia with traces attributable to defleshing.

3.4 The dog skull from 'House of Verucchio 4'

The dog remains are in a good state of preservation and were found in anatomical connection, lying above several sheep/goat and pig bones and near a cattle horn core facing east (Figure 3A). The skull belongs to a puppy as many bones of the skull are not fused. The fourth lower premolar is still visible in the crypt and not yet erupted, while the upper one is halfway out. In the left jaw, moreover, the dp2 is flanked by the second premolar.

According to Hasebe (1952), the skull's maximum length (175 mm) allows classification of the animal as a small-medium or medium-sized dog, such as on the basis of the jaw's length (a medium-sized animal of 135 mm long). Considering the teeth eruption stage of the dog (Silver 1969), its age at death was about six months old.

In the upper part of the occipital condyles there are two cut-marks, which based on their direction and size are referred to a single slaughtering gesture (Figure 3C-c). On the internal margins of the occipital there are some small fractures produced by a forced disarticulation aimed at separating the skull from the column, or when the animal was killed. On the right jaw, just at the base of the canine, there is a cut-mark with a double exit point made by a metal blade. The mark shows the V-shaped section without secondary striations at the overlapping point of the two traces, suggesting a repeated action (Figure 3F-f).

The animal was intentionally slaughtered, skinned without removing the flesh. Moreover, the upside-down position of the skull seems not to be random since it is unusual and doesn't compare with other archeological contexts. The absence of other skeletal parts suggests a different treatment of those body portions. All these data allow us to suppose that the pit and its contents could have had a ritual purpose.

4 Conclusions and discussions

The new preliminary results, obtained from the study of the fauna of Verucchio Pian del Monte, give an important contribution to the reconstruction of the management of animal resources during the Early Iron Age in Emilia-Romagna. Preliminary data suggest that the economy of Verucchio was mainly focused on sheep or goat and pig farming.

A direct comparison with other sites was not possible because in the territory the published archeozoological data refer almost exclusively to settlements dated from

the 6th century BC. Between the 8th and 7th century, breeding seems to concentrate on the exploitation of the sheep or goats and pigs while hunting plays a secondary role in the economy, perhaps mostly to defend cultivation. The presence of the bear is interesting, because it is a species not particularly frequent in the faunal assemblages of the period. At the moment it is not possible to assess the role of fishing in the urban economy. However, it is reasonable that this activity was practiced as a complement to the food resources. The ratio of the main domestic mammals indicates an economy dedicated to sheep or goat farming but with a clear tendency to increase the population, justified also by the number of pigs (NISp and MNI). The faunal assemblage from the 4th and 3rd century does not give new data about the economy, which, based on the edited (Farello 1997; 2006), shows an increase in the frequency of pigs, with respect to other domestic mammals, as happens in many other areas.

In the Ancient World the use of dogs in ritual practices could have played many symbolic roles, which can be synthesised in two general categories (Bodson 1980; Zaganiaris 1975; De Grossi Mazzorin and Minniti 2006; De Grossi Mazzorin 2008): the first one connects the animal sacrifice to Chthonic gods related to procreation, growth, and purification and the second one is linked to the role of a dog in everyday human life as a companion and guardian.

We know most of the information about Etruscan religion and ritual practices thanks to artistic representations, archaeological data and Roman texts.

In Etruscan culture, dogs are associated with Calu's cult, the god of the netherworld. Two paintings discovered in the tomb of Golini (Orvieto) and Orco (Tarquinia), represent the god of the dead bearing a dog-head hat (Kunée). Etruscan religion, like many aspects of culture, is enclosed in mystery and speculation, but we know some features thanks to the *Eugubinae Tabulae* (2nd century BC).

The remains of a dog, showing butchery marks, can be also referred to the agrarian rituals in which the processing of the animal and the use of some of its parts for the ceremony are often mentioned. In the Roman world, the sacrifice of a puppy near the city gates suggested the symbolic function of a dog-keeper (De Grossi Mazzorin and Minniti 2006; De Grossi Mazzorin 2008), but usually the entire skeleton of the animal was buried.

In this archaeological contest the dog's head deposited in the house with other skeletal elements of domestic animals could indicate several symbolic significances. Thus, the idea that it could be interpreted as an

inaugural meal (Harari *et al.* 2017), related to the dog-keeper symbolism, may be the most plausible hypothesis.

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