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## Possible evidences for a dog sacrifice at Ferento (Viterbo) in the Late Antique Period\*

### *Possibili testimonianze del sacrificio di un cane a Ferento (Viterbo) in età Tardoantica*

Summary - During the 2004 excavation at Ferento (Viterbo) in Sector 1, the skeletal remains of a dog, still partially articulated, were recovered in a pit covered with a block of *peperino* tuff, located in a commercial area, close to the crossroads. Contextual evidences indicate a Late Antique date for the burial. The individual presented several pathologies on the bones. The analysis of bone surface modifications allowed detecting on a rib and on a thoracic vertebra traces that are likely referable to the killing of the animal and that, together with the location of the burial, may suggest a sacrificial ritual.

*Riassunto - Nel corso della campagna di scavo del 2004 a Ferento (Viterbo), nel Saggio I, in una fossa oblitterata da un blocco di peperino, in una zona commerciale ed in prossimità di un crocevia, sono stati rinvenuti i resti scheletrici, parzialmente in connessione, di un cane. Evidenze contestuali fanno ipotizzare che la sepoltura sia da datare al periodo tardoantico. L'individuo presentava diverse patologie a carico dell'apparato scheletrico. L'analisi delle modificazioni presenti sulle ossa ha consentito di identificare su una costola e su una vertebra toracica delle tracce verosimilmente riferibili all'uccisione dell'animale che, insieme alla collocazione della sepoltura, potrebbero suggerire un rito sacrificale.*

Keywords: Dog sacrifice, Pathologies, Late Antique, Ferento (Viterbo)

Parole chiave: Sacrificio di cane, Patologie, Tardo Antico, Ferento (Viterbo)

\*MTF wrote the introduction regarding the archaeological context, the discussion about the ritual interpretation and the conclusion; FA dealt with the archaeozoological and taphonomic analysis of the faunal materials.

### INTRODUCTION

In September and October 2004, the last campaign of archaeological investigations was carried out in Sector 1 at Ferento.

This ratified, with the later backfill and closure of the area, the final act of a prolonged and fruitful season of archaeological and stratigraphic studies. The conclusive phases of the excavation occurred in specific areas of the Sector where it was necessary to extrapolate more clear and exhaustive stratigraphic information. During these soundings, a small circular pit, named SU 038, was intercepted (Fig. 1) in the area dividing Sector 1 into East and West part. Such pit was discovered after the removal of SU 1929, that was the last layer of the SU 1928<sup>1</sup> filling, close to the western wall of a room of roman age. Such room opened on the *decumanus* with a threshold (WSU 573, Fig. 1) that, considering the presence of a slot, was probably closed by a sliding wooden door (Pavolini *et al* 2007: 135-143). The stratigraphy and the analysis of the building techniques of the adjacent structures allowed attributing the pit to the Late Antique period<sup>2</sup>, at least to the 4<sup>th</sup> century AD (Fortunato 2009-10, Romagnoli 2006).

The above mentioned SU 038 was not very deep and was filled by a thin layer, SU 029, made of fine sediments with very fragmented materials including three ceramic shards, belonging to the *acroma* ware class. The pit was covered by a block of *peperino* tuff. Directly at the bottom of the pit the almost complete articulated skeleton of a dog was found (Fig.2); other animal bones were also present within the sediments. Previous archaeological and topographic studies evidenced that in this area of the settlement there were commercial buildings, the *tabernae*, with porches facing the *decumanus* (Romagnoli 2006: 54). Unfortunately, the early medieval interventions for the establishment of the obsidional<sup>3</sup> systems during the Greek-Gothic conflict, irremediably biased the urban topography of this portion of the settlement. In particular, it was also evident that the ditches cut and altered the secondary streets that merged orthogonally into the *decumanus* in this part of the town. Notwithstanding this difficult and compromised situation, it was possible to reconstruct and topographically reposition two *vici*, evidencing the fact that their intersection with the *decumanus*, generated crossroads.

<sup>1</sup> SU 1928 is one of the two ditches running parallel to the early medieval fortification built in this area of the settlement (Maetzke *et al.* 2001: 228-302).

<sup>2</sup> The study of the ceramic material recovered in this area of the site, that will allow a more precise chronological attribution, is still in progress.

<sup>3</sup> Referred to a siege.

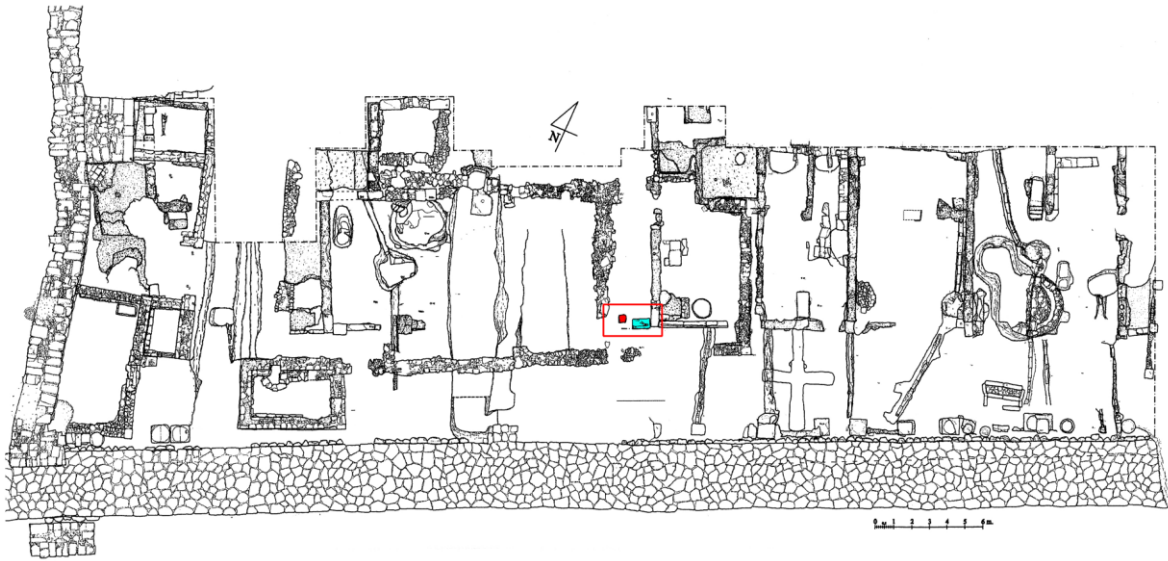


Fig. 1. Ferento. Plan of Sector 1 with the location of the pit (red) and the threshold (light-blue).

#### ARCHAEZOLOGICAL AND TAPHONOMIC ANALYSIS

The faunal assemblage recovered in the pit SU 038 includes 131 specimens in a fairly good state of preservation.

Most of these remains (NISP 100) belong to a single dog, 11 have been attributed to ovicaprines, a single tooth is referable to red deer, 14 rib fragments are of a very young medium mammal, while the remaining 5 fragments are completely unidentifiable (Tab.1).

*Ovis vel Capra* remains indicate at least 2 individuals: an adult, represented by a single distal humerus with gnaw marks, and a newborn, identified on the basis of femur fragments, vertebrae and pelvis.

The rib fragments attributed to the very young medium mammal may also belong to this second animal.

The red deer is a prime adult and represents only the second occurrence of this species in Roman layers at Ferento (Alhaique *et al.* 2011; Fortunato 2009-10).

The dog skeleton was laying on its right side (Fig. 2) with the cranium, mandible and the first cervical vertebrae under the body.

It was not possible to ascertain if the head had been separated from the rest of the skeleton or if the neck had been forcedly bent to fit the animal into the small pit.

However, the absence of cut-marks on cervical vertebrae may suggest that the second explanation could be more appropriate.

Biometric data (Tab. 2) and comparisons with skeletal elements of other Late Antique dogs (e.g., Albarella *et al.* 1993; Cerilli, Ceccaroni cds.; De Grossi Mazzorin 1995; Farello 1995) show animals of comparable size, except for Classe and *Alba Fucens* where very small animals were also present.

Species	NISP	MNI
<i>Canis familiaris</i>	100	1
<i>Ovis vel Capra</i>	11	2
<i>Cervus elaphus</i>	1	1
Medium mammal	14	
Unidentified	5	
<b>Total</b>	<b>131</b>	<b>4</b>

Tab. 1. Ferento. Faunal assemblage from SU 029 (NISP = Number of Identified Specimens; MNI = Minimum Number of Individuals).



Fig. 2. Ferento. The dog skeleton during the excavations.

ELEMENT	Measurements (in mm following von den Driesch 1976)
Maxilla (L)	16=20.7; m2=L7.0 B10.6; m1=L13.4 B16; p4=L20.7 GB10.3; c=L9.5 B6.4
Mandible (L)	1=149.5; 8=78.4; 10=38.0; 11=41.4; 17=12.2; 19=27.8; 20=23.6
Scapula (L)	GLP31.5; LG25.5; BG17.4
Humerus (L)	GL167; Bp30.4; Dp41.5; SD13.3; Bd33.3; BT24.6
Ulna (L)	SDO21.7; DPA*25.3; LO30.2; BPC18.8
Femur (L)	GL182; Bp38.9; DC29.4; SD13.5; Bd31.2
Patella (L)	GL17.8; GB10.0
Tibia (L)	GL187; Bp34.0; SD12.7; Bd23.0; Dd17.2
Calcaneum (L)	GL45.2
3rd Metatarsal (L)	GL69.8
4th Metatarsal (L)	GL73.4
5th Metatarsal (L)	GL64.5

Tab.2. Ferento. Bone measurements. (L = Left).

The withers height was, according to the different anatomical elements and coefficients, between 56 and 51 cm (Tab. 3) falling within the variability range of the Italian dogs of this period (De Grossi Mazzorin, Tagliacozzo 2000). According to the ratio between the slenderness index of the femur and the withers height, the Ferento dog can be considered an eumetric individual. The bones of the skeleton are usually quite complete and almost all the elements of the left side of the animal have been collected (Tab.4).

The age at death of the animal was probably between 18 and 24 months (Barone 1995) although there are anomalies in the fusion stage of some bones which could be related to alimentary deficiencies. *Cribra* detected on the humerus and the femur may have the same etiology (Fig.3A). Other pathologies were found on several elements of the axial skeleton: thoracic vertebrae 5<sup>th</sup> to 9<sup>th</sup> show an alteration of the distal portion of the neural spine (Fig.3B), while thoracic vertebrae 11<sup>th</sup> to 13<sup>th</sup> display signs of arthrosis on the articulation surfaces with the ribs (Fig.3C) and the corresponding ribs present pathologies on the proximal epiphysis (Fig.3D); one of the latter elements also has on the shaft a bony callus (Fig.3E), indicating a healed fracture. These signs of disease are more frequently expected on senile individuals and are more difficult to explain in younger animals although they may be again the result of malnutrition or possibly maltreatment.

The analysis of bone surfaces allowed detecting modifications which could indicate the way the animal was killed. On the ventral surface of the 6<sup>th</sup> thoracic vertebra, slightly on the right of the central medial line, there is a hole produced by a pointed tool (Fig.4A) and on the posterior edge of a right rib it is possible to observe a deep cut (Fig. 4B) made with a sharp blade. The traces identified suggest that the dog had been probably stabbed on its right side with a dagger (or similar tool) (Fig.4C). The penetration of the blade, at least 15 cm long, likely pierced the hearth and the lungs of the animal (Fig. 4D) causing its death.

Although with the available evidences it is quite sure that the animal was intentionally killed and buried, the interpretation of these actions is more problematic. Dog sacrifices are known from all over the world, well represented in the Roman period, especially in early times (e.g., De Grossi Mazzorin 2008), but are attested even in more recent contexts (e.g., Lugnano, Kana; McKinnon 1999, Daróczy-Szabó 2009). The location of the burial, close to crossroads and a threshold is evocative of a sacrificial ritual as it is also the possible association with the newborn ovicaprine<sup>4</sup> and with the red deer (see “Discussion about the ritual interpretation”), but at the same time this may just represent an extreme act of *pietas* for a very sick “best friend”.

Element	GL (mm)	Withers height (Koudelka 1884) (mm)	Withers height (Harcourt 1974) (mm)	Withers height (Clark 1995) (cm)
Humerus (L)	167	562.8	549.6	
Femur (L)	182	547.8	558.5	
Tibia (L)	187	546.0	555.5	
Calcaneum (L)	45.7	557.5		
III Metatarsal (L)	69.8			51.5
IV Metatarsal (L)	73.4			52.4
V Metatarsal (L)	64.5			51.8
<b>Mean</b>		<b>553.5</b>	<b>554.5</b>	<b>51.9</b>

Tab. 3. Ferento. Withers height. (L = Left).

Element	NISP	MNE	MNE with pathologies
Skull 1/2	10	2 (L+R)	
Mandible 1/2	1	1 (L)	
Teeth	1	1 (L)	
Hyoid	2	1	
Atlas	1	1	
Axis	1	1	
Cerv. Vert.(3-7)	5	5	
Tor. Vert.	13	13	9
Lumb. Vert.	4	4	
Sacral Vert.			
Indet. Vert.	5		
Sternebrae	4	4	
Ribs	27	18 (11 L+7 R)	2 (L) + 3 (R)
Scapula	3	2 (L+R)	
Humerus	1	1 (L)	1
Radius			
Ulna	1	1 (L)	
Carpals			
Metacarpus			
Pelvis 1/2	3	1 (L)	
Femur	1	1 (L)	1
Patella	1	1 (L)	
Tibia	1	1 (L)	
Fibula	2	1 (L)	
Astragalus			
Calcaneum	1	1 (L)	
Tarsals	2	2 (L)	
Metatarsus	3	3 (L)	
I Phalanx	3	3	
II Phalanx	2	2	
III Phalanx	2	2	
<b>Total</b>	<b>100</b>	<b>73</b>	<b>16</b>

Tab. 4. Ferento. The dog skeleton: NISP (Number of Identified Specimens), MNE (Minimum Number of Elements) and MNE with pathologies. (L = Left; R = Right).

<sup>4</sup>Given the presence of gnaw marks the adult humerus is likely intrusive in the assemblage.

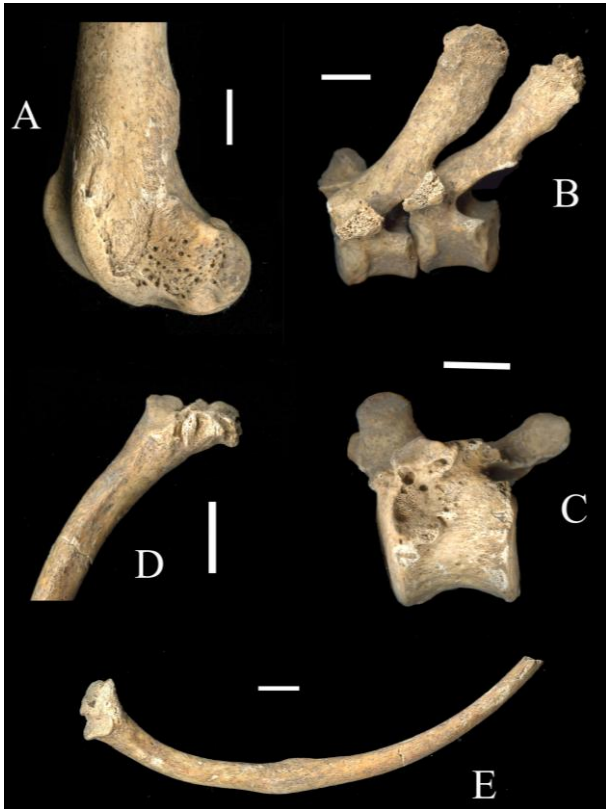


Fig. 3. Ferento. A) Distal femur with *cribra*. B) Thoracic vertebrae with pathologies on the distal neural spine. C) Thoracic vertebra with pathology on the articulation surface with the rib. D) Rib with pathology on the proximal epiphysis. E) Rib with healed fracture. Bar is 1 cm in all figures.

#### DISCUSSION ABOUT THE RITUAL INTERPRETATION

Archaeological sources report several examples of dog burials and often the authors specify that it is not always easy to interpret the ritual intent of the action performed differentiating it from the fortuitousness of such a burial (Coppola 2005). Specialized literature evidences that when the investigated features belong to a ritual context, the cult is referred mainly to underworld and chthonic gods and not to Olympic deities, because the dog was considered as an unclean animal and its sacrifice became therefore cathartic (De Grossi Mazzorin 2008). Such uncleanness was motivated by the fact that the main role of the animal was the connection between the world of the living and that of the death<sup>5</sup>. The leading reason for these ritual practices should be searched in the main purpose of the offerer that was to obtain the divine intercession with the sacrifice of the animal. Such sacrifice occurred usually by means of throat cutting<sup>6</sup>, then facilitating the flow of the victim's blood directly on the ground.

<sup>5</sup> A well-known example for this may be Cerberus.

<sup>6</sup> In our case instead the death of the animal occurred because it was stabbed through the hearth (Fig. 4D).

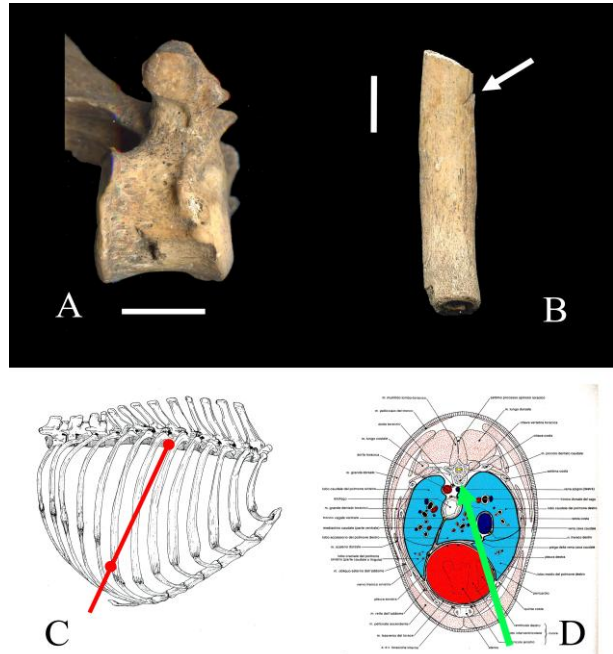


Fig. 4. Ferento. A) 6th thoracic vertebra with perforation produced by a pointed tool. B) Right distal rib with deep cut. Bar in A and B is 1 cm. C) Reconstruction of the trajectory of the blade showing the points where it touched the bones (modified from Pelagalli, Botte 1977). D) Transverse section of a dog showing the trajectory of the blade through the heart (red) and lung (light-blue) (modified from Barone 1981).

Libations followed so that the gods could satisfy their thirst with the vital sap of the immolated animal and the fruits of the earth, interceding benevolently.

Continuing the review of the literature, it has been evidenced that the cases of the association between dog and human burials are frequent too, probably in order to allow this faithful human friend to be a companion also during the journey to the netherworld or a guardian even after death (Coppola 2005, De Grossi Mazzorin, Minniti 2000).

The classical authors that mentioned dog sacrifices often refer this ritual to numina related to the female sexual sphere such as for example *Genita Mana* and *Mater Matuta* (e.g., Plutarch *Quaestiones Romanae*, 52, 277); such goddesses, of Italic origin, were in charge of the processes of regeneration and growth. Furthermore, according to Columella, outstanding expert of agriculture, the only means to prevent the appearance of the so called rust of the crops was to sacrifice a female dog and a sheep to *Robigus*<sup>7</sup>.

<sup>7</sup> "... Haec ne ruricolae paterentur monstra, salutis ipsa novas artis varia experientia rerum et labor ostendit miseris ususque magister tradidit agricolis ventos sedare furentis et tempestatem Tuscis avertere sacris. Hinc mala Rubigo viridis ne torreat herbas, sanguine lactentis catuli placatur et extis. Hinc caput Arcadici nudum cute fertur aselli Tyrrhenus fixisse Tages in limite ruris, utque Iovis magni prohiberet fulgura Tarchon, saepe suas sedes praecinxit vitibus albis (*Res Rustica* X: 337-347).

## CONCLUSION

After this rapid *excursus* on what has been reported, in general, about the rituals involving the dog, we shall now focus on the analyzed context summarizing the peculiar features of the finding.

The topographic location within the site, that is at crossroads, as well as the morphology of the earthen pit that recalls a *bothros*, may suggest an association with the cult of Hecate<sup>8</sup>. It seems that the dog burial with clear killing traces may refer to a ritual praxis deeply embedded in Roman customs that, together with the location of the finding, at the intersection between a *vicus* and the *decumanus*, seems to suggest a propitiatory ritual carried out so that Hecate, or any other deity belonging to the world of shadows, could intercede benevolently for the traveler.

The traces of the ritual evidenced by the different typologies of materials recovered in the pit are clear: besides the remains of the poor dog found *in situ* there were also ovicaprine and cervid specimens (Tab.1), as well as some fragments of *acroma* pottery, that, although not yet dated, can be however referred to kitchen or serving ware; so that it is possible to dispel another doubt because these may likely belong to beakers or cups used in the ritual, possibly filled with wine and deposited upside down according to the established precepts.

Considering as sure the chronological attribution to the early phase of the Late Antique period, proposed for the area where the burial was intercepted (Fortunato 2009-10, Romagnoli 2006), it appears strange that at Ferento, where by this time an extensive Christianization was already established, pagan rites still persisted.

A useful and providential help is provided by a site, not very far from Ferento, that is Lugnano in Teverina (Soren *et al.* 1995).

In this locality, at the border between Umbria and Latium, in the Late Antique infant necropolis, dated to the 5<sup>th</sup> century AD, children burials were found in association with those of dog puppies, here too in a period when pagan rites should have been already abandoned.

It appears that these are two examples of the persistence of pagan cults within a full Christian phase and of the consequent rise of that symbiotic relationship that always characterizes the official religion and the hidden practices of the ancient religiosity founding its roots into the dawn of times. The last bulwark of the paganism seems to have been

precisely the cult of Hecate that, for clerical imposition, modified its status and because of this her acolytes met secretly and, invoking their mother, danced around a walnut tree during full moon nights: this is how witches were born<sup>9</sup>.

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<sup>8</sup> Hecate was another deity related to the underworld often represented as a dog, with a dog head and/or accompanied by dogs. Classical literature reports several attributes of Hecate: *Propylaea*, *Epipurgdia*, *Phylax*, *Enodia*, *Trioditis*. Very likely the one related to the dog sacrifice presented in this paper was *Ecates Trioditis*, protector of the triple crossroads. The famous Orphic hymn: "I celebrate Hecate Trivia, lovely protector of the triple crossroads, [...] fond of solitude, rejoicing in deer, nocturnal protector of dogs, invincible queen, her passage is announced by roaring beasts, [...] bull tamer, guardian of the keys of the universe [...]" summarizes the main characteristics of the cult of this goddess.

<sup>9</sup> <http://www.romanoimpero.com/2010/02/culto-di-ecate.html>



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