

An oven and two crania found at the South door of Egitania (Idanha-a-Velha): a unique finding from the beginning of the Early Middle Ages

Um forno e dois crânios encontrados na porta Sul da Egitânia (Idanha-a-Velha): uma descoberta única do início da Idade Média



151

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Abstract Two crania were identified during the excavations carried out in 2019 in the historic village of Idanha-a-Velha, under project IGAEDIS: from *Civitas Igaeditanorum* to Egitania. The construction and development of the city and establishment of its territories from Roman times to the donation of the city to the Knights Templar (1st to 12th century), two crania were unearthed from a small oven located at the South door of the ancient Roman city. The crania were of two individuals aged between 7 and 16 years and were dated from the late Roman era. Their secondary position occurred after the oven was aban-

Resumo Em 2019, durante as escavações arqueológicas levadas a cabo na Aldeia Histórica de Idanha-a-Velha, no âmbito do projeto "IGAEDIS: Da *Civitas Igaeditanorum* à Egitânia. A construção e evolução da cidade e a definição dos seus territórios da época romana até à doação dos Templários (séculos I a XII)", foram descobertos dois crânios no interior de um pequeno forno localizado junto à porta sul da antiga cidade romana. Estes representam um depósito secundário ocorrido após o abandono do forno, provavelmente já no século VI d.C. Os crânios correspondem a dois não adultos com estimativas da idade à morte compreen-

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done, probably already in the 6th century. This deposit, original and unique in Lusitanian and Peninsular funerary context, raises several questions about the interpretation and reading of time sequences in the formation of complex archaeological contexts. The two individuals were analysed and the results of this study are presented.

Keywords: Late-Roman wall; ancient city; Early Medieval oven; secondary funerary context; non-adult burial deposits.

Introduction

In Roman times, the current historical Portuguese village of Idanha-a-Velha, called *Igaedis*, was the capital of the *ciuitas Igaeditanorum*. Although the time when it was founded is not well determined, the finding of an inscription from the year 16 BC, noting the offer of a sundial to the city by *Augusta Emerita* (Merida) citizen *Quinto Talio*, enables us to realise that this nucleus existed as a *ciuitas* capital since the early years of the Roman province of Lusitania (Redentor et al., 2022) (Figure 1). From then on, the capital of the *Igaeditani* ruled over a broad territory of south-eastern Lusitania and occupied a prime position as one of the most important Roman cities along the road connecting *Augusta Emerita* (Mérida, Spain) and *Bracara Augusta* (Braga, Portugal) (Carvalho, 2009; Redentor & Carvalho, 2017).

didadas entre os 7 e os 16 anos e foram datados da fase final da época romana.

Este depósito, que constitui um contexto original e único no mundo funerário da Alta Idade Média peninsular, levanta várias questões de interpretação e de leitura de sequências temporais na formação de contextos arqueológicos complexos.

Palavras-chave: Muralha tardo-romana; forno Alto Medieval; cidade antiga; contexto funerário secundário; depósitos funerários não adultos.

After the Roman period, the city occupied a key position in the southern half of the Suebi kingdom and became the seat of a diocese, called *Egestanea*. Although its bishop is only mentioned in councils in 572 (the Second Council of Braga), the diocese is likely to be much older, eventually dating back to the previous century, when the area associated with the baptisteries were reformulated (Cordero Ruiz et al., 2020). Once the city was incorporated into the Visigoth Kingdom of Toledo (585), its bishops continued to have a substantial presence at the ecclesiastical councils held throughout the 7th century AD. We know the name of nine Egitanian bishops between 572 and 693 from these sources. Several Visigoth kings (from Recaredo to Rodrigo) minted gold coins (*tremisses*) here. In this respect, it is interesting to note the substantial material findings pertinent to



Figure 1. Location of Civitas Igaeditanorum in Roman Hispania.

Christianity in the current village, in particular, inter alia, the two baptismal pools, one dated from the second half of the 4th century, and another from the early 5th century (Fernández et al., 2019; Cordero Ruiz et al., 2020). Still, the identification of the church or churches associated to these structures raises many doubts, despite the various publications on the subject (Cordero Ruiz et al., 2020: 147-48).

Following the Islamic conquest, the city became known as *Laydaniya* or *Antaniya* (Cordero Ruiz, 2019: 496-497), a *kura* capital. During the 9th century, the city was briefly taken over by King Alfonso III of Asturias, and in the 12th century it was handed over to the Christians dur-

ing King Afonso Henriques's reign. From then on, it became a Knights Templar centre, at which time a keep was erected on the *podium* of the ancient Roman forum temple. However, despite all attempts to repopulate it, the city began a long period of decline, compounded by the loss of the diocese (Real, 1995) at the end of the 12th century.

The interdisciplinary research work that brings together the Universities of Coimbra and Nova University of Lisbon, in liaison with the Idanha-a-Nova City council and the Regional Directorate for Culture – Centre Region, focuses precisely on the history of the ancient city and its territory, throughout its lengthy occupation.

Archaeological background

The oven

Among the findings from the archaeological excavations carried out since 2017 under the project IGAEDIS (*The historical village of Idanha-a-Velha*), those from the olive grove area south of the Knights Templar Keep / *Igaeditani* Forum are particularly worthy of note. Carried out next to the walled enclosure, these excavation works enabled the identification of the South door of the ancient city wall (Figure 2). Some issues need to be clarified as to the nature of this entrance, in particular its timeline (construction and subsequent reconstructions) and its relationship with the urban development. We can, however, offer some information, for example, that it may have been built in an advanced stage of the Empire, as evidenced by the massive use of *spolia* from the Early Imperial period, and of a number of reconstructions carried out throughout the Middle Ages. Each of these moments can be determined more precisely – an ongoing study soon to be published. What is important to emphasise here is the identification of a small oven, probably for domestic use (bread oven?), as neglected as the Roman city door. This monumental 3.6 m wide door is made of large flawless granite ashlar masonry, still preserved in its eastern side up to the start of the arch. The early abandonment of this door is stratigraphically shown by the presence of a large, well-sedimented layer of very fine, muddy and compact greyish earth. Some

centuries later, this door may still have been partially covered by a heap of large granite blocks that reduced the breadth of the doorway and narrowed the access to the city. These layers of very fine earth (EUs 28 and 36) deposited after the door was abandoned directly overlap with the road preparation and circulation (*cardo*) connecting the south door to the *forum*.

The remnants of the oven were – surprisingly – identified within the context of the initial abandonment of the door (= UE 36 – fine and dark earth, with much debris, including charcoal and bones), whose datable materials (T.S. *Hispânica Tardia* e T.S. *Africana D1*) collected point to a deposit from the mid (or the first half) or the 5th century AD. This structure (Figures 3 and 4), leaning against the doorway and resting on pebbles, is formed by a flat base and a masonry dome made of pieces of brick (reused *lateres* and *tegulae* from a previous construction) with mortar and clay aggregates (and clay soil), the clay being glazed inside it. The oven had a diameter of 0.60 m on the inside. What remained of the oven was partly covered by fragments of crumbling construction pottery and shale stones cladded with yellowish clay soil, which perhaps belonged to a destroyed structure that initially surrounded it and whose filling increased its thermal capacity.

The crania

Two non-adult crania were found inside the oven, beside its south wall, with



Figure 2. Aerial photography of Idanha-a-Velha, marked with round yellow the area of the South city door where the oven was identified.

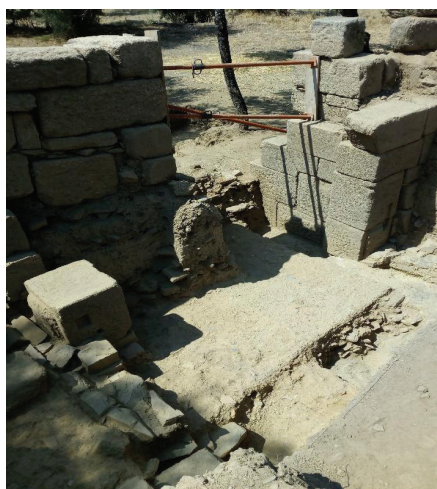


Figure 3. General view of the oven in the city's south door.



Figure 4. View of the North side of the oven under excavation.

the base facing upwards, and they were numbered as Individual 1 (IGA-19.1) and Individual 2 (IGA-19.2) (Figure 5). We cannot consider the possibility of the individuals being buried inside the oven and later moved around, firstly because the oven space is clearly too small for burying non-adults. These crania were, therefore, considered a secondary deposit. Both individuals as we will discuss later are older than the oven itself (Table 1). Individual 2 still had the atlas, covered by the earth found over the base of the cranium, but aligned with the *foramen magnum* (Figure 6). In other words, he must have been brought to this place covered with earth together with the cranium, causing us to believe that the individual would have been unearthed from a primary position when he was found. No other postcranial bone was found in what was left of the oven. However, as only half of the structure was preserved, we cannot exclude the presence of more bones.

The crania were half buried in a layer of fine, compact, grey sediment containing mixed charcoal, which was scattered inside of the oven. Several sediment samples were collected, some of which contained charred seeds and wood remains, analysed by palaeobotanics and subsequently analysed by radiocarbon determination (Table 1). Bone samples were also collected from the two individuals for dating purposes.

Paleobiological analysis: biological profile, non-metric morphology, and paleopathology

Age of death of those individuals was estimated assessing the development and eruption of the superior teeth following the proposal by AlQahtani et al. (2010). It was found that the age at death of Individual 1 (IGA-19.1) was between 13.5-15.5 years, and that of Individual 2 (IGA-19.2) between 7.5-9.5 years.

Furthermore, a non-metric morphology analysis was made. All observed discrete cranial bone characters were recorded based on Hauser and De Stefano (1989). To analyse the dental morphology, we used the recording method proposed by Turner et al. (1991), ASUDAS (The Arizona State University Dental Anthropology System). Each permanent tooth was observed being recorded the presence or absence (and, if necessary, the degree) of the morphological characters identified.

As regards the analysis of the non-metric traits, in Individual 1 we noted the presence of parietal *foramina* (Figure 7a), supernumerary ossicle in the lambdoid suture (left side) (Figure 7b), and the presence of accessory nasal suture. No bone traits were found in Individual 2.

The dental morphology allows inferences to be drawn on heredity, dental characters are also a tool for estimating ancestry. As for geographical differences, these may be reflected in the frequency and expression of dental traits (Scott et al., 2018).

Both individuals only had the upper dentition present, thus limiting inferences



Figure 5. Overall view of the two crania deposited in the remaining part of the oven.



Figure 6. Top view of oven with the two crania inside. Individual 2 also presents the atlas aligned with the foramen magnum.

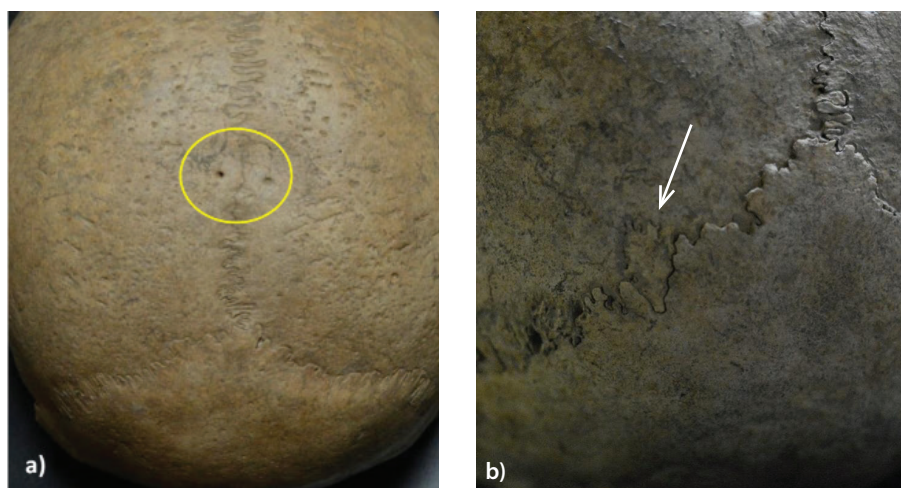


Figure 7. Crania non-metric traits detected in Individual 1.

a) Parietal foramina. b) Supranumerary ossicles in the lambdoid suture.

about ancestry. The Individual 1 presents various dental traits, of which a score 3 of shoveling in central incisors (FDI 11, 21) and a score 5 in left lateral incisor (FDI 22). We also observed the presence of Carabelli's trait in both 1st molars (FDI 16, 26) and a dental tubercle in the right lateral incisor (FDI 12). In respect of Individual 2, we noted the grade 5 expression of hypocone in the 1st molars (FDI 16, 26), and the presence of some labial convexity in the left central incisor (FDI 21).

The two crania were also examined macroscopically in order to detect the presence of lesions. All bone alterations found were recorded, described, and photographed, carrying out a differential diagnosis, when possible.

With respect to dentition, a record was made of the existing and *antemortem* and *postmortem* teeth loss. Both in-

dividuals had an almost complete set of upper teeth, with *postmortem* (PM) loss of the right central incisor of Individual 2 and of the left 2nd molar of Individual 1.

We examined the teeth macroscopically and, where necessary, with the aid of a magnifying glass. We also recorded existing tooth decay according to the method proposed by Lukacs (1989), dental *calculus*, following the recommendations by Martin & Saller (1956 in Lamarque, 1991), and tooth wear, following Smith's scale (1984) modified by Silva (1996). We also recorded the presence of linear enamel hypoplasias, as they are a very common indicator of physiological stress (Goodman et al., 1980).

Regarding the paleopathological analysis, the cranium of Individual 1, in a good state of preservation, no signs of pathologies were detected. The teeth

(N=15) usually show wear of grade 1, as well as dental *calculus*. As for anterior teeth (canines and both lateral and central incisors), they showed enamel hypoplasia, indicating that the individual had undergone episodes of physiological stress (poor nutrition, infections, etc.) during the period of dental enamel formation (Armêlagos et al., 2009).

Individual 2 presents several bone lesions on the cranium. We recorded porotic hyperostosis (Figure 8) and signs of *cribra orbitalia*. Both may be related to nutritional deficiencies, such as anaemia (Mays, 2018), metabolic disorders (Brickley and Mays, 2019; Brickley et al., 2020), or infections, such as respiratory infections (O'Donnell et al., 2020). Due to the absence of the appendicular skeleton, we were unable to present a more substantial differential diagnosis. We also recorded some alterations in the *sinus maxillaris*, characterised by bony growths, the so-called “spicule-type bone formations” (Magalhães, 2018) (Figure 9). These lesions are highly consistent with the presence of rhinitis and chronic maxillary rhinosinusitis (Magalhães, 2018: 16). In Portugal, the publication of maxillary rhinosinusitis cases in ancient populations is scarce and mostly stem from modern collections (Magalhães, 2018). The two oldest cases were published by Silva (1993), dating back to the Neolithic/Chalcolithic period, both unearthed from the São Pedro do Estoril cave, and the third one was published by Matos (1999), who presents a case of an individual from the

early Medieval period, from the Prazo necropolis (Freixo de Numão, Vila Nova de Foz Côa). Thus, Individual 2 became the third oldest case of rhinosinusitis found to date and published in Portugal, and the first from the Roman period.

An antemortem traumatic lesion with a diameter of 9.32 mm (Figure 10) is still visible in the right side of frontal bone. No lesions were observed in the inner part of the cranium, but the *pars basilaris* shows some porosity.

As far as oral pathology is concerned, the present deciduous dentition displays an average of 4.8 (n=7) of dental wear, particular high on the molars, indicating a rather abrasive diet in the early years of life (Hillson, 2005; Dawson and Brown, 2013). The dental *calculus* observed is residual, both in the deciduous and permanent teeth. A small occlusal caries was in the permanent first right upper molar (n=11). All permanent teeth (n=7/11) have linear enamel hypoplasia, confirming instances of physiological stress that this individual may have suffered during childhood.

Discussion

The crania belong to two non-adults, namely an infant and an adolescent, aged around seven and sixteen years. Individual 2 stands out for the number of pathologies presented, as the presence of porotic hyperostosis and *cribra orbitalia*. Reference should be made to the alterations in the *sinus maxillaris*, highly consistent with the presence of rhinitis and chronic



Figure 8. Porotic hyperostosis in the parietals of Individual 2.



Figure 9. Spicule-type bone formation in the *sinus maxillaris* of Individual 2 is usually associated with chronic maxillary rhinitis and rhinosinusitis.



Figure 10. Antemortem traumatic lesion on the right side of the frontal bone of Individual 2.

maxillary rhinosinusitis, thus being the third oldest Portuguese case known, and the only one from the Roman period. The absence of the appendicular skeleton of both non-adults does not allow further considerations about them.

On the other hand, the context of the oven and human remains deposited inside it is a challenge to the interpretation thereof. To help us understand the context and timeline of events, various radiocarbon determinations were carried out, and are presented in Table 1. At the same time, clay samples were collected for OSL dating (Table 2).

The space where the individuals were identified, the small oven, perhaps

used for domestic cooking, was built where the South door to the city once stood and where the *cardo* once gave access to the forum, which at the time no longer fulfilled their initial purpose. Such door is believed to have been closed in the end of 4th century AD or beginning of the 5th. The oven is built on a layer of pebbles placed here on purpose, on top of a layer of earth (EU 36), dated by radiocarbon to the second half of the 4th century (Table 2, BETA - 620237), but which contains ceramic materials that allow us to determine the time of the deposit of that layer to the first half or mid-5th century. The oven is likely to have been built probably somewhere in the second half

Table 1. Radiocarbon determinations obtained for oven context. Calibration Oxcal 4.4.2 software (© Bronk Ramsey, 2021), Intcal 20 calibration curve (Reimer et al., 2020).

Lab. reference	Sample	Radiocarbon determination	CAL AD
BETA - 544131	Individual 1 - bone	1670±30BP	330-436 (81.2%)
	(IGA-19.1)		257-531 (95.4%)
BETA - 544132	Individual 2 - bone	1760±30BP	234-381 (95.4%)
	(IGA-19.2)		
BETA - 544133	<i>Pinus pinaster</i>	1940±30 BP	0 - 204 (95.4%)
	(IGA-19.3)		
BETA - 544134	<i>Secale cereale</i>	1690±30BP	326-423 (78.8%)
	(IGA-19.4)		255-423 (95.4%)

Table 2. OSL determination of the oven (obtained by Jorge Sanjurjo Sánchez from the Laboratorio de Datación por Luminiscencia; Unidad de Geocronología, Universidad de A Coruña).

Lab reference	Dosis equivalente (Gy)	N	Determination	Year DC	Cal AD
Forno-2	7,29±0,15	62	1510±99	511±99	411-610

of the 5th century, or even at the beginning of the 6th century, the data does not allow a chronological refining more precise of this moment. Nevertheless, the dating of the oven's mortar indicates that it may have been used for at least the final decades of the 6th century (Table 3). Although the crania must have been deposited inside the oven in a moment posterior to its abandonment (around the end of the 6th century), the dating of the individuals has shown that they are older than the oven itself. Individual 1 (Table 2, BETA-544131), the one better preserved (Figure 4), was dated between 257-531 AD (95.4% probability). The time

frame is too wide, but if we analyse the results of calibration, it is to mention that 81,2% of probability is situated between 330-436 AD. This means that there are strong probabilities that the child has lived between the second half of the 4th century and the beginning of following century. Individual 2 (Table 2, BETA-544132) was dated between 234-381 AD (95.4% of probability), which led us to a broader time window, which do not pass the 4th century. Maybe these two individuals were not coeval, but they are certainly older than the oven.

The dating carried out on the seeds (Table 2, BETA 544134) found inside the

oven points to the 4th century AD, so it is not impossible that these macro-organic remains could have been carried out with the earth that came with the crania. The sediments that filled the oven after the deposition of the crania may also have incorporated samples of charcoals and seeds of older chronology. The same can be said in relation with the sediments that covered the oven. The correspondent stratigraphic unit (UE 28) contained scarce potsherds that seem to be from the Visigoth period. From the same UE it was possible to obtain a radiocarbon determination of a sample of rye (Table 2, BETA-544124. The results calibrated are 255-423 AD (95.4%) and 326-423 AD (78.8%), meaning that this rye seeds likely date back to the 4th century. Once again, we must admit that the soil deposit that covered the oven could have been remobilised from other areas of the city and it could have incorporated older organic matter.

The stratigraphic sequence, combined with several radiocarbon determinations (Table 1) and archaeological materials, it is likely that the deposition of UE 28 occurred in the second half of the 6th century or even in the following century. The full results of this excavation (stratigraphy, structure, and materials) will be published in detail in another paper.

The crania are clearly in a secondary context. This conclusion is based on four factors: 1) their bases are pointing upwards; 2) absence of the appendicular skeleton of both individuals; 3) the timelines of the individuals, which are clearly

earlier than the proposed date of construction of the oven; finally, 4) and the evident lack of space inside the oven for the primary burial of any of the non-adults.

The only possible interpretation is that these two non-adults were originally deposited in a Roman funerary area, perhaps situated near the city wall, and were partially removed to the oven, which had already fallen into disuse, sometime during the 6th century. It is not easy to determine the motives behind this deposition, as no other similar contexts are known that could help to interpret this underlying behaviour. Hamerow (2006) refers to 16 Anglo-Saxon cases from the early medieval period, which identified "special deposits" with human (burials or detached bone parts) and animal bones. One-third of such deposits that contain human bones refer to children and those that contain animal bones are mostly of dogs and horses (2006: 3, 27). Although rare, they are generally "termination/closure deposits" of silos or boundaries/accesses to settlements and not so much foundation deposits. This data could even be like the Idanha-a-Velha case, as the oven was built when the original wall was no longer being used. Another factor similar to the Idanha context is that these Anglo-Saxon contexts also occur in the same timeframe. However, not only is the similarity distant in its geographical scope but also the sociopolitical and religious context is not comparable.

While existing data allows us to state that the person responsible for this sec-

ondary deposit clearly had an intention, today it is impossible to explicitly determine the nature thereof. Nevertheless, in view of the data available and the cultural and religious context of the time it took place, we can put forward several hypotheses. It seems obvious to us that there was a clear respect for the human remains, which were manifestly ancient. This respect could be understood to be on the grounds that these were two non-adults, or the fact that the right to the preservation of human remains was recognised, which stems from the Christian mentality already dominant in Egítania at the time the circumstances occurred. We should not forget that Idanha was an episcopal see at least since the 6th century. We can infer that some action involving the removal of soils and/or even of funeral areas may have been responsible for the identification of the primary contexts where these subadults were buried. Once the bones were identified, someone would have collected them and found the appropriate place for depositing them again in the sheltered place of an abandoned oven, where they remained until they were recovered by the excavation work. Maybe this means that the memory of the old city burial areas was already forgotten in the 6th century.

There are no direct parallels in literature that help to better formulate this behaviour. It seems evident that these Idanha-a-Velha context is unique in the Peninsular Early Middle Ages funerary realm and may perhaps help understand other contexts that may be identified in the future.

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