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# pca

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volume 10/2020

	CONTENTS	PAGES
EDITORIAL		5
	RCHAEOLOGY: FROM THE AGENDA 2030 LD POST-COVID	
G.P. Brogiolo,	, <b>A. Chavarría Arnau</b> Archeologia e sostenibilità nell'era post (?) COVID-19	7
P. Gould	Resilience and innovation: an economic contemplation on public-facing archaeology after COVID-19	21
P. Gelabert	Past diseases: present questions and future perspec- tives from an archaeogenetic approach	35
C. Holtorf	An archaeology for the future: from developing contract archaeology to imagining post-corona archaeology	57
P. Everill	Quo vadis? What next for British archaeology?	73
D. Henson	Archaeology's place in education: under threat or an opportunity?	91
A. Rey da Sil	<b>va</b> Sailing the waters of sustainability. Reflections on the future of maritime cultural heritage protection in the global sea of development	107
R.J. Williams	<b>son, M. Nevell, B. Humphrey-Taylor</b> Increasing the resilience of cultural heritage using novel technologies: the perspective from a UK volunteer-led site	135
C. Rynne	Waterpower and sustainable energy in 19 <sup>th</sup> -century Europe and the USA. An archaeology of the water turbine	147
RESEARCH -	RETHINKING THE LATE ANTIQUE COUNTRYSIDE	
C. Corsi	The villa- <i>mansio</i> in the Late Antique Mediterranean: between historiographical creation and archaeological impotence	165
T. Lewit	" <i>terris, vineis, olivetis</i> ": wine and oil production after the villas	193

N. Conejo	Coins and <i>villae</i> in late Roman Lusitania: collapse of the Roman currency economy?	219
A. Carneiro	Adapting to change in rural Lusitania: zooarchaeological record in the Horta da Torre Roman villa (Portugal)	247
R. Montagnet	<b>tti, D. Pickel, J. Wilson, F. Rizzo, D. Soren</b> New research in the Roman villa and late Roman infant and child cemetery at Poggio Gramignano (Lugnano in Teverina, Umbria, Italy)	279
J.M. Nolla, M	. Prat, A. Costa, N. Corominas, L. Palahí La visualiza- ción de los visigodos en Gerunda y sus entornos. Datos significativos de un problema sin resolver	303
BEYOND THE	THEME	
N. Tsivikis	Moving beyond the Invisible Cities of Byzantium	325
P. Todaro, G.	Barbera, A. Castrorao Barba, G. Bazan <i>Qanāts</i> and historical irrigated landscapes in Palermo's suburban area (Sicily)	335
S. Bianco, E. A	<b>Ilué, S. Riera Mora, A. Fernández, M. Soberón Rodríguez,</b> <b>C. Miró Alaix</b> The evolution of wood fuel exploitation in the El Born Market site (Barcelona, Spain) during the 15 <sup>th</sup> -18 <sup>th</sup> centuries starting from charcoal analysis	371
A.R. Staffa	La transumanza in Abruzzo fra tarda antichità e medioevo	401
P. Marcato	Analisi diacronica del paesaggio storico delle malghe di Brentonico (TN) tra XIX e XXI secolo	449
REVIEWS		473
ranean:	n and Late Antique Wine Production in the Eastern Mediter- A Comparative Archaeological Study at Antiochia ad Cragum and Delos (Greece) - by <b>T. Lewit</b>	
insediativ	Sacchi (eds), <i>La villa dopo la villa. Trasformazione di un sistema</i> vo ed economico in Italia centro-settentrionale tra tarda antichità evo - by <b>G.P. Brogiolo</b>	
	Quirós Castillo (eds), <i>Arqueometría de los materiales cerámicos</i> a medieval en España - by <b>C. Citter</b>	
	. Chavarría Arnau, <i>Archeologia postclassica. Temi, strumenti,</i> ive - by <b>A. Guidi</b>	
C. Giostra (ed), by <b>V. La</b>	Migrazioni, clan, culture: archeologia, genetica e isotopi stabili - Salvia	
	nd, <i>Reinventing Sustainability: How Archaeology Can Save the</i> by <b>M. Fecchio</b>	
I. Huvila (ed), <i>Ar</i> by <b>L. Du</b>	chaeology and Archaeological Information in the Digital Society - <b>rjava</b>	
C. Holtorf, A. Pa	antazatos, G. Scarre (eds), <i>Cultural Heritage, Ethics and Con-</i> ry <i>Migrations</i> - by <b>A. Borsato</b>	

research

André Carneiro\*

### Adapting to change in rural Lusitania: zooarchaeological record in the Horta da Torre Roman villa (Portugal)

The starting point for this study is the description of the processes recorded in archaeological excavations at the Horta da Torre *villa* (Fronteira, Alto Alentejo, Portugal). Although the site was abandoned in the mid 5<sup>th</sup> century, a phase in which the *villa* was reinhabited was identified during the 6<sup>th</sup> century. This second occupation took place for reasons and using strategies that differed greatly from those identified in the previous phase: the room that served as one of the owner's representation areas would go on to house a shelter made of perishable materials, while other areas were used to carry out pastoral operations. The archaeofaunal records collected were essential in defining the way in which this shift took place, as they provide evidence for a strong change in both dietary and economic patterns. Combining these findings with other examples from the region, this study seeks to characterise the livelihood of the population at the time, as well as the ways in which they adapted between the 5<sup>th</sup> and 8<sup>th</sup> centuries. Recovered data shows how significant changes took place to the daily activities lived by rural populations, in just a few generations.

Keywords: villa, transformations, environment, rural economy, late antiquity

Il punto di partenza di questo studio è la descrizione dei processi registrati nello scavo archeologico della villa di Horta da Torre (Fronteira, Alto Alentejo, Portogallo). Anche se il sito è stato abbandonato a metà V secolo, è stata identificata una fase di rifrequentazione durante il VI secolo. Questo secondo momento di occupazione ebbe luogo per motivi e con strategie differenti rispetto a quelli identificati nella fase precedente: la sala che fungeva da area di rappresentanza per il proprietario sarebbe stata rifrequentata come riparo in materiali deperibili, mentre altre aree sono state usate per attività legate alla pastorizia. Il record archeozoologico è stato essenziale per definire il modo in cui è avvenuta questa trasformazione, evidenziando un forte cambiamento sia di dieta che economico. Combinando questi ritrovamenti con altri nella medesima regione, lo studio vuole ricostruire i mezzi di sostentamento della popolazione al tempo e comprendere i modi in cui questa si adattò tra V e VIII secolo. I dati dimostrano che le attività giornaliere delle popolazioni rurali subirono significative variazoni nel corso di poche generazioni.

Parole chiave: villa, trasformazioni, ambiente, economia rurale, tarda antichità



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Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do. Once or twice she had peeped into the book her sister was reading, but it had no pictures or conversations in it. "What's the use of a book," thought Alice, "without pictures or conversations?"

Lewis Carroll, Alice in Wonderland, p. 1

#### 1. Introduction

The Roman villa of Horta da Torre (Fronteira, Portugal) was referenced in 1999, within work conducted to draw up the Fronteira Archaeological Map (Carneiro 2005; 2014, II, p. 266). Although severely destroyed in large part by agricultural work, the excavations in progress since 2012 have uncovered a set of structures that have remained in relatively (and surprisingly) good condition. In addition to providing the floor plan and design of the rooms, one of the main points of interest in the results obtained is the recovery of (at least) two phases during which the site was inhabited. The excavation area centres around a main building for leisure activities, in which there is a room crowned by a *stibadium* with a double apse. This area revealed one of the most original decorative styles and architectural solutions in the province of *Lusitania*. possibly functioning as a *cenatio aestivalis*. The site was abandoned in the mid 5<sup>th</sup> century, although it was reoccupied after a period of abandonment that can be estimated to have been of around 50/100 years; long enough for some of the roofs of the annexes to start falling into disrepair. The reoccupation of the villa would shelter an entirely different form of livelihood to that witnessed in the imperial phase. This could be detected from the elements of material culture documented and the patterns of food consumption to the economic activities undertaken. It should be noted that the excavated area is small in relation to the total construction surface of the villa and that the results presented in this study are preliminary. This is the case as an in-depth study of the materials and settings recovered is set to take place in due course. It can nonetheless be considered that the elements identified in the archaeological excavations can be analysed to a great enough extent as to contribute to knowledge of the processes of adaptation and change in the rural landscape of *Lusitania* at the end of the Empire. Horta da Torre is therefore yet another example of the "end of the *villae*", documenting the process that lead to the destructuring of the imperial landscape and, more specifically, the way in which the large, monumental buildings that characterised rural settlements in the province were abandoned. These processes, which have been increasingly well documented in Hispania (Chavarría Arnau 2007) as well as this region (Carneiro 2017), find a relevance in the Horta da Torre case study. This relevance is closely linked to the way in which the villa allows us to understand how the communities that inhabited this territory adapted to the changes they faced, restructuring their daily and economic activities in order to do so. Examples are mentioned in the region that allow these processes of change in the livelihood of the population as a whole to be detected.

#### 2. The Horta da Torre villa: the stibadium and its annexes

Horta da Torre is located in the heart of what was once one of the most densely inhabited territories in Lusitania (fig. 1). The municipality of Fronteira contains 56 sites where Roman remains have been registered, stretching over a distance of 248 km<sup>2</sup> (Carneiro 2014, II, pp. 249-282). Of these 56 sites, 7 can be characterised as *villae* (1/35 km<sup>2</sup>) given the diversity and abundance of materials found in the surface record, which include mosaic floors and/or architectural elements. This concentration can be explained by the convergence of two factors: one of them is a particularly important itinerary, which possibly corresponds to the XIV Antonine Itinerary (Olisipo-Augusta Emerita) (Carneiro 2008, pp. 58-66), with the *mansio* of *Abelterium* to the northwest (present-day Alter do Chão). This proximity to the itinerary (which is less than 500 m away and visible) explains the ease with which the villa gained access to supplies, both material (a huge variety of ceramics, metals and glass fabrics, for example), and dietary - the excavation of a dumping area next to the double apse room made it possible to recover a large number of oyster (Ostrea), clam (Ruditapes decussates), cockle (Cardiidae) and sea snail (Mollusca gasteropoda, possibly Buccinum) shells. The proximity of this itinerary also explains the presence of a "string" of large *villae*, of which Horta da Torre is part (that is, sites lining the route taken by the itinerary).

Endogenous resources must also be considered. The most notable is the Sulfúrea thermal spa (Cabeço de Vide), which is still operational to this day but contains underground proof that a Roman *balneum* existed. In the immediate surroundings of the villa there are abundant water resources and the soil is of a good quality, making it suitable for farming. All the necessary physiographic conditions therefore converged in this location to provide the desired environmental conditions of an *ideal landscape*, a description characteristic of the locations of these sites in the Alto Alentejo, which have been found to be in complete harmony with their surroundings (Carneiro 2014, I, p. 144 ss.). André Carneiro

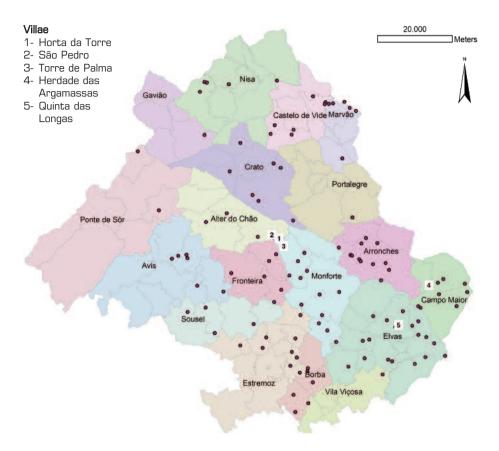


Fig. 1. Roman *villae* in Alto Alentejo (according to Carneiro 2014, map by Joana Valdez-Tullet).

At Horta da Torre, excavations began around a structure that was visible on the surface, named the *Tower* by the local population thanks to its semi-circular shape (fig. 2). These first explorations allowed for a double apse to be documented, crowning a monumental room with a *stibadium*. These types of devices have been found in other regions to such an extent that in recent years it can even be said that there was a real "esplosione di *stibadia*" (Volpe 2019, p. 215). It should be noted, however, that they are still rare in *Lusitania* and in what is now Portugal: the specimen located at Horta da Torre is only the second to have been identified, the first having been at Rabaçal (Penela) (Pessoa 2008). Structures with parallel concepts include the case of El Ruedo (Almedinilla, Cordoba) (Vaquerizo Gil, Noguera Celdrán 1997) and, in particular, that of Faragola (Apulia) (Volpe 2006), which can also be classed as a summer *cenatio*. Just as in the examples mentioned, water



Fig. 2. Aerial view at the end of the 2019 campaign (drone photo by Jesus García Sánchez).

was used to create illusory and suggestive scenarios: behind the *stibadium* stood a floodgate, allowing for the flow of water to be controlled<sup>1</sup>. The floor in this room was therefore laid using *opus signinum* instead of the usual mosaics, prevalent throughout the region's *villae*. The décor, which was destroyed in large part by the collapse of the walls, was partially recovered via excavation: the walls were connected to the floor using marble slabs, and the upper sections of the elevations would have been covered in panels of multi-coloured mosaics depicting aquatic plants. A marble architectural element, which would possibly have been part of a skirting board at the top of the wall, fits in with this design, therefore resulting in a coherent decorative language. The theme of water, or the design of *nympheum*-type spaces, was common to other *villae* in this area of *Lusitania* (Carneiro 2019a, pp. 9-12), where the continuous efforts made to fuse natural landscapes with built environments can be detected (fig. 3).

<sup>&</sup>lt;sup>1</sup> A proposal for a 3D virtual model reconstituting the atmosphere of the *stibadium* was developed by André Carneiro, Gonçalo Lopes and Carlos Carpetudo. The virtual model created by Carlos Carpetudo is available at https://www.youtube.com/watch?v=OzyEanG9aVk.



Fig. 3. 3D proposal for the double-apsed *stibadium* room (André Carneiro, Gonçalo Lopes and Carlos Carpetudo, 2016).

The excavation did not allow for the roofing of this room to be documented, or even whether it had been covered at all. However, the collapse of the walls resulted in a universal layer made up of a chaotic accumulation of stone, mortar and fragments of mosaics from the parietal coverings coating the entire surface of the room. It is this unit, which is extremely thick and robust, that determined the context within which the villa was occupied post-abandonment, as described in the following point.

Two other large spaces surrounded the *stibadium*, also demonstrating how the element of water made up an integral part of this domestic environment. Given the philosophy of open area excavation, work has progressed in order to identify two further sets of structures attached to the room. Thus, a small peristyle can be found to the south of the double apse room, where *cubiculae* were positioned around an *impluvium*, which was filled directly from a spring. A wall blocks off the access to the space opposite the entrance to the room, where a larger peristyle also has an exedra with ducts and structures to allow water to circulate around what would have been a pleasant garden. Thus, these two peristyles would have had different uses. The smaller one would have been reserved for private use, for the family, in which they could rest, while the larger one would provide access to the *stibadium*, therefore placing it in the section of the villa reserved for receptions.

The excavation of the *stibadium* started with the assumption that this would be the central area of the villa's pars urbana. This area, however, has been severely damaged through both intentional destruction and agricultural practices. However, geo-radar surveys were carried out throughout the property in 2018 as a part of the Fronteira Landscape Project, in collaboration with Leiden University (Netherlands)<sup>2</sup>. The results were surprising, revealing that the underground structures spread over two hectares. When the entire layout is considered, which can be detailed with excellent precision, it appears that the *stibadium* is, after all. in a decentralised, peripheral position, opposite to a large courtyard. This courtvard is preceded by another, smaller one, probably reserved for the pars rustica. This separation between functional areas was implemented in accordance with a layout similar to those found in other Lusitanian villae, such as the neighbouring Torre de Palma (Monforte, less than 10 km away) or at La Sevillana (Badaioz) (Aquilar Saenz. Guichard 1993, fig. 37-38, pp. 116-117). Although no data has been produced on the type of yields and economic activities that took place at Horta da Torre, two indicators of these factors have been detected. The first is the location known as "Alto da Torre", which is in the villa's immediate surroundings and which contained a large accumulation of ore slag; the second is the presence of a huge winepress, which has recently been removed and taken to an unknown location by the owner. The winepress had been located at the south western edge of the property, more precisely next to the entrance to the outer courtyard, as documented in the geophysical surveys. Also, there was a necropolis between the villa and the itinerary, which was targeted by clandestine excavations around 1990. Some marble slabs that had been used to cover burial graves have been recovered.

It should be noted that the materials used on the Horta da Torre villa are particularly opulent, demonstrating the benefits gained from its connections with the product distribution circuits, which are unsurprising given its proximity to the XIV itinerary. Examples of these materials were found in the records of amphorae in Fronteira (Alves, Carneiro 2011), which displays a huge diversity of elements collected in the area, includ-

 $<sup>^2</sup>$  Collaboration between the University of Évora and the Leiden University's Faculty of Archaeology, funded by the Prins Bernhard Culture Foundation, and conducted in two sections (01/2018 and 03/2019). The geo-radar work was carried out by a team from the Universidad de Cadiz-UCA GPR service, overseen by Lázaro Lagostena Barrios, using a Stream-X 200 mHz antenna. The *Fronteira Landscape Project* aims to conduct an intensive study of the network of rural settlements in the municipality of Fronteira, with work being directed by André Carneiro and Tesse D. Stek coordinated by Jesus Garcia Sanchez and Rogier Kalkers. The first campaign results were presented in CARNEIRO *et al.* 2019.

ing items of Italic origin (Dressel 2-4; Dressel 24) and also from *Baetica* (Dressel 23; Dressel 28), in addition, of course, to the ubiquitous containers used to transport fish preparations from the estuaries of the Tagus and Sado rivers (Almagro 51; with an occurrence of 65% of Almagro 51c). This basis also provides evidence for the consumption of luxury goods, coherent with other elements in the surface record.

#### 3. The Horta da Torre villa: the ruin

However, sometime in the mid 5<sup>th</sup> century, this vast space, which was decorated with exquisitely opulent elements, would come to be abandoned. It was a planned evacuation: at no point has the excavation uncovered any evidence of fires, destruction, concealment or loss resulting from circumstances other than those that could have happened by accident or chance. The few materials recovered from the imperial phase resulted from situations in which they were casually left behind in the flooring, having somehow escaped the attention of those who later inhabited the space (aided by the disturbances caused by agricultural work, as large areas of soil were turned over to provide plantations). This can be illustrated through the serialisation of *terra sigillata*: while fragments collected are abundant and varied during prospecting (especially near the river, where drag sedimentation occurred), relatively few ceramic fragments were collected during excavation. For example, from ten fragments with stamps, nine were collected during field survey and one only in excavation, from the area used to collect refuse, outside the double apse room - that is, none from within constructions.

The abandonment of the villa, however, was not permanent. Within no more than two generations — that is, no longer than 50 years — all the areas studied so far show signs of a human presence. This process of reoccupation took place at a time when the villa had been completely abandoned and had begun to fall into ruin. The excavation carried out made it possible to identify the following:

- a) a post-abandonment presence in the *stibadium*, while the room was still in structurally good condition. There is no evidence that walls had begun to collapse, quite the contrary, in fact: the top layer seals the level at which the room was re-inhabited.
- b) the collapse of the roof in the small peristyle. Thus, it was found that the *impluvium* was filled with construction ceramics, an occurrence that would not have taken place naturally, as the roof should have fallen on the *opus signinum* flooring. It was therefore found that the *impluvium* had been filled systematically, covering it to the top and thus

preserving two  $4^{\mbox{th}}$  century coins that were left untouched on the floor.

Therefore, and according to the data obtained so far, we can estimate the following historical process:

- *i*) "full" imperial occupation until the mid 5<sup>th</sup> century AD;
- ii) no human presence or inhabitants that did not leave archaeological traces – between the mid 5<sup>th</sup> century and the beginning / mid 6<sup>th</sup> century;
- iii) a short cycle of human presence or several moments that cannot be distinguished from each other archeologically, as no differentiators in material culture could be detected (only a few changes in the archaeozoological records, which shall be further explored in the relevant section) — with "pastoral" evidence found in the small peristyle and ligneous construction in the *stibadium*, from around the mid 6<sup>th</sup> century;
- *iv)* the villa was either abandoned permanently at that time or at the end of the 6<sup>th</sup> century.

Next, the circumstances recorded shall be detailed.

#### 3.1. The stibadium

The most visible element providing proof of a post-abandonment presence recorded at the Horta da Torre villa is the alignment of holes made in the opus signinum floors. These are the evidence of a shelter constructed out of perishable materials. The approximately 100 m<sup>2</sup> of the double apse room is covered by a thick layer of overturned soil [UE22] that seals a residual layer within which a limited number of materials were collected [UE33]. Holes were made in the flooring in order to build a hut that occupied about 2/3 of the area of the room and was sub-rectangular, not dissimilar to a "barge" shape. This choice of shape lead to a loss of the classic concepts of orthogonality and the division of rectangular modules, a phenomenon that only fully developed in Hispania in medieval times (for example, Tejerizo García 2015, p. 259), following radical changes in the perception of spaces for daily activities (Van Ossel, Ouzoulias 2000, pp. 145-146). It should be stressed that the only evidence of this construction are the holes along the room's opus signinum flooring, therefore establishing that neither Grubenhäuser (Fronza 2011, pp. 121-128) nor Sunken-Feature Buildings (SFB, or EFR, in Spanish terminology) (Tejerizo García 2015, pp. 256-274) would have been constructed here. A chronological component must also be noted, however, as the occupation of Horta da Torre (6<sup>th</sup> century) was verified to have been prior to medieval times (7<sup>th</sup> century onwards), when these types of constructions became the norm.

The Horta da Torre case is important because it is an example of the phenomenon of ligneous construction *inside* buildings, which is less frequent than those built *outside* (in general, in close proximity). Building inside a room, as was the case here, required a greater investment as, for example, floors had to be perforated. This work also reflects the radical way in which the room was restructured, losing all relevance – except for as a shelter, becoming a "shell" –, which contrasts profoundly with the way in which the previous occupants had used it, as a lavish, central space. The spaces chosen for this purpose were, in general, of great importance, often signalled as such by the use of mosaics (in El Val, the *emblema* has been removed on purpose) or complex decorative designs, as in Horta da Torre. The conversion of these refined environments into areas built for mere survival, using ligneous constructions, are proof of the vastly different codes of appropriation of these populations. The documented situations in table 1 have been recorded (in addition to Horta da Torre).

One of the elements that must undoubtedly be highlighted is the geographical dispersion of the process. Although the contingent is scarce, it is represented in a similar way across varied regions removing, therefore, the connection that had generally been made between these perishable constructions and the "barbarian influx", and therefore the question of an ethnic connection between the builders of such structures.

Another suggestive phenomenon took place at Horta da Torre: horse bones were collected from the UE22 and UE33 in the interior of the room (Valente, Carneiro 2015), indicating that people and animals alike lived in this space. This conclusion has been taken from the fact that the bones of equines (*Equus caballus* and some *mulus*) do not present any marks suggestive of carbonisation or consumption. These circumstances have been documented in some places in *Hispania*, where the case of the El Val villa (Alcalá de Henares) is, once again, the most well known. In this case, the construction of a hut where men would coexist with animals lead to one of the most monumental mosaic floors in the house being perforated, which demonstrates the lack of interest in pre-existing elements (Rascón Marqués, Méndez Madariaga, Díaz Del Rio 1991).

Another notable situation at Horta da Torre arises from the removal of the marble slabs that skirt the walls and provide the markings that divide the floor between the living room and the *stibadium*. These circumstances have also been observed in other *villae*, such as the well-known case of Noheda (Cuenca), where the plaques used to line the walls of the main room had also been pulled out (Valero Tevar 2019, pp. 158-160). In both cases, it is clear that the procedure was carried systematically yet manually, without the use of machinery. This is evidenced by the marks made by the picks on the plaques and on the mortar of the walls (fig. 4).

Villa	Province	Structure	Environment	Chronology of the environment	Main reference
Vilauba (Girona)	Tarraconensis	6.25 x 3 m structure with rectangular floorplan	Room in the central sec- tion of the building	6 <sup>th</sup> -7 <sup>th</sup> cen- turies (TSCD, lyre-shaped plaque, bronze horse harness)	Castanyer, Tremoleda 1999
Tinto Juan de la Cruz (Pinto, Madrid)	Tarraconensis	Not described, but in fig. 21 four sub-rect- angular shaped post holes can be seen next to a silo	Enclosure III (Large room with opus signinum flooring)	Late 5 <sup>th</sup> / early 6 <sup>th</sup> cen- tury with spoils includ- ing weapons and TSHT	Barroso <i>et</i> <i>al.</i> 2001
El Val (Alcalá y Henares, Madrid)	Tarraconensis	14 x 9m rect- angular struc- ture	In the main room, pierc- ing the "vic- torious auri- ga" mosaic	End of the 5 <sup>th</sup> century (TSCD)	Rascón Mar- qués, Mén- dez Madaria- ga, Díaz Del Rio 1991
El Salar (Granada)	Baetica	Not described, only "post holes" refer- enced	Ambulacrum (but also in the triclini- um, as per- ceived in photographs)	4 <sup>th</sup> -5 <sup>th</sup> cen- turies <sup>3</sup>	González Martín 2016, p. 323
Morosanto (Ronda, Málaga)	Baetica	Post holes around a cen- tral pillar (the excavated area was reduced as this study was only a sur- vey and the floorplan was not described)	<i>Natatio</i> inte- grated into pars urbana	Filled from the 2 <sup>nd</sup> half of the 5 <sup>th</sup> centu- ry (Hayes 51 and 53b); subsequently inhabited	Castaño Aguilar 2016
Milreu (Estói, Faro)	Lusitania	Post holes drilled into mo- saic floors	Chambers in the neigh- bouring room connect to the main area	No descrip- tion	Teichner 2008

#### Table 1.

 $^3$  Proposal presented with no dates, so the chronology may need to be revised. The hypothesis of the 6th century presented in GONZÁLEZ MARÍN 2014, p. 182 is more realistic.



Fig. 4. Northern wall in the *stibadi-um* room [UE40] with marble slabs removed.

It has not been possible to determine if these actions took place at Horta da Torre:

- i) once abandoned by the owner;
- ii) at any other time, once the room was abandoned. Circumstances recorded for other *villae* have provided proof that processing structures were installed after the imperial period and before the building was permanently abandoned (Munro 2012, p. 365) for example, this process took place at the villa in Faragola during a period intermediately preceding the construction of huts (Volpe *et al.* 2009; Turchiano, Volpe 2018, pp. 143-149);
- *iii)* during the reoccupation, characterised at Horta da Torre by the construction of the hut inside the room in which the marble plundering took place. The only element that can be claimed with certainty is the fact that other marble elements were of no interest and were therefore abandoned: as is the case of the column base recovered in the *cubiculum* that leads into the small peristyle (see 2.2). Likewise, although there are some contemporary lime kilns nearby, the fate of these plaques cannot be determined, as no old processing structure has been found. In summary, the only evidence encountered of a systematic *spolia* so far, relates to the *stibadium*. This is possibly the case because these plaques were easier to remove and transport than architectural elements that were still required to support the structures, or because the marble in the room was of a distinct origin, with specific characteristics.

#### 3.2. The small peristyle

As the roof had previously collapsed in this room, the roof tiles used in its construction were thrown into the *impluvium*, covering it almost entirely [UE72]. It is therefore within a room that shows distinct signs of abandonment that indicators of its reoccupation have been encountered. Perhaps due to these constraints, the way in which the space was used shows distinct differences: small marks on the opus signinum of the lining of the impluvium - and a larger central hole - indicate the existence of a structure smaller than the one built in the *stibadium* room. Likewise. the way in which the markings are aligned - markings that are particularly faint - suggest the existence of a fence, which may have been used for keeping ovicaprine livestock, based on the abundant osteological remains found (as referenced in point 3). The wall that encircles the eastern wing - [UE38] - is reinforced with juxtaposed stones, which makes it look as if it once supported a workbench of some kind (for cutting meat? storage?) or just a simple bench used as seating. In the north wing, especially in the north-western corner, a thick layer [UE16] signals that this was the location used to dispose of refuse. Dark sediment filled with coarse ceramics intended for culinary use, fragments of *dolia* used to store food in and various bone remains, including jaws, fill this corner (fig. 5). These particular elements are significant, as they reflect what appears to have been the economic regime in place at the time, demonstrating that livestock were kept; the containers in which food was cooked, of which only pots and pans prolifically marked by fire were found, while plates are absent; and also the existence of two or three medium-sized containers (small dolia), which demonstrate the way in



Fig. 5. Jawbone in [UE16], small peristyle.



Fig. 6. Marble column basis found in the compartment attached to the small peristyle, found in an inverted position.

which household products were stored, signalling, in addition, the lack of capacity to store any additional materials or contents on a wider scale. It should also be added that in imperial times, the presence of *dolia* in this context would be anomalous, as the peristyle would have been a private space designed to provide a rest area in the spaces around. Finally, it should be noted that a fragment of granite millstone was found in this layer, which would have been used to make flour, the only evidence of this type found in the villa.

As for the adjacent western annex, on which excavation has already begun, it is a small *cubiculum*, designed for rest. It has been possible to verify that a wooden pillar was placed in the centre of the room — the base of which pierced the *opus signinum* flooring — to support the roof, which would have been close to collapsing at the time. Aside the western wall an inverted marble column base was found, used as a seat (fig. 6). The way in which it aligned with the entrance allowed for an open view into the area housing livestock in the peristyle and *impluvium*.

#### 3.3. The large peristyle

Excavation on the area bordering the entrance to the *stibadium* began in 2018, having since uncovered almost the entire floor plan of the main peristyle, which contained a walkway created with a focus on the use of water. A garden would have been located in the centre of the peristyle,



Fig. 7. Example of ceramic found in dumping areas [UE108].

which those who wished to access the *stibadium* would have had to walk around. Just as the small peristyle, a layer [UE108] filled with sections of bone covered in cuts and teeth marks, including jaws, could be found in the large pericycle, as well as remains of coarsely manufactured containers with visible marks providing evidence that they had been used for culinary purposes (fig. 7). It is therefore possible that this central area of the peristyle — which was part of the throughway to the *stibadium* room — could have been used as a space for dumping refuse.

#### 4. The Horta da Torre villa: analysis of the evidence

The first factor that should be considered lies in the *periods* related to the process of abandonment / reoccupation / final abandonment of the Horta da Torre villa. This aspect is fundamental because, as has been noted by other authors (Chavarría 2007, pp. 125-141), the uses of the villa during different periods resulted in varying perceptions and behaviours, which differed to the way in which a previously abandoned residence would have been used in the 6<sup>th</sup> or 8<sup>th</sup> centuries, given the distinctive historical events taking place in *Hispania*.

The artefacts collected during excavation do not shed light on these factors, as the process of abandonment carried out in the imperial phase seems to have been systematic. This would have meant that materials that could have been useful in order to understand the process have been removed. However, twenty years of field survey conducted on the site suggest that the process of abandonment took place in the mid 5<sup>th</sup> century. This conclusion was reached as the most recent morphotypes found were fragments of North African slip ware: Hayes 50, Hayes 58,

Haves 61. Haves 67 and Haves 59. These findings contrast sharply with those recorded for two neighbouring sites, demonstrating how different phenomena have been found to have taken place within a reasonably limited geographical area. Examples include the ceramic records found for two sites that were also supplied by the possible XIV itinerary. Further south, in the Monte de S. Francisco villa (also in Fronteira), imports dating all the way up to the 6<sup>th</sup> century were found, within which there was an abundant presence of African slip ware D (Hayes 76, 84, 93B and 97). In the opposite direction (to the north), patterns of continuity have been registered up until more recently in *Abelterium*, which was possibly an urban cluster, as well as persistent links to the Roman traditional ceramic repertoires (Quaresma, António 2017). These records provide the evidence necessary to suggest that Horta da Torre was abandoned earlier than other sites in the region - in around the mid 5<sup>th</sup> century. The process of reoccupation took place long enough after abandonment for the villa's structures to have begun to fall down - the *stibadium* was still intact, but the roof of the small peristyle had collapsed, demonstrating that a significant amount of time had passed.

This process of abandonment, which resulted in a lack of human presence in the villa for a time, fits with the transformation phenomena detected that depart from its original design. The reoccupation of the villa therefore provides a deeper insight into how it was used. In other words, what had been the owner's reception chambers, an annex of which had been a private rest area, would be completely transformed and used for other purposes. It became an area used for shelter and for keeping livestock; occupied as such with no regard for maintaining the room's prior usage. Furthermore, no efforts were made to restore or repair what had existed there previously. In Torre de Palma, for example, the mosaic floors of the peristyle were patched using opus signinum. In Horta da Torre, on the contrary, only preventive measures were taken to delay the decomposition of the villa: a wooden post was installed in order to support a roof that was under threat of imminent collapse, for example. In the small peristyle, fallen tiles were thrown into an empty space so that they would not disrupt the walkways within the villa. Action was always taken immediately, and the space was regarded as purely utilitarian, with no provisions made to provide comfort. Habitation of the villa was precarious, in every sense of the word, with the occupants demonstrating no lasting intention of remaining.

Another set of issues concerns the economic pattern supported by the material record and archaeological evidences identified. As mentioned, both in the last phase in which the villa was occupied, during imperial times, and also when it was reoccupied, the ceramic morphotypes found differed greatly from those that continue to be found in neighbouring sites. While North African supplies continued to arrive at Monte de S. Francisco, it has been established that they were scarce at Horta da Torre (predominantly Late Hispanic terra sigillata) and stopped being delivered relatively early. This comparative pattern – although based solely on field survey data – is interesting as far as sites served by the same source are concerned, the source having been what was probably XIV itinerary. Likewise, it can be seen that the material culture recovered from the periods of reoccupation is marked only by coarsely manufactured ceramics. Made from pastes filled with non-plastic elements and poorly manufactured, they crumble to the touch. The shapes of these ceramics are utilitarian, predominantly pottery with an s-shaped, outwardfacing rim, displaying visible fire markings. Similarities with other sets of artefacts from the 6<sup>th</sup> century found in similar circumstances can be seen very clearly (for example the TL1 in Vigil-Escalera Guirado 2006, pp. 732-733), therefore establishing the resources, technologies and strategies common to the area at the time. However, while other locations in the region still provide proof of contact with the Mediterranean circuits, no foreign imports were discovered from this period of occupation. The ceramics were manufactured locally, using simple shapes, and were almost exclusively used for the purposes of cooking, a theory which is also supported by the osteological evidence collected.

Finally, the last question must be asked: who were the inhabitants who sought out the ruins of Horta da Torre? In truth, none of the data collected helps answer this question. No material evidence suggests that these inhabitants would have been foreign to the region. However, assuming that the reason for their presence was rooted in their pastoral work (cattle-keeping), it can be assumed that they would have been familiar with the land, as they were searching for shelter for themselves and their cattle. Although the formal prototype of the hut built in the stibadium can be found built outdoors in this region, it should be noted that the "barge" plan breaks with the orthogonal canons found in contemporaneous archaeological sites. While this break denotes that other forms of livelihood may have been employed, the structure bears no resemblance to previous prototypes in the classical age. However, for the time being, no material evidence has been found to support the idea of a migrant group having inhabited the house, just as there has been no evidence found of a Christian presence. These people settled in a ruin, extended its useful life without investing in it, used the space until it collapsed, and then left. "Nomads", who had a fluid connection with the land and with a precarious livelihood, seem to have been the protagonists of this process of reoccupation in the ruins of Horta da Torre.

#### 5. The archaeological record: patterns of change

#### 5.1. At Horta da Torre

Although totals have only been quantified for the first four excavations (Valente, Carneiro 2015), the data from the osteological records found at Horta da Torre are useful because they allow for a comparison to be drawn between the two periods of human presence on the site. It is, however, important to note two points: firstly, the stratigraphic layers are not sealed individually, only in relation to later periods, as the layers overlap and only the collapse of the room [UE22] closes the context. It should therefore be stressed that there are no clear markers between the two units found in each one the spaces analysed: the room [UE22 and UE33] and the peristyle [UE16 and UE72]. In other words, the socalled Pompeii premise (Allison 2004, pp. 179-205) cannot be adhered to, according to which the strata are like "snapshots", registering an original coherence (for the methodological problems of these studies, see Bermejo Tirado 2014, pp. 57-64).

Likewise, it is not possible to define more diachronic periods that could be linked to known patterns (Salvadori 2011), although it should be noted that in the case of Horta da Torre, the faunal records seem to clearly reference the two main periods in which the villa was inhabited.

Two stratigraphic units considered being from particularly significant periods, and which presented with particularly notable features were selected(which is not the case for UE 33 and 72, of which there are few bone samples). [UE16] refers to the layer over the floor of the small peristyle, from which abundant remains of domestic consumption were collected from the period of reoccupation. The [UE22], which was found inside the room, is the layer that was sealed when the building collapsed, completely filling the space. However, this layer [UE22] is problematic, because while it may contain evidence relating to the construction of the ligneous structure inside the room, it may also contain traces of the consumption of luxury goods during the use of the *stibadium* (as it was this room that collapsed). As will be discussed below, the variety of species considered seems to reflect the somewhat hybrid character of this layer.

The archaeozoological analysis carried out by Maria João Valente (University of the Algarve) on 1160 faunal remains allowed for the following values to be identified which, it should be noted, combine the number of determined bone fragments (NRD) collected before 2015, with the rest, which are yet to be analysed (table 2).

Some significant data demonstrated different occupancy profiles for the two spaces. The most notable is the somewhat hybrid nature of the

		UE1 (sma	3 Il peristy	le) UE22 (room)			Total	Total		
		NRD		MNI	NRD		MNI	NRD		MNI
Mammals										
Oryctolagus cunic.	Wild rabbits	13	9.1%	3	1	3.1%	1	14	8.0%	4
Canis familiaris	Dogs	1	0.7%	1				1	0.6%	1
Equus caballus	Horses	1	0.7%	1	9	28.1%	1	10	5.7%	2
Sus	Pigs/Wild boars	37	25.9%	2+2	7	21.9%	1	44	25.1%	3+2
Cervus elaphus	Deer	2	1.4%	1	4	12.5%	1	6	3.4%	2
Dama dama	Fallow deer	3	2.1%	1	1	3.1%	1	4	2.3%	2
Bos taurus	Cattle	22	15.4%	2	5	15.6%	1	27	15.4%	3
Capra hircus	Goats	6	4.2%	5+1				6	3.4%	6+1
Ovis aries	Sheep	3	2.1%					3	1.7%	
Ovis a./Capra h.	Sheep/Goats	55	38.5%		5	15.6%	1	60	34.3%	
	Total	143	—	16+3	32	—	7	175	-	23+3
Birds										
Gallus gallus	Chicken	7	46.7%	1+1				7	43.8%	1+1
Other birds	-	8	46.7%	1	1	100%	1	9	56,3%	2
	Total	15	—	2+1	1		1	16	—	3+1

#### Table 2.

stibadium room, as two different universes seem to have coexisted. Thus, the consumption of luxury goods through venatio has been welldocumented: wild animal hunting makes up 15% of the total, evidencing the distinct contrast between this room and the small peristyle, in which there is a mere residue of the same factor (3%). However, these records of the room thus seem to have preserved an earlier period, in which the banquets held led to this type of consumption being the norm, or else – and this can be detected – revealing an intermediate period in which locals occupied the villa, between the imperial phase and the "pastoral" occupation. In other layers from the interior of the room - [UE28] between the *stibadium* and the interior apse, and [UE33], a part of the floor in which the collapsed materials were particularly well-maintained, along the south wall - cervus and cuniculus were also found, although in insignificant quantities. In contrast, it was in [UE22] that a considerable number of horse bones were found, which can be documented as being from the post-imperial occupation of the room, when the ligneous structure that pierced the floor was constructed. It is worth noting that the quantity of these bones is significant (16%) and, above all, that no parallel records have emerged in findings from any other known *villae*, as shall be further explored in the following point.

The [UE16] layer provides evidence of an unquestionable, differentiated temporal coherence from the events that took place in the *stibadium*. A key marker documents a relevant change: the percentages of *Ovis* and *Capra* increased during this period of reoccupation, compared to the quantities found for the imperial phase. The values increase from 15 to 45%, demonstrating a new pattern of consumption. On the contrary, and as has been mentioned previously, species obtained from hunting are almost non-existent, especially in terms of big game. The quantity of pigs, on the other hand, increased slightly (19 to 26%) and the low numbers of cattle persisted (16%). In this case, it should be noted that the total numbers in [UE16] might be inflated, as several molars can belong to a single animal if slaughtered once aged 10 or over.

It should also be noted that almost all the bones have carbonisation and cut marks, so it can be inferred that they were consumed after being stewed or boiled in pots. A simple pastoral economy had developed, with agents who were possibly moving across the land, and who saw the abandoned site as a mere source of useful elements.

Another element to consider is the lack of planning for the area in which food waste was disposed, as this evidence also established a significant change in the behaviour of inhabitants, when compared to the period in which the villa was fully inhabited. This has been possible because the excavation work has uncovered two areas in which refuse was dumped. The first has already been excavated: is an area of about 3 m<sup>2</sup> by 80 cm deep and is located outside, next to the north wall of the outer apse that encloses the *stibadium*. Another area, which is precisely opposite the first (to the south) and was identified when the outer wall of a room attached to the double apse was established, has not yet been fully excavated. These two areas filled with refuse provided material evidence in abundance: the large amount of oyster, clam and conch shells mentioned above must be highlighted, as well as the osteological remains (of which the study will begin in 2020) as well as several fragments of *lucernae*, which are sometimes in relatively good condition (entirely whole discs or exemplary specimens). Assuming that homogeneous content was dumped in these locations, it can be inferred that banquets were held in which a wide variety of foods were eaten, and which would have agone on late into the night (hence the presence of *lucernae*). Parallels can be drawn between these dump sites and the other known cases in Lusitania, such as the Quinta das Longas villa (Elvas) (Cardoso, Detry 2005). In contrast, if the dumping areas for the post-abandonment period are mapped, it can be seen that they are spread over all the excavated areas, with the exception of the double-apse room. This random approach to disposing of refuse demonstrates the lack of planning when it came to this disposal, which was not the case in the imperial phase.

#### 5.2. Horta da Torre compared to other sites in Alto Alentejo

Some faunal records for locations in the Alto Alentejo region (near the Horta da Torre villa) have been published (Cardoso, Detry 2005; Davis 2005; Mackinnon 1999-2000), although only from the imperial period. More general considerations could therefore be forged with a basis on previous work conducted (Valente, Carneiro 2015).

Some notes must be made about the locations considered. São Pedro contained a settlement within the same area as Horta da Torre, which, although on the opposite side of the Sulfúrea thermal complex (Davis 2005), was still in the municipality of Fronteira. Archaeological excavations of the site were carried out under the direction of the author between 2000 and 2006 (Carneiro 2014, II, pp. 252-257), but the results were not sufficiently conclusive to determine the profile of the settlement that once stood on the site (a vicus? a village?). Numerous activities were detected through the collection of items such as loom weights, millstones and metallurgical welds and slag, and spaces in which products were stored were also detected (many large ceramic containers). However, the degree of destruction of the structures prevented a clear reading. On the opposite side of the road, heading south, stands Torre de Palma villa (Monforte), for which faunal records were published by the North American team (Mackinnon 1999-2000). As for Quinta das Longas (Elvas), in the direction of the road heading to Augusta Emerita (Carneiro 2014, II, pp. 193-197), a refuse disposal was dug next to the triple-apse room (Cardoso, Detry 2005).

The totals are shown in table 3 (Valente, Carneiro 2015).

The data is consistent, showing that in the imperial era, a livelihood supported by non-specialised livestock predominated. This means that no single species was farmed, which would be bred and kept in captivity for this specific purpose and in order to harvest a certain product (meat and/or milk within the broader context of a market). Livestock of different species were, however, kept for different purposes (workforce, food, secondary products, usually for autarchic consumption). This inference can be confirmed by the varying ages of the slaughtered animals (when this information is available).

In the case of Horta da Torre, the numbers calculated for both layers were combined to reach totals, but it is important to note that if the

	Horta da	a Torre	São Ped	Iro	Torre de Palma		Quinta das Longas	
	5 <sup>th</sup> c. A	כ	3 <sup>rd</sup> -5 <sup>th</sup> c.	AD	4 <sup>th</sup> -5 <sup>th</sup> c.	AD	4 <sup>th</sup> c. Al	C
Leporids	14	7.3%	3	4.6%		9.9%	110	20.9%
Canidae	1	0.5%	—	—		2.5%	2	0.4%
Equidae	10	5.2%	—	—		1.2%	—	—
Pigs	44	23.0%	9	13.8%		25.9%	122	23.1%
Deer	10	5.2%	10	15.4%		17.4%	39	7.4%
Cattle	27	14.1%	19	29.2%		14.2%	28	5.3%
Caprinae	69	36.1%	22	33.8%		27.0%	127	24.1%
Birds	16	8.4%	2	3.1%		1.9%	99	18.8%
Total NRD	191		65		?		527	
Domestic		87.4%		76.9%		72.0%		61.3%
Wild		12.6%		23.1%		28.0%		38.7%

Table 3.

[UE16] is analysed independently, the resulting figures are similar to those found in São Pedro, which in addition to being the closest location geographically, is the site that clearly does not seem to be a monumental villa. A high number of ovicaprines was found in São Pedro and a low number of pigs, and this was also the location where *venation* was conducted least often.

In general, and despite understandable fluctuations, it appears that there was a predominance of ovicaprines, as already noted in *Hispania* when compared to other regions of the Empire (King 1999). With the exception of São Pedro, no significant numbers of livestock were recorded and, more notably, there were low percentages of pigs when compared to numbers found in Italian sites (Mackinnon 2004).

Other relevant data presents the possibility that an evolution of the records obtained for Horta da Torre should be analysed, despite the doubts raised by the *stibadium* layer. In this regard, however, it appears that the IUE16] presents far greater differences when compared to records from the Torre de Palma and Quinta das Longas *villae*, and (as already noted) is most similar to São Pedro. Temporal variation also adds a notable element to this analysis, as it allows this data to align with the global portrait of fauna in Italy, in which the numbers of cattle fell sharply between the 4<sup>th</sup>/5<sup>th</sup> and 6<sup>th</sup>/7<sup>th</sup> centuries, while the numbers of swine decreased and of ovicaprines increased significantly (Salvadori 2011 fig. 3, p. 204). Despite the distance between them, the patterns of transformation were well underway, causing changes in the livelihoods of the communities.

#### 6. Resilience and adaptation: intra-site changes

The research produced in the last few decades has provided a completely new level of understanding of what has traditionally been called "the end of the *villae*". The "Germanic waves" and an abrupt end are no longer the keys to explaining the phenomenon: "Les grandes villas sont les refuges et les héritiers directes d'une Hispanie romaine qui s'effondre dans les premières années du V<sup>e</sup> siècle, submergée par de nouvelles vagues germaniques" (Gorges 1979, p. 55). The study of phenomena of post-abandonment presence has advanced at an intense pace, allowing for the systematisation of a set of definitions such as "reuse", "reoccupation", "re-frequency" or "recycling" (Castrorao Barba 2014, pp. 8-9). These studies have also made it possible to draw up analysis grids to see if there were occasional, systematic reoccupations, during long or short periods of time, which would result in changes in functions when compared to the original usage<sup>4</sup>. This analysis is still very complex, especially when data from old investigations must be re-evaluated, given the past lack of attention to recording "ephemeral evidence" (Munro 2012, p. 353). This situation is particularly notable when it comes to the Portuquese territory, or the ancient province of Lusitania, where few examples of accurate excavation records allow us to understand how the "end of the villae" came about. As a result, trends cannot be defined, and although concrete examples are sometimes given, it does not mean that these sites set general standards. In fact, guite the contrary is true. As will be discussed later in this work, one of the clear markers that signal what happened at the end of the Empire is the fact that completely different phenomena were registered, even in contiguous locations. For this reason, in-depth knowledge needs to be gathered about the events of each location, which is why the case of Horta da Torre is important, as it is the best-documented example of the reoccupation of a villa in Lusitania.

The changes registered at the Horta da Torre villa can be seen as a normal process motivated by social dynamics typical of local communities, augmented by a power vacuum, leading, therefore, to the appropriation of an empty building. The first element that should be questioned is, therefore, how this power vacuum came about — that is, what caused the villa to be abandoned? And secondly, why did the livelihood strategy implemented differ so drastically from the previous model?

<sup>&</sup>lt;sup>4</sup> In an ongoing PhD, Jamie Dodd analytically systematises the different shapes and forms these processes take, in which we can include Horta da Torre. I would like to thank the author for the information he provided and for granting me access to his work in progress.

One of the possible answers to these questions lies in drawing a comparison with the phenomena taking place in the neighbouring Torre de Palma villa. This is pertinent as there appears to have been an economic strengthening of the latter at the time at which Horta da Torre was abandoned. The site of Torre de Palma, that lies within the municipality of Monforte, experienced an expansion of its production facilities as well as the beginnings of a monumentalising of religious structures. It was precisely during this phase that agricultural work peaked, and the basilica and baptistery were constructed (Lancha, André 2000, p. 117 ss.) together with the expansion of the western bath building (Lancha, André 2000, p. 95), perhaps corresponding to an increased number of agricultural workers. The data provided by this example therefore disproves any hypotheses of there having been a crisis or generalised breakdown of the region's villae. It cannot be determined whether this economic reinforcement was achieved through the expansion of the villa's own resources or by combining the *fundi* of neighbouring properties that have since been abandoned, not least because there are no other reference cases to which this one can be compared.

What can be perceived, however, is the existence of several postabandonment presences in *villae*, although relevant documentation is severely lacking for this region (table 4).

When the cases cited are analysed, one factor stands out that bears particular significance: all of the sites are located in areas with a sharp agricultural and livestock farming profile, are easily accessible (always close to itineraries) and, therefore, are the quite the opposite to what would be expected when their circumstances are considered. The expectation would be that abandoned *villae* would be peripheral, providing the possibility that they were vacant due to a scarcity of resources or lack of connections necessary to carry out commercial operations. Quite the contrary is true, however, as these *villae* are located in the area with the most endogenous potential. Thus, other explanations will have to be found.

An interesting case is the Herdade das Argamassas villa, in Campo Maior. As witnessed in Horta da Torre, habitational areas were abandoned before the roofs collapsed (Brazuna 2003, p. 4; Carneiro 2014, II, pp. 88-90), sealing a set of agricultural instruments (a chisel, an iron mallet and a sickle under collapse in Survey 4 and an iron spoon and a possible part of a plough connected to the collapse analysed under Survey 1). It is possible that once it was abandoned, the villa was converted into an area used for farming operations, therefore no longer serving as a residential unit. The transition to an economic model based on subsistence agriculture is reinforced by the presence of "a tiled hearth in the centre of the chamber where several millstones, whether whole or frag-

Archaeological site	Municipality	Comments
Argamassas	Campo Maior	Fireplace over mosaic
Quinta das Longas	Elvas	Perforation of flooring
S. Vitória do Ameixial	Estremoz	Fireplaces; dumping areas
Monte de São Pedro	Fronteira	Compartmentalisation of spaces; silos
Horta da Torre	Fronteira	Perforation of flooring; fireplaces
Torre de Palma	Monforte	Patching of Mosaics; fireplaces

Table 4 (Carneiro 2017, p. 59).

mented, and, again, several fragments of *dolium* have been found" (Brazuna 2003, p. 30). These inhabitancy indicators have been documented in other *villae*, such as Quinta das Longas and Santa Vitória do Ameixial, pointing to a reconversion of the economic model, moving towards a mixed profile of non-specialised livestock farming, in line with what can be determined at Horta da Torre.

The agents of the land must have been farmers who, either through personal choice or because ordered to do so, engaged in an unspecialised economic activity. They thus abandoned the intensive irrigation farming of the imperial era, during which the region was filled with an abundance of water infrastructures (Carneiro 2014, pp. 196-208), opting instead for pastoralism.

Several factors may have led to this change. It might have been due to the population losing its mastery of techniques and the "know-how" present during the imperial era, which prevented complex infrastructures from being maintained and recuperated – especially those that regulated water (tanks, dams, channels or reservoirs are usual in Alto Alentejo). It might also have been due to the increased availability of unskilled labourers (for a general framework see Wickham 2005). These two factors led to the development of what we can call *broadband strategies*, defined by their extensive unsophisticated skills. The "pastoralism" phenomena evidenced at Horta da Torre demonstrates lower subsistence indicators and, consequently, the existence of an extensive agricultural practice, which, in turn, resulted in a more fluid relationship with the land. It should also be noted that raising ovicaprine livestock, the practice of which significantly increased during the 5<sup>th</sup> century (Brogiolo, Chavarría 2020, p. 75), has other advantages from the point of view of the local economy. It provides products such as milk, cheese and wool (when sheep are kept), as well as the benefit of these animals being more resistant to hard conditions than pigs, demonstrating a pertinent strategy aeared towards minimising risks. Their status as mobile "storage batteries" made them ideal for a highly flexible subsistence economy (Horden, Purcell 2000, p. 199). Likewise, post-abandonment reoccupation phenomena have provided for cases of fragmented millstones being left on flooring (Horta da Torre, but also Argamassas and São Salvador, in Campo Major), which prove that tentative manual operations with the aim of making basic flour were carried out, the resulting feed possibly having been grain-based. As in the case of Horta da Torre, material culture and eating habits also changed in a very visible way: consumption patterns were ovicaprine-based, the bones of which were cut into small pieces and cooked in pots. In this respect, it is tempting to draw an ethnographic parallel with the traditional eating practices still commonly seen in the region. At that time, goat and lamb stews and broths were common, and dishes that used all of the animals, including the innards and blood ("cachola" or "rechina" being typical examples of dishes made using these parts at the time). Likewise, the practice of shepherds staying with their herds as they grazed and living with their livestock in perishable or ligneous constructions has also been proved from an ethnographic point of view. This is especially true in more remote regions with undulating hills and deeper water courses. These shepherds carried a set of rudimentary instruments with them, which they used to make food and for basic entertainment, to help pass the time (thus leading to the emergence of "pastoral art" - materials made from wood or boxwood which gained great ethnographic value, but that, unfortunately, has been almost entirely lost). These customs persisted up until the mid 20<sup>th</sup> century, and there are still ruins of buildings called "malhadas" or "arribanas" in the region, as can be seen in the toponymic property maps. While some villae may have maintained their centrality for some time, even strengthening their economic power, other abandoned properties may have served as a refuge and pool of resources for local nomads. In the case of Horta da Torre, one of the most significant elements was collected from a period within which the external resources provided by the "world economy" (imported amphorae; molluscs) crossed over with the practice of hunting as proof of status. This tilted the lifestyle towards a diet that was largely based on locally sourced produce, where there would have been no access to luxury and/or imported goods, either in terms of food or material culture.

This process can also be related to the drop in demand at urban markets, as in *Lusitania* the dynamics of the main settlements would generally dwindle, and secondary settlements would be abandoned. This may also have helped lead to rural properties being re-used and a decrease in consumer demand and/or purchasing power (Carneiro 2019b). If the *vil*- *lae* were the major suppliers of these markets, then a causal supply and demand relationship would have existed, the breakdown of which would have led to economic downturns and these sites therefore being abandoned. It is possible that some would have strengthened their productive capacity, coming up with solutions to cater for their flow of products, as was the case in Torre de Palma. The general impression, however, seems to be that several sites were abandoned, either because their products were too specialised, or because, as is the case with Horta da Torre, they were more geared towards *otium* and prestige, which, with the passing of time, no longer made sense.

This period of time therefore leaves us with evidence of a livelihood that was very distant from the specialised work and technical skills of a world-economy — aspects that characterised the *villae* that monumentalised the rural landscape of *Lusitania*.

The villae, which were slowly being abandoned, would then go on to serve as a base --hotspots for activities. In the Alto Alentejo, these villae clearly continued to be focal points for the local populations, although these occasional occupations were not the most important phenomena to take place there, from a numerical point of view (Carneiro 2017, p. 59). However, a difficulty with the research strategies used also arises here. In order to detect post-abandonment reoccupation phenomena, more than traditional excavation is required, given the difficulty of recovering the faint evidence left. For other regions where the registration requirements and analysis criteria are more advanced, it has been shown that reoccupation processes reached high numbers. One example is in Britannia, where 70% of the villae have been found to contain such evidence (Jamie Dodd, personal communication). Data for Italy also points to 26% of the *villae* containing evidence of human occupancy, but if this analysis is limited to completed excavations, it appears that the percentage increases to 49% (Castrorao Barba 2014, pp. 264-265). This is further proof that analysis must be based on carefully defined criteria.

## 7. Resilience and adaptation: a general view of rural communities at the end of *Lusitania*

Advances in recent research have provided proof that, in general, the paradigm of a villa as the "classic" means through which to live in the countryside ended between the  $5^{th}$  and  $7^{th}$  centuries, at least for the western half of the Empire. In the eastern half, the concept of villa had quite different characteristics, having come about via a separate set of historical processes. The rhythms of abandonment and ways in which the

villae were abandoned vary, especially from region to region. These can be observed from the premature "crash" in *Belgium* in the late 4<sup>th</sup> century or early 5<sup>th</sup>, to regions such as *Britannia* or *Germania Secunda* and more stable lifestyles being established in south western France that seemed to stretch until the 7<sup>th</sup> century, for example. Significant variations can be observed in neighbouring areas, even within *Hispania*, due to changes such as urban dynamics, endogenous resources and ease of communication. However, regional records show that "en definitiva, el modelo bajoimperial romano va a llegar a su fin, según nuestros datos, a finales del siglo V d.C. o inícios del VI d.C. momento en el que documentamos la desarticulación del sistema de villae [...]" (Tobalina Pulido 2019, p. 848). And so came the end of the villa as the archetype of choice when living in the countryside, from the Alto Alentejo (Carneiro 2014, I, pp. 241-274) to Bajo Guadalguivir (Garcia Vargas et al. 2013, pp. 372-383) and regions where the settlements centred on *villae* as monumental as the campi Pallantini of the Douro valley in Castilla y León (Regueras Grande 2013, p. 154). Even though these places may have continued to be the occasional focus of human activity, this activity followed norms that differed entirely from the framework for which the buildings were designed.

In short, the reality differs greatly from the traditional linear reading that saw medieval "villages" as successors to the *villae*, the intermediate period being one of villages growing around a church. This stereotyped picture envisioned a process of progressive "proletarianization" (to use a Marxist word) or "feudalisation" (according to the conventional school) of the fields. On the contrary, the diversity of strategies and solutions adopted in various locations has become increasingly visible. This is true even for locations that are not geographically distant, with sometimes even somewhat contradictory events taking place in neighbouring *villae* (Horta da Torre being abandoned/Torre de Palma peaking economy), showing how even recent outlines of the villa's process of conversion (Chavarría 2007) can no longer be applied to the entire variety of existing cases.

However, it has become increasingly evident that throughout the 4<sup>th</sup> century, the villa was the dominant paradigm of the fields of *Lusitania*, and that they then came to an end, ceasing to be the powerful, striking monumental element that polarised economic activities and social relations. Several changes in the social, economic and political spheres led to some sites being abandoned while others grew, which led to different rural communities having to adapt to these changes. A new phase had begun, in which economic strategies seemed to be much less elaborate and the codes of Christian coexistence created other forms of sociability

and ways in which to coexist within communities. Explorations of new ways in which to build settlements also arose at the same time, ways that were out of the ordinary for the imperial model, showing the "misalignment" of certain communities that sought out niches of work that could be characterised by a non-specialisation and eclecticism. As always, people reacted to these new circumstances by adapting, building new forms of interaction and seizing opportunities. Under these circumstances, these opportunities were the old abandoned villae, which would become structures filled with materials that could be put to good use. It should be noted that a villa's proximity to routes and itineraries meant it was privileged, but that this was not a decisive factor when it came to determining its duration, as exemplified by the case of the abandonment of Horta da Torre. However, it can be assumed that the fact that some of the villae that continued to be inhabited for some time may have reinforced their centrality in relation to the populations that lived around them, taking on the role of economic centres with a large autarchic component at local and sub-regional levels, but also gaining skills by building religious structures for Christian worship.

It should also be noted that this article has focussed on the internal processes undertaken by the communities that inhabited this area. It would have been more convenient to propose that foreign contingents or even "barbarian invaders" had settled in the *villae*, but no evidence has been found to support this explanation for the time being. No archaeological material or evidence of an external presence has been found in Horta da Torre, and indicators of any such presence are scarce in the Alto Alentejo region as a whole (Carneiro 2016, fig. 3). It seems clear that, as is human nature, populations have reacted to changes using adaptive mechanisms, transforming their daily lives and demonstrating their resilience, not only by not leaving the area, but by also taking advantage of the possibilities they found they had access to. It is these peasants, who so often fall by the wayside in research, that we seek to get to know better.

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276

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