nº 73

2022

Recibido: 2021-10-25 Aceptado: 2022-10-18

Natural cave usage in the Late Roman Empire. Shelter in times of instability?

El uso de las cuevas naturales en el Bajo Imperio romano. ¿Refugios en momentos de inestabilidad?

KEY WORDS: Natural caves, Late Roman Empire, instability, refuges. PALABRAS CLAVES: Cuevas naturales, tardorromano, inestabilidad, refugios. GAKO-HITZAK: haitzulo naturalak, garai erromatar berantiarra, ezegonkortasuna, babeslekuak.

Leticia TOBALINA-PULIDO⁽²⁾, Alain CAMPO⁽³⁾

ABSTRACT

In 2014 we began an ambitious study of the usage of natural caves in between first and fifth centuries AD in the area between the Ebro and the Pyrenees (Navarre, Basque Country, and northern Aragon). The aim was to make an inventory of all natural caves with Roman remains in the western Pyrenees in a database, to clarify the chronology of different cave usages thanks to the study of the archaeological material, to establish the function of those kinds of sites, and finally, to put into relation the caves with their surroundings in the cases that it is possible.

In this article, we analyse a disputed subject in the historiography of this phenomenon: the possible use of the caves as shelter in times of instability during the Low Empire period. This interpretation has been repeated since the 70s of the 20th century until today, despite the inexistence of clear evidence.

RESUMEN

En 2014 iniciamos un ambicioso estudio sobre el uso de las cuevas naturales entre los siglos I y V d.C. en el espacio comprendido entre el Ebro y los Pirineos (Navarra, País Vasco y norte de Aragón). El objetivo era inventariar todas las cuevas naturales con restos romanos en el Pirineo occidental, aclarar la cronología de los diferentes usos de las cuevas gracias al estudio del material arqueológico, establecer la función de ese tipo de emplazamientos y, finalmente, tratar de poner en relación las cuevas con su entorno, en los casos que es posible.

En este artículo analizamos un tema controvertido en la historiografía de este fenómeno: el posible uso de las cuevas como refugio en tiempos de inestabilidad durante el Bajo Imperio. Esta interpretación se ha repetido desde los años 70 del siglo XX hasta la actualidad, a pesar de la inexistencia de pruebas claras.

LABURPENA

2014an, Ebro eta Pirinioen (Nafarroa, Euskadi eta Aragoiko iparraldea) arteko gunean K.o. I eta V mendeen artean haitzulo naturalek izandako erabileraren inguruko asmo handiko ikerlanari ekin genion. Horren helburua zen mendebaldeko Pirinioetan aztarna erromatarrak dituzten haitzulo natural guztien inbentarioa egitea, material arkeologikoa aztertuta haitzuloen erabilera ugarien kronologia argitzea, kokapen mota horien funtzioa finkatzea eta, amaitzeko, haitzuloen eta haien ingurunearen arteko lotura zehazten saiatzea ahal zen heinean.

Artikulu honetan, gainera, fenomeno horrekin lotuta historiografian eztabaida ugari sortu duen gaia aztertu genuen: Behe Inperioko ezegonkortasuneko garaietan, haitzuloak babesleku gisa erabili zituzten ala ez. Interpretazio hori behin eta beti azaldu da XX. mendeko 70eko hamarkadatik hasi eta gaur egun arte, nahiz eta horren inguruko froga argirik ez dagoen.

1. INTRODUCTION

The study of usage of natural caves¹ in Roman times has been an unusual subject in historiography possibly because of the scarcity and variety of the data that we handle and the vagueness of the archaeological registers. Even when cave usage has been subject to archaeological interest since the 19th century, the Roman levels and beyond have not had the same attrac-

⁽¹⁾ The present article is found within the investigation project POEM *"Pyrénées Occidentales Échanges et Mobilités"* (2013-2018) directed by Fr. Réchin, and co-financed by the *"Communauté d'agglomération de Pau-Pyrénées"* and the UPPA. Article translated by Gloria T. Dauden, gloriatdauden@gmail.com.

⁽²⁾ Casa de Velázquez-EHEHI (Promotion 2021-2022). Research associate at Université de Pau et des Pays de l'Adour, E2S UPPA, ITEM, Pau, France. Leticia.tobalina@casadevelazquez.org.

⁽³⁾ Université de Pau et des Pays de l'Adour, E2S UPPA, IRAA-CNRS (USR 3155), Pau, France / Departamento de Historia Medieval, Moderna y de América, Facultad de Letras, UPV/EHU, P.º de la Universidad, 5, 01006 Vitoria-Gasteiz, Álava.

¹ This is not so in the case of artificial caves, where numerous works have been carried out in several areas of the Iberian Peninsula. We highlight the works of J.A. Quirós (Quirós Castillo & Alonso Martín, 2007) and Azkárate (Azkárate, 1988) for the south of Álava, as well as for the north of Burgos and South of Cantabria (Berzosa Guerrero, 2005; Polo Romero *et al.*, 2021), areas with a high density of cave dwelling and religious spaces.

tion towards study than those of Prehistoric times, as the latter has generally taken the focus of all investigations.

In this article, we present the first results of an ongoing investigation about the occupation of caves in Roman times. Thus, with the project in an intermediate-advanced point, we will focus ourselves in a much-debated topic in historiography: the use of natural caves as shelter in moments of instability during the Low Roman Empire, an interpretation that has being repeated since the 70s of the 20th Century to this day.

During the Late Antiquity, there are two moments that are specially "tumultuous", the known as "Crisis of the 3rd Century" and the 5th century AD invasions. The first of them, happening between 235 and 284 AD (Peña Cervantes, 2000) "ha [sido] considerado [...] el siglo de los desastres, y el concepto de "crisis" le ha sido aplicado una y otra vez" (Sanz, 2008: 461); the second one makes reference to the barbaric invasions that took place at the beginning of the 5th century AD that started the decline and dismantling of the Roman Empire. These interpretations, based primarily on literary sources (Raynaud, C., 2001) have determined the historiographic development of the last fifty years (Apellániz, 1973; Gil Zubillaga, 1997; Fanjul Peraza, 2011; Utrilla, Laborda, 2014) and they are recurring elements to explain phenomenon such as those that we are studying.

With the objective of testing the reality in a certain study area, we have selected for this article the one situated between the western Pyrenees and the Ebro River. This is a frontier and travelling zone in which the number of caves with Roman remains is quite high (62 caves in total). Thus, in a first stage, we will present the historiographical debate around this question, to continue afterwards with the references on caves found in literary sources. After that, we will present the late archaeological remains that we encountered in the interior of the caves. We will end with a specific presentation of two sites classified as shelter by the bibliography and a general assessment of the phenomenon.

2. A HISTORIOGRAPHICAL DEBATE: SHELTER IN PERIODS OF INSTABILITY?

Considered often as secondary settlements inside the Roman habitat, investigations have ignored this phenomenon until mid-20th century when, with the dominant "Catastrophic" movement over the end of the Roman Empire, its inclusion in the studies (especially since the 70s) grew stronger inside the crisis system built upon the literary sources. The caves were since then considered, in many cases, as shelter in periods of instability.

There are two main reasons given to hold this interpretation. The first would be a flight to the caves in sight of the depopulation of the settlements. The inhabitants would have taken refuge in wild places, where it was easy to hide, in the late 4th and early 5th century AD (We refer to Gutiérrez Cuenca et al., 2012). That is, we would be considering the caves as a place of habitation. However, the settlements in hills and half heights continue (with a few exceptions) at least towards the end of 5th century AD (Filloy, Gil e Iriarte, 1997: 787; For the Basque Country, we will address Esteban Delgado, 1990; Garcia Camino, 2002). Thus, this explanation seems not to hold its own. In the second explanation, the escape to the caves would take place because of the terror towards the barbaric invasions between the 3th and the 5th centuries AD (Buisson, 1991; Utrilla, Laborda, 2014) and, therefore, we would be in front of cave usage as particular event. Thus, in this theory, the rural settlements, "Effrayées ou molestées par les Barbares, [...] n'auraient eu d'autre choix que de fuir dans les profondeurs terrestres, ou sur les sommets désolés" (we refer to Raynaud, 2001: 450).

S. Gagnière y J. Granier (1963: 236) built one of the first monographics on the occupation of caves in the Late Period and its vinculation with the invasions of the end of the Roman Empire. For them, part of the population, given the insecurity in sight of these invasions, took refuge in caves. The authors consider that the situation took place in two moments, in the 3rd century AD with the invasions of the 270-280 AD and at the beginnings of 5th century AD (Gagnière y Granier, 1963). In this same line of thought, P.A. Février (1978), in his study on the occupation of the French Southeast, gives caves the function of shelter in times of instability, but consider plausible that their use during the Lower Empire was also because of an expansion of sheepherding. In the 80s, J.R. López denies the relation of these cave uses with the insecurities of the time. It's interesting that, given the limited importance of the Low Empire levels, this author classifies as "occupation" and not of "habitation" those Late levels (López Rodríguez, 1985: 150-152). The same goes for M.D. Fernández-Posse (1979), who links the phenomenon to ruralisation and the increment in the cattle breeding activity during the Lower Empire. In France, in the same period, C. Raynaud (1984) begins to question the relation of the caves with the instability of the Lower Empire.

In the 90s, some authors continue on the "Catastrophic" line. Thus, M. Esteban (1990: 345-346) believes that the return to a traditional way of life (and therefore, to the caves), a theory defended by J.M. Apellániz (1974), would be an answer to the instability of the period. In turn, J.M. Arribas Pastor, considers that the usage of the cave of Lumentxa in Bizkaia, during the 4th - 5th centuries AD can be explained "en relación con los fenómenos de inestabilidad política y social de los últimos siglos del Imperio romano" (Arribas Pastor, 1997: 654). J.M. Tudanca interprets, in general, the occupation of caves as a result of the events of the time, pointing out that "La inseguridad, el temor ante las invasiones, el bandidaje y la depredación de los pueblos del norte peninsular serán interpretadas de la habitación de cuevas" (Tudanca, 1997: 397-398).

At the beginning of the 21th Century, if we observe the principal synthesis of Roman and Medieval settlement in our study area, between the attributed functions to the usage of caves we can add the climate of instability. Thus, I. García Camino (2002) in this synthesis about Bizkaia, establishes as four the functions given in histography: resistance of the indigenous peoples to process of romanisation, the revival and expansion of cattle raising in the Low Empire, the climate of political instability of the 4th and 5th centuries AD and the prelude to hermitism. And points out that it is precisely the one related to instability the one that has gained more strength.

Despite the advances in the study of the Roman settlement, for the caves we can see that this interpretation is still present in bibliography. In the more recent synthesis publication about the phenomenon, it is again considered among the options of interpretation that of the *"Cuevas refugio en momentos de inseguridad o escondite de bandoleros* [...]" (Utrilla, Laborda, 2014: 704). This interpretation is shared by M. Esteban (2012: 14) for the case of Peña Forua.

3. THE LITERARY SOURCES: AN APPROXIMATION TO THE PERCEPTION OF THE CAVES IN LATE ANTIQUITY (3TH-7TH CENTURIES AD)

With the intent of coming closer to the perception that can be obtained from caves in the written sources, we have counted the references to them by Latin authors between 3th and 7th centuries AD. Our focus for this article has not been to take on an exhaustive analysis of all written sources of the time, but to build a first approximation to the usage of caves through the literary sources. Given that it was precisely the sources that linked the caves with the moments of instability at the end of the Roman Empire (Raynaud, 2001: 450-451), we wanted to check the reality about the references to caves that we find in them.

In the first place, it seems there is a negative perception towards the caves. Thus, in the High Empire, the sources constantly used negative language to refer to them: "Door of Hell", "Outdoor to the God of Hell", "Place of Sorrow and Madness". In the Low Empire, even though the adjectives keep their negative flair, they are not as derogatory: "bleak", "dangerous", "humid" or "impenetrable" are some of those words, but we do not go as far as Hell related mentions. This could be a signal of a change of mentality during the Late Antiquity, as caves were seen in a less fearsome manner than in the previous period. This is probably linked to the change of perception associated with the transition from paganism to Christianity.

In relation to the attributed function, we can see they are various, being the mythological one the first. After the mythological passages come: linked to religious practices (inside of which we find all kinds of demonstrations like offerings, ascetism, heremitism, pagan cults), funerary and of habitat (of animals and people) (Fig. 1). This shows that there is no general interpretation of the function to which caves were destined, but, on the contrary, that the possibilities are varied.

Focussing ourselves in the interpretation of "refuges in period of instability" (Fig. 1), we just have registered three mentions, all of them in texts of the 4^{th} and 5^{th} centuries; one from a pagan author, two from Christian ones.

We find the first one in the "History of Rome" (4th century) where it is pointed out: "*quos inopinus hebetauerat pauor, uel confugere coegerat ad speluncas*" (Amm. Marc. XXVIII, 6, 4). This passage makes reference to the "Austoriani", a neighbouring people of the Tripolitana region in the Magreb. After the death of one of their own, they destroyed and sacked the region as vengeance. This passage, therefore, makes reference to a certain event in Northern Africa and very far away from our pirenaic context. Despite the geographical divide, the text is interesting because it is a contemporary testimony of the usage of caves as shelter in times of terror.

The second mention is that of Victor Vitensis; he narrates the Vandal invasion of the African province in the year 429 AD. It is one of the few contemporary documents of such invasion. Thus, in the book V he points out that: "Et quia superius de violentia immanitatis eorum breviter diximus, hanc plurimi metuentes, alii in speluncis, alii in desertis locis viri vel feminae, nullo sibi conscio sese claudebant [...]" (Victor Vitensis, V, XV). This extract describes the violence committed by the Vandals against the Christians (Romans) in Northern Africa during the 5th century AD. However, it is possible that the author has magnified the events, because in the text (in the lines following the selected text) he makes reference only to the discovery of the corpse of a priest of Nizenta called Cresconius in the cave of Zigua and not to the founding of numerous peoples. The text addresses the issue of a climate of instability that we could extrapolate, with all precautions possible to our area of study, in a context far away from the Pyrenees.

Finally, the third mention we find it in the work "Commonitorium" (first half of the 5th AD): "nec castella locis, non tutae moenibus urbes, invia non pelago, tristia non eremo, non cava, non etiam metuendis sub rupibus antra ludere barbaricas praevaluere manus" (Orentius, II, 35-36). This last fragment is part of a poem in heroic verse in which the author praises the sacrifices made by martyrs. In this way, he tries to show the way to Salvation and show mankind the obstacles that deviate them from the righteous path. From a geographical perspective, the text is located at the South of France, however, given the poem's theme; it is difficult to determine the objectivity of the author when narrating the events.

After this brief summary of the more important mentions in the sources, we move now to showing the different archaeological remains that we have located in the caves of the period.

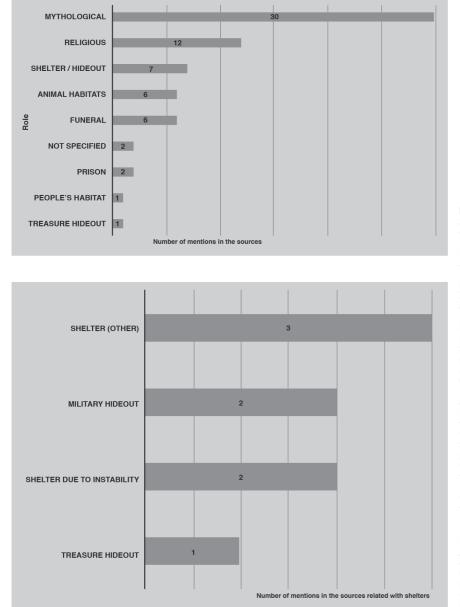


Fig.1. Número y tipo de menciones realizadas en las fuentes sobre la posible función y uso de las cavidades.

Fuente: Elaboración propia a partir de los textos de autores latinos del siglo III al VII d.C. Textos latinos a los que hacen referencia las menciones del gráfico: Ammianus Marcellinus. Rerum gestarum libri XXXI; Orientius. Commonitorium; Victor episcopus Vitensis. Historia Vandalorum persecutionis in Africa; Gregorius Turonensis. Septem Libri Miraculorum; Sidonius Apollinaris. Epistolae; Macrobius. Saturnalia; Lucius Ampelius. Liber memorialis; Iulius Firmicus Maternus. Matheseos libri; Avienus. Ora maritima; Claudius Claudianus. Panegyricus de Sexto Consulatu Honorii Augusti; St Geronimo. Biblical exegesis commentaries; Adomnan. De Locis Sanctis. / Number and type of mentions in the sources about the possible function and use of the cavities Source: Own elaboration base.d on Latin

Source: Own elaboration base o on Latin sources from the 3rd-7th centuries. The textual sources to which the mentions in the graph refer are: Ammianus Marcellinus. Rerum gestarum libri XXXI; Orientius. Commonitorium; Victor episcopus Vitensis. Historia Vandalorum persecutionis in Africa; Gregorius Turonensis. Septem Libri Miraculorum; Sidonius Apollinaris. Epistolae; Macrobius. Saturnalia; Lucius Ampelius. Liber memorialis; Iulius Firmicus Maternus. Matheseos libri; Avienus. Ora maritima; Claudius Claudianus. Panegyricus de Sexto Consulatu Honorii Augusti; St Geronimo. Biblical exegesis commentaries; Adomnan. De Locis Sanctis.

4. THE ARCHAEOLOGICAL DATA: REMAINS FOUND IN CAVES IN LATE ROMAN CONTEXTS

The specific bibliography about the usage of natural caves in Roman times is scarce. There are no publications as of today, that synthesise all the information (Up to date we can highlight the following essays: Fanjul Peraza, 2011; Gamo Pazos, 2013; Gutiérrez Cuenca y Hierro Gárate, 2012; Rubio, 2014; Hierro Gárate, 2022). As a general norm, the data we have is dispersed and of varied quality and quantity. This is due to the diverse illegal samplings that were made to the disappearing materials in excavations and ancient foundings and to the little interest that the post-Prehistoric levels have had in the archaeological interventions of the 19th century and first half of the 20th century (Campo *et al.* 2017: 121–122).

However, thanks to the POEM project, we have been able to revise a grand part of the documentation available for each of the caves (reports on excavations, sketches, articles, photographies). Furthermore, we have studied in some cases, and restudied in others, the material of some of them. (Tobalina-Pulido *et al.*, 2015). This revision has enabled us to correct some identification mistakes and optimise chronologies. Thus, from the 62 caves in which we have documented Roman remains from between 1th BC and 5th AD centuries, 53 show remains from 3th and 5th AD centuries (Table 1). The chronology for some of them is not entirely safe

170

Name	Region	3 rd century	4 th century	5 th century
Abauntz	Navarra			
Akellarren Leze	Navarra			
Artxulo	Navarra			
Diablozulo	Navarra			
Ezpilleta	Navarra			
Itxitxoa	Navarra			
Txargain	Navarra			
Urricelki	Navarra			
Araos	Álava			
Cobairada	Álava			
Kontrobai	Álava			
Los Gentiles	Álava			
Los Husos I	Álava			
Los Husos II	Álava			
Peña del Cuervo	Álava			
Peña Parda	Álava			
Ruciribay	Álava			
Santa Coloma	Álava			
Solacueva	Álava			
Arenaza	Bizkaia			
Arlanpe	Bizkaia			
Aurtenetxe	Bizkaia			
De la Zorra	Bizkaia			
Ereñuko Arizti	Bizkaia			
Goikolau	Bizkaia			
Guerrandijo	Bizkaia			
Guetaleuta I	Bizkaia			
Kobeaga	Bizkaia			

for those periods, but at least 36 show materials clearly ascribed to the period.

On the other hand, despite the lack of precise information from some archaeological sites, (a total of 13), the archaeological remains from the Low Empire are documented in the areas closer to the entrance of the caves in 14 of the sites. The three caves in which the materials are located at the end seem to correspond to caves with a burial purpose (Apellániz, 1974; Apellániz et al. 1967). However, in neither of the three caves do we have C14 dates that allow us to be sure that the caves were used for burial in the Late Roman period. For this reason, this interpretation should be taken with extreme caution. In this sense, there are few cavities in which we have C14 dating that allow us to testify to a burial context in the Late Roman period. In France, the Arlakondo cave in Saint-Just Ibarre has a human bone dated between 336-535 AD. Etxeberri, in Cihique, has a slightly earlier chronology, with a date between 216-390 AD (also dated by a human bone) (Ebrard, 2013: 155). In England we have the case of Dog Hole Cave (Cum-

Name	Region	3 rd century	4 th century	5 th century
Los Judíos	Bizkaia			
Lumentxa	Bizkaia			
Oyalkoba	Bizkaia			
Peña Forua	Bizkaia			
Sagastigorri	Bizkaia			
Santimamiñe	Bizkaia			
Aitzgain	Guipúzkoa			
Amalda	Guipúzkoa			
Anton Koba	Guipúzkoa			
Arrikrutz	Guipúzkoa			
Beondegi I	Guipúzkoa			
Ekain IV	Guipúzkoa			
Ermittia	Guipúzkoa			
Intxurmutegi II	Guipúzkoa			
Iruaxpe III	Guipúzkoa			
Jentiletxeta III	Guipúzkoa			
Santarri IV	Guipúzkoa			
El Forcon	Huesca			
El Toro	Huesca			
Els Trocs	Huesca			
Las Brujas	Huesca			
Las Guixas	Huesca			
Los Moros 2b/5	Huesca			
Moro de Alins	Huesca			
Moro de Olvena	Huesca			

Table 1: Siglos de uso de las cuevas en función de los restos arqueológicos localizados. Fuente: Elaboración propia a partir de la bibliografía y del estudio de materiales / Centuries of use of the caves according to the archaeological remains found. Source: Own elaboration based on bibliography and study of materials.

Not sure Sure

bria) with dates between 200 and 270 AD (O'Regan *et al.* 2020: 29). For the Visigothic period, in the Peninsula, Cueva Corazón (Palencia) has offered three absolute dates between the 4th and 6th centuries for human bones for the second funerary sequence of occupation of the cave (the first is from the Protohistoric period) (Santa Cruz del Barrio *et al.*, 2021: 51-52). The Riocueva cave (Cantabria) has been dated by C14 (five human bone fragments and two grain samples were dated) between the 6th and 8th centuries for its sepulchral use (Hierro Gárate, 2020: 29). The cave "Foradada" in the province of Huesca between the 7th and the middle of the 8th century (Hierro Gárate, 2020: 96-98; Hierro Gárate, 2002; Barandiarán, 1973).

Therefore, given that we have very limited reliable data and few absolute dates that certify a sepulchral use of the caves in the Late Roman period, we have to take this interpretation with caution.

This updating of the information has made us reconsider and rethink the function of those sites. If we take into account the classification made by K. Branigan and M.J. Dearne (1992) for the "Hideout" category, the materials that we should find would be: "poca cantidad de materiales domésticos; posibles materiales de valor" (Quirós, Bengoetxea, 2010: 113). Next, we will make a brief review of the types of materials that we can find in caves of our study area and period ($3^{th} - 5^{th}$ centuries AD). Each cave has some peculiarities, so that they do not show the same materials. We present, in a general manner, the archaeological remains that have a bigger representation or that can be highlighted because of their singularity.

4.1. The ceramics

This is the most common material found in caves. However, the data obtained from its study is hard to use. On the one hand, the fragments show, on most occasions, a broad chronology that does not enable a precise determination of the periods of cave usage. This is the case of the common ceramics, with an important presence in caves, but with a broad chronology. Thus, for instance, the form 706 that we found in Akelarren Leze and Diablozulo (Navarra) is datable between 1th and 5th AD (Tobalina-Pulido et al., 2015: 156). More precise is the form 704 located in Arlanpe that we can locate between centuries 4th and 5th AD (Gutiérrez Cuenca et al., 2012: 234). As discussed, it's difficult to establish the chronologies for these ceramics, but we also find an interesting presence of fine Late Period ceramics. Despite the presence of DSP, in some caves such as El Toro (Huesca) (Castán Sarasa, 1985), Urricelki/ Atapaburu cave (Navarra), or Los Husos II (Álava) (Quirós, Alonso, 2007), the ceramics that we find in a more recurring manner is TSHT (Table 2), primarily in the 37B form, with a chronology established between the 380 and 510 AD as the one found in Arlanpe. (Gutiérrez Cuenca et al., 2012: 234).

The percentage of this type of ceramics is presented in an atypical way in relation to other rural sites (Réchin, 1996: 468; Tobalina-Pulido *et al.*, 2015: 154). This seems a constant in this type of sites as it happens too in other regions such as the Alps (Buisson, 1991). In the villa of Séviac (Montréal-du-Gers), the percentage of fine ceramics is 9.51% (considering the MNI) (Réchin, 2018: vol. 1, 20); in the villa of Veranes (Asturias), 33% corresponds to fine ceramics (Fernández Ochoa *et al.* 2005-2006: 140). In the case of Diablozulo (Navarra), of which we have only been able to access part of the material, the percentage of fine ceramics amounts to 32.10%. (Tobalina-Pulido, 2015: 142). In Iruaxpe, however, the percentage of fine ceramics is 60% (Azkárate *et al.*, 2016: 197). Although we have to take these data with caution, because we have hardly any stratigraphies and the material recovered is scarce, they give us indications of the differences between this type of settlement and other rural sites.

In our case, the two sites that present a remarkable quantity of valuable TSH are Iruaxpe III (Guipúzcoa) (Azkárate *et al.*, 2003) and Peña Forua (Bizkaia) (Martinez Salcedo, Unzueta, 1988). From a strictly economic point of view *"les céramiques tournées fines ne peuvent être considérées comme des produits de luxe [although] elles constituent en Aquitaine méridionale l'indice socioculturel assez sûr d'usages de table de type urbain" (Réchin, 2008; We refer too to Morel, 1983: 167).*

4.2. The numismatics

It is frequently taken as the only element of trustworthy dating. Coins are however, commonly ill identified and sometimes its value is overrated at the time of the chronology attribution of sites. This brings on numerous analysis and interpretation mistakes. In the first place, with regards to the coins studied, we must highlight the ill preservation of them. This is sometimes difficult to evaluate due to the frequent aggressive cleanings that these materials undergo (in many occasions, avoidable), as it happened with the Abauntz and Solacueva coins.

On the other hand, and differently to what happens with the alpine case (Buisson, 1991), we see a scarce 3rd century AD monetary representation. Of that chronology, we have only found coins in La Zorra caves (undetermined number), Solacueva, and El Trocs (Barandiarán, 1964; Utrilla, Redondo 1979; Ybarra, Bergé, 1954: 169–170). If we take into account that, at least in the bibliography, 3rd Century AD is a period of instability in which the invasions occur and we sustain the theory

Name	Region	TSHT	сс	DSP	A. SIG	Glass	Metal	Coins	Ornaments	Bones
Abauntz	Navarra	Х	Х	Х		Х	Х	Х	Х	Х
Akellarren Leze	Navarra		Х							
Artxulo	Navarra		Х							
Diablozulo	Navarra	Х	Х					Х		
Ezpilleta	Navarra	Х								Х
Itxitxoa	Navarra							Х		
Txargain	Navarra							Х		
Urricelki	Navarra	Х	Х	Х		Х	Х			Х

Name	Region	TSHT	СС	DSP	A. SIG	Glass	Metal	Coins	Ornaments	Bones
Araos	Álava	Х								
Cobairada	Álava	Х			Х			Х		
Kontrobai	Álava	Х								
Los Gentiles	Álava	Х						Х		
Los Husos I	Álava	Х	Х			Х	Х			
Los Husos II	Álava	Х	Х	X						
Peña del Cuervo	Álava	Х								
Peña Parda	Álava	Х	Х			Х	Х		Х	
Ruciribay	Álava		Х							
Santa Coloma	Álava	Х	Х							
Solacueva	Álava	Х				Х	Х	Х		
Arenaza	Bizkaia	Х		1				X		
Arlanpe	Bizkaia	Х	Х			Х	Х			
Aurtenetxe	Bizkaia	X	X			X				
De la Zorra	Bizkaia	X				X	Х	Х	Х	
Ereñuko Arizti	Bizkaia	X	X				X	X	X	Х
Goikolau	Bizkaia	X	X			Х	X	X		X
Guerrandijo	Bizkaia	X	X							~
Guetaleuta I	Bizkaia	X	X				Х			
Kobeaga	Bizkaia	X		1						
Los Judíos	Bizkaia	X								
Lumentxa	Bizkaia	X	X				X		Х	
Oyalkoba	Bizkaia	~	X				~		~	
Peña Forua	Bizkaia	Х	X	X		X	X	X		
Sagastigorri	Bizkaia	X	X	~		X	X	X		
Santimamiñe	Bizkaia	X	X			X	X	X		
Aitzgain	Guipúzkoa	X	^					^		
Amalda	Guipúzkoa	^	X				X		X	
Anton Koba	Guipúzkoa		X						^	
Arrikrutz			^		1	//ithout apoaifi	ing			
	Guipúzkoa		X		1	Vithout specify				
Beondegi I Ekain IV	Guipúzkoa		X							
Ermittia	Guipúzkoa Guipúzkoa	Х	X				V			Х
		~	~				X		V	~
Intxurmutegi II	Guipúzkoa	V	V				X	X	X	
Iruaxpe III	Guipúzkoa	Х	X				V			
Jentiletxeta III	Guipúzkoa						X		V	V
Santarri IV	Guipúzkoa					V	V		X	Х
El Forcon	Huesca	V		V	V	X	X	V	X	
El Toro	Huesca	Х		X	Х	X	Х	X		
Els Trocs	Huesca					X		X		
Las Brujas	Huesca	Х			Х			X		
Las Guixas	Huesca							Х		
Los Moros 2b/5	Huesca		Х	X					Х	
Moro de Alins	Huesca					Х		X		
Moro de Olvena	Huesca	Х						X		

Table 2: Tipo de material arqueológico hallado en las diferentes cuevas objeto de estudio. Fuente: Elaboración propia a partir de la bibliografía y del estudio de materiales / Type of archaeological material found in the different caves. Source: Own elaboration based on bibliography and study of materials.

that links occupation of caves in the Late Period with the times of instability, the caves must present this kind of material. However, the presence of these *antoniniani* is sporadic and it is linked with the coming centuries. That is, generally, the coins from 3^{rd} century AD are associated to bronzes from the 4^{th} century or even the 5^{th} AD due to that during the first half of the 4^{th} century AD they were still in use (Estiot, 1999: 196–198).

The Low Empire coins are more frequently found in the cave contexts studied are those from half of 4th century AD and the beginning of the 5th century AD (Table 2). As with the large percentage of fine ceramics, we can highlight the important proportion of coins from this actual period. This contrasts with the monetary *facies* of the *villae* and other rural settlements where the percentage of coins from the ending of the 4th century to the beginning of the 5th century AD is of small significance. We can take as an example the comparison between the villa of Augreilh in Saint-Sever (Landes), which has a high rate of coins from the 4th century AD, and two significant monetary lots discovered in caves (those of Abauntz (Navarre) and Solacueva (Alava)).

For the villa of Augreilh, we note a high percentage of coins issued between 307 and 358 AD (with a peak of 32.87% for issues dated between 335 and 341 AD). After this date, the presence of coins is almost nil. On the other hand, for the caves of Abauntz and Solacueva, we find several more or less similar phases (Table 1). For example, the coins issued between 335 and 358 AD are very well represented with an increase in issues for Abauntz (335-341 AD = 8.18%; 341-348 AD = 12.27%; 348-358 AD = 15%) and an increase followed by a regression for Solacueva (335-341 AD = 10.42%; 341-348 AD = 22.92%; 348-358 AD = 20.83%). For the period between 358 and the beginning of the 5th century AD, we also note a significant representation of the numeral with, in particular, a significant peak between 383 and 408 AD, 16.82% for Abauntz and 14.58% for Solacueva.

On the other hand, it seems singular to observe some signs of the continuation of monetary exchanges after the beginning of the 5th century, a period when monetary circulation seems much rarer (Depeyrot, 1992: 91-92). Thus, in Solacueva, a lead 'cheton' was found (Barandiarán, 1968: 86; Cepeda Ocampo, 1990: 70). This is probably a sign of the scarcity of liquid money, which has been materialised by the exchange of metallic fragments since the beginning of the 5th century. This fact is not exclusive to this period, but also occurred in the pre-Roman period (García-Bellido *et al.*, 2011).

Finally, we would like to highlight a characteristic or practice that has been observed in certain coins. Certain monetary individuals have been pierced or hit in the middle, as seen in Goikolau (Bizkaia), Solacueva (Álava), Ereñuko Arizti (Bizkaia), Sagastigorri (Bizkaia). J. M. Doyen, in his study on pierced coins, points out that "L'essentiel du numéraire troué (32 ex.) provient de tombes tardives, parfois même mérovingiennes" (Doyen, 2013: 17). It is therefore possible to hypothesize that this practice can be linked to potential funerary rites in late contexts.

4.3. Metallic objects

Metallic objects are, in general, quite common. The most representative elements built in iron are nails and rivets, for instance those found in Arlarpe (Bizkaia) (Gutiérrez Cuenca, et al., 2012), Las Brujas (Huesca) (Utri-Ila, Laborda, 2014) or Goikolau (Bizkaia) (Basas Faure, 1987). Other objects that we found are rings of different kinds built in bronze or iron and from which we are not able to interpret a function, as is the case of Moro de Olvena (Huesca) (Utrilla, Laborda, 2014) or Lumentxa (Bizkaia) (Arribas Pastor, 1997). The same happens with the rods registered in Abauntz (Navarra), Guetaleuta I (Bizkaia) y Amalda (Bizkaia) with a function that is not easily clarified. But we too find materials that have more evident functions: As in Arlanpe (Bizkaia) we have documented an iron knife (Gutiérrez Cuenca, et al., 2012: 238), in El Forcón a harness that represents the head of a horse and two wild boars. (Baldellou, 1985; Utrilla, Laborda, 2014), and in Abauntz (Navarra) farm tools (Utrilla, 1982). In bronze, we can document a wristband in Peña Parda (Álava) (Gil Zubillaga, 1997) and several pieces such as rings. There is too a fine silver thread wristband in Guerrandijo (Bizkaia) (Apellániz et al., 1967: 168). On the other hand, we find relevant the bronze and iron slags that we document in Goikolau. (Basas Faure, 1980: 85), and iron slag found in Roman stratum of Guerrandijo (Apellániz et al., 1967: 168). Both, apparently were found in the context of burial trousseau. However, as mentioned above, this interpretation must be treated with caution because we do not have absolute dates or precise data to confirm it.

Finally, it is worth mentioning a bronze object that is rather peculiar: the statuette of goddess Fortuna found in Peña Forua (Bizkaia). This type of figurines can be found too in an Asturian cave, a possible Minerva and a piece of bronze with a hunting scene, now gone, that could have come from the cave of Ferran (Asturias) (Fanjul, 2011: 114).

4.4. Other materials

In addition to the previously mentioned materials, in a lesser percentage, we find some others such as glass and some animal remains. In some caves there has also been found some *acus crinalis* (needles to decorate the hair), as in Abauntz (Navarra) (Tobalina-Pulido *et al.*, 2015: 135, Fig.2) or in Sastarri IV (Guipúzcoa) (Esteban Delgado, 1990) We can also find human remains in at least three caves, but their chronologies are uncertain as they appear in the context of Roman and Prehistoric materials, for example, the case of Ereñuko Arizti (Ape-Ilániz, 1974).

5. TWO CASE STUDIES: THE CAVE OF ABAUNTZ IN NAVARRA AND THE CAVE OF PEÑA FORUA IN BIZKAIA

5.1. Abauntz cave, Arraiz, Navarra

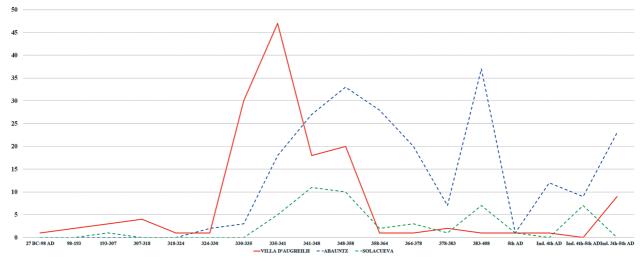
Abauntz is located in the valley of Ulzama (Navarra). Oriented to the southeast, it presents a length of 62 meters. This cavity, one of the most well known in the Navarran territory, was discovered in 1932. Since then and until the seventies several cave explorations took place. Since 1976, after a campaign of exploratory drillings, several archaeological interventions took place under the direction of P. Utrilla until the year 1995. Even though the cave presents a relevant Prehistoric level (Utrilla, 1982), since the first excavation campaign there were Roman remains documented. We bring the case here with the goal of giving a new approach to the found remains.

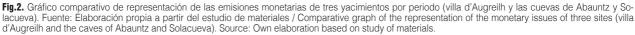
In the Abauntz cave, several pits have been discovered over considerable metres (in the corridor facing the entrance and extending to the middle of the cave) with various types of objects inside, including coins, ceramics, rings and a circular metal element with a spade head which, according to the archaeologists, could have been used to dig the pits. Generally, when valuable objects are hidden, they are gathered together in one place so as not to lose them. This is common, as can be seen in films or historical narratives, where people hide their valuables in a very easily recognisable place (at the foot of a tree, a wall, etc.). We know that the mountain populations are Christianised less quickly than the population living in the city. We can cite as an example the highland sanctuaries in the Comminges (France), where pagan practices seem to continue at the end of the 4th and 5th centuries (Cf. Venco, 2018). This could therefore point to a continuation of pagan practices in the caves (just as we still practice the votive aspect of fountains by unconsciously throwing a coin) (Jiménez Sánchez, 2010; Moreno Resano, 2009; Salinas de Frías, 1990). In 319, Constantine forbade the practice of magic which officially led to the end of paganism in 395 by Theodosius I (Salinas 1990: 239-240). From a negative connotation of cave activities in ancient literature (mouth of hell, place where ferocious and evil beasts live, deserter's hideout etc.) caves seem to become more attractive towards the end of the 4th-beginning of the 5th century.

In general, and even though in the last years some authors have questioned this interpretation, (Gutiérrez Cuenca *et al.*, 2012), in the publications that refer to the Late Roman Period of the Abauntz cave, the interpretation that links it with the instability period of the barbaric invasions is common in the bibliography. Thus, even in recent articles, it has been included in the group of *"Cuevas refugio en momentos de inseguridad o escondite de bandoleros* [...]" (García García, 1997; Utrilla, Laborda, 2014: 704). This interpretation is grounded primarily in the location of several coins from IVth and Vth AD many of those found in pits (Level A of the stratigraphy) that cut into the Chalcolithic and Prehistoric levels (Utrilla, 1982: 217).

After the revision of a part of the materials (the numismatic), and if we take into consideration the the analysis of the published data, we must question the cited interpretation. The coins were found in the first bend of the cave and its extension. Looking at the grid of excavations, the highest concentrations of coins are found in the square formed by areas B1-D1 and B4-D4 at the first bend and in areas B11-D11, B9-D9 and B7-D7. In these areas, the Roman material appears to be linked to a series of pits (Utrilla, 1989; Utrilla & Mazo, 1993-1994).

In one of these pits, excavated in the 1979 campaign in the square B1, in a non-identified ceramic, there would have been found over 30 coins. Over this all a metal hoe covered by a slab was found. After the





revisión of the coins, we find the highest concentration of minting between 383 and 408 AD (16.82% of the total batch). This observation, combined with the wear of the coins from this period, allows us to affirm that these coins continued to circulate at least in the first quarter of the 5th century. The hypothesis of refuge in periods of instability, particularly during the period of the invasions mentioned in the bibliography, therefore seems to be ruled out. The option of the cave being used by the "invaders" and not by the refugees, or that of a later frequentation, are the most probable.

About the other interpretation: treasure hideout, E. Gutiérrez Cuenca et al. link the pits with those of Arlanpe, to which they signal to a "not funerary ritual behaviour of Roman times" in the manner of "offering pits" (Gutiérrez Cuenca et al., 2012: 243). With the data at our disposal, we cannot be categorical in rejecting the function of treasure caches. Nevertheless, the fact that we did not find a single concentration of furniture in one pit but several of more or less reduced size, as well as the rather poor quality of the furniture, are not elements that support this hypothesis. With regard to the types of artefacts and their arrangement, we agree with E Gutiérrez Cuenca who attributes a ritual function to this cavity (Gutiérrez Cuenca et al., 2012: 245). Indeed, the 220 late coins, rings, ceramics and iron objects found mostly in pits of various sizes (probably « favissae »), as well as a large metal disc, seem to confirm this hypothesis.

5.2. Peña Forua Cave (now gone), Guernica, Bizkaia

Peña Forua, also known as Guinerradi, is located in the neighbourhood of Elejalde (Guernica, Bizkaia). It was discovered in 1919 by J.M. de Barandiarán. The excavation date is unknown, but it was carried out by B. Taracena and A. Fernández de Avilés. The materials were published by E. Nolte and J.M. Apellániz in the sixties and seventies, while M. Mezquíriz published part of the Roman ceramics in his doctoral thesis. In the year 1988 a great number of unpublished roman materials were edited. (Martinez Salcedo, Unzueta, 1988) In general, the chronology of the Roman materials is Late, centuries 4th and 5th AD, even though there are some Early Roman materials. (Esteban Delgado, 1990: 329-330; García Díaz et al., 1994: 192-193). The cave was destroyed due to the advance of the exploitation of the limestone quarry of mount Artadi. It was never object to a systematic analysis; the materials were obtained without an archaeological excavation in sight of the threat of destruction (Esteban, 1990: 329-330; García Díaz et al., 1994: 192-193).

The cave has been considered too a place of refuge. An example of this situation (in reference to the instability of centuries 4th and 5th AD) *"es la ocupación como refugio puntual de la próxima cueva de Peña Forua -hoy desaparecida - durante el siglo V d.C."* (Esteban *et al.* 2012: 14). Given that the cave has disappeared, we cannot conclude with precision about the functions of the cave. Despite this all, it is hard to evaluate this hypothesis with the materials obtained. In addition to DSP and TSHT that set us in a posterior phase, other material types as common ceramics, the local common ceramics or the glass give us broader chronologies inside this Late Period. To this we can add two coins from the first half of the 4th AD. Finally, we must mention a rather particular bronze object, a goddess Fortuna statuette, dated typologically in the 2nd century AD (Martinez Salcedo, Unzueta, 1988), but with a usage that might have been longer in time. It is an element that would lead us to think of a ritual function with other statuettes found in caves outside of our study focus. In this way, a possible Minerva and bronze piece with a hunting scene, now gone, and that could have come from cave of Ferrán, stands out. (Asturias) (Fanjul, 2011: 114). And the author, links the ritual function with its placement near a communication route. (Fanjul, 2011: 105). A small "Celtic Mother Goddess" was also found near other objects and some coins from the 4th century AD in the Culver Hole. (Braningan, Dearne, 1992). With this data, it seems likely that it is a ritual function (not specifically burial), at least for the Early Empire period, even though it is difficult to determine its function in the Low Empire.

6. CONCLUSIONS

As we have discussed during this article, trying to give an answer to the concentration of archaeological material of the end of the 4th century and beginning of the 5th AD in caves, the investigators have often reached out to the hypothesis of the refuges in periods of instability. During this article, we have been able to confirm that we do not have specific elements (either in the literary sources or in the archaeological data) that enables the attribution of the caves to this function.

On the one hand, if we take into consideration the Latin literary sources, the mentions of this function are not numerous or explicit enough. Thus, of the 62 references in the sources to registered caves, only three refer to their usage as shelter in periods of instability. This means that only 4,8% of the references link to this function. Thus, at least given by the sources, we can minimise the importance of the given interpretation. Mythology or religious aspects are elements that appear with a higher frequency.

One of the alleged reasons in the bibliography towards the cave usage in centuries 4th and 5th AD is that of the depopulation of cities and villages and the lookout for shelter of the inhabitants of rough areas, in which hiding was easy (We refer to Gutiérrez Cuenca *et al.*, 2012: 242). However, in general, the settlements in hills and half heights continue (with some exceptions), at least towards the end of the 5th century AD (We refer to Filloy *et al.*, 1997: 787; Gutiérrez Cuenca *et al.*, 2012). We see no destructions that signal this "pass of the barbarians". This questions that the inhabitants could flee to the caves because of the depopulation because of an epidemic. If this were true, we could only raise the issue for Labitolosa, in which 5 km. radio there are 3 caves. However, the ending of this city is set for 2nd century AD (Look for Tobalina-Pulido *et al.*, 2017; Magallón *et al*, 2013). But, again, the chronologies of the objects found in the caves will not match those of the city's depopulation.

On the other hand, we checked archeologically that there is no uniformity in the found materials. It is guite varied and, in some cases, abundant (for instance in Peña Forua, Iruaxpe III). The chronological dating of the material does not enable us to precise the chronologies in less than 50-100 years, which makes it hard to link them to a very particular time period as the invasions dated between the 409 AD and the 429 AD. Archeologically determination of the remains of a shelter is a complex matter, or an impossible one, even. We can consider that the people could hide before the threat of a sudden danger. In this case, they hide to save their lives and they can or cannot bring valuable objects with them, this would leave little evidence in the archaeological register. To this, we must add that the caves, often offer a scarce or no stratigraphy. In the caves that present an important stratigraphy, the Roman archaeological material is in the superior stratum mixed with materials from other periods (Utrilla, 1982), and the modern material, in a reduced quantity (with few exceptions), which signals that we are looking at cave visits or sporadic practices.

The location of material analysis has been attributed in general, the material documented in the back of caves refers to burial contexts, while the entrance ones (on most occasions) signal a punctual cave usage that as for now we cannot clarify. We can only add that it is a multifunctional place serving as a shelter, as a fireplace letting smoke escape from the cave and as an escape route in case of immediate danger (human or animal attacks).

The same happens with the material located in rooms of the medium cave area; we cannot precise its function. We highlight here, that in the last case, in general, the material is located in the entrance of a cave room found after a long corridor.

Finally, in relation to the studied cases, the function as shelter in times of instability seems to be dismissed. Thus, in the case of Abauntz, the large concentration of coins between 383 and 408 AD would lead us to rule out the hypothesis, at least related to the invasions of the year 408.

In the case of Peña Forua, it seems to respond to a ritual usage, but the absence of stratigraphy and the context of the founding could signal a superposition of different functions over time.

To conclude, nowadays, we are not able to know the extent or absence of the phenomenon in the caves in times of instability. Few literary sources link caves and the found materials do not enable this kind of function but only highlight practices or functions that use these materials (burial, ritual etc) that differentiate from a shelter function. This forces us to continue in the search of an answer to this cave usage looking from another direction, without completely rejecting it, but questioning it and opening new roads of interpretation.

7. BIBLIOGRAPHY

Apellániz, J.M., 1973. Corpus de materiales de las culturas prehistóricas con cerámica de la población de cavernas del País Vasco meridional. Munibe. Suplemento, 1.

Apellániz, J.M., 1974. Los problemas de las cuevas sepulcrales de Ereñuko Arizti, Arenaza II y Albiztey en Vizcaya. In: Baldeon, A., Apellániz, J.M. (Eds.), Dos estudios sobre Prehistoria del País Vasco, 114–142. Universidad de Deusto, Bilbao.

Apellániz, J.M., Nolte Aramburu, E., Altuna Echave, J., 1964. Cuevas sepulcrales de Vizcaya. Excavación, estudio y datación por el C 14. Munibe Antropologia-Arkeologia 19, 159–226.

Arribas Pastor, J.L., 1997. Materiales de época romana de la cueva de Lumentxa Lekeitio, Bizkaia. Isturitz 8, 643–656.

Azkárate, A., 1988. Arqueología cristiana de la Antigüedad tardía en Álava, Guipúzcoa y Vizcaya. Diputación Foral de Álava, Vitoria-Gazteiz.

Azkárate, A. Nuñez, J., Solaun, J.L., 2003. Materiales y contextos cerámicos de los siglos VI al X en el País Vasco. Archivo Español de Arqueología, Anejos 28, 321-370.

Baldellu Martínez, V., 1985. La cueva del Forcón. Bolskan 1, 149-176.

Barandiarán, J.M., 1964. Monedas romanas de Solacueva (Jócano, Álava). Boletín Sancho El Sabio 8, 67–93.

Barandiarán, J.M., 1968. Excavaciones en Solacueva de Lazcomonte (Jócano-Álava). Campaña de 1966. Estudios de Arqueología Alavesa 3, 117–131.

Barandiarán, J. M., 1973. Restos visigodos en la Cueva Foradada (Sarsa de Surta, Huesca). Escuela de Estudios Medievales. Imprenta Heraldo de Aragón, Zaragoza.

Berzosa Guerrero, J., 2005. Iglesias rupestres. Editorial Monte Carmelo, Burgos.

Branigan, K., Dearne, M.J., 1992. Romano-British cavemen: cave use in Roman. Oxbow Books, Oxford.

Buisson, A., 1990. Les grottes-refuges d'époque romaine dans le Jura méridional et les Alpes du Nord françaises (départements de l'Ain, Isère, Savoie, Haute-Savoie). In: VVAA, Actes du colloque Peuplement et exploitation du milieu alpin (Antiquité et Haut Moyen Age), 51–66. Caesarodunum, Belley.

Campo, A., 2021. Le lot monétaire de la villa du Gleyzia d'Augreilh à Saint-Sever (Landes), Bulletin de la Société Française de Numismatique 76, 165-171.

Castán Sarasa, A., 1985. Los restos de la cueva del Toro y el fondo de una leyenda. In: XVII Congreso Nacional de Arqueología, 919–932. Universidad de Alicante, Alicante.

Cepeda Ocampo, J.J., 1990. Moneda y circulación monetaria en el País Vasco durante la Antigüedad (siglos II a.C. - V d.C.). Bilbao Bizkaia Kutxa, Bilbao.

Doyen, J.M., 2013. The chairman's address. Entre amulettes et talismans, les monnaies trouées: ce qui se cache sous les apparences. The Journal of Archaeological Numismatics 3, 1-39.

Ebrard, D., 2013. Les grottes sépulcrales de Soule. In: VVAA, 50 ans d'archéologie en Soule. Hommage à Pierre Boucher (1909-1997), 147-155. DRAC Aquitaine, Mauléon-Licharre.

Esteban, M., 1990. El País Vasco atlántico en época romana. Universidad de Deusto, San Sebastián.

Esteban, M., Martinez Salcedo, A., Ortega, L., Alonso Olazabal, A., Izquierdo Marculeta, M.T., Réchin, F., Zuluaga, M.C., 2012. La cerámica común romana no torneada de difusión aquitano- tarraconense (siglos II a.C. - V d.C.). Estudio arqueológico y arqueométrico, Kobie. Anejos, 12.

Estiot, S., 1999. Le trésor de Troussey (Meuse): 5864 antoniniens et nummi, 303 AD, Trésors Monétaires XVII, 181–303.

Fanjul, A., 2011 inédito. Las últimas cuevas. La ocupación histórica de las cuevas asturleonesas.

Fanjul, A., 2013. Las últimas cuevas. Observaciones en torno a la ocupación de las cuevas astur leonesas. Arqueología y Territorio Medieval 18, 91–116.

Fernández-Posse, M.D., 1979. Informe de la campaña en la cueva de Arevalillo (Segovia). Noticiario Arqueológico Hispánico 6, 51–87.

Février, P.A., 1978. Problèmes de l'habitat du Midi méditerranéen à la fin de l'Antiquité et dans le haut Moyen Âge. Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz 25, 208–247.

Filloy, I., Gil, E., Iriarte, A., 1997. El territorio alavés en el Bajo Imperio. In: Teja, R., Pérez González, C. (Eds.), Congreso internacional la Hispania de Teodosio, 465–475. Universidad SEK, Segovia.

Gagniere, S., Granier, J., 1963. L'occupation des grottes du IIIe au Ve siècle et les invasions germaniques dans la basse vallée du Rhône. Provence Hist. 13, 225–239.

Gamo Pazos, E., 2013. Cuevas y alturas: reocupación de hábitats prerromanos en el Bajo Imperio en la provincia de Guadalajara. In: Álvarez Jiménez, D., Sanz Serrano, R., Hernández de la Fuente, D. (Eds.), El espejismo del bárbaro: ciudadanos y extranjeros al final de la Antigüedad, 213-240. Biblioteca Potestas, Madrid.

García-Bellido, M.P., Callegarin, L., Jiménez Diáz, A. (Eds.), 2011. Barter, money, and coinage in the ancient Mediterranean (10th - 1st centuries BC) (Vol. LVIII). CSIC, Madrid.

García Camino, I., 2002. Arqueología y poblamiento en Bizkaia, siglos VI-XII. La configuración de la sociedad feudal. Diputación Foral de Bizkaia, Bilbao.

García Díaz, P., Fernández Ochoa, C., Uscaestu, A., 1994. Producciones atlánticas de Terra Sigillata gálica tardía en la costa cantábrica de Hispania. Cuadernos de Prehistoria y Arqueología 21, 183-234.

García García, M.L, 1997. El poblamiento en época romana en Navarra: sistemas de distribución y modelos de asentamientos. Isturitz 8, 75–110.

Gil Zubillaga, E., 1997. El poblamiento en el territorio alavés en época romana. Isturitz, 8, 23–52.

Gutiérrez Cuenca, E., Hierro Gárate, J.A., 2012. El uso de las cuevas naturales en Cantabria durante la Antigüedad Tardia y los inicios de la Edad Media (siglos V-X). Kobie Paleoantropología 31, 175–206.

Gutiérrez Cuenca, E., Hierro Gárate, J. Ángel, Ríos Garaizar, J., Gárate Maidagan, D., Gómez Olivencia, A., Arceredillo Alonso,

D., 2012. El uso de la cueva de Arlanpe (Bizkaia) en época tardorromana. Archivo Español de Arqueología 85, 229–251.

Hierro Gárate, J.Á., 2002. Arqueología de la tardoantigüedad en Cantabria: yacimientos y hallazgos en cueva. Nivel Cero 10, 113-128.

Hierro Gárate, J.A., 2022. El uso funerario de las cuevas en época visigoda (siglos VI-VIII). Documentos de Arqueología Medieval 17. Universidad del País Vasco, Leioa.

Jiménez J. A., 2010. Constante y Constancio II y sulegislación contra el paganismo. In: E. Suárez y E. Pérez (eds.), Lex Sacra: Religión y derecho a lo largo de la Historia. Actas del VIII Congreso de la Sociedad Española de Ciencias de las Religiones, Valladolid, 15- 18 de octubre de 2008, Valladolid, 107-116.

López Rodríguez, J.R., 1985. Sigillata hispánica tardía decorada a molde de la Península Ibérica. Universidad de Valladolid, Valladolid.

Magallon Botaya, M.A., Sillères, P., 2013. Labitolosa, une cité hispano-romaine. Universidad de Burdeos, Burdeos.

Martínez Salcedo, A., Unzueta Portilla, M., 1998. Estudio del material romano de la cueva de Peña Forua. Universidad de Deusto, Bilbao.

Morel, J.P, 1983. La céramique comme indice du commerce antique (réalités et interprétations). Trade and Famine in Classical Antiquity 8, 66-74.

Moreno, E. 2009. La política legislativa imperialsobre los cultos tradicionales de los siglos IV y Vd.C. Mainake 31, 209-216.

O'Regan, H.J., Bland, K., Evans, J., Holmes, M., McLeod, K., Philpott, R., Smith, I., Thorp, J., Wilkinson, D.M., 2020. Rural Life, Roman Ways? Examination of Late Iron Age to Late Romano-British Burial Practice and Mobility at Dog Hole Cave, Cumbria. Britannia 51, 1-34.

Peña Cervantes, Y., 2000. La crisis del siglo en la historiografía española. Espacio, Tiempo Y Forma. Serie II, Historia Antigua 13, 469–492.

Polo Romero, L.A., Palomero Ilardia, I., Reyes Téllez, F., 2021. El yacimiento arqueológico de La Mosquita (Villalaín, Burgos): Avances en el estudio del hábitat rupestre y los centros de culto en el norte de Burgos. Cuadernos de Arqueología de la Universidad de Navarra 29, 235-258.

Quirós Castillo, J.A., Alonso Martín, A., 2007. Las ocupaciones rupestres en el fin de la Antigüedad. Los materiales cerámicos de Los Husos (Laguardia, Álava). Veleia 24-25, 1123-1142.

Raynaud, C., 1984. L'habitat rural romain tardif en Languedoc oriental IIIème-Vème s. Université de Montpellier, Montpellier.

Raynaud, C., 2001. L'occupation des grottes en Gaule méditerranéenne à la fin de l'Antiquité. In: Ouzoulias, P., Pellecuer, Ch., Raynau, C., Van Ossel, P., Garmy, P. Colloque international AGER IV, 449-471. APDCA, Antibes.

Réchin, F., 1996. La vaiselle commune de table et de cuisine en Aquitaine méridionale. In: Bats, M. (ed.), Les céramiques communes de Campanie et de Narbonnaise (fer s. av. J.C.lie s. ap. 1.-C.). La vaiselle de cuisine et de table. Actes des Journées d'étude (Naples 1994), 447-479. Centre Jean-Bérard, Nápoles.

Réchin, F., 2008. Espaces et sociétés en Aquitaine méridionale à l'époque romaine. L'apport des études céramologiques, Dossier de candidature à l'Habilitation à Diriger les Recherches (Université de Pau et des Pays de l'Adour, inédito). Rubio, M., 2014. Vestigios de ocupación romana en cuevas naturales de la Subbética Cordobesa. Nuevas hipótesis Interpretativas, Antiquitas 26, 205-225.

Salinas, M. 1990. Tradición y novedad en las leyescontra la magia y los paganos de los emperadores cristianos. Antigüedad y Cristianismo 7, 237-245.

Santa Cruz del Barrio, A., Lucas, A. de, Fonseca, H.J., Sánchez, P., 2021. Nuevos testimonios funerarios en cueva del Bronce Proto-Cogotas: el complejo espacio sepulcral de Cueva Corazón (Mave, Palencia). In: Sánchez, S., Diáz-Navarro, S., Fernández-Lozano, J., Jiménez, J., The Archaeology of 'Underdog Sites' in the Douro Valley. From Prehistory to the Modern Age. Archaeopress, Oxford.

Sanz, J., 2008. La crisis del siglo III. In: Alvar, J. (dir.), Entre Fenicios y Visigodos. La Historia Antigua de la Península Ibérica, 461-477. La Esfera de los Libros, Barcelona.

Tobalina-Pulido, L., Duménil, V., Campo, A., 2015. Fréquentations des grottes durant l'époque romaine: le cas de la Navarre. Cuadernos de Arqueología de La Universidad de Navarra 23, 123–161.

Tobalina-Pulido, L., Pace, B, Campo, A., 2017. The contribution of GIS to the analysis of the distribution of Roman caves between the Ebro River and the Pyrenees. In: Mayoral Herrero, V., Parcero-Oubiña, C., Fábrega-Álvarez, P., Archaeology & Geomatics: Harvesting the Benefits of 10 Years of Training in the Iberian, 191-207. Sidestone Press, Leiden.

Utrilla, P., Laborda, R., 2014. La reocupación de cuevas prehistóricas del Prepirineo oscense en época romana. In: Duplá Ansuategui, A., Escribano Paño, M.V., Sancho Rocher, L., Villacampa Rubio, M.A. (Eds.), Miscelánea de estudios en homenaje a Guillermo Fatás Cabeza, 693-704. Instituto Fernando el Católico, Zaragoza.

Utrilla, P., Mazo, C., 1993-1994. Informe preliminar sobre la actuación de urgencia de 1991 en la cueva de Abauntz. Trabajos de arqueología Navarra 11, 9-29.

Utrilla, P., 1982. El yacimiento de la cueva de Abauntz. Trabajos de Arqueología Navarra 3, 203-346.

Venco, C., 2018. L'habitat fortifié du Cap des Pènes et le sanctuaire du Dieu Erge de la Protohistoire à l'Antiquité tardive. Bize / Montsérié (Hautes-pyrénées). Sondages archéologiques programmés. Unpublished archaeological report.