

THE ARCHAEOLOGY OF THE PEASANTRY IN THE EARLY MEDIEVAL AGE. REFLECTIONS AND PROPOSALS

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ABSTRACT

The archaeology of the medieval peasantry in Spain and Europe has attracted renewed attention in recent decades. This article is an overview of the research carried out in the last 30 years into the peasantry and their cultivated areas in the early-medieval societies in the north of the Iberian Peninsula and al-Andalus. Special attention is paid to the interpretations archaeologists make of the archaeological record. Approaches from two distinct perspectives are analysed, these being the excavation of settlements, and the archaeology of agrarian spaces. Both approaches do not usually come together in the research.

It is increasingly clear that the 8th century was a turning point in the forms of peasant settlement and the creation of new cultivated areas. The consolidation of the migration in al-Andalus or the new forms of peasant settlement that arose from the end of the 7th century in the north of the Peninsula were essential for the later urban development. This development is closely linked to the changes in the production of artefacts and tools, as well as how these were distributed (in markets increasingly controlled from the city) and the patterns of consumption by the population, both rural and urban. Ethnic origins and religion have little to do with this process.

KEYWORDS

Peasant archeology, Medieval Archaeology, Agrarian Archaeology, Al-Andalus.

CAPITALIA VERBA

Archaeologia agricola, Archaeologia mediaevalis, Archaeologia agraria, Iberia Arabica.

1. Introduction

The archaeology of the medieval peasantry in Spain and Europe has received renewed attention over recent decades, especially research into forms of early-medieval settlements.¹ In Spain, however, a distinction must be made between the archaeology of the medieval Christian societies in the north and that of al-Andalus. Moreover, there is a line of in-depth archaeological research orientated towards studying the processes involved in the conquest of al-Andalus and the consequent feudal colonisation. Rural settlements are often the preferred subject of study. The reason for this preference is an old one. In 1988, referring to the British archaeological tradition for the medieval period, Miquel Barceló indicated that the great advances in the study and interpretation of the formation of agricultural landscapes had not produced knowledge that enabled *relacionar adecuadamente la estructura de estos espacios con los procesos de trabajo campesinos que precisamente les daban forma*.² If one does not look for the peasant work processes into the shapes and sizes of the plots, the structures of the settlements and all their archaeological residues, there is no “archaeology of the peasantry”, it is only the “archaeology of rural settlements”, “landscape archaeology”, or even “agrarian archaeology”.

Since the 1980s, the archaeology of rural settlements has been developed in good measure as an effective resource for the study of the processes called *incastellamento* and *encellulement* in Western Europe or the development of the *manors* and *villages* concentrated in England.³ This link with the historiographic proposals contributed to giving the discipline of medieval archaeology a prominence it had not previously enjoyed. Medieval archaeology had focussed mainly on buildings (castles and churches) and cemeteries, with little or no interest paid to the peasant records. This archaeology did not overcome its ancillary position, as described by Miquel Barceló, in the historiographic narrative and, also, in its academic visibility.⁴ It began to gain relevance when it constituted an instrument to verify the historiographic discourse and then, as

1. My thanks to Fèlix Retamero and Antoni Virgili for their comments about this article and which have contributed to improving it. The research behind a good part of the reflections presented here has been financed by various institutions in recent years. The most recent is the project *Órdenes agrarios y conquistas ibéricas (siglos XII-XVI). Estudios desde la arqueología histórica* (HAR2017-82157-P, Ministerio de Economía, Industria y Competitividad).

2. “...the structure of these spaces to be related adequately with the processes of peasant work that precisely gave them their form”. Barceló, Miquel. “La arqueología extensiva y el estudio de la creación del espacio rural”, *Arqueología Medieval. En las afueras del medievalismo*, Miquel Barceló, Helena Kirchner, Josep M. Lloró, Ramon Martí, José M. Torres, eds. Barcelona: Crítica, 1988: 195-274.

3. Toubert, Pierre. *Les structures du Latium médiévale. Le Latium méridional et la Sabine du IXe à la fin du XIIe siècle*. Rome: École Française de Rome, 1973, 2 vols.; Fossier, Robert. *Enfance de l'Europe (Xe-XIIe siècle). Aspects économiques et sociaux. I: L'homme et son espace*. Paris: Presses Universitaires de France, 1982; Fossier, Robert. “La naissance du village”, *La France de l'an Mil*, Robert Delort, dir. Paris: Seuil, 1990: 162-168; Lewis, Carenza; Mitchell-Fox, Patrick; Dyer, Christopher. *Hamlet and field: changing Medieval settlements in Central England*. Manchester. Manchester University Press, 1997. These processes have mainly been studied by analysing the written documentation.

4. Barceló, Miquel, “Prólogo”, *Arqueología Medieval. En las afueras del medievalismo*, Miquel Barceló, Helena Kirchner, Josep M. Lloró, Ramon Martí, José M. Torres, eds. Barcelona: Crítica, 1988: 9-17.



a discipline able to present new problems that the written documents were unable to address.⁵

In more recent years, another factor that has been decisive in the consolidation of the archaeology of the rural settlements has a professional rather than a historiographic origin. I am referring to the numerous excavations fostered by large urban infrastructure and transport projects. Rescue archaeology has contributed to creating an unprecedented corpus of data, very especially in the field of early-medieval rural settlements. However, the contributions are unequal, both in the registration methodology, and in the development of the results.⁶ In the archaeology of al-Andalus, rescue archaeology has not been so closely tied to large infrastructure works but more to local initiatives aimed at recovering the architectural heritage or urban interventions. Because of that, excavations in large monuments stand out and, among these, those of fortifications.

It is not my intention to make the state of the matter nor an exhaustive historiographic review of Spanish medieval archaeology something that has recently been done.⁷ I do, in contrast, attempt to address a series of issues I consider relevant for archaeological research into the peasantry.⁸

5. Quirós, Juan Antonio. “Las aldeas de los historiadores y de los arqueólogos en la alta Edad Media en el norte peninsular”. *Territorio, sociedad y poder*, 2 (2007): 65-86. Again, in 1988, Miquel Barceló noted that *los dos registros —el textual y el arqueológico— producen informaciones distintas, cuya relevancia depende en última instancia de su articulación en una teoría y del lugar que ocupen dentro de ella. En rigor, el registro arqueológico, de una forma más directa que el textual, hace evidente que la estratificación —bien reconocible en el espacio por ella producido— es el factor fundacional de toda la estructura social y de todo el movimiento histórico. La estratificación necesita, pues, ser explicada. La relevancia científica de la investigación dependerá de la capacidad de movilizar la información producida por ambos registros para explicar por qué y cómo se produce y reproduce esta estratificación y medir, también, las variaciones de intensidad que esta estratificación puede tener en distintas sociedades* (“the two records —the textual and the archaeological— produce different information, whose relevance ultimately depends on being articulated in a theory and the place they occupy within this. In fact, the archaeological record shows in a more direct way than the textual that stratification —easily recognisable in the space where is produced— is the foundational factor for all social structures and all historical changes. So, stratification needs to be explained. The scientific relevance of the research will depend on the capacity to mobilise the information produced by the two records to explain why and how this stratification is produced and reproduced and also to measure the variations in intensity that this stratification could have in distinct societies”). Barceló, Miquel, “Prólogo”...: 14.

6. Quirós, Juan Antonio. “Introducción. ¿Por qué la arqueología preventiva ha hecho posible la arqueología del campesinado altomedieval?”. *El poblamiento rural de época visigoda en Hispania. Arqueología del campesinado en el interior peninsular*, Juan Antonio Quirós, ed. Bilbao: Universidad del País Vasco, 2013: 29-64.

7. For the archaeology of the early-medieval rural world in the Hispanic societies: Quirós, Juan Antonio. “Las aldeas de los historiadores...”; Quirós, Juan Antonio. “Medieval archaeology in Spain”, *50 years of Medieval Archaeology in Britain and beyond (1957-2007)*, Roberta Gilchrist, Andrew Reynolds, eds. Leeds: Society for Medieval Archaeology Monograph 30, Maney, 2009: 173-189. For the archaeology of the rural world of al-Andalus: Eiroa, Jorge A. “Pasado y presente de la arqueología de las alquerías”. *Imago Temporis Medium Aevum*, 6 (2012): 386-406; Carvajal, Cristóbal. “The archaeology of al-Andalus. Past, present and future”. *Medieval Archaeology*, 58 (2014): 318-339; Malpica, Antonio. “La arqueología medieval entre el debate científico y social. Tendencias actuales en arqueología medieval”, *Tendencias Actuales en Arqueología Medieval*, Ángel. L. Molina, Jorge A. Eiroa, eds. Murcia: Universidad de Murcia, 2007: 9-22; and the volumes of the *Boletín de Arqueología Medieval*, 15 (2011), 16 (2012) and 17 (2014) dedicated to the state of the question organised regionally. Recently, several chapters of the book coordinated by Juan Antonio Quirós again go into the state of the question of medieval archaeology in Spain: Quirós, Juan Antonio, ed. *Treinta años de Arqueología Medieval en España*. Oxford: Archaeopress, 2018.

8. My reflection returns partly to that done several years ago in this same journal: Kirchner, Helena. “Arqueología el paisaje y arqueología de los espacios de cultivo en las sociedades hispánicas medievales”,



2. Archaeology of the area of residence and archaeology of the agrarian spaces

There are two approaches in Spanish medieval archaeology that have yet to come together, namely the excavation in archaeological sites, and the archaeology of agrarian spaces. On one hand, there is a large number of scholars or commercial archaeologists who cannot conceive any other archaeology than excavation and who are responsible for the research done in rural sites and the architectural heritage. On the other hand, there is a sector of archaeologists—and also historians—who have focussed their research on agricultural spaces and, more recently, livestock areas. A few years ago excavations of cultivated fields began although these were not considered archaeological sites by any administration.⁹ Some archaeologists have, moreover, drawn attention to the need to redefine the concept of “archaeological site” or at least its perimeter. The settlements include internal spaces and neighbouring areas without building but which had agricultural functions.¹⁰ Despite the already

Imago Temporis Medium Aevum 5 (2011): 363-389 (English translation: Kirchner, Helena. “Archaeology of the landscape and archaeology of farmed areas in the Medieval Hispanic societies”. *Imago Temporis Medium Aevum*, 5 [2011]: 55-87).

9. Ballesteros, Paula; Criado, Felipe; Andrade, José M. “Formas y fechas de un paisaje medieval en Cidade da Cultura”. *Arqueología Espacial*, 26 (2006): 193-225. Ballesteros, Paula. “La arqueología rural y la construcción de un paisaje agrario medieval: el caso de Galicia”, *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress, 2010: 25-40; Ferro-Vázquez, Cruz; Martínez-Cortizas, Antonio; Nóvoa-Muñoz, Juan Carlos; Ballesteros-Arias, Paula; Criado-Boado, Felipe. “1500 years of soil use reconstructed from the chemical properties of a terraced soil sequence”. *Quaternary International*, 346 (2014): 28-40; Quirós, Juan Antonio. “Arqueología de los espacios agrarios medievales en el País Vasco”. *Hispania*, 69/233 (2009): 619-652. Quirós, Juan Antonio. “De la arqueología agraria a la arqueología de las aldeas medievales”, *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress, 2010: 11-24; Quirós, Juan Antonio, dir. *Arqueología del campesinado medieval: la aldea de Zavalla*. Bilbao: Universidad del País Vasco, 2012; Quirós, Juan Antonio; Nicosia, Cristiano; Polo-Díaz, Ana; Ruiz del Árbol, María. “Agrarian archaeology in northern Iberia: Geoarchaeology and early medieval land use”. *Quaternary International*, 346 (2014): 56-68; Vigil-Escalera, Alfonso. “Formas de parcelario en las aldeas altomedievales del Sur de Madrid. Una aproximación arqueológica preliminar”, *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress, 2010: 1-10; Fernández Mier, Margarita; Aparicio, Patricia; González Álvarez, David; Fernández Fernández, Jesús; Alonso González, Pablo. “La formación de los paisajes agrarios del Noroeste peninsular durante la Edad Media (Siglos V al XII)”. *Debates de Arqueología Medieval*, 3 (2013): 359-374. Fernández Mier, Margarita; Fernández Fernández, Jesús; Alonso, Patricia; López Sáez, José Antonio; Pérez Díaz Sebastián; Hernández Beloqui, Begoña. “The investigation of currently inhabited villages of medieval origin: Agrarian archaeology in Asturias (Spain)”, *Quaternary International*, 346 (2014): 41-55; Fernández Fernández, Jesús. “Arqueología de una aldea medieval y su espacio agrario: Villanueva de Santo Adriano (Asturias, noroeste de la península Ibérica)”. *Historia Agraria*, 72 (2017): 69-106; Puy, Arnald; Balbo, Andrea. “The genesis of irrigated terraces in al-Andalus. A geoarchaeological perspective on intensive agriculture in semi-arid environments (Ricote, Murcia, Spain)”. *Journal of Arid Environments*, 89 (2013): 45-56; Puy, Arnald; Balbo, Andrea; Virgili, Antoni; Kirchner, Helena. “The evolution of Mediterranean wetlands in the first millennium AD: the case of Les Arenes floodplain (Tortosa, NE Spain)”. *Geoderma*, 232-234 (2014): 219-235.

10. Vigil-Escalera, Alfonso. *Los primeros paisajes altomedievales en el interior de Hispania. Registros campesinos del siglo quinto d. C.* Bilbao: Universidad del País Vasco, 2015; Quirós, Juan Antonio, dir. *Arqueología del*



long tradition of studies into cultivated areas, archaeology continues to be mainly identified with settlements as its main subject of research. In general, then, not only is there an ongoing disconnection between the archaeology of the farmed and livestock areas and agrarian history, but also between the archaeology of the cultivated and livestock areas, and medieval archaeology, generally focussed on the inhabited places.¹¹

Agrarian archaeology is conceived more as a compendium of techniques used in the process of excavation linked to the recovery of bioarchaeological remains like seeds, pollen, charcoal and faunal remains and their later analysis. However, in the classic book coordinated by Jean Guilaine, as well as techniques for studying plant and animal remains, the various chapters included techniques of aerial photo-interpretation, of morphological analysis of field systems, of geo-archaeology, as well as the study of agricultural implements and farming techniques.¹² “Landscape archaeology” seldom contemplates the agrarian space and limits its study to the distribution of rural settlement and places linked to power in the geography of a region. Its aim is to understand the relations between the two types of settlement and is restricted more to studying the “territory” than the landscape transformed by the peasant communities.¹³ Indeed, when the expressions of “landscape archaeology” or “agrarian archaeology” are used, seldom do they contemplate the agrarian area. The analysis of plant and animal remains enables extremely valuable information about the management of crops and herds to be obtained. Also the excavation of settlements is essential for understanding a wealth of aspects that affect the domestic management of food and objects, the exchanges and unequal relations between individuals and social groups. The geographic distribution of the rural settlements and places of power enable the formation of certain settlement patterns and their social context to be identified. However, all these strategies —necessary, I insist— tell about a landscape and agrarian setting without measurements or forms. They lack the areas for cultivation, livestock, hunting and gathering. In the best of cases, mining has been a subject of interest. The settlements should be studied in relation to the productive areas and vice-versa. This disconnection between the archaeology of the inhabited places and the archaeology of the agrarian areas (understanding “agrarian” in the widest sense, not referring only to cultivated areas) is persistent

campesinado medieval...: 532-533.

11. Kirchner, Helena. “Arqueología el paisaje y arqueología de los espacios de cultivo...”.

12. Guilaine, Jean. *Pour une archéologie agraire. A la croisée des sciences de l’homme et de la nature*. Paris: Armand Colin, 1991.

13. See, for example, the manual for landscape archaeology by Cambi, Franco. *Manuale di archeologia dei paesaggi. Metodologie, fonti, contesti*. Rome: Carocci, 2011 (repub. 2015). Years ago, Almudena Orejas did a good state of the question with reflections that are still valid: Orejas, Almudena. “Arqueología del paisaje: historia, problemas y perspectivas”. *Archivo Español de Arqueología*, 64 (1991): 191-230. See also: Orejas, Almudena. “Arqueología de los paisajes agrarios e historia rural”. *Arqueología espacial*, 26 (2006): 7-19; Orejas, Almudena, Ruiz del Árbol, María. “Arqueología del paisaje: procesos sociales y territorios”, *La materialidad de la historia. La arqueología en los inicios del siglo XXI*, Juan Antonio Quirós, dir. Madrid: Akal, 2013: 201-240.



although various authors have thought about what should be understood by agrarian archaeology in medieval societies.¹⁴

The archaeological excavation of dwellings allows fundamental questions to be tackled. These are related principally to consumption, processing of agrarian products (plant or animal), including handling to make them apt for consumption and cooking, storage methods and artisanal structures for making tools and other objects. Similarly, the material remains found in settlements are crucial in the study of exchanges. Hearths, garbage dumps, pottery and other craftwork products, remains of fauna, remains of plants (carbons, plant macro-remains, pollen, etc.), hand mills, presses, storage structures (silos, containers, granaries), workshops and artisanal ovens also provide indirect knowledge about agrarian production (management of herds in the case of the fauna, conditions for planting cereals, harvesting, agrarian cycles and calendars, selection of animal or plant species, etc.). The analysis of these records by means of specialised techniques is essential and archaeological excavations, whether programmed or commercial, should include these systematically. In this sense, the work carried out from the Universidad del País Vasco, under the direction of Juan Antonio Quirós, is exemplary. Over relatively few years protocols have been designed for the excavation of sites and these have generated publications of reference.¹⁵ Agrarian archaeology is mainly identified with this type of technical resource and analysis, closely linked to excavation and the inhabited places.

However, a relevant part of the conditions of production cannot be inferred from excavations in dwellings or built up areas. These include the localisation of fields, the size of cultivated areas, farming procedures (with or without artificial irrigation), the areas of pasture and itineraries of herds, refuges for shepherds and animals, connections between settlements in relation to these spaces and how the peasant communities managed all these resources. Various authors have drawn attention to the need for peasant archaeology to study, together with the archaeological, the working areas linked to these and which are almost never included inside the perimeter of the group of dwellings.¹⁶

It is some time since Miquel Barceló considered that the concept of rural settlement should be understood as the inseparable set of the dwellings and the working area (the farmed fields, the areas for hunting, gathering and pasture, the

14. Ballesteros, Paula; Kirchner, Helena; Eiroa, Jorge A.; Fernández Mier, Margarita; Ortega, Julián; Quirós, Juan Antonio; Retamero, Fèlix; Sitjes, Eugènia; Torró, Josep; Vigil-Escalera, Alfonso. "Por una arqueología agraria de las sociedades medievales hispánicas. Propuesta de un protocolo de investigación", *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress: 185-202.

15. Quirós, Juan Antonio, dir. *Arqueología del campesinado medieval...*; Vigil-Escalera, Alfonso. *Los primeros paisajes altomedievales en el interior de Hispania...*

16. Ballesteros, Paula; Kirchner, Helena; Eiroa, Jorge A.; Fernández Mier, Margarita; Ortega, Julián; Quirós, Juan Antonio; Retamero, Fèlix; Sitjes, Eugènia; Torró, Josep; Vigil-Escalera, Alfonso. "Por una arqueología agraria de las sociedades...".



territories of political domain, etc.).¹⁷ On more than one occasion, he signalled a need for archaeology to go beyond the archaeological site and for the areas of peasant work to become the main subject of interest. Only by doing so could the sense and rate of the erosion of peasant autonomy through the seizure of rent, in the case of the feudal societies, be established.¹⁸ More recently, one of his last publications emphasised that the agrarian dimension of the selection of the peasant settlements is the central question that allows the size, morphology and mechanisms of domain that could eventually have weighed on them to be understood.¹⁹ P. Toubert quotes Miquel Barceló extensively to propose the necessity for the archaeology to move beyond the settlement and towards the cultivated area and road network and analyse not only “population dynamics” but also “peasant work”.²⁰ Other authors allude, although marginally, to the need to study the cultivated areas, but with these almost never becoming part of their research strategies.²¹

3. Archaeology of the cultivated areas

Until the 1980s, no strategy for research into medieval field systems in Mediterranean Europe had been developed equivalent to those in continental Europe or British Isles. In the latter case this had enabled field systems from the medieval epoch or even older to be identified thanks to the fossilisation of the limits of the plots or the imprints left by the process of ploughing. In this context, Miquel Barceló promoted a long-term research programme into Andalusí irrigated areas linked to rural settlements by means of a new methodology, the so-called “hydraulic

17. Barceló, Miquel. “La arqueología extensiva...”: 196; Barceló, Miquel. “Quina arqueologia per al-Andalus?”, *Coloquio hispano-italiano de arqueología medieval*, Antonio Malpica, ed. Granada: Patronato de La Alhambra y Generalife, 1992: 243-252.

18. Barceló, Miquel. “Crear, disciplinar y dirigir el desorden. La renta feudal y el control del proceso de trabajo campesino: una propuesta sobre su articulación”. *Taller d’Història*, 6 (1995): 61-72, esp. 64. French translation in: Barceló, Miquel. “Créer, discipliner et diriger le désordre. Le contrôle du processus de travail paysan: une proposition sur son articulation (Xe-XIe siècle)”. *Histoire & Sociétés Rurales*, 6/2 (1996): 95-116.

19. Barceló, Miquel. “Arqueología e historia medievales como historia”, *La materialidad de la historia. La arqueología en los inicios del siglo XXI*, Juan Antonio Quirós, dir. Madrid: Akal, 2013: 67-99.

20. Toubert, Pierre. “L’incastellamento aujourd’hui: quelques réflexions en marge de deux colloques”, *L’incastellamento. Actas de las reuniones de Girona (226-27 de noviembre de 1992) y de Roma (5-7 de mayo de 1994)*, Miquel Barceló, Pierre Toubert, eds. Rome: Consejo Superior de Investigaciones Científicas, Escuela Española de Historia y Arqueología en Roma, 1998: XI-XVIII; Barceló, Miquel. “Crear, disciplinar y dirigir...”.

21. Zadora-Rio, Elisabeth. “Le village des historiens et le village des archéologues”, *Campagnes médiévales. L’homme et son espace. Études offertes à Robert Fossier*, Elisabeth Mornet, dir. Paris: Publications de la Sorbonne, 1995: 145-153, esp. 153; Peytremann, Édith. *Archéologie de l’habitat rural dans le nord de la France du IV^e au XII^e siècle*. Saint-Germain-en-Laye: Centre Michel de Boüard - Centre de recherches archéologiques et historiques médiévales (CRAHM), 2003: 362; Alfonso, Isabel. “Las historiografías nacionales sobre el mundo rural medieval: una aproximación comparativa”, *La historia rural de las sociedades medievales europeas*, Isabel Alfonso ed. Valencia: Publicacions de la Universitat de València, 2008: 11-30.



archaeology”, that allowed the original design of Andalusi hydraulic systems and later modifications to be identified, measured and described.²² Since then, various studies have been carried out on a regional scale, mainly on the Balearic Islands, in eastern Andalusia and Catalonia.²³ This work was very original in the European panorama of research into cultivated areas. The research carried out over 30 years has not only made the methodology more complex, but also diversified the issues dealt with while generating a corpus of case studies that have made it possible to establish a typology of irrigated spaces, the procedures for building terraces and to determine the sizes of the irrigated areas in rural settlements. The question of size is especially relevant given that it enables the identification of one of the most significant criteria that conditioned the construction of the irrigated peasant spaces and their strategies to minimise risks.²⁴ The issue of the occupation of the irrigated

22. For the methodological and conceptual foundations, see Barceló, Miquel; Kirchner, Helena; Navarro, Carmen. *El agua que no duerme. Fundamentos de la arqueología hidráulica andalusí*. Barcelona-Madrid: El Legado Andalusí, 1995; Barceló, Miquel. “De la congruencia y la homogeneidad de los espacios hidráulicos en Al-Andalus”, *El agua en la agricultura de Al-Andalus*, Antonio Malpica, coord. Barcelona-Madrid: El Legado Andalusí, 1995: 25-38.

23. Barceló, Miquel; Kirchner, Helena. *Terra de Falanis. Quan Felanitx no ho era. Assentaments andalusins i organització de l'espai al sud-est de Mallorca*. Palma: Universitat de les Illes Balears, 1995; Kirchner, Helena. *La construcció de l'espai pagès a Mayûrqa: les valls de Bunyola, Orient, Coanegra i Alaró*. Palma: Universitat de les Illes Balears, 1997; Kirchner, Helena. “La reconstrucció del disseny original dels espais irrigats andalusins i de les modificacions posteriors. Exemples d'Eivissa”, *Estudiar i gestionar el paisatge històric medieval. Territori i societat a l'Edat Mitjana*, Jordi Bolòs, ed. Lleida: Universitat de Lleida, 2007: 11-38; Kirchner, Helena; Virgili, Antoni; Puy, Arnald. “Agrarian spaces in Tortosa during the Andalusian period and after the Catalan conquest (11th-12th centuries)”, *Irrigation, drainage, dry agriculture and pastures in Al-Andalus*, Helena Kirchner, Flocel Sabaté, eds. Turnhout: Brepols (forthcoming); Kirchner, Helena; Virgili, Antoni. “Irrigation and drainage in al-Andalus: Madîna Turtuša and rural settlements in the lower course of the Ebro River (Tortosa, Spain)”. *Old and new worlds. The global challenges of rural history, International conference, Lisbon 27-30 January 2016*. 6 February 2019 <<https://lisbon2016rh.files.wordpress.com/2015/12/onw-0164.pdf>>; Kirchner, Helena; Retamero, Fèlix. “Becoming islanders. Migration and settlement in the Balearic Islands (10th-13th centuries)”, *Agricultural and Pastoral Landscapes in Pre-Industrial Society: Choices, Stability and Change*, Fèlix Retamero, Inge Schjellerup, Althea Davies, eds. Oxford, Philadelphia: Oxbow Books, 2016: 57-78; Argemí, Mercè. “Segmentación de grupos bereberes y árabes a través de la distribución de asentamientos andalusíes en Yartân (Mayûrqa)”. *Arqueología del paisaje. Arqueología Espacial*, 19-20 (1998): 373-386; Barceló, Miquel; Kirchner, Helena; Martí, Ramon; Torres, José M. *The design of irrigation systems in Al-Andalus. The cases of Guajar Faragüit (Los Guájares, Granada, Spain) and Castellitx, Aubenya and Biniatró (Balearic Islands)*. Bellaterra: Universitat Autònoma de Barcelona, 1998; Barceló, Miquel; Retamero, Fèlix, eds. *Els barrancs tancats. L'ordre pagès al sud de Menorca en època andalusina*. Maó: Institut Menorquí d'Estudis, 2015; Sitjes, Eugènia. “Espacios Agrarios y redes de asentamientos andalusíes en Manacor (Mallorca)”, *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress, 2010: 61-78.

24. Glick Thomas. F.; Kirchner, Helena. “Hydraulic systems and technologies of Islamic Spain: History and archaeology”, *Working with water in Medieval Europe. Technology and Resource-Use*, Paolo Squatriti, ed. Leiden-London-Cologne: Brill, 2000: 267-329; Sitjes, Eugènia. “Inventario y tipología de sistemas hidráulicos de Al-Andalus”. *Arqueología Espacial*, 26 (2006): 263-291; Sitjes, Eugènia. “Managing slopes for agricultural purposes: terraces morphology in Andalusi hydraulic Systems”, *Agricultural and Pastoral Landscapes in Pre-Industrial Society: Choices, Stability and Change*, Fèlix Retamero, Inge Schjellerup, Althea Davies, eds. Oxford, Philadelphia: Oxbow Books, 2016: 201-219; Retamero, Fèlix. “Lo que el tamaño importa. Cuándo y por qué se modificaron los antiguos sistemas hidráulicos andalusíes”, *Arqueología Espacial*, 26 (2006): 293-310; Retamero, Fèlix. “Irrigated agriculture, risk and population. The Andalusi hydraulic



areas after the feudal conquests has been studied simultaneously.²⁵ Furthermore, the problem of the transmission of hydraulic techniques has been dealt with. In this sense, research was carried out in Yemen, the origins of the Banû Ru'ayn, a group who settled on the Peninsula and the Balearic Islands.²⁶ Archaeobotanic studies are being introduced to determine the set of plants grown with the aim of establishing the extent of the spread of plants in the irrigated spaces.²⁷ Geo-archaeology methods have been applied to study the processes of field construction and obtain absolute dating.²⁸ The research has not been restricted to the irrigated spaces, and studies have also been done into dry-land and drained areas and, more recently, about

systems of the Balearic Islands as a case study (Xth-XIIIth century", *Marqueurs des paysages et systèmes socio-économique. Proceedings of Le Mans COST Conference*, Rita Compatangelo-Soussignan, Jean-René Bertrand, John Chapman, Pierre-Yves Laffont, dirs. Rennes: Presses Universitaires de Rennes, 2008: 135-148.

25. Kirchner, Helena. "Colonització d'un regne en la mar: la subversió feudal dels espais agraris andalusins a Mallorca", *Histoire et archéologie des terres catalanes au Moyen Age*, Philippe Sénac, ed. Perpignan: Presses Universitaires de Perpignan, 1995: 279-316; Kirchner, Helena. "Arqueologia colonial: espais andalusins i pobladors catalans, 1229-1300", *El feudalisme comptat i debatut. Formació i expansió del feudalisme català*, Miquel Barceló, Gaspar Feliu, Antoni Furió, Marina Miquel, Jaume Sobrequés, eds. Valencia-Barcelona: Universitat de València, Museu d'Història de Catalunya, 2003: 201-236; Kirchner, Helena. "Conquista y colonización feudal: arqueología de los cambios producidos en los espacios irrigados de origen andalusí. El caso de las islas Baleares", *La conquista de al-Andalus en el siglo XIII*, Jorge A. Eiroa, ed. Murcia: Universidad de Murcia, 2012: 41-63; Batet, Carolina. *L'aigua conquerida. Hidraulisme feudal en terres de conquesta*. Valencia: Universitat de València, 2006; Kirchner, Helena; Retamero, Fèlix. "Cap a una arqueologia de la colonització. La subversió feudal de l'espai rural a les illes". *L'Avenç*, 290 (2004): 40-45; López, Esteban; Retamero, Fèlix. "¿Como solía en tiempos de moros? Los riegos después de las conquistas. El caso de Casarabonela, Málaga (siglos XV-XVI)". *Irrigation, Society, Landscape. Tribute to Thomas F. Glick. València*, Carles Sanchis-Ibor, Guillermo Palau-Salvador, Ignasi Mangue Alférez, Luís P. Martínez-Sanmartín, eds. Valencia: Editorial Universitat Politècnica de València, 2014: 116-131 <<http://ocs.editorial.upv.es/index.php/ISL/ISL2014/paper/viewFile/155/116>> (Consulted 6th February 2019); López, Esteban; Retamero, Fèlix. "Segregated fields. Castilian and Morisco peasants in Moclón (Málaga, Spain, Sixteenth Century)". *International Journal of Historical Archaeology*, 21/3 (2017): 623-640.

26. Barceló, Miquel; Kirchner, Helena; Torrò, Josep. "Going around Zafar (Yemen), the Banû Ru'ayn field survey: hydraulic archaeology and peasant work". *Seminar for Arabian Studies*, 30 (2000): 27-39; Barceló, Miquel; Torrò, Josep. "The hydraulic set-up of Bayt al-Ashwal valley: a case study". *Les Cahiers du CEFAS*, 3 (2003): 15-18; Kirchner, Helena. "Ma'gil': a type of hydraulic system in Yemen and in al-Andalus?". *Proceedings of the Seminar for Arabian Studies*, 33 (2003): 143-155; Barceló, Miquel. *Los Banû Ru'ayn en al-Andalus. Una memoria singular y persistente*. Granada: Al-Baraka, 2004.

27. Alonso, Natàlia; Antolín, Ferran; Kirchner, Helena. "Novelties and legacies in crops and agricultural practices of the Islamic period in the north-east of the Iberian Peninsula: the archaeobotanical evidence in Madīna Balagī, Madīna Lârida and Madīna Turṭūša". *Quaternary International*, 346 (2014): 149-161; Kirchner, Helena; Virgili, Antoni; Antolín, Ferran. "Un espacio de cultivo urbano en al-Andalus: Madīna Turṭūša (Tortosa) antes de 1148". *Historia Agraria*, 62 (2014): 11-45. About the processes of spread and acclimatisation from the perspective of agronomic literature: Retamero, Fèlix. "Un conjunto de reglas sabias y ordenadas: la disciplina agraria del sultan", *De Toledo a Huesca. Sociedades medievales en transición a finales del siglo XI (1080-1100)*, Carlos Laliena, Juan F. Utrilla, eds. Saragossa: Institución Fernando el Católico-Consejo Superior de Investigaciones Científicas, Diputación de Zaragoza, 1998: 61-66.

28. Puy, Arnald; Balbo, Andrea. "The genesis of irrigated terraces..."; Puy, Arnald; Balbo, Andrea; Virgili, Antoni; Kirchner, Helena. "The evolution of Mediterranean wetlands...".



pastureland.²⁹ Finally, these methods have also been applied to feudal irrigated areas.³⁰

On the other hand, Gerard Chouquer discovered medieval dry-land plots that altered the Roman centuriations in Romagna (Italy).³¹ Thus, with different methodologies (the so-called “hydraulic archaeology” and the morphological analysis or archaea-geography), research into medieval agricultural landscapes in Mediterranean region was developed. Shortly after, a line of research into mountain landscapes closely linked to the study of toponymy and ethnographic survey was developed in the University of Oviedo by Javier Fernández Conde. The thesis and later research by Margarita Fernández Mier constitute the best result of this proposal.³² In the Universidad de Granada, Antonio Malpica also promoted research into agriculture and Andalusí cultivated spaces.³³ In the University of Valencia,

29. Retamero, Fèlix. “Pautes per a l'estudi dels conreus de secà a Alandalús”, *IV Curs internacional d'arqueologia medieval: Els espais de secà*, Flocel Sabaté, Jesús Brufal, dirs. Lleida: Pagès editors, 2011: 31-49; Ferrer, Antoni. “Una infraestructura ramadera andalusí? Proposta d'adscripció cronològica dels aljubs de la Mola, Formentera”, *Irrigation, Society, Landscape. Tribute to Thomas F. Glick, València*, Carles Sanchis-Ibor, Guillermo Palau-Salvador, Ignasi Mangue Alférez, Luís P. Martínez-Sanmartín, eds. Valencia: Editorial Universitat Politècnica de València, 2014 <<http://df.10.4995/ISL2014.2014.165>> (Consulted 6th February 2019).

30. Kirchner, Helena; Oliver, Jaume; Vela, Susanna. *Aigües prohibides. El canal reial de Puigcerdà*. Bellaterra: Universitat Autònoma de Barcelona, 2002; Retamero, Fèlix. “Coping with gravity: the case of Mas l'Agustí (Monseny mountains, Catalonia, Spain, c.15th-18th centuries)”, *Agricultural and Pastoral Landscapes in Pre-Industrial Society: Choices, Stability and Change*, Fèlix Retamero, Inge Schjellerup, Althea Davies, eds. Oxford, Philadelphia: Oxbow Books, 2016: 173-186; Kirchner, Helena. “Hidráulica campesina anterior a la generalización del dominio feudal. Casos en Cataluña”, *Hidráulica agraria y sociedad feudal. Técnicas, prácticas, espacios*, Josep Torró, Enric Guinot, eds. Valencia: Universitat de València, 2012: 21-50. Kirchner, Helena; Virgili, Antoni. “Espacios agrarios en el Bajo Ebro en época andalusí y después de la conquista catalana”, *Trigo y ovejas. El impacto de las conquistas en los paisajes andalusíes (siglos XI-XVI)*, Josep Torró, Enric Guinot, eds. Valencia: Publicacions de la Universitat de Valencia, 2018: 15-49.

31. Chouquer, Gerard. “Les centuriations de Romagne orientale. Étude morphologique”. *MEFRA*, 93 (1981-82): 823-866; Chouquer, Gerard. “Traitements d'images et paysages médiévaux”. *Archéologie Médiévale*, 15 (1985): 7-30. See the more complete study in Chouquer, Gerard. *Les parcelles médiévaux en Émilie et en Romagne. Centuriations et trames coaxiales. Morphologie et droit agraires, Observatoire des formes du foncier dans le monde*. Paris: France Internationale pour l'Expertise Foncière (FIEF), 2015 <<https://www.formesdufoncier.org/pdfs/00-EmiRom-TOTAL.pdf>> (Consulted 6th February 2019). Various disciples of G. Chouquer have carried out studies of medieval plots using the methods of the so-called “archaeo-geography”. A selection of references: González Villaescusa, Ricardo. *Las formas de los paisajes mediterráneos (ensayos sobre las formas, funciones y epistemología parcelarias: estudios comparativos en medios mediterráneos entre la antigüedad y época moderna)*, Jaén: Universidad de Jaén, 2002; Lavigne, Cédric. *Essai sur la planification agraire au Moyen Âge: les paysages neufs de la Gascogne médiévale (XIIIe-XIVe siècle)*. Bordeaux: Ausonius-Publications, 2002; Abbé, Jean-Loup. *À la conquête des étangs. L'aménagement de l'espace en Languedoc méditerranéen (XIIIe- XVe siècles)*. Toulouse: Presses universitaires du Mirail, 2006; Watteaux, Magali. “La colonisation agraire médiévale en Alentejo (Portugal)”. *Études rurales*, 2/188 (2011): 39-71; Chouquer, Gerard; Watteaux, Magali. *L'archéologie des disciplines géohistoriques*. Paris: Errance, 2013.

32. Fernández Mier, Margarita. *Génesis del territorio en la Edad Media. Arqueología del paisaje y evolución histórica en dos concejos de la montaña asturiana: Miranda y Somiú*. Oviedo: Universidad de Oviedo, 1999.

33. Malpica, Antonio. “El agua y su uso en la vida agrícola en al-Andalus. Perspectiva de investigación”. *Cuadernos de la Alhambra*, 43 (2008): 40-55; Malpica, Antonio. “El agua en la agricultura. Agroecosistemas y ecosistema en la economía rural andalusí”. *Vínculos de Historia*, 1 (2012): 31-44; Trillo, Carmen. *Agua, tierra y hombres en Al-Andalus: la dimensión agrícola del mundo nazarí*. Granada: Ajbarr, 2004; Trillo, Carmen.



Enric Guinot, Josep Torró and Ferran Esquilache applied the methods of “hydraulic archaeology” to study the orchard area of Valencia, some rural spaces and also the impact of the feudal conquest.³⁴ Finally, Jordi Bolòs developed a significant line of research into field systems, following methods more akin to morphological analysis.³⁵ These academic centres are the ones that have led research into cultivated areas,

“A social analysis of irrigation in Al-Andalus: Nazari Granada (13th-15th centuries)”. *Journal of Medieval History*, 31 (2005): 163-183; Jiménez Puertas, Miguel. *Los regadíos tradicionales del territorio de Loja. Historia de unos paisajes agrarios de origen medieval*. Granada: Fundación Ibn al-Jatib de Estudios de Cooperación Cultural, 2007; Jiménez Puertas, Miguel. “Nacimiento y transformación de los regadíos en un sector de la Vega de Granada: Cogollos Vega y Calicasas en época medieval y moderna”, *El paisaje y su dimensión arqueológica. Estudios sobre el sur de la Península Ibérica en la Edad Media*, Miguel Jiménez Puertas, Lucca Mattei, eds. Granada: Alhulia, 2010: 113-159; Martín Civantos, José M. *Poblamiento y territorio medieval en el Zenete (Granada)*. Granada: Universidad de Granada, 2007. Guillermo Gracia-Contreras has begun a research line into Castilian Extremadura and the ecological impact of the Christian conquest: Gracia-Contreras, Guillermo. “Feudalización y cambio ecológico en el sector oriental de la Extremadura castellana: poblamiento y paisaje en los territorios de Atienza, Sigüenza y Molina (Siglos XI-XIII)”, *Trigo y ovejas. El impacto de las conquistas en los paisajes andalusíes (siglos XI-XVI)*, Josep Torró, Enric Guinot, eds. Valencia: Universitat de València, 2018: 51-76.

34. Guinot, Enric. “L’horta de València a la baixa Edat Mitjana. De sistema hidràulic andalusí a feudal”. *Afers*, 51 (2005): 271-300; Guinot, Enric. “La construcció d’un paisatge medieval irrigat: l’horta de la ciutat de València”, *Natura i desenvolupament. El medi ambient a l’Edat Mitjana*, Flocel Sabaté, ed. Lleida: Pagès Editors, 2007: 191-220; Guinot, Enric. “Agrosistemas del mundo andalusí: criterios de construcción de los paisajes irrigados”, *Cristiandad e Islam en la Edad Media Hispana*, José I. de la Iglesia, ed. Logroño: Instituto de Estudios Riojanos, 2008: 209-38; Guinot, Enric; Esquilache, Ferran. “La reorganización del paisaje agrario en la huerta de Valencia después de la conquista cristiana. El sistema hidráulico y el parcelario de Montcada y Benifaraig en el siglo XIII”. *Debates de Arqueología Medieval*, 2 (2012): 229-76; Guinot, Enric; Selma, Sergi. “La construcción del paisaje en una huerta feudal: la Séquia Major de Vila-Real (siglos XIII-XV)”, *Hidráulica agraria y sociedad feudal. Prácticas, técnicas, espacios*, Josep Torró, Enric Guinot, eds. Valencia: Universitat de València, 2012: 103-145; Torró, Josep. “Tierras ganadas. Aterramiento de pendientes y desecación de marjales en la colonización cristiana del territorio valenciano”, *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress, 2010: 157-173; Torró, Josep. “Colonización cristiana y roturación de las áreas palustres en el reino de Valencia. Los marjales de la villa de Morvedre”, *Hidráulica agraria y sociedad feudal. Prácticas, técnicas, espacios*, Josep Torró, Enric Guinot, eds. Valencia: Universitat de València, 2012: 147-185; Torró, Josep. “Agricultural drainage technology in Medieval Mediterranean Iberia. (13th-16th centuries)”, *Agrarian technology in the Medieval landscape*, Jan Klápště, ed. Turnhout: Brepols, 2016: 309-323; Torró, Josep; Esquilache, Ferran; Guinot, Enric. “La transformation du milieu littoral dans une société médiévale de conquête: le royaume de Valence (c. 1240-c. 1330)”, *Implantations humaines en milieu littoral Méditerranéen: facteurs d’installation et processus d’appropriation de l’espace (Préhistoire, Antiquité, Moyen Âge)*. Actes du XXXIV rencontres internationales d’archéologie et d’histoire d’Antibes, Laurence Mercuri, Riccardo González Villaescusa, Frédérique Bertonecello, dirs. Antibes: APDCA, 2014: 411-422; Esquilache, Ferran. *Els constructors de l’horta de València. Origen, evolució i estructura social d’una gran horta andalusina entre els segles VIII i XIII*. Valencia: Universitat de València, 2018; Torró, Josep; Esquilache, Ferran. “Por donde jamás habían sido conducidas aguas’. La transformación agraria del marjal norte de la Albufera de Valencia (siglos XIII-XV)”, *Trigo y ovejas. El impacto de las conquistas en los paisajes andalusíes (siglos XI-XVI)*, Josep Torró, Enric Guinot, eds. Valencia: Universitat de València, 2018: 161-225.

35. Bolòs, Jordi. *Els orígens medievals del paisatge català. L’arqueologia del paisatge com a font per conèixer la història de Catalunya*. Barcelona: Abadia de Montserrat, 2004; Bolòs, Jordi. “La formación del hábitat medieval en Cataluña: aldeas, espacios aldeanos y vías de comunicación”. *Studia historica. Historia Medieval*, 31 (2013): 151-180.



also recently incorporating dry-land and livestock areas.³⁶ This does not exclude other high-quality initiatives that do not necessarily follow the methodological lines initiated in the 1980s in the University Autònoma de Barcelona.³⁷ Indeed, it is worth recognising that developments in Spain include not only an archaeology of rural settlements which is at the same level as in the rest of Europe, but also a powerful line of research into cultivated areas and, more recently, pasturelands, which has the merit of pioneering the development of methods and protocols.³⁸

Recently, this line of research has begun to incorporate techniques from geo-archaeology with a twin purpose: to date the creation of the agrarian areas and the transformations they may have undergone, and how to describe the process of building the cultivated areas.³⁹ However, it is important to highlight that neither digging trenches in certain fields, nor the various analyses of the soils that geo-

36. Cara Barrionuevo, Lorenzo; Rodríguez López, Juana M. "El ámbito económico del pastoralismo andalusí. Grandes aljibes ganaderos en la provincia de Almería", *El agua en zonas áridas. Arqueología e historia, I Coloquio de Historia y Medio Físico*, Lorenzo Cara Barrionuevo, coord. Almería: Instituto de Estudios Almerienses, 1989: II, 633-653; Cara Barrionuevo, Lorenzo. "La ganadería medieval en el campo de Tabernas y Los Filabres", *Asentamientos rurales y territorio en el Mediterráneo medieval*, Carmen Trillo, ed. Granada: Athos-Pérgamos, 2002: 456-498; Cara Barrionuevo, Lorenzo. "Huellas de pastores: observando los paisajes ganaderos en los "extremos" granadinos", *Análisis de los paisajes históricos. De al-Andalus a la sociedad feudal*, Antonio Malpica, ed. Granada: Alhulia, 2009: 169-202; Malpica, Antonio. "Poblamiento, agricultura y ganadería en el reino nazarí de Granada", *La pastorizia mediterránea. Storia e diritto (secoli XI-XX)*, Antonello Mattone, Pinuccia F. Simbula, eds. Rome: Carocci, 2011: 41-54; Malpica, Antonio. "La vida agrícola y la ganadería en Al-Andalus y en el reino nazarí de Granada", *Homenaje al Profesor Dr. D. José Ignacio Fernández de Viana y Vieites*, Rafael Marín López, coord. Granada: Universidad de Granada, 2012: 213-228; Brufal, Jesús. *El món rural i urbà en la Lleida islàmica (S. XI-XII). Lleida i l'est del districte: Castellldans i el pla del Mascançà*. Lleida: Pagès, 2014; Retamero, Fèlix. "Pautes per a l'estudi dels conreus de secà..."; Ferrer, Antoni. "Una infraestructura ramadera andalusí?..."; Jiménez Castillo, Pedro. "El poblamiento andalusí en las tierras de secano: el área sudoriental de La Mancha (ss. XI-XIII)". *Al-Qantara*, 38/2 (2017): 215-259. Malpica, Antonio; Villar, Sonia; García García, Marcos; García-Contreras, Guillermo. "Animal husbandry and saltworks in the Kingdom of Granada (13th-15th centuries)", *The dynamics of landscapes in a Mediterranean territory. Mediterranean Landscapes in Post Antiquity. New frontiers and new perspectives*, Sauro Gelichi, Lauro Olmo-Enciso, eds. Oxford: Archaeopress, 2019: 163-173.

37. Attempting to cite this research exhaustively would be excessive in this article. However, I do wish to mention the research done in Cádiz: Martín, Emilio. *La organización del paisaje rural durante la Baja Edad Media. El ejemplo de Jerez de la Frontera*. Seville: Universidad de Sevilla, 2004; Martín, Emilio. "Los paisajes rurales en las comarcas gaditanas: transformaciones y permanencias. Interacción entre sociedad y medio ambiente. Siglos XIII al XV", *Trigo y ovejas. El impacto de las conquistas en los paisajes andalusíes (siglos XI-XVI)*, Josep Torró, Enric Guinot, eds. València: Universitat de València, 2018: 227-25; Martín, Emilio. "Los paisajes vitivinícolas a finales de la Edad Media. El ejemplo de Jerez de la Frontera". *En la Edad Media*, 20 (2019): 184-214.

38. Not long ago, a group of researchers drew up a proposal for a research protocol: Ballesteros, Paula; Kirchner, Helena; Eiroa, Jorge A.; Fernández Mier, Margarita; Ortega, Julián; Quirós, Juan Antonio; Retamero, Fèlix; Sitjes, Eugènia; Torró, Josep; Vigil-Escalera, Alfonso. "Por una arqueología agraria de las sociedades medievales hispánicas. Propuesta de un protocolo...". See also the recent state of the question by Margarita Fernández-Mier (2018), better informed about the studies into cultivated areas in the societies in the north of the Peninsula than those in Aragon, Catalonia or al-Andalus: Fernández Mier, Margarita. "De la Arqueología del paisaje a la Arqueología Agraria", *Treinta años de arqueología medieval en España*, Juan Antonio Quirós, ed. Oxford: Archaeopress, 2018: 225-270.

39. A state of the question about this aspect can be seen in Fernández Mier, Margarita. "De la Arqueología del paisaje...".



archaeology proposes can answer in themselves the questions that are brought up. Trenches should be dug in plots that are properly contextualised in the cultivated landscape and so this form of excavation cannot substitute the documentary, morphological and archaeological study of the field system where they are included.

Beyond the variants and innovations that can be introduced, and that will undoubtedly be necessary, there are solid research techniques for the study of the peasantry in the Middle Ages. However, it is worth asking if the adequate strategies are being developed and what the issues are.

4. Archaeology of the early-medieval villages

In recent years, the archaeology aimed at studying the patterns of early-medieval settlement has focussed its attention on the issue of the concentrated forms of settlement, the villages. There is increasingly consolidated evidence that early-medieval settlement structures were mainly concentrated and even preceded the villages that the historiography of the *incastellamento* and *encellulement* considers to be characteristic of the medieval landscape from the 11th or, in some areas, the 10th century on.⁴⁰ In the 1980s, various archaeologists had already begun to question Toubert or Fossier or the researchers who followed their approaches. The archaeology enabled forms of concentrated and stable settlement to be described, sometimes of considerable size, from earlier chronologies. Moreover, over the last 20 years, a corpus has been built up with a large amount of evidence from various European regions.⁴¹ The human landscape from the 7th to 9th centuries was not made up of an imprecise, dispersed, unstable and disorganised forms of settlement, but rather quite the contrary. The concentration of the population was not the result of an authoritarian gesture by 10th or 11th century aristocracies. The best evidence for this reconsideration was the finding of the marks left by wooden constructions that were replaced by castles and/or villages built in stone. The topographic “continuity” of the two forms of occupation justified the earliest attempts to revise the theories of

40. Toubert, Pierre. *Les structures du Latium médiévale...*; Fossier, Robert. *Enfance de l'Europe...*; Fossier, Robert. “La naissance du village...”.

41. Francovich, Riccardo; Hodges, Richard. *Villa to village. The transformation of the Roman Countryside in Italy, c. 400-1000*. London: Duckworth, 2003; Hamerow, Helena. *Early Medieval Settlements. The archaeology of rural communities in North-West Europe 400-900*. Oxford: Oxford University Press, 2003; Peytremann, Édith. *Archéologie de l'habitat rural...*; Quirós, Juan Antonio, ed. *The archaeology of early medieval villages in Europe*. Bilbao: Universidad del País Vasco, 2009; Lauwers, Michel. “De l'‘incastellamento’ à l'‘inecclesiamento’”. *Monachisme et logiques spatiales du féodalisme*, Cluny, les moines et la société au premier âge féodal, Dominique Iogna-Prat, Michel Lauwers, Florian Mazel, Isabelle Rosé, dirs. Rennes: Presses Universitaires de Rennes, 2013: 315-338; Schneider, Laurent. “Structures du peuplement et formes de l'habitat dans les campagnes du Sud-Est de la France de l'Antiquité au Moyen Âge (IVe-VIIIe siècles)”. *Essai de synthèse, Gallia*, 64 (2007): 11-56; Schneider, Laurent, “De la fouille des villages abandonnés à l'archéologie des territoires locaux. L'étude des systèmes d'habitat du haut Moyen Age en France méridionale (Ve-Xe siècle): nouveaux matériaux, nouvelles interrogations”, *Trente ans d'archéologie médiévale en France. Un bilan pour un avenir*, Jean Chapelot, dir. Caen: Publications du CRAHM, 2010: 133-161.



incastellamento and *encellulement* and, very particularly, the imprecise description that was made of the forms of peasant settlement preceding the “birth of the village”, linking this to the so-called feudal “revolution” or “mutation”.⁴²

Among historians, there was a debate about whether the process under which the Carolingian and Norman aristocracies privatised justice and the public mechanisms of authority linked to the monarchies was a “revolution”, a “mutation” or a gradual development that began long before the 11th century. Moreover, the debate revolved around the issue of whether it was the aristocracies who, through the management of their property, had impelled the “agrarian growth” that seems to be detected in the 8th and 9th centuries through the documentation or whether, on the contrary, this growth was due to the peasant communities and that, from a given moment (10th century, 11th century, depending on the region or author), the feudal aristocracies acquired the power to dominate through the consolidation of jurisdictional rights and the dispossession of the peasantry to form estates that generated rent.⁴³

To a large extent, these debates have developed in parallel, without the participants having managed to produce coalescent narratives. However, both cases have led to the need to describe the élites of the 7th to 10th centuries more precisely and to identify the mechanisms through which they established forms of dominion and to attempt to characterise the peasant communities. In this sense, the efforts to identify archaeological markers for the social complexity of peasant communities and to identify the social significance of different levels of wealth produce very uneven results and show great local and regional variability. In other words, there are no clear markers.⁴⁴

However, this long process also has a conflictive starting point and in which no consensus appears to consolidate. I am referring to the processes that occurred in the 5th century, when the Roman *villae* were already abandoned or, at the most, frequented and used for purposes that were far from their original ones and that, at the same time, new forms of concentrated rural settlement were becoming consolidated. These settlements were characteristically of huts built of wood, with new forms of artisanal production (little specialised and local pottery making), structures for the transformation and storage of agrarian products apparently managed collectively, new forms of burial and new agrarian orientations that are still not well known. The discussion revolves around the role of the arrival of the Visigoths in these changes, whether there are archaeological signs of a migration

42. See states of the art in: Quirós, Juan Antonio. “Las aldeas de los historiadores y de los arqueólogos...”; Watteaux, Magali. “À propos de la “naissance du village au moyen âge: la fin d’un paradigme?”. *Études rurales*, 3-4/167-168 (2003): 306-318; Lauwers, Michel. “De l’incastellamento’ à l’inecclesiamento’...”; Schneider, Laurent. “De la fouille des villages abandonnés...”.

43. See a state of the art in: Devroey, Jean-Pierre. *Puissants et misérables. Système social et monde paysan dans l’Europe des Francs (VIe-IXe siècles)*. Brussels: Académie royale de Belgique, 2006: 359-375.

44. Quirós, Juan Antonio. “Inequality and social complexity in peasant societies. Some approaches to early medieval North-Western Iberia”, *Social complexity in Early Medieval rural communities. The North-Western Iberia. Archaeological record*, Juan Antonio Quirós, ed. Oxford: Archaeopress, 2016:1-16, especially p. 12.



and the extent to which these transformations were the result of the reorientation of the peasant communities towards more local forms of production after the disappearance of the trade-oriented and specialised Roman agriculture developed in the *villae*.⁴⁵ Finally, the end of the Visigoth kingdom and the Arab-Berber conquest again suppose a turning point about which there are also opposing positions.

Somehow, the archaeologists have transferred the crucial moment of change, without calling it a revolution or a mutation, to the 8th or 9th centuries depending on the region, almost always disconnected from the political context and often following interpretations developed for other regions.⁴⁶ From then on, a slow process of transformations led to the consolidation of the feudal aristocracies in the 10th or 11th centuries or even later. The “revolution of the year thousand”, would not be that —nor would the processes of *incastellamento* or *encellulement* mark a before and after— but rather the end point of a long process of transformation.⁴⁷

The majority of archaeologists responsible for building this extensive archaeological record point to a turning point in the 8th or 9th century, depending on the region, and they consider that from that moment on the early-medieval villages were consolidated and that there is evidence that the intervention and guidance of the “élites” was responsible for the configuration of this new rural landscape. However, they fail to identify adequately the mechanisms in the archaeological record with which these élites established their dominion and they are granted a capacity to organise the population and its concentrated forms of organisation.

Certain archaeological traces can be interpreted in the opposite way. Thus, while in Italy, Marco Valenti relates the artisanal specialisation of certain areas and the concentration of animals remains of the most appreciated anatomical parts with the presence of the “élite”, Jordi Roig associates the distribution of the distinct activities, not only artisanal, but also the transformation and storage of food, such as ovens, silos, presses and *lacus*, with a form of communal organisation of production and consumption. Antonio Blanco González argues that the archaeological record of the 8th- and 9th-century peasant communities conforms to an organisation based on

45. Abundant bibliography has been generated in recent years. Alexandra Chavarría argues that the coming of the Visigoths had a significant impact and the aristocracies and bishoprics would have played an essential role in organising new forms of settlement and agricultural exploitation: Chavarría, Alexandra. “Castillos en el aire. Paradigmas interpretativos de moda en la arqueología medieval española”, *XXXIX Semana de Estudios Medievales. De Mahoma a Carlomagno. Los primeros tiempos (Siglos VII-IX)*. Estella: Gobierno de Navarra, 2012: 131-166. Other authors consider that the changes in the organisation of rural settlement were due more to peasant initiative or local élites: Martín Viso, Iñaki. “Un mundo en transformación: los espacios rurales en la Hispania postromana (siglos V-VIII)”. *Anejos de Archivo Español de Arqueología*, 61 (2011): 31-63; Vigil-Escalera, Alfonso; Quirós, Juan Antonio. “Early Medieval rural societies in Northwest Spain: Archaeological reflections of fragmentation and convergence”, *Scale and Scale Changes in the Early Medieval Ages. Exploring Landscape, local Society and the World beyond*, Julio Escalona, Andrew Reynolds, eds. Turnhout: Brepols, 2011: 33-60.

46. The second part of this statement is by Alexandra Chavarría: Chavarría, Alexandra. “Castillos en el aire...”: 157.

47. The authors cited in note 41 put it this way.



genealogical relations and a hierarchisation and accumulation of wealth that was parental, not class, in origin.⁴⁸

The archaeological record does not always reveal clear differentiations or hierarchisations and when these are identified, they can be interpreted in various ways. Similarly, the material evidence is interpreted in diverse forms, depending on whether it is analysed in the context of the 6th-7th or 8th-10th centuries. The result is extremely unclear. The fact that organisational forms of the apparently more complex villages are perceived in the 8th century is usually linked to the existence of “local élites” and that it is taken for granted that the peasant communities are not capable of designing their own settlements and making selections as the result of autonomous strategies of production, consumption and exchange.⁴⁹ The archaeological traces of the presence of these élites that are adduced are very varied: differences in some dwellings in the villages, sometimes surrounded by wooden stockades; differentiation of the composition of the remains of fauna, larger silos that would indicate the necessity to accumulate produce orientated towards paying rents or as a result of their payment, presence of personal ornamentation, equipment for horses or arms, pottery or glass objects considered “luxury”, for being imported or being made with sophisticated techniques. Concretely, for Chris Wickham, the degree of development of artisanal production—identifiable especially in the ceramic remains—and the topographic indicators to hierarchisation constitute the two markers of the level of erosion of the “mode of peasant production” which, according to him, is characterised by a high range of autonomy in the organisation of the settlements and their activities. The greater the erosion of this peasant autonomy, the wider the extension of the “feudal mode of production”.⁵⁰ This proposal has been accepted by many archaeologists. The presence of specialised forms of craftwork has been associated with the development of aristocratic élites and with a capacity to organise networks of settlements, systems of exchange and collection of rent that can hardly be more than signalled. Indeed, this archaeology is mainly aligned with the classic proposal of “agrarian growth” led by the seigneurial class, although this coincidence is not made explicit.

48. Valenti, Marco. “I villaggi altomedievali in Italia”, *The archaeology of early medieval villages in Europe*, Juan Antonio Quirós, ed. Bilbao: Universidad del País Vasco, 2009: 29-55; Roig, Jordi. “Asentamientos rurales y poblados tardoantiguos y altomedievales en Cataluña (siglos VI al X)”, *The archaeology of early medieval villages in Europe*, Juan Antonio Quirós, ed. Bilbao: Universidad del País Vasco, 2009: 207-252; Blanco, Antonio. “Espacios residenciales y productivos del interior peninsular entre la Antigüedad Tardía y la Alta Edad Media. Propuestas desde la arqueología extensiva”, *¿Tiempos oscuros? Territorios y sociedad en el centro de la Península Ibérica (Siglos VII-X)*, Iñaki Martín Viso, ed. Salamanca: Sflex, 2009:15-29.

49. Not long ago, Juan Antonio Quirós noted that the *descodificación en términos sociales del registro arqueológico no está exenta de problemas* (“decodification in social terms of the archaeological register is not free of problems”). Quirós, Juan Antonio. “Early medieval villages in Spain in the light of European experience. New approaches in peasant archaeology”, *The archaeology of early medieval villages in Europe*, Juan Antonio Quirós, ed. Bilbao: Universidad del País Vasco, 2009: 13-26, esp. 22.

50. Wickham, Chris. *Framing the Early Middle Ages. Europe and the Mediterranean, 400-800*. Oxford: 2006: 535-541. See the critique by Miquel Barceló: Barceló, Miquel. “Arqueología e historia medievales como historia”, *La materialidad de la historia. La arqueología en los inicios del siglo XXI*, Juan Antonio Quirós, dir. Akal: Madrid, 2103: 67-99.



Some other archaeologists tend to consider these settlements more as relatively autonomous, where the collective management of resources was exerted by peasant communities and no direct aristocratic intervention is detected. At best, this intervention is only known through texts and has not been identified in the peasant archaeological record. In this case, although again without making it explicit, the approach is close to that of the historians who consider that the peasantry of the 8th to 10th centuries was responsible for “agrarian growth”. Indeed, the historiographic discussion is still alive, although with chronological shifts and a new prominence of the archaeological records.

The imprecision of the majority of the archaeologists when it comes to identifying these élites, both in the Visigoth period and later, and the procedures through which they established their dominion over the peasant communities has constituted a brake on our interpretative capacity. In 2009, Gian Pietro Broggiolo considered that, at that moment, the end of a thirty-year cycle in the study of the rural settlement had been reached and warned about the danger of a slowdown if new research strategies were not incorporated.⁵¹

This slowdown, effectively, could be related to the research strategies, but it is above all, of a conceptual order.⁵² The aristocracies or “élites” are perceived as indeterminate groups able to seize part of the peasant production, without analysing or considering what this capture consists of, and the peasantry is perceived as a social mass who dedicate themselves to working to feed themselves and little else but who generate a surplus that is liable to be seized by the “élite” through an imprecise demand for rent. Any technical complexity that can be detected in the record (artisanal, constructive, of food remains, storage, tools, forms of fortification) is attributed to this indeterminate élite. Only an élite is capable of organising complex processes of work, craft and exchange. This allows the aristocracy to be turned into a social group that acted similarly and homogeneously over time, and the only thing that changed was the intensity of their action, which increased until reaching a peak in the 11th century. This fits well with Wickham’s metaphor of the “leopard skin”, which serves to explain precisely the greater or lesser ability of peasant communities to preserve their autonomy.⁵³

On the other hand, peasant autonomy is identified, erroneously in my view, with concepts that do not contribute to understanding how the processes of work were organised (“self-consumption”, “self-supply”, “subsistence economy”; “egalitarianism” among its members) and, in general, with material precariousness

51. Broggiolo, Gian Pietro. “Conclusiones”, *The archaeology of early medieval villages in Europe*. Juan Antonio Quirós, ed. Bilbao: Universidad del País Vasco, 2009: 465-469.

52. In fact, the strategies proposed by Gian Pietro Broggiolo were already taken into account and even put into practice some time ago: systems of territorial analysis through such new technologies as LIDAR, the study of agrarian landscapes, areas of extraction of raw materials, places of transformation of hydraulic or wind energy, systematic analysis of the palaeo-environmental, archaeo-zoological and anthropological data, the integration of the site into its geographic and historical context, etc...

53. Wickham, Chris. *Framing the Early Middle Ages. Europe and the Mediterranean, 400-800*. New York: Oxford University Press, 2006: 541.



and the absence of social differentiations. It is not by chance that efforts are dedicated precisely to determining inequalities within these peasant communities, although as Quirós recognises, the traces identified are varied and irregular chronologically and geographically. No clear patterns emerge and the current forms of evaluation of wealth, inequality and the hierarchies in the material record do not seem adequate when an internal analysis of the peasant communities is undertaken.⁵⁴ Perhaps these inequalities, undoubtedly existent, appear imprecisely and irregularly simply because they are not based on stable forms of dominion and so do not generate social distances in the long term nor accumulations of wealth that are regular enough to produce a material record that can be well defined. Although peasant communities are not an undifferentiated amalgam, perhaps we should not expect to find significant material markers of internal differences and these are not as decisive as could be thought for organising the strategies of production, consumption and exchange.

It is important not to disconnect the archaeological analysis from the documental or historical-political given that this is what could give content and outline to these aristocratic élites and the way they managed to capture rent.⁵⁵ The organisation of the Germanic royalties and the aristocracies linked to them should be included in the analysis. The authority exercised by the aristocracies, through posts or being embedded into the fiscal and monetary mechanisms of the states are not comparable with the dominion built around procedures for the extraction of rent that control and organise the processes of peasant work and on the legal seizure of goods and rights from the peasant communities.⁵⁶ The dominions based on this extraction of rent were already present in the 9th- and 10th-century aristocracies and, although links between both forms of aristocratic power can be identified and the revolutionary character or rupture attributed to the moment when these differences are detected in the documents is rejected, not taking them into consideration does not contribute to an adequate understanding of the archaeological records.⁵⁷ Indeed, it is still necessary to maintain in the debate the description Toubert made of an organisation of the territory “without interstices”, without physical or social areas in which to escape from the generalised exercise of seigneurial dominion from the 10th century on, the “aristocratic revolt” of the early decades of the 11th century in Catalonia

54. Quirós, Juan Antonio. “Inequality and social complexity...”: 12.

55. In this aspect, I share the critique of Alexandra Chavarría when she notes that some interpretations “infravaloran el contexto político” (underestimate the political context): Chavarría, Alexandra. “Castillos en el aire...”: 157.

56. Barceló, Miquel. “Crear, disciplinar y dirigir...”; Barceló, Miquel. 1999, “De fisco gotico, hispanico sive andalusico”. *Faventia*, 21/1 (1999): 103-118; Barceló, Miquel; Retamero, Fèlix. “From crops to coin. Which way back?”. *Gaceta Numismática*, 122 (1996): 55-63.

57. For the discussion about the feudal “mutation” or “revolution”, see the critique by D. Barthélemy perfectly coherent with the approaches of archaeologists of the villages: Barthélemy, Dominique. “La mutation féodale a-t-elle eu lieu? (note critique)”. *Annales. Économies, Sociétés, Civilisations*, 47/3 (1992): 767-777.



or the description of the 11th-century “village” by Robert Fossier.⁵⁸ That is what Thomas Bisson called for in his articles published in *Past and Present* in relation to the debate about the “feudal revolution”.⁵⁹ It is still necessary to keep the debate alive not so much to justify their arguments, but rather because a solid alternative interpretation has yet to be built from the archaeology.

The archaeological record presents three increasingly better described chronological turning points in various regions of the Iberian Peninsula and also in other parts of Western Europe: the 5th century, the 8th century (sometimes from the end of the 7th) and the 10th century (sometimes already in the 9th). Many of the early medieval villages were abandoned and only a few survived with transformations related with the presence of churches and fortifications. The churches and cemeteries linked to them would have exercised a “polarising” effect on the organisation of the rural landscape. This, not very precise, term has at least the ambition of observing this process not only through the excavation of these inhabited places in an isolated way but also understanding it from the relations —spatial and social— among the different settlements and between these and the places that acted as organising “poles”.⁶⁰ In other words, the subject of study ceases to be the inhabited place, the village, to become instead the network of villages and a scope which is at least regional. The collection of the tithe and the definition of parish limits in the 10th and 11th centuries were decisive for provoking a process of monumentalisation and (re) consecration of the churches which put them at the heart of the social organisation. Lauwers called this process *inecclesiamento*.⁶¹ Between the 11th and 12th centuries the consolidation of the model of village described by Fossier or the culmination of this “polarisation” around churches or also castles is more clearly seen.⁶² However, this periodisation is simplified and may have important regional variations, as well as varied architectural, urbanistic and material solutions. Now is not the moment to go into the details of these variants, although it is necessary to note that although long-lasting processes are identified, the changes come about and end up having a significant social impact and a considerably important reflection on a material level: castles, churches, abandonment or substitution of the early medieval villages by more concentrated rural settlements, built in stone. The descriptions of these phases by the same archaeologists do no more than show the changes however much these are the result of long-lasting processes and slow transformation.

The emergence of serialised documentary sets in monasteries, bishoprics and counties from the 10th century should not be relativised. The series and notarial

58. Toubert, Pierre. *Les structures du Latium médiévale...*; Bonnassie, Pierre. *Catalunya mil anys enrera. Creixement econòmic i adveniment del feudalisme a Catalunya de mitjan segle X al final del segle XI*. 2 vols. Barcelona: Edicions 62, 1981; Fossier, Robert. “La naissance du village...”; Fossier, Robert, Chapelot, Jean. *Le village et la maison au Moyen Âge*. Paris: Hachette, 1980.

59. Bisson, Thomas. “The ‘Feudal Revolution’”. *Past and Present*, 142 (1994): 6-42; Bisson, Thomas. “The ‘Feudal Revolution’: Reply”. *Past and Present*, 155 (1997): 208-225.

60. Lauwers, Michel. “De l’‘incastellamento’ à l’‘inecclesiamento’...”.

61. Lauwers, Michel. “De l’‘incastellamento’ à l’‘inecclesiamento’...”: 322.

62. Schneider, Laurent. “Structures du peuplement et formes de l’habitat...”.



nature of this documentation is partly new, and constitutes the certification of the process of peasant dispossession and the constitution of dominion based on the seizure of rent. This seizure should not be understood as a simple appropriation of booty or “surplus”, but rather as a set of procedures that imply that the seigneurial class guides, leads and disciplines peasant work.⁶³ Nor was it about building estates, much less “properties”, or that the peasants “lose” theirs. This was the creation of mechanisms of dominion through the exercise of rights that supposed the erosion of peasant autonomy. After a first phase of seizure of peasant assets that meant the introduction of demands for rent in places or regions where the peasant communities had been able to escape from these, from the 11th century and, more decidedly, from the 12th, the seigneurial class began to encourage settlements, the creation of new cultivated areas and legal formulae of peasant establishment that required explicit conditions for the work to be carried out (deforesting, draining, sowing cereal, planting vines, adjudicating plots with specific forms and sizes, etc.). The field systems that these initiatives generated are distinguished from the oldest ones by their regular morphological outlines and being in spaces that had not previously been chosen by peasants.⁶⁴ These procedures, which became habitual in the 11th century, were the instruments of colonisation in the areas conquered from al-Andalus. The cases studied show seigneurial initiatives to occupy extant cultivated areas or to create new plots that contrast clearly with the Andalusi agrarian areas.⁶⁵

Again, the concepts are vital for the understanding the processes studied and the archaeological records they have left. A “surplus” is often conceived as what is left over from the production and which the “élites” appropriate or as a result of the complementary effort that peasants must make to meet payments of rent or taxes.⁶⁶ It forgets that peasant communities would hardly survive (in

63. Barceló, Miquel. “Crear, disciplinar y dirigir...”.

64. Kirchner, Helena. “Hidráulica campesina anterior...”.

65. See the references in notes 25 and 34. Furthermore: Ortega, Julián M. “La agricultura de los vencedores y la agricultura de los vencidos. La investigación de las transformaciones feudales de los paisajes agrarios en el valle del Ebro (siglos XII-XIII)”, *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress, 2010: 123-146; Laliena, Carlos; Ortega, Julian M. “Formas feudales de especulación agraria: villas, viñas y acequias en el sur de Aragón (ca. 1170-1240)”, *Hidráulica agraria y sociedad feudal. Prácticas, técnicas, espacios*, Josep Torró, Enric Guinot, eds. Valencia: Universitat de València, 2012: 79-102.

66. “Archaeologists identify surplus as a central pivot in the big issues of historical change: the development of state society, the emergence of inequality and social stratification, the creation and intensification of agriculture, specialization and technological evolution, the division of labor (including between men and women), the formation of exchange networks and markets, the beginning of sedentism and eventually urban life”, “The role of surplus in reconstructions of change is often vague, assumed, and monolithic or is difficult to pinpoint in relation to emergent conditions in a sociopolitical landscape”. Morehart, Christofer T.; De Lucia, Kristin. “Surplus: The Politics of Production and the Strategies of Everyday Life. An Introduction”, *Surplus: The Politics of Production and the Strategies of Everyday Life*, Christofer T. Morehart, Kristin De Lucia, eds. Boulder: University Press of Colorado, 2015: 3-43, esp. 3. The studies contained in the volume edited by Morehart and De Lucia show that the surplus is not only a path towards social inequality, but can also be an instrument of resistance and power for groups that manage communal rights. Moreover, surpluses should not be defined only from biological requisites (Morehart, Christofer T.; De Lucia, Kristin. “Surplus... ”: 32).



any society or chronology) without strategies to plan for risks, habitually based on diversification (of agricultural, livestock and hunting and gathering activities, spatial diversification of areas of farming, pasture and sources of food that imply forms of mobility and exchange, temporal diversification, like building up reserves of food, or managing the calendar of harvests) and intensification (overproduction or irrigation).⁶⁷ The estimates of production must take into consideration not only mere survival, but also seed stock, reserves to minimise the risks from lost harvests and the need to trade to obtain products not produced within the community itself. Strictly then, survival includes all these forecasts or “surpluses”.⁶⁸ In these strategies, the establishment of forms of exchange are fundamental and, consequently, the connections between peasant communities, whose inhabited areas may or may not be organised in a concentrated form, are crucial. Thus, the villages or forms of peasant settlement cannot be studied as isolated archaeological units given that they belonged to networks with close connections that were fundamental for the success of the strategies of production and supply. This organisation is a necessary condition to guarantee the viability of the peasant community and does not require superior guidance. Good harvests or the absence of incidents could mean that the accumulation of product exceeded the forecast risk. This may give rise to temporary enrichment but does not necessarily lead to the consolidation of stable positions of power for those who have hoarded.

The aristocracies found the way to organise the seizure of this product by establishing mechanisms of dominion based on the exercise of rights over peasant assets. Monasteries, bishoprics, counts and lay lords conquered rights over these assets and, in virtue of these rights, modified, organised and managed peasant production to guide it towards the creation of rent susceptible to being appropriated and withdrawn from the reserve circuits and peasant exchanges. This process is what the serialised documentation from the 9th or 10th centuries describes.⁶⁹ Archaeologically, we should be able to detect it. This does not mean that prior to this date there were no forms of intervention in peasant processes, through extraction of rent or tax. In the best of cases, Wickham’s leopard skin had few spots. However, the seizure of peasant goods, especially by the church from the 10th century (or the 11th depending on the cases) was a novelty given the depth and width of this process. Lauwers warned about this when referring to *inecclesiamento*.⁷⁰

67. Marston, John. M. “Archaeological markers of agricultural risk management”. *Journal of Anthropological Archaeology*, 30 (2011): 190-205.

68. “Food surplus is not only an urgent global concern, but also a key index of how different groups and societies have addressed common problems of shortage and abundance, climatic uncertainty and power relations in the past”. Bogaart, Amy. “The archaeology of food surplus”. *World Archaeology* 49/1 (2017): 1-7, esp. 3.

69. Miquel Barceló considers that this documentation *autentifica la subordinación política del campesinado y regula la percepción de la renta sobre su trabajo* (“authenticates the political subordination of the peasantry and regulates the perception of rent from their work”) and *el fenómeno es de una amplitud y uniformidad de propósito estremecedora* (“the phenomenon is of a shocking breadth and uniformity of purpose”). Barceló, Miquel. “Arqueología e historia medievales...”: 70; Barceló, Miquel. “Crear, disciplinar y dirigir...”.

70. Lauwers, Michel. “De l’‘incastellamento’ à l’‘inecclesiamento’...”.



There is little sense asking about the agency of the 7th- and 8th-century peasant communities to organise networks of villages and whether or not they were responsible for the complexity of the productive resources they managed.⁷¹ As I see it, it could not be otherwise. It was the necessary condition for the consolidation of royalties with more or less efficacious fiscal systems or aristocracies that took advantage of these resources and that required rent. This demand for feudal rent is already well documented in the 9th century in some regions of the Carolingian Empire, especially through the polyptychs. However, this was not a spatially homogeneous organisation. From the 10th century, in contrast, the aristocracies, and very especially the church, ended up intervening in the processes of peasant work without leaving spatial and social interstices into which the peasant communities could escape. In any case, the consolidation of the mechanisms to seize rent was not possible without a peasantry that had organised the production, distribution and consumption strategies. Detecting and explaining how an aristocracy managed to establish the procedures first to seize, and later to “direct and organise” or reorganise, peasant production and the systems of exchange is the problem that has to be tackled.⁷² In Miquel Barceló’s words, *la aparición y consolidación de una clase señorial, de aristócratas de renta, es un episodio político cuando y donde se produzca, y no es el resultado de una imperfección en la fijación o mantenimiento de estructuras de producción campesinas.*⁷³

To be able to describe how the procedures for seizing rent were introduced, the working areas where the aristocracies penetrated must be studied. For this, dating these spaces is important and also their description: to know how they were built, with what technical criteria and with which strategies to minimise risks, how they were managed and what size they were. In the north of the peninsula, some cultivated areas have been dated. In various places in Galicia, terrace systems that would have initially been constructed between the 6th and 7th centuries and worked throughout the Middle Ages and down to the recent past have been studied and dated. In the hamlet of Gózquez (Madrid), plots that were probably farmed intensively have been excavated between the dwellings. A set of terraces in Zavalla (Basque Country) and the terraces studied in Asturias would date from later, between the 10th and 12th centuries.⁷⁴ Some dating has also been done in Catalonia, although this lacks the

71. Recently in the Spanish bibliography, this capacity for peasant organisation has been called *agencia*, an erroneous translation of the English term “agency”. In English, the main meaning of this term corresponds to the Castilian definition of *agencia*, referring to an institution, delegation or company that manages interests. However, there is another meaning, namely the “capacity to act” or “mediation” and that cannot be translated into Spanish as *agencia*. Accordingly, in the Spanish version of this paper I simply use the expression *iniciativa campesina* and avoid the neologism *agencia*.

72. I repeat the precise terms used by Miquel Barceló (Barceló, Miquel. “Crear, disciplinar y dirigir...”).

73. “The appearance and consolidation of a seigneurial class, of aristocrats of rent, is a political episode when and where it happens, and is not the result of an imperfection in the establishment or maintenance of peasant structures of production”. Barceló, Miquel. “Arqueología e historia medievales...”: 85.

74. Ballesteros, Paula; Criado, Felipe; Andrade, José M. “Formas y fechas de un paisaje...”; Ballesteros, Paula. “La arqueología rural y la construcción...”; Ferro-Vázquez, C; Martínez-Cortizas, A.; Nóvoa-Muñoz, Juan Carlos; Ballesteros-Arias, Paula; Criado-Boado, Felipe. “1500 years of soil use reconstructed...”;



necessary historical and archaeological contextualisation.⁷⁵ Thus, we have a scant and partial casuistic. This dating of the terraces in Zavalla from the 10th century does not exclude the possibility that the village with early-medieval chronology excavated did not have organised cultivated areas. Undoubtedly, this was among the first experiences of dating and the geomorphological study of farmed soils, but the protocols are not very developed and the corpus of data is still very small. Moreover, there are problems of interpretation of the dating procedures that cannot be overlooked given that the organic or ceramic materials in the sediments are not necessarily contemporary to the moment of construction or use of the farmed surfaces due to frequent secondary sedimentation. The process of building the fields may have provoked the inclusion of carbons from different origins and much earlier chronology into the stratigraphy. It is necessary to have stratigraphic sequences with various dates and not necessarily of carbons. The application of other techniques for dating soils, such as OSL, could give much more reliable results. In fact, the protocols for intervention are not sufficiently tested.⁷⁶

Irrigation, documented archaeologically in the 13th century in Zavalla is often mentioned in early-medieval Castilian documentation.⁷⁷ Indeed, in many cases, although almost never studied from this point of view, the series of documents, mainly generated by ecclesiastic institutions, shows that in the 10th century, the peasant infrastructures that were the target of the initial process of seignorial seizure and generalised submission to the payment of rent were already being worked when this happened. The documents describe a consolidated agricultural landscape that must have been organised and constructed long before.⁷⁸ The founding of the town of Puigcerdà (Girona) at the end of the 12th century went hand in hand with the construction of a 9-km canal taking water from the Aravó River to the orchard area and the royal mills at the gates in the town wall. This work was done in a place already occupied and dominated by the bishop of Urgell and the abbot of Cuixà. In turn, the 10th-century documentation certifies the acquisition of mills, orchards and fields by the bishop and the abbot in the small hydraulic systems on the banks of the Aravó River and linked to three peasant settlements. This seizure was done through donations and purchases and meant subjecting the peasants to the payment of rent. Bishop and abbot pushed into areas that were already built and being worked.

Vigil-Escalera, Alfonso. "Formas de parcelario en las aldeas..."; Quirós, Juan Antonio, dir. *Arqueología del campesinado medieval...* Fernández Mier, Margarita; Fernández Fernández, Jesús; Alonso, Patricia; López Sáez, José Antonio; Pérez Díaz, Sebastián; Hernández Beloqui, Begoña. "The investigation of currently inhabited villages..."; Puy, Arnald; Balbo, Andrea. "The genesis of irrigated terraces in al-Andalus..."; Puy, Arnald; Balbo, Andrea; Virgili, Antoni; Kirchner, Helena. "The evolution of Mediterranean wetlands...".

75. Kinnaird, Tim; Bolòs, Jordi; Turner, Alex; Turner, Sam. "Optically-stimulated luminescence profiling and dating of historic agricultural terraces in Catalonia (Spain)". *Journal of Archaeological Science*, 78 (2017): 66-77; Turner, Sam; Bolòs Jordi; Kinnaird, Tim. "Changes and continuities in a Mediterranean landscape: a new interdisciplinary approach to understanding historic character in western Catalonia". *Landscape Research* 43/7 (2018): 922-938.

76. Turner, Sam; Bolòs, Jordi; Kinnaird, Tim. "Changes and continuities...": 3.

77. Quirós, Juan Antonio, dir. *Arqueología del campesinado medieval...*: 585.

78. Kirchner, Helena. "Hidráulica campesina anterior...".



Their power at the end of the 12th century was so solid that the royal founding of Puigcerdà and its hydraulic system could not be done on the banks of the Aravó but had instead to be done in a distant place and with a long canalisation.⁷⁹ The monastery of Sant Cugat also extended its endowment on the basis of donations and purchases from the 10th century on. Hundreds of documents certify the process of intervention in the cultivated areas and mills in Rubí, Ripollet, Cerdanyola and Sant Cugat, peasant infrastructures that were already built and working when they began to appear in the documents.⁸⁰ The documentation generated by the Christian occupation of El Penedès, south of Barcelona, is equally eloquent: houses, orchards, vineyards, cereal fields, plots with trees, mills, woods, pastures... a complete peasant agrarian infrastructure was already in place when the Count of Barcelona burst in with the lay lords who received the castral dominions. The monastery of Sant Cugat also acquired important patrimony in the same area through donations from the count or local people.⁸¹

Finally, one archaeological data of great relevance, presented by Roig in his synthesis of the archaeology of the villages in Catalonia, is the findings of small grindstones from hand mills in early-medieval settlements dated from the 7th and 8th centuries, while bigger grindstones from water mills are found in those that date from the 9th and 10th centuries.⁸² This fact could be evidence that hydraulic infrastructures with mills on the banks of streams and rivers with low flows were built between the 9th and 10th centuries or slightly before. This is also the time when A. Durand situates the deforestation of valley bottoms in Languedoc, thanks to a wide bio-archaeological record rigorously compared with the written documentation.⁸³

This chronology coincides with the changes detected in the forms of settlement in the 8th century, when many villages were abandoned, others were consolidated and new settlements were created. It was in the 10th century, or shortly before, when villages and agrarian infrastructures, surely those consolidated from the 8th century, were the target for seigneurial seizure. Indeed, the changes or processes of consolidation of village forms in the 8th century could be closely related to technical decisions to create cultivated areas in valley bottoms, irrigated in some Mediterranean zones, which would be “new” compared with the forms of field systems from the ancient tradition.

79. Kirchner, Helena; Oliver, Jaume; Vela, Susanna. *Aigües prohibides...*

80. Kirchner, Helena. “Hidráulica campesina anterior...”.

81. Batet, Carolina. *L'aigua conquerida...*

82. Roig, Jordi. “Asentamientos rurales y poblados...”.

83. Durand, Aline. *Les paysages médiévaux du Languedoc (X-XIIIe siècles)*. Toulouse: Presses Universitaire du Mirail, 1998; Durand, Aline; Leveau, Philippe. “Farming in Mediterranean France and rural settlement in the Late Roman and early Medieval periods: the contribution from archaeology and environmental sciences in the last twenty years”, *The making of the Feudal agricultures?*, Miquel Barceló, François Sigaut, eds. Leiden-Boston: Brill, 2004.



5. Archaeology of the peasantry in al-Andalus

The archaeology of the peasantry in al-Andalus has recently been critically reviewed by Jorge Eiroa. He does not set out a very optimistic panorama, and considers that scant attention has been paid to the Andalusi rural environment while the monumental archaeology continues to dominate the bulk of interventions.⁸⁴ In contrast with the archaeology of the villages in the north of the Peninsula, the actions linked to professional archaeology have mainly been done in urban areas or on large monuments, especially fortifications. It is revealing that J. Eiroa presents the lines of research developed for non-urban archaeology in al-Andalus as capable of describing the rural landscape from the 10th century on, although in a fragmented way. Prior to that time, and even more so in the 8th century, the what is known archaeologically is extremely irregular and, in certain regions, non-existent. The difficulty of building a significant archaeological record is shared with early-medieval archaeology in general.⁸⁵

In the case of al-Andalus, the historiographic narratives done from the written documentation also have a capacity to condition both the approaches to the research and the interpretations of the record explored in themselves. In any case, the archaeology has had a considerable weight in debates from the start. The available written documentation, mainly chronicles and geographic, makes it difficult, as with the Visigoth period, to have specific references to, or much more than passing mentions of, the majority of rural settlements. In contrast, the documentation resulting from the feudal conquests offers a wealth of details about the areas colonised and that has been used by various researchers.⁸⁶

On the other hand, it is extremely difficult to make a diagnosis of the archaeology of the peasantry in al-Andalus or propose the path this should take without taking sides in the debate begun years ago between the two main historiographic tendencies. These must necessarily be simplified here them given that a detailed analysis would go beyond the scope of this article.⁸⁷ On one hand, there is the proposal that defends

84. Eiroa, Jorge A. "Pasado y presente...": 389.

85. Julián Ortega has done very exhaustive work to revise and interpret the available archaeological record of the Islamic conquest of the Iberian Peninsula. In fact, talk about a scant record is becoming inappropriate, although in comparison with what is available from the 10th century on, it is still limited (Ortega, Julián M. *La conquista islámica de la Península Ibérica. Una perspectiva arqueológica*. Madrid: La Ergástula, 2018).

86. Pierre Guichard, André Bazzana and Patrice Cressier used this resort in their research into the *ḥuṣūn* of the *ṣarq* al-Andalus (Bazzana, André; Cressier, Patrice; Guichard, Pierre. *Les châteaux ruraux d'al-Andalus. Histoire et archéologie des ḥuṣūn du sud-est de l'Espagne*. Madrid: Casa de Velázquez, 1988) and this has also been fundamental in research into agrarian areas.

87. Virgilio Martínez Enamorado did this analysis from the perspective of archaeology in a precise and extensive way (Martínez Enamorado, Virgilio. *Al-Andalus desde la periferia. La formación de una sociedad musulmana en tierras malaqueñas (siglos VIII-X)*. Málaga: Diputación de Málaga, 2003: 143-235). More recently, Cristóbal Carvajal has gone back over the question (Carvajal, Cristóbal. "The archaeology of al-Andalus: Past, Present and Future". *Medieval archaeology*, 58 [2014]: 318-339; Carvajal, Cristóbal. "Islamicisation or Islamicisations? Expansion of Islam and social practice in the Vega of Granada (south-east Spain)". *World Archaeology*, 45 [2014]: 56-70).



the existence of an Arab-Berber migration and the formation of a tribal society, one that was at the same time tributary, in which the state had an unequal power depending on the moment to impose the payment of taxes and where a seigneurial class able to demand rent in a generalised way from the peasantry did not develop. This is represented by Pierre Guichard and Miquel Barceló.⁸⁸ On the other hand, the other current, represented by Manuel Acién, defends a long-lasting process of Islamisation in which the tribal groups of Berber or Arab origin tended to “detrribalise themselves” and even to adopt forms of “proto-feudal” relations by imitating the indigenous social groups. These, in turn, were themselves in a process of feudalisation at the moment of the Arab-Berber conquest. In the 10th century, an “Islamic society” was consolidated. This was the result of a process not only of “religious Islamisation” (conversion of the indigenous population to Islam) but also of “social Islamisation” consisting of the shaping of a society characterised by Islam, the predominance of the private over the public, the pre-eminence of the city and the consolidation of a centralised state. Manuel Acién qualified this new society as an “Islamic social formation”.⁸⁹ Moreover, Eduardo Manzano characterised this process from a principally military viewpoint, in which the resulting Islamic society was mainly the work of aristocratic and warrior lineages and not the result of migration.⁹⁰

In the former case, Pierre Guichard’s approach encouraged an active survey archaeology and, in some cases, partial excavations, orientated towards studying the Andalusi rural fortifications, those generically called *ḥuṣūn* (sing. *ḥiṣn*) and first proposed an archaeology of peasant settlements, although without systematic excavations.⁹¹ Miquel Barceló, who developed especially all the fiscal studies of the emirate and Umayyad Caliphate, promoted the study of the irrigated areas that seemed to characterise the rural settlements.⁹² In the second case, Manuel Acién and Sonia Gutiérrez focussed on excavation, especially of urban sites, in

88. Guichard, Pierre. *Al-Andalus. Estructura antropológica de una sociedad islámica en Occidente*. Barcelona: Barral, 1976 (republished at Universidad de Granada, 1995); Barceló, Miquel. “Ensayo introductorio”, *Sobre el desarrollo desigual de las formaciones sociales*, Samir Amin. Barcelona: Cuadernos Anagrama, 1974: 5-53.

89. Acién, Manuel. “Poblamiento y *ḥuṣūn* en el sur de al-Andalus. La formación de un país de *ḥuṣūn*”, *Actas del III Congreso de Arqueología Medieval Española*. Oviedo: Asociación Española de Arqueología Medieval, 1989: I, 135-150; Acién, Manuel. “Sobre la función de los *ḥuṣūn* en el sur de al-Andalus. La fortificación en el Califato”, *Coloquio hispano-italiano de arqueología medieval*. Granada: Patronato de La Alhambra y Generalife, 1992: 263-275; Acién, Manuel. *Entre el feudalismo y el Islam. ‘Umar ibn Hafṣūn en los historiadores, en las fuentes y en la historia*. Jaén: Universidad de Jaén, 1994.

90. Manzano, Eduardo. *Conquistadores, emires y califas: los Omeyas y la formación de Al-Andalus*. Barcelona: Crítica, 2006.

91. The collective publication by André Bazzana, Pierre Guichard and Patrice Cressier (Bazzana, André; Cressier, Patrice; Guichard, Pierre. *Les châteaux ruraux...*) and the one by André Bazzana (Bazzana, André. *Maisons d’al-Andalus. Habitat médiéval et structures de peuplement dans l’Espagne orientale*. Madrid: Casa de Velázquez, 1992) present the archaeological research carried out since the 1970s.

92. Barceló, Miquel. *El sol que nació por Occidente. Estudios sobre el estado Omeya en al-Andalus*. Valencia: Universitat de València, 2010. For studies of irrigated areas, see the references in notes 22, 23 and 24.



the archaeological survey and studies of pottery to provide an argument on an archaeological base to the former's proposal.

6. Archaeology of Islamisation

The archaeological record is described starting from the idea that only in the 10th century, with the advent of the Caliphate, can one talk of an "Islamic social formation", in which the feudalising tendencies of the Visigoth aristocracies and the clan organisation of the Arabs and Berbers were diluted. This leads to highlighting all the indications of material continuity, instead of analysing the archaeological record in its own context.⁹³ The concept of "social Islamisation" has, moreover, the specific feature that it avoids the question of the process of Arab and Berber migration and settlement and its peasant dimension.⁹⁴ In this sense, Sonia Gutiérrez interpreted the continuity in the 8th century (or simply the topographic coincidence in the same place or the spatial proximity) of rural and urban settlements founded previously, the technical similarity of pottery produced before and after this date and the precarious nature of the materials and techniques used for domestic construction in the 8th and 9th centuries, as evidence of the shallowness or slow implementation of this "social Islamisation".⁹⁵ All the evidence of Arab and Berber conquest and settlement between the 8th and 10th centuries is attributed to a difficult to measure "religious Islamisation". However, in any case, this is only relevant from the material point of view from the 9th century, and only reaches "social homogeneity" in the 10th and 11th centuries, which in turn manifests itself in material patterns (especially pottery and dwellings) that are also homogeneous: *El paso del siglo X al XI revela una sociedad homogénea y profundamente islamizada. Al menos desde la perspectiva material, al-Andalus ya no es Hispania*.⁹⁶ The author reviews the archaeological traces of "Islamisation" and "Arabisation", with some fairly notable chronological concretions supplied by recent archaeology.⁹⁷ However, it is surprising, given the profusion of datable

93. See the reflections about this by Carvajal (Carvajal, Cristóbal. "Islamicisation or Islamicisations...").

94. Barceló, Miquel. "¿Por qué los historiadores académicos prefieren hablar de islamización en vez de hablar de campesinos?", *La prospección arqueológica. Actas del II Encuentro sobre Arqueología y Patrimonio*. Salobreña: Nakla, 1997: 133-44.

95. Gutiérrez Lloret, Sonia. *La Cora de Tudmír. De la antigüedad tardía al mundo islámico: poblamiento y cultura material*. Alicante-Madrid: Instituto de Cultura Juan Gil-Albert, Casa de Velázquez, 1996; Gutiérrez Lloret, Sonia. "Un reconocimiento arqueológico de la islamización. Una Mirada desde al-Andalus". *Arqueología e historia entre dos mundos, Zona Arqueológica*, 15 (2011): 191-210; Gutiérrez Lloret, Sonia. "La arqueología en la historia del temprano al-Andalus: espacios sociales, cerámica e islamización", *Histoire et archéologie de l'Occident musulman (VIIe-XVe siècle): al-Andalus, Maghreb, Sicile*. Philippe Sénac, ed. Toulouse: Méridiennes, 2012: 33-66.

96. "The switch from the 10th to the 11th century reveals a homogeneous and profoundly Islamised society. At least from the material perspective, al-Andalus was no longer Hispania". Gutiérrez Lloret, Sonia. "Un reconocimiento arqueológico...": 207.

97. Gutiérrez Lloret, Sonia. "Un reconocimiento arqueológico..."; Gutiérrez Lloret, Sonia. "La arqueología en la historia del temprano...".



evidence from the 8th and 9th centuries the archaeology of al-Andalus has supplied in recent years, that there is an insistence in minimising the impact of the conquest and migration of Berber and Arab peasant groups and that this is analysed only in terms of “Islamisation” and “Arabisation”, in other words, the adoption of Islam and of Arabic. Julián Ortega has recently carried out an extensive reflection about this, pointing out the schematic use often made of this concept.⁹⁸

According to Sonia Gutiérrez, the material indications of the process are very varied and affect all the aspects related to rural and urban settlements, displays of religion, language and the state: pottery production with technical innovations, consolidation of the urban network with construction of walls and mosques, generalisation of the model of dwelling laid out around a patio, founding of planned settlements and even the creation of irrigated areas.⁹⁹ This scheme is extremely effective and convenient for the interpretative universe of the archaeology of al-Andalus.¹⁰⁰

However, this narrative is based on the observation of a material progression that is understood as proof of the process of “social Islamisation”. This went from a material record with a rather undeveloped technical level to a higher one that was specialised, standardised and homogeneous. Thus, the change was from pottery made by hand or on a hand wheel with a very limited repertoire of forms (principally pots, pans, little jars and some complementary pieces for storage), regional variants of production and local and irregular distribution, to production of quickly turned pottery, with a diversified repertoire, in which the previous forms changed and new decorative forms and techniques of oriental origin appeared and were consolidated.¹⁰¹ There was a change from dwellings made up of a single room to which other rooms were occasionally added around an unclosed open-air space, and where all the domestic functions were done, to dwellings with various rooms with specialised uses (kitchen, latrine, bedrooms, entrance, storage areas), entirely or partially surrounding a closed patio. There was a progression from rural

98. Ortega, Julián M. *La conquista islámica...*, especially chapter 11.

99. Gutiérrez Lloret, Sonia. “Un reconocimiento arqueológico...”; Gutiérrez Lloret, Sonia. “La arqueología en la historia del temprano...”; Gutiérrez Lloret, Sonia. “Gramática de la casa. Perspectivas de análisis arqueológico de los espacios domésticos medievales en la península Ibérica (siglos VII-XIII)”, *Arqueología de la Arquitectura*, 9 (2012): 139-164.

100. Boone, James L. *Lost civilization. The contested Islamic past in Spain and Portugal*. London: Duckworth, 2009.

101. However, the repertoire of pottery forms from the 8th century, despite all the difficulties involved in identifying it, shows early innovations in the forms and household assemblages, which were consolidated in the 9th, as Miguel Ángel Alba and Sonia Gutiérrez show in a recent state of the art (Alba Calzado, Miguel Ángel; Gutiérrez Lloret, Sonia. “Las producciones de transición al Mundo Islámico: el problema de la cerámica paleoandalusí (siglos VIII y IX)”, *Cerámicas hispanorromanas. Un estado de la cuestión*, Darío Bernal, Albert Ribera, eds. Cádiz: Universidad de Cádiz, 2008: 585-613). They link these changes to the Islamisation and, in some cases, when they suppose greater artisanal specialisation, to Islamisation and the formation of urban markets.



settlements made up of unplanned groups of domestic units of the former type, to organised settlements with streets.¹⁰²

Moreover, in its forms and technical production, the earliest pottery resembles that of the late-antiquity (5th to 7th centuries) and the earliest homes resemble models from the Visigoth epoch, which is seen as an indicator of the durability of the Roman-Visigoth social structures and the slowness of the process of consolidating the “Islamic society”. Regarding the cultivated areas, especially the irrigated ones, these are dated to the 10th century given their spatial relation with the settlements with organised urbanism and cities that were already well-consolidated.

In itself, the morphological and technical description of the pottery and dwellings and their urbanistic organisation is the result of ever more refined and abundant archaeological research, and the efforts by Sonia Gutiérrez to systemise this information are undoubtedly useful. However, from my point of view, the interpretative framework is moot, as we shall see.

7. Archaeology of the Arab-Berber migration

“Hydraulic archaeology”, which came into being as a procedure for studying the irrigated areas of Andalusí origin in the 1980s, has evolved towards an archaeology of the cultivated areas (irrigated, drained or dry-land) and, beyond this aim, as an archaeology that aims to reconstruct the agrarian and livestock landscape of the Andalusí peasant settlements. A line of research, closely linked to the previous one, has also been developed about the impact the feudal conquests had on these landscapes and how later colonisation meant morphological transformations and the management of the Andalusí agrarian systems and creation of new cultivated areas. This research has done the study of the inhabited places mainly through archaeological survey and the analysis of the toponymy. These studies are characterised by covering regions, not only geographically isolated settlements as occurs with the few *alquerías* excavated, and this has often facilitated precise maps of the processes of Arab and Berber migration and the consequent creation of new cultivated areas. This tendency does not study a process of “Islamisation” but rather one of migration and settlement. It would be difficult for a migration of these characteristics to be successful without the support of an agrarian system, whether inherited, new or a combination of both of these. Postponing the creation of irrigated areas to the 10th century leaves the question how this migration could be consolidated unanswered, although this does not exclude the building of new cultivated areas in the 10th century or later. Even in the case of interpreting the archaeological record in terms of a process of Islamisation, it is still necessary to

102. Sonia Gutiérrez recognises, in the case of the structure of the houses and urbanism, that the “simplest” models often continue to exist in chronological advanced contexts, or that similar solutions appear in enormously varied social and geographic contexts (Gutiérrez Lloret, Sonia. “Gramática de la casa...”).



show which cultivated areas, if not those introduced by the Arab-Berber migration, sustained the Islamised peasant communities.

Research on the Balearic Islands has enabled a process of how migration and agrarian colonisation takes place to be described quite clearly and the conditions under which the earlier migration to the Peninsula occurred to be proposed. That is why I will dedicate a significant part of the argumentation to these islands. The migration to the Balearic Islands happened later than in the Peninsula, given that they were not occupied islands until the 10th century. In 902 A.D., 'Isam al-Ḥawlânî officialised this occupation in name of the Umayyads. As in the case of other migratory processes to islands, that of the mainly Berber groups, and Arabs to the eastern islands of al-Andalus followed the characteristic steps of exploration, transfer and colonisation. The exploration began much earlier through expeditions seeking to submit the population to the payment of tributes and surely to use the islands as havens or ports of call by the groups of sailors known as the *bahrīyyūn*. From the 10th century, voyages of migration sailed from the ports of the *šarq*-al-Andalus and were regular enough and sufficiently numerous (which does not signify that these were massive movements) to guarantee the success of the new settlements. These latter were not disconnected from the Peninsula as shown by the presence of pottery of peninsular origins. The proximity of the two coasts could also allow the migration to be reinforced demographically. The creation of new settlements was done in function of shared technical criteria, the basis of which had been established and consolidated previously on the Peninsula, and was orientated towards guaranteeing the necessary means of production. The organisation of these settlements, in networks of *alquerías* and *rahales* with complementary functions, is explained by these selections, in which the hydraulic option was predominant.¹⁰³ Detailed analysis of the cultivated areas and networks of *alquerías* has enabled the foundational structures to be distinguished from later processes of reinforcement. The differences between these are difficult to detect given that the extension or creation of new cultivated areas and settlements followed the same guidelines and technical criteria. The later settlements were set up in the interstices of the original network by building complementary cultivated areas and new population centres arising from these. The *rahales*, for example, which were initially complementary places of work, could end up being converted into *alquerías*.¹⁰⁴

Three pieces of archaeological evidence can be understood adequately in this context. In first place, in those areas where systematic survey has been carried out, the pottery found indicates that these sites were abandoned at the time of the feudal

103. Barceló, Miquel. "Immigration berbère et établissements paysans dans l'île d'Eivissa, 902-1235: à la recherche de la logique de la construction d'une nouvelle société", *Castrum VII. Zones côtières et plaines littorales dans le monde Méditerranée au Moyen Âge: défense, peuplement, mise en valeur*, Jean-Marie Martin, ed. Rome-Madrid: École Française de Rome, Casa de Velázquez, 2001: 291-321; Kirchner, Helena, Retamero, Fèlix. "Becoming islanders...".

104. Retamero, Fèlix. "Lo que el tamaño importa..."; Kirchner, Helena. "Original design, tribal management and modifications in Medieval hydraulic systems in the Balearic Islands (Spain)". *World Archaeology*, 41/1 (2009): 148-165.



conquest in the early 13th century. With some exceptions, the lack of abandonment prior to that date suggest that the percentage of failed initial settlements was low. The majority of these present datable material at least since the early 11th century and, in some cases on Ibiza, the 10th century. However, there have been too few excavations, and even these have been too partial, to be able to confirm this evidence with more confidence.¹⁰⁵

In second place, it has been possible to reconstruct the process of creation of networks of *alquerías* linked to cultivated areas either irrigated, dry-land or drained and pasturelands (these last, less studied). The distribution of the toponymy and inhabited areas is coherent with the choices made by the peasant communities when building their agricultural areas, with the networks of paths, pasturelands and rural markets. This link allows chronologies for the cultivated areas to be proposed that are coherent with those of the inhabited areas. Indeed, this dating is no less precise than what the surveys or excavations occasionally offer.¹⁰⁶

In third place, the studies into Andalusi pottery indicate that the earliest local production of pottery was hand-made or modelled on a hand wheel, with a rather limited range mainly composed of forms with basic functions, such as for cooking, or multiple uses, like jars—in principle for use at table—with signs of being used for cooking. Ibiza is where this production is best known, although there is evidence of small findings on the other islands.¹⁰⁷ This production coexisted with imports from the Peninsula from the 10th century on. It must be asked why pottery was

105. Ferrer, Antoni. “Yâbisa, Faramantira (segle VIII-1235). Aportació a un estat de la qüestió”, *Sol erat incipiens per iter conscendere caeli. Jornades d'estudi commemoratives del 900è aniversari de l'atac pisano-català a Yâbisa i Faramantira*, Benjamí Costa, Jordi H. Fernández, eds. Eivissa: Govern de les Illes Balears, 2014: 41-89; Kirchner, Helena. “The migration and colonisation of Berber and Arab clan groups in the Balearic Islands (10th-13th century)”, *Las islas Baleares durante la Antigüedad tardía (siglos III-X)*, Miguel Ángel Cau, ed. Oxford: Archaeopress, forthcoming.

106. A selection of references about this: Barceló, Miquel; Kirchner, Helena. *Terra de Falanis...*; Kirchner, Helena. *La construcció de l'espai pagès...*; Barceló, Miquel. coord. *El curs de les aigües. Treballs sobre els pagesos de Yâbisa (290-633H/902-1235d.C.)*. Eivissa: Editorial Mediterrània-Eivissa, 1997; Barceló, Miquel; Retamero, Fèlix. eds. *Els barrancs tancats...*; Kirchner, Helena. “El mapa de los asentamientos rurales andalusíes de la isla de Ibiza”, *Asentamientos rurales y territorio en el mundo mediterráneo en época medieval*, Carmen Trillo, ed. Granada: Athos-Pérgamos, 2002: 120-186.; Kirchner, Helena. “Redes de asentamientos andalusíes y espacios irrigados a partir de ‘qanât(s)’ en la sierra de Tramuntana de Mallorca: una reconsideración de la construcción del espacio campesino en Mayûrqa”, *Por una arqueología agraria: perspectivas de investigación sobre espacios de cultivo en las sociedades medievales hispánicas*, Helena Kirchner, ed. Oxford: Archaeopress, 2010: 79-94; Kirchner, Helena, Retamero, Fèlix. “Becoming islanders...”; Argemí, Mercè. “Segmentación de grupos bereberes y árabes; Sitjes, Eugènia. “Inventario y tipología...”; Sitjes, Eugènia. “Espacios Agrarios y redes de asentamientos...”.

107. Kirchner, Helena. *La ceràmica de Yâbisa (Eivissa). Estudi dels fons de ceràmica del Museu Arqueològic d'Eivissa i Formentera*, Eivissa: Museu d'Eivissa, 2002; Kirchner, Helena. “Ceràmicas andalusíes a torneta en Ibiza (Balears). Un indicador del proceso de migración y colonización”, *Actas del VIII Congreso Internacional de ceràmica medieval en el Mediterráneo*. Ciudad Real: Asociación Española de Arqueología Medieval, 2009: I, 419-428. Riera Frau, M. Magdalena; Rosselló, Guillem. “El nivell andalusí de la sala hipòstila del poblat talaiòtic d'Hospitalet (Manacor/Mallorca)”. *Butlletí de la Societat Arqueològica Lul·liana*, 51 (1995): 289-292; Rosselló, Guillem; Camps Coll, Juan. *Excavaciones en el complejo noreste de Es Figueral de Son Real (Santa Margarita, Mallorca)*. Madrid. Ministerio de Educación y Ciencia, 1973. In contrast, the 9th-century chronologies attributed by J. Ramon and M. Colomar to the findings of pottery in an excavation on Formentera lack



produced on the islands in the 10th century with the rather unspecialised techniques that characterised the Emirate pottery on the Peninsula. The explanation can be no other than the fact that in the 10th century, when the migration took place, the groups who settled on the islands did not find an organised artisanal and commercial infrastructure, nor did they immediately organise one themselves. What was a priority was to select places to create cultivated areas and pasturelands to guarantee the survival of the pioneers. Only when this infrastructure had been consolidated could the settled groups begin to assign people to tasks other than the production of food, such as the specialised making of objects and tools. In the 11th century, or maybe already by the end of the 10th, local pottery production was made on the wheel with glazes, complex decoration and a diversified range of objects. This was done in specialised workshops and traded in the rural and urban markets.¹⁰⁸

The combination in the research of archaeological survey, the reconstruction of the cultivated areas, the networks of paths, the pasturelands and rural markets enables us to highlight patterns that remit to the initial process of selection by the peasants. The research indicates that the criteria were based on the localisation of those places where catchment of water for irrigation was possible, or, at least, where the characteristics of the soils and their humidity enabled dry-land crops to be grown and where it was possible to have grassy pastures (especially on the edges of marshlands) or, also, of scrub. These spaces have been surveyed in detail and described in such a way that it has been possible to establish the distinct but few variants that these choices produced. As the selection criteria did not change for somewhat over than three centuries, we can detect few traces of the enlargement of the initial selection. In fact, the creation of new settlements after the first phase of colonisation could only be done in the interstices between the settlements and cultivated areas initially selected and as long as there were conditions that enabled the former, repeating similar selections and adopting technical solutions that were reiterated.¹⁰⁹ This is an indication that the possibilities of creating settlements were limited precisely because the criteria and technical knowledge they had resort to were stable. Moreover, the initial selections and later replicas, maintaining the relatively small sizes of the inhabited areas and cultivated areas, must be linked to strategies to minimise risk. The option of intensive forms of agriculture, like irrigation, was a way to face risks and was fundamental for the stabilisation of the initial colonisation process.¹¹⁰ Indeed, there is no need to introduce Islam into the migration process briefly described above to make it intelligible. The populations that migrated to the Balearic Islands in the 10th century were mainly from the *šarq* al-Andalus and did so at a moment when the process of Islamisation had supposedly culminated. If 10th-century pottery production, specialised, with a diversified range, typically Islamic forms, decorative techniques and innovatively modelled, is an indicator of

any basis (Ramon, Joan; Colomar, Maria. "El recinte fortificat de l'edat del bronze i l'habitatge andalusí de sa Cala (La Mola, Formentera)". *Quaderns de Prehistòria i Arqueologia de Castelló*, 28 [2010]: 139-166.

108. Kirchner, Helena. *La ceràmica de Yàbisa...*; Kirchner, Helena. "Ceràmicas andalusíes a torneta..."

109. Retamero, Fèlix. "Irrigated agriculture, risk..."; Kirchner, Helena. "Original design..."

110. Retamero, Fèlix. "Irrigated agriculture, risk..."



“Islamisation”, why did the migration of “Islamised” people to the Balearic Islands suppose an initial abandonment of this production to go back to techniques and repertoires from the 8th and 9th centuries?

It is much more complex to study the same process on the Peninsula. In contrast with the islands, where the society of Roman-Byzantine origin had almost disappeared on Ibiza and whose political organisation was very eroded on the other islands,¹¹¹ the archaeological record from the Visigoth epoch is much denser on the Peninsula and, although as Sonia Gutiérrez explains, the 8th-century record is difficult to detect, there is more and more evidence for it.¹¹² So, the Arab and Berber migration necessarily had to suppose forms of local negotiation with the indigenous population but details of which are difficult to know and may not have left eloquent archaeological traces. The settlements of the immigrant groups and their technical selections were conditioned by those that were already working. However, irrigated agriculture was governed by new criteria and cultivated areas were built in line with technical knowledge that to a good extent was new and, thus, in places that had no necessarily been occupied previously and, consequently, did not compete with indigenous peasant organisations. Research is needed to identify the agricultural areas of the peasant communities from the 5th to 7th centuries to enable this proposal to be sustained fully. However, what we know about Roman cultivated areas, those associated with centuriations or some examples of terraces on hillsides, show that the Roman selections did not coincide with the Andalusí rural hydraulic systems.¹¹³ There is written evidence and traces of Roman irrigation but the fieldsystems, canalisations or design of the hydraulic systems have not been identified and, consequently, the criteria for selecting the areas built have not been described.¹¹⁴ Then the cultivated areas from the Visigoth epoch or datable from the 6th or 7th centuries are the great unknowns, with the exception of those mentioned above.

The selection and techniques applied by the migrants adapted to the diversity of landscapes on the Peninsula, just as they also did on the Balearic Islands. To give some examples, while *qanât*(s) were built on Majorca, especially in the Serra de Tramuntana, this technique was not used on Menorca and there are very few examples of it on Ibiza. Animal-powered water wheels were found in plains in

111. Barceló, Miquel. “Immigration berbère...”.

112. Gutiérrez Lloret, Sonia. “Un reconocimiento arqueológico...”.

113. Ruiz del Árbol, María. *La arqueología de los espacios cultivados terrazas y explotación agraria romana en un área de montaña: la sierra de Francia (Salamanca)*. Madrid: Consejo Superior de Investigaciones Científicas, 2005; Ruiz del Árbol, María. “Los paisajes agrarios del Nordeste de Lusitania: terrazas y explotación agraria romanas en la Sierra de Francia”. *Arqueología Espacial*, 26 (2006): 115-142; Ariño, Enrique; Gurt Josep M.; Palet, Josep M. *El pasado presente. Arqueología de los paisajes en la Hispania romana*, Salamanca: Universitat de Barcelona, 2004.

114. Francisco Beltrán and Ana Willi gather all the known evidence of Roman hydraulic and irrigation in the Iberian Peninsula. Nowhere have irrigated plots been identified so their insistence on minimising the innovative capacity of Andalusí hydraulics lacks a convincing basis. Beltrán Lloris, Francisco; Willi, Ana. “El regadío en la Hispania romana. Estado de la cuestión”. *Cuadernos de Prehistoria y arqueología de la Universidad de Granada* 21 (2011): 9-56.



river valleys or on the edges of marshlands. Natural springs were used for irrigation whenever it was possible to divert their water to cultivable surfaces. The Banû Furânik Berber group settled in the Tramuntana mountains and built *qanât(s)* to water small irrigated areas. In Felanitx, on the south-east of Majorca, the same group used a natural spring and they also built a weir on the Santa Eulària River on Ibiza.¹¹⁵ The Yeṭṭurer/Banû Zuraġ Berbers built settlements on the Peninsula and the islands (Liétor, Letur and Yátor in Albacete and Granada, Xarraca on Ibiza). They built hydraulic systems using natural springs although with very varied results regarding the area and procedures for terracing hillsides or valley bottoms.¹¹⁶ While the Banû Ru'ayn from Yemen built large stone dams in Zafar, their place of origin, to catch the monsoon rains to enable year-round irrigation, they did not resort to the same technique in al-Andalus given that it would not have made sense under the climatic conditions of the Peninsula.¹¹⁷

For the time being, some evidence suggests that these areas were built at a very early date. Indeed, the 8th-century migration, like that to the Balearic Islands in the 10th, had firstly to guarantee the means for survival. Thus, the early date for the *norja* pots in the Tudmîr area,¹¹⁸ the dates given for the building of irrigated terraces in Ricote (Murcia) or the dating from the 8th for the start of the draining of the fluvial wetland situated beside Madîna Ṭurṭûša, are some examples.¹¹⁹ Undoubtedly, these dates cannot be generalised and there is a long way still to go in the research and to establish procedures for dating the founding of cultivated areas. However, it is difficult to postulate a two-century delay for the technical selections that the migration required to consolidate itself. Another problem is that of the diffusion of new plants of oriental origins, the rate at which this happened, the role of the palatine orchards in their acclimatisation, the geography of certain crops that require very special conditions (like cotton, rice or sugar cane) and the more or less important position in peasant diets of some of them (fruits or cereals). These rhythms, chronologies and geographic distributions are not yet well known beyond the eminently textual information available. The use of carpology to tackle this question has only recently begun and, to date, a very limited range of plants has been identified, partly as a consequence of the scant possibilities for the preservation of many plants that do not produce seeds, pits or wood.¹²⁰ In any case, developing

115. Barceló, Miquel; Kirchner, Helena. *Terra de Falanis...*; Kirchner, Helena. *La construcció de l'espai pagès...*; Kirchner, Helena. "La reconstrucció del disseny original...".

116. Navarro, Carmen. "El ma'jil de Liétor (Albacete): un sistema de terrazas irrigadas de origen andalusí en funcionamiento". *Trabalhos de Antropologia e Etnologia*, 35/2 (1995): 365-382; Navarro, Carmen. "Els Zurag (<Xarraca) i els Banû Rasn (<Benirràs) al quartó de Xarc", *El curs de les aigües. Treballs sobre els pagesos de Yâbisa (290-633H/902-1235d.C.)*, Miquel Barceló, coord. Eivissa: Editorial Mediterrània-Eivissa, 1997: 53-64.

117. Barceló, Miquel; Kirchner, Helena; Torró, Josep. "Going around Zafar..."; Barceló, Miquel; Torró, Josep. "The hydraulic set-up..."; Barceló, Miquel. *Los Banû Ru'ayn en al-Andalus...*

118. Gutiérrez Lloret, Sonia. *La Cora de Tudmîr...*

119. Puy, Arnald; Balbo, Andrea. "The genesis of irrigated terraces..."; Puy, Arnald; Balbo, Andrea; Virgili, Antoni; Kirchner, Helena. "The evolution of Mediterranean wetlands...".

120. Alonso, Natàlia; Antolín, Ferran; Kirchner, Helena. "Novelties and legacies in crops...". Julián Ortega reviews this evidence in his book and indicates the few differences between the Andalusi and



hydraulics only from the 10th century would have made the process of diffusion of plants and techniques that did take place, and in which the role of the peasant communities was decisive, practically impossible.¹²¹

Moreover, it must be pointed out that the processes of migration and settlement produced agrarian selections based not only on strategies and technical knowledge of oriental or North-African origin, but also local ones. We should not expect to see complete technological systems from specific origins reproduced mimetically, as Eduardo Manzano imagines. On the contrary, the cultivated areas, plants and livestock strategies created were the result of a synthesis between the migrants' knowledge, of which only one part, the useful, was selected, and the local conditions or even the local technical repertoire. We find wells with animal-powered water wheels on fluvial plains where it is possible to catch underground water from the rivers at a shallow depth, but not just anywhere. There would be underground water channels (*qanāt-s*) in mountainous areas where the alluvial fans of the streams and the aquifers enabled this technique to be applied. However, even so, there would be no *qanāt-s* hundreds of kilometres long as in Iran. Also, rice, cotton or sugar cane would only be grown where the conditions of heat and water supply were adequate, and they are unlikely to be found in a mountain *alquería*. The full range of examples would be too long-winded. Let us again recall the Banû Ru'ayn from Yemen, who did not build a single large dam in al-Andalus given that this would not have made sense. They selected other technical resources more appropriate to the places of settlement.¹²²

pre-Islamic records regarding the diversity of plants and the dominance of cereals. However, he does not take into consideration the problem of the lack of conservation of many of the plants grown (Ortega, Julián M. *La conquista islámica...*: 244-249). The recent compilation of data collected by some carpologists reaches the same conclusions (Peña-Chocarro, Leonor; Perez- Jordà, Guillem; Alonso, Natàlia; Ferran Antolín; Teira-Brion, Andres; Teso, Joao P.; Montes, Eva María; López Reyes, Daniel. "Roman and medieval crops in the Iberian Peninsula: a First overview of seeds and fruits from archaeological sites". *Quaternary International* (2017): 49-66 <<https://doi.org/10.1016/j.quaint.2017.09.037>> (Consulted 6th February 2019).

121. Retamero, Fèlix. "Un conjunto de reglas sabias..."

122. Manzano, Eduardo. "Entre fait et artefacts: interprétations historiques et données archéologiques en al-Andalus", *La culture matérielle: un objet en question. Anthropologie, archéologie et histoire*, Luc Bougeois, Danièle Alexandre-Bidon, Laurent Feller, Perrine Mane, Caherine Verna, Mickaël Wilmart, dirs. Caen: Publications du CRAHAM, Presses Universitaires de Caen, 2018: 93-111. In this article, Eduardo Manzano shows he ignores a good part of the scientific production about the themes he wants to deal with. The attribution of a diffusionist interpretation to some researchers, including Miquel Barceló, is inappropriate, not only because it ignores the research done and to which I have just referred, but also because who really thinks in diffusionist terms is Eduardo Manzano when he uses the fact that a material record clearly attributable to the Berbers has not been described as an argument to question the existence of a Berber migration: *Bien qu'il en soit exacte que les sources mentionnent la présence de nombreux groupes berbères lors de la conquête et attestent de leur installations dans certaines régions, l'archéologie n'a pas identifié jusqu'à présent un horizon culturel suffisamment homogène et fréquent dans la péninsule Ibérique qui puisse être relié à un horizon similaire en Afrique du Nord, au moment de la conquête. Nous ne disposons pas de "céramique berbère" ni d'autres éléments matériels qui pourraient être attribués à cet horizon. Ainsi, du moins pour l'instant, insister sur un contribution matérielle d'origine berbère pour définir la formation de la société andalouse manque d'un base empirique fondée sur le dossier archéologique* ("Although it is true that the sources mention the presence of many Berber groups during the conquest and attest to their installation in certain regions,



So, the archaeological indicators of migration in the Peninsula from the 8th century on are the little specialised technique of making pottery, simple dwellings with a single room or the lack of urban organisation of the first settlements. These are the same ones that Sonia Gutiérrez identifies as indicators of scant “Islamisation”, to which the creation of new agrarian areas should be added. In any case, these material remains show sufficient changes, although sometimes subtle, from the Roman-Visigoth record. The creation of a network of settlements on the edges of the marshes of the Lower Segura with cultivated areas irrigated with water wheels is a good example of the new forms of settlement resulting from migration and not necessarily as a result of an “Islamisation” of indigenous groups.¹²³ Burials with the Islamic rites and the introduction of new forms of pottery in Visigoth-era rural settlements and the simultaneous abandonment of numerous Visigoth settlements from the same epoch between the end of the 7th and 8th centuries are an eloquent record in the rural context, despite the difficulties of radiocarbon dating.¹²⁴

the archaeology has so far not identified a cultural horizon sufficiently homogeneous and frequent in the Iberian Peninsula which can be connected to a similar horizon in North Africa, at the time of the conquest. We do not have “Berber pottery” or other material that could be attributed to this horizon. Thus, at least for the moment, insisting on a material contribution of Berber origin to define the formation of Andalusian society lacks an empirical basis based on the archaeological record”). Manzano, Eduardo. “Entre fait et artefacts...”: 99. It should not be expected that this record will be found, which is not what Eduardo Manzano imagines. Moreover, there is a technical and material coherence between the pottery records from North Africa and the Peninsula in the 7th and 8th centuries. Also, in this paragraph, Manzano curiously grants little credibility to the written sources that document the migration. Shortly before, he had unfairly hit out at Miquel Barceló’s supposed (and false) rejection of the written sources to construct historical interpretations. Fortunately, anyone who knows his work knows full well that this attribution is false and anyone who reads the pages by Miquel Barceló that Eduardo Manzano cites would be able to understand well what Barceló who, incidentally, was not an archaeologist, really wrote. Miquel Barceló always defended the concurrence of the archaeology to study certain problems, often identified thanks to the written documentation. That analysing the “limits of the written documentation” does not mean that he does not consider it necessary to integrate it into the research and the interpretations. Quite the opposite. See what Eduardo Manzano cites: Barceló, Miquel. “Los límites de la información escrita”, *Arqueología medieval; en las afueras del medievalismo*, Miquel Barceló, dir. Barcelona: Crítica, 1988: 73-87; Barceló, Miquel. “Historia y arqueología”. *Al-Qantara*, 13/2 (1992): 457-462; Barceló, Miquel. “¿Por qué los historiadores académicos prefieren hablar de islamización en vez de hablar de campesinos?”, *La prospección arqueológica*, Domingo Armada, dir. Salobreña: Ayuntamiento de Salobreña: 133-144. He applies the same reasoning used for the pottery to the hydraulic systems, asking himself why irrigated areas similar to the eastern ones are not found on the Peninsula and his reflections do not go beyond the research by Thomas Glick, Andrew Watson or Miquel Barceló in the 1980s (Manzano, Eduardo. “Entre fait et artefacts...”: 100-103). He starts from the basis that we do not know what the agricultural landscapes of Syria, Yemen or North Africa were like in the 7th and 8th centuries, something that should be applied only to himself (Manzano, Eduardo. “Entre fait et artefacts...”: 101). Finally, the “materialist alternative” that Eduardo Manzano offers is based on a diffusionist and ethnicist view (his own) that allows him to deny the existence of the migration.

123. Gutiérrez Lloret, Sonia. “Acerca del origen de la huerta de Orihuela y la explotación de las zonas húmedas del bajo Segura entre los siglos VII y XI”. *Arqueología y territorio medieval*, 3 (1996): 37-48.

124. Vigil-Escalera, Alfonso. “Sepulturas, huertos y radiocarbono (siglos VIII-XIII d. c.). El proceso de islamización en el medio rural del centro peninsular y otras cuestiones”. *Studia Historica. Historia Medieval*, 27 (2009): 97-118. Vigil-Escalera notes that in the second half of the 8th century the percentage of pottery made on the hand-wheel fell significantly compared with those made on the wheel and with new typically Anandalusi forms (from 95% to 65-80%) (Vigil-Escalera, Alfonso. “Sepulturas, huertos y



The technical limitations, similar to those in the Visigoth epoch, and the apparent paucity of archaeological remains, are not indications of a “lack of Islamisation”, “weakness of the migration” or a progressive and slow process of “Islamisation”. They mark the conditions of production, distribution and consumption in 7th, 8th and 9th centuries. Migration—or Islamisation—did not change these conditions overnight. They remained the same until the 9th century, or well into the 10th in some areas, until urban markets were consolidated together with specialised forms production. This process was repeated on the Balearic Islands in the 10th century. We can also see indicators of the migration in the changes in burial rites, in the analysis of isotopes and other indications of origin,¹²⁵ the appearance of new forms of pottery, although made with the same local techniques, the building of new cultivated areas and, in general, in the new agrarian strategies. Simultaneously, there are also early traces, although scarce, of state-shaping in the coinage and in the modest urban architectural initiatives and fortifications.

Urban development only started to become relevant in the 10th century or later when migration and colonisation, once consolidated, enabled the appearance of specialists in building, the making of pottery and other objects and to a diversification of exchanges and places of exchange. It was also when the state had sufficient

radiocarbono...”: 105). Even so, he considers the *el consumo de cerámica en los enclaves rurales dependientes demuestra en todo caso un profundo mantenimiento de la tradición en las fases iniciales del nuevo periodo* (“the consumption of pottery in the dependent rural enclaves demonstrates in any case a deep conservation of the tradition in the initial phases of the new period”). Vigil-Escalera, Alfonso. “Sepulturas, huertos y radiocarbono...”: 117. He also concludes that the Islamic burials indicate a rapid process of Islamisation of the existing populations: *existen pocas dudas de que quienes se enterraron con arreglo al nuevo ritual eran descendientes de los antiguos habitantes de la comarca* (“there is little doubt that those who were buried under the new ritual were descendants of the former inhabitants of the region”). Vigil-Escalera, Alfonso. “Sepulturas, huertos y radiocarbono...”: 116. I understand that what he bases this claim on is that, *tres individuos inhumados con el ritual coránico y otro en decúbito supino comparten un específico rasgo epigenético (la apertura septal o perforación olecraneana), asociado habitualmente a la transmisión por herencia* (“three individuals buried in the Qur’anic ritual and another in supine position share a specific epigenetic feature (the septal opening or olecranon perforation), usually associated with transmission by inheritance”) and that *los análisis de ADN mitocondrial antiguo (30 muestras) indican que con bastante probabilidad que se dieron lazos de parentesco entre inhumados con ritos diversos, uno presumiblemente cristiano y otro con seguridad islámico* (“The analyses of ancient mitochondrial DNA (30 samples) indicates that it is quite likely that kinship ties occurred between the buried with diverse rites, one presumably Christian and the other surely Islamic”). Vigil-Escalera, Alfonso. “Sepulturas, huertos y radiocarbono...”: 99. Julián Ortega, again, has done a detailed review of all the known archaeological data about burials from the first phase of settlement and has shown the variety of solutions of rites until the norms of position and orientation became generalised from the 9th century (Ortega, Julián M. *La conquista islámica...*: 311-326). However, the initial hesitancy about the burial rites need not mean a lesser degree of “Islamisation”, but more the lack of guidelines. Those buried following little defined patterns but differentiable from the clearly Christian ones, were not partly-convicted Muslims.

125. The anthropological and isotopic analyses carried out in the *maqbara* in Pamplona, dated from the 8th century leave no room for doubt about the origins and family relations of those buried there, which include children, women and men. Moreover, the women had clearly Berber-tradition aesthetic mutilations of the incisors. Prevedorou, Eleni A.; Díaz-Zorita, Marta; Romero, Alejandro; De Miguel, M. Paz; Buikstra, Jane E.; Knudson, Kelly. J. “Residential Mobility and Dental Decoration in Early Medieval Spain: Results from the Eighth Century Site of Plaza del Castillo, Pamplona”. *Dental Anthropology*, 23/2 (2010): 42-51.



revenue gathering power to afford the cost of building the city, its principal seat. This same city could not grow without the peasant agricultural areas required to supply it. It must have become a place for exchanges between peasants and non-peasants (representatives of the state, artisans).¹²⁶

Nor were the development of more complex domestic buildings, a more organised rural urbanism, with specialised architecture, forms of artisanal manufacture (pottery is the most visible) also more specialised, with wider repertoires, standardised and technically more sophisticated, with distribution linked to stable markets and to a good extent urban, indicators of “Islamisation”. These changes also occurred in non-Islamic societies and around the same dates. The consolidation of a peasantry and its forms of production and exchange preceded urban development, the market linked to the cities and specialised artisanal production. Recent studies of urban irrigated areas through hydraulic archaeology and morphological analysis show that the role of peasant settlements was decisive in their growth.¹²⁷

The indications of early chronologies for these cultivated areas do not exclude the building of new areas at a later date. It has been mentioned above that the analysis of the networks of settlements, their toponymy and irrigated lands on the Balearic Islands enables procedures for the extension and creation of new irrigated areas in the wide interstices between the initial foundations to be detected.¹²⁸ Rigorous research into the *huerta* of Valencia has shown precisely how the cultivated area was extended from the earliest irrigated perimeters.¹²⁹ The consolidation of the city as a political and commercial centre probably influenced in the strengthening of the initial designs. In some case, there was direct intervention by the state or its delegates in the construction of the hydraulic systems. However, there are few examples of this. *Madīna Mayūrqa* (Palma in Majorca) was supplied through a new channel that came from a *qanāt* that originated at the feet of the Sierra de Tramuntana, 15 km away. The channel crossed the city, branching out to supply baths and mosques, until reaching the citadel. Inside the walled enclosure there were orchards, probably also irrigated with this water. The *qanāt* was called the Emir’s Spring (Ayn al-Amir or Enelemir in the documentation after the conquest), perhaps due to the responsibility of the state’s representative for building it.¹³⁰ In Valencia, in contrast,

126. Barceló, Miquel. “Quina arqueologia per al-Andalus?...”; Malpica, Antonio. “Urban life in al-Andalus and its role in social organization and the structure of settlement”. *Imago Temporis: mediun aevum*, 4 (2010): 25-49.

127. Esquilache, Ferran. *Els constructors de l’horta de València...*; Barceló, Miquel; González Villaescusa, Ricardo; Kirchner, Helena. “La construction d’un espace agraire drainé au *hawz* de la *madīna* de Yabīsa (Ibiza, Baléares)”, *La dynamique des paysages protohistoriques, antiques, médiévaux et modernes ou les paysages au carrefour de l’interdisciplinarité et de la diachronie. XVIIe Rencontres Internationales d’Archéologie et d’Histoire d’Antibes*, Joëlle Burnouf, Jean-Paul Bravard, Gerard Chouquer, eds. Sophia Antipolis: APDCA, 1997: 113-125.; Kirchner, Helena; Virgili, Antoni; Puy, Arnald. “Agrarian spaces in Tortosa...”.

128. Kirchner, Helena. “Original design...”.

129. Esquilache, Ferran. *Els constructors de l’horta de València...*

130. For the *qanāt* see: Barceló, Miquel; Carbonero, M. Antonia; Martí, Ramon; Rosselló Bordoy, Guillem. *Les aigües cercades. Els qanāt(s) de l’illa de Mallorca*. Palma: Institut d’Estudis Baleàrics, 1986. For the integration of the hydraulic system in *Madīna Mayūrqa*: Riera Frau M. Magdalena. *Evolució urbana*



rahales, *manzil* and *riyyad*, linked to public posts or private individuals, were situated in marginal areas of the network of channels that distributed water to the irrigated areas of the *alquerías*. These were created after the 10th century and are the imprint the city—or the state—left on the hydraulic system of the orchard area or *huerta*, taking advantage of interstices or adding branches or extensions to the canals.¹³¹

In the Christian societies or the territories conquered from al-Andalus, the documents and archaeology show numerous feudal initiatives from the 12th century to create new cultivated areas, both dry-land, irrigated or drained. These were accompanied by the founding of new towns or, in the case of the conquered areas, an in-depth remodelling of places of residence, with what could be qualified as a massive abandonment of the old Andalusí *alquerías*. Only a small number of these continued in use by the new Christian settlers and, in some regions, Mudejar communities.

Studies carried out in recent years into this type of area, combining the analysis of the field systems, the reconstruction of their layout and the analysis of the written documentation, have supplied an understanding of the processes of migration of Christian populations, their settlement and the management of the Mudejar communities who remained in many of the territories conquered. In fact, the scientific output in this field is so extensive and deals with such varied and complex questions that it would deserve more space than this article can afford without becoming excessively long. However, I have considered it worth referring to this question to indicate that the conservation of Andalusí cultivated areas should not be interpreted as a technical “continuity” without further social repercussion. On one hand, the subversion of the management of these areas by the new rulers was profound and, on the other, the works to create new dry-land, drained or irrigated areas, although not necessarily immediately after the conquest, were large-scale operations to transform the agricultural landscape.¹³²

8. Conclusions

This article is designed to be a reflection about archaeological research into the medieval peasantry of al-Andalus and the Christian societies in the north of the Peninsula. There are concomitances, and also contradictions, between the dominant narrative about the “Islamisation” and what was developed mainly for the early-medieval peasant settlements in the north of the Peninsula. In the second, we have

i topografia de Madina Mayúrqa. Palma: Ajuntament de Palma de Mallorca, 1993. For the documentation from after the conquest: Fontanals, Reyes. *Un Plànol de la sèquia de la vila del segle XIV, ciutat de Mallorca*. Palma: Ajuntament de Palma de Mallorca, 1984.

131. Esquilache, Ferran. *Els constructors de l'horta de València...*: 360-383.

132. A recent book deals with this question: Torró, Josep; Guinot, Enric, eds. *Trigo y ovejas. El impacto de las conquistas en los paisajes andalusíes (siglos XI-XVI)*. Valencia: Universitat de València, 2018. See also the bibliography in footnote 34.



seen above how, in a fairly generalised way, the consolidation of a process of spatial concretion of the concentrated village from the end of the 7th or the 8th centuries is accepted. It remains to be determined if the direction of an élite not very visible archaeologically would be behind this settlement pattern. In any case, in the 9th or 10th centuries, with an ever more general presence of the church in the form of parishes or monasteries, or of the lay seigneurial class through castles, the imposition of rights and rents became increasingly generalised. Moreover, a significant portion of the villages from the 8th-9th centuries were abandoned, although many others continued to be occupied and were transformed architecturally and urbanistically. There was a progressive move from an archaeological record with a not very specialised technological level (pottery hand-made or modelled with a slow wheel, with limited repertoires emphasising the functions of cookery; hut type homes made with perishable materials, or with stone and adobe foundations, from a single room or various rooms around open spaces for domestic use) to a record with a more specialised technological level (standardised pottery production, more diversified formally, in the hands of specialists, building in stone and organised urbanism). This simplified description recalls the one by Sonia Gutiérrez, especially in the aspects referring to the growing complexity of the material, architectural and ceramic record, which is considered an indicator of the process of Islamisation: it went from settlements without urban planning, single-room dwellings with not very well-defined open spaces and a limited repertoire of forms of pottery made on a slow wheel to settlements organised into streets and complex houses with various rooms, some specialised, laid out around a patio and pottery made by specialists, with diversified repertoires and modelling techniques and complex decoration. The process was accompanied by the consolidation of the cities and the caliphal state in the 10th century. If we strip both descriptions of religious contents or state or aristocratic presences (Islam, aristocratic lineages or armies, state, Church, aristocratic élites, a seigneurial class), what is left are material records that show a similar technical progression and with similar chronological rhythms. This description is interchangeable except for a detail which constitutes the great contradiction: there is a persistence in the archaeology of al-Andalus of considering that the arrival of Arabs and Berbers, whatever the form this took, only constituted the beginning of a long process of building the so-called “Islamic social formation”. Consequently, the archaeologists preferentially highlight the “continuities” of material order rather than the signs of change. In the archaeology of the villages in the north of the Peninsula, in contrast, it is considered that at the end of the seventh century sufficiently significant changes had been consolidated for the material organisation of the societies studied that they had nothing to do with the Roman or Visigoth worlds. Comparisons between these may seem banal, but it does show the intentionality of the interpretations, especially that of the archaeology of al-Andalus.

It is increasingly clear that the 8th century was a turning point in the forms of peasant settlement. Even in those villages in the Madrid area that were occupied by Muslims, an early abandonment before the end of the century is observed. The knowledge obtained to date about the cultivated areas also indicates processes of



construction of new irrigated cultivated areas, not only in al-Andalus, but also in the northern part of Catalonia.

The consolidation of the migration in al-Andalus or the new forms of peasant settlement that arose from the end of the 7th century in the north of the Peninsula were essential for the later urban development to happen. This is closely linked to changes in how artefacts and tools were made, and how these were distributed (in markets increasingly controlled from the city) and their forms of consumption by both the rural and urban populations. Ethnicity or religion had little to do with this process.

In both sectors, a process of abandonment of many of these peasant settlements is observed in the 9th or 10th centuries for undoubtedly varied reasons: the consolidation of the Umayyad state and its taxation in one case and the growing power of the church and the lay aristocracy to seize peasant rent, in the other, have a great deal in common. In both cases there is a certain tendency towards a concentration of the population in some of the initial settlements or to the founding of new settlements. However, that does not mean it can be deduced whether the cultivated areas were created only from that moment, as is postulated, without proof, for al-Andalus.

I consider that the archaeology of the peasantry cannot be based only on the excavation of dwellings. Given their size, archaeological excavations involve costs and a necessary investment of time, and tend to analyse problems from the excessively narrow perspective of the archaeological site. With that, in no way do I wish to minimise the explicative capacity of the archaeological record supplied by excavation. On the contrary, it is necessary to do many more excavations. However, it is always necessary to study the agrarian spaces linked to the settlements excavated systematically. It is worth dealing with these settlements in their context, much wider than just the dwellings and structures linked to these. Moreover, they were part of networks, and taken in isolation, they could not have been viable, and cannot be understood without knowing the areas of work in all their complexity.

On the other hand, as has been shown, similar chronological guidelines are observed in the Christian societies in the north of the Peninsula and in Al-Andalus. The progressive increase in technical complexity —understood in the widest sense and confirmed in the forms of production of objects, domestic construction, the organisation of peasant work and the urbanism of their settlements— is mainly explained by the growing power of some elites without a very precise social profile to organise the processes of peasant work, seize their product and promote exchanges in Christian societies, or by Islamisation and progressive consolidation of the centralised Islamic state, in the case of the society of al-Andalus. Indeed, there is a tendency in both cases to adapt the archaeological record to a prior narrative of historical processes of social and political content that cannot be checked adequately. This is the ceiling the archaeology of the peasantry in Spain or the archaeology of medieval societies in general comes up against, and which means the interpretation offered is not very consistent, whether it is a question of challenging the historiography of feudalism, or offering an explanation for the formation of al-Andalus. In both cases, the interpretations and their stagnation have become consolidated. The impression



of ones and the others repeating ourselves is becoming increasingly apparent. An in-depth revision is required. Research into the farmed and livestock areas should be crucial in addressing these problems. The criteria for selecting where to build these spaces, determined by the technical knowledge of the peasants, should make it possible to distinguish these from those created by seigneurial or state instances. The selection and modification of the initial design of these spaces can be detected in their morphology and size. These two aspects contain information about how these areas were managed and how the state or the aristocracies may have interfered in them. There is already a line of research that has produced relevant results in this sense. All that is missing is for the archaeology of the artefacts and sites to go hand in hand with an archaeology of the cultivated areas for us to be able to carry out an archaeology of the peasants.

