



Contents lists available at ScienceDirect

Journal of Archaeological Science: Reports

journal homepage: www.elsevier.com/locate/jasrep

The contribution of Bayesian analysis to the chronology of Iron Age north-western Iberia: New data from San Cibrán de Las (Galicia, Spain)



M. Pilar Prieto Martínez^{a,*}, Yolanda Alvarez González^b, Manuel Fernández-Götz^c, Marco V. García Quintela^a, A. Cesar González García^d, Luis Francisco López González^b

^a Department of History, Sincrisis Group, University of Santiago de Compostela, Spain

^b Terra Arqueos SL, Spain

^c School of History, Classics and Archaeology, University of Edinburgh, United Kingdom

^d Institute of Heritage Sciences (Incipit), Spanish National Research Council, Spain

ARTICLE INFO

Keywords:

Chronology
Bayesian analysis
Iron Age
NW Iberia
Oppida
San Cibrán de Las

ABSTRACT

This paper presents a series of 25 previously unpublished radiocarbon dates from the *oppidum* of San Cibrán de Las, one of the most important and thoroughly excavated Iron Age sites in the NW Iberian Peninsula. These ¹⁴C dates are discussed on the basis of a Bayesian analysis. The results reveal a much longer occupation history of the site than previously thought. Moreover, the data offer new light into the much-debated question of the origin of the large fortified sites known as *oppida* in the region. The evidence from San Cibrán de Las clearly suggests a pre-Roman origin for at least some of the *oppida*, thus challenging traditional interpretations about the origins of urbanism in northern Iberia.

1. Introduction

This article offers the first overview on a new series of 25 radiocarbon dates from the fortified Iron Age settlement of San Cibrán de Las (pre-Latin name *Lansbrica*, Galicia, Spain). The application of Bayesian analysis to the new data from San Cibrán and other related settlements offers new light into the chronology of the Iron Age Iberia and the origins of the large fortified sites known as *oppida*. Bayesian chronologies are starting to reassess many of our traditional assumptions on the Iron Age (see e.g. Hamilton et al. 2015), and through this paper we aim to integrate the north-western Iberian Peninsula into the debate.

In the Iron Age, fortified sites known as hillforts ('castros' in Galician language) and *oppida* dominate the archaeological record of NW Iberia (Parcero Oubiña and Cobas Fernández, 2004; González Ruibal, 2006, 2007). To date, 147 hillforts have been excavated out of an estimated total of between 3000 and 4500 (Teira Brión and Abad Vidal, 2012) (Fig. 1). There are very few known unfortified sites (Aboal Fernández et al., 2002; González Ruibal, 2005, 2007; Parga Castro et al., 2016) and there is virtually no funerary archaeology (Vilaseco Vázquez, 1999). More recently, some scholars consider a series of links have been established between the hillforts and part of the region's rock art (Santos Estévez, 2007).

The first summaries on the Iron Age chronology of NW Iberia

focused on pottery types (Almeida, 1974; Rey Castiñeira, 1991; Fernández Fernández, 2008) and the settlements themselves, associating their morphology with their location at a local level (Carballo Arceo, 2002; Parcero Oubiña, 2000). Absolute dates first appeared in 1971 (Martínez Fernández, 1971) while Carballo Arceo and Fábregas Valcarce (1991) proposed the first summary. Several compilations have recently appeared (Matos da Silva, 2008; Picón Platas, 2008; Villa Valdés, 2002; Jordá Pardo et al., 2009), although only the study by Jordá Pardo et al. (2009) applies Bayesian analysis to 388 samples from 69 sites, revealing that the occupation of the hillforts varied from site to site, depending on their phases of settlement and the abandonment of socio-economic cycles (Jordá Pardo et al., 2009: 91). These datings show that the hillforts were occupied between the 8th century BCE and 2nd century CE, and sporadically a few of them were-occupied during the Middle Ages and the modern age (Jordá Pardo et al., 2009: 96).

In this paper, we take into account information from 70 sites with 420 radiocarbon dates, although we only consider 345 of them as valid. It must be noted that the samples analysed in the region suffer from several methodological problems (Jordá Pardo et al., 2009). They come from a wide range of materials with a varying lifespan, as the acidity of the soil breaks down organic matter that is not carbonised, meaning the options are limited in terms of selecting datable material. For this reason, AMS dating is being increasingly applied, as this makes it

* Corresponding author.

E-mail addresses: pilar.prieto@usc.es (M.P. Prieto Martínez), M.Fernandez-Gotz@ed.ac.uk (M. Fernández-Götz), marco.garcia.quintela@usc.es (M.V. García Quintela), a.cesar.gonzalez-garcia@incipit.csic.es (A.C. González García).

<http://dx.doi.org/10.1016/j.jasrep.2017.10.010>

Received 16 June 2017; Received in revised form 24 September 2017; Accepted 7 October 2017

Available online 06 November 2017

2352-409X/ © 2017 Elsevier Ltd. All rights reserved.

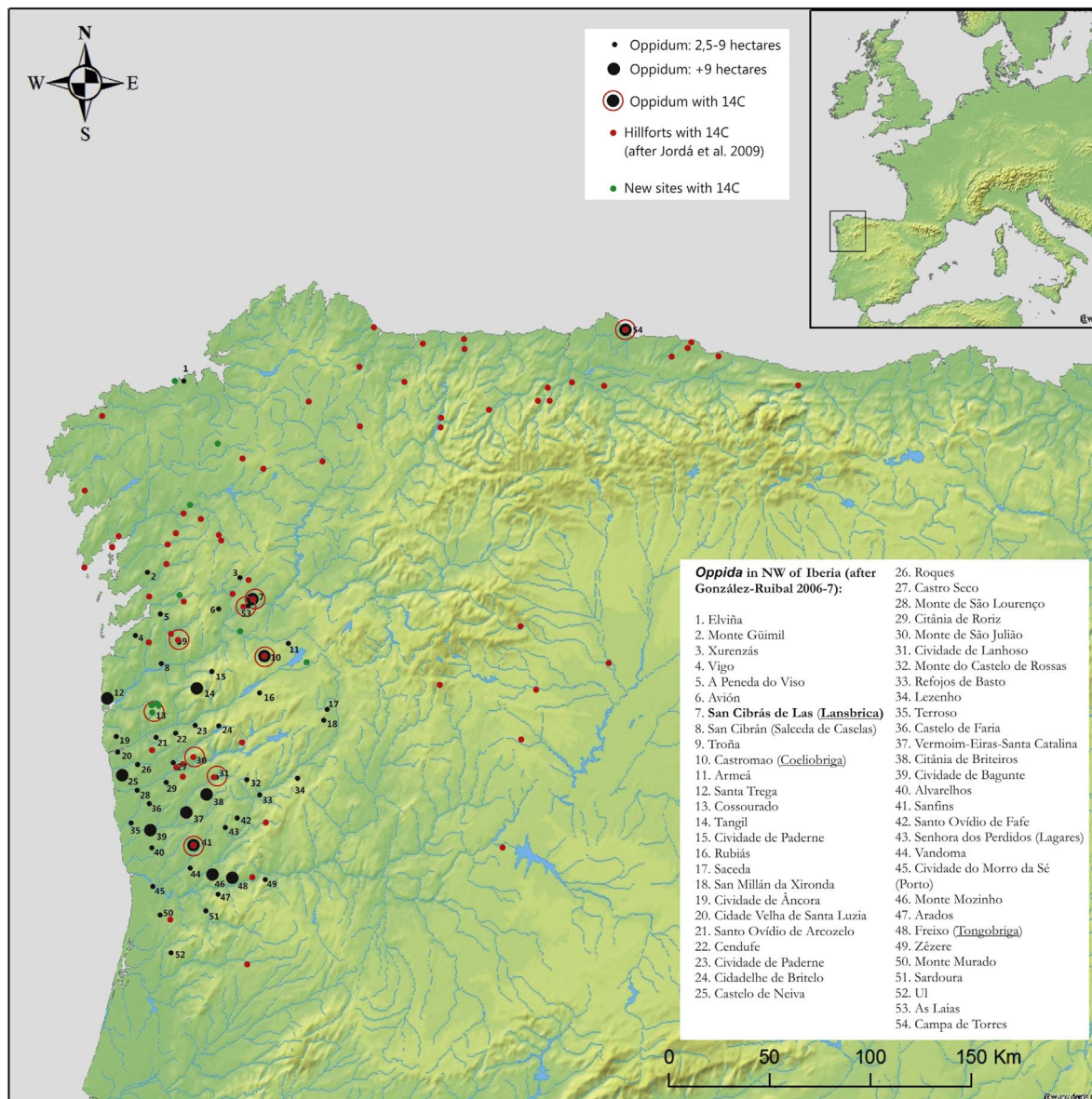


Fig. 1. Map showing the location of the hillfort sites that have so far been dated in the Iberian Peninsula (authors, based on González Ruibal 2006; Jordá Pardo et al., 2009; Aboal Fernández et al., 2005; Matos da Silva, 2008; Cano Pan and Gómez Filgueiras de Brage, 2010). The map also includes all of the *oppida* that are dated and undated.

possible to use very small samples. There is also a relatively high number of invalid samples: datings from the Gakushuin laboratory; a standard deviation of more than 100; a lack of BP data, although the calibrated date is provided; and no description of the context (Carballo Arceo and Fábregas Valcarce, 1991; Castro Martínez et al., 1996; Calo Lourido, 2015). Otherwise, the number of datings per site varies between 1 and 51, and there are only more than 11 datings in 12 sites, led by the Citania de San Julião (51 datings), and followed by San Cibrán de Las (25) (see Supplementary data, Tables 2 and 3).

The so-called *oppida* appeared at the end of the Iron Age in Galicia and the north of Portugal as an evolved form of ‘castros’. *Oppida* are considered as being fortified settlements covering more than 2.5 ha, with some reaching an area of as much as 25 ha (González Ruibal, 2006, 2007: 336, fig.4.44). Many researchers have interpreted their size and more orderly layout as a sign of Roman influence in the region (e.g. Almeida, 1984: 37–8; de la Peña Santos, 1992: 386–7; Calo Lourido, 1993: 51; Queiroga, 2003: 32–3), a hypothesis that is supported by findings of material culture dating from between the time of Augustus and the Flavians (c. 20 BCE–90 CE). sometimes corresponding to the last phases of occupation of the considered ‘castro’.

However, it has recently been proposed that the *oppida* developed on a local scale (Parcero, 2002; González Ruibal, 2006), as their main period of development occurred during the first century BCE, i.e. prior to the Roman conquest of the region that was completed around 26 BCE. González Ruibal (2006: 318–328) presents some arguments that justify this earlier chronology: the existence of levels of occupation from before the time of Emperor Augustus, or the presence of imported Roman objects prior to the conquest, together with Punic and Iberian materials. Therefore, at least some of the *oppida* are interpreted as a result of a transformation due to endogenous social processes from the Iron Age that occurred before the Roman invasion, although there are others that appeared after the arrival of the Romans.

However, there are virtually no radiocarbon samples or analyses for the *oppida*, as the information we have on them comes from excavations carried out many years ago. Out of the 54 *oppida* that are known, only 9 have been dated by ¹⁴C, including San Cibrán de Las. The radiocarbon datings we present in this paper allow us to contextualise the results for San Cibrán de Las, by carrying out a Bayesian analysis to distinguish its phases of occupation.

Download English Version:

<https://daneshyari.com/en/article/7445236>

Download Persian Version:

<https://daneshyari.com/article/7445236>

[Daneshyari.com](https://daneshyari.com)