



Contents lists available at ScienceDirect

Quaternary International

journal homepage: [www.elsevier.com/locate/quaint](http://www.elsevier.com/locate/quaint)

## The Middle to Upper Paleolithic transition in La Güelga cave (Asturias, Northern Spain)

Mario Menéndez <sup>a,\*</sup>, David Álvarez-Alonso <sup>a</sup>, María de Andrés-Herrero <sup>b,c</sup>, Pilar Carral <sup>d</sup>, Eduardo García-Sánchez <sup>a</sup>, Jesús F. Jordá Pardo <sup>a</sup>, José M. Quesada <sup>a</sup>, Julio Rojo <sup>a</sup>

<sup>a</sup> Department of Prehistory & Archaeology, Universidad Nacional de Educación a Distancia (UNED), Ciudad Universitaria, Paseo Senda del Rey 7, E-28040, Madrid, Spain

<sup>b</sup> Neanderthal Museum, Talstr. 300, 40822, Mettmann, Germany

<sup>c</sup> University of Cologne, Institute of Prehistoric Archaeology, Albertus-Magnus-Platz, 50923, Cologne, Germany

<sup>d</sup> Department of Geology & Geochemistry, UAM, Campus de Cantoblanco, E-28049, Madrid, Spain

### ARTICLE INFO

#### Article history:

Received 22 December 2015

Received in revised form

28 August 2017

Accepted 29 August 2017

Available online xxx

#### Keywords:

Aurignacian  
Châtelperronian  
Chronology  
Geoarchaeology  
Interstratification  
Mousterian

### ABSTRACT

La Güelga cave is located at the bottom of a mountain valley in the Eastern part of Asturias (Northern Spain), 186 m above sea level and 15 km far away from the coast. It currently comprises a group of caves that were occupied during the Middle and Upper Paleolithic periods (MP and UP respectively). In recent years, we have studied the levels of La Güelga cave –D Zone– proposing a sequence for the MP/UP transition: Mousterian–Aurignacian–Châtelperronian, which we review in this paper after a detailed analysis of the chronostratigraphy. We also provide new radiocarbon dates for the Mousterian, Aurignacian and Châtelperronian levels. Finally, the geoarchaeology, taphonomy, archaeological data, and chronology suggest that the interstratification –initially identified on the basis of stratigraphic observations during excavation– cannot be maintained. In any case, the stratigraphy of the internal D Zone of La Güelga cave is one of the most interesting from the Cantabrian region for analyzing the last phases of the Mousterian and the rise of the Aurignacian in the North of the Peninsula.

© 2017 Elsevier Ltd and INQUA. All rights reserved.

### 1. Introduction

The end of the Neanderthal settling and the first human settlements by anatomic modern human groups (HAM) has been the focus, in recent decades, of one of the greatest debates in European archaeology; and of the evolutionary process of our human species in this continent. The southernmost regions of Europe register the last human settlements of Neanderthal groups (Higham et al., 2014), for this reason, the identification of when and how the process of substitution and replacement of a species for another took place has been one of the main challenges for researchers for some decades (Cabrera, 1993; Maroto et al., 2005). The North of the Iberian Peninsula (specially the Cantabrian region), due to its

richness in the Paleolithic archaeological record and to the existence of Mousterian and Aurignacian evidence –dated in the 1980s onwards within a very narrow chronological range (ca. 40 Ka) (Bischoff et al., 1989; Cabrera and Bischoff, 1989; Cabrera, 1993, Cabrera et al., 2005)–, has been in recent decades one of the most interesting seats for analyzing the process of transition between the Middle and the Upper Paleolithic (Maroto et al., 2005, 2012).

On the other hand, the identification of different evidences and levels along the North of the Peninsula, which have been classified as belonging to the Châtelperronian technocomplex –being the most important ones Cueva Morín (level 10) or Labeko Koba (level IX) (Maíllo-Fernández, 2005; Arrizabalaga and Altuna, 2000) and more recently, Aranbaltza (Ríos-Garaizar et al., 2015)– have generated, for the last several years, an intense debate concerning the cultural allocation, the chronological precision (radiometric) and the chronostratigraphy of these Cantabrian transition sequences, in the framework of the research of the Middle/Upper Paleolithic transition in this region (Andrés-Herrero, 2009; Andrés-Herrero and Arrizabalaga, 2014; Cabrera and Bernodo de Quriós, 1996, 2001, 2002, 2004; Camps, 2006; Maíllo-Fernández, 2007; Maroto

\* Corresponding author.

E-mail addresses: [mmenendez@geo.uned.es](mailto:mmenendez@geo.uned.es) (M. Menéndez), [dalvarez@gijon.uned.es](mailto:dalvarez@gijon.uned.es) (D. Álvarez-Alonso), [mdeandres@neanderthal.de](mailto:mdeandres@neanderthal.de) (M. de Andrés-Herrero), [pilar.carral@uam.es](mailto:pilar.carral@uam.es) (P. Carral), [egarciasmail@gmail.com](mailto:egarciasmail@gmail.com) (E. García-Sánchez), [jjorda@geo.uned.es](mailto:jjorda@geo.uned.es) (J.F. Jordá Pardo), [jmquesada@geo.uned.es](mailto:jmquesada@geo.uned.es) (J.M. Quesada), [juliorojo@juliorojo.jazztel.es](mailto:juliorojo@juliorojo.jazztel.es) (J. Rojo).

et al., 1996). This technocomplex was conventionally related to the Neanderthals (Hublin et al., 2012), a further reason why it represents an even more controversial and contested context; even though, in the Cantabrian region no human remains related to any of the aforementioned discussed levels have been recorded.

This debate has only started to be exceeded following the recent implementation of new radiometric analyses (Higham, 2011; Higham et al., 2014; Wood et al., 2014, 2016) and the geoarchaeological revision of some of the archaeological sequences which have been at the center of the debate during the last decade.

This is the point where La Güelga cave –a site with a rich sequence from the Middle and Upper Paleolithic–has played an important role on the debate about the transition from the Middle to the Upper Paleolithic in the North of the Peninsula. It is due to the existence of Mousterian levels in this site –infracent to the Aurignacian levels– which were also sealed by remains that were assigned to the Châtelperronian following the identification of some guiding fossils highly characteristic from this period (Châtelperron points) (Menéndez et al., 2005, 2006a, b; Quesada and Menéndez, 2009). These pieces have been documented not only at other Cantabrian sites such as La Viña, where they appear in a Mousterian context without discussion (Fortea, 1999; Santamaría Álvarez, 2012) but also in several contexts defined as Châtelperronian, such as Morín, Aranbaltza or Labeko Koba (Arrizabalaga, 2000, 2005; Arrizabalaga and Altuna, 2000; Arrizabalaga and Iriarte-Chiapusso, 2006; Maíllo-Fernández, 2005, 2007, 2008; Ríos-Garaizar, 2008, 2012; Ríos-Garaizar et al., 2012); this is one of the reasons why we have been talking more about a Mousterian with Châtelperron points –placed at the final moments of the Middle Paleolithic– than about a Châtelperronian (Maroto et al., 2005). This latter remark can be interesting for assessing the context to which levels 1 and 2 of La Güelga could be connected.

On the other hand, this type of interstratifications between industries belonging to the Aurignacian and Châtelperronian technocomplexes have served during the last decades to support the notion of a presumed cohabitation or coexistence between Neanderthals and Anatomically Modern Humans (Gravina et al., 2005; Mellars et al., 2007), a reason for the debate to gain further interest.

In the case of La Güelga, even though at first –just as it is shown in previous publications (Menéndez et al., 2005, 2006a, b; Quesada and Menéndez, 2009)– an interstratification was identified in the cultural sequence excavated in the Interior D-Zone (Châtelperronian-Aurignacian-Mousterian) bringing about the debate on the coexistence of both human species in the same space and at close chronologies. Recent geoarchaeological research –with a detailed and exhaustive revision of the sequence which was the subject of the discussion– together with new datings have dismissed this side of the issue and have finally closed the debate in what pertains to La Güelga cave (Jordá et al., 2013; Kehl et al., 2017; Menéndez et al., 2013, 2014).

On the other hand, this revision coincides with similar ones from sites such as Le Piage and Roc-de-Combe (Bordes, 2003) or El Pendo (Montes and Sanguino, 2001; Montes et al., 2005), which have rejected the proposal of interstratification for these transitional technocomplexes, already put into question years ago.

In this work, we present a synthesis on the different studies and works performed in the sequence of the D-Zone at La Güelga cave, which serves to put closure on the existing debate around the chronographic position of the Châtelperronian remains as identified in this site. In the following lines, there is a detailed exposition of the analyzed problematics, as well as the research that our team has developed in coordination with the Neanderthal Museum and the University of Cologne, which have finally refuted the interstratification initially posed for this site. In any case, and despite deeming secondary the chronostratigraphic position of levels 1 and

2 of the Interior D-Zone, it is clear the importance of the Mousterian-Aurignacian transitional sequence of La Güelga cave, as one of the most interesting from the North of the Peninsula, especially with respect to the Final Mousterian (Menéndez et al., 2014).

## 2. The site and its archaeological context

La Güelga cave is located in close proximity to Cangas de Onís (Asturias, Northern Spain), in the eastern part of the Asturian Massif or central zone of the Cantabrian Cordillera that corresponds with the Cantabrian zone of the Iberian Massif (Vera et al., 2004) (Fig. 1). The karstic complex of La Güelga is developed within the pre-Stephanian (Namurian) Upper Carboniferous Barcaliente formation. This formation is comprised of grey and black fetid limestone (micrites, microsparites and dolomicrites) (I.G.M.E, 1986). The cave mouth is located at the base of a cliff with a strong relief, at 182 m asl and at the bottom of a blind valley in which La Güelga or La Brava stream disappears into a subterranean karstic complex (Fig. 2).

The entrance of La Güelga cave morphologically resembles a large stony rock shelter in which the river incised its course. Successive phases of incision during karst phases have left traces on the walls of the cliff and the rock shelter, the uppermost of which is some 13 m above the present river bed. The Upper Pleistocene archaeological contents of the deposits in these terraces are variable (Menéndez et al., 2006a,b). The most significant of these is situated at 11 m above the current river level, lying on top of a chaotic deposit of large limestone blocks detached from the outcrop, and consisting of 2 m of sediment. At this level, there was an ancient entrance to the cave where the stream once flowed. The sediments that fill the cavity (Interior D-Zone) are presently connected to the ones located to the outside and on top of the terrace (Exterior D-Zone).

Around the current cave entrance, located in the lower terrace of the system (A and C Zones), were identified Solutrean and Magdalenian occupations (Fig. 3B); These two areas were excavated from 1989 to 2000 (García et al., 2004; Menéndez and Martínez Villa, 1992; Menéndez et al., 2004, 2006b).

In the 11 m terrace, the D-Zone contains archaeological levels defined as Early Aurignacian, Châtelperronian and Mousterian (Fig. 3A). Archaeological research in this area of the site began in 2000 and it was developed along 8 campaigns, until 2008; in 2012 the archaeological studies were completed with the performance of new datings and micromorphological analyses from the D-Zone sequence.

### 2.1. D-zone. Middle to upper palaeolithic transition archaeological sequence

The D-Zone is composed by two adjacent spaces, but dissimilar and with a different stratigraphic sequence. The first one is located outdoors (Exterior D-Zone) and the second one (Interior D-Zone) within a small cavity (ancient valley drain), which was completely colmated with sediments ranging the ceiling of the cavity, at the beginning of the fieldworks in 2000 (Fig. 4). As the research progressed, the excavation surface expanded, reaching until 6 m<sup>2</sup>, and established a sequence of 9 archaeological levels ranging 2 m deep with a still wider sequence pending for digging. At the top of the sequence a thick surface layer was removed and bioturbed (Layers S1 and S2), containing a large number of organic remains mixed with a heterogeneous lithic assemblage and some handmade ceramic fragments.

Under this surface layers, a not-bioturbed archaeological level is preserved (N1). The survey in this and subsequent levels identified

Download English Version:

<https://daneshyari.com/en/article/7449779>

Download Persian Version:

<https://daneshyari.com/article/7449779>

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