Summary. In 2011, an engraved limestone block was found in the cave of Arlanpe (Lemoa, northern Iberian Peninsula). One of the figures represented on it was identified as a schematic feminine representation similar to those of the Gönnersdorf-Lalinde style. The stratigraphical position of the block is not totally clear owing to severe disturbance in the Upper Pleistocene deposits located near the entrance sector of the cave. Nevertheless, the most probable stratigraphical correlation is with Level I, which has been dated to the beginning of the Middle Magdalenian. This finding extends the distribution range of this kind of representation to the northern Iberian Peninsula, where, up to now, only two other, less clear, Gönnersdorf-Lalinde style representations have been found. It also extends its chronological range, pushing it back to the beginning of the Middle Magdalenian. In this paper, we present the archaeological context of the engraved block, followed by a detailed description of technological and stylistic features. These data will be used to discuss the implication of this discovery for an understanding of the origins, expansion and diffusion of this kind of feminine representation across Europe.

INTRODUCTION

The representation of feminine figures in both parietal and portable art began during the Early Upper Palaeolithic (Conard 2009; White et al. 2012), and is one of the most common themes in European Upper Palaeolithic artistic expression. These representations are widespread across Europe, with a certain degree of variability in means of expression, style, context and significance. Such differences are more evident when comparing Initial and Middle Upper Palaeolithic female figurines (Willendorf style) with Late Upper Palaeolithic ones (Gönnersdorf-Lalinde style) (Gaudzinski and Jöris 2015).

The Gönnersdorf-Lalinde style figurines are characterized by several traits, such as the representation of profile silhouettes, with exaggerated buttocks, occasionally showing breasts,
and, when present, very schematic arms and heads. These figurines usually appear forming compositions of at least two figurines and are present in both parietal and portable art (Bourrillon 2009; Bourrillon et al. 2012; Bosinski et al. 2001; Delluc and Delluc 1995). This style of feminine representation is commonly associated with the Late Magdalenian, and is present basically only in France and Germany. After a period, during the Middle Magdalenian, when a sort of stylistic unity was observed in the Franco-Cantabrian region, the scarcity of this kind of representation in the Cantabrian region, and by extension in all of the Iberian Peninsula, has been interpreted as part of a process of cultural differentiation between the Magdalenian on either side of the Pyrenees (Fritz et al. 2007).

The particular spatial distribution of Gönnersdorf-Lalinde representations has long been related to the definitive recolonization process that started in France and extended towards the northern plains, already free from the influence of ice sheets (Jochim et al. 1999; Terberger and Street 2002; Demars 2008). The dispersion and persistence of these symbols have been related to the need by ‘pioneering’ populations to maintain social networks with the original territories (Gaudzinski and Jöris 2015).

In this paper, new evidence for these types of engravings is presented from Arlanpe Cave (eastern Cantabrian region). A limestone block with one clear feminine engraving and two other probable feminine representations, and its association with Middle Magdalenian occupations in the cave, introduce new elements of discussion about the chronology and geographical origins of these types of representations. It also serves as a basis for discussion about the dynamics of cultural exchanges and contacts between south-west France and the Cantabrian region during the Middle and Upper Magdalenian. The site’s function, combining the information from lithic and faunal assemblages with the information derived from the engraved block, will also be assessed. This will be set in relation to the existence of ritualized spaces in the Cantabrian Magdalenian (Arias 2009) in order to give some insights into the function and symbolic meaning of these types of feminine representations in this particular context.

SITE LOCATION AND DESCRIPTION

The cave site of Arlanpe (UTM coordinates: 30T 519254, 4782262, 204 m.s.l.) is located on the north-west slopes of the Aramotz massif, 15 km from Bilbao, the capital city of the Basque region of Bizkaia, in the north of the Iberian Peninsula (Fig. 1). The landscape around the cave is very mountainous, except on the valley floors of the Arratia and the Ibaizabal rivers. The natural routes created by these valleys connect the current coast with the mountain passes that lead to the Alavese Plateau and the Upper Ebro Valley. Thus, Arlanpe is located in the centre of one of the major Palaeolithic communication routes in the eastern Cantabrian region. This area itself acted, with varying intensity throughout the Palaeolithic, as a crossroad between Continental Europe and the Iberian Peninsula (Arrizabalaga 2007).

The cave itself opens in the Albian limestone; it is elongated in plan with three wider spaces (Fig. 2) (maximum dimension 25 x 6 m). The site was discovered in 1963 but systematic excavation and research only started in 2006. The archaeological work has revealed a complex stratigraphy containing evidence of Late Roman (Gutiérrez Cuenca et al. 2012), Bronze Age, Middle Magdalenian, Late Upper Solutrean (Rios-Garaizar et al. 2013), Gravettian and Early Middle Palaeolithic (Rios-Garaizar et al. 2011) levels.
DESCRIPTION OF THE ENGRAVED BLOCK

The block was initially analysed using the classic system of describing engravings (Fritz and Tosello 2007). High quality photos and copies were made using image processing software. Then a high resolution 3D scan was made to obtain a precise digital model of the figure using a NextEngine 3D laser scanner housed at the CENIEH laboratory. The parameters of the scanning were: 400 points/IN² per second, error: 0.005\(^\prime\); visual field 3 x 5\(^\prime\). Each block face was scanned at least ten times to avoid gaps. NextEngine © software was used to align the different scans without any simplification or interpolation. The resulting mesh was combined with a RGB photo to create a model. This was analysed with 3D Resharper software to obtain transverse and longitudinal sections. The model was also used to obtain a three-dimensional perspective of the block for a better understanding of its position and the relationship between the engravings. MeshLab software was used to visualize the model and create ortho-photographs (Fig. 3).

The engraved block is a parallelepipedic fragment of limestone with two wide and long parallel sides, two narrow and long laterals, and two narrow and short extremities. The larger sides present quite regular and flat surfaces, as does one of the long laterals. The rest of the laterals are irregular. On the limestone surface, rudist fossils, parallel cracks and thin calcite
Figure 2
Plan of Arlanpe Cave, with the position where the engraved block was recovered marked with a star (BURNIA espeleologi taldea, modified by J. Rios-Garaizar).
crusts can be observed. The maximum dimensions of the block are 78 x 35 x 19 cm, with a weight around 60–70 kg. The engravings are located on one of the wide sides (Side A) and on the regular long and narrow side (Side B) (Fig. 4).

**Side A**

Side A has a regular surface about 70 cm long and 38 cm wide. Several parallel cracks run across the surface. A figure formed by several engraved lines can be observed (A1). It occupies a surface of 34.5 x 20 cm. Two of the lines are curved with a sub-parallel disposition, creating a fusiform figure, wider in the middle part, and with the concavity on the right side. The curved line on the right is crossed perpendicularly, in the lower part, by a shorter, sinuous, line. Two similar traces, in this case curved, are situated parallel in the upper part, one of them intersecting the main tracing on the left. This combination of engravings forms a single representation, probably figurative. Beside this composition two more sub-parallel lines (A2), of smaller size, have been traced on the upper part of Side A.

**Side B**

Side B is regular in surface, about 70 cm long and 19 cm wide. Three different representations can be individualized. The most interesting one is situated on the upper part adjacent to the right side (B1). The figure, 24.5 cm long, is the result of two curved lines forming a fusiform figure (Fig. 5). The line at the back is continuous and forms an ample curve which represents a feminine buttock. The line located at the front intersects the previous one in the upper part and has two straight sections which join in an open angle, more or less in the middle, representing the waist and the contact between the leg and the torso (Fig. 5: A). Right in the intersection between these two lines, another, shorter, one (4.6 cm) was engraved, and below this line, in parallel, a faint tracing was engraved (Fig. 5: D). These two lines represent the arms. In the upper part of the figure, two small traces, partially erased by an ancient fracture, represent a schematic head (Fig. 5: B). The legs are represented by two small traces which emerge minimally on Side A of the block (Fig. 5: C).
Figure 4
Sides A and B (photo and copy) (D. Garate).
The second figure (B2) is located beside the first one, along its left side. The tracings are shallow and almost imperceptible. It is composed of several irregular lines, almost straight in delineation. Three of them seem to create a discontinuous line. Another two have a similar direction and form a slight curved line; the shorter one can be traced perpendicularly towards the other figure.

The last figure (B3) was made near the bottom of Side B. It is composed of a 15.5 cm long, curved continuous line (concavity on the right), opposed to a sub-parallel line formed by two tracings. The position of these lines creates a fusiform figure.

**Interpretation of the figures**

The different figures traced on the limestone block from Arlanpe Cave share some common characteristics. They are composed of pairs of sub-parallel curved lines, most of them (except B2) created by deep tracings, and some of them (A1, B1, B2) with transverse traces (simple – B2, or double – A1, B1). Three of them (A1, B1, B3) also create fusiform figures. Among these figures, the most complete and detailed one is B1. In this case, the conventions (fusiform silhouette, V-marked waist joint, reduced breast, pronounced buttocks) fit the graphic characteristics of the Schematic Feminine Figures (FFS, *Figures Féminines Schématiques*; Delluc and Delluc 1995) which are typical in the western European Magdalenian. The same
conventions can be observed at various sites including those of Lalinde (France) and Gönnersdorf (Germany) (Bourrillon 2009; Bourrillon et al. 2012; Bosinski et al. 2001; Delluc and Delluc 1995) (Fig. 6). The representation of parallel arms, with no clear perspective, and the schematic head are less common, though present, in these kinds of engravings.

The other figures, especially A1 and B3, can be assimilated within the same ideographic concept, but they are of a lower definition and have a lesser degree of detail, which hinders an outright interpretation. However, the association in the same block of a clear FFS and of less clear fusiform figures, close to the FFS concept, suggests that we can probably interpret the engravings on the Arlanpe block as a composition of anthropomorphic depictions, some of which are feminine.

ARCHAEOLOGICAL CONTEXT

Stratigraphy of the entrance sector

Arlanpe Cave has been excavated in three different sectors (Fig. 2). The entrance sector, where the block was found, is near the actual entrance of the cave and presents a complex stratigraphical sequence (Fig. 7). It is characterized by a sedimentary hiatus, erosion, animal burrowing and human activity. Seven main episodes can be distinguished:

![Figure 6](image_url)

Examples of Schematic Feminine Figures (FFS). a. Les Combarelles (C. Archambeau); b. Lalinde (A. Roussot); c. Magdeleine-la-Plaine (E. Ladier); d. Fronsac (B. and G. Delluc); e. and f. Gönnersdorf (G. Bosinski); g. Andernach (G. Bosinski); h. Hohlenstein-Bärenhole (G. Bosinski).
1. Cave infilling with yellow-orange sandy endokarstic sediments, totally sterile at the base (Level VIII) but with some evidence of human activity above it (Level VII). The upper part of this level is partially encrusted with carbonate calcium. This sequence shows traces of erosion caused by water.

2. Greenish-brown sediment in which charcoal and land snails are present. It represents the first intense episode of human occupation of the cave, with many lithic and faunal remains (Level VI). This level can be attributed to the Early Middle Palaeolithic (EMP).

3. Yellow-orange sandy sediments. Two intact levels have been identified. The lowest one (Level V) is almost sterile archaeologically and in its upper part stalagmite crust fragments are very abundant. The upper level (Level IV) has yielded more archaeological material and can also be attributed to the EMP. Levels IV–V have been used by burrowing animals (probably badgers) to make tunnels, owing to their more compacted nature. These tunnels have collapsed and were finally filled by an admixture of materials from the upper levels (Level II – Solutrean) together with original material from these levels. The careful excavation process has allowed the identification and isolation of these tunnels from the rest of the archaeological material found in situ.

4. Dark grey sediments with many limestone slab fragments. This level shows strong evidence of anthropogenic activities such as fireplaces, consumed faunal remains and lithic artefacts (Rios-Garaizar et al. 2008; 2013). It has been dated to the Late Upper Solutrean (US), c.17,000 BP. The level is partially affected by underlying burrowing, deformation caused by collapses, and by the excavation of ceremonial pits during Late Roman occupations. Two levels have been identified in this episode; Level II has been assigned to the intact sediments, while Level III is composed of sediments displaced by burrowing and burrow collapse.
5. The sediments situated above Level II are pale brown in colour and contain fewer limestone fragments (Level I). The horizontal extension of this level has been heavily affected by the excavation of a ceremonial pit (see below) and probably by burrowing. Nevertheless, intact patches of unmodified sediment were excavated. Archaeological remains are less abundant than in the previous level. The dating and archaeological composition, which will be discussed later, point to a Middle Magdalenian (MM) attribution.

6. The exposed Palaeolithic surface was probably used during the Late Bronze Age to deposit human bodies as part of a funerary ritual. In the central area of the cave, there is evidence of a small mound that could have a funerary significance. The cave was then used during the Late Roman period for ritual activity. These rituals comprised the excavation of small ceremonial pits (Fosa N and Fosa S), where different kinds of goods were offered (Gutiérrez Cuenca et al. 2012).

7. The uppermost level consists of mixed sediments belonging to cave entrance dismantlement, burrowing activity and illegal excavations.

Context of the engraved block

The block was first discovered during the 2008 season, in the eastern section of the entrance sector (within subsquares K21.1–2 and K21.3–4). The exposed surface was then almost completely covered by mixed sediments corresponding to a filled in ceremonial pit dating back to the Late Roman period (Fig. 8: A). Only the southernmost part of the block was covered by intact sediments corresponding to Level I. At this time the engraved surfaces were not exposed, so the importance of this limestone block was not recognized and it was thus left in place. In the 2010 season, the sequence on the eastern profile was cleared and defined. Owing to the proximity of the cave wall it was quite difficult to identify the different levels but we were able to recognize Level II sediments (US) and Level I-like sediments above them (Figure 8: B–D). In the photos, the relative position of the block can be easily appreciated, as well as the partial covering of Level I sediments (Figure 8: B). Between 2010 and 2011, the eastern section partially collapsed so we decided to open two more subsquares (K21.2 and K21.4), excavating the small volume of sediment situated between the 2008 excavation and the cave wall. This excavation allowed both the extraction and the study of the relative position of the block. It was leaning against the cave wall and was partially covered by Level I and mixed sediments. At the moment of extraction the main engraved figure (B1) was noticed and was immediately photographically recorded.

The block was resting, almost vertically, on the long and narrow side without engravings. The wide side with decoration (Side A) was leaning against the cave wall, with the intervening deposits consisting of mostly mixed sediments. The decorated long and narrow side (Side B) was positioned on the top, slightly inclined towards the south, with the end with the complete FFS (B1) positioned higher than the end with the schematic fusiform depiction (B3), which was partially covered by Level I sediments. The base of the block was embedded in Level IV, Level II and burrow sediments.

Our interpretation is that the block was found in a modified in situ context. Probably it was originally in a vertical position, but the excavation of the Roman pit and the deformation caused by burrow collapses made it lean, also deforming the sediments covering the block. This fact casts some doubt on the exact stratigraphical position of the block and the engravings. Nevertheless, given the way it was found, and the stratigraphy of this excavation sector, the most
probable attribution is to Level I. Following this hypothesis, the block was already in place when Magdalenian people occupied the cave and made engravings on two of its exposed surfaces.

**Level I radiocarbon dating**

Two herbivore bone samples recovered from Level I were dated by $^{14}$C AMS. They come from the same subsquare and excavation pit, with a difference in depth of 3 cm, Beta-316472 being above Beta-287336. Calibrated results (Table 1) show no overlap at 2 sigma deviation, suggesting a long time formation. Nevertheless, both dates can be attributed to the local Early Middle Magdalenian. Similar dates have been recently obtained in Santimamiñe (López Quintana and Guenaga Lizaso 2011), Linar (Rasines *et al*. 2009), Ekain (Altuna *et al*. 2010) and Mirón Caves (Straus *et al*. 2011).

**Archaeological assemblage**

The Level I lithic assemblage is composed of 470 pieces. Of these, 246 pieces are fragments smaller than 10 mm, natural fragments and formless fragments. The remaining 224
comprise blades, flakes, cores and by-products (Table 2). The main raw material used is flint (88 per cent) imported from different locations situated between 30 and 50 km away from the site (Flysch, Treviño and Loza varieties). Other local raw materials, such as sandstone or mudstone, were used for specific purposes such as hard hammers, or for obtaining large flakes.

The flint production at the site is characterized by blade technology. Four blade categories have been identified with regard to blank width. The most abundant are bladelets of around 4 mm in width. These products correspond to the negatives of bladelet cores recovered at the site. The proportion of bladelets to bladelet cores suggests that, although some production occurred at the site, the bulk of bladelets was produced elsewhere. This becomes more evident when studying the larger blades, which were usually transformed into formal tools, suggesting that they were introduced into the site as personal gear.

Formally retouched tools (Table 3) consist of backed bladelets, burins, borers (some of which are microlithic), notches and raclettes. The backed bladelets show simple or double backing with steep retouch. Blanks selected to make armatures were mainly straight and narrow bladelets (3–4 mm). The presence of impact fractures on some of these pieces indicates that they were used in composite hunting weapons. Burins are thick, usually displaying multiple burin facets and crest-like preparations. Some of them probably acted as bladelet cores. Aside from retouched tools, there are also some non-retouched macro-tools that were used in knapping and other activities, such as retouchers or ochre grinders.

The faunal assemblage from Level I is dominated by mountain goat (*Capra pyrenaica*) and chamois (*Rupicapra pyrenaica*), but other species such as red deer (*Cervus elaphus*), wolf and bear are also present (Table 4) (Arceredillo-Alonso et al. 2013).
### TABLE 3

Typological classification of Level 1*

<table>
<thead>
<tr>
<th></th>
<th>Sandstone</th>
<th>Limonite</th>
<th>Mudstone</th>
<th>Silex</th>
<th>Σ</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. Borer</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>24. ‘Bec’</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>26. Micro-borer</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>28. Asymmetrical dihedral burin</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>29. Angle dihedral burin</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>30. Angle burin on broken blade</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>34. Burin on straight retouched truncation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>58. Backed blade (total backing)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>74. Notch</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>78. Raclette</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>78b. Raclette (atypical)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>85. Backed bladelet</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>87. Denticulate backed bladelet</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>89. Notched bladelet</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>90. Dufour bladelet</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>92. Diverse</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>92. Fragment of backed blade</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>92. Retouched tool</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>92. Flake with retouch in ventral surface</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>92. Fragment with abrupt retouch</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Macrolithic tools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaped pebble</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Hard hammer</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Retoucher</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Used slab</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>41</td>
<td>50</td>
</tr>
</tbody>
</table>

* Following Sonneville-Bordes and Perot 1956.

### TABLE 4

Number of remains (NR) and minimum number of individuals (MNI) of the faunal remains found in Level I of Arlanpe Cave

<table>
<thead>
<tr>
<th>Taxa</th>
<th>NR</th>
<th>MNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artiodactyla indet.</td>
<td>33</td>
<td>–</td>
</tr>
<tr>
<td>Cervidae indet.</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td><em>Cervus elaphus</em></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Caprinae indet.</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Rupicapra pyrenaica</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Capra pyrenaica</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Herbivores</td>
<td>53</td>
<td>6</td>
</tr>
<tr>
<td>Carnivora indet.</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td><em>Canis lupus</em></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Felidae indet.</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ursus sp.</td>
<td>1</td>
<td>1*</td>
</tr>
<tr>
<td>Carnivores</td>
<td>10</td>
<td>2+1*</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>63</td>
<td>8+1*</td>
</tr>
</tbody>
</table>

* Individuals based on decidual dentition
Arlanpe Level I can be interpreted as the result of various short occupations that may have been infrequent, based on the dates obtained from this level. During these occupations, activities related to weapon replacement were carried out. The strategic position of the site with a good view over the confluence of two rivers (Arratia and Ibaizabal), as well as its location at the entrance of a calcareous gorge, probably favoured its use for controlling prey movements. Compared to the occupations in Level II (Final Upper Solutrean), where some signs of stability were recognized (Ríos-Garaizar et al. 2013), Level I seems basically to fulfil the function of a hunting camp on the basis of the lithic and faunal assemblages.

DISCUSSION

Chrono-cultural attribution

The suggested stratigraphical association between the block and Level I, although not definitive, is probably the most parsimonious explanation based on the available evidence. Level I represents a succession of ephemeral hunting camps, where limited activities were carried out. The dates of this level situate it in an early phase of the Middle Magdalenian. The lithic assemblage recovered in Level I is not very diagnostic, but the presence of abundant backed bladelets, the large proportion of burins compared with endscrapers, and the characteristics of blade production are quite similar to other regional Middle Magdalenian sites such as Ekain VII (Cazals and Langlais 2005), Santimamiñe levels Csn-Camr (López Quintana and Guenaga Lizaso 2011) and Mirón Cave (Straus and González Morales 2012).

The chronology of such kinds of feminine representations in Europe extends from c.13,680 ± 130 BP (Magdeleine-la-Plaine, France) to 11,700 ± 90 BP (Petersfels, Germany) (Bourrillon et al. 2012; Bosinski et al. 2001; Ladier et al. 2005), that is, between the end of the Middle Magdalenian and the Late Magdalenian. Unfortunately, most of these representations lack precise dating and their chronology has been estimated by stylistic comparison. Some of them, from southern France, can also be attributed to the Middle Magdalenian, as is the case for Arlanpe Level I. This is also true of those from Villars (Dordogne), Gourdan and Mas-d’Azil (Pyrenees). The engraved FFS from Gourdan has been attributed to the Middle or Upper Magdalenian by stylistic comparison (Fritz et al. 1993), and the associated archaeological context has yielded two dates between 14,400 and 13,200 BP (Bertrand et al. 2003; Jaubert 1995), that is, within the temporal range of the Middle Magdalenian. At Mas-d’Azil, FFS have been recovered from a Middle Magdalenian layer without direct dating, but archaeological layers with the same cultural attribution excavated in the Salle Piette and in the Galerie des silex yielded 14C dates between 13,640 and 13,200 BP (Alteirac and Bahn 1982).

Contextual interpretation

The presence of this kind of representation in a site interpreted as a hunting camp may be difficult to explain. However, the low intensity of the use of this cave in the Magdalenian leaves plenty of room for multiple uses over a long period of time. The block was probably originally upright, with the images on Side B facing the entrance of the cave, and Side A orientated in the narrow space between the block and the cave wall. Despite the fact that no other evidence of symbolic activity has been identified at Arlanpe in the Magdalenian (possibly owing to the limited extent of the excavation), this probably belongs to some sort of ritual structure. The
presence of ritual structures in the Lower and Middle Magdalenian has recently been described in detail (Arias 2009). It seems that sometimes these occur in the deeper areas of caves where symbolic activities were carried out, for example La Garma A, Praile Aitz, Erberua and the recently described Etxeberri (Garate et al. 2012); while others took place closer to occupation areas, for example Erralla, El Juyo and the secondary burial at El Mirón (Straus et al. 2011). Some of these sites include upright stones (Erralla, Juyo, La Garma A) and on many of them there were anthropomorphous representations (Entrefoces, La Garma A, Juyo). In such levels, pigments and ornaments were also commonly present. In the case of Arlanpe Level I, ochre grinders and ochre fragments have been recovered close to the engraved block, but no ornaments or portable art are known. What seems different in the case of Arlanpe is the presence of objects, such as burins or backed bladelets, associated with everyday activities. Furthermore, regarding the faunal assemblage, there is nothing unusual or significant. The animals show a predominance of mountain species as would be expected from the environment surrounding the cave (cf. Erralla – Altuna and Mariezkurrena 1985).

Regional stylistic parallels

The only two known parallels for Arlanpe in the northern Iberian Peninsula are the figures from El Linar and Arenaza Caves (San Miguel and Muñoz 2002; Garate 2004). In these sites, unique schematic feminine representations (FFS) have been recognized. They show a fusiform torso, exaggeration of the buttocks, and the waist indicated by a V-like line, with no indication of the extremities or the head. Unlike Arlanpe, both figures are faint engravings on cave walls and are located far away from occupation areas (100 m in Linar, 250 m in Arenaza). None of these figures has been dated directly. Initial work in Linar Cave suggested that the human occupations were of Upper Magdalenian age (Moure 1971), but recent excavations in three different sectors, situated at c.20 m from the FFS engraving (Lasheras et al. 2005), suggest that the site was occupied during the Middle Magdalenian, with dates between c.15,800 and 14,000 BP (Rasines et al. 2009), and is also associated with portable art typical of the Middle Magdalenian (de las Heras et al. 2008). In the case of Arenaza, the excavations that were carried out in the 1970s and 1980s revealed a Late Magdalenian–Azilian sequence (Apellaniz 1985), but a recent revision of the lithic industry reveals that level VI has elements that link it to older phases of the Upper Magdalenian or even the Middle Magdalenian (Rios-Garaizar and San Emeterio 2012). In the cave of Ardales, located in the south of the Iberian Peninsula, several possible FFS have also been described (Ramos et al. 2002; Maura et al. 2009), but so far no concrete Upper Palaeolithic occupation context has been reported (Cantalejo and Espejo 2013).

Geographical dispersion of FFS among Europe

The distribution of sites with FFS representations extends from the northern Iberian Peninsula to the central European plains. Three main concentration areas can be distinguished, one in the Dordogne/Quercy/Pyrenean regions (France), and the other two in western and eastern Germany (Fig. 9). As mentioned previously, the older manifestations are found in the southern French area, probably beginning during the Middle Magdalenian, while in northern Europe these figures are associated with the Late Magdalenian occupations. In this sense, the attribution of the Arlanpe block to the Middle Magdalenian reinforces the idea of an origin for these kinds of images in south-western Europe and an ultimate expansion towards northern Europe at the end.
Figure 9
Sites in Europe with FFS. The doubtful figures (38, 43, 45, 46) are in grey. The circles represent the main regional aggregations. (Basemap: European Environment Agency, modified by R. Bourrillon.)
of the Magdalenian. This expansion would coincide roughly with the process of colonization of the central European plains at the end of the Last Glacial (Otte 1990; Jochim et al. 1999; Terberger and Street 2002; Demars 2006), which probably was made from French–Iberian refugia. It has also been proposed, from genetic evidence, that Cantabrian populations played a major role in the colonization of northern Europe (Torroni et al. 2001), but recent studies suggest a more cautious interpretation of this genetic evidence (García et al. 2011).

Thus, the apparent scarcity of FFS in the northern Iberian Peninsula is unexpected. This fact has been used to propose the existence of a stylistic frontier during the Upper Magdalenian between the Cantabrian region and south-western France (Fritz et al. 2007). The available data suggest that FFS originated during the Middle Magdalenian, and the discovery of the Arlanpe block, where three FFS (two of them less perceptible) were depicted probably in the Middle Magdalenian, reinforces the possibility that the symbol originated in the Franco-Cantabrian region during this period, and then dispersed from this macro-region towards north-central Europe during the Late Magdalenian. Many other lines of evidence speak about a certain unity of this macro-region during the Middle Magdalenian, such as the repetition of artistic representations (ie. Contour-découpé, Claviforms, Niaux-style bisons, etc. (Tosello 2003; Garate et al. 2012), of ornament types (Rivero and Álvarez-Fernández 2009), the distribution pattern of raw materials (Corchón et al. 2009), and the expansion of certain types of bone tools (i.e. fork-based antler points – Pétillon 2007).

CONCLUSIONS

The finding of the Arlanpe block, with engraved figurines, reinforces the presence of FFS in the northern Iberian Peninsula, although some doubtful examples were previously recognized, in El Linar and Arenaza Caves. One of the Arlanpe figures clearly fits the stylistic canon of Lalinde-Gönnersdorf representations, while another two are closely related to this canon and can thus be interpreted as probable FFS, with a further two being more difficult to interpret. In Arlanpe, the presence of this engraved block in a site interpreted as a hunting camp is difficult to explain, but is probably linked to the creation of some sort of ritualized space, as has been proposed for other examples from the Cantabrian region.

The block at Arlanpe also fills a gap in the distribution of FFS representations in south-western Europe, which was difficult to explain given the apparent unity, at least in symbolic-artistic manifestations, of the Franco-Cantabrian region during the Middle and Upper Magdalenian. The possible relationship of the Arlanpe block to the Middle Magdalenian levels of the site reinforces the idea that such images were initially developed in south-western Europe and later diffused to the north, following the colonization routes of the northern plains, already free of ice. This also opens new questions about the role of populations from the Cantabrian region in this recolonization process.

Finally, the presence of a clear Lalinde-Gönnersdorf type figure from an Early Middle Magdalenian context suggests that these kinds of manifestations, typical of the Upper Magdalenian, probably had an older origin than previously thought.

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