NOTICIARIO

Paintings in Atlantic Megalithic Art: Barnenez

Pinturas en el arte megalítico atlántico: Barnenez

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ABSTRACT

The use of technique is usually considered in European megalithic art as an indicator of the level of culture sophistication attained by a particular community. Traditionally, it was considered that only the Iberian Peninsula is home to painted dolmens. The analysis of chamber H of the Barnenez tumulus together with some information scattered over the continent, prove that painting was part of the graphic programs in the most archetypal Atlantic sites, such as Brittany. A highly rewarding panorama appears for European megalithic art with potential new readings. The most suitable method of detecting paintings and interpreting them in funerary contexts must be reviewed.

1. INTRODUCTION

Characterisation of Atlantic megalithic art as a set of carvings in burial contexts, with the sole exception of the north-east of the Iberian Peninsula, has become a commonplace in its technical definition (Shee 1981).

Over the last few years, the Universidad de Alcalá de Henares (UAH) team in the Iberian Peninsula, and Carrera and Fábregas’s team in the north-western, as well as occasional work on Portuguese and Spanish megaliths have proven that paintings were not only seen on the dolmens at Viseu. Findings in Galicia, Asturias, the Basque Country, Catalonia, inland, south-east and Andalusia have been adding evidence to the hypotheses

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that painting was part of the decoration of megaliths, amongst others.

The diffusion of painted graphics programs points to issues of varying importance. Among those we wish to examine in this short paper is the idea of carving as an expression of Atlantic art as opposed to paintings, which is an expression of Mediterranean art. We consider this to be an untenable dichotomy in view of the our currently available data (Bueno et al. 2008).

The old hypothesis splits the Iberian Peninsula into two – those areas related to expansion of the neolithic Spanish Levant area and those connected to the Atlantic area. Thus, this defines megalithic art as a coastal and Galician-Portuguese manifestation with a few sporadic and late sallies inland. This theory enforces to the concept of a barrier between painting and carving which, strangely enough, coincided with the political border with Portugal. Some evidence from recent years allowed dissent over some pronounced absence (Sanches 1997), and therefore, the last barrier between painting and carving was moved to lay between Galicia and Portugal (Bradley and Fàbregas 1999). Data on painting and carving in the interior of megaliths found in territories characterised by open-air carvings and paintings only started to make these solid barriers crumble (Bueno et al. 2009a; Bueno et al. 2009b).

The situation of megalithic art in Europe is not much different from that of the Iberian Peninsula. Paintings have not been acknowledged in European megaliths because the historiographical tradition denied their existence and specific methodology were not implemented to discover them. Some years ago, we suggested that the supposed absence of painting on European megaliths was as flawed as the supposed absence of paintings on megaliths from anywhere in the Iberian Peninsula but the north-west (Bueno and Balbin 2002: 611).

There were references to painting on German megaliths (Müller 1997), and French megaliths. The most typical were the black paintings associated with some “goddesses” of the hypogea of the Marne (Villes 1997). Data on red paint on megalithic uprights (Devignes 1996: 138; Devignes 1998a, b) and on stelae in the south of France has been recorded (Gutherz et al. 1998; Hasler 1998). The spread of megalithic art in the area may be wider, as suggested by the documented presence of colorants in recent archaeological excavations (Beyneix 2007). As with the Iberian Peninsula, there is schematic painting in natural shelters and caves with 1921 burials (Hameau 2003).

There are also findings in the British Isles, with Breuil and Macalister’s reference to pigment on the Loughcrew monument. Also, there is the possible painting on the Calve dolmen (O’Sullivan 2006: 667) or that currently being analysed by Scarre at the Dehus dolmen in Guernsey (personal comm.). Bradley et al. (2000: 54) in his study on incisions in decorations on megaliths in Orkney indicate a possibility that these were finished by painting, as happened in the Iberian Peninsula. Documentation from work with infrared rays on the link between incision and red paint on the Maes Howe dolmen is an overwhelming argument (Bradley et al. 2000: Fig. 11). More proof is yielded by the Orkneys where paintings have been found in dwelling sites, such as Skara Brae and Brodgar Ness (Card et al. 2007; Smith 2010).

However, it is true that Brittany, the area that defines the essence of Atlantic megalithic art, remained a stronghold of carvings. It contains the best-known examples used to establish the sequences of megalithic art in Europe. Our knowledge of some of these monuments leads us to suspect that painting can be found in Brittany. Thus, Gavrinis’ spectacular decoration of carved circular motifs seems to clearly show an evident chiaroscuro between the wide line engraving and the false low relief, which was probably white with raised areas painted in black. We do not deny that the troughs may have been covered with red paint, although the remains seen today must be analysed to rule out recent interventions (Cassen personal comm.). The relationship of this technique with examples from the south of the Iberian Peninsula from where we have analysed data from pictorial applications – dolmen 19 at Montefrío, the Bobadilla stela and the Gorafe stela (Bueno et al. 2009c), leads us to suspect that Gavrinis’ troughs were painted with black pigment and also red pigment. The Goërëm dolmen in Gavres (L’Helgouach 1970) whose layout as a passage at right-angles is a reminder of some of those documented in megalithic art in Huelva, also seems of interest.

Another monument where painting might be found is Barnenez. Apart from its impressive architecture, the known chronology places it as one of the oldest example of megalithic art in the world, and some of its chambers house important
carvings and sculptures (Giot 1987). The first data obtained from samples from Barnenez seem to us to be sufficiently significant to give this information (Fig. 1).

2. WORKING METHODOLOGY

Our team is developing documentations on megalithic art always using photography. To this end, we use several techniques based on complete respect for the supports. This means not using plastics or other elements for direct tracing which, in any case, are quite unnecessary.

A thorough visual analysis with lights(1) which provides initial evidence is complemented by a wide range of photographic techniques available these days. We take photographs with various lights and filters on the same image in order to maximise the chance of reading pigments and carvings. Experience in detecting painting and carving helps when performing this type of work.

(1) We combine led lights 9430 and 9440 Remote Area Lighting System Peli, with incandescent spotlights and screens of multidirectional fluorescent lamps. This is to intensify the direct light which is what helps us to see the painting, but it has to be combined with warmer tones, and so incandescent lamps are used.
for let us not forget that carvings, and especially paintings, may present severe problems for preservation.

The location of paintings is compared with analytical methods. Sometimes, we use a portable X-ray diffraction tube, as with the work at Menega (Bueno et al. 2009c). At other times, we have taken direct samples in order to provide an indisputable comparison for the presence of pigments. This system has been widely used in studying Palaeolithic art, and it enabled C14 dating from organic pigments in megalithic art (Carrera and Fábregas 2002).

Documentation of megalithic painting at Barnenez required irrefutable proof and so we resorted to direct sampling. We worked in chamber H, which has been closed since Giot’s archaeological excavations ended (Giot 1987: 43). Two different orthostates and several pigments were chosen: black for samples M1a1 and M2a2, and red for sample M3a2. Samples from neighbouring, undecorated areas were taken for comparison, one from each of the orthostates. To help with reading the position of the samples, they were grouped together as: M1, M2 and M3 as shown in figure 2. The sampling respected

Fig. 2. Barnenez (Brittany). Top: floor plan of the tumuli, with indication of the nomenclature for the various chambers (Giot 1987). Bottom: floor plan and elevation of monument H of the primary tumulus (Giot 1987), showing the position from where sampling was taken.
those basic rules for preserving the support. Each extraction was photographed and stored in sterile glass until analysed in the Science and Physicochemical Techniques Laboratory at the UNED.

A series of tests was used, starting with differentiating the components of the support. These were determined from the spectra obtained by Raman microspectroscopy, which confirms the main components of the substrate: α-quartz, albite and muscovite, all of which are typical in a rock like granite. The pigment samples emit intense fluorescent radiation when irradiated with the line at 632 nm from a laser which prevents the detection of Raman signals. Therefore, scanning electron microscopy was used together with X-ray energy dispersive spectrometry (SEM/EDX). The EDX spectrums show that samples 1 and 2 contain manganese, probably in the form of oxides, and sample 3 has iron, probably in the form of oxides or oxyhydroxides, components which are completely alien to those making up the support. Analysis is continuing to decide the composition of the manganese and iron compounds found in each of the pigments, and their proportions (Fig. 3).

3. PAINTINGS IN CHAMBER H OF THE TUMULUS OF BARNENEZ.

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Work by Giot’s team at Barnenez demonstrated the existence of a complex system of tumuli built on top of each other and the reuse of pieces. This led to the start of a less strict view of Atlantic constructions and how long they lasted (Fig. 4). Chamber H is part of the oldest tumulus on the site. It lies in the centre and is the most spectacular. It is the most highly decorated of all of them and has carvings and stelae (Giot 1987: 40). The architectural style, with a long corridor and chamber with ante-chamber, pose some reasonable questions on possible refurbishment (Laporte 2010), which is borne out by an analysis of the decoration.

We found black painting laid out in lines horizontal to the orthostates in the ante-chamber, particularly visible on its south side. A black horizontal line circles the lower third of the famous stela before the chamber. Inside the chamber, orthostat A, at the entrance, has black painting, while others orthostates have red lines, in addi-
tion to them all having carvings. There must have been more painting in the past than can be seen today. Red, zig-zag horizontal lines are clearly visible on several orthostates. Those on orthostates B and C are particularly recognisable. Firstly, because they display some continuity between each of the supports which proves an overall design following the same height. Secondly, because we suspect that some of them were painted over on more than one occasion. More specifically, this refers to orthostat C. Bright red in less parallel lines and in a somewhat wavy layout completes the wavy carvings seen on the left. A row of carvings is seen further below, this time above the zig-zag lines painted in orange-red tones. Sample 3 is taken from this one. The sequence of decoration on orthostat C shows wavy carvings completed with bright red painting, overlying a previous decoration of more orderly, angular paintings, from which we took samples (Fig. 5).

The carvings recognised by Giot’s (Giot 1987: 43) works, display a special technique that is not very common in Breton art, but is documented in Iberian sites. These are the wide, surface chip carvings which characterise the well-known U-shaped motifs on the monument. Evidence of this technique is found on decorated monuments in the north-west of Portugal, with the Portela de Pau dolmen 2 (Baptista 1997: 205) being one of the most outstanding ones in area. The same type of carving has been documented for monuments in the Tajo International Nature Reserve. In both cases we have defended the theory that their superficiality must have played a role associated with the painting, whether or not this is preser-

![Fig. 4. Current state of the Barnenez monument (Brittany). The oldest tumulus is the darkest one (photo by R. de Balbin).](image)

![Fig. 5. Carvings and paintings on orthostat C, Chamber H, Barnenez tumulus (Brittany). General view and detail with photographic description restored by several types of illumination (photos by R. de Balbin).](image)
At the time painting was performed, there would have been a considerable contrast in colour between the carved surface and the rest, thus constituting a “pictorial” mode of expression. Their fine state of preservation meant that the patina played a role in being able to observe motifs that would be lit by lamps similar to Palaeolithic ones. The presence of one in Anta de Coureleiros is an interesting finding and is very similar to those found in the Irish New Grange dolmen (Stout and Stout 2008: fig. 34).

The most famous piece is the widest one in the chamber; it contains the most varied motifs. It is rather too offset from the central axis to be an entrance orthostat and appears to pair more with the one on the north side. In fact, the wavy carvings on piece D follow the same height as those on C. The uncarved area on both pieces continues in black painting. It is not difficult to associate these with Iberian motifs of the same type: broken or curving lines repeated over the whole or part of the orthostat. We have suggested that these motifs resemble to ankle-length robes, in the same style as those on decorated plaques (Bueno y Balbín 1996; Bueno et al. 2005). Below, a rectangular motif painted with a black surround presents a large blot in the same colour on the south side. Both are overlaid by a saline crust. The rectangular motif very often appears in carvings on other megalithic monuments in Brittany, and is not out of place in the main inventory of this type of funerary art. Its relationship to possible human figures cannot be dismissed: in the same complex at Barnenez, dolmen J has a similar figure to which lines were added in the upper part, which researchers interpreted to be an idol. In fact, we plan to review the uprights in chambers J and A, as the similarity of their carvings puts forward the possibility of there being remains of paintings, which needs to be confirmed.

The presence of an axe with handle and an axe blade on orthostat A certainly associates decoration on this upright with that of the stela before the chamber. The stela presents a bow, but both display an intention to show human figures equipped with the same objects in the most important areas of the burial area: the entrance and the front area. This positioning is repeated in many Iberian and European megaliths (Bueno y Balbín 2002: 623) (Fig. 6).

4. INTEGRAL GRAPHICS PROGRAMS IN MEGALITHIC ART IN EUROPE

The results obtained from Barnenez, together with the review of the Goërem dolmen where we found black painting, were immediately notified to the relevant public authority. We thought it essential to take measures to preserve a part of cultural heritage where current lack of knowledge could cause irredeemable loss. In order to make an initial assessment, one of us (P. G.) found remains of red on one of the capstones of dolmen 1 at Saint-Michel in Carnac, red bands on one of the uprights in dolmen 3, and remains of black on one of the uprights of dolmen 2 in the same monument. At Petit, one of the orthostates has vertical, wavy motifs painted in red. This information must be assessed in greater detail, but they help to confirm that the absence of paint on dolmens in Brittany can be explained by the lack of research on this type of technique.

The spread of painting in European megalithic art will eventually be similar to that documented in the Iberian Peninsula over the last few years. This perspective adds to the opportunities to study complex programmes in which carvings, paintings and sculptures have varying significance. The discovery of painting at Barnenez connects the graphic systems of all Atlantic megaliths (Bueno y Balbín 2002). Such evidence of long-distance interaction adds to that found recently for some materials documented in European and Iberian megaliths. A sure example is variscite found in Brittany, but originating from around Huelva and Zamora (Herbault and Querré 2004).

The fact that the materials found are high-prestige and have a direct relationship with megalithic rituals is another element to add to the fact that the funerary ideology behind them was widespread throughout megalithic culture in the Atlantic area. Axes, variscite, amber, perhaps gold and copper later, display a scenario of pomp in the face of death which is the reason for most of the Atlantic exchange routes from the 5th millennium cal BC, at least.

The chronology of Iberian megaliths comes much closer to those in Brittany, while the detailed samples from those in Britain show a long chronology with ancient roots (Scarre 2010), similar to that in the north of Europe (Furholt and Müller 2011). The precise information that may
be provided by finding organic materials in megalithic pigments adds a factor of undeniable interest in re-setting dates for megalithic art in the Atlantic region.

From a the point of view of motifs, paintings at Barnenez advise a re-reading of some of the most iconic figures of megalithic art in Brittany, as the U-shaped motifs cannot easily be classified as boats or birds (Cassen 2007), if they are defined as continuous wavy or zig-zag lines finished in paint. Therefore, experts in the field should be an indispensable part of any multidisciplinary team in the future. Decisions on preservation must also be taken once sufficient information has been obtained, since paintings are more delicate than carvings, and samples can be taken not only on pigment types, such as we are providing here, but also for C14 dating. As we have mentioned, direct sampling from painting on Galician and Portuguese dolmens (Carrera and Fábregas 2002), has proved to be one of the most reliable dating systems for Iberian monuments and their refurbishing (Bueno et al. 2007).

Atlantic megalithic art can be seen as a huge range of opportunities requiring specific methodology for identifying paintings, the same as with Iberian megaliths years ago. This is the only way to establish the true scope of the technique in graphics in Brittany, and by extension, the rest of Europe.
Sculpture certainly plays a role where formulae like those of the Iberians are constantly repeated: paintwork, carvings and sculpture formed part of these integrated projects to decorate megalithic monuments. The way in which this was done, whether part of the pre-existing monuments was renewed, or they were refurbished more than once, are questions that have to be answered by detailed study which includes the possibility of painting having been found in Barnenez, and undergoing confirmation in this nucleus of funerary art par excellence in Europe: Brittany.

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