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PASSAGE-GRAVES OF NORTHWESTERN IBERIA: SETTING AND MOVEMENTS. AN APPROACH TO THE RELATIONSHIP BETWEEN ARCHITECTURE AND ICONOGRAPHY*

by

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Abstract: Our text is based on published information concerning decorated megalithic monuments (dolmens and passage graves), from north-western Iberia, which also yield further archaeological data that may be studied in terms of effective, phenomenological, use of their inner space. These monuments were erected from 4300 BC to 3200 BC, and linked therefore with a regional social and building behaviour, restricted in time. Although the monument forms an architectural and "functional" unit, composed of an artificial mound of soil and stone, the inner dolmen and the surrounding natural and social landscape, our attention is focussed on the inner space, i.e., the chamber and corridor. We study the burial chamber and its links with the outside area, concentrating on the possible movement exterior-interior / interior-interior / interior-exterior, and its relationship with both the iconography identified and other "sensorial" features (colour, shape, light). Iconography is considered only as an archaeological document, no further iconological interpretations are attempted. The iconographic motifs, their organization and distribution are seen as the generating force of "scenarios" / variable environments and related to movement and light (natural or artificial). The number of people the monument may enclose is also taken into account. Taking in account all this available data, we conclude that iconography and architecture of each dolmen embodies an organic unity, conceived for a specific purpose.

Key-words: Northwestern Iberia dolmens; architectonic/iconographic programme; movement.

Resumo: Este texto tem como base material a documentação arqueológica publicada relativa aos dólmenes do NW da Península Ibérica que possuem iconografia no seu interior e que, em simultâneo, disponibilizam informação arqueológica relativa à utilização do espaço megalítico interno susceptível de ser estudada segundo uma perspectiva fenomenológica. A construção destes monumentos megalíticos neolíticos situa-se entre 4300 BC e 3200 BC aprox., razão pela qual estamos perante um comportamento social e construtivo razoavelmente delimitado no tempo ao nível regional. Embora o monumento forme um todo construído unitário, tanto do ponto de vista arquitectónico como "funcional", sendo formado pela colina artificial de terra e pedras (a mamoa), pela construção megalítica interna e pela paisagem com a qual faz corpo social activo, incidiremos

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exclusivamente no espaço interno:câmara e seus acessos. Ou seja, analisaremos a câmara e sua comunicação com o exterior, para privilegiar neste estudo a relação entre as possibilidades de movimento (exterior-interior / / interior-interior / interior-exterior), e sua articulação com a iconografia pintada, gravada ou "esculpida", e/ou com outros elementos que podem "moldar" ou orientar os sentidos (cor, forma e luz no espaço interno). A iconografia é analisada essencialmente como documento arqueológico, não se procurando interpretações iconológicas. Os motivos iconográficos, sua organização compositiva e sua distribuição espacial são vistos como geradores de "cenários" ou de ambientes significantes variados que relacionaremos com os constrangimentos ao movimento impostos pela arquitectura. A iluminação (natural e/ou artificial), bem como as possibilidades que a arquitectura oferece à "observação" de cada esteio ou de cada parte das câmaras, são assumidos como factores determinantes na leitura iconográfica e na hierarquização interna dos espaços. Esta análise atende ainda à quantidade de pessoas que o espaço interno do dólmen permite albergar. Articulando todas as variáveis enunciadas, conclui-se e defende-se que cada monumento responde a um programa arquitectónico e iconográfico específico, levado a cabo com uma intenção particular.

Palavras-chave: Dólmenes do NW da Península Ibérica; programas arquitectónicos/iconográficos; movimento.

1. NORTHWESTERN IBERIA DECORATED DOLMENS

Archaeological research carried out during the last 30 years has shown that megalithic iconographies, created by painting, engraving and scratching techniques, are present in the whole of the Iberian Peninsula (Bueno Ramirez & Balbin Behrmann, 2003; 1997). However, the information obtained so far is by no means conclusive and further specific research is still needed, especially in northwestern Iberia. Several aspects, such as traditional megalithic art studies and recent archaeological studies of megalithic monuments, must be considered.

Since the beginning of the 80s, and largely as a result of work by Elisabeth Shee Twohig, Northwestern megalithic art is no longer interpreted as an indicator of Neolithic Atlantic identity, in the sense of an "ethnic unity" shared by communities in Iberia, Brittany, Ireland and Northern Britain. Because megalithic art is now understood as a specific manifestation of these communities' collective conceptual ideas, it has become necessary to study them at a regional scale and to assess the potential of this type of art for their cultural characterisation. We recall that, in this region, paintings are as abundant (or more) as engravings, while in Europe generally, megalith paintings remain an exceptional feature.

Recent archaeological studies of megalithic monuments have uncovered a large number of decorated monuments, intensely engraved and/or painted. They have also revealed that graphic motifs occur in a large diversity of megalithic forms; however iconographic motifs are more frequent in chambers with open access and passage graves1. About eighty decorated dolmens have been identified so far, in northwestern

Iberia. Fifty-seven of these (well preserved) have been included in our study, which aims to identify a close relationship between architectural shape and graphic design. This evidence shows that dolmen constructions and their traditional use in undecorated and decorated monuments belong to the same megalithic tradition. This is to say that art appears in regional megaliths during the period spanning from the end of the 5th to the middle of the 3rd millennium BC, but it is a phenomenon which archaeological and archaeometric data place chronologically within the 4 millennium². We believe that painting and/or engraving the interior of megalithic monuments was not considered to be a punctual or exceptional activity by Neolithic communities from northwestern Iberia. It may reflect, instead, a millenary conceptual tradition of dolmen building

Passage-graves of northwestern Iberia: setting and movements.

An approach to the relationship between architecture and iconography

Megalithic iconography also allows a close characterization of the conceptual ideas underlying the construction and use of decorated monuments, as art was enclosed in the monument and ritually sealed. This accuracy of chronological and cultural context is not equalled by the postglacial open-air rock art or rock shelter painting in the region. We can also access the collective behaviours in each monument through the intimate relationship between architectonic project and motif organization. We believe them to be part of a single project, planned and carried out with a single specific purpose.

and use.

The significance of the latest data concerning megalithic art in northwestern Iberia lies less in the identification of increasing number of decorated dolmens and their abundant and diverse motifs than in the new interpretations concerning the conception, use and closure of monuments by Neolithic regional communities.

In addition, we now have better knowledge about painting and carving techniques, which allow us to identify sporadic acts of repair and eventual iconographic changes. This is the case of monuments such as Madorras 1 (Sabrosa) (Gonçalves & Cruz, 1994), Alviada 1 (Arouca), Casa dos Mouros de Dumbria (Coruña) and Antelas (Oliveira de Frades) (Carrera, 2005). In spite of this, archaeological data point to an individualized iconographic and architectonic programme for each dolmen.

¹ To Elisabeth Shee Twohig (1981) and Marc Devignes (1993) megalithic art was mainly the art of passage graves.

² The majority of C14 dates concern charcoal samples and only eleven samples came from organic black pigments used in paintings (AMS technique): nine samples from Galicia (Steelman; Carrera; Fabregas; Guilderson & Rowe, 2005) and two from Portugal (Cruz: 1995b).

2. GUIDING IDEAS OF THIS RESEARCH – INTERPRETATIVE HYPOTHESIS

Following a careful and systematic study of the published megalithic tombs from northwestern Iberia, it is now possible to put forward some guiding ideas.

Iconography and architecture of dolmens embodies an organic unity, conceived for a specific purpose. Megalithic architecture is a *locus* that creates space and time through physical conditions that control body movements and impose body positions in specific parts of the chambers and corridors. The graphic motifs and their resulting compositions organize space and time through imposed or suggested reading movements in each orthostat and/or in the whole internal megalithic surface. Thus the megalithic shape and its iconography articulate as an organic unity in order to create spatial hierarchies in the interior of the dolmen.

The dolmens are "secrets" (Jorge, V., 1997): that is, intentionally hidden spaces where these communities kept their ancestors along with their corpses, bones and special artefacts. The power to communicate with the Past and to blend Past and Present, via entry into the dolmen, was restricted to certain members of the community. These restrictions were imposed by tradition, by Genealogy, by architectonic shape and, in decorated dolmens, by iconography.

As the number of undecorated dolmens is unquestionably higher than the number of decorated ones, the latter distinguish themselves not only by their specific graphic messages but, above all, by the power that these iconographies have over the hierarchisation of internal spaces and the restriction of these spaces to certain members of the community, moments of community life, or even to specific ceremonies.

The unity of Northwestern megalithic art lies less in a motif's recurrence (which frequently assumed a locally or regionally restricted value) (Table 1) than on a particular, yet diverse, megalithic motif organization. In this it is the *lines* which dominate – serpentiform, zigzag, or straight; engraved and painted red, black, and even white. These lines do not simply connect to other motifs but also hierarchise the orthostat's space through horizontal, vertical, and (less commonly) oblique segments. Frequently organized in bands, and less so in grids or entangled forms, the lines are a symbolic motif in themselves and act to divide both the orthostat's surface and the dolmen's interior surface. These lines are often the only graphic motif identified on the orthostat, or even the whole dolmen.

One can discuss whether the dolmens contain an underlying mythographic structure, but only at a wide scale of analysis. Of the forty-five motifs that we have identified, only three of them – the serpentiform and zigzag line bands, the "thing" motif, and (less significantly) the anthropomorphic figure/skin skeuomorph – could point to the existence of a mythological reference shared by the megalithic communities

of Northwestern Iberia. These motifs are exclusive to the enclosed megalithic context (Fig. 2).

The "thing" (also known as "the object") allows us to hypothesize the existence of a mythology specific to the Northwestern corner of the Iberian Peninsula (Finisterra). This hypothesis is supported by the identification of a similar graphic composition in two chambers, geographically close to each other: Casa do Mouros de Dumbria (C2) (Carrera, 2005) and Dombate (C6) (Bello, 1996).

It is possible that there was no common mythographical structure underlying all Neolithic Cosmology in North-western Iberia; but rather, myths were shared at different graphical levels by Neolithic regional communities during the 4th – beginning of 3rd millennium BC. We believe that these myths would have been recounted by means of recurrent motifs with different graphic organizations, even when the myth stayed the same. As a result, we may consider that some of the specific motifs are artefacts functioning as highly encrypted "containers" of stories or ideas, on a local or possibly wider regional scale, and the monument could have worked as a "deposit." The decorated dolmen would have been a "deposit" of very specific memories and stories where, together with corpses, human bones, axes, arrow heads, necklaces, ceramic pots and other "non utilitarian" artefacts, other graphic objects were also placed.

3. DISCUSSION

3.1. The dolmen as a "programme"

From an architectonic point of view the dolmen is the inner structure (almost completely hidden) in an artificial rounded hill commonly called *mamoa* or *tumulus*. Although mounds and dolmens must be seen as an architectonic whole, excavations in North-west Iberian monuments have shown that the dolmen's construction, or at least the placement of the vertical orthostat, always preceded the mound construction (technically speaking). It is accepted that the roof slab might have been placed after the construction of the chamber's "box," or even the completion of the mound.

Therefore the megalithic mound has a very deep impact on the landscape, which changes according to its volume, the surrounding topography and the inhabited territory. Nevertheless what should be underlined is that the monument "plays" with the internalization of some architectonical features – chamber and corridor – and the exteriorization of others: the mound's volume, visual aspects, and façades, including the atrium.

Archaeological excavations have shown that these monuments were not subjected to major architectural changes during use, until the time of final condemnation. The monuments, as structures that create and hierarchise internal spaces, seem to have been planned *ab initio* and intentionally sealed when that concept, or the tasks for which they were created, came to an end.

Apart from the great Dombate dolmen (Coruña), whose mound completely covers and hides a much smaller chamber (Bello, 1996), we have no record of important physical changes (in terms of shape and/or volume), like those identified in many Atlantic funerary megalithic monuments³. Whenever dolmens have later occupations, such as Madorras 1 (Gonçalves e Cruz, 1994) or Dombate (Bello, 1996), these always occurred during the third and second millennia BC. Craters were dug on the chamber's top, corridors and in several parts of the mound. This may be interpreted as a break in the use of the dolmen, far from its original conception, as pointed out by Domingos Cruz (1995b).

The subsequent use of these monuments is very interesting as it shows that, even after being ritually closed, they were still valued as *loci* of Past memories and secular Genealogies, with which the communities wanted to bind. It is obvious that, by then, the original role and traditional use of these monuments and the underlying significance of them had changed. It is this conception/use that we want to talk about here.

The iconography in nearly all monuments was made during construction, as is the case with Picoto do Vasco, Orca dos Juncais (C2), Cortiçô de Algodres, Chã de Arcas V and Dombate (C3, C5 & C6), among others. In other cases the art was made after the construction of the chambers and corridor, as is the case for the paintings of Dombate. Thus, in nearly all recorded cases, iconography was part of the original monument design. At this point, we must say that megalithic programs cannot be viewed as a modern architectonic project – which purpose is the finished building – because excavations have shown that many kinds of ritual acts were performed during construction. Megalithic communities chose stones with particular textures and colours (Picoto do Vasco) (Cruz, 2001); some of these stones were brought from very far away (such as orthostat C2 in Casa dos Mouros, which was moved 10km to its final destination) (Carrera, 2005); rare and/or coloured pebbles were also deposited, and fires were built in several areas of the mound, including

inside and over the counterfort (Castelo 1 mound) (Sanches & Nunes, in press). This supports the hypothesis that the construction itself is a "sum" of ritual actions, each one with specific social values.

In this context, the vertical placement of the 'backstone' deserves careful attention. This is in fact the first stone erected during construction of the dolmen, frequently sculpted as a stele and always receiving the most elaborate iconography. In some cases, the 'backstone' is also decorated on the back face (Castelo 1) or carefully polished (Santa Cruz) (Blas Cortina, 1979). It is possible that this slab might have been placed like a standing stone, acting as the foundation centre where ritual actions took place before the construction's progress⁴. More excavation work and thorough observation of the surrounding area must be carried out to test this hypothesis.

3.2. The tomb's axis entrance and natural illumination

It is accepted that the mounds, due to their visual and physical impact on the landscape, determined people's movement in the territory. Thus these mounds functioned as determinants in space-time understanding. Similarly the dolmen's internal space configuration, due to its architectonic features, is a privileged "tool" to command, enable or disable the human action and movement inside chambers and corridors. Thanks to Foucault (1993) one can understand just how incarceration affects human movement in time and space, and so subjectivity. Both are intrinsically linked to the reproduction of social relations (Kirk, 1994: 184). Likewise these megalithic constructions organize space and time, as they are enclosed places designed for the performance of specific social practices where actors turn themselves into subjects (Kirk, 1994: 184). So the architecture guides and commands individual interpretations through control of body movement and light. In this dolmenic context, iconographic interpretation, experienced by a single person or by a very restricted group of people, becomes an integral part of the *movement*.

The dolmen's entrance axis is interposed with the mound's circular movement, and defines the only access direction (Jorge, S. et Al., n/d). The monument's access is a progressive walk into the dark, from the naturally illuminated atrium to the complete darkness of the hermetic, even claustrophobic, space of the inner chamber. From one point to the other it is necessary to pass through the entrance corridor's penumbra, or sometimes into a near-complete absence of light if the corridor is long

³ Such as Petit Mont cairn (Arzon-Brittany). The prehistoric "building sites" take place in North-west iberia only at the end of the fourth-beginning of the third mill. BC, and they are funerary sites no longer. Crasto de Palheiros (Murça) (Sanches, 2003; 2004), Castelo Velho (Freixo de Numão – V. N. Foz Côa) (Jorge, S., 2003; 2005) and Castanheiro do Vento (Horta do Douro – V. N. Foz Côa) (Jorge, V.; Cardoso, J.; Coixão, A. and Pereira, L., 2002) are good examples of these monumental "on going projects".

⁴ Trevor Kirk (1994) suggested a similar idea for some Brittany megalithic monuments.

and low. There is, therefore, a horizontal scaling of the entrance's axis that suggests a hierarchisation of the group members who were allowed to perform certain steps. This scaling starts at the monument's atrium, although our main concern lies in the chamber and corridor.

Let us focus on the penetration of natural light and on the architectonic constraints to movement inside the different monuments, as they condition both the perception and the reading of iconography.

Given the importance of the entrance's axis we have investigated whether the sunrises occurring during the year would exhibit some sort of alignment with the monument's entrance, and if so, if there was also a calendar related to them. We must emphasize that sun motifs are among the most frequent motifs inside chambers, although they are not found in corridors (Fig. 3, 5, 10). These motifs - circles with radiating lines, radial-line motifs, radial lines and outer circle motifs - are the most recurrent in all of Northwestern Iberia (Table 1). They can be found in the backstone and in the left and right halves of the chambers, suggesting that there could have been a common concept linked to the sun, or some sort of knowledge related to the different positions of this star during the year. We have also investigated whether some of the iconography found in the open chambers' interior and from the chambers with antechambers could receive sunlight sometime during the year, allowing these motifs to be temporarily illuminated. We left aside corridor dolmens, because they are very hermetic and dark spaces.

Solar calendar (Fig. 3): We have verified that of the forty-six cases which had available information, the majority of them could have been used specifically as a solar calendar marker. In 35% of the cases the entrances were oriented towards the equinox, 20% to the winter solstice and 4% to the summer solstice, although in the remaining 41% the dolmen's entrance does not follow these specific orientations. However, we can assume that the solar calendar could have been an important factor in the majority of the monuments' building programs, and that this community knowledge could have been crucial in selecting periods during which the community would congregate in order to build each monument.

Natural illumination of iconography (Fig. 3): The majority of the monuments considered here could have been illuminated during Autumn/Winter and a smaller group during Spring/Summer. In all of the considered cases the sunlight would reach the lower half of the backstone. I believe that there are no motifs related to the natural sunlight, although the backstone is highly decorated in both "opened" and "closed" chambers.

This has lead us to conclude that the iconographies present inside all sorts of dolmens were intended to be read strictly with artificial light. This artificial illumination, accomplished with torches, lamps, or fires, would emphasize certain motifs to the

detriment of others. Above all this artificial light confers movement on the motifs, creating a unique reading for each occasion. Some compositions seemed to have been conceived for the specific purpose of movement/animation (Fig. 2, 8, 7, 6)⁵.

Passage-graves of northwestern Iberia: setting and movements.

An approach to the relationship between architecture and iconography

3.3. Architecture: constraints imposed on the circulation and reading of iconography

The megalithic crypts were conceived as enclosed spaces, hermetic and dark; however, the imposed constraints to entrance and movement lie mainly in the corridor's shape. The chamber's spatial constraints are related to the balance between height and internal area. Although the plan is almost always of a polygonal or a subcircular form, the ceiling and the floor are always flat and horizontal adding to the claustrophobic ambience.

3.3.1. Corridors

The "closed" architectonic space of the Northwest Iberian dolmens – chambers with a classic corridor, chambers with an antechamber and chambers with a "V" plan – is achieved by diverse and detailed options in each monument.

There are both long and short corridors, but all of them are narrow at their entrance. Some entrances are so tight that the corridors acquire a "V" plan. Amongst all of the monuments we only consider here the "long" corridor of Orca dos Juncais (7,4 m in length) (Fig. 8) and Chã de Arcas V (only 4,0 m). The excavations have also shown us that the corridor's entrance was closed with a slab (Madorras 1 or Eireira), and many of them had one or two pillars (Alagoas, Sobreda or Pala da Moura 1). So, entering a dolmen that would normally be closed implies clearing the entrance and passing multiple "barriers." Those that were architectonically more noticeable were related to the corridor's height.

According to the available anthropological data (Silva, A., 1995), we can assume that megalithic people in this region stood between 1, 60 and 1, 65 meters high, so corridors and chambers with heights less than 1, 70 meters would not allow a correct standing position. In the case of the decorated dolmens, the iconography could not be seen unless the observer reclined or bent down. Such positions would not allow a complete view of each slab, but instead a partial one.

⁵ Dombate-C6; Casa dos Mouros de Dumbria-C2; Orca dos Juncais- C2; Portela do Pau 2 and Forno dos Mouros considering the chamber as a whole.

136

Among the studied dolmens, only 16% of the corridors would allow the Neolithic people to walk in a vertical position and in Vale da Cabra 1 and Rapido the passage to the chamber could only be entered by crawling. Of the remaining 84% the progression through the corridor could only have been made with bodies bent down at different levels. We should add that corridors frequently increase their height from the entrance to the chambers. Even in the "V" plan dolmens we can distinguish the access corridor from the chamber because it is progressively lower. Both in Antela da Portelagem (Esposende) and Eireira (Viana do Castelo) one must enter by bending the body down, and in walking through the entrance to the "chamber" one can gradually assume a vertical position.

Inner corridor decoration is found in only eight monuments, none of which are entered by crawling. The carvings that were not destined to be seen were found on the orthostat's back face, hidden by the mound. The paintings of Lubagueira, Orca dos Juncais (Fig. 8) and Dombate were viewed with bodies bent down. The iconographies of the big monuments of Cunha Baixa (Mangualde) (Fig. 4) and Pedra Coberta (Coruña) (Fig. 11) could be seen from a standing position. We are convinced that the iconographies from Orca dos Juncais and Lubagueira, (which occupy only one orthostat) or the ones found in Cunha Baixa (which occupy two) would change the understanding of the path during the entering or the exiting of the monument. We shall speak about Pedra Coberta later, due to its peculiar nature.

We can suggest that in the Cunha Baixa dolmen, which has one of the rare corridors that can be walked in a vertical position, the engravings on orthostat 22 are located in a privileged observation position for those leaving the chamber and moving toward the corridor (Fig. 4). This privileged position is enabled by the low pillar that is found at the exit (or entrance) of the chamber. We should underline that Cunha Baixa is a dolmen where both the corridor's large dimension and shape, as well as its iconography, suggest that it might have been used as a "second chamber." Inside the "main" chamber only the backstone has vestiges of faded red paintings.

One of the details that deserves particular attention is the off-centre placement of the corridor's axis relative to the chamber's axis. Such placement is noted, for instance, in Arquinha da Moura (Fig. 9), Mamaltar de Vale de Fachas, Lamoso, and Madorras 1, creates more intimate spaces in either the left or right halves of the chambers, depending on the monument. The corridors might also have a curved design (Pedra da Moura 1), which inhibits the visibility of the chamber from the corridor.

Although the corridor's engravings and paintings must be interpreted in each monument's unique context, the rare number of decorated corridors allows us to point out that iconographic messages focuses attention mainly in the chambers.

We must add that, from an architectonic point of view, in all dolmens space increases from the corridor to the chamber (either suddenly or progressively). So, in the Northwestern Iberian dolmens the chamber is the main ritual site, where ceremonies were conducted in great secrecy.

3.3.2. Chambers: internal shape, human movement and iconographic compositions

In all of the Northwestern Iberian dolmens, the chambers are shaped by orthostats standing side by side. The inner walls form a continuous sequence of vertical panels where the decorated and non-decorated surfaces assume different visual rhythms, such as: a) the decorated orthostats might appear in an isolated manner, i.e., chambers have only a decorated slab – normally the backstone; b) the chamber's interior is completely decorated – all of the vertical slabs, or in some cases, even the corridor slabs, have paintings and/or carvings (Fig. 6, 10, 11); c) the orthostat's continuous decorated sequence only occurs in a particular area of the chamber- rear, left side or right side (Fig. 5); or d) many different combinations of continuous decorated and undecorated areas might occur⁶ (Fig. 8, 9).

In reality these chambers have very distinct heights and circulation areas, and these distinctions introduce variants in body movement and viewing of the images. We have recorded very small chambers in which the area varies between 3 to 8m² (Santa Cruz-Oviedo, Portela do Pau 2, Melgaço, Antelas-Oliveira de Frades) (Fig. 7, 10); there are also wider chambers which vary from 8 to 12/14 m² (Arquinha da Moura- Tondela, Orca dos Juncais-Viseu; Chã de Parada 1-Baião, Forno dos Mouros and Pedra Coberta-Coruña) (Fig. 9, 8, 5, 6, 11); and there are still wider (though fewer in number) chambers whose area reaches 20m² (Madorras 1) and 25m² (Carapito 1).

We believe that carved or painted figures may not conform to our Western culture's image visualization pattern, which considers the vertical and motionless position as the appropriate one (implying a static conception of space) (Berrocal, 2003: 94). On the contrary, architectonic shape determines different ways of panel reading. So, since the chamber's area determines the possible body proximity/distance required for panel viewing, chamber height became a crucial factor in both body posture and reading process. Such a process must always imply movement.

By comparing the chamber's internal area with its height we have noticed that in 16% of the cases human movement is extremely constrained by height⁷; thus,

⁶ Some of the recorded situations might have been caused by poor preservation.

⁷ Such as in Mamoa do Taco 1, Alviada 1, Vale da Cabra 1, Rapido 3, Chã de Castiñeiras 2.

Neolithic people could not have walked there in a vertical position. In 57% of the cases the crypts' height varies between 1,70m and 2,50m, allowing the possibility that Neolithic people were able to move around upright inside but in many of these cases the inner space is particularly limited due to the small available circulating area⁸.

Chambers that are between 2,5m and 3,0m in height – Orca dos Juncais and Arquinha da Moura⁹ – provide internal areas that allow not only better movement but also an appropriate distance for viewing the whole orthostat. Inside this latter chamber, some of the complex compositions (Slab C4) require varying degrees of distance due to the number of fields in the composition (Fig. 9). These fields articulate, creating an effect of internal movement, and they even create depth of field (Orca dos Juncais-C2 and Arquinha da Moura-C4/backstone) (Fig. 8, 9). In this way, the vertical alignment of the central motifs on the backstone of Arquinha da Moura articulates with the circularity suggested by the central figure of concentric circles. These circles also act as an axis of horizontal symmetry, creating a virtual mirror effect. Additionally, the composition aligns itself on the stone along a diagonal axis from right to left. On orthostat C2 the great central anthropomorphic figure (skin/skeuomorph), painted red, imposes a vertical axis which is contradicted (or completed) by the little anthropomorphic figures located under his arms. These latter figures add a horizontal axis to this composition (Fig. 9).

There is a small group of seven chambers that display height greater than 3,0 m and internal areas that reach 25,0 m²: Orca da Cunha Baixa (Fig. 4), Areita, Orca do Tanque and Carapito 1 in the Viseu region; Madorras 1 in Vila Real; Dombate and Pedra Coberta (Fig. 11) in Coruña. All of these monuments possess magnificent façades due to the fact that their chambers are significantly higher than the corridors, which suggests that they have a much more "public" nature than the rest of the northwestern Iberian dolmens. It is our belief that these spaces would allow a much greater number of people inside, providing a large area for wider ceremonies.

These larger dolmens are not necessarily those that display the most complete and complex iconography, because the motif's richness has no direct relationship to the chamber's size. For instance, the great Madorras 1 dolmen is exclusively decorated on its left side, although the big dolmens of Pedra Coberta and Dombate can be interpreted as wide areas of public character due to the complexity of their decorations, which spread out through the whole inner space.

We can conclude that each monument seems to have a very specific iconographic organization, which was made for a particular ritual or ceremonial purpose. On the

other hand, we have also found, at a regional level, some inner spatial motif arrangements that *suggest movement and orient the reading of a drawing* (Fig. 2, *above*). In the following text we present some examples of monuments, focusing on their general characteristics. We have given priority to three types of dolmens in an attempt to cover the different arrangements found in each context:

- 1. Chambers in which attention is focused at the rear as iconography is found only on the backstone and/or the orthostats that are side by side with it. When they have symmetrical plans, as in Lamoso and Pala da Moura de Vilarinho da Castanheira, spatial hierarchisation is simple, due to the fact that the backstone orders the whole chamber's area. In Picoto do Vasco, as well as in many other monuments (e.g. Rapido), the chamber's space is structured by the three rear orthostats. This latter group includes the "V" plan dolmens, although these dolmens use iconography to formally separate the "chamber" from the "corridor" (Eireira 1).
- 2. Dolmens in which iconography hierarchises inner space, dividing chambers into two parts. In Chã de Parada 1, iconography distinguishes the right side (Fig. 5); in Madorras 1 and in Zedes it distinguishes the left side. But this distinction between two sides must be evaluated case by case. For instance, in Arquinha da Moura's chamber the left side seems to present itself as a second chamber. Besides the architectonic configuration, in this latter dolmen orthostat C2 stands out due to the size and organization of its motifs, as if it were a second backstone¹⁰. This slab deserves particular attention because it exhibits a large anthropomorphic figure (a sort of skin/skeuomorph motif), which in other chambers commonly occupies the backstone.
- 3. Monuments in which iconography conflicts with the vertical segmentation imposed by the orthostat's sequence, transforming the inner space in a continuum. This iconography also seems to command a circular continuous movement, along the chamber's walls and, in some cases, the corridors. This movement is created by some motifs and their standardized arrangements.

In one case, this movement is created by lines, or bands of serpentiform lines that traverse the orthostats horizontally, as occurs in Forno dos Mouros (Fig. 6) and Portela do Pau 2 (Fig. 7). Although the iconography of these monuments is both complex and ambiguous, in Portela do Pau 2 chamber (where one can walk upright), the continuity created by the band of lines is imposed on this symmetrical space.

⁸ Picoto do Vasco, Dolmen de Juncal 1, Chão Redondo 2, Santa Cruz, Portela do Pau 2.

⁹ As well as Fontão, Pedralta, Pala da Moura de Vilarinho da Castaneira, Cortiçô de Algodres, Fonte Coberta da chã de Alijó, Chã de Parada 1, Barrosa, Casa dos Mouros de Dumbria.

¹⁰ This probably happens in Lubagueira 4 chamber, where C3 Slab could be a "second" backstone.

Passage-graves of northwestern Iberia: setting and movements.

An approach to the relationship between architecture and iconography

141

However, the progressive motif diversity that spreads out from the entrance to the rear isolates the most remote part of the chamber as the most important one.

In other cases, the movement and concept-continuity is accomplished by the use of reticulated bands. These bands horizontally traverse the entire lower section of the orthostats in both the chamber and corridor, as in Pedra Coberta (Fig. 11) and Dombate. In Dombate the area between the orthostats was filled with plaster in order to emphasize that continuity. These monuments are not easy to describe, due the complexity of each orthostat's compositions. If the lower band confers uniformity to the inner space, different and diversified compositions distinguish each orthostat. The published data does not allows us to establish concretely how iconography hierarchises space; but it is our suspicion that it is not the lack of information that is the main cause of this impossibility. Our suggestion is that these two dolmens (which are simultaneously located between the largest dolmens in Northwestern Iberia) were intentionally ambiguous in their iconography in order to create ambience for a large number of rituals.

4. Monuments which are extremely ambiguous in their iconographic organization, although without the suggestion of movement. Like the dolmens of Dombate and Pedra Coberta, above, it is this ambiguity that deserves attention. The Antelas dolmen can be considered the paradigm of this type of monument (Fig. 10).

First, its plan is slightly dissymmetric. Entering the corridor, the only visible area is centred on the red-and-black painted sub-rectangular motif on the lower half of the backstone (C5). This is the motif that simultaneously informs chamber's and the corridor's space. This is also the only motif that stands out for its colour, shape and size, even with the entrance's soft natural light. All of the remaining motifs can only be observed from inside the chamber, exclusively with artificial light.

Second, the backstone's left orthostat (C4) can be viewed as a "complementary" backstone, due to its position in the chamber's layout and the specific organization of the motifs. The backstone (C5) and this orthostat (C4) are the only slabs that display a horizontal segmentation, as V. O. Jorge (1982) mentioned, and they seem to be complementary to one another in the creation of a unique composition.

Third, the decoration's complexity progressively spreads out from the chamber's entrance to its rear, where less-abstract motifs stand out in orthostats C4, C5, and C6. However, the left side of the chamber is more concealed than the right side.

So, if the orthostats are in their approximate original position, we would have the following schematic inner hierarchisation:

- a) The sub-rectangular motif that structures both the chamber and corridor;
- b) The backstone (C5) plus the orthostats that flank it (C4 and C6) which structures the chamber and symbolically supports the rear;

c) Orthostat C4 which extends the backstone to the left, symbolically reinforcing the chamber's left half – whose architectonic plan was already dissymmetric.

4. CONCLUSIONS

According to structuralism the interpretation of symbols or motifs can only take place in a relational mode or through its position inside a "text". In the Northwest Iberian dolmens the text would have been created by the close relationship between the decorated space and the placement of motifs in the inner architecture. The methodology that we have followed has revealed to us not a linear "text" (because linearization is completely absent); rather, every dolmen suggests particular symbolic contents and, sometimes, different possible "readings" of the iconography in each monument. In this way the reading process transforms each dolmen into a very particular message "container."

Given their nature, symbols/motifs do not possess an intrinsic or discrete meaning. They are ambiguous, thought they can also suggest – particularly due to their position inside the dolmen and their iconographic association – some accepted ways of reading them. The content broadly depends on the reading process, and on the individual who transforms the graphic motifs into messages. So, these messages are temporally and subjectively located.

If community reading rules do not exist, these messages would be completely random. The dolmen architectonic program establishes the fundamental norms of human movement. Motif organization in each slab and in the whole inner space should orientate the interpretation *that could be accepted* by the general community.

Many other questions could be posed in order to understand decorated monuments. A more urgent one is the relationship between decorated and undecorated dolmens, particularly in the same territory. This is difficult to address with the available data. Nevertheless, this is one of the most important research methods for increasing comprehension of megalithic art in future investigations.

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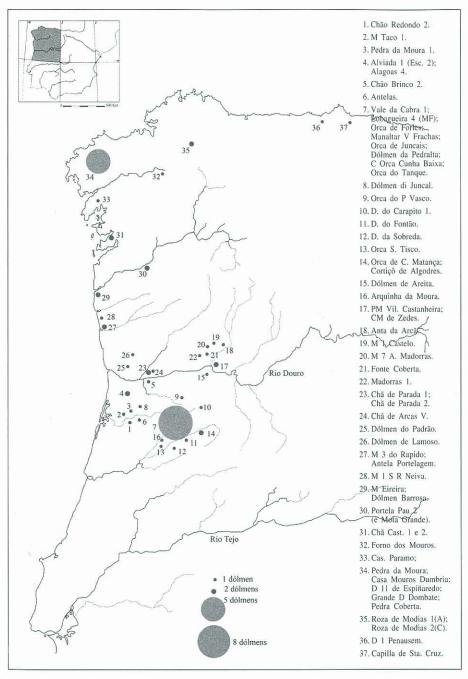


Fig. 1 - Northwestern Iberian decorated dolmens studied for this article (Source: author).

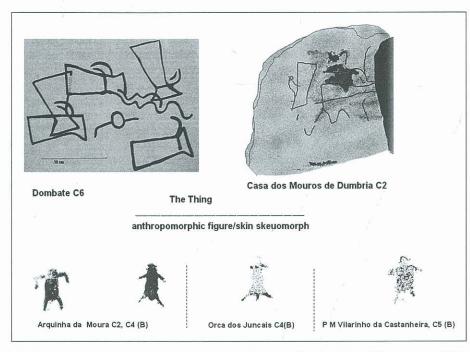


Fig. 2 – Above: Two compositions similar to the "thing" motif (After Bello, 1996; Carrera 2005). Below: Images of the "skin skeuomorph" (After Cunha 1993, 1995; Shee Twohig, 1981).

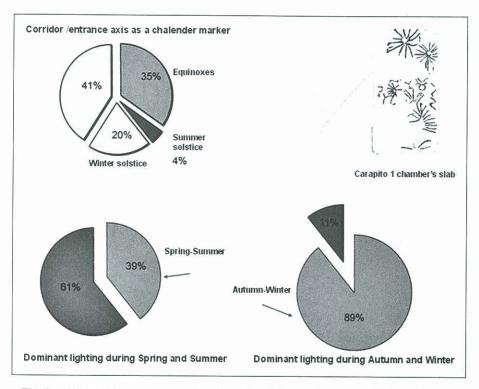


Fig. 3 – Above: dolmen entrance axis relative to solstices and equinoxes. Below: dominant lighting during Spring/Summer (left) and Autumn/Winter (right).

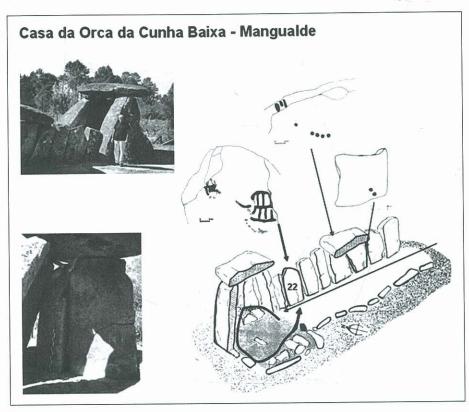


Fig. 4 – The arrows inside the dolmen indicate the movement suggested by iconography and architectonic shape. In slab 22 we have a composite carved motif which suggests a "mirror effect." (Modified from Vilaça & Cruz, 1990)

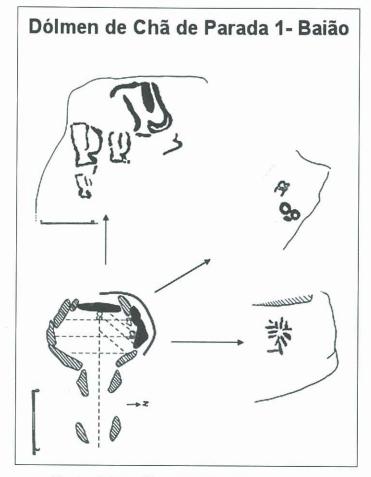


Fig. 5 – Dolmen with a symmetrical plan. Here, carved iconography emphasizes the right half of the chamber (Modified from Shee Twohig: 1981).

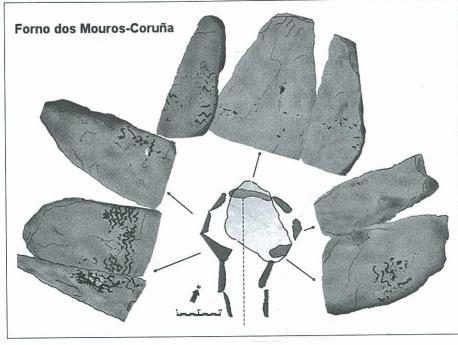


Fig. 6 – In this dolmen, bands of serpentiform lines (painted red and black) traverse the orthostats horizontally, suggesting circular movement. On the left side, the iconography on the first orthostat simulates an entrance pillar. (From Carrera, 2005).

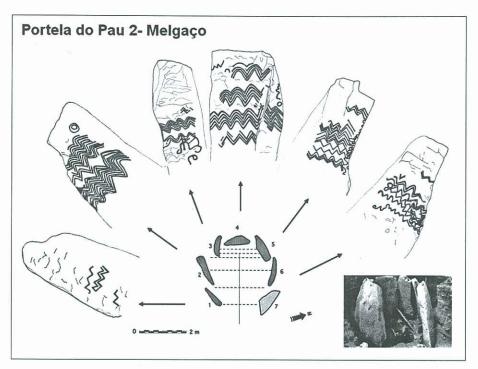


Fig. 7 – Bands of serpentiform lines (carved) traverse the orthostats horizontally, suggesting circular movement, but the iconographic complexity emphasizes the rear of the chamber (backstone and the orthostats that flank it). The backstone is pecked (carved) and painted black. (Modified from Baptista, 1997; Photograph from Jorge, V. et al., 1997).

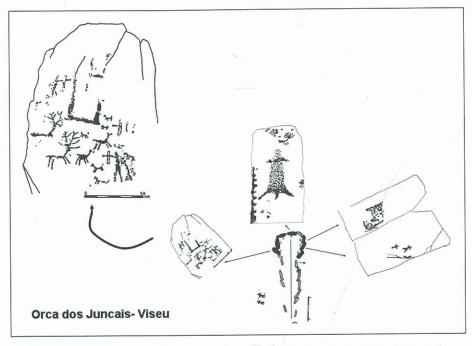


Fig. 8 – Orca dos Juncais. Symmetrical dolmen, painted red. The backstone iconography emphasizes the rear of the chamber. The large chamber area and height allows the whole slabs to be seen from a standing position.

(Modified from Shee Twohig: 1981).

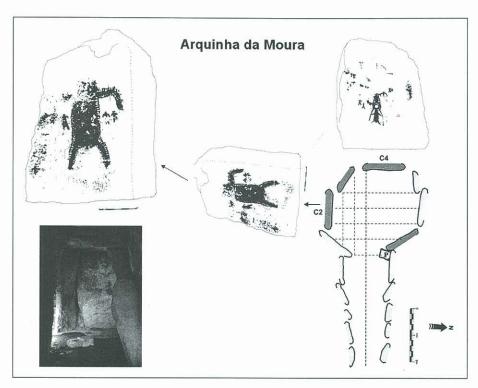


Fig. 9 – The chamber provides internal areas that allow not only better movement but also dictate the appropriate distance from which to view the orthostats as a whole, which would be necessary to understand the backstone iconography. Orthostat C2 stands out as if it was a second backstone, due to its architectonic position and the specific iconography.

(Modified from Cunha: 1993; 1995).

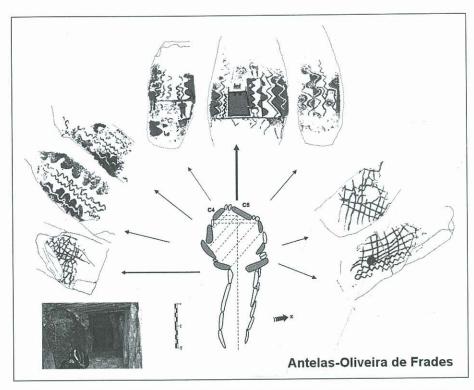


Fig. 10 – Antelas dolmen, painted red and black (sometimes over a white background). In this dissymmetrical chamber the sub-rectangular motif (on the backstone) informs both the chamber and corridor. The backstone (C5) plus the orthostats that flank it (C4 and C6) structures the chamber and symbolically supports its rear. Orthostat C4 symbolically reinforces the chamber's left half. (Unpublished illustrations kindly given by Domingos Cruz).

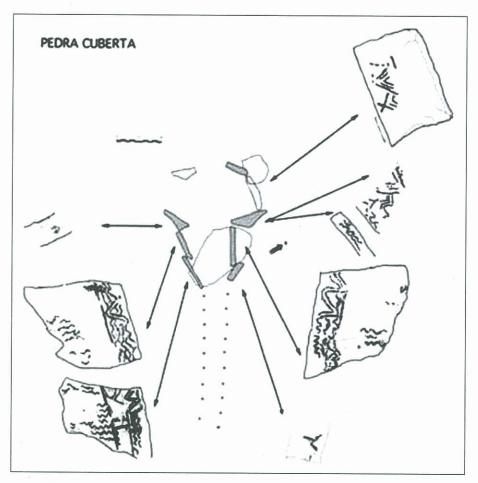


Fig. 11 – Pedra Coberta dolmen (painted red and black) is one of the biggest dolmens in Northwestern Iberia. Its lower reticulate band confers uniformity to the inner space, but different and diverse compositions distinguish each orthostat. On the right side of the chamber the iconography simulates an entrance pillar. (After Shee Twohig: 1981).

Motifs	CO	V	G	A	P	VR	В	VC	PT	С	L	0	Total
adial lines and outer circle		i											1
'comb"		1	1										1
noon/crescent		1						7-544					1
ree motif				1									1
fish backspine"		1											1
norizontal band of													
riangles/lozenges (grid)										1			1
riangle motif						1				1			2
DOW		2										-	2
stag with antlers		2											2
'placa'' (formalized													
rectangular figure)		-1		1									2
"oculado"	====				1	1							2
"coloured dots"		1								1			2
Zoomorphic figure (general)		2	1		10		1						3
segmented square/rectangle		1		1		1				1			4
circle with central dot		1		1				1					3
radial-line motif		1	1	-	1			1					4
anchor-like motif		1				1	1						3
vertical band of													
triangles/lozenges		3										=	3
crook			1				2						3
trapezoidal figure		2	-	1				1					4
phalic anthropomorph		2		•	1		1						4
		1		2			-			1			4
boxed U's or V's		2	_	2				1					5
Simple rectangle/square			-	2				1				-	1
anthropomorphic figure/skinqa		4				1							5
skeuomorph	_	1	1					1	1	1			5
concentric circles		1	1		-	2	1	1					5
single cupmark		2		2		1	1	i		1			6
rectangular idol		- 2	_		2	1		1		3			6
"The Thing"		-		- 1		1		1		7.5	-	-	6
isolated zigzag line		2		2		1		1	-	1	-	1	7
saw-tooth motif		4	_	2		-		1	-	2		1	7
complex meander figure		I		_	1	2	_		-		-	+	8
circle with radiating lines	- 3	4	1				-	2	N	1	-	-	0
(figure) base united paralel vertical lines		3		I		3		1_	1	2			10
non boxed paralel				1				2	1	1		1	8
serpentiform/zigzag lines	-	1		2	-	1	1	1	1	1	-	1	9
penannular circle		1	1	1		3	1	1		1	-	-	9
single U's or V's		3		1	1	1	3	2	-		-	-	10
anthropomorphic figure		5			2	-	1	1 2			+	-	7
grouped cupmarks		1		-	1	2	2	1	I	-	-	1	-
meanderic line			2	2		2	1	3	-	2	-	1	12
single serpentiform line		2	1		1	2	3	.	1	2	-	+-	14
single circle		3	2	2	1	3	-	1	2		-	-	14
"others" (diverse abstract motifs)		4		- 2	1	2	2	4				1	
vertical straight lines	1	3	1	2		3		2		3		-	15
horizontal straight lines		4	3	1			2	2	4				16
banded (boxed) serpentiform/ /zigzag lines		3		1	2	1	1	3	2	3	1	1	
totals	1	78	15	30	15	33	21	33	12	24	1	5	26

Table 1 - Motif distribution by district: CO - Coimbra; V - Viseu; G - Guarda; A - Aveiro; P - Porto;
 VR - Vila Real; B - Bragança; VC - Viana do Castelo; PT - Pontevedra; C - Corunha; L - Lugo;
 O - Orense. The considered classes are present/absent, following the spatial categories created for the chamber and corridor. This means that a motif is counted as one per monument, even if there are multiple representations of that motif in the same monument (including in the corridor and antechamber). Only two kinds of motifs are located at the exterior.

Mari