WHERE DO THE HORSES RUN? A DIALOGUE BETWEEN SIGNS AND MATTER IN THE ROCK CARVINGS OF FORNELOS (VIANA DO CASTELO, NORTH-WESTERN PORTUGAL)

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Abstract: The aim of this paper is to present the dialogue that exists between the morphology of granite outcrops, its geoforms and the motifs engraved or inscribed in them. It is assumed that the outcrops were not an inert material or a simple surface for carvings but instead acting agents that contributed to the meaning of these places.

One case study, which clearly illustrates these assumptions, is Fornelos, in the parish of Carreço (Viana do Castelo), located in the North-west of Portugal, where, in different panels, various equines, horsemen, a dog or a loop and an anthropomorph were engraved. The space chosen for the carving of these signs, the orientation of the motifs, the topography of the outcrop and its coloration create an impressive scenic effect for the audience, while at the same time it seems to tell a real or a mythical narrative. Here, horses and horsemen seem to have travelled a certain path - narrowed, poorly lighted, and limited – from where only a few would return, probably a rite of passage of the Late Bronze Age or Iron Age inhabitants.

Introduction
The rock carvings of Fornelos were of great interest to several Portuguese and Spanish researchers from the outset. In fact, it was classified as Property of Public Interest in the Official Gazette by Decree No. 26-A/92, DR, 1st series-B, No. 126 of 1
June 1992, with the designation of Rock Carvings of Montedor. ¹ In the Archaeologists' Portal the rock carvings are registered by the National Site Code (CNS) 859.

Although Henri Breuil may have identified them in the first half of the 20th century, according to Lanhas (1969), the first publication of these carvings is assigned to the former only after their identification by Francisco Pereira Viana in 1967. Lanhas creates the first sketch of the carvings, identifying 14 carved motifs, amongst which are cup-marks, a "horseshoe", grooves and zoomorphs, mostly identified as cervids. The author does not rule out the possibility that there might be anthropomorphic figures. In fact, the author interprets them as possibly corresponding to a hunting scene (Lanhas, 1969).

In the 80s, Baptista and Magalhães (1985) and Baptista (1986) designated the location for its micro place name - Fornelos - and conducted the first tracing of the carvings, using the bichromatic method and plaster moulds, which they published. The authors described 35 motifs and their manufacturing technique, interpreting most of them as representations of cervids, furthering Lanhas' path (1969), although they considered the existence of some equines and an anthropomorphic figure (Fig. 1). The motifs date from Prehistory, Early Bronze Age “possibly extending towards Late Bronze Age” (Baptista and Magalhães, 1985: 18), except for a carving located on the eastern surface of the outcrop that seems to be of later date and revived.

Bradley and Fábregas Valcarce (1998, 1999), in their work on the spatial distribution of Galician and Schematic Rock Art, consider these engravings² to be part of the schematic style, taking into account their form of representation, the arrangement of motifs in vertical outcrops, their bordering location in relation to the settlements and the possibility of a limited audience. This work shares Baptista's (1987) perspective, in which the author considered the animal figures of Montedor to have an affinity with the schematic and semi-naturalistic paintings.

¹ An unfortunate designation as the location of the carved outcrop has its own place name, and the lighthouse of Montedor is located at a distance of about 700-800 meters as the crow flies and at a higher level. It is also worth mentioning that in the promontory of Montedor there are other rock carvings.

² It is worth mentioning that the authors mistakenly place the figures in the parish of Afife.

³ The site is once again wrongly placed in the parish of Afife and in the Valley of Minho River.
Novoa Álvarez and Gostas Goberna (2004), in an article focused on identifying the carvings of fauna of the Valley of Minho River and on the spatial location of these sites, performed a partial direct tracing of the motifs on tracing paper, identifying some quadrupeds and possible horse riding scenes. Although the number of references on this locus, all authors treated the outcrop as a mere support for the carvings, and no attempt was made with a view to an interpretation of the whole set.

These rock carvings are also mentioned in many generic or heritage enhancement publications (Leal, 1995; Lemos, 2005; Silva and Alves 2005; Almeida, 2008; Martins n/d, amongst others). They are currently integrated in a hiking route, PR7, of the responsibility of the Municipality of Viana do Castelo where there is an explanatory placard that partially reproduces the rock art tracings of Baptista and Magalhães (1985).

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3 The site is once again wrongly placed in the parish of Afife and in the Valley of Minho River.
Despite the various approaches, a thorough and more interpretive study of the carvings of Fornelos was never performed. This justified the research carried out therein, initially under the ENARDAS project (PTDC/HIS-ARQ/112983/2009), but furthered under other research projects.\(^5\) From this study resulted a poster presented at an international congress (Bettencourt et al., 2013) and a file in the Rock Art Virtual Corpus of North-western Portugal (CVARN).\(^6\)

Thus, this text reflects the results of the work undertaken and aims to disclose the profound dialogue that seems to exist between the morphology of the outcrop of Fornelos and the motifs carved therein with a view to an interpretation of the symbolic world of the populations that carved and experienced them.

The theoretical framework was based on the landscape assumptions proposed by Tilley (2000) that “physical” world is not simply made of inert things but full of significant properties that matter to its inhabitants. In this sense, the outcrops and their forms were not simple surfaces to carve, but acting agents that added meanings to these rock art places and stories to tell for posterity.

According to several authors, in the worlds of many small-scale societies or pre-modern societies stones act as anchoring historical and mythical events, often linked to the actions of specific or generalised ancestors. They can hold considerable cosmological and spiritual significance, and be powerful and potent social agents in their own right” (Pollard & Gillings, 2009: 30).

The *praxis* included a more thorough study of the site taking into account not only the iconography of the carved motifs, but also the way they are arranged in relation to the carved outcrop and its geological characteristics, the physical and astronomical context of the site, as well as aspects with regard to visibility and visual perception of the surroundings. The direct tracing of the carvings was performed with polyvinyl plastic during the months of July of 2012 and 2013, and the plastic was cut into small rectangles that overlapped depending on a predetermined grid. This allowed us not

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\(^5\) See designation of the project in the acknowledgements section.

only to make use of eyesight but also of touch, enabling a wider familiarity with the carved space. The team worked at different times of day and at different solar conditions, which allowed us to realise the importance of light in the visualisation of the rock art. The site was also observed throughout different periods of the year.

Day and night photographs were taken, as well as a partial and full photogrammetric survey of Panel 1 and Panel 2, respectively, through the program Agisoft. These techniques were used with a view to answering some questions resulting from direct tracing.

Administrative location, physical and archaeological context

Fornelos, which gives its name to the site, is located in the parish of Carreço, in Viana do Castelo, in the northwest of Portugal (Fig. 2).
The rock art is located in an impressive granite relief on the south-western tip of the promontory of Montedor, a spur of the western slope of the sierra of Santa Luzia, northwest to what is now the "pocket beach" of Fornelos. It is a marine beach, currently sandy and surrounded on all sides by granite outcrops, except on the western quadrant, although at low tide one can perceive, even to the west, that there is a profusion of outcrops (Fig. 3). They are porphyritic (K-feldspar phenocrysts) medium- to fine-grained two-mica granites (Teixeira et al., 1972), belonging to the granitic facies of Bouça do Frade. These potash feldspar megacrystals have an average size of 2 cm. These granites present a "spotty" appearance due to the presence of a large number of small surmicaceous enclaves. The dimensions of the surmicaceous enclaves rarely exceed 5 cm and are predominantly composed of lamellar biotite and muscovite crystals. This granite also presents metasedimentary enclaves with dimensions generally ranging from 10 to 20 cm.

At the base of the carved outcrop runs from east to west a course of intermittent water that will flow into the ocean - sometimes visible on the surface, especially in winter. From the south side of the beach, there is a fresh water spring that gushes out of the outcrops and was used by local people up to the 20th century. Today, it is buried under the sand of the beach. Under the granite relief where the rock art was carved, there is a small rock shelter, facing west, completely empty of sediments, as it is situated on the coastline and only visible at low tide.

It is also worth mentioning that in the outcrops of Fornelos there are traces of marine abrasion during the Eemian, probably in the MIS5e, HS1 ~ 124 ka BP, which today are considered Geological Heritage (Carvalhido et al., 2016). In addition to the moulding of the coastal platform, we can see the wave-cut notches, perhaps responsible for the place name (Fornelos) that etymologically means small ovens. Thus, Fornelos corresponds to a sheltered, intimate, impressive place due to its geoforms and abundant irrigation with fresh water, at least in a recent past.

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In palaeographic terms, it is assumed that the coastline in North-western Iberia was further away between the Neolithic and Roman period - a fact attested by the location of some archaeological remains from these periods. During the Middle Bronze Age (c. 3085 BP), the Lima River ran at a lower level than today (Alves et al., 2003), which also suggests the distancing of the coastline towards the west. In these circumstances, it is assumed that the situation would be similar in the Late Bronze Age or Iron Age, periods in which these carvings might have taken place. This place may have been a relief integrated into a wet meadow.

From Later Prehistory, the promontory of Montedor was occupied since the Neolithic period as the place names imply, existing in its northern slope and on the coastal platform, south of the rock carvings. The rock carvings of Sinadora are probably

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from the Neo-chalcolithic periods, inserted in the Atlantic Art tradition. A few hundred meters south of the carvings is the Late Chalcolithic/Early Bronze Age settlement of the beach of Carreço,\textsuperscript{10} possibly associated with the extraction of salt, amongst other shellfish activities (Bettencourt, 2009). On top of the promontory, a poorly known settlement from the Iron Age, called Castro of Montedor or Gandra is listed (Viana, 1961). According to the surface remains, it would have extended towards the northern and north-western slope, although it appears to be small. Throughout the western area of the promontory, there is a series of small salterns that were hollowed out in the rock, some of which were performed without the help of metal instruments, which are thought to be from the Bronze Age and/or Iron Age. It is also worth mentioning the existence of two salterns at a western natural step of the carved outcrop.

The engraved locus

The carved outcrop with a trapezoidal contour - for those who view it from the south - is quite raised in relation to the sandy beach.\textsuperscript{11} In the middle of the outcrop there is a small natural step of about 80 cm average width, enabling human circulation in front of its ravined wall. Below this step, the granite shows partially extended fractures due to weathering and erosion processes that give the outcrop a singular aspect. The outcrop is composed of fine- to medium-grained two-mica granite with a porphyritic texture, and polygonal fractures and irregular cracks - one of which is wider and somewhat deeper. The carved granite surface has a discontinuous reddish colour due to the presence of iron oxides resulting from the weathering of biotite in the granite matrix and surmicaceous enclaves, and a yellowish colour resulting from the combination of feldspar weathering with the iron oxides resulting from biotite. These colourations are very different from the grey colour of the remaining less weathered granite relief. These characteristics make Fornelos identifiable from afar for those that approach the site, on the south side (Fig. 4).


\textsuperscript{11} It should be noted that at certain times of the year when the sea takes the sand, the carved surfaces of the outcrop are raised above 3 m in relation to the beach.
Fig. 4. Top: The beach of Fornelos with the engraved outcrop. Middle: appearance of the site with the carvings (view from the southeast). Bottom: various perspectives of the carved outcrop of Fornelos (view from the south). The scale is 50 cm.
From this site, one has a view to either the coastal platform, to the south, or the western slope of the sierra of Santa Luzia, in particular Alto do Mior 3, where an outcrop with a ridden horse, amongst other motifs, was found. Towards the south-west and west, we can see the Atlantic Ocean. However, for those who see the carvings from the front, the setting is intimate and only open towards the north-west and west, that is, to the ocean.

The carvings

From the new rock art tracing and partial photogrammetric survey, we can distinguish in Fornelos thirty-one motifs divided into three panels: Panel 1, on the southern subvertical face with a trapezoidal outline; Panel 2, on the southern edge of the eastern subvertical face; and Panel 3, on the western subvertical face (Fig. 5).

Fig. 5. Manual tracing of Panel 1 of Fornelos.

In Panel 1, at the bottom of the southern face and next to a small step that exists therein, mainly in the yellowish area of the outcrop, twenty horses were schematically

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carved in a distorted perspective: an imperceptible cervical-dorsal line, completed with the tail, long neck and small head. The posterior and anterior legs are represented by simple grooves. Nineteen of them are oriented towards the east and their representation in a diagonal cervico-dorsal line implies an upward movement. The remaining horse is oriented towards the west and is roughly in the middle of the panel, partially overlapped by another in the opposite direction. It is facing an existing crack due to bursting on the surface of the outcrop, which does not seem recent.

Thirteen horses are ridden by very stylised horsemen whose legs are never represented. Five or six horsemen are only defined by small irregular grooves that come out from the horse's back, while others, more specifically eight, seem to grasp the horse's reins, materialising horse riding representations. In the first set, two horsemen follow in pairs at the bottom of the composition, and flanked by another six horsemen of different typology. Two of them seem to carry something on their backs, and five grasp the horse's reins in order to check its progress, as implied by the position of the heads of these animals. In the same line of the schematic pair of horsemen, but near the bottom, there is another horse that seems to carry two horsemen. Further on, two very stylised horsemen at the top and bottom of the composition seem to flank a horseman grasping the horse's reins, whose body and head are very perceptible. The horseman at the top is flanked by another bearing "load", and the one at the bottom has a horse behind him bearing "load", which follows the former very closely. In front of the herd follow two non-ridden horses, one of them with a very long neck. Behind the herd, another non-ridden horse follows. The same happens next to the group of horsemen without reins located at the back of the composition.

In addition to the quadrupeds and riding scenes, there are also six grooves. One of them, located intentionally under the feet of a horse, is a thin wandering line with one end thicker than the other, resembling a serpentiform. Another occurs under some of the legs of the ridden horse with two (?) horsemen. The interpretation of the remaining four grooves is problematic. They can either be incomplete representations of other equines, intentionally carved by only using the cervico-dorsal line, or the remains of very eroded horses. However, careful observation of the surroundings revealed nothing, as well as the photogrammetric survey. The groove located on the
The front section of the composition is very curvy to be able to represent the back of an equine, and there are also technical characteristics different from the other representations that leads us to believe that it may not be part of the original composition (Fig. 6).

Fig. 6. Panel 1 (in the centre) and Panel 2 (on the right) observed at 8 o'clock in the morning, in October 2010.

In Panel 2 we can find two animal figures on the south end of the subvertical surface facing east, next to Panel 1. The top one was not observed by Baptista and Magalhães (1985), nor during the survey of 2012. It was first seen in 2013, but its appearance as well as the absence of patina, lead us to believe that it was executed recently. The bottom animal figure was also touched up recently. However, the fact that it is represented in the drawing of Lanhas (1969) and in the surveys from the 80s (Baptista and Magalhães, 1985), and that part of the legs are under lichens, which are quite impregnated in the rock, provides us with signs of its antiquity. The body of this animal is represented by a horizontal line, a small tail facing downwards, a raised neck and two raised ears in a warning position (Figs 6 and 8). According to its position - facing south - it seems that it is waiting for the procession of horses and horsemen. Can it be a dog or a wolf?
In Panel 3, in the western subvertical face and on the south end of a wide and somewhat deep crack, in a reddish area, there are two groups of figures separated by a small oblique joint. Above the joint, there is a group of at least four very eroded horses facing south. They are also schematically represented. The one on top, which is very incomplete, might have borne "load". Below this figure, there is a ridden horse with a long neck, a well-designed head and flowing horsehair. The third horse from the top also seems to carry a horseman, perhaps two. Here, the intentional overlapping of figures makes their interpretation difficult. Finally, there is a last horse with no horseman. Although it is not visible in the tracing, the position of the equines on the outcrop shows signs of an upward movement.

Under the joint, there is an anthropomorphic figure carved in a semi-naturalistic way with a semi-circular head, narrow and long body, long, thick and curved arms and inverted U-shaped legs. This is an asexual figure. There seems to be an undetermined object attached to its right arm or shoulder (Fig. 7).

All figures were made by percussion and then abrasion, thus presenting polished and relatively wide U-shaped grooves.
Interpretations

Based on the aforementioned assumptions, it seems that the intelligibility of the materialised narrative in Fornelos might have been dependent on the intrinsic dialogue between the carved signs, the geomorphology of the outcrop, the effects of light and shade it provides and the context of the place. Thus, this set of elements might have been part of a narrative that the audience from the past experienced.

By taking into consideration this perspective in the interpretation of the place in the present, and the interaction between the motifs and the geoforms, we assume that the elements of Panel 1 are directed towards a round indentation in the surface, whose width is greater at the beginning than at the top. At its entrance, in the margin of the panel, there seems to be the raised head of a dog or wolf (Panel 2), in an attentive or expectant manner as if expecting the horsemen and the herd. Within the round indentation in the surface, no figures were identified. However, in the extension of the eastern surface, facing west (Panel 3) there are only some horsemen and horses that - coming from the north towards the south and in a moving posture - seem to have been the only figures coming out of that cavity. Beneath them, at a lower level, and well outlined by a joint, there is an anthropomorphic figure, whose raised arms show signs of a prayer, a spirit or a deity (Fig. 8).

In terms of sun exposure, Panel 1 is illuminated from morning until early afternoon, the moment from which Panel 3 is illuminated. However, the latter is illuminated until sunset only in winter due to the oscillation of the solar cycle between different seasons. It is also worth mentioning that when Panel 3 starts to be illuminated, the figures seem to be "pursued" by the shadow coming from the cavity, which only gradually fades away.
Thus, the protagonists of this story would have been the horses and horsemen - some bearing "load". Coming from the west, they would have started a journey towards the east, perhaps in the morning (the best moment of the day to view the carvings) on a summer day, which is suggested by the presence of the serpentiform. Along the way, some horsemen seem to have gone through some adversities, as suggested by the position of the head of the horses of the group behind them. Is this circumstance related to the serpentiform that is under the legs of one of the horses?

There are horsemen that are differentiated from others as they are represented without reins. May they be considered initiates? Along the way, the procession would have turned north, walking through a narrow, poorly lighted and bumpy (perhaps dangerous) path with no way out, where they would be defied from the outset by a dog or wolf, and where only a few would have returned - maybe some time/days/months later. The time dimension is suggested by the solar time in which Panel 3 is illuminated, i.e. in the afternoon in the summer, moment from which we can no longer observe Panel 1.
What does this narrative, inserted in the Late Bronze Age or Iron Age, represent? The answer to this question is not simple.

If we consider the written sources of Roman times related to horses, particularly those found in Strabo, in his work Geography Book III, 7, we find that the author states that the mountain people sacrificed goats, captives and horses to Ares, arranging hecatombs of each species, in the Greek way, and also organised equestrian, gymnastic and hoplite fights. Tito Livio (Per. 49) states that the Lusitanians sacrificed a horse and a man before combats. However, the narrative carved in Fornelos does not seem to represent any of these situations.

Taking into consideration all its characteristics, it seems that it is the representation of a mythical narrative on propitiatory rites or rites of passage that were part of the cosmogonic universe of the populations of the Late Bronze Age or Iron Age. In these rites, some horsemen and horses bearing "load" (offerings?) would have to undertake certain tasks that would involve many adversities, as well as go through certain underground areas of the world (round indentation in the surface with no way out) and face sub-world beings (serpent and wolf/dog), with a view to their rebirth or access to a new world. In this sense, the exit/release from the "dark depths" of the four horses - one bearing "load", two carrying horsemen that are grasping reins, and another carrying no horseman - could mean that only some of the initiates of this mythical journey would have been successful, probably with the protection of prayers, deities or spirits, embodied by the raised arms of the anthropomorphic figure.

It is worth questioning whether the possible "load/offering" was related or not to salt, a product believed to be of great real and symbolic importance, which could have been exploited both in the carved outcrop and in the surroundings (Fig. 9).

13 This chronological placement is based on the fact that the riding practice is well known since the Late Bronze Age (Harding, 1998). The canids also frequently appear in the stelae of the Late Bronze Age of the South-western Iberia after Gomes, M.A.S.V. Arte Rupestre do Vale do Tejo. Um Ciclo Artístico-Cultural Pré e Proto-histórico. Lisboa: Universidade Nova de Lisboa (PhD Thesis), 2010.

14 Although in another stylistic context - the Atlantic Rock Art tradition - the interpretation of quadrupeds as representing rites of passage was made for more complex compositions of possibly wild horses and deer, which would have been led to marshes or wet meadows where some animals would have been sacrificed, in the context of social and religious activities (Santos Estêvez 2015a, 2015b), perhaps indicating a great ancestry of such rites.
The materialisation of the mythical narrative through the rock carvings in Fornelos would also have been a way of organising the world, turning it in “imbibed spaces”, a place of appropriation, control and integration of the elements of the territory in everyday life and in the social practices of the communities that created it, under the context defined by Campelo (2016) as a magical and symbolic geography.

Even the physical context of Fornelos seems to agree with this interpretation, as the representation of propitiatory rites and rites of passage makes sense in a liminal place, i.e. in the border between worlds (land and ocean; the promontory and plateau) as if it were a mnemonic; of difficult access (width of the step in front of the panel and its height in relation to what is thought to have been the level of the beach or the wet meadow in the past) and where there is a spring. Therefore, Fornelos is a place whose characteristics are conducive to the manifestation of divinity, if we accept Brañas Abad's (2007, 417) premise that all border places are naturally prone to do so, drawing attention to the fact that both Romans and Greeks had specialised gods for the protection of these spaces. It should also be noted that liminal sites are also revered, celebrated or ritualised in the magical and religious geography of the Portuguese North-west (Campelo, 2016).
In the popular tradition of the North-western Iberia, the horse, amongst other meanings, is seen as a messenger, guard or guide between two worlds, as well as sometimes collecting the souls of the dead (Teijeiro Rey, 2002). The serpent is the “primordial goddess of the earth” and representative of a certain time of year, such as summer, where it can be found in wet meadows, water-courses and water sources (Teijeiro Rey, 2002: 85-86), or the manifestation of the devil, fertility and access to the depths of the earth (Campelo 2016). The wolf, although known as an entity whose function is to guide or lead, can also be associated with the sun, being able to devour the moon with its light (Murguía, 1888). The wolf, in some mountainous areas of Northern Portugal, was also seen as a mythical and supernatural being, sometimes with an evil influence (Álvares, 2004). The sea is understood as holy (Llnières García, 1990) and the water sources are normally linked to supernatural beings (Teijeiro Rey, 2002). In the Portuguese North-west springs and water are associated with femininity, fertility, health and wealth (Campelo, 2016).

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