



LOOKING OUT TO SEA: ACCESSIBILITY TO THE COAST AND DISTRIBUTION OF BRONZE AGE ROCK ART

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SUMMARY

The Atlantic Rock Art style seems to have originated during the Neolithic period and is widely distributed along Europe's Atlantic façade, in Ireland, Great Britain, and the northwest of the Iberian Peninsula. The cup-and-ring motifs are the most representative symbols of the Atlantic Rock Art, but during the Bronze Age, this rock art tradition undergoes iconographic changes in Iberia, daggers, halberds and other types weapons are carved. In Galicia and the northwest of Portugal, most rock art panels with Calcolithic/Bronze Age weapons are located in the western coast and on mountainous sites situated not further than 30 km from the coastline. The coastal factor seems clear as well in other rock art regions such as British Isles and Scandinavia.

RIASSUNTO:

Lo stile atlantico dell'arte rupestre sembra aver avuto origine nel periodo Neolitico, diffondendosi poi lungo la facciata atlantica europea: dall'Irlanda e Gran Bretagna fino al quadrante nord-occidentale della penisola iberica. Il motivo coppella con corona circolare è il simbolo più rappresentativo dell'arte rupestre atlantica. Durante l'età del Bronzo osserviamo una variazione iconografica a questa tradizione: nell'area iberica compaiono incisioni rupestri con pugnali, alabarde e altri tipi di armi. In Galizia e nel nord-ovest del Portogallo, la maggior parte dei pannelli di arte rupestre con armi riferibili al Calcolitico / Bronzo si trovano nella costa occidentale, su rilievi montuosi situati non oltre 30 km dalla costa. Il fattore determinante della prossimità della costa sembra chiaro anche in altre regioni con arte rupestre, come isole britanniche e la Scandinavia.

INTRODUCTION

One of the functions of rock art is to signify places, and thus give the landscape meaning. In the case of the northwestern Iberia during the Bronze Age this meaning could have been to control certain critical points of the landscape in order to define a territory and to regulate access to and transit across it. This process would have taken place in an historical context in which trading in certain prestigious goods, especially metals, played a part in the construction of the social reality of the Bronze Age. Therefore, in communities without a state, which lacked some mechanisms of social control, the role of the symbolic and the ritual, among other resources, contributed towards generating social cohesion and towards maintaining power structures. These are functions that rock art, as iconographic artefacts and monuments, could have carried out very well.

This article presents the evidence and arguments relating to the association between the location of rock carvings depicting weapons and the estuaries and bays of the western coast of Galicia, which were favourable places for commercial and social exchange among communities. Although the scope of these exchanges is still difficult to define, authors such as Ruiz-Gálvez Priego (1998), Kristiansen (2000) and Kristiansen and Larsson (2005) maintain that asserting control over routes, especially those concerning the metal trade and prestige goods (the so-called *prestige chains*,

see RENFREW 1972, p. 465), could have been a key factor in the development of societies in Late Prehistory as transmitters of symbols and ideologies and, likewise, these commercial routes could have functioned as broadcasters of images (FREDELL 2010).

ROCK ART IN EUROPEAN COASTAL REGIONS

It could be significant that in three zones with late prehistoric rock art: Scandinavia, northern British Isles and Galicia had similar coastal landscape: irregular and rocky shore, with many bays, capes and, small isles. These shores are suitable to serve as refuge for ships and for short-distance transit. In peripheral regions the sea provided a vital connection between communities who were less accessible by land (BRADLEY 2014).

In Scandinavia pictures of ships are the most representative image of the southern rock art. The coastal factor seems clear in this rock art tradition. Every areas with rock art are very close to the sea (Fig. 1). If we consider, according to geological analysis, the shore level in Late Prehistory in Bohusland (Sweden) was 16-14 meters higher, the connection between rock engravings and the sea is even more evident (LING 2008). Some authors had interpreted the connection between rock art and as a evidence of long distance contacts and trade. As well other proposals defend these engravings as a possible representations of ritual maritime actions (COLES 1990; LING 2008). In Kville (Bohuslan), according with the sea level in Bronze Age, there exist

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some marine passages with simple carvings representing ships, anthropomorphs, zoomorphs, etc. We can consider these passages as lines of movement to reach the central area located in Torsbo, situated some hundred metres away from the sea. In Torsbo we can see the most complex carvings with large seized warriors, ships, bulls, etc., this place could be worked as a natural port (SANTOS-ESTÉVEZ 2010, p. 150).

British rock art belongs to Atlantic rock art tradition (BRADLEY 1997). The most representative designs are cup-and-ring carvings. In Great Britain main concentrations of rock art occur in the north, in an area between West Yorkshire and the Caledonian Canal. In Scotland major engravings are found in Strath Tay, Mid Argyll and Galloway. In England in north Northumberland, Cumbria, North York Moors, Ilkley Moor, Stainmore Gap and, Peak District. In Ireland Donegal, Louth and Kerry.

Some carvings commanded a view right along valleys or lakes, but others did not do so. But, in general terms, especially in the most important concentrations of panels: Mid Argyll, Galloway and Northumberland, rock art are in coastal regions and no far from to shore line, and in Mid Argyll, the most of them in peninsulas and surrounding bays (Fig. 1).

ATLANTIC ROCK ART IN GALICIA AND NORTHERN PORTUGAL

It has been noted that there was a high density of Atlantic rock art in the region of Rías Baixas, four bays situated in the western coast of Galicia, and its surroundings. These region, and their immediate surroundings, into an extremely

It has been noted that there was a high density of Atlantic rock art in the region of Rías Baixas and its surroundings. The 'rías' of Galicia form a peculiar aspect of the Iberian Atlantic coast. On the one hand, the Portuguese coast is predominantly straight, meaning that the main ports are located at the mouths of rivers. The fact that the coast faces the open sea means that there are not many natural points of refuge for seafarers. On the other hand, the Cantabrian coast outside of Galicia is more irregular than the Portuguese coastline, but does not possess many natural harbours either. Rather, small bays and river estuaries are used for that purpose. In summary then, the northwest of Iberia is flanked by two long *uncongenial coasts* (CUNLIFFE 1999, p. 94). The natural features of the Rías Baixas have created favourable conditions for short-distance transit between the differing communities situated on their shores. Likewise, for any seafarer coming from the south of the Iberian Peninsula the rías would have been a refuge and an almost obligatory stopping place. Its distinction as a strategic enclave would have been enhanced by the fact that Galicia is situated at a crossing point between the North and South Atlantic (CUNLIFFE 1999, p. 2). Rías Baixas region was in Late Prehistory a dynamic area as far as the incorporation of cultural innovations (GONZÁLEZ RUIBAL 2006; SANTOS-ESTÉVEZ, SEOANE-VEIGA 2006).

Recently, Güimil-Fariña and Santos-Estévez (2013) argue that rock art with Bronze Age weapons were locat-

ed to control maritime transit in western coast. Until the car became widely used in the second half of the twentieth century, the quickest means of transport in the Rías Baixas was by boat. This fact favoured contact between coastal populations and caused some cultural features to extend along the rías whilst being almost non-existent inland. It must have been this circumstance which facilitated the distribution of the rock art of 4,000 years ago along the western coast. As far as coastal navigation as a means of transport in Late Prehistory, more specifically in the first millennium BC, is concerned, it is necessary to point out parallels between the western coast of Scandinavia, in Bohuslän-Østfold area, northern British coast and the Rias Baixas in Galicia. These areas are extremely irregular, with many capes and bays, and are notable for the abundance of rock carvings which are distributed along the same coastline length: 150 km. in Galicia and Bohuslän and 120 km in Mid Argyll.

Carvings from the Neolithic can be found from the northern coast of Galicia right down to the Vouga river in Portugal and from the Atlantic coast to the central mountain ranges of Portugal and those in the east of Galicia (Fig. 2). During Bronze Age, after second half of the third millennium BC, the area of distribution of the rock carvings reduced to the western coast and their immediate surroundings (SANTOS-ESTÉVEZ 2012). Their limits could be defined between the cape of Fisterra, situated on the northwestern coast, and the mouth of the River Lima on the Portuguese border and between the western coast and the Dorsal Meridiana mountain range that separates the interior and the coastal regions (GÜMIL-FARIÑA, SANTOS-ESTÉVEZ 2013).

As far as iconography is concerned, it can be said that there are three types of weapons represented in the carvings: swords, daggers and halberds. The link between rock carvings depicting weapons and the ritual realm has been pointed out by Vázquez Varela (1995) when he indicates that at least some rock carvings, perhaps the most monumental ones, could have functioned as aggregation sites and/or places for the celebration of rites of passage. As far as this possibility is concerned, the apparent disconnection of rock carvings depicting weapons with contemporary domestic settlements should be noted. This dissociation between great concentrations of rock carvings and domestic areas has also been documented in similar social contexts in regions such as Scandinavia (BROWN *et al.* 2011). In other cases, settlements which can be related to aggregation sites and/or fishing activity have been documented (BENGTSSON, LING 2007; NILSSON 2010). Returning to the northwest of Iberia, the studies carried out in Campo Lameiro showed the absence of agricultural activity in the surroundings of the rock carvings and excavations in nearby areas have located hardly any fragments of pottery, or indeed the total lack of them (VV.AA. 2013). We are inclined to follow Vázquez Varela's proposal in considering that at least the larger panels were sites of special ritual significance, associated with aggregation sites for warriors (SANTOS-ESTÉVEZ 2010). They could, therefore, have played an

important role as far as social cohesion is concerned. On the other hand, the smaller panels could have been linked to places where ritual depositions of weapons would have taken place. In this respect, the discovery of a weapons deposit dating from the beginning of the Bronze Age in the immediate surroundings of a rock carving with the same type of artefacts engraved must be highlighted (BRADLEY 1998).

VISIBILITY AND ACCESSIBILITY TO THE COAST

The vast majority of rock carvings depicting weapons were located away from long distance land routes. In the cases in which a relationship with land routes was observed, this was always connected to ways which linked the interior with the coast. Below, we shall observe, in addition to this circumstance, other factors which allow us to propose the connection between rock carvings depicting weapons and the coast, for example the proximity to the coast and visibility over the bays. Areas with great concentrations of carvings, such as O Mauxo, Campo Lameiro and the Barbanza Peninsula, are located less than 20 km from the coast. However, if we limit the sample to carvings depicting weapons, the distance to the coast is even less. There are 35 rocks distributed across 20 sites; only four are more than 25 km away from the coast and none is more than 65 km away. The most frequent distance from the coast is less than 9 km.

On the other hand, the existing link between the locations of some of the carvings depicting weapons and the coast can also be explained by questions of accessibility. We have the case of Pena Ancha (Dumbria), which is located on the pilgrim route from Santiago to Cape Fisterra at exactly point from which the coast first becomes visible. The view over the bay of Baiona is impressive from the vicinity of Pedra das Procesiões (Gondomar). The site of Amoedo is situated on a mountain pass which acts as a gateway between the interior and the coast less than 5 km away. There definitely seem to be two types of carvings depending on the distance from the coast. The first type is located a short distance from the coast, with views across a beach or bay, whereas the second type tends to be located some distance from the coast, without visibility - or at the precise limit of visibility - of the coast. Here we are referring to key points for transit or on routes linking the interior with the coast (Fig. 3).

In addition, there seems to be a certain systematic relationship between the iconography of the panels and their location at specific points around the rias. In this way, in the rias of Vigo, Pontevedra and Arousa, panels can be observed at the end of the rias, more specifically at the mouth of the principal river. The sites in question are those of Poza da Lagoa, Montecelo and Foxa Vella respectively. All three are composed of daggers and halberds and are situated at high sites, from which it is possible to see the interior of the ría and, in the case of Poza da Lagoa, the view across practically all the ría is impressive. The connection between iconography and location can also be seen in the most distant from inland carvings, Rego Lamoso, Beira da

Costa and Mogüelos, where halberds are absent; the number of daggers is fewer and the view is orientated towards the entrance and towards the outside of the rias (Fig. 4).

We have observed how a large number of the rock carvings of weapons are not only situated close to the coast, but also that they command good views over the sea. In some cases, they visually dominate specific beaches, to which they have easy access. This is the case of Rego Lamoso with the beach of Carnota, Laxe da Chan with Rodeira beach and of Foxa Vella with the bay of Rial, the latter site with evidences of ritual activity (COMENDADOR REY 2010). In general, rock art which is closest to the coast normally has good access to a beach or small bay into which a stream flows and from which access to the interior is easy. Beaches in areas with cliffs, in unprotected areas or areas without a source of fresh water, seem to have been rejected. Definitely, many of the rock carvings of weapons are in locations associated with a beach with natural conditions which allow for its use as a port. In some cases, this possibility could be corroborated by the archaeological record, as in the case of the concentration of Early Bronze Age pottery of O Fixón, situated 600 m to the south of Mogüelos and next to the beach of Barra (GARCÍA-LASTRA 1984, and LÓPEZ GARCÍA 1984), a site about which we have already speculated on its probable non-domestic use (GÜMIL-FARIÑA, SANTOS-ESTÉVEZ 2013).

VISUAL CONTROL OVER THE COAST IN THE RÍA DE VIGO

Following a general outline of the association of rock carvings depicting weapons with the coast, and given that it is not possible to go into detail for each of the cases in this article, we shall concentrate on the Ría de Vigo. The abundance of carvings of weapons in this area allows us to analyse in more detail the characteristics of their location. The two sides of the ría contain a total of four sites of carvings of weapons with a view across the Ría: Os Mogüelos (Cangas), Laxe da Chan (Cangas), Poza da Lagoa (Redondela) and Pedra das Procesiões (Gondomar). Another site in the area is that of Laxe de Sárdoma (Vigo), from which it is not possible to see the sea. This is a rock carving which is associated with a transit route towards the sea, which became an historic route beginning in the episcopal see of Tui and ending in the port of Vigo.

Almost all of the ría is included in the visual field of one of the rock carvings in the area, with the exception of the bay of San Simón, although perhaps this bay as we know it may not have existed in the Early Bronze Age (REY SALGADO 1993, quoted by FÁBREGAS 2001). The rock carvings are located close to the coast in places that are sufficiently elevated to enable a view over a wide area of the sea. It could be thought that the only way to define a direct relationship with the sea is by proximity, but better visibility of the coast is not obtained from the beaches, but rather from the nearby hills. We could compare it to the location of cairns in Bohúslan (Sweden), which are on top of hills on the coast.

The four sites with views over the coast concentrate their visual field over some of the sectors of the ría in

a complementary way, so that between all of the rock carvings, they cover practically all of the ría (Fig. 5). Another characteristic which defines their visibility is that each site overlooks the nearest beach or natural harbour. All of these cases are beaches with freshwater streams in small bays protected from the wind and the currents of the open sea by the presence of a cape situated to the west of the natural harbour. In fact, all of these natural harbours were ancient port areas.

The Rías Baixas have historically been an area linked to maritime trade with the south of the Peninsula and with the Mediterranean from Late Prehistory to the beginning of the Middle Ages. Indeed, travel by boat must have been what enabled the earliest contacts with the Mediterranean peoples. The book III of Strabo's *Geographica*, based on sources from the second century BC, is particularly detailed in its description of the coast, especially compared to the sparseness of its detail on the interior of Galicia. Contact with the south of the Peninsula, at least from the Iron Age, seems to be corroborated by the archaeological record (GONZÁLEZ RUIBAL 2006, p. 243), although we believe that this contact could date back to the Late Bronze Age if it is true that the deposits of palstaves, which are so abundant in the Rías Baixas, represent bronze for trade or exchange. On the other hand, if we refer to the second half of the second millennium BC, we can mention the presence of a rock carving with a depiction of

a Mediterranean boat in Oia on the southwest coast of Galicia, which Ruíz-Gálvez has interpreted as a Post-Mycenaean Aegean boat (RUÍZ-GÁLVEZ PRIEGO 2008).

CONCLUSIONS: ROCK ART AS AN ARTICULATOR OF TERRITORY

We have attempted to define some of the factors that may have influenced or even governed the distribution of Atlantic rock art with carved weapons. These carvings seem to have a connection to the sea, more specifically with the estuaries and natural harbours of the Rías Baixas (Fig. 6). However, it should be noted that with this connection other possible factors influencing their location have not been exhausted. Having analysed the accessibility to and visibility over the rías, it seems that the principal motivation for this connection to the sea was the control of transport and transit by sea.

Rock art with Bronze Age weapons are never located beyond the principal obstacle which would make access to the coast difficult: the Dorsal Meridiana mountain range. This physical barrier seems to be what demarcated the area of distribution of Atlantic rock art from the Bronze Age onwards. Also, these somewhat more interior carvings are related to routes which head towards the coast from the interior. The presence of monuments in certain places would be a way of materializing memory, thus producing tradition and consolidating links between groups within the same community and between this community and the wider territory.

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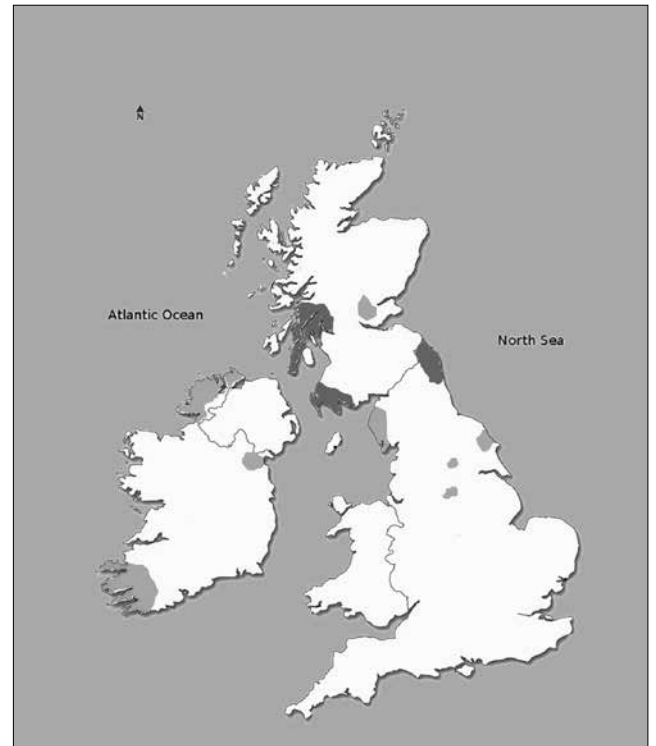
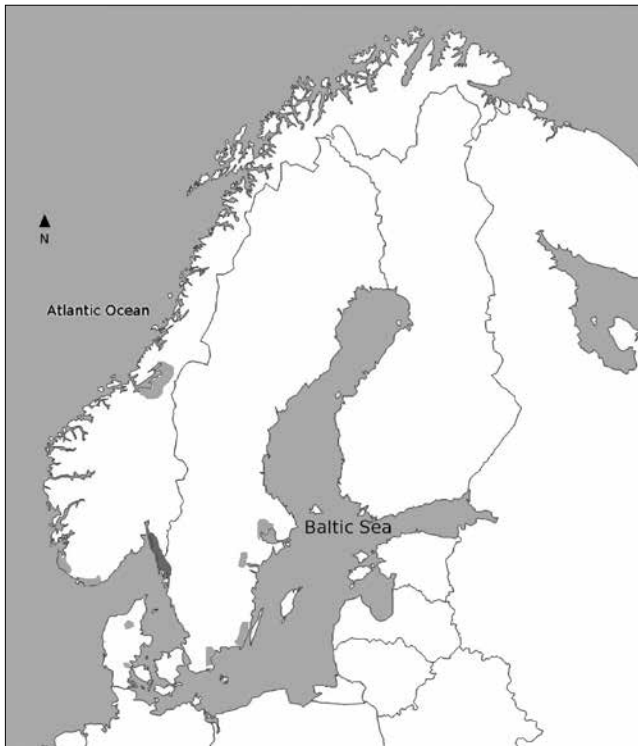


Fig. 1 - Left: Rock art regions in Scandinavia. 2. Rock art regions in British Isles. Areas in red represents regions with highest rock art density.



Fig. 2 - Left: distribution of Atlantic rock art in Neolithic. Right: Distribution of rock art depicting Bronze Age weapons. Carvings mentioned in this paper: 1) Pedra Ancha 3) Laxe de Sárdoma 5) Coto das Laxas 6) Cavadiña 7) Rego Lamoso 8) Foxa Vella 10) Pedra das Procesións 11) Outeiro do Corno 12) Primadorno 13) Namelas 14) Montecelo 15) Mogüelos 16) Poza da Lagoa 18) Beira

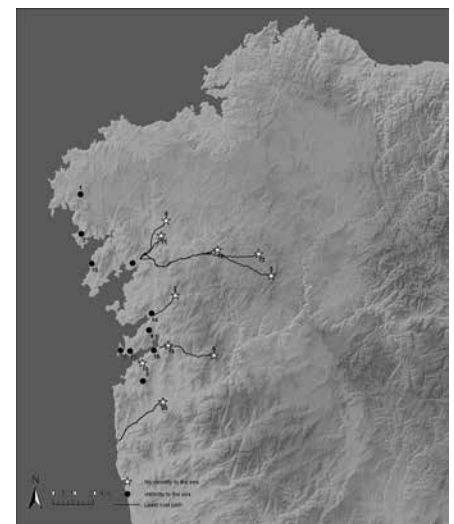


Fig. 3 - Routes to the coast from the inland carvings. At the end of the routes, at the coast, there are carvings with the same iconography: daggers and halberds.

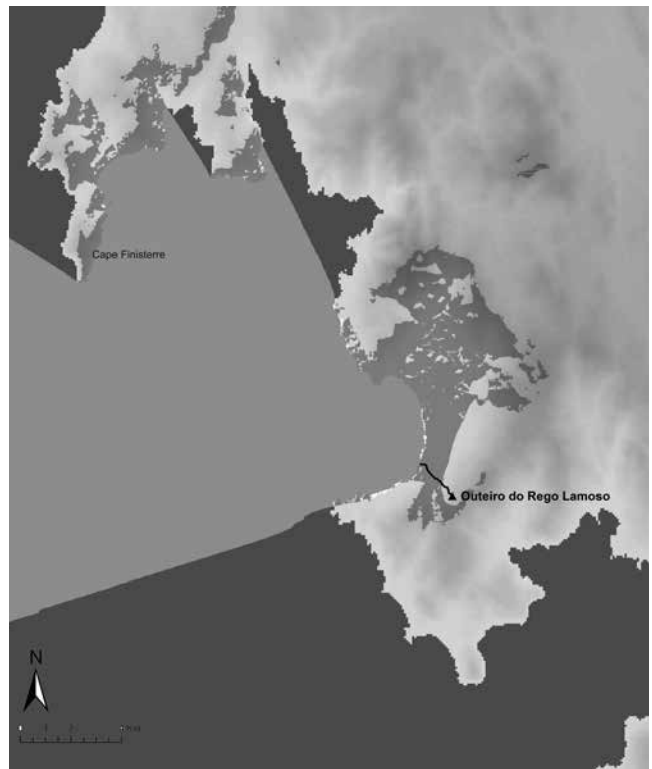
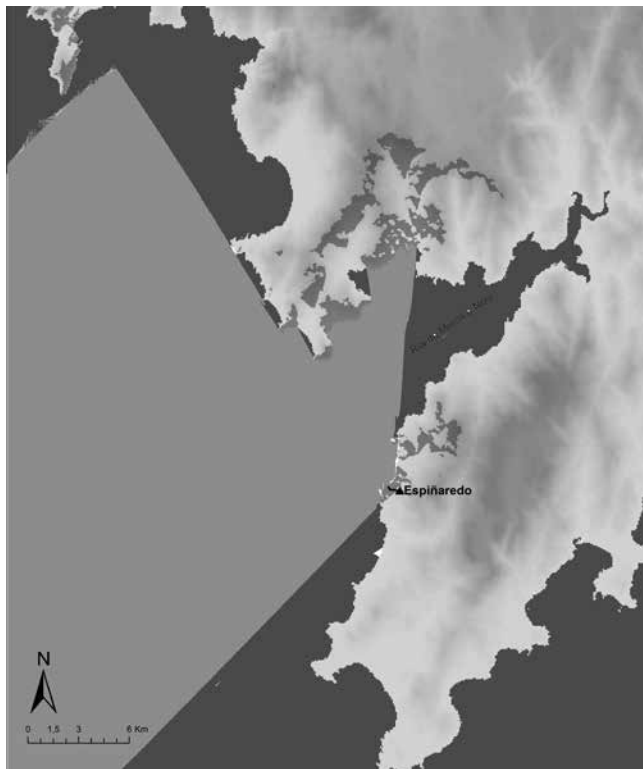


Fig. 4 - Espiñaredo and Rego Lamoso. Visibility towards the entrance and the outside of the rias and accessibility to beaches.

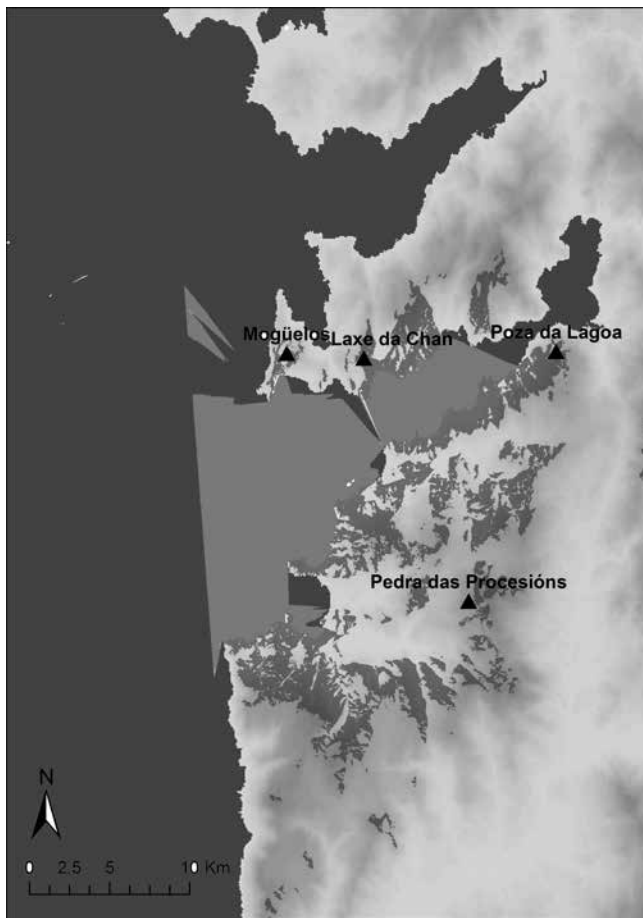


Fig. 5 - View of the Ría de Vigo and possible natural harbours. The total area of visibility from the rock carvings covers practically all of the ria.



Figure 6 - Above: Visibility over Ría de Vigo from Poza da Lagoa. Below: location of Rego Lamoso and view over Carnota beach and Fisterra cape.