

Preface

It is with great pleasure that I write the preface to Joana Valdez-Tullett's book *'Design and Connectivity: The Case of Atlantic Rock Art'*. I am especially pleased, having supervised the doctoral thesis that formed the basis of this book.

Certain rock art traditions in Europe are well known; these include the Bronze Age rock art of southern Scandinavia and the rock art of Valcamonica, Italy. Other rock art traditions are almost unknown: the Atlantic rock art of Britain, Ireland, Spain and Portugal is one such tradition. Whereas Scandinavian rock art and Italian Alpine art have readily identifiable motifs, of people, animals, boats (Scandinavia) and people, animals, field systems and settlements (Italy), the rock art of Atlantic Europe is mainly composed of abstract geometric motifs, with a few motifs of people, animals and occasionally metalwork (in Spain and Portugal only). It may be that the lack of identifiable motifs has led to this rich rock art tradition being overlooked by rock art scholars.

The tradition has not been entirely overlooked, and in Britain, Spain and Portugal there has been a long antiquarian tradition of enquiry dating back to the eighteenth and nineteenth centuries. However, it was not until relatively recently that archaeologists seriously studied the rock art tradition. The work of Richard Bradley (e.g. Bradley 1997; Bradley 2009) has been instrumental in bringing this tradition to wider attention. Bradley gave the tradition a 'shape', coining the term 'Atlantic rock art' to overcome its regional description as 'Galician' rock art and define its geographic spread through Britain, Ireland, Spain and Portugal. He also introduced a Landscape Archaeology methodology for the study of the rock art tradition and produced an influential interpretation of rock art site location: rock art sites were argued to be situated as markers on routeways between and around territories occupied by mobile hunter-gatherer and pastoralist populations.

It is over twenty years since Richard Bradley published his key work on Atlantic rock art and much has changed in the study of this rock art tradition. The study of this rock art tradition in Britain, Ireland, Spain and Portugal has increased incrementally. One result of this is that we have now increased the geographic spread of the tradition. When Bradley was writing, the tradition was suspected to continue into Portugal (though this was not discussed in his volume). We now know that the tradition extends well beyond the Spanish–Portuguese border as far south as the river Vouga some 150 km from the border. We now have a better understanding of the date of this rock art tradition (in Britain and Ireland at least) due to excavations around

rock art sites by the late Blaze O'Connor in Ireland, by this writer in the Kilmartin region of Scotland and by Richard Bradley himself in Ben Lawers, Perthshire, Scotland. Most excavations have produced a spread of dates but firmly date the first rock art to the Neolithic period. Added to this, the methodology for the study of rock art has progressed in leaps and bounds over the past twenty years. Once novel techniques, such as GIS, are now routine and – augmented by field-based analysis – aid in our understanding of landscape location and visibility. Perhaps the greatest changes have come in the documentation of rock art using digital imaging techniques, like Reflectance Transformation Imaging (RTI) and photogrammetry, which not only produce accurate images of rock surface, but also enable the researcher to interrogate the rock surface in greater detail.

The book by Joana Valdez-Tullett you are holding in your hands is the result of four years of fieldwork augmented by these new methodologies. Like Bradley, in each of her study regions she is concerned with how the rock art sites relate to the landscape. However, her enhanced methods of digital recording enable her to ask new questions of each rock art site: how is the rock art situated on the rock surface? What range of motifs are carved? How do individual motifs relate to the rock? This enables her to produce a nuanced scalar analysis of rock art sites (she describes these scales as 'graphic', 'sensorial' and 'environmental'). This has important advantages, as it allows her to compare differences and similarities in Atlantic rock art across the whole range of its geographic spread. Joana's study is a holistic one: she is interested in understanding the differences or similarities between Atlantic rock art in differing landscapes in Scotland, England, Ireland, Spain and Portugal as a way of understanding degrees of connectivity between these areas. Debates concerned with connectivity and migration are having a renaissance in archaeology with the development of isotopic and aDNA analyses. This work is especially important as it uses rock art, for the first time, to speak to these debates. The results of this wide-scale and detailed analysis are astounding and, using computer-based network analysis, Joana reveals the intricate (and often surprising) connections between different regions of Britain, Ireland and Iberia. This is simply the most extensive study of the Atlantic rock art tradition to date. For that alone it should be commended, but this is much more than the study of a single rock art tradition.

Rock art studies are often thought of as niche. One of Richard Bradley's imperatives for the study of rock art is that it should contribute directly to archaeology if it is to achieve anything of value (Bradley 1997, 8). It is clear from this book that Joana Valdez-Tullett has directly

contributed to wider archaeological debates in her study of connectivity in the Atlantic rock art region. Because of this, the book deserves to be read not only by rock art scholars, but by all archaeologists interested in the dynamics of interaction in prehistoric Europe. It is apparent from this book that rock art studies have come of age.

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Introduction



Derrynablaha, Iveragh Peninsula (Co. Kerry, Ireland). Photograph by Joana Valdez-Tullett.

1.1. Unbounded Atlantic Rock Art and Research Aims

The term Atlantic Rock Art was popularised in the 1990s by Richard Bradley (1997) and refers to a type of carving practice widespread across Atlantic Europe. With its northern limit set in Scotland and the southern currently in Portugal, it spans c. 1800 km, traversing England, Ireland, France and Spain (Bradley 1997: 17,34). Eóin MacWhite was the first author to use the term ‘Atlantic’ for this type of rock art, bringing together components of a style, previously studied separately (e.g. Obermaier 1923 in Galicia; Péquart *et al.* 1927 in France; Simpson 1867 in Scotland), and distinguishing open-air art from what became known as Megalithic Art (Bradley 1997: 38; MacWhite 1946). Both display motifs based on simple shapes such as circles and spirals that are also found on artefacts like the Gardboldisham macehead (Figure 1) but the complexity and exuberance of Megalithic Art, at times, overshadowed the study of rock art in the wider landscape. Despite co-existing in the same or neighbouring territories (e.g. Loughcrew, Ireland), the relationship between the two is still largely unclear (Shee Twohig 2012: 131).

Atlantic Art’s repertoire (Table 1) is based on abstract and circular imagery, including classic designs of cup-marks, single circles, cup-marks surrounded by one or more rings, penannular rings, wavy grooves, spirals, rosettes (Alves 2003; Bradley 1997; O’Connor 2006; RAPP 2000; Santos-Estévez 2008; Valdez 2010a, 2010b). Figurative and naturalistic images of animals and weapons are also generally included in the group, but are specific to Iberia. Iconography was the first element of this style to be studied, with the detailed analysis of individual motifs which led to the construction of numerous typological tables (e.g. Obermaier 1923, 1925; Peña-Santos and Vázquez-Varela 1979). The subsequent assessment of its geographical distribution in association with the morphological similarities of motifs shared by the aforementioned regions, suggested that these would have been connected in the past (Lorenzo-Ruza 1952; MacWhite 1946; Simpson and Thawley 1972). The nature of the relationships, however, has never been fully explored or understood. Likewise, there is a generally accepted chronological currency, although the dating of the making and use of the symbols is still an open discussion. Similarly, it is not yet possible



Figure 1. The Garboldisham macehead is a Neolithic artefact made out of red deer antler and decorated with spiralled motifs (photograph by Marta Díaz-Guardamino).

to outline a satisfactory social and cultural framework for Atlantic Rock Art.

The definition of a social and cultural context for Atlantic Rock Art will depend on the chronological period of use, however chronological ambiguity has hindered this integration. The dating of rock art is always controversial, in particular when situated in open-air locations with no other elements, but the landscape, to contextualise it. Atlantic Art's chronology has been a recurrent discussion, but is still an open debate. While there has been a tendency to ascribe the practice to the Bronze Age (BA) (e.g. Baptista 1983-84; Barnatt and Reader 1982: 33; Beckensall 1974: 8-9; Bettencourt and Sanches 1998; Eogan 1986: 221; Herity and Eogan 1977: 137; MacWhite 1946; Morris 1977: 15; Obermaier 1925; Peña-Santos 1980; Sobrino-Buhigas [1935] 2000; Tate 1865), the current general consensus is that the style originated in the Neolithic, with its use enduring until the 1st millennium BC (Alves 2003; Bradley 1997; Fábregas-Valcarce and Rodríguez-Rellán 2012a: 252; Jones *et al.* 2011; O'Connor 2006; Santos-Estévez 2015). The chronology of Atlantic Art has been explored through a number of strategies, although none have included a direct dating approach. The lack of stratigraphic or other associated contexts and the nature of the rock art constitute obstacles to a clear definition of the time in which this iconography was in use. In this book I will offer a narrower chronological currency, enabling the assessment of regional variations of the tradition and the moment of its creation, ongoing use, and potential re-use of and abandonment.

The cup-and-ring forms are the main feature that unifies the Atlantic Art carving tradition (Bradley 1997). The present study, however, considers that iconographic

similarities do not necessarily imply identical cultural frameworks. Furthermore, processes of transmission and adoption (Alves 2009b: 172), as well as the apparent long diachrony of the style (Santos-Estévez 2013: 219) may have influenced its evolution, leading to regional differences. The presence of a particular figure does not enable the identification of a composition's style, but instead a range of motifs in articulation with other factors such as shape regularity or the fashion in which elements are organised (Alves 2012b: 202; Layton 1991) and deployed in their environment. Further investigation is required to fully understand Atlantic Rock Art, and whether it can consistently be considered a widespread, unified phenomenon that materialises cultural exchange in Prehistory.

1.1.1. Designing Research Questions

The present work aims to contribute to a wider understanding of Atlantic Art, contextualising it and seeking answers to the most basic of questions: who was creating Atlantic Art, why and when? Avoiding the typological studies that flourish in the style's historiography, the following research questions were designed with clear objectives in mind. They intend to provide a social and cultural context to Atlantic Art, exploring the connections between the regions where it is found, merging the event with the wider narrative of Prehistory.

1. What is the character of Atlantic Rock Art?

The realisation that the formal characteristics of Atlantic Art are repeated in a number of modern countries of Western Europe suggests that there is a common identity underlying the tradition. The striking similarity between the motifs, the media and the landscape location of the rock art, make a common origin undeniable, despite regional variations. The construction of a narrative for Atlantic Rock Art requires a clear understanding of what the practice concerns. Its assessment and characterization include parameters such as technique, motifs, and compositions. A small scale of analysis encompassing the study of motifs regarding their type, regularity of shapes, dimensions, distribution, organisation into compositions, superimpositions and the carving techniques employed, will be used to ascertain the graphic personality of the rock art. Complementing these observations, the study will determine the topographical features of the media and the placement of rock art in the landscape. This will contribute for the revision of the concept of 'quintessential Atlantic Rock Art' (O'Connor 2006), considering physical features and social practice across all the study areas assessed in this book.

2. What is the evidence for theme and regional variability?

Despite observations that suggest there is a shared repertoire of motifs across the Atlantic seaboard (e.g. Anati 1963; Bradley 1997; Burgess 1990; Lorenzo-Ruza 1952, 1955; MacWhite 1946, 1951; Rodríguez-Rellán

Table 1. General types of Atlantic Art motifs






Type of Motif	Illustration	Description	Where it can be found
Cup-marks		Circular hollows worked into rock surfaces. They occur individually or in groups, can appear to have a random organization but may also be plotted in patterns. Occasionally conjoined by grooves. Two cup-marks joined by a linear groove are called <i>dumb-bells</i> (RAPP 2000:30).	All regions
Cup-and-Rings		This motif is a composition of a central cup-mark surrounded by a single or multiple concentric circles. These occur in different sizes, varying layouts and the number of rings can vary (RAPP 2000:30). These too can be connected via a network of linear grooves, be carved individually or as part of complex compositions.	All regions
Penannular Rings		Penannular rings are a variation of the previous motifs. They are cup-marks surrounded by one or more discontinuous curvilinear grooves, also called <i>gapped rings</i> , <i>penannular grooves</i> (Morris) or <i>horseshoe shapes</i> (Beckensall) (RAPP 2000:30). A radial line is usually carved from the central cup-mark, with which the circular grooves will meet.	All regions
Wavy Grooves/ Lines		One of the defining characteristics of Atlantic Art is the existence of multiple grooves, which can be linear or wavy, crossing the carved surfaces and connecting the main motifs. They are usually additions to compositions, rarely appearing on their own. In simpler designs, the combinations include, cup-marks.	All regions
Labyrinths ¹		Circular motifs with similarities to the Penannular rings. However, the interior of the figures is usually more complex its configuration resembles a labyrinth. (Peña-Santos and Vásquez-Varela 1979; Santos-Estévez and Seoane-Veiga 2010:25).	Mostly Iberia. There are accounts of labyrinths in other regions but of dubious authenticity (e.g. Rocky Valley carvings in Cornwall)

Table 1 continued



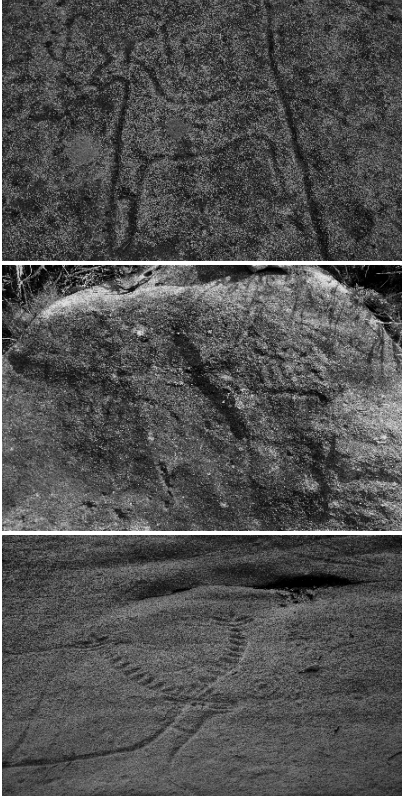
Type of Motif	Illustration	Description	Where it can be found
Spirals		<p>Spiral motifs are curvilinear lines that curl outwards from a central starting point. They can be either sinistral or dextral. These are usually carved alongside other circular combinations (Peña-Santos and Vázquez-Varela 1979:26-32).</p>	<p>All regions, but not very common</p>
Rosettes		<p>Rosettes can be described as a cluster of cup-marks organized in circular patterns. More often, a central larger cup-mark is surrounded by smaller ones in the shape of a circle. The combination can also be enclosed within a larger simple circle.</p>	<p>More common in the British Isles</p>
Zoomorphs		<p>Animals such as horses and stags are included in the definition of Atlantic Art in Iberia, where they occur alongside the circular iconography. In Galicia, they represent the second largest type of engravings, but they can also be found in the northern region of Portugal. These representations are far from homogenous, and several styles of depiction can be found. They occasionally feature in hunting and riding scenes, and serpents are also depicted in Galicia (e.g. Coto de Penalba, Campo Lameiro (Peña-Santos and Vázquez-Varela 1979:62-64).</p> <p>Representations of animals in Britain and Ireland are rare beyond the example of the deer in Ballochmyle (Ayrshire, Scotland) (Bradley 1997:59).</p>	<p>Spain (Galicia), NW Portugal</p>

Table 1 continued


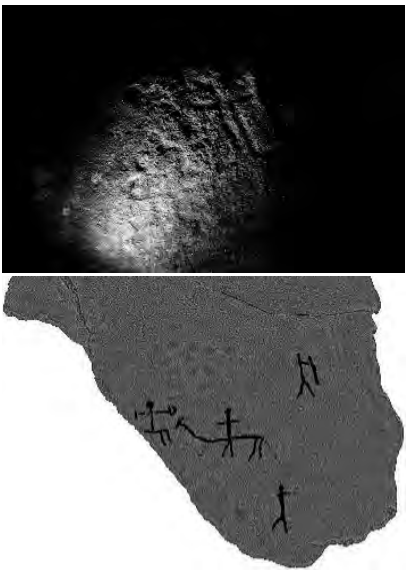


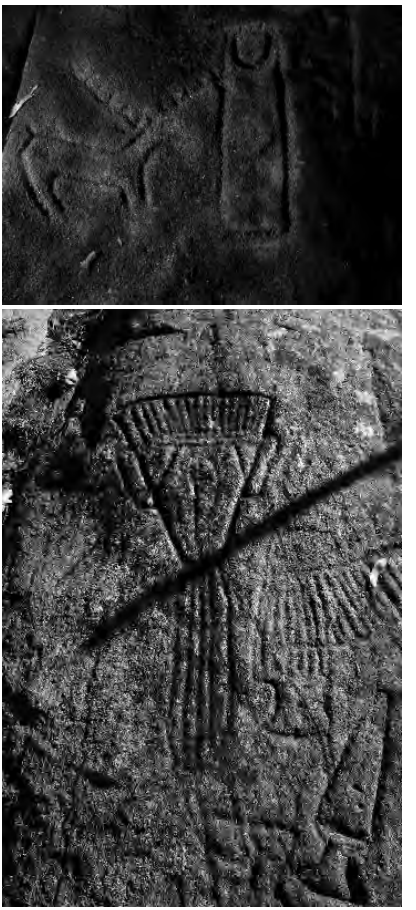
Type of Motif	Illustration	Description	Where it can be found
Weapons ¹		<p>The depiction of weapons such as halberds and daggers is also a characteristic of Iberia. Often depicted with much detail, they were soon used to date the rock art. They are less common than other motifs and often found in isolation (Bradley 1997:42).</p> <p>In the British Isles, such depictions of daggers and axeheads are nearly always associated with monuments (Bradley 1997:56), such as Stonehenge (Simpson and Thawley 1972) and Nether Largie in Argyll (Bradley 1993:91-93).</p>	Spain (Galicia), Portugal (very rare)
Anthropomorphs		<p>Human figures are rare, but examples are known to Iberia. Mostly associated with and riding scenes (Fábregas-Valcarce and Rodríguez-Rellán 2012c:254).</p>	Iberia
Miscellaneous Motifs (circular)		<p>Other motifs included in the tradition are rarer: e.g. <i>U-shaped grooves</i>, <i>key-holes</i>, <i>segmented circles</i>, etc. Their occurrence varies depending on the region.</p>	Varying according to region

Table 1 continued

Type of Motif	Illustration	Description	Where it can be found
Miscellaneous Motifs (other geometries)		<p>Motifs of angular configurations and other shapes: <i>crosses, chevrons, ladders, grids, lozenges, comb-like motifs, tridents</i>, etc. (Morris 1981:171), <i>pallettes, footprints, hooves, squares</i> (Peña-Santos and Vásquez-Varela 1979). In general, these motifs are quite rare and do not feature in the core group of Atlantic Art.</p>	<p>British Isles, Galicia (Spain), Portugal</p>
Miscellaneous Motifs (Figurative) ²		<p><i>Idols</i>, exclusive to Iberia, are a hard group to classify. Due to their shape, they are usually associated with their artefactual counterparts, mostly found, for instance, in funerary monuments in the South of Portugal (Peña-Santos and Vásquez-Varela 1979:76-80). Apart from the depictions, no material idol is known to have been found in the NW of Iberia. Another type of motifs are the so-called <i>Shields</i> (Costas-Goberna and Nóvoa-Álvarez 1993:157-81), alternatively interpreted as a kind of vehicle (Züchner 1992). Little is known about them, but they are often found with weapons.</p>	<p>Iberia</p>

¹Photograph by Manuel Santos-Estévez.

²Photographs by Manuel Santos-Estévez.

et al. 2015) regional deviations are thought to exist. The definition of Atlantic Art's character and its identification across the whole Atlantic region enables a discussion about connectivity at this level. The assessment of

deviations from a common repertoire allows us to look at interregional connections. Once defined the concept of Atlantic Art and the set of the similarities and differences of the tradition in each study area, I will then be able to

compare the regional data and identify regional variations in the motifs, their making and the setting of the rocks. This will allow the identification of unique variations within regions and those that are shared between particular areas, enabling a discussion about interregional contact.

3. What are the implications of connectivity and knowledge transmission for Atlantic Rock Art?

The presence of shared practices across such widespread regions, suggests the establishment of cultural relationships and consistent long-distance contacts during Prehistory. This presupposes a certain importance that Atlantic Art held, justifying its extensive and prevalent use. This book will explore the nature of these cultural relationships, connections between regions and how such a phenomenon could be dispersed over such a large area to ultimately comment on what role Atlantic Art played within the social context of these communities.

1.2. About This Book

This book starts by defining the main concepts upon which it will be based, outlining the current understanding of Atlantic Rock Art. Chapter Two analyses the published work for each of the addressed study areas, with an overview of how the phenomenon has been perceived in each country, drawing a historiographic evolution. Although Atlantic Art has an extensive bibliography, especially in England and Spain (Galicia), most of it is based on descriptions and analysis of individual motifs and the construction of typologies that contribute little to a broader discussion. Scrutiny of past publications has pinpointed common themes that led researchers to approach these carvings as a unified phenomenon, despite differences and a widespread distribution. This critical review revealed the shortfalls of some approaches and how limited investigations introduced bias into the dominant interpretations, restricting the progress of research.

Chapter 3 sets out the criteria used for the definition of the study areas and briefly describes the main geomorphological character and archaeological context of the rock art of each region. The main concerns of the project include the inter-regional study of Atlantic Rock Art, often approached in isolation, dissolving modern administrative borders. As such, a study area was sampled from each country where Atlantic Art is known: the Machars Peninsula (Dumfries and Galloway, Scotland); Rombalds Moor (Yorkshire, England); Iveragh Peninsula (Co. Kerry, Ireland); Barbanza Peninsula (Galicia, Spain); Monte Faro (Valença, Portugal).

The general hypothesis explaining the uniform character of Atlantic Art is outlined in Chapter 4, exploring concepts of Developmental Psychology and Cultural Transmission. Because the concepts of Difference and Similarity seem to be intrinsic to Atlantic rock Art, these were discussed in Chapter 5, where the need for the creation of a categorical

system and typologies is explained, in order to enable the identification of regional assemblages.

The strategies used to assess Atlantic Art's character and the basis used to compare the differences and similarities identified in the study areas is outlined in Chapter 6, where a detailed review of the methodology is provided. The methodology used to conduct the project was designed to meet the three aforementioned research questions and to be as unbiased as possible, whilst equally applicable across the different regions. The results of this approach are an important contribution of this book, since they encompass not only the formal analysis of Atlantic Art's iconography, but a number of associated variables that contribute for its social contextualisation.

Chapter 7 describes the overall results of the analyses, characterizing Atlantic Art according to the various components of its assemblage. It is organized conforming to the defined scales of analyses that guide the study, from the small motif to the wider landscape, and the final engagement of all the components exploring the relationships between the study areas.

Finally, Chapter 8 renders my perspective on Atlantic Rock Art, beginning with a renewed understanding of its main characteristics, resulting from the overall study. It comprises a synopsis of the phenomenon based on the knowledge produced in this book, but it also engages the practice of Atlantic Rock Art with a wider social and cultural Neolithic context, period in which its origin is placed. This is not only based on the slim archaeological available data for its production, but also in a Neolithic worldview and its evolution in subsequent periods.

A few final words are provided in Chapter 9 where the main achievements of the project are outlined, along with future directions and work that still can and must be done in order to improve our understanding of Atlantic Art.

This book complements Richard Bradley's seminal work (1997) and updates it, through a relational approach between a larger number of study areas examined in detail and the introduction of dynamic methodologies such as network science. Furthermore, this work is fundamentally based on an empirical approach. In addition to other projects that have been developed, particularly in the last decade (e.g. Alves 2003; Enlander 2013; Fábregas-Valcarce & Rodríguez-Rellán 2015; O'Connor 2006; Santos-Estévez 2008; Sharpe 2007), the picture of Atlantic Art is being gradually completed.