

Review of: Valdez-Tullett, J. (2019). *Design and Connectivity: The Case of Atlantic Rock Art*. (BAR Internat. Series, 2932). Oxford: BAR. 286 pages, 172 figures (31 in colour), 61 graphs (39 in colour). Supplemental material online (figures and graphs). ISBN 9781407316628.

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Archaeological theory offers tantalizing possibilities for understanding any kind of rock art and in this case, Atlantic rock art. To achieve that clarity of expression is essential. Academia is under scrutiny as never before. While academics have the duty to explain through pathbreaking works and clearly set out syntheses, their explanations will benefit from the intense surveillance of the general public. A clearly delineated theoretical stance is key. A rigorous examination of archaeological phenomena requires an investigator who draws on increasingly large bodies of disparate data which carry multiple meanings. This involves careful use of intellectual frameworks (theory) while multiple digital approaches are applied so that carefully compiled site data at scale provide potential for the rigorous comparison that naturally emerges from modelling. Different perspectives emerge as vast quantities of digital data flow from the application of an array of digital tools and draw on databases of content of varied but well-documented provenance. To achieve that happy result, it requires (i) extreme rigour in the collection and verification of data, (ii) an explicit theoretical position framework from the outset, and (iii) clearly articulated well-documented scaffolding appropriate to the task in hand. These criteria provide the prism through which to examine the work in question.

Design and connectivity: The Case of Atlantic Rock Art by Joana Valdez-Tullett is the 2,932nd volume of a series which has been running since the 1970s. It is also the first volume of a subseries of publications entitled: "*Archaeology of Prehistoric Art*". It was launched by British Archaeological Reports alongside a second sub-series of publications with the ambition to provide "*a worldwide databank in archaeological research that is relevant in 100 years' time*". It is a softcover publication which counts 171 pages, in 9 chapters, bibliography, 5 appendixes covering 65 pages, 42 tables, 62 graphs, and 162 figures (includes 40 colour photographs). All figures and graphs are available for downloading (<https://www.barpublishing.com/additional-downloads.html>) (VALDEZ-TULLETT, 2017, viii). It is the first volume of a series published by BAR Publishing (British Archaeolo-

gy Reports) in their sub-series called "*Archaeology of Prehistoric Art*". The press launched this series in response to a "*renewed interest in the archaeology of prehistoric art*" ([https://www.barpublishing.com/sub-series/archaeology-of-prehistoric-art/\[24.5.2020\]](https://www.barpublishing.com/sub-series/archaeology-of-prehistoric-art/[24.5.2020])). The volume is a revision of a PhD thesis, the result of four years of fieldwork on the petroglyph sites of an area previously designated (by BRADLEY, 1997) as "*Atlantic Europe*". She drew on numerous petroglyphs located in five sample regions in Portugal (Monte Faro, Valença), Spain (Barbaza Peninsula, Galicia), Scotland (The Machars, Dumfries and Galloway), England (Ilkley Moor), and Ireland (Iveragh Peninsula, Co. Kerry) to extrapolate about the petroglyph sites called Atlantic Rock Art. Valdez-Tullett challenges several generations of work on the Neolithic era. Laudably ambitious, the work lacks that vital focus and clarity essential to the task she has set herself. The absence of clearly articulated middle range theory means that the reader experiences a difficulty in detecting her stance on the principal questions posed. Questions arise: is the underlying data secure? Are there commonalities in the images extant on the unknown number of sites surveyed? What can these commonalities tell us about the symbol system of the world of the Neolithic? What about the question of style? Or the underlying logic? Or the inevitable challenges posed by the evidence? No wonder then that the conclusions are so vague.

Chapter 1, outlines the structure of the subsequent nine chapters and introduces the carvings, the petroglyphs. Valdez-Tullett builds on the works of Bradley (for example: 1995; 1997; 1998; 1999; 2000; 2002; BRADLEY & FABREGAS-VALCARCE, 1998) popularized during the 1990s. The term "*Atlantic Rock Art*" is inherently awkward. It refers to the practice of carving on the rock surfaces across a vast area which has "*Scotland is its northern limit while its southern limit is Portugal*" (2019, 1). Oddly enough she did not have a sample region in France despite the existence of Neolithic engravings (for example: CASSEN ET AL., 2015; 2017). The term 'Atlantic' was first used by Eóin MacWhite to group the images as he "*brought together components of a style, previously considered separately*" (VALDEZ-TULLETT, 2019, 1). The chapter discusses the history of the use of the term 'Atlantic Rock Art' which appears to be based on the physical style of the carved images, which is apparently typified by their "*cup-and-ring motifs and a predominately circular iconography*" (VALDEZ-TULLETT, 2019, 9). Valdez-Tullett declared that the definition of a social and cultural context for Atlantic Rock Art

depends on the chronological period of use yet states “however, chronological ambiguity has hindered this integration”. Rather than seek more substantive evidence she reminds the reader that this ‘tradition’ is defined by Bradley (1997; cited in (VALDEZ-TULLETT, 2019, 2)), but Valdez-Tullett reifies the word ‘tradition’ using a capital ‘T’ according to her preface (VALDEZ-TULLETT, 2019, xxii).

The definition of ‘rock art’ is surprisingly dealt with in chapter 2 where she stated that “style is not enough to define a tradition” (VALDEZ-TULLETT, 2019, 10). Valdez-Tullett asserts that “the dating of rock art is always controversial” since sites often occur in open-air locations with no other elements and with only the landscape to “contextualize it” (VALDEZ-TULLETT, 2019, 2). Two types of dating exist: absolute and relative dating can be employed. Dating petroglyph sites is always a tough call not made easier by her assumption that the landscape is static, unchanging. Yet landscapes perpetually shift with time, temperature, seasons, the year, the day, even the very moment. Surely the student of petroglyphs must take into account the probability that the ways in which the landscape was seen changes over time, and with the viewer. A reference to that issue would have enriched the discussion. ‘Seeing’ and ‘perceiving’ are crucial: reference is needed to the copious literature, works which discuss that issue, e.g. Berger’s book “Ways of Seeing” (1973). Valdez-Tullett argues that earlier researchers ascribed them to the Bronze Age period. Current researchers agree that the style of these images originated much earlier in the Neolithic and persisted “until the 1st millennium” (VALDEZ-TULLETT, 2019, 2). The author notes that previous work has attempted to devise chronologies for Atlantic Rock Art, argues that none have used direct dating methods, and states that “the lack of stratigraphic or other associated obstacles contexts and the nature of the rock art constitute a clear definition of the time in which this iconography was in use” (VALDEZ-TULLETT, 2019, 2). This does not make much sense. Perhaps the author believes that there is no secure method of dating the images. Perhaps she presumes the images were ‘used’ either once or multiple times over an unknown period of time. Valdez-Tullett states she intends to offer a “narrower chronological currency, enabling the assessment of regional variations of the tradition and the moment of its creation, its ongoing use, and potential re-use of and abandonment” (VALDEZ-TULLETT, 2019, 2). The idea of ‘currency’ is fascinating but by what methodology does she intend to achieve this? Additional investigation, she asserts, is required to “fully understand” Atlantic Rock Art. “Can it be consistently understood as a widespread, uni-

fied phenomenon that materializes cultural exchange in Prehistory” (VALDEZ-TULLETT, 2019, 2). One quickly gains a strong impression that Valdez-Tullett sees her study as the key work which establishes an Atlantic tradition of petroglyphs. She asserts that there is a “striking similarity between the motifs, the media and the landscape location of the rock art, make a common origin undeniable, despite regional variations” (VALDEZ-TULLETT, 2019, 2). Naturally enough she asks the inevitable questions who created them, why and when (VALDEZ-TULLETT, 2019, 2). She then claims that she intends to ‘merge the carvings’ “with the wider narrative of Prehistory” (VALDEZ-TULLETT, 2019, 2). This entails proposing and describing the social and cultural context of the regions at the time they were created.

Though indicated in the initial outline of discussion the intellectual framework to be employed in this task, the ones we referred to earlier are, sadly, left unstated (VALDEZ-TULLETT, 2019, 7). There is no lack of ambition here: Valdez-Tullett indicates her study “complements Bradley’s seminal work (1997)” and she argues, extends it by taking a relational approach between evidence drawn from findings from a larger number of sites using what she called “dynamic methodologies” such as ‘network science’ (VALDEZ-TULLETT, 2019, 7). She has not indicated which methodologies she intends to use to establish meaning which can be employed together or separately: analogical, homological or intuitive. The intuitive (sometimes called the narrative, constructivist, or so called ‘humanist’) approach associated with post-processual archaeology developed as a reaction against the positivism of the processual archaeologists during the 1970s and 1980s (for more information see COLSON, 2006, 5-7). The extent to which a body of empirical data collected over a number of years can be subject to ‘network design’ depends heavily on the quality of the intellectual scaffolding provided by middle range archaeological theory, supported by grand theory from the outset. Had that been present it may well have enabled the author to place the discussion of style at the outset of the study so that readers can understand and not have to infer the approach and style adopted. The challenge is in the material itself: for given the absence of adequate dating the images becomes an intractable task unless a rigorous discussion of style is employed and seen to be employed from the very outset. Unfortunately, this is postponed until later chapters. Yet this is the very foundation of any discussion in archaeology, and its absence here is sorely missed.

Chapter 2 appears to launch the reader into the meat of the work. It appears to be a discussion of

theory. Yet discussion of the intellectual frameworks sprawls over chapters 2 and 8. Why this has occurred is unclear. Valdez-Tullett states “it is generally accepted as a reference for prehistoric tradition of carvings found among the Atlantic seaboard” (VALDEZ-TULLETT, 2019, 9). What are the references to substantiate this claim? Who are these ‘rock art researchers’? What do those from other disciplines that have examined these images – art historians, archaeologists, anthropologists, historians, and so on – have to say? The author argues that the style of these images is insufficient on its own to “define a tradition of rock art” (VALDEZ-TULLETT, 2019, 10) which may well be a valid point. The identification of Rock Art styles has become central to this area of intellectual activity (see: BAHN, 1993; BOU-ISSAC, 1993; CLEGG, 1993; CHAPLOUKA, 1993; DRONFIELD, 1993; FRANKLIN, 1986; 1993; HASKOVEC, 1992; JOHNSTON, 1993; LORBLANCHET, 1993; OFFICER, 1992; TRATEBAS, 1993; WELCH, 1993). So, making such a statement here begs the question of why is this discussion not provided in chapter 1. In that respect it would be useful to have an illustration of a “non-naturalistic abstract” design (VALDEZ-TULLETT, 2019; 9). Such a design is not to be found in Table 1 (VALDEZ-TULLETT, 2019, 3-6). A portion of this chapter considers the body of literature on “Atlantic rock art” and covers sites in Portugal, Spain, England and Ireland. The extent to which this detailed review contains the grey literature so common to this field is unclear.

At the same time Valdez-Tullett (2019, 13) implies that the study of rock art is separate from archaeology. She claims it emerged as a discipline during the period when processual archaeology (VALDEZ-TULLETT, 2019, 14) predominated. She references a publication by Renfrew and Bahn (2000). She (VALDEZ-TULLETT, 2019, 14) states: “By the end of the 20th century, rock art is an established discipline with its own character[.]” But why has this statement not been substantiated by references from other works? Citing an undergraduate textbook as basis for such a generalization is inherently weak. It is difficult to understand the place of this discussion in her argument. If accepted, it stands her reasoning on its head. If rock art is a separate discipline, that is a separate argument: its canons would have been developed and could inform the arguments about an Atlantic Rock Art ‘tradition’. This stance implies that rock art can be interpreted outside of Neolithic Archaeology. This is problematic as this implies Rock Art has its unique disciplinary canon as a specific branch of knowledge, learning or practice. However this is awkward because the term ‘rock art’, which is

invariably applied to these images, is an integral component of the experience of the past, as important as the lithic, the bone, and ceramic despite the fact that people globally describe them as ‘art’ (for a more detailed definition see Colson, 2018, 80). It is a component of a material culture. It is possible that the study of Rock Art might draw on archaeological theory even conceivably ethnomusicology: but their relevance to the discussion of an Atlantic Rock Art must be clearly discernable. As presented, this is a separate but related issue.

According to Valdez-Tullett archaeological theories are linear developments. There is a sense that she does not understand that theory (the abstract frameworks used to organize and structure information called data) is inherently dynamic. Theories do not build upon each other rather they react against each other. Postprocessualism emerged as a reaction to processualism. They developed in specific historical contexts bringing specific theoretical implications, influences and consequences to the interpretation of the archaeological record. As Trigger (2006, 17) points out the ideas, theories and discussions of each researcher exist in a specific context. So, a discussion is missing regarding the relationships and influences of the Grand Theories in vogue at the time of writing (e.g. positivism, relativism, realism) with the various approaches, middle range theories and their bearings on the studies of rock art images emerging as interstitial. Valdez-Tullett posits the idea that because “rock art studies were slow to engage with the new paradigm” the new “discipline” as she calls it has been “marginalized and isolated from mainstream academic discussions” (VALDEZ-TULLETT, 2019, 13). Such a bold assertion cannot be asserted but must be substantiated by evidence and duly referenced. Her stance indicates that she strongly supports post-processualism. She argues that “landscape archaeology evolved from the conceptual fusion between the principles of Humanist Geography, Processual and Post-Processual archaeology” (VALDEZ-TULLETT, 2019, 15). This is a vague assertion but without detail has little intellectual heft. How did the principles of these disciplines mesh with one another? More prosaically, how were they employed in the practice of recording, describing and classifying the archaeological record? The reader understands that Bradley’s (1991; 1997) work informs the development of the theory of ‘landscape archaeology’. But where are the bridging arguments which provide the scaffolding to take the reader from the detail of the engravings to inform the theoretical perspectives which inform her gaze? Otherwise the reader cannot see the wood for the trees.

Chapter 2 continues the discussion on chronologies and Bronze Age chronologies. Valdez-Tullett asserts on (2019, 10) that *"this book demonstrates that style is not enough to define a tradition of rock art"* this chapter is an ideal location for discussions of the debates on style, chronologies and function and a reflection on the considerable body of work which exists on such topics. The author recognises the value of multidisciplinary research as it brings numerous methodological advantages with *"an array of philosophical backgrounds to a research question"* (VALDEZ-TULLETT, 2019, 17). Unfortunately, she neglects to highlight the reality that these benefits inevitably import intellectual challenges in terms of the philosophical frameworks of each discipline and each practitioner. The sub-titles *"The Character of Atlantic Rock Art"* and *"Chronologies of Atlantic Rock Art"* indicate suitable places for such discussions. The brief summaries and beautiful photos are but mere illustrations, they are insufficiently worked up to provide the scaffolding necessary to support the general argument so that the reader cannot assess their contributions to the argument.

Chapter 3 has an introduction, and a discussion section but sadly lacks a well-defined conclusion. Three definitional issues need to be dealt with first for the generally knowledgeable reader, secondly for a lay reader, and thirdly for *"an international audience"* (<https://www.barpublishing.com/> [17.6.2020]). Many will read this volume, it was not merely intended for a select audience much less the hyper select cognoscenti: so it is necessary to state (i) what is a 'tradition?', (ii) Where are the areas of study located on the map? and, (iii) What are the precepts of the writers whose samples are cited? These are not pedantic points: unless they are made clear, it is very difficult to accept the premise of an 'Atlantic Art'. Again, why are sites in France excluded from the *"Atlantic"*? It is as if this geographical region does not exist. If the regions chosen are 'case studies', then the principles on which they have been selected should be spelled out. Valdez-Tullett proceeds as if the five study areas are a representative sample of a wider area and can provide the empirical data for subsequent analysis. The objective of her examination is to develop *"an intra-regional investigation, a study from each modern country in which Atlantic art can be found"* (VALDEZ-TULLETT, 2019, 25). That is all well and good, the goal has potential but the way in which the work is conducted is problematic because Valdez-Tullett neglects to define the phrase *"modern country"* which is particularly pertinent to her argument. The same can

be said for the use of *"Europe"*. It is equally the case for the phrase *"modern country"*. Does this last refer to Europe after the late Seventeenth Century the 'Modern Revolution' discussed by Pincus (2009) where he adduced that the events in England in 1688-89 *"radically transformed England and ultimately to shape the modern world"* (PINCUS, 2009, 486) or to the ideas referred to by Judt (2005) as he discussed the experience of several places in Post War Europe after 1945 as each country 'constructed' its 'national heritage' amid the rubble and ruin. Without clearly defined methodology (case study and sampling) a reader of whatever variety is in danger of losing their bearings.

The last sentence of the opening paragraph is unclear: Valdez-Tullett (2019, 25) writes that *"Whilst it is never an aim to study the integrity of each country's record, it was crucial that the tradition was significantly sampled [...]"*. What does this mean? It is inherently a-historical, so her rationale to use previously published data is unclear: 'national' level data is irrelevant, regional data is relevant. What are the reasons for the supposed association of geomorphological features with environmental characteristics (VALDEZ-TULLETT, 2019, 25-26)? Again, more clarity is needed. The reader must not have to guess the selection criteria used to identify her study areas. She utilized advice from Orton's (2000) publication and then devised *"a scheme of unintentional samples"* (VALDEZ-TULLETT, 2019, 25). Since she has stated that *"most"* of the data utilized in this study had been previously published so these are secondary sources (VALDEZ-TULLETT, 2019, 25). In that case who collected and compiled it and what were their intellectual frameworks? Why had Valdez-Tullett used it rather than her own fieldwork and controls? Nonetheless Valdez-Tullett identified five cases studies: the Machars (Scotland, Ilkey), Moor (England), Iveragh Peninsula (Ireland), Barbanza Peninsula (Spain), Monte Faro (Portugal) in order to develop an *"inter-regional investigation"* based on them satisfying a set of *"specific criteria"* unknown to the reader (VALDEZ-TULLETT, 2019, 25). In addition, she provides at least 30 carved panels of *"accessible and/or published data"* (VALDEZ-TULLETT, 2019, 25). Again, it is unclear what is meant by the use of the word *"accessible"*. It would be helpful to be informed of the *"specific criteria"* utilized by Valdez-Tullett and a secure definition of a *"panel"*. Valdez-Tullett is clearly aware of the issues which arise when using such ('loosely documented') data samples for archaeological research as she states that the quality of the samples *"depends on the type of, or lack of available data"* (VALDEZ-TULLETT, 2019, 25).

The chapter is poorly framed: the end fails to relate to the beginning. It is insufficient to merely provide descriptions of the geomorphology and the history of archaeological research on each area of the five regions to be sampled.

Chapter 4, entitled “*Cultural Transmissions*” presents some of the methodology for the study (VALDEZ-TULLETT, 2019, 39). Despite the promise of its title and the description in chapter 1, (VALDEZ-TULLETT, 2019, 7), this is a very short chapter. It is also frustrating as numerous claims are made based on no clear evidence. Firstly, why does Valdez-Tullett need to reiterate her claim that “*one of the main strengths of this project is its empirical nature*” (VALDEZ-TULLETT, 2019, 39)? Where is the evidence for making such a claim? The reader has already been informed (at the end of chapter 1 (VALDEZ-TULLETT, 2019, 7) that this study is “*fundamentally based on an empirical approach*”, but surely any work in archaeology should be based on empirical evidence. The introduction argued that the chapter contains a discussion of the general methodology, of developmental psychology and what is termed “*Cultural Transmission*” (VALDEZ-TULLETT, 2019, 7). Valdez-Tullett briefly introduces readers to the notion of drawing on developmental psychology (VALDEZ-TULLETT, 2019, 40) with the statement that numerous studies in developmental psychology “*demonstrated that there are a number of ways that knowledge and culture can be transmitted, each of them with their different results*” (VALDEZ-TULLETT, 2019, 40). This statement is inherently weak a citation to an article by Huang and Charman (2005) in the *Journal of Child Psychology* which discusses several experiments on the behaviour of children who are less than 18 months old with respect to objects, is merely suggestive. Valdez-Tullett referred to developmental psychology, as having been “*explored*” by Stade (2017) “*in relation to cultural transmission in the Palaeolithic*” which she obviously views as valuable as she cited his work several times (VALDEZ-TULLETT, 2019, 40). However, Stade (2017) discussed lithics, not petroglyphs leaving the reader to beg the question ‘Are they analogous?’ Valdez-Tullett (2019, 40) subsequently stated the “*three main methods for cultural transmission which are relevant for the case Atlantic art*”, but there is no forensic discussion of the advantages and disadvantages of utilizing developmental psychology in order to understand these petroglyphs.

It is unclear why Valdez-Tullett briefly discussed the similarities and differences in the petroglyphs (VALDEZ-TULLETT, 2019, 40) given that there is little or no mention of the supposed large body of empirical data she drew upon on page 39 and page

7. Examples include the opening sentence of the chapter “*At a large scale, Atlantic Rock Art is seemingly identical across Western Europe*” (VALDEZ-TULLETT, 2019, 39). Where is the evidence to substantiate this claim? Why does Valdez-Tullett once again fail to define “*Western Europe*”? Valdez-Tullett briefly lists the range of motifs and one learns that she follows O’Conner’s (2006) lead in referring to a core group of motifs at each site as ‘quintessential Atlantic’ (VALDEZ-TULLETT, 2019, 39). This is by definition quantitative. Why does Valdez-Tullett not provide the data here? According to Valdez-Tullett other motifs are present but there were smaller numbers of them as Valdez-Tullett stated “*other images are also present in smaller percentages*” which remain unstated to the reader (VALDEZ-TULLETT, 2019, 39) but they are ‘percentages of what exactly?’ Why were these motifs not described here? Is the information provided on a ‘need to know’ basis? Valdez-Tullett states that the techniques “*with which the shapes were cut into the rock are also fairly similar*” (VALDEZ-TULLETT, 2019, 39). The meaning of the word ‘similar’ is opaque to anyone other than the writer of the volume.

She boldly concludes, lacking significant empirical evidence that “*it seems clear that Atlantic Art was culturally transmitted and travelled across the Atlantic façade[.]*” (VALDEZ-TULLETT, 2019, 41). The word ‘façade’ implies that there is something behind it. Valdez-Tullett does not indicate how such cultural transmission of ideas might have travelled across this vast area as neither further information nor references are provided. Perhaps the poverty of explanation regarding the term ‘Atlantic façade’ (VALDEZ-TULLETT, 2019, 41) implies that author does not wish to provide the reader with the information in the dataset in question. However, the obligation of the writer is to provide evidence, information, to their audience, their reader(s) to substantiate their point(s) in a clear, logical and comprehensible manner. Prior knowledge should not be a prerequisite. Again, a precise conclusion should summarize this chapter’s discussions as an aide memoire.

Chapter 5 is a detailed discussion of the debates of style and tradition within archaeology itself (VALDEZ-TULLETT, 2019, 43-51). This detailed discussion should have been located in chapter 1 or chapter 2. Valdez-Tullett states in the introduction that “*one of her primary goals of this project*” is “*contrasting similarities and differences between the rock art of the outlined study areas*” (VALDEZ-TULLETT, 2019, 43). Why is this statement here? It ought to be foregrounded earlier. She continued that the aim of goal is the “*deconstruction, or contribution*

towards, the notion of homogeneity that underpins Atlantic Art and that has seldom been questioned" (VALDEZ-TULLETT, 2019, 43). Where are references or discussions to highlight the rationale for this goal? The following statement "in fact, at a large scale, Atlantic Art seems to be a standardized, global phenomenon emerging during prehistory in Atlantic Europe" (VALDEZ-TULLETT, 2019, 43) is insufficient. For an opening paragraph this is a laudable aim, but how to achieve it, is a question to be resolved by forensic examination, not by gesture. Valdez-Tullett asserts that she utilized a holistic approach which she had developed in order "to overcome the inherent limitations of direct comparisons" (VALDEZ-TULLETT, 2019, 43). So, the questions regarding the construction of such a holistic approach must be exposed and the limitations of previous comparisons brought to light. At last the methodology employed is introduced. Valdez-Tullett stated that the methodology devised for this study was "designed to contrast a type of material culture that when zoomed out looks intrinsically similar but when zoomed in exhibits further differentiations[.]" (VALDEZ-TULLETT, 2019, 43). That is always the case for any attempt at synthesis but is the author simply saying that 'on closer examination differences emerge'? The word 'zoom' is yet another rhetorical flourish.

Perhaps this is because Valdez-Tullett fails to provide any indication of her own intellectual approach and the way in which it influences her methodology, her choice of the software tools employed and her perspective on the discipline of archaeology. Detailed argument is necessary and scaffolding provided so to be able to lay in the Grand Theory. Detailed observations, the advantages and disadvantages of various techniques explained, the advantages of each methodological tool brought to bear when the five groups of data were considered. Clarity is critical so that the parameters of the investigation are clear and the reader can understand why a collection of images were deemed to be both "beyond morphology" and "essential" (VALDEZ-TULLETT, 2019, 43). Valdez-Tullett needs to be upfront about both her data and the intellectual scaffolding to be provided so that the reader can understand the foundations on which a Grand Theory can be expounded. Readers cannot be left to second guess an author's statement based on their own familiarity with the protagonists and their published works whilst reading her discussions of concept of "style and tradition" (VALDEZ-TULLETT, 2019, 44-46), "categories, typologies and assemblages" (VALDEZ-TULLETT, 2019, 46-47), "building a categorical scheme" (VAL-

DEZ-TULLETT, 2019, 47-48) and "creating meaningful categories" (VALDEZ-TULLETT, 2019, 48-49). This is risky, such discourse can rapidly descend from scholarship to the shaky realm of 'gossip'. The chapter ends with a final paragraph which once again apparently constitutes a conclusion. This is problematic as this chapter needs a summary which is reversed around the author's 'major point' which ought to be criticised. Otherwise the reader is lost. The review should have closed with a substantial paragraph.

Chapter 6 entitled "Methods and Practices" is a methodology chapter held over from earlier chapters 1 or 2. The lack of clarity in the discussion of the methodology makes it tough for a reader to understand the manner in which it might be deployed. But surely this is the point of developing a methodology. It is based on the large quotation in Portuguese by Miguel Torga (DIÁRIO, 1942), translated in a footnote, in the beginning of the chapter and in the initial discussion Valdez-Tullett is evidently interested in the landscape and its role in understanding the context of the petroglyphs. She states that "even if the original mind-frames are permanently gone" (VALDEZ-TULLETT, 2019, 54), but what does this mean? Valdez-Tullett argues her methodology was developed to "bear the objective of assessing the relationships between different elements that facilitate a better perception and interpretation of rock art: motifs, rock surfaces, landscape locations, processes, fabrication, actions and networks" (VALDEZ-TULLETT, 2019, 54). This is an ambitious goal but it is tough to know what the terms: "fabrication", "processes", "actions" and "networks" mean without forensic explanation. Perhaps this is because Valdez-Tullett neglects to inform the reader as to the extent to which her methodology has been informed by her implicit choice of grand theory, intellectual approach(es), choice of working concepts etc. It is unclear what is meant by the phrase "zooming in and out from the landscape" in her sentence "The use of dialectical scales of analysis, zooming in and out from the landscape to the rock surface, facilitates access to these spheres of human life, connecting funerary, ritual and domestic scopes, despite some of the links being too controversial" (VALDEZ-TULLETT, 2019, 54). A distinct lack of precision exists here because these statements are merely descriptive, on their own they have little analytical heft. Why do these scales exist and why are they useful? Statements remain unqualified such as: why was the number of, a minimum of 30 carved rocks, per study area chosen (VALDEZ-TULLETT, 2019, 54)? How did Valdez-Tullett arrive at this number? These highly pertinent questions, remain unanswered.

Valdez-Tullett neglected to provide a detailed discussion as to the decision taken to rely on previously published data which she had not personally collected. A discussion is obligatory on this topic so that readers can understand the decisions taken by Valdez-Tullett rely on third-party. This discussion is not presented. Admittedly Valdez-Tullett drew on Orton (2000). Readers ought to know the precise manner in which this data was interpolated with her own field data. Questions can be asked regarding this data such as: what are the theories and methods used by those researchers, who collected the published data that Valdez-Tullett states that she used, see page 25 in chapter 3. Why? Such data have its own intellectual provenance. It is evitable that the mid-range and grand theory used by those previous researchers may have affected the development of Valdez-Tullett's methodology. Valdez-Tullett obviously organized this volume, but then the problem is the manner in which she introduced the discussion of the technology into her own methodology and the fieldwork which supports her findings. She drip-feeds the reader components of her methodology throughout each and every discussion of the research and fieldwork in each of her sample regions. This dilutes the larger argument.

Furthermore Valdez-Tullett appears to withhold information from the reader. In the section entitled "*The Graphic Scale: The Motifs*" she writes "[...] *the Graphic scale of analysis aims to bring the researcher's attention span back to the rock surface, recently overlooked due to a stigma imprinted by Landscape Archaeology and the criticism of static typological approaches*" (VALDEZ-TULLETT, 2019, 55). The word 'stigma' sits awkwardly with any discussion of theory. The reader remains in the dark. What is meant by the use of the phrase "*deep engagement with the motifs*" (VALDEZ-TULLETT, 2019, 55)? Valdez-Tullett (2019, 55) states that this is crucial to understand variation but neglects to provide further references. She presumably is concerned as to whether different images exist in different regions. It remains unclear exactly how she intends to undertake that task. Statements in the section "*The Sensorial Scale: The Rock*" about the nature of the rocks, on which these images are found, are problematical as Valdez-Tullett not only makes claims regarding their nature but does not provide any references. She states: "*The motifs hold a strong connection with the medium in which they were deployed. Although the image could have been used on other types of surfaces, the fact that they were carved on hard durable rock faces suggestion an intention to endure.*" (VALDEZ-TULLETT, 2019, 61). That may be

obvious in 2020, but is it possible that this rock was the only available solid surface in that region at that time. This is an instance where Valdez-Tullett might have deployed an approach (framework) to take the reader through her reasoning on this point and could have utilised some evidence? As it stands, her claim is unsubstantiated and why should the reader trust it given that it is unsupported by evidence. She continues in her highly speculative excursus regarding the selection of hard rock surface with the statement: "*More obscure factors may have appealed to the carvers, including intangible elements such as legends, memories or tales from the communities' cosmogonies, along with other more functional justifications[.]*" (VALDEZ-TULLETT, 2019, 61). She discussed how unnamed individuals might have related to the landscape – "*Not only do individuals interact with the landscape but landscape acts back arguably possessing a degree of agency, providing familiar lands marks, orientation, heritage and memory, besides natural resources essential for survival.*" But landscapes exist: the perception of that landscape by others remains elusive. The point is that this word 'act' (which appears to be substitute for 'reflection' cannot be effectively invoked without a framework or framework(s). These are not provided, they are merely inferred.

Another instance of her tendency to "*drip-feed*" her methodology is Valdez-Tullett's statement on page 61 that a blend of "*field observations*" and what she labelled "*computational spatial analyses*" which appears to involve GIS to analyse the landscapes (VALDEZ-TULLETT, 2019, 61). This information should have been presented earlier than in Chapter 6. Valdez-Tullett asserted that her approach "*allowed for an engaged multiscale perspective involving a mathematical representation of the landscape and its affordances, contrasted with a nuanced human experience*" (VALDEZ-TULLETT, 2019, 61-62). That is all very well but what is the result? Otherwise why employ this 'methodology'? Is it really a 'methodology'? Or are these 'techniques'?

Unfortunately, the chapter is riddled with verbose unclear statements. Valdez-Tullett mentioned that GIS was utilized to record the petroglyphs from the few references throughout the chapter (VALDEZ-TULLETT, 2019, 61, 63), but neglects to discuss the implications of employing this tool. Similarly, the author utilised SfM (VALDEZ-TULLETT, 2019, 67), discussed its advantages but also neglected to clarify the inherent drawbacks of utilizing this tool. This is a crucial move. A novice, and an individual, who is not a specialist, must understand whether Valdez-Tullett has merely used a tool that happened to be

available. There are many such tools available. Structure from Motion, or SfM as it is commonly referred to, is considered an inexpensive, effective, and flexible approach to capturing complex topography. SfM was combined with RTI (VALDEZ-TULLETT, 2019, 67) but again she neither provides both the advantages and disadvantages of this combination, and any other combinations of software in her approach. Such a discussion is imperative. RTI is 'Reflectance Transformation Imaging' (or Polynomial texture mapping) is a technique where objects are displayed under varying lighting conditions to reveal surface phenomena. Again, it is important for any reader to understand the reason for using RTI with SfM. Frankly, readers ought not to have to use the abbreviation list (VALDEZ-TULLETT, 2019, xxi). A thorough comparison must work through the relative advantages and disadvantages of 2D, 2.5D (RTI) and 3D techniques which Valdez-Tullett also utilised. Why? She stated "*a combination of 2D, 2.5D (RTI), and 3D recording procedures has its strengths and weakness and in general can contribute differently to rock art visualisation (ROBIN, 2015, 36)[.]*" (VALDEZ-TULLETT, 2019, 67). A reader needs to know Valdez-Tullett's reasoning, not that of Robin (2015). Furthermore, what does 'differently' entail here? The reader is still left clueless but the author neglected to clarify what she meant by the terms 2D, 2.5D (RTI), and 3D. Even if her abbreviation list (VALDEZ-TULLETT, 2019, xxi) is consulted a novice archaeologist or a lay reader would not understand the discussion. The author continues as she writes that "*photogrammetry models were, when required, complemented with the documentation of details with RTI*" (VALDEZ-TULLETT, 2019, 67) but once again fails to provide systematic rationale for this practice to be undertaken.

It is tough to determine what sort of recording occurred for the petroglyphs at each of these sample sites, given the lack of clarity and organization of the text in this chapter. Too many discussions are simply muddled. It is difficult to determine what type of recording took place in each region, what was sampled especially given that some of the fieldwork had been conducted at other points in time by third parties. This is, from the perspective of a reader, problematic as Valdez-Tullett did not clarify the intellectual frameworks used in previous studies.

The work does cover the type of recording (VALDEZ-TULLETT, 2019, 65-69) conducted but not the intellectual approach, nor the use of middle range or grand theory. This chapter is a muddled discussion of several things: the methodology

(not described in detail), information regarding the manner in which Valdez-Tullett utilized the different recording techniques (again not described in sufficient detail) and prior data. In sum, it is a truncated discussion of the methodology utilised. It is clear that useful information is in Valdez-Tullett's (2019) article rather than the volume, the dataset (VALDEZ-TULLETT, 2019, 62-63) as well as a discussion of the fieldwork which was conducted (VALDEZ-TULLETT, 2019, 63-69). As is so often the case Chapter 6, lacks a clear and strongly delineated conclusion.

The title of Chapter 7, "*Re-assessing Atlantic Rock Art*" is problematic in itself. This chapter is more common at the outset of a study, not at near the end (VALDEZ-TULLETT, 2019, 71). This is the longest chapter of the book (VALDEZ-TULLETT, 2019, 71-149). It is dense and suffers from similar problems to previous chapters where information ought to have been presented at an earlier stage in the argument. For example, the subsection entitled "*A Biography of Landscape Archaeology and Atlantic*" (VALDEZ-TULLETT, 2019, 107-108) in the section entitled "*Landscape Studies, GIS and Spatial Analysis*" ought to have been discussed in chapter 2, not chapter 7. This chapter suffers severely from her inability to articulate either her intellectual approaches or the grand theory that might inform them. It is impossible to answer the question posed in the second sentence of the chapter: "*But how can one assess a creative tradition of which we know so little from recognising a certain type of iconography?*" (VALDEZ-TULLETT, 2019, 71). She states: "*Much of this approach has an anthropological foundation, based on the relationship between people and rock art.*" (VALDEZ-TULLETT, 2019, 71). In support of that she refers to a study of rock art in New Mexico, in the US to assert that "*rock art can be created for a multiplicity of reasons in many different locations*" (VALDEZ-TULLETT, 2019, 71). What is the rationale behind Valdez-Tullett statement? Where is the ethnographic data to support this assertion? What about her bridging arguments? An additional problem is that Valdez-Tullett suddenly, introduces a "*dynamic methodology*" "*defined as under four tiers of analyses enabling zooming in and out*" which is again too vague (VALDEZ-TULLETT, 2019, 71). What does this verb 'zoom' mean? Does this mean the image as seen through various lenses and if so where are the results? Why did she not securely tie figure 45 to the text on page (VALDEZ-TULLETT, 2019, 72)? Figures must be securely tied to the text.

The section entitled "*Design and Graphics: An Art of Illusion*" (VALDEZ-TULLETT, 2019, 72) is strik-

ing to anyone familiar with E. H. Gombrich's canonical work *"Art and Illusion"* (1960), republished numerous times. It is considered fundamental for anyone, interested in systematically examining images. Petroglyphs, rock art, are images so for the Valdez-Tullett the allusion is implied. What therefore is meant by the title *"Unbounded Atlantic Rock in Place and Space"* (VALDEZ-TULLETT, 2019, 109)? What does the word *"unbounded"* mean in this context? The question is posed since the content of the section really does not seem to connect with its title. The section is frustrating as Valdez-Tullett once more bleeds new components of her methodology, such as the Kolmogorov-Simironov (K-S) test, to establish whether a significant relationship exists between the carved rocks and the slope's inclinations (VALDEZ-TULLETT, 2019, 126). As previously observed, the methodology should be housed in one chapter. What is meant by the *"slope's inclinations"* (VALDEZ-TULLETT, 2019, 126)? Another 'new' facet of her methodology that ought to have discussed earlier is *"Viewshed Analysis modelling"* (VALDEZ-TULLETT, 2019, 129) as well as *"Social Network Analysis"* (VALDEZ-TULLETT, 2019, 138). Why are these techniques and methods introduced at this stage of the discussion and analysis of the data? This is problematic. At the same time the presentation and discussion of the results of each of these samples lacks cohesion. The text confuses the assessment of new technologies and methods with the discussion of different regions. In this respect the three long paragraphs of the conclusion are striking. Valdez-Tullett clearly believes that the application of these new techniques would yield new results. But why were these techniques and methods not comprehensively introduced earlier in the argument? This suggests either (a) the work is badly organized or (b) she wanted to cherry pick results they yielded so as to support her overarching hypothesis. She stated near the close of this chapter that, *"SNA was able to validate the hypothesis set put in chapter 4. The fact that Atlantic Art is indeed widespread and present in all study areas accounts for the possibility of it having been deliberately taught and passed on[.]"* (VALDEZ-TULLETT, 2019, 146). This is a bold statement. But first we must address an infelicity. Firstly, abbreviations should be avoided in a published text as they risk being colloquial to the author. Otherwise this suggests that the author had not edited the manuscript of the PhD. Secondly, the use of an abbreviation suggests that the text was intended for a select audience, a cognoscenti, but not a general knowledgeable reader nor a lay reader, nor *"an international audience"* (<https://www.barpublishing.com/> [17.6.2020]). Such terms

always need to be spelt out in full. Let us now address the point in the sentence. How can the teaching and craft implied by the existence of an image be logically inferred from the employment of these new technologies? How is it possible to determine, given Valdez-Tullett's methodology, to ascertain whether one or more images were *"deliberately created, taught and passed on"*. Without collateral evidence these are highly problematic statements. This is flawed scientific method. Valdez-Tullett's (2019) discussion so far had considered the petroglyphs in a timeless void. That her discussion appears to ignore them as almost superfluous is from this reader's perspective simply bizarre.

Chapter 8 is somewhat more clearly written but the same issues persist. It appears to discuss the data and the conclusions that might be drawn from it. Its title *"Atlantic Rock Art: Art of Illusion"* suggests either an unlikely play on the words of Gombrich (1960) or that much of this chapter is about an illusion. The title of the chapter makes for a revisit to the overall thrust of the work it is intended to *"render"* her perspective *"on Atlantic rock art"* (VALDEZ-TULLETT, 2019, 7). This is an odd use of the word. Valdez-Tullett states at the outset of this that she intended to discuss *"at a high level, the quintessential Atlantic Art package holds together across all of the regions but as the level of details increases apparent regional variations start to appear in the data[.]"* (VALDEZ-TULLETT, 2019, 149). That is the fate of any generalization, so what does the *"quintessential Atlantic Art package"* consist of? The reference might remind a reader of the range of motifs listed and follows O'Conner (2006, 1) in referring to a core group of motifs at each site as *"quintessential Atlantic"* (VALDEZ-TULLETT, 2019, 39). The word 'package' is drawn from Stade's (2017) work on lithics (VALDEZ-TULLETT, 2019, 40). It is not clear what it can bring to the discussion.

The ostensible aim of chapter 8, is to explain the connections between the different variations which the reader presumes the variations in the petroglyph shapes themselves suggest, the possible connections which exist between the five regional samples, as well as to contextualize the dataset in terms of *"the transformation that were taking place during the Neolithic and to explore the connectiveness which the regions that facilitated the flow[.]"* (VALDEZ-TULLETT, 2019, 149). Why is the prose so incomprehensible? The question itself is straightforward. How does this stand against her claim that the chronology of 'Atlantic Art' was a matter of debate which was still open (VALDEZ-TULLETT, 2019, 2)? Previous researchers, as Valdez-Tullett noted, had ascribed the images to the Bronze Age

(VALDEZ-TULLETT, 2017, 2), but she noted that current researchers agree that the style of these images originated in the Neolithic and “its use during until the 1st millennium” (VALDEZ-TULLETT, 2019, 2). Valdez-Tullett contends that previous researchers have attempted to devise chronologies for Atlantic Rock Art and none have used any direct dating methods, but she fails to provide any indication of the different results from her own perspective (VALDEZ-TULLETT, 2019, 2). Nonetheless she states that the lack of stratigraphic or other associated contexts and the nature of the rock art in itself constitute a clear definition of the time in which this iconography became prevalent (VALDEZ-TULLETT, 2019, 2). These are very big claims to make. She claimed that the goal of her analysis is to offer a “narrower chronological currency, enabling the assessment of regional variations of the tradition and the moment of its creation, its ongoing use, and potential re-use of and abandonment” (VALDEZ-TULLETT, 2019, 2). This is the tough question with which the chapter purports to wrestle.

Valdez-Tullett states “that all the main motifs identified in Chapter 4” were effectively present in all the regions” (VALDEZ-TULLETT, 2019, 149). What do the words “effectively present” mean? Images were either present or not. What is implied by the use of the word “static” in the statement “None of these motifs are static and they take different positions and interact in multiple ways with other imagery and the rock surface” (VALDEZ-TULLETT, 2019, 149). The problem from the perspective of this reader is that images, such as petroglyphs, cannot be both physically static while taking different positions on the surface of a rock. This is technically impossible. To achieve some clarity, the prose must be reworked by the reader. Is she trying to state that the same image repeatedly occurred in different positions on the same rock surface? Or that certain images only appeared on certain rock faces. Valdez-Tullett speculates as to the precise sequence in which each motif appeared in the Neolithic (VALDEZ-TULLETT, 2019, 149) but she has not substantiated her claims with clear hard evidence which tie specific images to specific sites with dates. This might have enabled the reader to gain a more detailed understanding of the reasons she followed O’Conner’s (2006) lead to identify and track a ‘quintessential Atlantic’ group of motifs at sites across Scotland, England, Spain and Portugal (VALDEZ-TULLETT, 2019, 39). Another point: “Despite a few exceptions of panels with exuberant visual features, Atlantic Art appears to be a relatively simple carving tradition, in terms of type morphology, but also the organization of the workspace, with the majority of rocks encompassing

a frequency of 1 to 2 types at a time[.]” (VALDEZ-TULLETT, 2019, 151). The categorization must be more precise to carry analytical heft. Words such as “exuberant visual features” are culturally specific. Terms such as “workspace” and “panel” should not be left unexplained. The interest in rock art and the Neolithic is naturally global, so the issue of cultural specificity must be nailed down.

Valdez-Tullett’s findings regarding the decision making processes of possible creators of the images at an unstated time in the past, in her discussion of the physical location of the petroglyphs of Iveragh Moor, Ireland and Rombalds Moor, West Yorkshire remain unsubstantiated (VALDEZ-TULLETT, 2019, 153). Her subsequent discussion of the glaciation striations, in the same paragraph, needs references from work by technical specialists since the words “outstanding geological features” merely indicates her own view and fails to clarify anything about these physical features in the landscape (VALDEZ-TULLETT, 2019, 153)? Such statements do not tally given repeated claims that the body of available information on these petroglyphs is vast and her study is therefore based on a large body of empirical data (VALDEZ-TULLETT, 2019, 7, 39, & 41). As far as change over time is concerned a petroglyph “may have known variances in terms of its social and cultural practice over time” (VALDEZ-TULLETT, 2019, 157). This ambitious claim remains unsubstantiated by evidence nevertheless the arguments are taken forward as she argued that if that one considered “the chronological span of Atlantic Art from the Neolithic until the BA, it is easy to see that it knew different rhythms of use” (VALDEZ-TULLETT, 2019, 157). This statement is unsubstantiated, uses an abbreviation (BA which means Bronze Age according to her abbreviation list; VALDEZ-TULLETT, 2019, xxi) and readers must therefore accept it with blind faith. Did these petroglyphs become animate, rather than inanimate otherwise how else can engravings in stone “know rhythms of use” (VALDEZ-TULLETT, 2019, 157)? The question is left in the breeze. She continues by stating, “over this period, the perception of the carvings changed and ultimately, the archaeological record seems to suggest that by the end of the BA a completely different view of them is held[.]” (VALDEZ-TULLETT, 2019, 157). But where is the archaeological evidence that confirms this observation? The phrase “seems to suggest” is possible code that Valdez-Tullett is hedging her bets here, as there is a potential lack of clarity, or she does not wish to substantiate her claim. Speculation abounds as she states “Many motifs are then incorporated into other types of monuments, in particular those in other

types of funerary practices[.]" (VALDEZ-TULLETT, 2019, 157). She continues: "As for the panels remaining in the wider landscape, there were certainly rhythms of forgetfulness which ultimately led to our recent acts of finding those carved rocks[.]" (VALDEZ-TULLETT, 2019, 157). This sentence and the remainder of this paragraph are perhaps suitable for a novel they are rhetorical not empirical.

Chapter 8 however provides more details on the Atlantic 'façade' first mentioned in Chapter 4 as she stated, that "it seems clear that Atlantic Art was culturally transmitted and travelled across the Atlantic façade[.]" (VALDEZ-TULLETT, 2019, 41). As noted earlier, her comments regarding this entity are bold as the word 'façade' implies that there is an underlying structure (VALDEZ-TULLETT, 2019, 41). She concludes, without significant empirical evidence from the perspective of this reader, that "it seems clear that Atlantic Art was culturally transmitted and travelled across the Atlantic façade[.]" (VALDEZ-TULLETT, 2019, 41). Valdez-Tullett must clarify the evidence that there was a transmission of ideas. Otherwise "Atlantic façade" (VALDEZ-TULLETT, 2019 41) is just an elegant and evocative phrase. Her discussion of the Neolithic era is detailed but the evidence for an "Atlantic façade" (VALDEZ-TULLETT, 2019, 41) is lacking. She argues that "an interesting relationship seemingly exists between the rock art and standing stones" (VALDEZ-TULLETT, 2019, 161). This is a striking assertion because the word 'seemingly' implies that this relationship is unproven, perhaps a more useful word is 'apparent' (VALDEZ-TULLETT, 2019, 161-163). Valdez-Tullett, in the section "Atlantic Rock Art Connected" amid a discussion of the early Neolithic does raise the possibility of a "Neolithic package" which is a problematic for readers this "package" had not been discussed at an earlier stage. One wonders whether this is the "quintessential Atlantic Art package" discussed earlier (VALDEZ-TULLETT, 2019, 39) so reliant on Stade's (2017) work on lithics (VALDEZ-TULLETT, 2019, 40). Can such an analogy work?

Valdez-Tullett (VALDEZ-TULLETT, 2019, 166) argues that the in situ analysis of many carved rocks in the five study areas revealed that there is a core group of motifs, termed "quintessential Atlantic" (VALDEZ-TULLETT, 2019, 166). She subsequently asserts that the cultural transmission of Atlantic Rock Art occurred at two levels: "a local/familiar and global/inter group[.]" (VALDEZ-TULLETT, 2019, 166). This is an interesting statement in itself but it is even more surprising that Valdez-Tullett drew for this insight on anthropological studies from outside of the Atlantic Europe such as Mali (Africa), Wilcannia (Australia), and New Mexico

(US) (VALDEZ-TULLETT, 2019, 167). This is problematic on several grounds: (a) she fails to state the bridging arguments that can enable inference from anthropological studies, (b) she has not indicated why she chose these three geographical regions in order to support her statements about the nature of Atlantic rock art, and (c) what is the underlying argument behind Valdez-Tullett's statement? If ethnographic data from these regions is utilized to support her assertions, then these questions must be answered. This chapter is less obscure in terms of its prose than the previous ones. Even so, terms must be clarified and lyrical turns of phrase not substitute for argument. The chapter also draws richly on the author's familiarity with the vocabulary of the post-processual school of work and that of the large body of literature on the Neolithic, the debates and the sites in the geographical regions in question.

Chapter 9 is entitled "Conclusion and Final Words" (VALDEZ-TULLETT, 2019 169). It is surprisingly short. She repeats her claim that this study is 'holistic' (VALDEZ-TULLETT, 2019, 169) but it is tough to ascertain whether this claim can be made, given the circularity of the prose style and the organizational issues pointed out earlier. If it was her intention to draw on assemblage theory and a relational ontology, then that should have been indicated at the outset. This is only made clear on page 169, in the first page, of her final chapter, the conclusion. Perhaps that should have been read first, as with a PhD. Not doing so means that Valdez-Tullett presumed that her reader(s) will remember all of her arguments, the evidence for making the arguments, and the data. Valdez-Tullett ought to have provided references to her chapter and page numbers so that the reader can go back to this information, for themselves. She asserted that Social Network Analysis was crucial to demonstrate that a "package composed 'quintessential Atlantic motifs', along with a broad understanding of the tradition, including techniques and modes of creation, production and use, was transmitted between the study areas, and further developed locally originating regional variation and local preferences[.]" (VALDEZ-TULLETT, 2019, 170) which is supported by Social Network Analysis. She concludes that while it was a "complicated task" to establish a chronological definition for Atlantic Rock Art "recent evidence points at its inception during the Neolithic, with a prolonged use possibly until the end of the BA. It is difficult to demonstrate that the carving practice began in the early stages of the Neolithic, but there is strong evidence that it was around in the Late Neolithic." (VALDEZ-TULLETT, 2019, 171).

The problem with this statement is that the reader is required to accept her conclusion on blind faith, as the evidence is simply not provided.

Conclusion to the entire book

Generally speaking, reviewers of works such as this must firstly ask, how useful was the publication as a way of reworking the evidence for an 'Atlantic Rock Art' in a form that was not previously available? And secondly, does the interpretation stand up?

Frankly, it is difficult to ascertain the relationship between the book and the forward by Andrew Meirion Jones (VALDEZ-TULLETT, 2019, xxii-xxiii). This reader is left bewildered. The intellectual fireworks have turned into damp squibs. Setting aside the most egregious issues many problems remain. Firstly, it is clear the volume contains some little gems which merit polishing and exposure to the light of day. However, such nuggets are inaccessible. The ideas should be presented using clear and uncluttered prose so that any archaeologist and not a coterie of sub-specialists can understand what it was she has set out to achieve. At the outset of the volume, she states that she will offer a "*narrower chronological currency, enabling the assessment of regional variations of the tradition and the moment of its creation, its ongoing use, and potential re-use of and abandonment*" (VALDEZ-TULLETT, 2019 2) but she does not provide it. She does conclude that, while it was a "*complicated task*" to establish a chronological definition for Atlantic Rock Art "*recent evidence points at its inception during the Neolithic, with a prolonged use possibly until the end of the BA. It is difficult to demonstrate that the carving practice began in the early stages of the Neolithic, but there is strong evidence that it was around in the Late Neolithic.*" (VALDEZ-TULLETT, 2019, 171). This statement is important, but the use of the abbreviation strongly indicates that the manuscript was written for the cognoscenti, as the novice must refer back to the abbreviation list to discover that BA means Bronze Age (VALDEZ-TULLETT, 2019, xxi). As stated at the outset of the review, clarity of expression is inherently valuable and given today's global calamities it is essential. Those engaged in research have a duty to be clear: they are under scrutiny as never before: governments and citizens demand clarity above all. Why? Archaeologists have a moral duty to explain their findings clearly to, respect the views of others, and to clearly indicate the role that those new findings play in throwing

some light on the past, in shaping our lives. The extensive field work of this particular reader indicates very clearly that the memory invoked by contemporary people's experience of the Rock Art sites continues to play a powerful role in shaping their daily lives. As we all have to have a connection with the past the following observation from the Falkland Islands from a Falkland Islander is apt: "*We're so young, we don't have a long history,*" Leona Roberts, a member of the [Falkland] islands' legislative assembly, says. "*And there's no native population, no carvings to tell us who we are[.]*" (MACFARQUHAR, 2020). The pictographs on sites familiar to this writer have played and continue to play a role in the lives of the people who have lived near them for centuries. So there is a moral imperative to explain.

The manner and the prose regarding the data, the ideas and information unfortunately suggest that Valdez-Tullett had a far more parochial reader in mind: someone who knew the literature of the Neolithic period, was already familiar with the geographical regions under study and with the intellectual geography and history of the theoretical frameworks she has employed. Those may well understand her arguments and are already familiar with her intellectual approaches, her use of jargon, and the archaeological data under scrutiny. She clearly was not concerned to write for readers not as familiar as herself with the vast literature and the body of theory which invariably provide the middle range generalizations (frameworks) and intellectual scaffolding which must inform it. She fails to articulate her intellectual scaffolding, those frameworks, to the reader. This suggests that she was only interested in the patterns within and between specific petroglyph sites. The reader is required to accept her conclusions *ex cathedra*. This dense work is replete with statements which cry out for evidence and includes value judgements about the geomorphologies in which the objects of study are to be encountered. The "*drip feed technique*" of indicting methodological and theoretical positions throughout the volume is far too weak to sustain the argument. Why did Valdez-Tullett utilize such a "*drip-feed*" technique? It is surely reminiscent of an authoritarian mindset, one prevalent in a society with elites who 'know their narrative'. Why was the pertinent information on the methodology published in a separate article (VALDEZ-TULLETT, at press), not included in this volume and in one initial chapter rather than thinly spread through chapters 3, 4, 5, 6, 7, and 8? In conversation with this author, Bruce Trigger counselled that intellectual frameworks must al-

ways be laid out very clearly. He regarded such presentation as 'best practice'. This is especially the case for the Neolithic period one in which there is a vast body of work associated with the issues of dating. Much of that work has been produced over the past thirty years (e.g. BRADLEY, 1995; 1997; 2000).

It would have been preferable to have had a narrative which attempted to understand Neolithic art, imagery, in a way that the people who created it, might have understood it (that is where the scaffolding comes in). It would perhaps have been insightful to take a more Braudelian approach to provide the 'sweep' required, for we are dealing with the passage of centuries and vast areas. These images should never be 'divorced' from the people and the community that created and used them, however demanding the leaps of understanding might be. Even if one understands the community, society, connected with these images it would likely not be easy to understand their use of visual imagery. It is certainly a task worth the effort. One must at least start with a basic understanding of any societies of these various regions one attempts to interpret their images, motifs and symbols etc. Admittedly this is impossible if researchers are considering the Neolithic period. It is important to recognise that these images are possibly not art in the many ways in which we, people living in the early part of the twenty-first century, at a very specific context (e.g. the North Atlantic world) have come to understand it. Indeed, the very use of the word 'art' implies a type and a degree of meaning which may well be presumptuous on the part of the researcher. It takes moral courage to say that we simply cannot say much about the images at hand. They are perhaps, whole books we cannot yet open. And perhaps never may.

Given the nature and depth of the volume an index is imperative. That might stimulate a discussion as to her rationale behind her treatment of sites in Brittany in Chapter 8 (VALDEZ-TULLETT, 2019, 158, 161 & 165), but otherwise ignores the region for chapters 1, 2, 3, 4, 5, 6, 7 and 9. France has always been regarded as important to rock art studies. She claims on the first page of chapter 3 that her study is "*an intra-regional investigation, a study from each modern country in which Atlantic art can be found*" (VALDEZ-TULLETT, 2019, 25). Valdez-Tullett must clarify her rationale for only mentioning Brittany and ignoring the remainder of France, except for one instance where it is mentioned (VALDEZ-TULLETT, 2019, 165). Why has France been excluded, with the exception of a few mentions of Brittany, from her dis-

ussion particularly as France is considered an integral component of what is termed 'Atlantic Europe' for researchers in many disciplines? We live in an age in which scholars are increasingly aware that the 'modern state' is a creation of the XVII century and indeed standard texts e.g. R. R. Palmer (1959a; 1959b) place it firmly in the Atlantic world. The weak contextualization provides space for readers to speculate on the reasons for its exclusion.

A short annotated essay should have been provided with the figures and graphs available for downloading (<https://www.barpublishing.com/additional-downloads.html> [22.7.2020]) in order to enable readers to understand how the data might be redeployed. The bibliography ought to have included research on the Neolithic by Chris J. Stevens, Alistair Barclay, as well as the work conducted in Brittany and Atlantic France. Valdez-Tullett must be clear as to her stance on the role and use of archaeological theory, so it would be worthwhile revisiting Trigger's (2006) publication in order to refresh what he often referred to as the archaeologist's "*supermarket*" of theories. Admittedly it is tough to deal with literature that challenges one's own intellectual perspectives but other researchers such as Dronfield (1993; 1994; 1995; 1996), Lewis-Williams and Dowson (1994), Lewis, French and Green (2000), Johnson and Solis (2016) and naturally further work from France should be taken on board here. The debate on style and rock art ought to have been more detailed and included: Abramov, Farkas and Ochsenchlagler (2006), Bahn (1993), Bouissac (1993), Clegg (1993), Chaplounka (1993), Dietler and Herbich (1998), Dronfield (1993), Franklin (1986 & 1993), Haskovec (1992). Johnston (1993), Lorblanchet (1993), Officer (1992), Sackett (1977a; 1977b; 1982; 1986), Tratebas (1993), and Welch (1993). The exclusion of these works is especially problematic, especially in a work which purports to challenge accepted ideas, perspectives, and pasts.

On style and language: was the draft written in Portuguese-English then edited and copy-edited to English? The reviewer's fluency in Brazilian-Portuguese enabled her to translate some of the prose back into Portuguese the better to understand the argument. So, despite having read it at least three times, the text still required such somersaults to expose Valdez-Tullett's ideas and the nuggets of information, the unpolished gems which lie therein. Otherwise this begins to look as if this study of Rock Art – one of the earliest and most striking examples of human self-expressions is just another in that beguiling genre – the world as seen through 'oculos fumé'?

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