

NEANDERTHAL ART

And The Problem Of Ethnocentrism

TUILIO ABRUZZESE

ABSTRACT:

The recognition of artistic expressions coming from the Palaeolithic has always been skewed towards the acknowledgement of our species as the sole superior maker. This is due to the double standard applied to the Palaeolithic archaeological research, for which similar material evidence from Modern Human and Neanderthal contexts are interpreted differently because different levels of cognitive abilities are attached to different human species. This biased understanding of the deep past comes from a mindset derived from the 'colonial thought' that steered (and regrettably often still steers) Western political, social, and scientific agendas. Colonialism implies the owning and the refusal of knowledge and culture of the Other by the superior Western knowledge system. Colonialism is here understood as the product of a universal Ethnocentrism, proper of the human mind. In this paper, a review of the state of knowledge and debates around Neanderthal modernity is presented by using Middle and Upper Palaeolithic artistic expressions as a case study. Ultimately, a more relativistic theoretical framework is proposed to move beyond futile discussions around hominins' complexity of thoughts and behaviours. Understanding that our species stands not alone on a higher evolutive step can help archaeology (and also other sciences involved in the study of the deep past) move forward and beyond its boundaries, by re-evaluating and questioning old interpretations and hypotheses, products of an ethnocentric mindset.

KEYWORDS:

Middle Palaeolithic, Otherness, Decolonization, Art, Ethnocentrism

Corresponding author email: tullio.abruzzese@gmail.com

NTRODUCTION:

Archaeology is a product of Western colonialism. This statement might sound outrageous, but nevertheless true. Archaeology has been used as a tool for controlling and owning other cultures' past and situating it into a Western system of cultural and ideological values (Moro-Abadía, 2006; Porr & Matthews, 2017; Smith & Wobst, 2005b). As Nicholas and Hollowell (2007) illustrate, archaeology is often still perceived by Indigenous groups or more generally descendant communities as "just another tool of oppression that objectifies the past and disenfranchises them from their own histories" (Nicholas & Hollowell, 2007, p. 60). The recognition of this problem led to a generally diffused post-colonial approach towards the discipline of archaeology (e.g., Porr & Matthews, 2020a; Smith & Wobst, 2005a). However, still a lot needs to be done to fully decolonize archaeology (for an overview of this critique see e.g., Hamilakis, 2012), especially in the part of the discipline that studies the deep past of humanity, broadly known as Palaeolithic archaeology. This branch often falls into the traps created by the colonial discourse, for example by interpreting deep past behaviours and cultures using modern parallels and Western ideals, or by creating temporal divisions and disparities among species solely based on the problematic assumption of Homo sapiens' exceptionalism.

An example of an archaeological endeavour which easily falls victim to the 'colonial mindset' (the reasoning underlying the phenomenon of colonialism, def. by the author) is the quest for archaeological traces of the beginning of our complexity of thoughts and behaviours. In fact, the question of the origin of 'modern' behaviours and cognitive sophistication, led to the theorization of the so-called Human Revolution Model (Klein, 1995; Mellars & Stringer, 1989; Noble & Davidson, 1991) in which Homo sapiens (HS) is seen as the modern, complex species par excellence (McBrearty & Brooks, 2000; McBrearty, 2013). The model postulates that ours is the only species of the genus Homo to be worthy of the title of 'human' because of the development of a more complex and modern set of behaviours such as the use of language, new technologies, and the manipulation of symbols (Deacon, 1997; Henshilwood & Marean, 2003; Nowell, 2010; McBrearty & Brooks, 2000; McBrearty, 2013). According to this definition (i.e., 'behavioural' humanity as opposed to 'anatomical' humanity), HS became finally 'human' around 70ka when it started displaying complex behaviours such as the processing of pigments or the ability to exploit marine resources. However, this raises the question of inter-Homo 'humanity': are modern behaviours and cognitive complexity unique traits of our species? Are they an overall characteristics of the genus Homo?

To answer these questions a sort of "shopping list" for the archaeological recognition of complexity has been created (Wadley, 2003, p. 247). This list of complex traits encompasses many characteristics shown archaeologically by HS. These include for example the creation of microlithic implements, evidence for long-distance exchanges, or the creation of tools made of perishable materials, other than the two traits mentioned in the previous paragraph and many more (McBrearty & Brooks, 2000, p. 503). Leaving aside the limitations and the dangers derived from the use of such a checklist (for an overview of the main problems see e.g., Henshilwood & Marean, 2003; Nowell, 2010; Wadley, 2003), the search for archaeologically recognisable complex behaviours led to the awareness that our species

is not as unique as previously thought. In particular, one of our evolutionary cousins stands out: the Neanderthals (*H. neanderthalensis*, HN). Our relatives seem to possess many of the complex characteristics displayed archaeologically by HS (for an overview see e.g., Roebroeks & Soressi, 2016; Villa & Roebroeks, 2014), with the exception, arguably, of symbolic behaviours (i.e., the ability to communicate through symbols). Important to note is that the ability to communicate symbolically has been considered the key characteristic of 'humanness' (Deacon, 1997; McBrearty, 2013), also because, during the European Upper Palaeolithic, symbolism took a whole new, spectacular form: art expressed through non-perishable media.

Today, 'art' is a word charged with implications, connotations, and ideas. Therefore, a definition of this culturally specific, but nevertheless universal, category is needed. Following the definitions of Wadley (2003, p. 248) and Mithen (1996, p. 154-155) the word 'art' is here used to refer to any form of material symbolic expression intentionally created with the potential to communicate concepts, ideas, identities, and/or worldviews. Shell beads, decorated ostrich eggshells, or images drawn on a rock wall coming from Middle Palaeolithic (MP) or Upper Palaeolithic (UP) contexts, are all considered here as art. Artistic expressions have the potential to transmit messages that need to be interpreted (Deacon, 1997; Wadley, 2003; Mithen, 1996). Therefore, art and symbolism are here treated as mainly interpretative processes.

Palaeolithic artistic expressions in the form of jewellery and body ornaments, or paintings and engravings (hereafter called figurative expressions), are widely accepted as such when coming from HS contexts but are heavily debated when attributed to Neanderthals. An example of this duality is the summarization of Neanderthals' behavioural traits by Marean (2015) where complex behaviours such as pigments use or symbolic artefacts dubbed "advanced cognition" (Marean, 2015, p. 537) of HS are represented by continuous thick lines starting as far back as 200ka, while Neanderthals' "advanced cognition" is represented by a meaningful empty space with a few sparse dots clustered around 50ka (curiously, the probable date of the contact between the two species in Europe). Another example is offered by the way early figurative depictions are interpreted with a neuroscientific approach excluding the possibility of symbolic representation in Hodgson (2019) who stated that early "nonfunctional marks" (Hodgson, 2019, p. 588) may not have been symbolic or representational but just linked to the way the visual cortex of hominins processed visual information, not considering that the need of drawing such patterns might be in its own right a marker for complex cognition. Why does the idea of inter-species cognitive complexity encounter harsh opposition? Why does it seem that a double standard is applied when interpreting and recognizing HS and HN artistic expressions? In this paper, I aim to answer these questions by using MP figurative expressions as a case study. I will argue that the double standards often applied in Palaeolithic archaeology are a legacy of colonialism rooted in the whole archaeological discipline, ultimately derived from a universal ethnocentric mindset entrenched in our minds. Finally, I will plea for the decolonization of the deep past, echoing a growing number of scholars embracing a critical approach towards the Western theoretical mindset employed for the study of the deep past (e.g., Back Danielsson et al., 2012; Gosden, 2012; Hamilakis, 2012; Porr & Matthews, 2017, 2020a; Porr, 2019; Smith & Wobst, 2005a).

FROM DOUBLE STANDARDS TO ETHNOCENTRISM

Famous sites such as the caves of Lascaux and Chauvet in France, or the rock painting of the Aboriginal Dreamtime in Western Australia, are often cited when talking about cave art. These examples have in common the hand of the maker: HS. In fact, it is generally assumed that our species is the maker of these ancient artistic expressions, and historically little doubts were raised about whether these representations were among the first examples of intentional art in the history of mankind (e.g., Bednarik, 1995; White, 1992). The same applies to the oldest parietal arts in Sulawesi (Indonesia), for example, or to the earliest UP cave art in the Iberian peninsula. Over the decades, ancient caves such as Lascaux and Chauvet, have generated several theories around their meanings, ranging from shamanistic or animistic interpretations to didactical purposes (Sauvet et al., 2009). Indeed, it seems like no limit to the speculation about the cognitive capacities of our ancestors exists (the recent proto-language hypothesis proposed by Bacon et al., 2023, or the old 'hunting magic' interpretation summarized in Mithen, 1991, are good examples of this). On the other hand, art coming from the Neanderthal world has been heavily debated and questioned, and often classified as "accidental" (Medina-Alcaide et al., 2018, p. 72) or as a natural occurrence, applying an interpretative double standard for which similar evidence is treated differently solely based on the context (e.g., age or periodisation). In this regard, it is worthwhile mentioning a few examples such as the discussion on the natural formation of red stains in speleothems by Aubert and colleagues (2018) or the argument for non-intentional (accidental) smearing of red ochre into stalactites by Medina-Alcaide et al. (2018), both trying to explain the red colouring shown in Figure 1, or the recent discrediting of the MP dating for the alleged intentional Neanderthal art (Figure 2-A) by White and colleagues (2020). In this context, it is fair to cite the corpus of research with opposing views on HN artistic capacities. For example, the new dating evidence for the red motifs in Spanish caves by Hoffmann et al. (2018) which seems to point to HN as the maker, or the approach to the understanding of Neanderthals' use of space by Jaubert et al. (2016), or the recent publication of engravings made by pressing the fingers into soft tuff walls creating elaborate motifs of certain Neanderthal origin at La Roche-Cotard (Loire Valley, France) described by Marquet and colleagues (2023). These are just a few among many other examples, roughly summarizing the entity of the debates around MP artistic expressions (Nowell, 2023 offers a more complete and thorough summarization of the state-ofthe-art around HN research and debates therein). However, on a theoretical level, not everyone accepts the idea that also the Neanderthals were able to express something other than simple biological needs (Marean, 2015; Savage-Rumbaugh & Fields, 2011).

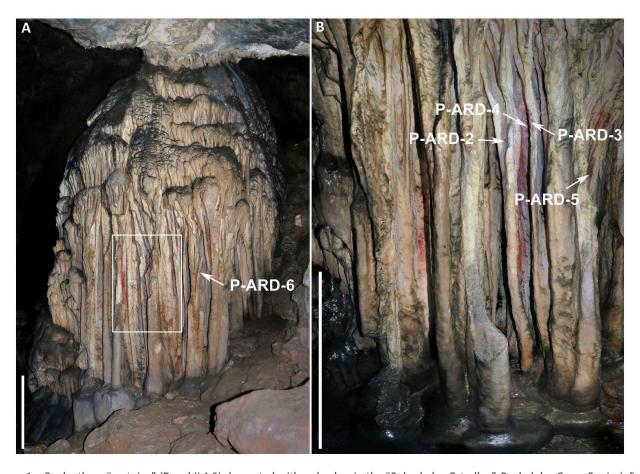


Figure 1 – Speleothem "curtains" (Panel II.A.3) decorated with red ochre in the "Sala de las Estrellas", De Ardales Cave, Spain (after Pitarch Martí et al., 2021). Licensed for use by CC BY-NC/CC BY 4.0.

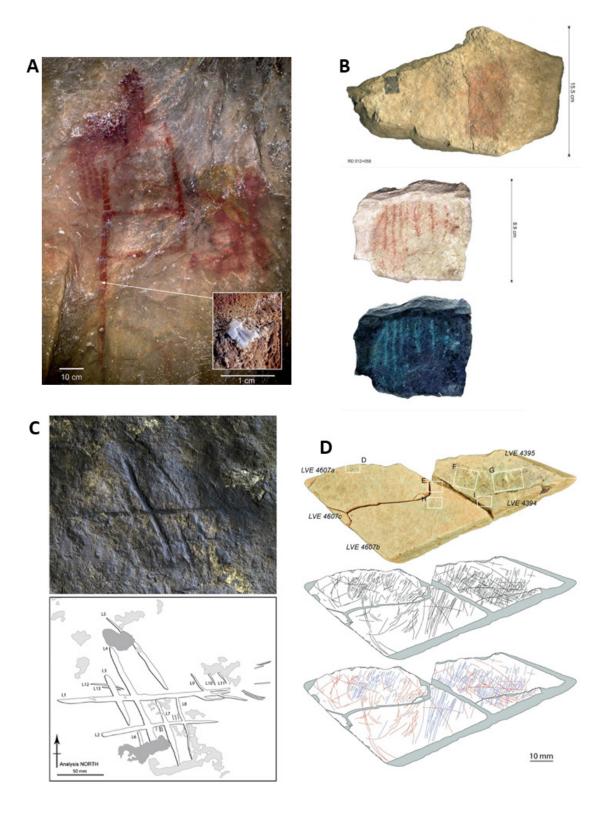


Figure 2 – Comparisons between artistic/symbolic representations coming from MP (A and C) and UP (B and D) contexts: A) Panel 78 in hall XI of La Pasiega cave (Cantabria, Spain) (after Hoffmann et al., 2018). This panel features the La Trampa pictorial group which yielded a minimum age of 64.8 ka and attributed to H. neanderthalensis (Hoffmann et al., 2018). However, the attribution and the dating have encountered fierce debate (see e.g., White et al., 2020); B) Two examples of pebbles with ochre stains from the Dalmeri rock shelter (Trento, Italy) attributed to the UP Epigravettian culture (after Dalmeri et al., 2011). Even though the depictions show nothing more than example A, these cobbles have been attributed to the symbolic realm of Epigravettian people, in fact the area yielding the cobbles has been even called "ritual area" (Dalmeri et al., 2011); C) Engraving of MP age in Gorham's Cave, Gibraltar (after Rodríguez-Vidal et al., 2014). Although the intentionality of the engravings cannot be questioned, the panel has been associated with marks left by bear claws rather than sentient hominins (Camarós et al., 2017); D) Plaquette 1 from Les Varines (Jersey, Channel Islands) attributed to the UP Magdalenian culture (after Bello et al., 2020). Although the scratches bear few remarkable similarities with example C, the willingness of the maker to convey some artistic expression is not questioned directly from the title of the manuscript (Bello et al., 2020). Licensed for use by CC BY-NC/CC BY 4.0.

I would argue that this bias derives from ideological double standards applied to the study of the deep Palaeolithic past (Roebroeks & Corbey, 2001). The examples provided above, show the double standards at work (Figure 2): since it is assumed the HN are on a different level of cultural complexity when compared to HS, evidence for higher cognitive processes needs to be reviewed. This creates a bias in the research that might even be considered unintentional. In fact, I would argue that this 'epistemological double standard' is enabled by the underlying colonialist thought that dominated, and in a certain sense created, the archaeology of the deep past. Indeed, historically, archaeology was born as a product of the Western cultural system, and past people have been studied through the eyes of our modern society, to own the past and the people whose past is at stake (Moro-Abadía, 2006; Porr, 2020; Porr & Matthews, 2017; Smith & Wobst, 2005b). This is especially problematic for the Palaeolithic since the comparisons between modern and past cultures create the illusion of a clear-cut past whose cultural entities are only the primitive and 'pristine' state of the modern (Western) society, and also reinforces the dangerous primitivistic assumption that contemporaneous groups used as background comparison (e.g., indigenous groups such as the Hadza tribe in Tanzania, or the Alaskan Nunamiut groups) are just relics from the past (Athreya & Rogers Ackermann, 2020). Moreover, specifically when our species, rather than our society, is used as the benchmark to interpret, study, and ultimately evaluate other hominins or other members of our genus (Homo), the underlying assumption is that of linearity in the cognitive evolution of our lineage, in which we are at the top end of the line, and the 'others' are along the line but below us. We are the intelligent species. These ideas have strong parallels with the universal concept of Ethnocentrism: only the cultural system to which one belongs is superior enough, or 'human' enough to measure, evaluate, and ultimately truly judge all the other systems (Viveiros De Castro, 1998). Indeed, I would argue that ours is a profoundly ethnocentric mind, no matter our background, formation, culture, and personal beliefs. In my reading, Ethnocentrism is a universal condition of mankind.

I would argue that this was the mindset driving the Imperial expansion of many European countries in the past centuries. The encounter of different cultures creates the illusion of superiority, and the opposite side is recognised as frightening different and inferior. The cultural differences are transformed into 'Otherness', and the 'Other' is considered to lack important characteristics of humanness. Through the ethnocentric lens, the term 'Other' is always used discriminatorily, and the 'Other' is always different in the negative connotation of the term (Hussain, 2020). This narrative is used to devalue and marginalize the 'others' because the system that judges is the sole holder of the dogmatic truth (Athreya & Rogers Ackermann, 2020). In my opinion, this has been the mindset steering the study of the MP record (but also human evolution in general) for most of the last century. Our species (sapiens) has been seen as the superior mind while all the other hominin species were the 'cavemen'.

Villa and Roebroeks (2014) coined the expression "Modern Human Superiority Complex" to describe how we are seen and perceived as the only species able to produce the complex thoughts behind art. These complex thoughts are ultimately translated into meaning. In fact, any symbolic manifestation needs

to transmit a message of some sort. Being a symbolic species (Deacon, 1997), we need to find the meaning behind any form of symbolic expression, be it figurative, gestural, or auditory. When confronted with imagery such as the ones from Lascaux or Chauvet, our mind looks for (and finds) interpretable, familiar patterns. But when we look at something like the stains of red ochre in Figure 1 or the engraved lines in Figure 2-C, we cannot find any known pattern and we cannot attach meaning to it. Because of our experience, we can recognize, relate and imbue with meaning the lions from Chauvet, but we might struggle to describe the unfamiliar red stains or engravings found on a rock deep in a cave coming from contexts that are not attributed to HS. An example of this comes from the Epigravettian site of the Dalmeri rockshelter (Trento, Northern Italy). The site yielded a series of cobbles and broken stones that show depictions in red ochre representing anthropomorphic and zoomorphic figures (Dalmeri et al., 2011). Among these depictions also many cobbles display just red stains of ochre across the surface (Figure 2-B) that have been attributed with certainty to the symbolic realm (Dalmeri et al., 2011). Such biased judgement has been accepted because the context from which these depictions come is HS. Therefore, any depiction must have had something to do with a higher cognitive sphere, and the meaning those red stains convey is just assumed. An ease of interpretation that is seldom granted to Neanderthals or any other hominins (Figure 2). This is an example of the double standards applied to prehistoric research. However, without assuming the existence of meaning, the judgement of HS' stained cobbles might have been different. This is mainly because something without any meaning can be considered empty, and uninterpretable (Goodrich, 1994). Therefore, unfamiliar imagery cannot be labelled as 'art' or 'symbol' (Deacon, 1997; Goodrich, 1994; Mithen, 1996).

Figure 3 tries to summarize my argument from biases and double standards to Ethnocentrism. The universal ethnocentric mind enabled the Western colonialism in which archaeology is rooted. Colonialism, or what I referred to as 'colonial mindset', enabled (and often still enables) the double standards used in the research of the deep Palaeolithic past, creating biased judgement and interpretative fallacies. For example, the search for 'meaning' might be considered as such a fallacy, which does not add anything to the general interpretation of art, and has the sole purpose of 'cutting away' artistic figurative expression from contexts in which meaning cannot be reconstructed, or even imagined.

DECOLONIZING MIDDLE PALAEOLITHIC ART

It is to be noted at this point that meaning is relative and dependent on historical and cultural contexts (Kuhn, 2021; Viveiros De Castro, 1998). Without knowing the context, it is virtually impossible to purposely identify the meaning (Kuipers, 2022). Even when the context is known, reconstructing the meaning is a difficult exercise. Understanding that symbols and their meanings are subjective and culturally specific is the key to escaping the Western colonial thought still applied (often unintentionally) to the study of the deep past of complex behaviours. It is necessary to stop the urge to recognise (here intended as imbuing with meaning) and interpret the images that past humans left

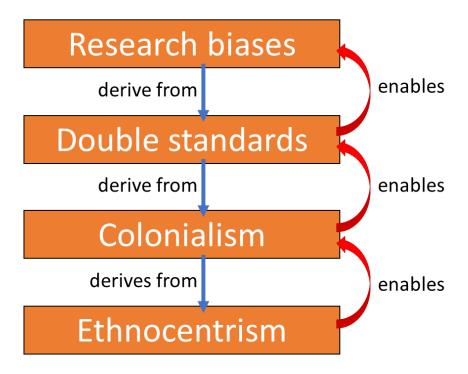


Figure 3 – Summarisation of the four main epistemological steps argued for in the article. Research biases in the Palaeolithic are derived from the double standards applied in the archaeological research, which derive from the colonial mindset, which in turn derives from an underlying universal Ethnocentrism. The image shows that the flow can work also the other way by starting from the ethnocentric mind (image by the author).

behind. It is a futile exercise, whose sole purpose is to celebrate the accomplishments of our species and to fuel discussions at times pointless. Images without a clear meaning for our perception are not 'meaningless', rather they offer a different window onto past cultures, which are not to be labelled inferior, or 'Other'. By using a more relativist approach (i.e., there is no absolute truth but rather different truths that are bound to particular cultural, environmental, or social realities), it is possible to escape the ethnocentric mind applied to the deep past. Hussain (2020, p. 486) remarks that the decolonization of a mindset requires foremostly the recognition of the plural and ephemeral nature of knowledge. I would add that the decolonizing efforts should stem from the negation of the existence of the dogmatic truth, and the acknowledgement of multiple perspectives that might be diametrically opposed to the one of our (Western) society. This is the essence of the relativistic thought.

It is essential to keep in mind that art due to its inherent symbolic nature, communicates (and even manifests itself) often in unexpected ways. For this reason, it is important to consider more perspectives coming from other contexts, and in this sense, the too often suppressed Indigenous knowledge can be a precious help. By applying a relativist framework, it is possible to understand that a single object or representation can have different levels of interpretation relative to the system used for their study. In relativist terms, none of the possible interpretative levels are true by themselves, however, I would argue that different perspectives together can be used to approach what might be called a better approximation. Hussain (2020, p. 486) reminds us that "working together with, rather than against" Indigenous knowledge can produce unexpected, better results.

Thus, through the relativist framework, an Indigenous perspective might force us to think about radically alternative scenarios and perspectives related to the emergence, creation, manifestation, and ultimately interpretation of deep past artistic expressions (Hussain, *personal communication*, January 9, 2024). Once it is possible to accept the existence of several, different interpretative levels, it is not necessary to find meaning to recognize the existence of a higher cognitive sphere.

ONCLUSION

Decolonizing the deep past is not only a way of acknowledging that there were other 'humans' walking alongside us but also a way of questioning that part of the Western knowledge system rooted in colonialism and based on the refusal of other systems. For many years since the discovery of the first Neanderthal remains, our evolutionary relatives were seen as cavemen capable only of surviving. Luckily, a growing number of archaeologists are starting to see beyond the "Modern Human Superiority Complex" and questioning the old interpretations produced by what I referred to as 'colonial mindset'. I have argued that a universal ethnocentric mind is at the base of colonialism in which archaeology as a discipline is rooted, which in turn enabled and still enables double standards applied to the study of the deep past, creating biased interpretations of other cultures and also other species such as HN. A more relativistic framework can be used to escape the ethnocentric trap into which the Western knowledge system too often falls. Nowadays, Neanderthals are increasingly recognized as worthy of the coveted title of 'humans'. The framework here proposed not only

allows revaluating hominin species from our common past but provides also the opportunity to rediscover suppressed Indigenous perspectives and offers another way of giving voice to neglected and overlooked realities.

By decolonizing the deep past of humanity, it is possible to acknowledge the incredible achievements of other hominin species and to change the perception we have of ourselves. We are not more *sapiens* or 'exceptional' than other past hominin species, and what is seen as our natural right of disposing freely of our environment needs to be revisited. In the end, as Finlayson (2010) stated, we stand alone on this planet not because we are the smartest species, but maybe because we are the luckiest

A CKNOWLEDGEMENTS

The background idea for this work has been elabourated following some of the concepts discussed in the RMA course *Advanced Themes in Archaeology*. I would like to express my gratitude to Dr. Alexander Verpoorte for his precious comments and insights on earlier versions of this paper, and to Karel Kuipers for providing useful feedback and nice, always funny discussions. I would like to thank the editors of Inter-Section and the two reviewers (Dr. Shumon Hussain and Dr. Davide Delpiano) whose fair criticisms made this a way better (and very different!) work. Finally, I would like to thank Dr. Francesca Di Cicco for convincing me to write this paper and providing precious feedback.

EFERENCES

Athreya, S., & Rogers Ackermann, R. (2020). Colonialism and Narrative of Human Origins in Asia and Africa. In M. Porr & J.M. Matthews (Eds.), *Interrogating Human Origins: Decolonization and the Deep Human Past* (pp. 72-95). Routledge.

Aubert, M., Brumm, A., & Huntley, J. (2018). Early dates for 'Ne-anderthal cave art' may be wrong. *Journal of Human Evolution*, 125, 215-217.

https://doi.org/10.1016/j.jhevol.2018.08.004

Back Danielsson, I.-M., Fahlander, F., & Sjöstrand, Y. (2012). Imagery beyond Representation. In I.-M. Back Danielsson, F. Fahlander, & Y. Sjöstrand (Eds.), *Encountering imagery: materialities, perceptions, relations* (pp. 1-12). Stockholm University.

Bacon, B., Khatiri, A., Palmer, J., Freeth, T., Pettitt, P., & Kentridge, R. (2023). An Upper Palaeolithic Proto-writing System and Phenological Calendar. *Cambridge Archaeological Journal*, 33(3), 371-389. https://doi.org/10.1017/S0959774322000415

Bednarik, R.G. (1995). Concept-Mediated Marking in the Lower Palaeolithic. *Current Anthropology*, 36(4), 605-634. https://doi.org/10.1086/204406

Bello, S.M., Blinkhorn, E., Needham, A., Bates, M., Duffy, S., Little, A., Pope, M., Scott, B., Shaw, A., Welch, M.D., Kinnaird, T., Millar, L., Robinson, R., & Conneller, C. (2020). Artists on the edge of the world: An integrated approach to the study of Magdale-

nian engraved stone plaquettes from Jersey (Channel Islands). *PLoS ONE*, 15(8), e0236875. https://doi.org/10.1371/journal.pone.0236875

Camarós, E., Cueto, M., Teira, L., Münzel, S.C., Plassard, F., Arias, P., & Rivals, F. (2017). Bears in the scene: Pleistocene complex interactions with implications concerning the study of Neanderthal behavior. *Quaternary International*, 435(A), 237-246. https://doi.org/10.1016/j.quaint.2015.11.027

Dalmeri, G., Neri, S., Bassetti, M., Cusinato, A., Kompatscher, K., & Hrozny Kompatscher, N.M. (2011). Riparo Dalmeri: le pietre dipinte dell'area rituale. *Preistoria Alpina*, 45, 67-117.

Deacon, T.W. (1997). The Symbolic Species: The co-evolution of language and the brain. W.W. Norton & Company, Inc.

Finlayson, C. (2010). *The Humans Who Went Extinct: Why Nean-derthals died out and we survived.* Oxford University Press.

Goodrich, G.L. (1994). A picture without meaning isn't worth a thousand words: Visual information in vision rehabilitation. In A.C. Kooijman, P.L. Looijestijn, J.A. Welling, & G.J. van der Wildt (Eds.), *Studies in Health Technology and Informatics (vol. 11):* Low Vision (pp. 111-120). IOS Press. https://doi.org/10.3233/978-1-60750-855-7-111

Gosden, C. (2012). Post-Colonial Archaeology. In I. Hodder (Ed.), *Archaeological Theory Today* (pp. 251-266). Polity Press.

Hamilakis, Y. (2012). Are We Postcolonial Yet? Tales from the Battlefield. *Archaeologies: Journal of the World Archaeological Congress*, 8(1), 67-76. https://doi.org/10.1007/s11759-012-9200-5

Henshilwood, C.S., & Marean, C.W. (2003). The Origin of Modern Human Behavior: Critique of the Models and Their Test Implications. *Current Anthropology*, 44(5), 627-651. https://doi.org/10.1086/377665

Hodgson, D. (2019). The origin, significance, and development of the earliest geometric patterns in the archaeological record. *Journal of Archaeological Science: Reports*, 24, 588-592. https://doi.org/10.1016/j.jasrep.2019.02.025

Hoffmann, D.L., Standish, C.D., García-Diez, M., Pettitt, P.B., Milton, J.A., Zilhão, J., Alcolea-González, J.J., Cantalejo-Duarte, P., Collado, H., de Balbín, R., Lorblanchet, M., Ramos-Muñoz, J., Weniger, G.-C., & Pike, A.W.G. (2018). U-Th dating of carbonate crusts reveals Neandertal origin of Iberian cave art. *Science*, 359, 912-915. https://doi.org/10.1126/science.aap7778

Hussain, S.T. (2020). Book Review: Martin Porr and Jacqueline Matthews, eds. Interrogating Human Origins: Decolonisation and the Deep Human Past (Abingdon: Routledge, 2019, ISBN 9781138300415). *European Journal of Archaeology*, 23(3), 483-488. https://doi.org/10.1017/eaa.2020.30

Jaubert, J., Verheyden, S., Genty, D., Soulier, M., Cheng, H., Blamart, D., Burlet, C., Camus, H., Delaby, S., Deldicque, D., Edwards, R.L., Ferrier, C., Lacrampe-Cuyaubère, F., Lévêque, F., Maksud, F., Mora, P., Muth, X., Régnier, É., Rouzaud, J.-N., & Santos, F. (2016). Early Neanderthal constructions deep in Bruniquel

Cave in southwestern France. *Nature*, 534, 111-114. https://doi.org/10.1038/nature18291

Klein, R.G. (1995). Anatomy, behavior, and modern human origins. *Journal of World Prehistory*, 9, 167-198. https://doi.org/10.1007/BF02221838

Kuhn, S.L. (2021). *The Evolution of Paleolithic Technologies*. Routledge.

Kuipers, K.J. (2022). The problem with symbolic behaviour. *Inter-Section*, 5, 1-7.

Marean, C.W. (2015). An evolutionary anthropological perspective on modern human origins. *Annual Review of Anthropology*, 44, 533-556.

Marquet, J.-C., Freiesleben, T.H., Thomsen, K.J., Murray, A.S., Calligaro, M., Macaire, J.-J., Robert, E., Lorblanchet, M., Aubry, T., Bayle, G., Bréhéret, J.-G., Camus, H., Chareille, P., Egels, Y., Guillaud, É., Guérin, G., Gautret, P., Liard, M., O'Farrell, M., Peyrouse, J.-B., Thamó-Bozsó, E., Verdin, P., Wojtczak, D., Oberlin, C., & Jaubert, J. (2023). The earliest unambiguous Neanderthal engravings on cave walls: La Roche-Cotard, Loire Valley, France. *PLoS ONE*, 18(6), e0286568. https://doi.org/10.1371/journal.pone.0286568

McBrearty, S., & Brooks, A.S. (2000). The revolution that wasn't: a new interpretation of the origin of modern human behavior. *Journal of Human Evolution*, 39, 453-563. https://doi.org/10.1006/jhev.2000.0435

McBrearty, S. (2013). Advances in the Study of the Origin of Humanness. *Journal of Anthropological Research*, 69(1), 7-31. https://doi.org/10.3998/jar.0521004.0069.102

Medina-Alcaide, M.Á., Garate Maidagan, D., & Sanchidrián Torti, J.L. (2018). Painted in red: In search of alternative explanations for European Palaeolithic cave art. *Quaternary International*, 491, 65-77. https://doi.org/10.1016/j.quaint.2016.08.043

Mellars, P., & Stringer, C. (1989). The human revolution: behavioral and biological perspectives on the origins of modern humans. Princeton University Press.

Mithen, S. (1991). Ecological Interpretations of Palaeolithic Art. *Proceedings of the Prehistoric Society*, 57(1), 103-114. https://doi.org/10.1017/S0079497X00004916

Mithen, S. (1996). The Prehistory of the Mind: The Cognitive Oriqins of Art and Science. Thames and Hudson.

Moro-Abadía, O. (2006). The History of Archaeology as a 'Colonial Discourse'. *Bulletin of the History of Archaeology*, 16(2), 4-17. https://doi.org/10.5334/bha.16202

Nicholas, G., & Hollowell, J. (2007). Ethical Challenges to a Post-colonial Archaeology: The Legacy of Scientific Colonialism. In Y. Hamilakis & P. Duke (Eds.), *Archaeology and Capitalism: From Ethics to Politics* (pp. 59-82). Routledge.

Noble, W., & Davidson, I. (1991). The Evolutionary Emergence of Modern Human Behaviour: Language and Its Archaeology. *Man*, 26(2), 223-253. https://doi.org/10.2307/2803830

Nowell, A. (2010). Defining Behavioral Modernity in the Context of Neandertal and Anatomically Modern Human Populations. *Annual Review of Anthropology*, 39(1), 437–452. https://doi.org/10.1146/annurev.anthro.012809.105113

Nowell, A. (2023). Rethinking Neandertals. *Annual Review of Anthropology*, 52, 151-170. https://doi.org/10.1146/annurev-anthro-052621-024752

Pitarch Martí, A., Zilhão, J., d'Errico, F., Cantalejo-Duarte, P., Domínguez-Bella, S., Fullola, J.M., Weniger, G.C., & Ramos-Muñoz, J. (2021). The symbolic role of the underground world among Middle Paleolithic Neanderthals. *Proceedings of the National Academy of Sciences*, 118(33), e2021495118. https://doi.org/10.1073/pnas.2021495118

Porr, M., & Matthews, J.M. (2017). Post-colonialism, human origins and the paradox of modernity. *Antiquity*, 91(358), 1058-1068. https://doi.org/10.15184/aqy.2017.82

Porr, M., & Matthews, J.M. (2020a). *Interrogating Human Origins: Decolonization and the Deep Human Past*. Routledge.

Porr, M., & Matthews, J.M. (2020b). Interrogating and decolonising the deep human past. In M. Porr & J.M. Matthews (Eds.), *Interrogating Human Origins: Decolonization and the Deep Human Past* (pp. 3-31). Routledge.

Porr, M. (2019). Rock art as art. *Time and Mind, The Journal of Archaeology, Consciousness and Culture*, 12(2), 153-164. https://doi.org/10.1080/1751696X.2019.1609799

Porr, M. (2020). The temporality of humanity and the colonial landscape of the deep human past. In M. Porr, & J.M. Matthews (Eds.), *Interrogating Human Origins: Decolonisation and the Deep Human Past* (pp. 184-207). Routledge.

Roebroeks, W., & Corbey, R. (2001). Biases and double standards in palaeoanthropology. In R. Corbey & W. Roebroeks (Eds.), *Studying human origins: disciplinary history and epistemology* (Vol. 6). Amsterdam University Press.

Roebroeks, W., & Soressi, M. (2016). Neandertals revised. *Proceedings of the National Academy of Sciences*, 113(23), 6372-6379. https://doi.org/10.1073/pnas.1521269113

Rodríguez-Vidal, J., d'Errico, F., Pacheco, F.G., Blasco, R., Rosell, J., Jennings, R.P., Queffelec, A., Finlayson, G., Fa, D.A., Gutiérrez López, J.M., Carrión, J.S., Negro, J.J., Finlayson, S., Cáceres, L.M., Bernal, M.A., Fernández Jiménez, S., & Finlayson, C. (2014). A rock engraving made by Neanderthals in Gibraltar. *Proceedings of the National Academy of Sciences*, 111(17), 13301-1330. https://doi.org/10.1073/pnas.1411529111

Sauvet, G., Layton, R., Lenssen-Erz, T., Taçon, P., & Wlodarczyk, A. (2009). Thinking with Animals in Upper Palaeolithic Rock Art. *Cambridge Archaeological Journal*, 19, 319-336. https://doi.org/10.1017/S0959774309000511

Savage-Rumbaugh, E.S., & Fields, W.M. (2011). The evolution and the rise of human language: Carry the baby. In C.S. Henshilwood & F. d'Errico (Eds.), *Homo Symbolicus: The dawn of language, imagination and spirituality* (pp. 13-48). John Benjamins Publishing Company.

Smith, C. & Wobst, H.M. (2005a). *Indigenous Archaeologies: Decolonising Theory and Practice*. Routledge.

Smith, C. & Wobst, H.M. (2005b). Decolonizing archaeological theory and practice. In C. Smith & H.M. Wobst (Eds.), *Indigenous Archaeologies: Decolonising Theory and Practice* (pp. 4-14). Routledge.

Villa, P., & Roebroeks, W. (2014). Neandertal Demise: An Archaeological Analysis of the Modern Human Superiority Complex. *PLoS ONE*, 9(4), e96424. https://doi.org/10.1371/journal.pone.0096424

Viveiros de Castro, E. (1998). Cosmological Deixis and Amerindian Perspectivism. *The Journal of the Royal Anthropological* nstitute, 4(3), 469–488. https://doi.org/10.2307/3034157

Wadley, L. (2003). How some archaeologists recognize culturally modern behaviour. *South African Journal of Science*, 99, 247-250.

White, R., Bosinski, G., Bourrillon, R., Clottes, J., Conkey, M.W., Corchón Rodriguez, S., Cortés-Sánchez, M., de la Rasilla Vives, M., Delluc, B., Delluc, G., Feruglio, V., Floss, H., Foucher, P., Fritz, C., Fuentes, O., Garate, D., González Gómez, J., González-Morales, M.R., González-Pumariega Solis, M., Groenen, M., Jaubert, J., Aránzazu Martinez-Aguirre, M., Medina Alcaide, M.-A., Moro Abadia, O., Ontañón Peredo, R., Paillet-Man-Estier, E., Paillet, P., Petrognani, S., Pigeaud, R., Pinçon, G., Plassard, F., Ripoll López, S., Rivero Vilá, O., Robert, E., Ruiz-Redondo, A., Ruiz López, J.F., San Juan-Foucher, C., Luis Sanchidrián Torti, J., Sauvet, G., Simón-Vallejo, M.D., Tosello, G., Utrilla, P., Vialou, D., & Willis, M.D. (2020). Still no archaeological evidence that Neanderthals created Iberian cave art. *Journal of Human Evolution*, 144, 102640. https://doi.org/10.1016/j.jhevol.2019.102640

White, R. (1992). BEYOND ART: Toward an Understanding of the Origins of Material Representation in Europe. *Annual Review of Anthropology*, 21, 537-564.