Visual Cultures in the Upper Palaeolithic

April Nowell

Using examples drawn from the European Upper Palaeolithic, this article advocates a visual cultures approach to studying the art of this period. Visual culture is defined as the biological, cognitive and social underpinnings of how we see, while the term art refers to what we see. A visual cultures approach to these images allows the archaeologist to explore how they were experienced, decoded and innovated upon within historically situated, overlapping and entangled communities of practice and further affords archaeologists the tools and the vocabulary they need to explore apprenticeship, active teaching, embodied cognition, situated learning, scaffolding, enskillment, the existence of chaînes opératoires *and the impact of these materials on the human brain. European Upper Palaeolithic finger flutings are presented as a case study of the visual cultures approach.*

The debate over 'art'

The debate over whether or not to use the term 'art' to refer to the corpus of Palaeolithic imagery that we normally think of when we use that term (e.g. paintings, drawings and engravings of figurative and non-figurative subjects) reminds me of the angst anthropologists suffer(ed) when trying to define the term 'culture' (recall, for instance, Kroeber and Kluckhohn's classic 1952 volume *Culture: A critical review of concepts and definitions*, that offers more than 100 definitions of culture). I remember as an undergraduate student being taken aback by the fact that a concept as central to our field as 'culture' could be so difficult to define—or at least by how difficult it was for us to reach a consensus on its definition. My thought at the time was that the reason that anthropologists had trouble reaching a consensus was that we were confounding many different uses of and needs for the term 'culture' into one word. The tension and confusion caused by this tendency led to a great many academic articles and conference papers, but to little else. My sense is that, at the end of the day, this debate has largely fallen away (except in undergraduate courses) without moving the field very much forward on the issue.

Is art ever 'art'?

I think the culture debate is a reasonable analogy to the one we are having now about 'art' (see John Robb's (this issue) elegant model of the different ways in which the term 'art' is conceptualized and studied in archaeology). As someone who sees archaeology more as a science than a humanity, I value using precisely and accurately defined terms. The publication of *Beyond Art: Pleistocene image and symbol* (Conkey *et al.* 1997) and the conference upon which it is based were key to challenging archaeologists to be more mindful in their use of the term art (see also Davidson 2012; 2013). Yet I will admit that in 2000, I designed and have continued to teach a course called *Paleolithic Art*. One of my first lectures is titled 'I know what I like but is it 'art'?', in which we explore this debate in detail, using a myriad of examples from Russian Icons to Banksy and the work of performance artist Susanne Heintz in order to challenge students to probe the boundaries of the category of affective material culture we call art. While we always conclude that its modern Western connotations[1] and the inherent difficulty of defining what is 'art' even in our own time have largely rendered the term irrelevant (at least in a Palaeolithic context), I still find myself slipping into using this old, familiar, comfortable term—especially when I speak to the general public. I am still of two minds whether there are legitimate instances of when using 'art' with all of its traditional connotations is warranted or whether it is never warranted—even in a modern Western context. Is the term art itself an artefact of our making? In other words, was there ever a time and place when 'art' functioned and

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incorporated all of the assumptions that White (2003) has argued are associated with it now? Would Michelangelo have recognized what we mean by 'art' in that sense?

Returning to the analogy of the debate on culture, I am reminded of a story that Margaret Conkey told at the end of a public lecture on Palaeolithic 'art' that she gave at the University of Victoria many years ago. She described the excitement of the late rock-art specialist Patricia Vinnicombe in having an opportunity to ask Australian aboriginal elders about the meaning of their art. Conkey recounts that Vinnicombe enthusiastically asked, 'Is it about your ancestors? About hunting? About spirits?' The elders answered, 'yes'. Similarly, to the question of whether 'archaeological art' is 'art' in Robb's sense, affective material culture, or something else, the answer is yes. Art in an archaeological context is probably all of these things and more.

The relationship between art and Pleistocene visual cultures

Art

For my own purposes, when I am writing and thinking about the corpus of Palaeolithic 'art', I have come to use the phrase 'Pleistocene visual cultures', following Soffer and Conkey (1997; see Nowell 2006) and, much more recently, the term 'art' in the sense of Davidson (2013). Davidson (2013, 42) defines art as 'the making and marking of surfaces where the images have implicational meaning for the observer whether or not they know the full propositional meaning of the artist'. In this sense, art for me includes not only the paintings, engravings, drawings and figurines as described above, but also body adornments (and the adorned body—e.g. tattooing, piercing, scarification), textiles and decorated tools. This does not mean that 'everything is art'. Art remains a bounded category, because Davidson's (2013) definition focuses on the transformative power of the recognition that signs (in the Peircean sense) can be symbols. In this way, these marked surfaces are readily distinguishable from the act and products of grinding plant materials with a pestle (Lippi *et al.* 2015), scraping hides and making (undecorated) tools, even though these behaviours often mark surfaces.

Pleistocene visual cultures

For me, the term Pleistocene visual cultures[2] (Soffer & Conkey 1997) encompasses Davidson's notion of art, but also the social production of these art objects and how they were experienced, decoded and innovated upon within historically situated, overlapping and entangled communities of practice. As Conkey (2009) has written, 'images and forms were generated within and by communities of practice … in that sense [they are] not art images but rather [the] artful integration of many entangled material and social factors'. This approach is in agreement with Gell (1998, 3–4), who argues that an anthropology of art must '[focus] on the social context of art production, circulation and reception' in order to be in line with the larger body of anthropological theory.

Further, visual cultures incorporate the biological and cognitive dimensions of art as well. Specifically, studying Pleistocene visual cultures within a communities of practice approach affords me the tools and the vocabulary I need to explore apprenticeship, active teaching, embodied cognition, situated learning, scaffolding, enskillment (e.g. Fritz *et al.* 2016; Rivero 2016; Sinclair 2015), the existence of *chaînes opératoires* (e.g. Farbstein 2010; 2011a,b) and the impact of these materials on our plastic brains. In my research (Nowell 2015a,b), I ask questions such as 'how did growing up within a Pleistocene visual culture structure the neuronal connections of Ice Age children and influence the adults they became?' and 'how did they learn to think through and about pictures/visual material culture?'. In the words of Malafouris (2013, 202), how did 'those early pictures bring forth a new process of acting within the world and at the same time thinking about it'? How did this impact people's relationships with each other, with animals, with objects and the environment? In sum, what I gain from studying Pleistocene visual cultures, rather than simply art, is the ability to focus on the biological, cognitive and social underpinnings of *how* we see, rather than *what* we see.

Making these definitions work in a Palaeolithic context

Communities of practice

Because the ways of engaging in art are 'learned and practiced by community members' (Joyce 2012, 150) within the visual culture(s) of which they are a part, communities of practice persist over time. As a result, one way to identify communities of practice in art production is to identify archaeologically visible standardized means of production or 'traditions', of which there are many in the Upper Palaeolithic. Well-known examples include thousands of tiny Aurignacian (*c.* 35,000 BP) basket-shaped, mammoth ivory beads (White 2007), highly standardized animal-head cutouts known as '*contours découpés*', animal-ended spear-throwers (Conkey 1993; Dobres 2001) and feline-human statues from three sites in

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Germany (Conard 2011). Another way to identify communities of practice is to look for points of disjuncture or discontinuity in the archaeological record that might reflect changes in social practice. For example, there is at times a diverging relationship between fauna chosen to be consumed and fauna chosen to be depicted on cave walls (Gonzales-Morales 1997). Another example is the change in recipe used to make pigments employed in the production of images in caves such as Niaux in southwest France. While artistic style remained the same over generations, there is a clear regional change in pigment recipe at 13,000 BP with the addition of biotite as an extender (Clottes 1995). We know that not only adults, but children too, engaged in, or at least witnessed, the production of images at different times and places in the Upper Palaeolithic, based on evidence such as footprints, handprints, finger holes in clay and tiny finger flutings at caves in France and Spain (e.g. Bahn & Vertut 1997; Clottes 2013; Roveland 2000; Van Gelder 2015a).

Embodied cognition, extended cognition, skill and experience

There are a number of ways in which people experience and learn about the world around them. I will briefly mention two that are relevant for our discussion of Palaeolithic art and Pleistocene visual cultures: (1) embodied cognition and (2) extended cognition. Embodied cognition is 'a growing research program in cognitive science that emphasizes the formative role the environment plays in the development of cognitive processes' (IEP n.d.), while extended cognition is the result of that instance of entanglement between 'the affordances … of the raw material and the sensorimotor properties of the human hand' (Malafouris 2013, 176) and individual skill and experience. These types of cognition can be studied through the artist's[3] use of space, as expertly documented by Fritz and Tosello (2007) in their study of drawings in Chauvet Cave. By meticulously reconstructing the order in which each line was drawn and whether it was drawn with confidence in one stroke, or with hesitation, or if it was erased and redrawn, these researchers are able to recreate how artist(s) positioned themselves in the cave, navigated that space, were limited or liberated by the affordances of the materials they worked with, including the texture and humidity of the cave wall, and worked around, incorporated, or at times ignored pre-existing art.

Other examples include the challenges of working with new materials, such as ivory, bone and shell. In particular, much has been made of the texture, luminosity and material exigencies of ivory in the early Upper Palaeolithic of Europe (e.g. Heckle 2009), while sophisticated ivory and bird-bone flutes are believed to have been produced beginning in the Aurignacian (*c.* 43,000-30,000 BP), partially because before that suitably large avians (e.g. raptors and swans) were unknown in this region (Morley 2013; Tyrberg 1998). A change in resource availability may have impacted not only the use of one material (hollow bird bones), but the way in which another (ivory) was conceived of as well.

A final example is the Aurignacian ivory beads mentioned above (White 2007). Most are quite small (some approaching the size of seed pearls), perforated and manufactured using the same techniques (e.g. splitting, wedging, scraping, gouging, and polishing) as those used to make Aurignacian figurines (Conneller 2011). Given their size, artisans threading ivory and bone needles and sewing these beads on spun, dyed textiles (e.g. Kvavadze *et al.* 2009; Soffer 2004; Soffer *et al.* 2000), were almost certainly working by touch and embodied gesture (i.e. muscle memory), rather than by sight, to create objects with meaning for members of that particular visual culture.

Ways of seeing and knowing

Finally, we can look at how Pleistocene visual cultures impact ways of seeing and knowing. These topics are explored in much more depth elsewhere (Nowell 2015a,b), but one example, that of metaphorical thinking, will be touched on here. Metaphors are said to act as a bridge between different realities, different levels of meaning and different realms of experience (Billow 1981). Humans use metaphorical thinking to recognize patterns and create relationships between disparate elements and to imbue these patterns and relationships with meaning (Nowell 2015b), and they learn to do so from a very early age. It can be argued that metaphorical thinking through pareidolia (the human ability to attribute significance to ambiguous or random data: see Geary 2011) underlies many forms of Upper Palaeolithic art. Upper Palaeolithic artists are well known for incorporating the natural topography of a cave's wall in their paintings and engravings—a convexity lends three-dimensional corporality to an animal, while a concavity can be transformed into an eye. For example, at the French site of Cougnac, artists incorporated natural flow stone into a drawing of an Ibex in order to depict the shaggy texture of its coat (Fig. 1), while at Altamira in Spain natural protrusions give Palaeolithic bison corporeal roundness: other rock protrusions in the cave turn into eerie masks with the addition of eyes drawn in charcoal. Similarly, the 'humanness' of the half-human, half-feline figurine from Geißenklösterle, Germany (Conard 2011) (Fig. 2)

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Figure 1. *(Colour online) An ibex from Cougnac, France. By incorporating the flowstone on the cave wall the animal is given a 'shaggy' coat. (Photograph: Jean Clottes).*

mentioned above is likely a function of the shape of the ivory tusk from which it is made, including the dental cavity which facilitated separated (bipedal) legs (Conneller 2011). Whether the artist had a concept of imaginary (i.e. composite) figures before picking up this piece of ivory, or whether the natural shape of the ivory brought forth a concept of an imaginary creature, is an interesting question to explore and could be resolved if, for example, an older two-dimensional image of such a creature is found.

What seems clear is that, while pareidolia and related phenomena may be human universals (Geary 2011), the particular form they take is culturally mediated, and children growing up in a particular visual culture learn to process (i.e. to imagine, create and 'see') these metaphors as others before them have done (Nowell 2015a,b). Pleistocene visual cultures were, as their modern counterparts are, tied to their particular economies and landscapes. The visual cultures approach gives us a means of exploring the recursive relationships between these variables and art. As Davidson (2013, 26) notes, 'it is likely that the differentiation between those hunters and gatherers who did engage in art (say, in the west Mediterranean regions) and those who did not (say, in the east Mediterranean region) led to different relationships with the resources of their environments and hence their subsequent histories'. In other words, for Davidson (2013) and Malafouris (2013) and myself, the interesting questions relate to how living in a pictorial culture fundamentally and irrevocably changes the way you see the world and thus changes the life course of the communities of which you are a part. This is what studying Pleistocene visual cultures brings you that simply studying art does not.

Discussion and conclusion

In this context, I am working with Leslie Van Gelder, who, along with her late husband, Kevin Sharpe, developed a pioneering method for recording and analysing Upper Palaeolithic finger flutings (e.g. Sharpe & Van Gelder 2004; 2005; 2009; 2010; Van Gelder 2012; 2015a,b,c,d). Finger flutings (Fig. 3) are quite literally the residue of touch and result when Upper Palaeolithic peoples in France, Spain and Australia used their fingers to draw in soft sediment covering cave walls and ceilings. While flutings were once dismissed as 'parasite lines' by the famous prehistorian Henri Breuil (1912), through years of meticulous work Sharpe and Van Gelder were able to demonstrate that the flutings, even in the largest caves, were made by small groups of people (i.e. never less than two, never more than nine); the larger groups

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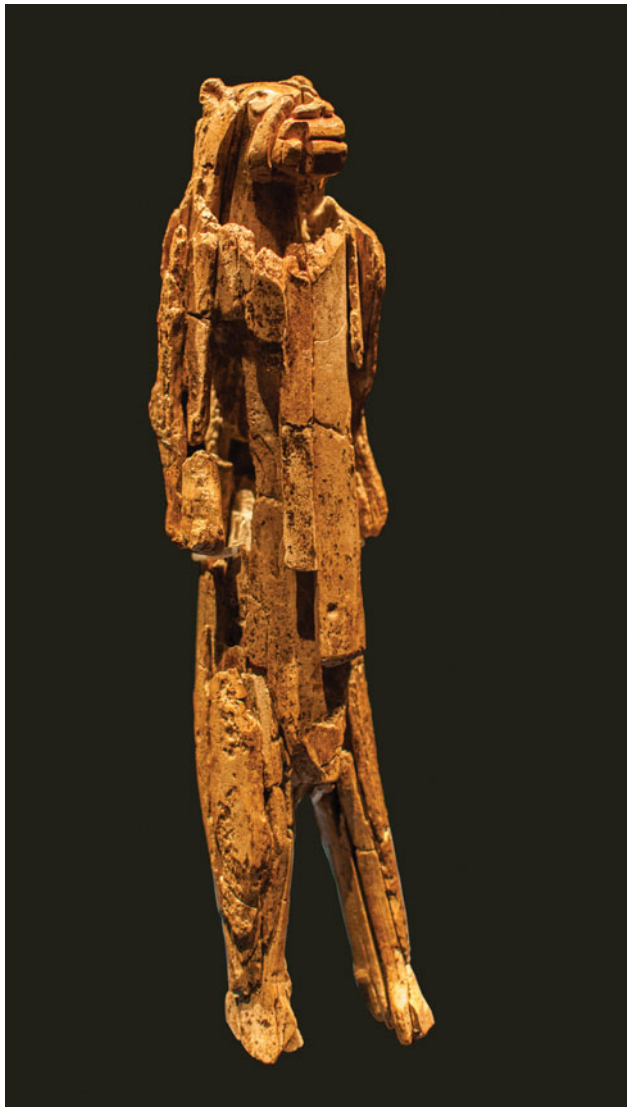


Figure 2. *(Colour online)* Löwenmensch *figure from Hohlestein-Stadel, Germany. (Photograph: Dagmar Hollmann/Wikimedia Commons, Licence CC BY-SA 3.0.)*

always included children, who were sometimes the most prolific fluters; and panels were often created in concert as documented by the criss-crossing of differently sized flutings produced by different-sized hands. Van Gelder (2015e) describes her work as an 'archaeology of intimacy' where, through the application of forensic techniques, these small moments in time can be rendered visible.

Our ongoing study of finger flutings takes a Pleistocene visual cultures approach by identifying communities of practice through the documentation of who entered the caves (age and sex categories whenever possible, as well as minimum number of individuals), who engaged in mark making, where and how Upper Palaeolithic peoples engaged with each other, whether they chose to depict figurative and/or non-figurative images, how flutings relate to the production of other types of art and how these variables change over time (e.g. were children always invited into these spaces?). We also address embodied and extended cognition in terms of how the senses of touch and sound may have been as important as sight in navigating these spaces, how the material affordances of the cave walls determined, at least to some extent, whether Upper Palaeolithic peoples fluted, engraved or painted and how these people relied on embodied gestures to create figurative and non-figurative images as they moved through space. Finally, we address how Upper Palaeolithic peoples came to see and know the world through, for instance, documenting the incorporation of the natural environment into fluted images. For example, at the French site of Rouffignac, with the 'Mammoths of Discovery' (finger-drawn mammoths with a row of flutings both within one of the mammoths and beyond), the mammoth's eye is a well-placed stone (Van Gelder pers. comm., 2017). Not only can we think of this as an example of metaphorical thinking as discussed above, but we can also ask questions related to how people learned to move between two, three and four dimensions (Nowell 2015a,b). In other words, how do you learn to render a three-dimensional animal in two dimensions and, conversely, how do we recognize that a flattened image of a mammoth is a mammoth in some ways (as we assume they did), but differed from it in other equally significant ways? Gathering all of these data allows us to begin to reconstruct how specific groups of Upper Palaeolithic peoples at certain times and certain places came to experience and know the world around them.

To return now to the question at the heart of this essay—what is art in an archaeological context? In some ways, it is easy to shrug off this question. We all think that we more or less mean the same thing when we write about 'art', but as Robb (this volume) has shown, we do not. I have argued that there is much to be gained by using the term visual culture instead of art as it moves us from a focus on *what* we see (art) to a focus on *how* we see. This is not simply a case of semantics—of substituting one vague term for another—to me, the term represents a fundamental shift in the way I conduct my research: in the questions I ask, the data I collect and the results I obtain. I hope that I have demonstrated here that if I studied the flutings as art, I would understand how they were produced, how they change over time, how they co-occur (or not) with other types of art and perhaps something about their aesthetics; but I would miss

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Figure 3. *(Colour online) Finger fluting from Rouffignac Cave, France. (Photograph: Leslie Van Gelder.)*

how people growing up in these cultures experienced these flutings—how they learned to 'read' them, if you will, and through that process how they came to know the world around them.

Notes

1. White (2003) identified eight assumptions of modern Western art, including that there is a distinct sphere of action called art; 'true' art is a work of genius; 'it fulfills an innate need in people to comprehend themselves and the universe'; that it is distinct from craft; it can be appreciated for its aesthetic qualities alone and its 'effects are virtually universal based on natural visual sensibilities'.
2. I use the plural form 'cultures' to reflect the fact that the visual record of the Upper Palaeolithic is not uniform. For example, we often refer to an 'explosion of art' in the 'European' Upper Palaeolithic, but the corpus of art objects (as traditionally defined) is actually quite unevenly distributed and is, in fact, more geographically circumscribed than commonly acknowledged (Straus 2009). The social, technical and material processes that comprise any one visual culture varied over time and space and this is particularly true when we consider the Upper Palaeolithic on a global scale (see, for example, Bar-Yosef 1997; Davidson 1997; 2012).
3. If I use Davidson's (2013) definition of art, then an artist can be defined as the person who engages in the making and marking of those surfaces.

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