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How ancient is art?

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**ABSTRACT**

In this paper I suggest that music and dance of an artful kind could pre-date the emergence of our species by several hundred thousand years. Our progenitor, *H. heidelbergensis*, had the necessary physiological resources and social capacities. And she inherited older modes of moving and vocalizing that could have laid the foundations for dance and music. Admittedly, for her, these artistic activities would have been more about sharing and expressing emotions than about symbolizing abstract ideas or conveying complex thoughts. But that is something for which song and dance are ideally suited. Accordingly, the common assumption made by many palaeoanthropologists in discussions of the origins of art and of psychological modernity — that art is a distinctively *sapiens* attribute presupposing the kind of complex mentality that may be unique to our species — is mistaken. As well, there are some philosophical morals about the nature of art to be teased from the facts of its ancient origin.
How ancient is art?

Analytic philosophers of art have shown comparatively little interest in the deep origins of art. The same applies, though to a lesser degree, to their consideration of non-Western art. Their concern was more often stimulated by the challenge to traditional conceptions of the nature of Fine Art generated by the avant-garde of the twentieth century, beginning with Duchamp’s readymades and going on to conceptual art. Fair enough. But in this paper I will draw some philosophical morals from reflections about the conditions under which the earliest art — the art of prehistory — arose.

Admittedly, claims about the earliest art cannot avoid being speculative. We are in the domain of paleoarchaeology, which deals with shards and fragments the significance of which is often controversial and hotly debated. And we will focus on song and dance, the existence of which usually must be a matter of inference rather than of artifactual record. Inevitably, the conclusions reached should be understood to be conditional and qualified.

Though we are in the domain of paleoarchaeology, we must be wary of what paleoarchaeologists say about art. They use the term so liberally that it denotes any marked surface, decorated object, or item of adornment. For instance, crudely perforated shells that may have been strung together are referred to as “art”.

In fact, for these scientists “art” serves as a term of art. By contrast, our interest will be in items and behaviors that are much nearer to our ordinary notion of art. They may not be complex or sophisticated, but they should invite the label “art” in a fashion that is coextensive with what we reserve the term for in its normal, broad use.

As will be outlined presently, paleoarchaeologists also tend to assume that art is a marker of symbolic thinking and advanced intellectual capacities. Philosophers of art tend to share this assumption. We will examine and reject this idea later.

We will turn to the philosophical morals at the close. First, we need to hunt out early candidates for art-status, to assess their plausibility, and to locate their earliest examples.

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The tradition of European cave art (painting, engraving, etc.) extended from 36-11,000 years ago in the Upper Paleolithic. It coincided with the creation of carved figures, purpose-made musical instruments, the decoration of practical objects, the adornment of the person and her clothing, burial with grave goods, ritual observances, and “spiritual self-awareness.”

It used to be held that Neanderthals (H. neanderthalensis) in Europe did not behave in this fashion, or anyway, not until they encountered our species, H. sapiens, not long before their eventual extinction about 35-30,000 years ago. But there is evidence at least of the use of body adornments, including an eagle talon necklace pre-dating the arrival of Cro-Magnon H. sapiens in Europe by 80,000 years. Still, by comparison, Neanderthals were not driven, as were Cro-Magnons, to be artistic.

Yet this Upper Paleolithic flowering of cultural activity was apparently unprecedented in our earlier sapiens ancestors. Our species first emerged about 195,000 years ago, but evidence of behavioral modernity — of symbolic, abstract thinking — was not obvious in the archaeological record before the “creative explosion” that took place in Europe in the Upper Paleolithic.

To explain the suddenness of this alteration in the absence of outward anatomical change — for instance, in brain size — it has been posited both that a mutation led to the rewiring of our brain and that the mirror-neuron system had achieved its modern form.

Many elements in this story about the dawning of modern modes of cognition in our sapiens forerunners have been challenged, however. Art of similar antiquity is found in Asia and Africa. And evidence of earlier isolated periods of advanced lithic technologies, ritual behaviors, abstractly marked items, such as ochre crayons and shell necklaces, can be found in Africa and the Middle East going back more than 100,000 years. Accordingly, some have claimed the existence of art in these earlier times — for instance, engraved ostrich shells of Diepkloof rock shelter dated to 65-55,000 years ago.

With respect to music, we might apply more abstract reasoning. Sophisticated but different forms of music are found in every culture and people though the groups concerned have often been isolated for a very long time. Our species originated in Africa and later spread to other parts of the globe. Together,
these facts suggest that sophisticated forms of music must have existed earlier in Africa. Given its ubiquity and complexity, music must have left Africa with *H. sapiens* emigrants rather than being invented subsequently in every isolated community.\textsuperscript{xxiv} So when did members of our species leave Africa? After an earlier visit by *H. sapiens* to the Middle East and perhaps further, the current consensus puts the primary global spread of our species as initiated from Africa about 60,000 years ago.\textsuperscript{xxv} Sophisticated forms of music must have pre-dated that.

It is now widely thought that there was not a sudden light-bulb moment in Europe. Either modern ways of thinking emerged gradually in our species over scores of millennia, or our first *sapiens* ancestors were psychologically modern from the outset but could express this in only limited, temporary ways given the fragile life-circumstances under which they existed.\textsuperscript{xxvi}

However these competing accounts are to be reconciled, it is worth noting an assumption about art that they seem to share: namely, that it presupposes a mind like ours; one that can explore fictional and counterfactual scenarios, manipulate abstract symbols, coin metaphors, and make unexpected cross-domain connections. It undoubtedly took imagination to discern the form of a bison in the bulge of a cave wall and creativity to sketch the animal in charcoal with a skill that captured its inimical likeness and brought it vividly to life. And it took planning and sophisticated knowledge to appreciate where to place holes in a vulture’s wing-bone in order to produce a flute with the favored musical scale. Art, it is implied, is the product of clever thinkers, such as we are and our previous hominin forebears were not.

We will now query that assumption for the cases of music and dance.

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One way of questioning the *sapiens* origin of art would be by arguing that our predecessor species were more intellectually capable than is widely assumed. Certainly, there is scope for suggesting that they must have had a considerable practical intelligence.\textsuperscript{xxvii} Multi-part, composite tools are at least 300,000 years old.\textsuperscript{xxviii} Moreover, about a million years ago, *H. erectus* executed horse hunts that must have required forward planning and the assignation to individuals of different functional roles within the overall enterprise.\textsuperscript{xxix} At about the same time, exchange
networks for trading goods over scores of miles began to develop, suggesting that sophisticated communication between groups was possible.\textsuperscript{xxx} About 500,000 years ago, \textit{H. heidelbergensis} — the ancestor we share with Neanderthals — also used complex, cooperative hunting techniques.\textsuperscript{xxxi} Some people think that these ancients had complex languages.\textsuperscript{xxxi} But even if they did not, they were apparently capable of planning and sophisticated interpersonal communication.

It has only recently been discovered that \textit{H. erectus} in Java engraved shells with geometric patterns not less than 430,000 years ago.\textsuperscript{xxxiii} So if the carved ochre crayons at Blombos cave dating from 75-100,000 years ago testify to the advanced psychology of African \textit{Homo sapiens}, as is generally thought, these Javanese shells might suggest that abstract and symbolic thinking is more ancient even than our species.\textsuperscript{xxxiv}

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The other way of arguing that art might pre-date our species involves demonstrating that in at least some of its forms, it does not require abstract or symbolic modes of thought. A sense of beauty or awesomeness and an urge to express emotion might suffice. This is what we now consider.

The creation of "special" bifacial hand axes from 400,000 years ago suggests that craftspeople of the time were sometimes motivated by aesthetic goals. About two percent of axes were worked on far beyond what practicality required.\textsuperscript{xxxv} They were finely worked to be highly symmetrical. Some made a feature of fossils or crystals. Others were of unusual or colorful material. Some were outsized and not easily used. And many of the most striking examples do not seem to have been used as butchering tools.

Some writers identify these as the first artworks.\textsuperscript{xxxvi} That is possible, I think. But in any case, we can discern aesthetic motives (among others, perhaps) behind their production. These were people who were drawn to beauty and took the time to create it. Indeed, seemingly they gave it priority over more practical matters on some occasions.

An even better candidate for the earliest pre-\textit{sapiens} art, I would suggest, is non-artifactual. It is vocal music and dance.\textsuperscript{xxxvii} \textit{H. heidelbergensis} possessed the
physiological prerequisites for song: fine tongue and thoracic breath control, descended voice box and appropriate hyoid bone structure, hearing geared to detect and process the pitchbands in which the species vocalized, the neural resources to process and store patterned sound strings, and so on. Moreover, these hominins lived in social groups and depended on coordination, communication, and cooperation, so they had the social capacity to make group music and could benefit from doing so. If they had language, their songs might have articulated simple thoughts. But just as easily, their songs could have been composed of meaningless, repeated vocables.

Since H. heidelbergensis belonged to a hunter-gatherer community, she probably shared with us an instinctual predilection for entraining to music, that is, to match and share movement to a regular musical pulse. As in hunter-gatherer communities everywhere, this would mean that music regularly evoked dance. This form of dance need not have been highly choreographed or designed to convey a narrative. It might have been more like a rumba line with people swaying, moving, and stomping in time to the music, say, around a fire. Such music may have been accompanied by percussion, generated by items that came readily to hand, by body slaps, or by the rhythmic rattle of adornments on the dancers’ limbs.

Music-making of a quite developed kind is often more about emotional expression and group entrainment and coordination than about abstract or symbolic thought. Individuals with mental deficits can be highly musical. Very young children can participate in group dancing and singing. Music-making is a practical skill that calls for “know-how” but need not require “knowing that,” the capacity verbally to cognize and articulate what is done. What matters, then, is not whether H. heidelbergensis qualified as what we would nowadays call an intellectual but whether she was inclined to vent her feelings in a musical fashion, perhaps while interacting with her baby or while cooperating with her fellows. If her group celebrated their successes and mourned their losses, these ancients would have found applications for the musical capacities that they possessed. And if she danced and sang, the Neanderthals that later descended from her species likely did as well.
There is considerable overlap in the many neural regions involved with music and language.\textsuperscript{xvi} We do not know which aptitude came first. Some authors regard music as an evolutionary by-product of language.\textsuperscript{xvii} Others see music as prior.\textsuperscript{xviii} Indeed, it is possible that language is best seen as a special case of music.\textsuperscript{xlix} In any event, there obviously were vocal precursors to music; and if music is ancient, these must be even older.

Of course, our hominin predecessors vocalized as do much older species. They issued alarm and contact calls; perhaps they defended their territories or attracted mates by vocalizing; they cooed and clucked at their babies; they vented their rage, despair, and grief with howls, sobs, and screams.\textsuperscript{1} One suggestion is that what distinguished the vocalizations of hominins from those of the more distant ancestors we share with apes was the hominins’ adoption of synchronous chorusing, which led eventually to music.\textsuperscript{li}

Another candidate precursor for music is infant-directed speech (aka motherese), the melodically inflected, highly repetitive mode in which we address our babies and pets.\textsuperscript{lii} Infant-directed vocalizing — which obviously need not take the form of speech in the sense of language — was likely practiced by hominin species pre-dating our own.\textsuperscript{liii} And it must have provided a natural source, if not for the coordinated group singing and dancing described previously, then for the lullaby, which universally displays soothing expressive qualities and smooth, descending melodic contours.\textsuperscript{liv}

The main alternative hypothesis is that both music and language had a common ancestor, known as protolanguage or musilanguage.\textsuperscript{lv} On the standard account, this was not confined to interactions with infants but employed as part of a more general form of (verbal-cum-gestural-cum-facial-cum-behavioral) communication between all members of the group. It is reasonable to see some version of this ancestral form of communication existing between ancient pre-	extit{sapiens} species, given their cooperative hunting and social practices as described above. Over millennia, expressive slides and glides, fragmentary melodic phrases, beats, and rhythms were combined, repeated, and developed until something recognizable as music emerged.\textsuperscript{lvi}

Meanwhile, joint action and cooperation laid down the basis for beat-entrained movement, behavioral mimicry and coordination, turn-taking, and complementarity in mutual actions, which were the facilitators for dance.\textsuperscript{lvi}
Perhaps music has more than one prehistoric source. But in any case, given the number of very ancient potential forerunners, it is plausible to think that the earliest music itself was made as much as 500,000 years ago.

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In this paper it has been suggested that music and dance of an artful kind could pre-date the emergence of our species by several hundred thousand years. Our progenitor, *H. heidelbergensis*, had the necessary physiological resources and social capacities. And she inherited older modes of moving and vocalizing that would have laid the foundations for dance and music. Admittedly, for her, these artistic activities would have been more about sharing and expressing emotions than about symbolizing abstract ideas or conveying complex thoughts. But the expression of emotion is something for which song and dance are ideally suited. Accordingly, the common assumption made by many palaeoanthropologists in discussions of the origins of art and of psychological modernity — that art is a distinctively *sapiens* attribute presupposing the kind of complex mentality that may be unique to our species — is mistaken.

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What philosophical lessons, apart from a wariness of *sapiens* chauvinism about art-creation, can we draw from this discussion, assuming it to be sufficiently convincing? The first art was made by people who could not (yet) have had the concept of art; they might also have lacked a language in which to express that concept. They aimed at prominent aesthetic effects and thereby succeeded in making art even if they could not have thought of themselves as doing so. In addition, they made art in the absence of the kind of institutional scaffolding and artworld backdrop that we take for granted.

Art had many kinds of precursors. Its emergence via bootstrapping may not have been clearly acknowledged. Nevertheless, at some point, someone recognized a difference between the aesthetic effects of art and those of its precursors. The objects that became known as bona fide artworks perhaps
displayed higher levels of technical skill, originality, and complexity than their merely artifactual precursors. And the earliest music and dance perhaps achieved a higher degree of emotional arousal and required a level of group coordination and entrainment that was somehow more involved than what other forms of interpersonal communication called for. Philosophers of art ought to take into account that the powerful aesthetic effects which distinguished art from its predecessors did not demand of the participant great cognitive sophistication. Children surely joined in the singing and dancing. We tend to think of art as cognitively sophisticated and lexically centered, which it often is. But not all art has to be like this, and at its outset these qualities might not have been central. In addition, we tend to assume that art is created by the few for distanced, disinterested contemplation by the many, which it often is. But not all art has to be like this. Many of the attributes identified as art-central in Europe’s eighteenth century might apply to high-end Fine Art, but art is broader in its use and appeal than that. At its origins, art was more likely functional and community-involving.

Bearing this last point in mind, we can see that it will be more appropriate in considering art to work out what capacities it calls for, the occasions for their application, and the benefits that might result, rather than focusing narrowly on the artifact produced (if there is one), especially if we are to give music, dance, and oral traditions of drama, poetry, and storytelling their due. Art is as much a matter of behavior and interpersonal interaction as it is a matter of material culture.
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NOTES


iv Note that those who painted Lascaux cave were as far from those who painted Chauvet cave as they are from us today.


See Cook, *Ice Age Art*.


Here I adapt an argument that has been applied to the history of syntactically complex languages in Christopher Collins’ *Paleopoetics: The Evolution of the Preliterate Imagination* (New York: Columbia University Press, 2013).


Gary Tomlinson disagrees in *A Million Years of Music: The Emergence of Human Modernity* (New York: Zone Books, 2015). He proposes that pitch-structured, metrically organized music was independently created by different human groups between forty and twenty thousand years ago.


Ibid.; Tattersall, *Masters of the Planet*.

See Collins, *Paleopoetics*.


See Josephine C. A. Joordens, et al., “*Homo erectus* at Trinil on Java used shells for tool production and engraving,” *Nature*, Accessed December 3, 2014, doi:10.1038/nature13962. Their abstract notes: “The manufacture of geometric engravings is generally interpreted as indicative of modern cognition and behaviour. … Together, our data indicate that the engraving was made by *Homo erectus*, and that it is considerably older than the oldest geometric engravings described so far … [T]his discovery suggests that engraving abstract patterns was in the realm of Asian *Homo erectus* cognition and neuromotor control.”


See Morley, *The Prehistory of Music*.


Sufferers of the form of autism known as Williams syndrome are often drawn to and skilled at music. See David Huron, “Is Music an Evolutionary Adaptation?” in *The Cognitive Neuroscience of Music*, edited by I. Peretz and R. Zatorre.


Such as Morley, \textit{The Prehistory of Music}.

Ibid.


For such an account, see Brown, “The ‘Musilanguage’ Model of Music Evolution.”


For further discussion of this and following points, see Davies, “Defining Art and Artworlds.”

This point has long-been advocated by Ellen Dissanayake; see her *What is Art For?* (Seattle: University of Washington Press, 1988).