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Culture and art: Importance of art practice, not aesthetics, to early human culture

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Abstract

Art is expressed in multiple formats in today's human cultures. Physical traces of stone tools and other archaeological landmarks suggest early nonart cultural behavior and symbolic cognition in the early *Homo sapiens* (HS) who emerged ~300,000–200,000 years ago in Africa. Fundamental to art expression is the neural underpinning for symbolic cognition, and material art is considered its prime example. However, prior to producing material art, HS could have exploited symbolically through art-rooted biological neural pathways for social purpose, namely, those controlling interpersonal motoric coordination and sound codependence. Aesthetics would not have been the primary purpose; arguments for group dance and rhythmical musical sounds are offered here. In addition, triggers for symbolic body painting are discussed. These cultural art formats could well have preceded material art and would have enhanced unity, inclusiveness, and cooperative behavior, contributing significantly to already existing nonart cultural practices.

Keywords

Brain and art, Neuroscience and art, Symbolic cognition, Material culture, Evolution, Dance, Music, African culture, Social art, Upper Paleolithic

1 INTRODUCTION

Art, in all of its broad manifestations and expressions, has become in the past tens of thousands of years a major defining feature of human culture, so much so that it is frequently considered a measuring stick for what we mean by "culture." In fact, culture encompasses technological practices, customs, behavioral norms, attitudes, beliefs, and rules of the social unit; art is not the sole defining feature (definition of art is elaborated below). In recent years, interdisciplinary explorations of the dynamics of culture and its effects on genetic modification are providing insights into human evolution (Kolodny et al., 2018).

The archaeological record suggests that the practice of making art, as judged through physical traces of objects, had slow and protracted beginnings. On the surface, it does not seem to have been a major or abundant feature of the early human technological and survival culture when anatomically modern *Homo sapiens* (HS) emerged in Africa sometime some 300,000–200,000 years ago (Hublin et al., 2017; McDougall et al., 2005; Stringer and Galway-Witham, 2017). Hundreds of thousands of years later a mere trickle of art-related objects emerged in the form of seashell beads in Africa, while thousands of years later, a seemingly abrupt influx in the form of statuettes, ornaments, carvings, and cave wall paintings appeared in Europe, a period known as the Upper Paleolithic. Since then the practice of integrating art into human cultures has continued unabated.

The large time gap between the trickle to full-fledged regular art production could imply a major alteration of the human brain or else a gradual time course is somehow needed (reviewed by McBrearty, 2012). The possibility that cultural values played a major role must be considered as well. However, the very early arts did not necessarily have had to emerge through durable material such as stone or other nondegradable items (Zaidel, 2017), nor for aesthetic reasons alone (Lewis-Williams, 2002; Zilhao, 2007). The explanation proposed here is that they had been practiced for hundreds of thousands of years by the HS prior to the Upper Paleolithic in formats deeply entrenched biological neural pathways, particularly those controlling interpersonal cosynchronization of motoric movements and vocal sounds (elaborated further in subsequent sections). They would have emerged spontaneously and exploited through symbolic art expression to solidify group membership. All group members, regardless of age or other distinctions, would be able to participate, as in collective group dances and collective rhythmical musical sounds. Such cultural endeavors signify affiliation, bonding, and unity, which together support motivation for survival in socially oriented groups.

In the discussion that follows, critical to our understanding of art's role in human culture is the intersection of several factors, namely that: (i) humans are the only ones in nature to produce art spontaneously, (ii) symbolic and abstract cognition are supported by unique neural features of the human brain, (iii) nonart cultural behaviors preceded material art practice, and (iv) art expression is not likely to have been initiated for aesthetic effects alone because that would attract attention to single talents rather than to the collective whole.

2 WHAT MAKES ART, ART

The perspective taken here is that not unlike language, art is a culturally based communicative system. Art's meanings are understood by the society in which it was created (the cognition is discussed in the subsequent section) and can trigger reactions cross-culturally as well. A formal definition of art with an endless list of what

art is is neither practical nor useful. Philosophers have contemplated and argued this issue extensively. Among philosophers, "this thought that art can't be defined, may be better grounded than one might suspect at first glance. Several philosophers have argued in defence of the claim that certain concepts—concepts we all use and feel familiar with—just can't be defined" (Goldie and Schellekens, 2009, p. 39). Some would define art as expressions lacking in utilitarian value, such as extra decorative embellishments on a sword's handle whose main function (utility) lies in cutting and piercing, or painted patterns on a plate whose function is basically holding food, or carved flowers on legs of a dining table, and so on. However, here, in the discussion of early art (e.g., dance movements, musical sounds, painted body colors) and its incorporation into nonart cultural practices, art expression is viewed as useful for signaling group inclusiveness and belongingness through symbolic messages of shared values.

3 BRAIN AND VALUE OF SYMBOLIC COGNITION

A great deal of human thinking is based on referential and symbolic understanding (Deacon, 1998, 2011), in language and also in art, whether it is material art or not. The unique feature of the human mind, namely, the enormous ability to represent experiences, objects, colors, and ideas symbolically, metaphorically, abstractly, and referentially (Balter, 2009), is supported by the neural organization of the brain. The purpose of both language and art is communication, which in itself is the hallmark of social interaction. There is no logical reason to assume that the early humans could not express their mental experiences through some type of art forms, given that they already established a culture of technology in group-oriented existence.

Symbolic cognition provides the underlying basis for descriptions of things not actually present in real time but can be understood by others. A black ink drawing consisting of just a few lines on a white canvas, such as Picasso's "Femme," is understood by viewers to be the back side of a nude woman. Similarly, his "Head of a Woman" painting, although not a realistic representation of a face, is understood to refer to a woman's face. When one image (drawings, paintings) or activity (dancing, singing) refers to or represents an idea, and members of society understand what stands for what, we have the basis for abstract reasoning and symbolic cognition. The same can be argued for the purpose of language and its cognitive underpinning (Deacon, 1998).

Chase (2003) argues that the use of symbolic cognition in language is not identical to the symbolism we use in culture. Although in both types arbitrary signals gain meaning when members of the society agree on their semantic implications, language uses specific, highly detailed features (sounds and subsounds as in speaking and comprehension, visual markings and submarkings as in reading) to refer to meaningful entities; in this sense, it is referential symbolism (see Deacon, 2011). Culture uses arbitrary

objects, concepts, and behaviors with somewhat loser precision to communicate affiliation. Art would fit with the cognition of culture notion. Regardless of the distinction, the human brain enables both types of communication.

4 EARLY HUMANS AND CULTURE: BACKGROUND

In biology, culture and social grouping have evolved for millions of years, well before the HS emergence. The roots can be found deep in our biological ancestors: Culture is a part of chimpanzees and other nonhuman primates, too, albeit much constrained in scope and complexity by biological and genetic factors (Kempe et al., 2014; Lefebvre, 2013; Stout and Hecht, 2017; van Leeuwen et al., 2017; Whiten, 2011, 2017; Whiten et al., 2009, 2017). And in the millions of years after the HS split from chimps, hominins' prosocial cultural behaviors evolved in a direction that enhanced survival.

After the split from chimps, approximately 5.5 million years ago (Langergraber et al., 2012; Patterson et al., 2006) the trajectory of hominins evolved increasingly in the direction of living in socially oriented units (Key and Aiello, 2003). Early HS had a culture, one that was organized around stone tool technology, food attainment, most likely through hunting expeditions, foraging, and scavenging, as well as through defense strategies against predators. The composition of the groups, as conjectured from observing modern-day hunter gatherers, consisted of both blood-related kin and nonkin, unlike nonhuman primates (Hill et al., 2011, 2014). Members had to get along with each other in order to achieve successful survival based on cooperation. Individual differences, interpersonal competition, stress, and predator concerns were all issues that had to be overcome in order to facilitate social existence. Cooperation among members was the key. Biological adaptation promoted survival through collective efforts; neural pathways in the human brain have been under selection to underlie the basis for bonding, whether between paired couples, siblings, and grandparents, or with nonkin members. The triggers for the practice of art are likely to have been social–cultural. Scholars have reasonably suggested that the first arts would have consisted of visual signs worn on the body signifying social affiliation and identification, something that would become necessary in hierarchical society, or for other useful social reasons (Lewis-Williams, 2002; Zilhao, 2007). This notion that art represents socially relevant information, namely, distinction, has been proposed earlier by Bourdieu, a social philosopher, who based the notion on his own modern-day studies (Bourdieu, 1984).

With the primary motivation being social considerations, the aesthetics factor would have been secondary. As suggested in a previous publication (Zaidel, 2017), social inclusiveness displays average the talents of all in the group whereas aesthetics attract attention to works of individual artists, something that potentially can trigger competitiveness through difficult to control jealousy impulses; friction would undermine the collective group effort to survive.

5 CULTURE AND ART: ARCHAEOLOGICAL FINDINGS AND EARLY HUMANS

The earliest fossil evidence for anatomically modern HS dates to ~195,000 years ago, in Africa (Butzer, 1969; Klein, 1992; McDougall et al., 2005), and according to recent analyses of fossil finds in Morocco, to an archaic HS who lived ~300,000 years ago (Hublin et al., 2017; Stringer and Galway-Witham, 2017). We can only rely on physical traces to know if art objects were created. While stone tools and other technology attesting to sophisticated cognition, more complex than in previous hominins, have been found (McBrearty, 2007; McBrearty and Brooks, 2000; Wadley et al., 2009), material art from those very early HS habitats have so far not been unearthed.

Judging from finds in South Africa, dated to ~77,000 years ago, the earliest art-related objects cited in most debates on this subject are sea shells that presumably were strung and possibly worn around the neck; they were also found in ancient sites in Israel and Morocco (d'Errico et al., 2009, 2017; Henshilwood, 2007, 2014; Vanhaeren et al., 2013). This was followed by a time gap of tens of thousands of years with only a trickle of material art. Only in the Upper Paleolithic period, starting around 45,000–35,000 years ago, in Europe, a clear influx (some call it "explosion") was created; sculptures from stone and ivory, engraving on bones, and antlers appeared in the habitats of HS. This trend of art making has grown into an unabated cultural habit that has lasted to this very day. The specific events that have led to the prolific production in that particular part of the world and not in others are continuously discussed and pondered. Whatever the triggers might have been, it is clear that the culture valued the practice.

In Africa, several types of stone tool technologies, starting as long as ~300,000 years ago (Henshilwood, 2003; McBrearty and Brooks, 2000; Wadley, 2013; Wurz, 2013), bespeak of advanced HS cognition. Between around 300,000 and 75,000 years ago expansions were evident: The unearthed artifacts from South Africa sites, in particular in Still Bay, Howiesons Poort, Blombos Cave, Diepkloof Rock Shelter, Pinnacle Point, and Klasies River, attest to cultural structures in stone tool manufacture and related behaviors. Excavations in Blombos Cave revealed that HS left behind sea shells which could have served as body ornament around 100,000–71,000 years ago. Also in Blombos, unearthed finds suggest high-level cognition by way of engraved bone tools, heat-treated and deliberately flaked stone projectiles (arrow tips?), purposefully engraved (geometrical patterns) on ocher pieces, ocher heated in abalone sea shells, assorted pigments of crushed ocher mixed with other ingredients; evidence transfer into the cave of material mined far away; both the abalone shells and the pierced beads were harvested from the ocean which required skilled attention (reviewed in Douze et al., 2015). At Sibudu, around 77,000 and 58,000 years ago numerous physical artifacts point to separation of the sleeping quarters from the stone-making workstations, a layout that indicates symbolic categorization of the group's living space (de la Peña and Wadley, 2017; Wadley et al., 2011).

In addition, adhesives made from plants were used to construct some stone tools (Wadley, 2010, 2013), and ocher altered through heating, distant mining, and, significantly, use of medicinal plants effective against insects were uncovered, and what may possibly be snares and traps for animals were found as well (Wadley et al., 2011). As Wadley (2013) points out, together with similar analysis of the archaeology of Rose Cottage, the heating of ocher and of plant adhesives could be taken to show abstract reasoning, functional long-term memory, planning ahead, meticulous observation skills, and enhanced survival strategies. It is reasonable to assume that all of this could not have been expressed if capacities for symbolic cognition were not functional.

Wadley argues that this evidence exemplifies level and type of cognition capability that could be considered to be close to what current modern humans possess (Wadley, 2013). Other archaeologists (cited above) working on the artifacts from South Africa largely concur with this view. From a current neuropsychological perspective, this type of archaeological record suggests that the brain of early HS in South Africa functionally supported executive control in planning ahead and working memory (frontal lobes), mental rotation and mental transformation (right parietal lobe), long-term memory (hippocampus and temporal lobes), topographical memory (right parietal lobe), fine finger dexterity (precentral gyrus in the frontal lobes, and if right-handedness already present, then the left gyrus), and visual acuity (occipital lobes). To this we can add color knowledge and meaning (left lingual gyrus), sequential memory (Ghirlanda et al., 2017), and most likely memory for faces (right fusiform gyrus). At the very minimum, art would require these same functions for its expression.

6 CULTURE AND THE EARLIEST NONMATERIAL ARTS: FROM UTILITARIAN APPLICATION TO SYMBOLIC PRACTICE

Consider body paintings: It could not have escaped the notice of early HS that smearing the body with plant material provided camouflage in hunting forays. The paint material, if chosen carefully to match the surroundings, as in deliberate camouflage, would have provided protection from predators and enemy groups, and aid in snaring prey. Going from practical application is but a small step to symbolic rehearsal at the gathering of members in the campsite. Easily available materials such as charcoal from fire, ashes mixed with animal fat, animal blood, plant juices, shades of ocher, feathers, animal skins, sinew and ligaments from killed animals, and other perishable material would have fulfilled the affiliation signifiers (symbolic) markings.

The initial utilitarian trigger would have served as the bridge to symbolic representations through mental rehashing of lived experience and aided in planning future activity. This is a reasonable possibility for the triggers. Indeed, the art of modern cultures is replete with examples of lived experiences, as can be seen in Goya's painting, "The Second of May 1808," Picasso's painting, "Guernica," Asia Argento's 2000 movie "Scarlet Diva," to name but a minute fraction of countless of examples.

Today's tribal societies use body paints extensively for socially based distinction, symbolic purposes, and decoration (Silvester, 2009). They serve as models for understanding the early past uses by HS. Visual display of body paints is easily recognized and conceptually categorized by others. No physical traces would be left behind for archaeologists to unearth.

7 CULTURE AND THE EARLIEST NONMATERIAL ARTS: SKILLS DEEPLY ROOTED IN BIOLOGY

Other early arts could have arisen spontaneously from biologically conserved neural pathways controlling interpersonal cosynchronization of movements and sounds. Natural and spontaneous rhythmical body rocking to inner (in the mind) or outer (external) beats is observed in some animals, in young babies, children, and adult humans (Fuhrmann et al., 2014; Laland et al., 2016a; Ravignani and Cook, 2016). Transforming this inherently biological state of cotiming (entrainment) into an expressive art form such as group dance is a natural act (Zaidel, 2017). The notion that human cultural innovations can possibly map into already existing cortical regions through neuronal cycling has been proposed and discussed (Dehaene and Cohen, 2007).

Biologically, the act of synchronizing to a beat is known as entrainment. Entrainment is reported to be present in fireflies, some pet birds, sea lions, elephants, and horses (Rouse et al., 2016; Wilson and Cook, 2016). Human beats do not necessarily have to be "musical" (that is, created vocally or instrumentally); it can be self-generated through clapping, foot thumping, throat humming, or tongue clicking. Matching motoric movements to those of others develops early in infants and children. Infants react to auditory rhythms, they respond positively to rhythmical rocking movements, whether or not musical sounds are heard, they synchronize their movements with others in social settings, and young children spontaneously respond to music rhythmically with whole body motion, showing that repetitive movement is naturally calming for humans from birth (Cirelli et al., 2016; Tunçgenç et al., 2015). Adults easily synchronize their walking tempo to each other regardless of the presence of musical beats (Schmidt and O'Brien, 1997). Interpersonal matched steps is probably related to nonverbal expressions of commonality and empathy (Wiltermuth and Heath, 2009). This biologically natural trait could easily have evolved into an art form with symbolic meaning and practiced on a group level as dance in the early days of the HS, or earlier (Zaidel, 2017).

Because group dance formations are achieved through coordinated interdependent movements by all individuals, it is a highly inclusive artistic expression. This is a form that can be expressed in the safety of the camp site. Collective synchronized touching, shuffling, and clapping tap into primates' emotional needs for closeness. Group dance formations convey the symbolic message of "oneness," group identity, social cohesion, and shared values. Looking for examples in modern times, tribal societies in Africa, Papua New Guinea, and Australia,

practice elaborates ceremonial group dance formations (Ajayi, 1998; Magowan and Neuenfeldt, 2005; Salak, 2004; Stubington, 2007; Welsh, 2010).

The fact that we, today, still apply cotiming and interdependent group movements (classical ballet, folk dances) illustrates the adaptive nature of dance to cultural practices (Christensen et al., 2017; Laland et al., 2016b). In today's Western societies, affiliative group dancing is seen in weddings, religious holidays, festivals, and sporting events. Moving synchronously together in unison is a powerful social display of identity, and there is no logical reason to believe that this is strictly a modern cultural phenomenon.

8 CULTURE AND THE EARLIEST NONMATERIAL ARTS: SOUND RHYTHMS

Dancing to music is a natural human reaction (Sheets-Johnstone, 2005), but saying "dancing" implies planned choreography of movements. Initially, however, the dance as an art form could have seen its early beginnings in spontaneous matching leg movements to the regularly produced beats of stone in the long and protracted stone age of HS in Africa, and most likely even earlier than that, in the life of *Homo erectus* and *Homo habilis* people. Such sounds were generated in stone-hitting-stone activity: Percussive sounds of fracturing, flaking, chipping, grooving, and hafting in the campsite environment. Stone-on-stone, wood or bone on stone, sounds created a beat with regularity that could not have escaped their attention. Montagu (2007) proposed that stone tool makers engaged in such activity might have played an unintentional yet important role in creating the first sounds of rhythm and even counter-rhythm, both essential components of music (Montagu, 2017). Matching these sounds in foot stomping, tapping, and hand clapping would have been natural reactions. From there to purposeful choreographed dancing patterns, accompanied by vocal sounds (or by percussion through stones) with symbolic meaning is but a short mental step away, functions which the brain at that time could have supported.

The very nature of stone tool industry had the potential to inspire rhythmical sounds we would call "musical." Music itself is seen as a socially based art form (Loersch and Arbuckle, 2013), although musical performances can take on solitary virtuosity. Exploiting a utilitarian manufacture for symbolic expression of unity would be achieved through matching and synchronizing sounds with purposeful cotimed group movements. The regularity of the sounds might have created emotional comfort because of the implications conveyed by them, namely, communal endeavors. A correctly placed knap is normally paired with a particular sound and this had to have been noticed, learned, and remembered. Cross-modal cognition is an established process in human thinking (Brunel et al., 2015) and conditioned learning is similarly a powerful aid for memory consolidation. A skill improves with real-time practice as well as mental practice, and to assume that the mental rehearsal would have codified and whittled into symbolic art-related activity is not far-fetched.

9 ART AND CULTURE: BRAIN EVOLUTION AND NEUROPSYCHOLOGY

Given the above, is art a cultural innovation rather than a form of adaptation? In itself, art is more likely than not a cultural innovation, albeit one anchored in social needs and in humans' biological origins. Its expression emanates from neuroanatomical and neurophysiological underpinning for symbolic and abstract functions, which have undergone evolutionary pressures for many millions of years.

From a biological evolutionary perspective, language brain regions and pathways have been evolving in nonhuman primates for many millions of years (see Wilson and Petkov, 2011). Art making, by contrast, is unique to HS and is relatively new on the cultural evolutionary scene. It is thus reasonable to think of art making as a human cultural innovation. Moreover, we have clues from neurological studies of professional artists with brain injury (see Zaidel, 2015), namely that such artists go on creating their art regardless of the etiology of their disease (stroke, dementia), laterality of brain injury (left or right hemisphere), handedness, or art format (visual, musical, or literary). To this we can add the examples of de novo art created by nonartists who sustained brain injury that compromised their language abilities; the art was made following the injury. Together, these neuropsychological observations strongly suggest a robust communicative social role for art that is supported by distributed neural areas and pathways in the brain.

In this context, it is important to emphasize the difference between art viewing and art making. It would appear that there is no single neural underpinning for art making in the brain, unlike the language-specific localized neural regions widely known to be controlled by the left hemisphere (for review, see Fridriksson et al., 2018). With regard to the viewing of art, in fMRI studies where the aesthetic evaluation of art was measured, multiple, widely distributed active brain circuits have been identified (Boccia et al., 2016; Nadal, 2013; Zaidel, 2015).

As described above, material art made from antlers, bones, wood, and stones, as well as paintings on cave walls, was abundantly and imaginatively produced in Europe in the Upper Paleolithic. What appears to be an abrupt influx raised important questions: Has the brain itself undergone major changes at that time? Most scholars reject the sudden brain alteration notion on the grounds that the cognition underlying art making itself was not uniquely different from other human abilities already long present, and that the influx was not a "revolution" in material culture (Bar-Yosef, 2002; d'Errico and Stringer, 2011; d'Errico et al., 2017; McBrearty, 2012; McBrearty and Brooks, 2000; Wadley, 2013, 2015); that type of culture had already been practiced in Africa for hundreds of thousands of years prior to its spreading into other regions of the world around 60,000 years ago. Future archaeological discoveries might reveal that the impetus for the influx was the simultaneous cultural habit expansion and the environmental conditions (the nature of the habitat in the Ice Age, for example) at that time.

10 BIOLOGY OF CULTURE: GENE–CULTURE COEVOLUTION AND THE ROLE OF ART

The greater the acceptance of a fitness promotor in a cultural practice, the higher the likelihood it will be incorporated into the culture. Our genetic inheritance can be altered and affected by the environment and culture in which our ancestors survived (Richerson, 2005), through genetic mutations in reaction to both consistent environmental conditions and cultural practices (Gintis, 2004). Because culture shapes human behavior, and has consequences to DNA, it is widely viewed as a biological entity (Cavalli-Sforza and Feldman, 1983; Cavalli-Sforza et al., 1983; Gintis, 2004; Richerson and Boyd, 2002). From an evolutionary perspective, to adjust to cultural practices, genetic material might be selected in future generations to support traits that dovetail with the culture (Feldman and Cavalli-Sforza, 1976).

A classic, often cited example of gene–culture coevolution is the persistence of the enzyme, lactase, into adulthood. The enzyme is used by the body to break down milk lactose sugar for proper digestion; it is present abundantly in babies, but when it is still present in adults, who do not need it to survive because they can eat other foods, it is known as lactase persistence. Its availability into adulthood is associated with a specific genetic mutation present in cultures where dairy farming dominates nutrient attainment (Gerbault et al., 2011; Laland, 2008; Laland et al., 2010).

Expansion of behavioral repertoire is largely attributed to cumulative culture, where a large knowledge base and skills passed on from one generation to the next optimizes the group's survival (Dean et al., 2012; Laland et al., 2016a; Richerson, 2005; Tomasello, 1999). Indeed, compared to other animals, humans have the largest cultural knowledge base, something that is attributed to our expandable memory capacity, extended childhood period when learning is optimal, multiple social habits, and cultural norms (Henrich and McElreath, 2003; Reader et al., 2011).

How did early art making affect the gene–culture coevolution? It is reasonable to suggest that art making contributed to the existing cultural scaffold through expressions of social interdependence, affiliative signifiers, and interpersonal bonds, and, in this way, shaped/influenced gene expressions in the brain. Acceptance of such art as part and parcel of cultural habits would have encouraged the use of symbolic activity in other abstract and referential cognitive domains currently so pervasive in human behavior (e.g., mathematics), all of which are supported by the unique features of the human brain. One might speculate that the emergence of spontaneous and biologically rooted art forms described here played a major role in gene–culture evolution.

11 CONCLUSIONS

Art's early emergence in human life is viewed here as a cultural innovation with symbolic social meaning rather than a purely aesthetic enterprise. The discussions center on a few early art candidates, namely, body paintings (with plant materials,

ocher, animal derivatives), which might have initially been applied for a practical purpose (e.g., camouflage) and exploited subsequently symbolically, group dance (members moving in unison), and rhythmical musical sounds (through stone knapping sounds, purposeful guttural sounds, tongue clicks). The latter two, it is argued, arose from biological underpinning of conserved neural pathways controlling entrainment and rhythmical sounds. Together, such art expressions would have added opportunities for symbolically exhibiting group unity, which in turn enhanced cooperation and survival (aesthetics alone would not have contributed to unity).

It is no coincidence that the sociocultural beginnings of art are powerfully evident in modern times: The infamous "black list" of Hollywood artists in the 1950s, known as the McCarthy Era in the United States; Nazi destruction of artworks labeled "degenerate art" (Peters, 2014); "socialist realism" in art under communism (Nelson, 1988); Taliban destruction of Buddhist sculptures (Noyes, 2016); centralized censorship rules in film, books, theater, and dance (Couvares, 2006; Golomstock, 2012). Indeed, the usefulness of art to promote the dominant values of a culture, and subcultures, is tied to its early beginnings more than to current notions of individual artistic freedom or to aesthetic considerations (Zaidel, 2017).

With the eventual successful population of the world by HS migrating away from Africa, art practice has become nearly culturally ubiquitous (Dissanayake, 1995). And even where it is currently not freely practiced for religious–cultural reasons, some art forms are nevertheless present, at times without the awareness of those who deny their existence (see Hillenbrand, 1998). The fact that art has evolved into numerous multifaceted formats ranging from visual arts to dance, music, movies, theater, literature, and continuously evolving combinations of materials and sensory modalities attests to its adaptive usefulness to human culture.

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