

Art as a human universal: an adaptationist view

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In order to consider art as a human universal, it is of course necessary to decide what is meant both by the term "universal" and by the word "art". "Universal" may imply that a feature (e.g. art) is untaught and appears spontaneously, is latent in all normal individuals, has been invented by all cultures, or is a product of some people (e.g. artists) that has been important in all societies. These meanings arise from different assumptions and carry incompatible implications.¹

Similarly, the familiar one-syllable word "art" drags behind it a long, shadowy train or "tail" of theory, definition, qualification and contention – an appendage that has become only more elaborated and unmanageable over the past century. Many unexamined assumptions are tucked into its folds, and one who looks for universals must begin by carefully sorting through these beguiling, yet confusing, embellishments.

For example, the word "art" is often tacitly restricted to the visual arts (e.g. paintings, sculptures, drawings), especially to "fine art" – and thereby denied to craft, to decoration and to the artistic efforts of untrained or untalented persons. A notion of fine art implies that there is a qualitative distinction to be made between art and non-art, or between good and bad art – in other words, that "art" is a kind of essence that inheres in some works and is lacking in others. What comprises that essence? Can it be defined so that one knows art when one encounters it? Does that essence inhere in art's form or content? In its function (or non-functionality)?

Frequently the category "art" is extended to include other "arts" – music, dance, poetry, literature, drama and their subdivisions – which may, like the visual arts, lend themselves to distinctions of quality (or essence) that make some music or literature "art" and other examples of music or literature not art. To consider art as a superordinate category subsuming several arts requires that one be prepared to say what characteristics these arts have in common. What does a symphony have in common with a sonnet, or a folk dance with

a novel or Ming vase, that justifies placing them in one conceptual category? Is the common denominator to be found in formal attributes, in their function, or in some other feature? "Beauty" has been considered by many as a necessary feature of art, or good art. What about examples of the arts that are not beautiful?

Such questions and distinctions (about art both as visual art and as a general category) have been the subject matter of philosophical aesthetics in the West for more than two centuries. Although Western aesthetics has been typically concerned with arts of the western European tradition, a universalist position must include the arts (however defined) of people everywhere. A worthwhile effort in this vein is that of Dutton (2002), who in the spirit of Weitz (1956) and Munro (1963), used a "family resemblance" notion of art, and made a provisional list of seven characteristics which, in whole or large part, will apply to the practice of art across cultures and throughout historical time: expertise or virtuosity, non-utilitarian pleasure, style, criticism, imitation, "special" focus, and serving as an imaginative experience for both producers and audiences.

Such a list is a valiant and useful attempt to delineate universal characteristics of the arts across cultures, but five of the features (i.e. specialized skill, styles and rules, critical evaluative language, representation and imaginative embodiment) characterize examples of nonart as well. Only intrinsic pleasure (self-reward) and bracketing (special focus) seem more or less restricted to art or art-like activities (such as play and make-believe, or ritual behaviour – see Dissanayake 1988, 1992).

More commonly in recent decades, many philosophers of art have given their attention to non-essentialist (and nonuniversalist) matters – as if altogether abandoning the possibility of sorting out the confusions inherent in the subject of the nature and purpose of art. In general, the climate in aesthetics and the arts at the end of the late twentieth century is a vaporous one of "cultural constructivism" or "cultural relativism" (see below) that claims that anything can be art if one (or an "artworld") chooses to see it as such. If this is the true state of affairs, then looking for universals in art is doomed, for there is no reason to look across cultures or in the past for something that can be anything.

My own view of art, which will be described more fully below, emerges from a naturalistic and specifically Darwinian or adaptationist approach. As such, it considers art – like language or toolmaking – to be an inherent psychobiological capacity of the human species, an evolved component of human nature that is in some respects untaught and spontaneous and in others latent in every individual. To approach art (or any human attribute) evolutionarily requires that one specify not only what the capacity consists of, but why it should exist at all: what it is for. What did art provide for our ancestors

for whom it was adaptive? I will claim that only the evolutionary perspective can satisfactorily establish art as a human universal – that is, can suggest why people universally have, engage in, make or experience art.

What art does: seven views

Before describing my evolutionary or adaptationist view of art, let us first examine some more familiar notions about what art is for – that is, answers to such questions as what its function is, why people do it, and what art accomplishes for artists or experiencers of art. Here again there are a number of complementary, overlapping or incompatible views, each generally stemming from a larger theoretical position.

For example, there is what might be called the *theological* view, held implicitly or overtly in theocratic societies as in the European “Middle Ages”. Art, in such societies, reflects the power or beauty and goodness of God or the gods: it manifests or reveals or gives human access to the divine. Not many scholars hold a theological position today, but it has characterized perhaps the majority of human societies and is implicit in small-scale traditional societies where the arts were made and used primarily in religious ceremony or observance.

A *sociological* or *socio-cultural* perspective typically considers art to be an instrument of power – whether this power be economic, or of class, gender or race. Art then reflects, asserts and consolidates privilege or vested interests of the powerful, whether rulers and the nobility, the church, the state, the upper classes, the bourgeoisie or “white European males”. In the historical past, few questioned what art was – it was what the powerful said it was. Over the last century, and especially in recent decades, a variant of this view, called cultural constructivism or cultural relativism, has become predominant in the academy. It considers art to have no objective essence of its own, but to be simply a cultural construct or label given to objects or practices by interested parties. “High” and “low” art, “heathen” art, “tribal” art, “good” and “bad” art – all are (or have been) labels assigned by one group to its own or another’s art. An extreme position of this sort is the “institutional” theory of art, which claims that art is what the “artworld” of dealers, critics and curators says it is (Danto 1964; Dickie 1974). Another is that “art can be anything and anything can be art” (e.g. Andy Warhol and Joseph Beuys, cited in Danto 1996: 110).

To a Freudian *psychoanalytical* perspective, art is a product of delusion or lack – a symptom of neurosis. It arises from psychological defence measures such as sublimation or projection, and serves – both in the artmaker and in the respondent to art – as the disguised fulfillment of a forbidden and repressed (unconscious) wish, a substitute for something else.

Other *psychological* views consider art more positively as self-expressive or therapeutic rather than palliative or neurotic. Art is a means to personal individuation, to creativity and fulfillment. It expresses and communicates mood and personality, and may aid self-knowledge and self-acceptance, which are themselves considered to be good things.

Experimental psychological studies approach the arts empirically as stimuli that humans consider pleasing or beautiful. Such studies investigate "aesthetic" perceptual and cognitive preferences that reveal something about what people universally like and dislike (e.g. Seashore 1938; Valentine 1962; Berlyne 1971; Gestalt psychologists). Such studies may have practical consequences for advertisers, interior decorators and fashion designers. They also contribute to understanding human minds and how they work.²

In *anthropological* views, art reflects a cultural system. It is an instance of and repository for symbolic meaning, and embodies and conveys important cultural truths to people of that culture. Palaeoarchaeologists who study human prehistory have also typically claimed, or presumed, that art is an instance of human symbol-making ability (e.g. Mithen 1996).

As described earlier, *philosophical* views of art examine longstanding questions about beauty, quality, taste and judgement – the subject area that is traditionally called "aesthetics". The nature and purpose or function of art are among those questions.

Each of these perspectives on art's nature and purpose is or has been useful at one time or another for addressing various specific problems – clinical, commercial, ethnographic, even interpretive. Many serious and gifted thinkers have devoted years of their lives to investigating them, and have left valuable insights. Nevertheless, none of the approaches can satisfactorily address, much less answer, the question of whether or not art is a universal.

The cultural relativist view of course eschews the very possibility of universals, so that we need not mention it again. Yet even those views which one might assume would pretend to universality fail because they cannot be applied to the arts of all individuals or all societies. Theological views rest on their adherents' belief in a particular divinity, not in a universal deity that every human society would accept. The psychoanalytical and psychological views are inapplicable to cultures or individuals where sublimation and wish-fulfillment are absent in the arts or where self-expression and creativity are not fostered or valued. Traditional philosophical aesthetics is based on Western Enlightenment and post-Enlightenment ideas (e.g. disinterested appreciation) and concepts (e.g. beauty, taste, a defined entity or essence of "art") that one can show do not apply across cultures. Although anthropological views are concerned with the arts in a variety of cultures, they generally uphold a cultural relativist position that emphasizes individuality and uniqueness, and denies universality in any cultural product.³ By assuming that art is necessarily

symbolic, they beg (or ignore) the question of what makes an artistic symbol different from a nonartistic symbol; additionally, they thereby disregard or deny the possibility that there are presymbolic origins or instances of the arts.

Experimental psychological and neurological approaches do address universals, but their formulations omit important considerations. Although they are concerned with universal "aesthetic" preferences or cognitive capacities that contribute to art, they are generally silent regarding how these isolated elements (shapes, colours, musical intervals, motifs, or particular regions of the brain) are used in actual instances of artmaking and art experience. Actual instances of art arguably involve something more than a collection of preferences or capacities (Dissanayake 1998). They have characteristics and effects that are different from those of any individual component.

In addition to insufficiently sorting through the manifold assumptions inherent in the term "art", or failing to appreciate the complexity of an individual instance of art or the variety in art practices cross-culturally, the approaches just described typically ignore the question that is fundamental to understanding art as a universal: why does art exist at all? Where did it come from and why? They may tacitly hold assumptions about art's origin and reason for existence that inhere in their particular view, e.g. that art was created by (their own) God, or that individuals made it up, or that this is the way brains and minds and societies just are. An adaptationist view is not satisfied with this complacency.

Art as a universal behaviour: the ethological approach

Because life in modernized societies is so recent in the enormous time span of hominid or even human evolution, it is misleading to generalize about human nature or human universals by looking only at the way contemporary people lead their lives. Working from an adaptationist view, we should keep in mind that art is likely to be broader than, or different from, common-sense ideas that emerge from the cultural biases of modern and postmodern Westerners. That is, art will not necessarily or automatically be such things as works in museums, products of creativity and self-expression, embodiments of beauty or anything at all that one chooses to call art. An adaptationist view will always ask of any offered statement or conclusion about a human activity (such as art): is this likely to have been the case in ancestral societies? Because we have no ancestral societies to observe, we will have to ask instead whether a statement or conclusion is likely to be applicable to small-scale, traditional, pre-industrial, primarily foraging (hunter-gatherer) societies – whose way of life is closer than ours to that in which human nature evolved and to which it was adapted.

As an alternative to the traditional, yet ultimately restricted, perspectives described in the previous section, I will here use an *ethological* perspective to suggest both what art is and what it does – its origin, nature, and reason for existing.⁴ Unlike the other views, ethology allows one to approach art as a human universal. What is more, it subsumes – rather than nullifies – the other seven approaches.

Developed as a branch of biology over the past half-century, the science of ethology adopts a Darwinian adaptationist (or evolutionary) view that humans, like other animal species, have acquired over time, through natural selection, a congeries of adaptive traits which helped individuals who possessed these traits to survive and reproduce more successfully than individuals who lacked them or displayed them to a lesser extent. Ethologists specifically consider an animal species's characteristic psychology and behaviour – like its anatomy and physiology – as having evolved to “fit”, or “adapt”, them to a particular way of life. For example, within a particular family (say, Felidae), some species (lions) have a way of life (on the open savannah) that promotes sociality, while other species' way of life (tigers in dense jungles) fosters asociality. Not only behavioural systems of social interaction but of mating, parenting, acquiring food, and defence – individually called “behaviours” or “behavioural mechanisms” – evolved to suit the members of a species to their particular environmental niche and its required way of life. Behaviours generally require a facilitating environment in order to develop smoothly but they are inherited, with greater and lesser degrees of lability in expression, as predispositions. They are not (or are rarely) mechanically “determined”.

With regard to art, the ethological approach will ask whether it is justifiable to consider it – like language, toolmaking, forming social bonds or parenting – as a *particular kind of behaviour* that *universally characterizes* the human species. By viewing art as a behaviour, the ethological approach – unlike the previously described approaches – considers art as a process rather than as an outcome or product of the process, or a feature (such as beauty) of that product.

Just as languages, tools, social practices and parenting styles vary from culture to culture – yet all humans are born with a predisposition to speak, make and use tools, form bonds with others, and care for their young – expressions of the arts may also vary, yet still rest upon universal predilections. Like these other biological predispositions, art requires cultural facilitation.

Thinking of art as an evolved – that is, adaptive – characteristic of human nature provides a new set of criteria to apply when considering claims by others about its nature or universality. If art is adaptive, it is, by definition, universal, and (a) there will be evidence of this behaviour at some point in our ancestral hominid past; (b) it will be observable cross-culturally in members

of all known societies regardless of their degree of economic or technological development; and (c) its rudiments will be detectable or easily fostered in the behaviour of young children. Like other adaptations, (d) art will appear under appropriate conditions or circumstances.

Also like other adaptations, (e) art will be generally a source of pleasure. Most people will willingly devote time, effort, thought and other resources to it, as they do with other adaptive behaviours such as mating, parenting, finding and preparing and eating food, socializing and gaining social acceptance, talking, seeking out and staying in safe (familiar) surroundings, and learning information that is useful for their way of life. Additionally, an account of art as a universal behaviour (f) will distinguish between its motivation and immediate effect (the "proximate" reasons for the behaviour) and its "ultimate" or adaptive value, although the motivations will be of emotional importance to those who engage in it.⁵

Clearly the ethological suggestion that art is an adaptive behaviour opens a new pathway for understanding art as a human universal. Let us now examine what a "behaviour of art" might be.

Artification: "making special"

I have shown that earlier views have regarded art as objects, entities, an essence or a label. None of these approaches is translatable to an ethological perspective, which will necessarily conceptualize art as a behaviour – what one might call "artification". Although European languages do not have a verb *to art*, it should not be difficult to understand what this word might mean: "to make something art". But what could this be?

It is easier to conceptualize art as "a behaviour" if we think of art as music (chanting, singing, playing an instrument) or performing (dancing, reciting, miming, acting, telling stories), since these arts take place, like "behaviour", in time. In a similar way, one can also think of the plastic or visual arts as making, marking, image-making, decorating, adorning (in any medium) – that is, as the process or activity rather than the product or outcome of the artifying. But it is not immediately evident what – if anything – all these activities have in common.

In earlier publications (Dissanayake 1988, 1992, 1995), I offered a common denominator for a behaviour of art that I called *making special*. That is, I claimed that in all art (here "artifying") in all times and places, ordinary experience (i.e. ordinary objects,⁶ materials, movements, sounds, words, utterances, the surrounding environment, even ideas) is transformed, is made *extraordinary*. The notion is congruent with similar formulations by others – e.g. the notion of "bracketing" mentioned above, or "defamiliarization"

("making strange") and "foregrounding" in literary studies (e.g. Shklovsky [1917] 1965; Mukarovsky [1932] 1964; Miall & Kuiken 1994a, 1994b).⁷

Based on this characterization of art, I advanced a theoretical position that suggested how making special would have been adaptive, and could thus be considered a universal feature of human species nature. In my most recent work and in the present essay, I refine and extend the earlier position. My argument has three strands: aesthetic predisposition; emotional investment (or "care"); and the invention of ceremonial ritual.

Aesthetic predisposition

In recent work (e.g. Dissanayake 1999, 2000, 2001), I describe universal features that can be observed in early interactions between human mothers and their infants. Despite cultural variations, mothers all over the world talk to their small infants in a characteristically soft, high-pitched, undulant voice – which babies have been shown to prefer to typical adult conversational speech. Along with special vocal behaviour to infants, mothers (and other adults) engage infants' attention by the use of rhythmic body movements (touching, patting, stroking, hugging and kissing the baby), exaggerated facial expressions (long looks, sustained smiles, widened eyes, raised eyebrows), and characteristic head movements (bobs, nods and wags) in an almost ritualized way. These vocalizations, expressions and movements are often repeated, sometimes with dynamic variations (louder and softer, faster and slower) in what can be called a "multimedia performance".

Yet it is more than an individual performance. Painstaking analysis of videotaped engagements of mothers and babies show that the pair are interacting in remarkably close temporal unity – responding to each other in subtle yet precise ways (see, for example, Stern 1971; Beebe *et al.* 1977; Papousek & Papousek 1981; Beebe *et al.* 1988; Nadel 1996). The mother varies her pace and rhythm in order maximally to fit in with the baby's emotional state and to help it achieve equilibrium. The baby in turn responds to the mother's signals with kicks, hand and arm movements, facial expressions, head movements, and vocalizations of its own – often as if participating in a mutually-negotiated rhythmic "beat" with complementary dynamics. The pair engage and disengage, synchronize and alternate, practising their "attunement" over the first five or six months of the infant's life.

Such behaviour has been shown to have many practical effects for the baby's development of emotional homeostasis (Hofer 1990) and later socialization (Papousek & Papousek 1979; Schore 1994; Aitken & Trevarthen 1997), language learning (Fernald 1992), cognitive development (Papousek & Papousek 1981; Trevarthen 1997), and acquisition of parental culture. Yet

it is rarely pointed out that the very components of the interaction are fundamentally *aesthetic*.

Repetition, patterning, exaggeration, dynamic variation, elaboration and surprise – in visual, vocal and kinesic modalities – are used by the arts in order to gain attention and create expectancy. The performative, temporal, and dynamic features of mother-infant engagement can be viewed as aesthetic (or *protoaesthetic*) elements to which, for adaptive reasons (infant survival and maternal reproductive success), humans are innately sensitive.⁸

There are other innately-appealing (or “aesthetic”) sensory features that originally appeared in nonaesthetic contexts – e.g. bright, true, clear colours, vigorous or graceful movements, significant motifs (e.g. eyespots and zigzags; see Aiken 1998; Üher 1991), or cognitively interesting and satisfying musical intervals or visual shapes and patterns (as described by Gestalt psychologists and cognitive neuroscientists). These are immediately attractive or salient to humans, insofar as they signal beneficial or possibly harmful states or events (e.g. ripeness, youth, health, strength, danger, interest and cognitive mastery). Individuals who attended to and valued such signals would have enjoyed greater survival and reproductive success than individuals who did not. Such signals would become inherent perceptual and cognitive preferences, as described by experimental psychologists and cognitive neuroscientists.

I suggest that the innate predisposition to take note of or positively like such *protoaesthetic visual and aural signals*, as well as the inborn capacities and sensitivities that predispose adults to make and babies to respond to the *protoaesthetic temporal and dynamic manipulations* that were described above, existed as a sort of “reservoir” from which early humans could draw when at a later point in evolution they began deliberately to artify (to “make special”).

Emotional investment (“care”)

Humans, more than any other animals, use their wits rather than their instincts to address the problems of their lives. For our species, what to do and how to live are not instinctive, but must be learned. Over the millennia of hominid evolution, the mind increasingly became a “making sense” organ: interrelated powers of memory, foresight and imagination gradually developed and allowed humans to stabilize and confine the stream of life by making mental “connections” between past, present and future, or among different experiences or observations.

Humans could remember good and bad things, and imagine them happening again. One cost of this awareness of the desired possibilities and inevitable unpredictability of life, greater in humans than in other animals, was uncertainty, even anxiety. I suggest that uncertainty – leading to emotional

investment or care – was the original motivating impetus for the human invention of religion and its behavioural expression, art (or artification).

Usually religion and art are treated as aspects of “culture”, which according to conventional anthropological theory is opposed to “biology”. An adaptationist view, however, considers the various components that are called “culture” – for example (as described earlier), language and toolmaking – to be outgrowths of evolved psychobiological predispositions. Here I view religion and art similarly as cultural behaviours that originally were based on the wish to influence the outcomes of circumstances that were especially important, but uncertain.

In general, cultural knowledge and practices direct our attention to particular biologically significant things – ways to become a competent adult, to make a living, to rear children and to maintain social relationships. Language and traditions of toolmaking and subsistence practice are among these “ways”. Additionally, our ancestors had to *care about* the outcome of biologically significant and valuable events and states that were not always certain of attainment – e.g. assuring or restoring safety, prosperity, fecundity, health and victory, or successfully dealing with the bodily changes and emotional concomitants of sexual maturity, pregnancy, birth and death.

Other animals in uncertain circumstances frequently engage in “displacement” activities or ritualized behaviours whose components are drawn from ordinary bodily movements used in everyday contexts such as grooming, locomotion, or nestbuilding (e.g. preening, preparing for flight, or plucking grass). In the new uncertain context, these ordinary movements become more stereotyped – that is, exaggerated, patterned and repeated. Such “ritualized” movements signal to conspecifics that the sender of the signal is agitated or anxious. They also serve to reduce the tension of the displaying animal (Tinbergen 1952; Eibl-Eibesfeldt 1988).

I suggest that in uncertain circumstances that did not call for immediate pragmatic action (that is, were not matters of immediate fight, flee or freeze responses), our early human ancestors at some point found that performing repetitious, stereotyped, exaggerated sounds and movements provided “something to do”, felt comforting, and ultimately eased tension – particularly when performed jointly among members of a group. I further suggest that individuals in groups that responded to uncertainty in stressful circumstances with such practices would gradually have gained survival advantage over those in groups where each person behaved individually or randomly.

It is important to note that such stereotyped, “ritualized” behaviours were culturally invented (not, as in other animals, biologically programmed) and would therefore vary among groups, even though like toolmaking, language, and other cultural activities they were based on inherent predispositions (for example, body rocking and repetitious rhythmic vocalizations are

spontaneous self-comforting behaviours of emotionally distressed individuals and even of captive animals; Charmove & Anderson 1989). Unified group behaviour, even more than individual activity, would create the illusion that the disturbing situation was being coped with – e.g. Mead ([1930] 1976) described how the people of Manus huddled together during a frightening storm and chanted charms to abate the wind.

The mammalian response to physiological and psychological stress is an adaptive answer to potential or actual physical danger: glucocorticoids and adrenaline are secreted and help the body to react immediately (Sapolsky 1992; Flinn *et al.* 1996). Worry and unfocussed anxiety, as well as direct psychological and social stress, may also provoke the response, which if long-standing or excessive negatively affects immunity, growth, reproduction, muscle action and cognition.

One of the psychological variables that modulates the stress response is to have a sense of control or predictability. It is healthier – more adaptive – to feel that one knows how to deal with uncertain events. Behaviour that is controlled – that is, patterned, repeated, exaggerated, and performed with deliberation and care – is a physical expression that mimics, and feels like, psychological control.

Although we cannot observe ancestral humans responding to uncertainty with stereotyped visual, vocal and kinetic patterns, repetitions and exaggerations, some palaeoarchaeologists (Brody 1977; Taçon 1983; Taçon *et al.* 1994; Taçon & Brockwell 1995) have found evidence of a conspicuous increase in artistic activity during periods of environmental stress; McNeill (1995: 89) notes that “preaching and song combined with rhythmic muscular movement” are conspicuous “in times of trouble and among distressed populations”.

The invention of ceremonial ritual

I have just suggested that the earliest forms of what we today call “religion” and “art” arose together during human evolution as ways to address the inevitable uncertainties of life that became increasingly evident to intelligent, foresightful people. In my ethologically-plausible reconstruction, a behaviour of art may have originated in the psychobiological tendency, in circumstances of perceived uncertainty and its concomitant psychological stress or anxiety, to attempt to gain control of desired outcomes by means of controlled – patterned, repetitive, exaggerated, elaborated, dynamically varied – vocal and kinetic actions that were a behavioural analogue of psychological coping. As in mother–infant interactions, such activities may well have been presymbolic and preverbal to begin with, eventually acquiring symbolic significance.

Today we call such behaviour "ceremonial ritual", but we could just as well call it "artification". That is, in ceremonies individuals use protoaesthetic sensory and cognitive features (which, as described in the previous section, are innately noteworthy because they were already adaptive in other nonaesthetic contexts) in temporally and spatially controlled – patterned, repeated, rhythmic, exaggerated, elaborated, dynamically varied – ways. Because ritualized mother–infant interaction had already prepared humans to be especially sensitive to dynamic temporal and spatial manipulations as a way of creating, expressing and sustaining emotional accord, further shaping and elaborating (artifying) of the components of the interaction – in visual, vocal and kinesic modalities – would be additionally affecting and effective.

It seems likely that in their origins, the arts of music, dance and mime would have been performed together as one multimedia activity, as they occur in mother–infant interactions. Perhaps protoaesthetic visual elements (say, in body adornment) were added to make the performance even more striking. Over time, individual arts could be additionally developed and even emancipated from ceremonies, from religion and from uncertainty. Once artifying in ceremonial ritual became part of an individual's or culture's repertoire, its various features could be further artified or manipulated and used in a variety of other, even secular and celebratory, contexts.

Inherent in an ethological view is the premise that culturally created ceremonial rituals were biologically adaptive. The fact that we are emotionally and behaviourally susceptible to elaborated movements in time, visual compellingness, skillful execution and the structuring and manipulation of our sensory experiences made it more likely that we would engage in the socially reinforcing ceremonial behaviours, remember the messages that these practices transmitted and become emotionally convinced of their truth and effectiveness. Without such biologically adaptive reactions, artification of existing protoaesthetic signals would not have become an important universal human behaviour.

Artification as a human universal

In conclusion, I will consider my ethological or adaptationist view of art as a human universal with respect to conceptual and other issues mentioned in earlier sections of this essay. I will also refer, when appropriate, to the other seven approaches that were described. Unlike some of these, an ethological approach includes the arts of people in all societies and all times. That is, it is not restricted to "fine" art, and accepts decoration, much craft, the performing arts and even unskilled or careless examples of all these. Determinations of what is "good" and "bad" are not relevant considerations, and are left to art critics.⁹

To summarize, art, in its origins, is regarded as an inherent psychobiological capacity to "artify": that is, to use (and respond to) protoaesthetic visual, vocal, and/or kinesic behaviours and features – which occurred originally in other adaptive contexts – in a considered (i.e. made special – exaggerated or formalized or elaborated) way, thereby demonstrating serious regard ("care") for biologically important life concerns. In circumstances that provoke concern or care, it seems particularly human to enlist exceptional, attention-getting, emotion-affecting, memorable elements and activities as a sort of "demonstration of serious regard" correlative to the biological significance and value of the things cared about.

As described here, the original psychobiological motivation for artification was the desire to affect or control – through extraordinary effort and execution – the outcomes of uncertain (hence anxiety-provoking) biologically-important occasions about which people rightly cared. Whether or not an individual ceremony achieved its particular or *proximate* purpose (say, securing game, placating a powerful spirit, or expressing one's resolve), its *ultimate* effect was to relieve individual anxiety by providing an illusion of coping, thereby contributing to survival and reproductive success.

Of equal or even greater importance, however, was an associated benefit. Ceremonial participation instilled general coordination, cooperation and feelings of affiliation among members of the group, additionally enhancing the fitness of individuals. Through cultural ritualization and elaboration, the behavioural mechanisms that were first evolved in mother–infant mutuality – the repetitions, patterning, dynamic variation, visual, vocal and kinesic display – became adaptive means for arousing interest, riveting joint attention, synchronizing bodily rhythms and activities, conveying messages with conviction and memorability, and ultimately indoctrinating and reinforcing right attitudes and behaviour in members of a group. By being especially compelling, beautiful, rare, painstaking and astonishing, a people's arts are emblems of how much they care about the sacred beliefs that bind and preserve them.

As such, the arts in traditional societies reinforce a group's communality and solidarity: they manifest and celebrate who they are. By carefully making and then responding to these constructions, group members transmit and reinforce the values – the emotional dispositions – on which their cohesiveness depends. Their belief furthers commitment to long-term interests that arouse and satisfy needs for shared emotional meaning, to be distinguished from equally important short-term interests that serve immediate physical subsistence and preservation. Humans evolved to require satisfaction of both.

The adaptationist account presented here shows that predispositions to artify are untaught and spontaneous. That is to say, all humans are innately receptive to protoaesthetic sensory and cognitive features in the environment (identified, as described, by experimental psychologists and neuroscientists

as particularly pleasurable, satisfying and compelling) and to the temporal manipulations inherent in mother–infant interaction. Similarly, all children are predisposed to play and make-believe – that is, to participate in and acknowledge a “bracketed” or special, extraordinary dimension to experience.¹⁰ Young children also readily show – and observably enjoy – the rudiments of art practice, usually without being taught. That is, they will make marks and images, dance, sing, play with words and language, dress up, make-believe, and be receptive to specially-crafted stories. Without example and encouragement from other people, specific art interests and abilities may remain latent and undeveloped. In premodern societies, however, the arts are valued and performed by most or all adults, and children grow up experiencing, valuing and performing them also. Although historically, as sociologists point out, artification has served political and personal power and specialists (“artists”) often make the arts that reflect or consolidate that power, in small-scale, traditional societies, art is rarely confined only to specialists. Artification is practised by all.

The work of cultural anthropologists not only makes clear the wide diversity of arts in all societies, but implicitly supports an adaptationist view that in all societies people artify when they care about important things.¹¹ That is, anthropologists report how ceremonies, with their constituent arts, embody and give potency to the cultural meanings of societies – the meaningful systems and stories by which religions explain the world and join their adherents in common cause. At the same time, insofar as it regards art as a ritualized behavioural counterpart of religion, my adaptationist view incorporates the theological view of art, since devotees of religious practices everywhere view their aesthetic actions and artefacts as inevitably associated with their deity or deities.

In some contemporary socio-cultural or cultural constructivist views, art can be about anything and anything can be art. Nevertheless, even in modern environments that are very different from the subsistence societies in which human nature evolved, people still tend to artify in circumstances about which they care (e.g. when they wish to impress someone else, mark an important event, or show love and regard). That is, although art occupies a variety of new and different roles, it also continues to appear under appropriate conditions. The fact that we today artify by purchasing (rather than ourselves making) self-adornment, holiday decorations and gift presentations does not negate the wish to effect important outcomes.

Artification still provides pleasure, and people willingly devote large amounts of time, effort and thought to it, notwithstanding the fact that contemporary arts are primarily devoted to popular entertainment, distraction, and – through advertisements – the promotion of consumerism.¹² Art as practised by individuals still relieves anxiety, and in alienated modernized

societies where individualism is valued and fostered it can be a means of self-expression and self-validation. Various forms of arts therapy – whether visual art, music, dance or drama – are acknowledged as ways to deal not only with sublimation of forbidden wishes but of giving form to, thereby articulating and resolving important individual problems.

By establishing that art is a human universal, the adaptationist view presented in this essay implies that art (as making special or artifice) has been – and continues to be – integral to our lives. More than a revelation of the divine, a manifestation of political power, the satisfaction of unfulfilled desires, an expression of the creative self or an agglomeration of perceptual and cognitive preferences, art – as described here – emerges from our fundamental nature as humans and for untold millennia has been essential to our life in the world.

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Notes

1. See Brown (1991, 1996) for broad and illuminating discussions of human universals and their implications.
2. Related to experimental psychology is the *neurological* view of art as a brain/mind or cognitive phenomenon. It identifies and describes areas of the brain that are involved in art-like capacities such as pattern perception, visual thinking, spatial abilities, manual or kinesthetic abilities, musical abilities, and metaphoric and imagistic abilities. The recent fields of “neuroaesthetics” and “evolutionary aesthetics” (e.g. Voland & Grammar 2003), imply that art can be understood as a collection of cognitive capacities or perceptual preferences, and they generally ignore its motivational, emotional and functional aspects (see Brown & Dissanayake 2009).
3. A notable exception is Anderson (1990).
4. The well-known Austrian ethologist Eibl-Eibesfeldt (1988; 1989: 665–702) also addresses human art, arriving at some of the same ideas and suggestions as those which follow, although in a less systematic manner. I acknowledge the inspiration of his pioneering work. See also Eibl-Eibesfeldt and Sütterlin (2007).
5. Non-ethological accounts of the motivation for or function of artistic behaviour (i.e. that it is “self-expression” or “wish fulfillment” or “projection” or “individuation”) have not demonstrated how these proximate functions are ultimately related to ultimate survival or reproductive success.

6. By "object", I include such things as written works (e.g. a novel or musical score), or a reading or performance of such a work – an entity.
7. Dictionaries give subtly different meanings of the word "special", not all of which apply to my use of the adjective. In the *Houghton-Mifflin Canadian Dictionary of the English Language*, the first meaning of "special" is "surpassing what is common or usual; exceptional". It is this sense in which I have adopted the term. Criticisms that consider "special" to be imprecise because it can refer to non-artistic things are employing other dictionary meanings – distinct among others of a kind (singular), primary, peculiar to a specific person or thing (particular), having a limited or specific function or scope, arranged for a particular occasion or purpose, esteemed or close. Each of the arts makes special (surpasses what is usual – or ordinary). In dance, for example, ordinary bodily movements of everyday life are exaggerated, sustained, repeated, patterned; in poetry, ordinary speech is formalized, rhymed, made striking through alliteration, assonance, unusual vocabulary and word order; in song, the prosodic features of human vocal utterance are formalized into fixed intervallic patterns and more regular metre, exaggerated with sustained vowels and given notable dynamic emphasis; in the visual arts, ordinary materials are treated with colour and pattern, or transformed by formalizing and elaborating; stories are given shape and emphases that surpass the bare facts of their plot. One might call the actions of sustaining, repeating, exaggerating, patterning, formalizing, or adding vividness through colour and dynamic variation *ways of artifying* – aesthetic actions. There may be other aesthetic actions that I have not named. Rather than list aesthetic actions anew each time, I prefer to unite them in one overarching concept: making special (as surpassing what is common or usual) or "artifying". This should distinguish artistic making special from specialness for purposes of identification or esteem or denoting a specific function, scope or application. The notion of "making special" is not meant to account for everything about art: it is offered as the ancestral activity that gave rise to the arts, an activity that continues to imbue all instances of artification.
8. One might ask why human mothers and infants developed such an elaborate and complex interactive behaviour. We know that walking on two rather than four legs demanded a number of anatomical changes, including a narrower pelvis. At birth hominid infants (whose head size was also gradually becoming larger than any other primate) would have to be smaller (more immature) than their ape cousins simply to pass successfully through the birth canal without endangering themselves or their mothers. Indeed, it has been estimated that to be of a comparable maturity at birth as an ape baby, today's human infants would have to be in the womb a full year longer than nine months, and would weigh twenty-five pounds (Leakey 1994: 44). Such an immature and helpless infant would be well advised to be perceived as being as lovable as possible so that its mother would be motivated to care for it for the requisite longer period of dependence. I suggest that the rhythmic, patterned mother-infant interaction that we observe today is based on a ritualized behaviour that co-evolved between early hominid mothers and their infants to foster emotional attunement and interdependence, thereby enhancing the baby's survival and the mother's reproductive success. The facial expressions, movements and sounds that mothers use with their infants are exaggerations of expressions, movements and sounds used by other primates, as well as human adults, in contexts of friendliness and affiliation. By using these, the mother not only communicates affection to her infant, but also reinforces positive emotion in her own neural circuits. When structured in a patterned, rhythmic way, so the two can respond and counter-respond, the interaction becomes a ritualized expression and sharing of a positive emotional state (see Dissanayake 1999).

9. Although my adaptationist notion of art as a human universal is not concerned with evaluations of "good" and "bad" art, it nevertheless is concerned with value in art – in terms of motivation and activity rather than product or result. In ancestral times it would not have been adaptive to make any old thing special. The occasions and artefacts for which artifications were considered necessary were of importance to biological (including psychobiological) survival. Such "value" is not, and need not be, a consideration in art practice today where subsistence is not an issue.
10. It seems certain that early hominids, like other primates and many higher animals, would *play*, and thereby acknowledge a dimension or sphere of activity that is "not for real" in that it does not directly affect the subsistence activities of obtaining real food, evading real predators, fighting real competitors, finding real mates and so forth.
11. It has been said that we "assume" that all cultures have art, but "no one has counted" (e.g. Anderson 1993). My view is that the burden of disproof is on the doubters. I invite information about human cultures that do not practice some form of artificiation as it has been described in this essay.
12. As societies modernize, they emphasize short-term (or material subsistence) values. Buying and selling, getting and spending, and the quick gratification of immediate needs or desires become scaffolded upon the fundamental human requirements for physical survival, but far surpass these. In the ensuing assessment of cost to benefit, the long-term (emotionally meaningful or "spiritual") values so necessary to the cohesion and perpetuation of truly "subsistence" societies are forsworn. Thus the arts can become separate from life, made "for their own sake" or for reasons that are nonadaptive.

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