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Aesthetic Experience and Human Evolution

TODAY IT IS GENERALLY agreed that certain works made by members of societies other than our own are worthy of our aesthetic regard and deserve to be called "art." This now unexceptionable attitude is, however, less than a century old. It indicates, one hopes, a growing acknowledgement that the similarities among humankind are more significant than their differences.

Yet modern aesthetic theory in the West rarely has taken account of the contemporary willingness to regard artifacts from non-Western cultures as art. Its theoretical preconceptions are in the main derived from Enlightenment and Romantic thinkers for whom the few exotic artifacts of their acquaintance were mere savage or barbaric curios, of ethnographic but not aesthetic interest. These influential predecessors were, unlike us today, ignorant of Lascaux, unaware of the implications or extent of man's protohistory, and unfamiliar with the diversity and magnificence of human imaginative creations. The legacy of their presuppositions—e.g., disinterested contemplation or an "aesthetic attitude"; standards of taste and discrimination that are universally-knowable or agreed-upon; "fine" arts; art-for-art's-sake; an "aesthetic emotion"—seem irrelevant or misplaced when applied to primitive or prehistoric art. In addition, much of the artistic production of the world's other high civilizations, not to mention recent contemporary Western art, strains the explanatory powers of modern Western aesthetic theory.¹

It would seem that a different, more contemporary and relevant approach might now be welcome. Although I am not pre-

pared here to attack all the cluttered corners, I would like to suggest that we try a new broom—one made available to us by the postulates of bioevolutionary theory.²

Immanuel Kant's difficult notion of the "subjective purposiveness" of nature assumed that nature was adapted to our human powers of understanding.³ The bioevolutionary view would claim, rather, that our powers of understanding are adapted to nature. That is to say, nature through a long evolutionary process has molded our brains so that its products—what we think and do, what we *are*—are, before anything else,⁴ biological phenomena whose value is, fundamentally, that they have contributed positively to the survival of the creatures who possess them.

Such a view requires a radical change in our habit of thinking about ourselves. We have to adopt now what might be termed a "heliocentric" view of human history.⁵ Though none of us today believes that the universe revolves around the earth, it seems to be difficult to eradicate a geocentric notion of the importance of our own society, or rather the way of life and mode of thought that is ours by way of our society. But at least rationally, if not emotionally, we must recognize that our civilization, not to mention our person, is as dizzyingly insignificant in time as our planet is in space.

It would be a serious error to think we understood the nature of a living creature after examining it only for one minute of one day, the most recent of its life, thereby ignoring previous developmental stages. Yet we make an analogous error when we presume that human nature stands forth in the image of an advanced Western man. For the evolutionary history of human beings, when their biological and psycholog-

ical needs were being formed and refined, is so long that the last two or even ten thousand years, *which is what we mean by "human history,"* is no more than one minute of a late afternoon in the total life of a mature person—the rest of human evolution occupying the several million minutes that preceded it.⁶

If we take as our concern the whole range of human achievement, it seems overweening to presume that our way of life and our values are the unquestioned standards by which it can be understood and judged. The modern concept of "art," for example, originated among people of a small geographical area and has had its present connotations for only about two centuries. No wonder it is often awkwardly applied to objects and activities from other human societies and from earlier times. In any case, as members of post-industrial, highly-modernized, highly-literate society we are hardly in a position automatically to understand or appreciate the meaning these artifacts have for the pre-industrial, unmodernized, nonliterate people who make and use them. Are we justified to regard and admire them as if they somehow represented or embodied a universal essence of "art"—like *mana*—that *we* can discern even if their producers do not?

To the bioevolutionary view (which regards all of mankind as fundamentally similar members of the same species) it is not unlikely that there are common, universally-affecting elements in the carefully-rendered objects and activities of mankind.⁷ However, it would be surprising if these could be prescribed by members of a society that is in a number of important respects unique in human history, unless we are prepared to go outside our highly-specialized and artificial cultural preconceptions and look at these objects or this proposed essence as far as possible from a trans-cultural or pan-cultural—that is, a bioevolutionary—perspective.

I. Major Postulates of a Bioevolutionary View of Art

A bioevolutionary view, then, claims to allow what present neo-Kantian aesthetic

theory has failed to provide—a comprehensive view of art as a universal human endowment that applies not only to Western art but to the artistic works of all men.

At the same time, it takes a broad temporal view of art as a biologically-based human ability or characteristic that has evolved, i.e., has developed from simpler origins with changes, additions, and deletions along the way. It attempts to suggest how art arose, and how, historically, it has changed, and—most interestingly, for this is a question of value—why it was retained. Darwinian evolutionary theory claims that any structural or behavioral feature that is found *universally* in a species will most likely be found to have had selective value. This means, broadly, that the feature has been "selected for" over generations because those who possessed it survived more successfully (i.e., left more offspring) than those who did not. Therefore, since art observably exists in all human societies, we may presume that it contributed something vitally necessary to the members of those societies or it would not be there. If art (like, say, headhunting or circumcision) were an evolutionarily-neutral behavior or a product of cultural evolution that was adaptive only in certain specialized circumstances, it might exist in a few scattered or related groups. If it were detrimental it would gradually disappear as its practitioners failed to survive as well as those who did not practice such deleterious behavior.

Let us look more closely at the bioevolutionary assumption that art must be functionally⁸ adaptive to human beings. Although when phrased this way the notion may sound odd, or at odds with modern Western aesthetic theory which maintains that the aesthetic value of an object resides in something other than its practical utility, most people would probably not dispute that art contributes somehow to human survival. Man does not live by bread alone. It does not sound outrageous to say that people vitally need beauty or a amusement or distraction or spiritual elevation—and "art" often does provide these things. But it is not so easy as that, once we look closely at what art provides and how it provides it. For we who are concerned with the philosophy and

criticism of art know better than anyone else that art is *not simply* beauty or amusement or distraction or elevation. We can be amused, distracted, and uplifted by what no one would call art, and art need not in every case be beautiful, distracting, and so forth. So the intuition that man needs art, though felt by many, is not easy to verify or even to elucidate.

Certainly not all people need good or great art—a look around us will dispel any illusions on that score. But to say that people “need” pop music or television comedies or magazine-influenced interior decoration, though it might interest sociologists, is not a statement that causes much interest or inspiration to art critics or philosophers. Is there an interesting or relevant sense in which we can accept that *art makes (or has made) a positive contribution to the evolutionary fitness of human beings?* Modern Western aesthetic theory with its present elitist biases cannot provide one.⁹ But from the bioevolutionary position we can hazard another try.

II. Art as a Behavior

Because human evolutionary history is so long and artifacts that are called artistic exist for only the past 25,000 years or so, our view of art is limited if we look at it simply as a history of objects, as art historians do. This approach is interesting and important, but an evolutionary approach must have a larger prospect. Without extant artifacts, however, what can we do?

Although it too may seem odd, we can call art a behavior.¹⁰ Indeed, if we are interested in evolution this is a promising approach, for there is a precedent in the science of ethology which concerns itself, among other things, with the evolution of a number of behaviors in other animals. It is more usual and therefore more comfortable for us to think of art as an essence that resides in objects, or as a body of objects with certain agreed-upon features, or as a transaction between work and perceiver, or as a label. But it is precisely these notions of art that are so hard to universalize into art of all times and all places.

It should first be made clear that I do not mean behavior in the literal sense of making a particular pot or statue. In ethology the notion of a behavior has a much broader and more general meaning. Aggressive behavior, for example, is not simply a collection of threatening acts like snarling or hitting. Neither is it claimed today to be a unitary drive or instinct. As a general ethological term, aggressive behavior refers to an array of different responses even with separate controls in the nervous system.¹¹ It includes such disparate activities as the defense and conquest of territory, the assertion of dominance within already well-organized groups, sexual aggression, acts of hostility by a mother to terminate weaning, aggression against prey, defensive counterattacks against predators, and in human beings moralistic and disciplinary aggression used to enforce the rules of society. The common denominator in all these is the use of force, the assertion of self (or what stands for the self) forcefully in a social context.

Could one make an analogous analysis for art? The model of aggressive behavior is useful in that it will allow quite divergent activities, even those derived from different parts of the nervous system, to be subsumed in one behavioral category—e.g., singing, dancing, painting, miming, versifying, carving, decorating, adorning, and so forth. But what is their common denominator? As philosophers of art we are well aware of the difficulty of finding a common characteristic that justifies combining all the so-called arts into one phenomenon or category. If one goes through the list of such defining characteristics that have been proposed for art (e.g., making order or harmonizing, communication, formalization, play, display, etc.), one soon realizes that as behavioral definitions they do not help very much, for people can do all those things without the result being art at all. Art, as we know it, is usually orderly, harmonious, communicative, innovative, and so forth, but all order, harmony, communication, innovation is not art. So *these* cannot be the common denominator for our postulated behavior of art.

A. *The Propensity for "Making Special"*

I would like to propose a general category of human behavior that has until now received no direct elucidation or description by anthropologists or human ethologists. I will claim, however, that it is as characteristic of our species as the skillful making and use of tools, as language, as complex symbolization, and the other attributes that are often said to define man. This universal ability or proclivity is to recognize that some things are "special," and even more, to *make things special*—that is, to treat them as different from the everyday. One can flake a stone tool for use—as humans did for millennia. But at some point people began to decorate its handle, not simply to make a mark of ownership (for this could be any old mark) but presumably to make it special.

Although many, including myself, would insist that there is more to art than this, I would like for the present to suggest that art—as we know it and as we recognize it in other human societies, present and past, even those which have no concept or word for art—is an instance of this broader human faculty or proclivity for making special. In its specifically artistic form it is concerned with shaping and embellishing everyday ordinary reality so that it becomes extraordinary, i.e., on a different "level" from the usual daily round of satisfying vital needs of food, rest, social interaction, shelter, care, and so forth.

Just as there is more to art than "making special," this starting point or common denominator is not confined to what we call art. It is, however, more restrictive than the other proposed common denominators (order, communication, etc.), and therefore seems a better place than these to start. For I can think of only two kinds of normal conscious human behavior that are concerned with a world other than the everyday, and often with making things special—these are ritual and play. But this should not seriously distress us in our general search for a way of calling art behavior, for, as I will repeat later, art and ritual and art and play are often only arbitrarily or artificially viewed as conceptually separate.

I do not then claim that one can *define* art as "making special," recognizing or conferring specialness. But this ability or propensity must be taken into account in any behavioral definition. I *will* claim that it is the root proclivity from which everything that we call art has come, and it seems to have appeared early in hominid evolution.

There are documented instances which indicate that early men reacted to specialness in Middle Acheulian times (i.e., ca. 250,000 B.P.). Red-pigmented rocks were shaped and collected together in one place; unusually marked stones, rather than more abundant and easily-worked flint, were sometimes used for fashioning tools; and pieces of fossil coral that had no obvious "use" but bore a striking pattern were carried far from their place of origin.¹²

B. *Primordial Elements of Art*

Although I propose that the *sine qua non* of art as a behavior is the ability to recognize specialness, a more complete story requires that we look further back into human evolutionary history. My hypothetical reconstruction of the origin and development of art requires cognizance of a number of strands or elements of human endowments—physiological, psychological, social—which developed separately, or in separate and joined contexts, and which could ultimately become ingredients in a recognizable, more-or-less independent behavior.

Let us imagine the evolution of the genus *Homo* over several million years.¹³ We know that hominid evolution displays gradual improvement in certain tendencies and abilities which can be found in other animals—for example, the skillful manufacture and using of tools; communicating with a spoken language; mentally employing concepts or generalizations; using and responding to symbols; ordering the world by means of patterns or narrative; seeing relationships, recurrences, similarities and differences; desiring and even seeking out novelty and irregularity; becoming needful of and intimate with others; requiring the setting of culture in which innate potentialities can be manifested; and developing

a richer, deeper, and more varied emotional life.¹⁴

Gradually, particular manifestations of these fundamental tendencies and abilities (e.g., dexterity, curiosity, pattern-making, ordering, imitating, making believe, communicating, persuading), although they all developed and were expressed first in various functional and nonartistic contexts, became available for use in a behavior we would today call art. Augmented slowly but surely by human inventiveness, symbolizing capacity, and so forth, these manifestations over the course of human evolution would have become more and more refined, more integrated in specific behaviors, and eventually could appear even in essentially emancipated forms.

This hypothetical reconstruction of the evolution of a general behavior of art in the human species may be more easily grasped by an analogy with the ontogeny of picture-making in the human infant. It has been demonstrated that when given drawing materials for the first time, all normal 2-year old children will make the same kinds of marks, and in time perform a repertoire of twenty basic scribble forms. These scribbles are derived in the first instance from general motor movements that are even displayed in the uncoordinated arm-wavings of babies—that is, from spontaneous variations of muscle tensions. But progressively, with practice, and with the assistance of simultaneously-developing motivations and abilities (i.e., dexterity, curiosity, ordering, and so forth, named above), these scribbles become refined into deliberately-made shapes or diagrams such as circles or crosses, and eventually into aggregates and genuine pictorial forms.

I am suggesting that artistic behavior in our species, like artistic behavior in an individual child, was manifested and developed only after a certain stage of “maturity” was reached. When it appeared it made use of abilities that had been developed in earlier, functional contexts, but *when used to make things special* these could acquire independence and the potential to be used in other contexts and even, if desired, for their own sake.

It is suggestive that the other two human

behaviors concerned with making special, ritual and play, themselves share many similarities with what in advanced Western society we think of as characteristic of art. Play, for example, makes use of abilities to see something as something else, to imitate, to experiment and to improvise.¹⁶ Similarly, ritualized behaviors formalize and pattern; emphasize; exaggerate and distort; order and shape in time or space; unify the contradictory or unlike; and channel emotion.¹⁷ Still other artistic elements such as embellishing, pretending, and metamorphosing are important in both play and ritual. One might view the three behaviors—art, play, and ritual—as aspects of a single behavioral complex based on the recognition and “manufacture” of specialness. In any case, though generally distinct in the advanced West, they are demonstrably closely related in many other societies.

III. The Symbiotic Relationship of Ritual Ceremony and Art

I have briefly set out what I see as basic postulates of a bioevolutionary view of art—that it is universal, that it has evolved, that it is a complex behavior based on “making special” which makes use of a number of fundamental human attributes and tendencies. Next I would like to narrow the field of vision to describe one of the ways in which it can be proposed that art had selective value: in its symbolic relationship with ceremonial ritual.

In ritual ceremony, the activities that I have postulated as primordial elements of a behavior of art could coalesce, as well as expand and multiply. Ceremony provided times and places for making special, for acknowledging and responding to specialness. Ceremony made use of skills and attributes that originated in specific functional contexts, but encouraged their coordination and refinement and gave them occasion to diversify and flourish.¹⁸

It is not difficult to see how and why ceremonial ritual developed and acquired selective value in the evolution of human beings. The mysteries and hazards of life—sexuality, birth, death, ensuring good hunting, protecting from harm, curing

illness—would have been major concerns of the self-conscious, intelligent hominid, man. Shifting these sources of wonder and anxiety from everyday reality to a symbolic sphere and acting upon them with deliberation and repetition and great care would have been (and still is) a way of dealing with them.¹⁹ Bound together in common beliefs and ventures, their tribal values reinforced, groups of hominids that performed ritual ceremonies were presumably more cohesive and therefore better equipped for survival than groups that did not.²⁰

But one can ask why ritually-expressed concerns developed into long complicated ceremonies that required elaborate preparation and execution when a few words and actions would have left early man with more time for daily activities required for survival. A reasonable answer is that natural selection favored groups that performed long complex rituals not because such ceremonies really produced more game or more capably destroyed evil forces, but because they more effectively contributed to social cohesion and group solidarity than did quick, perfunctory observances. Longer, or at least more memorable ceremonies would better teach, express and reinforce the values and beliefs of the group and perpetuate the knowledge that was essential for group maintenance and survival. Yet in order to achieve these benefits a way had to be found that would encourage people to engage in time-consuming and often arduous ceremonies rather than in shorter, less socially-advantageous ones.

I believe that an important factor contributing to successful ritual ceremonies would have been their incorporation of what are now called *aesthetic* elements. In its most elementary form, human aesthetic experience is simply the pleasurable response to novelty, variety, pattern and rhythmic sequence, intensity, and other sensuous stimuli closely associated with physiological and psychological processes common to all living creatures. Initially discrete and uncoordinated responses would gradually but progressively through time have been molded into more affective sequences. When phenomena possessing

pleasurable effects were combined with ritual (as when they are combined with other essential life activities such as reproduction or alimentation), the ceremonies became more enjoyable and this enjoyment or pleasure helped to ensure that they were willingly repeated.

As well as giving pleasure, aesthetic elements would help to ensure an effective, accurate performance. Rhythm and euphony would assist the memorization and recitation of myth, group history, and ceremonial sequence. The kinaesthetic pleasure of bodily movement, the rhythm of words and incantations, the manipulated tempo of the total ceremony in time, visual pleasure in colors and patterns of objects and costumes, aural pleasure in songs and instrumental music—these would have made the elements of ritual physically and emotionally satisfying.²¹

What I wish to emphasize here is that not only did specific artistic elements and abilities evolve as they were used and stressed in ritual ceremonies, but the *response* to these would have evolved as well. It is a kind of feedback mechanism: the more that people liked (or were affected by) these things, the more they used them, and the more they used them, the more affecting they became. Less-effective and less-affecting elements would through selective pressure gradually have disappeared.

IV. The Evolution of Aesthetic Experience

I do not mean to suggest that in human evolution art was not at the same time closely connected to activities other than ritual ceremony, such as play, entertainment, or exploration. But stressing the relationship between art and ritual ceremony allows me to emphasize that the *experience* of art is as important to a bioevolutionary view as the *making* of art. A theory of art as a behavior should comprehend both.

Let us next consider whether the preceding hypothetical reconstruction of the evolutionary interdependence of ritual ceremony and art contributes to an understanding of modern aesthetic experience. At first glance it would seem an absurd notion. Our modern response to art is most

commonly a general feeling of pleasure or well-being, a recognition of and satisfaction with "rightness." It may contain "incommunicable," even vaguely physical elements or sensations, but there seems no reasonable way that we can say it resembles the crowd-induced, reflexive, often extravagant and overt behavior that we associate with responses to primitive ritual ceremonies.

But the bioevolutionary perspective suggests a manner in which complex aesthetic experience might have developed from elementary aesthetic responses. There are certain fundamental aspects of early infant experience that are arguably the same for primitive, even prehistoric, and modern man. These can be called human universal aesthetic prototypes upon which later cultural expectation and hence behavioral repertoire can be embroidered.

Underlying this claim is a model of early infant experience derived from Freud via Erik Erikson.²² It proposes that the affective energies of the maturing infant are focussed in the initial months of life upon the oral, anal, and genital areas, and suggests that the modes of the physical functioning of each zone eventually develop into psychological modalities of thought. For example, regarding the oral zone, the characteristic modes of general physiological functioning are "passive

incorporation, getting or taking in" or "active incorporation, biting, grasping, investigating."

Additionally, every mode can be experienced in terms of several "dimensions" or "vectors" (see Fig. 1). As Howard Gardner explains,

In order to "take in," the organism must either open a portion of his anatomy or, on the psychological level, evince readiness to assimilate new experiences. This "open-ness" or potential for "taking in" need hardly assume a single fixed form, however: taking in may occur readily, with reluctance, widely, narrowly, at regular or staggered intervals, alternating with closing up, uniquely . . . or repeatedly . . . Likewise, incorporation or introjection may occur intermittently or regularly, forcefully or weakly, with hesitation or enthusiasm. Clearly the various modes are abstractions, general stances toward the world . . .²³

According to this model, what originate as physiological modes become social and cultural modalities—the child's way of experiencing the world beyond his own skin. This sensitivity to general modal/vectoral properties and their associations in experience is initially "somatomorphic"—that is, part of the totality of bodily sensation and unmediated by complex mentation. As the infant develops, the *somatic* sensitivity becomes overlain with *cognitive* concepts of "open" and "closed," "up" and "down." The all-engulfing, unlabeled feelings these once

Figure 1. Modes and Vectors*

Zones	Characteristic Modes	Some Vectorial Properties of Modes
Oral-sensory (mouth/tongue)	Passive incorporation (get, take in) Active incorporation (bite, grasp, investigate)	Speed (quick vs. slow) Temporal regularity (regular vs. irregular) Spatial configuration (wide vs. narrow; curved vs. angular)
Anal-excretory (sphincter)	Retention (hold onto) Expulsion (let go, release, push out)	Facility (ease vs. strain) Repletion (hollow vs. full) Density (thick vs. thin)
Genital (penis-vagina)	Intrusion (stick into, go into) Inception or inclusion (take into, envelop)	Boundness (open vs. closed) Also: directionality, force, depth, comfort, texture

* After Gardner, 1973, p. 101.

gave rise to are given culturally-shared names, contours, and definiteness.

I would like to suggest that art (and other kinds of experience, like sex, that are not preeminently intellectual and indeed contain a large proportion of sheerly physical satisfactions) may in part short-circuit or overleap the usual cognitive labeling and classifying processes and directly activate these fundamental preverbal and pre-conceptual "modal" and "vectoral" sensations.²⁴

But even if it is admitted that physically-based preverbal associations derived from infancy may help to explain something of the incommunicability and intensity of some aesthetic experiences, there is obviously more to the response to art, at least in the modern sense.

If a behavior of art could have evolved as I have described in section II-B above, it seems justifiable to assume that in due course would appear a *tradition* according to which the individual manifestations of this behavior—the stories, verses, songs, dances, musical compositions, masks, adornment, costumes and so forth—would be made (or performed) and appreciated. In general, conservatism is an important asset to all animals, humans unexcepted.

It is with the appearance of tradition (which would require a reasonably high degree of social and environmental stability) that along with almost reflexive aesthetic responses another kind of response to aesthetic phenomena could develop. Tradition, a body of accepted and acceptable standards for performing an activity, with its own autonomous rules or "code," would require that at least some persons appreciate cognitively (tacitly, if not articulately) the *way* in which the requirements were met, paying attention to and judging the attainment of such things as appropriateness, skill, beauty, artfulness—the qualities and their manifestations that the "code" embraces and exalts.²⁵

The response to art can then perhaps be considered as a two-tier accomplishment. Earlier I suggested that the human species, like the individual child, required a certain degree of maturity before it could use in art the abilities that developed in non-art contexts. In a similar fashion, it can be argued

that just as the baby's emotional life begins in its awareness of modal/vectoral properties, the infant human species first displayed its nascent aesthetic sensitivity in reacting to elementary sensory psychophysiological stimuli. Presumably this ability—this responsiveness—remains operative in everyone. More complex aesthetic responsiveness requires one to employ and develop a predominantly cognitive ability to appreciate the ways in which these stimuli are combined with each other and with other humanly-significant features and presented as works of art. Such an ability is differentially shown by individuals and cultural groups.

The two "tiers" are not to be separated in actual aesthetic experience, but the "untrained" response relies more on the fundamental layer. The person who knows little about, say, "classical music" may nevertheless be gloriously affected by a symphony's rhythmic and dynamic contrasts, its flowing melody and repeated developments of intensity. An unknowledgeable Western listener to classical Indian music may respond powerfully to the performance of a raga, recognizing something of the breathtaking dexterity of the performers and reacting to the manipulated elements of rhythm and intensity. These responses are not to be gainsaid, but they are not the same as the response of the experienced listener who is acquainted with the tradition or "code" within which the performance comes to being.²⁶

More than this, I would even suggest that special concomitants of life in the advanced West make possible a kind of aesthetic experience that, though it may share some recognizable features with the aesthetic experiences of people from other cultural backgrounds, is in certain respects a unique and unprecedented form of human experience. Claiming this and understanding the peculiar circumstances that contribute to it might explain why confusion attends the attempt to treat the carefully-made works of all mankind as examples of one universal class, "art," which calls for a special or peculiar response. I base my claim that the experiencing of the more complex arts with the "upper tier" (at least to a high degree) is not a universal human endow-

ment on a number of independent but related findings.

The work on cognitive developmental psychology by Jean Piaget and his associates is well known for demonstrating that any individual person's mental formulation of the nature of reality follows a general developmental sequence. Without positing validity for every implication that has been claimed for Piaget's theories, it can be stated that the highest level, that of formal operations, is not achieved at all in primitive societies nor by many people in modern societies.²⁷ Acquisition of the higher Piagetian levels appears to depend on a number of environmental factors, including growing up in a primarily man-made environment and experiencing at least several years of formal education.²⁸

Formal education, of course, is among other things meant to bestow the ability to read and write. And it is becoming increasingly realized that the acquisition of literacy requires and fosters certain habits of mind that have important effects on the perception and structuring of reality.²⁹ Some of these effects, important for my argument, are the improvement in one's ability to separate words from their referents and to separate the components of an experience from each other and from oneself. The development of formal operational thought itself depends on this capacity to treat things as abstract entities and to detach oneself from the immediate data being considered. Detachment is a well-known criterion of the modern appreciation of art.³⁰ It is no coincidence, in my view, that formal operational thought and detached aesthetic appreciation are most highly-regarded and striven for in advanced Western culture, where literacy—not simply the ability to read and write but the habitual employment of "disembedded" modes of thinking characteristic of the highly-schooled, literate mentality—is an essential (though not naturally-occurring) prerequisite of successful socialization.³¹ This was and is not the case in pre-industrial traditional societies. Significantly, perhaps, it has become increasingly important in Western society in the last two hundred years—that is, in the period during which the elucidation of a class called "art" and the nature of one's

response to it has become an articulated problem.

It is, I would further suggest, objects which are made with the intention to sustain second-tier appreciation that we think of as art, and we are mistaken to place into this conceptual category everything that happens to look beautiful or arresting or pleasing. That such objects can hold our regard is not denied, but so can many of the creations of nature.

How then can one explain the high level of artistic achievement in the past, or in pre-literate primitive and non-Western societies. We must first of all recognize that formal operational thought and detached and highly discriminating aesthetic appreciation are not necessary (and indeed may even be inimical to) the creating of art.³² The affecting works of mankind can be well-experienced and appreciated on many levels: there is not one "best" way, although the "detached contemplative" way perhaps suits our modern Western temper best.

It is also important to recognize that although persons in pre-industrial societies make aesthetic *judgments* as we do, this fact does not mean that their judgments necessarily rest on the same sort of aesthetic *experience*.

With striking exceptions there is not much encouragement or opportunity in pre-industrial societies to develop to a high degree an appreciation of variations and qualitative differences in elements of traditional codes for their own sake. Until recently, in our own as well as in other cultures, an elite—the producers and patrons of art—practiced their own "selectivity." Traditions in art developed slowly, guided and maintained by persons who had aptitude and training, in association of artists (e.g., guilds or castes) directed by religious and political authority. The present avalanche of artistic mediocrity and carelessness around the globe as well as our own culture's confusion about the status of the concept of art is traceable in large measure to the waning of tradition and centralized authority.

Although most of the human race now and always has had small interest in discerning and appreciating autonomous aesthetic

quality in the artifacts that surround them, and although the bioevolutionary justification for the existence of these artifacts is in their utilitarian or social, non-aesthetic aspects, there have always been a few human beings—particularly artists—who have been innately predisposed to carry on artistic tradition and to be concerned, consciously or unconsciously, with non-functional aesthetic or “second-tier” aspects of their work.³³ Wanting to make special, after all, implies the intention of doing one’s best, and taking pains will generally result in considered work that embodies the most highly-regarded attainments and aspirations of the person and his society.

It is not surprising that as classifying creatures with highly-developed powers of discrimination and strong feelings, human beings will rank things, finding some “better” and others “worse.” Beauty, like love, is in the mind of the beholder. As we are all the same species it is likely that we will all agree about the value of many things and—being individuals—we will continue to have idiosyncratic preferences and to disagree. Trying precisely to categorize what is valued according to exact inflexible rules seems a doomed enterprise, much as our classifying minds are seduced by the possibility of comprehensive schemes.

V. Summary

According to the bioevolutionary view, then, aesthetic experience in a general sense is universal, fundamental, and necessary to man. However, the type of experience presupposed by advanced Western aesthetics seems to be bound to one culture, and rare even within that.

A bioevolutionary view of art should not aim to usurp or markedly change modern Western aesthetic theory. There is much interesting and valuable work to be done in discerning the bases for criticism and appreciation within our Western elitist tradition.

But a comprehensive Aesthetics, equipped to deal with non-Western art and with much of the art of the past century in the West, requires—I believe—a radical reorientation, a new heliocentrism. Perhaps some of the thoughts presented

here may suggest to others new questions and directions for general aesthetic theory.

¹ For example, Harold Osborne, recognizing the differences in expressed attitudes toward art there and here and then and now, has found it necessary to postulate a “latent unconscious aesthetic impulse” that existed and was made manifest in earlier art but has “remained unarticulated until the present century and civilization.” H. Osborne, *Aesthetics and Art Theory: An Historical Introduction* (New York, 1970), p. 158.

² A stimulating critical examination of the implications of the bioevolutionary approach as they apply to moral philosophy has been made by M. Midgley in *Beast and Man* (Ithaca, 1978).

³ Osborne, *op. cit.*, p. 188 and K. Popper, *The Logic of Scientific Discovery* (London, 1959), p. 79.

⁴ This is not to deny that there are other valid and valuable approaches to man and his works—cultural, economic, political, psychoanalytic, sociological, anthropological, etc.—but it insists that these take cognizance of biological fundamentals.

⁵ N. Elias, *The Civilizing Process: The History of Manners* (1939) (New York, 1978), p. 255.

⁶ I am speaking here of the evolution of the human species only, not considering the evolution of mammals or of life or of the cosmos.

⁷ I would hope that eventually a bioevolutionary view could contribute to elucidating biological reasons for universally considering certain configurations (e.g., proportions, shapes, musical intervals, combinations of these, etc.) to be beautiful or excellent or preferred.

⁸ The word “functionally” may misleadingly recall the so-called functionalist position in British cultural anthropology that sought to view every feature of a group’s life in terms of its social function. The position has been heavily criticized and does not concern me here. In any case, interpretations arising from those who espouse some theory of the nature or evolution of culture need not conflict with a bioevolutionary viewpoint which precedes and should encompass other explanatory approaches. See also note 4, above.

⁹ A bioevolutionist would look at the selective advantage of art as it might be regarded by modern Western aesthetic theory somewhat as follows. In our evolutionary past, when human nature was being formed (i.e., in the five million years that preceded the mere 10,000 years of human civilization), art in conjunction with ceremonial ritual and other vital aspects of life had selective value to those in societies that practiced it. As art has become detached from life, especially in the past century, its positive contributions to human existence are less clear. In its present elitist form there would appear to be little general benefit to the human species as a whole, and there seems no good reason why art appreciators (more than philistines) would pass on more of their genes to the next generation. However, see D. Mandel, *Changing Art, Changing Man* (New York, 1967), who proposes a more positive selective role for art in the modern Western sense.

¹⁰ For an expanded discussion of this notion, see E. Dissanayake, “Art as a human behavior: Toward an ethological view of art,” *Journal of Aesthetic and Art Criticism* (Summer, 1980), 402.

¹¹ E. O. Wilson, *On Human Nature* (Cambridge, Mass., 1978), p. 104.

¹² See K. P. Oakley, "The emergence of higher thought 3.0–0.2 Ma B. P." (1981) in the emergence of man, *Phil. Trans. R. Soc. London B* 292, 205–211, for these and other examples of the ability in early hominids to recognize specialness.

¹³ The most recent fossil findings suggest that the immediate predecessor of *Homo* branched from its parent *Ramapithecus* stock at least five to six million years ago. R. E. Leakey and R. Lewin, *Origins* (London, 1977).

¹⁴ These fundamentally human abilities are found with varied emphasis in all human behavior and it might be objected that they are too general to contribute to an understanding of the origin and evolution of art. I mention them here in order to acknowledge that art as a complex behavior has had a complex history and most certainly did not come from one simple antecedent, like play or pattern-making or body-ornamentation, as some have proposed.

¹⁵ R. Kellogg, *Analyzing Children's Art* (Palo Alto, 1969–70).

¹⁶ E. Dissanayake, "A hypothesis of the evolution of art from play," *Leonardo* 7 (1974) 211–17.

¹⁷ E. Dissanayake, "An ethological view of ritual and art in human evolutionary history," *Leonardo* 12 (1979) 27–31.

¹⁸ J. Pfeiffer, *The Emergence of Society* (New York, 1977), p. 334.

¹⁹ W. Burkert, *Structure and History in Greek Mythology and Ritual* (Berkeley, 1979), p. 50.

²⁰ Also see E. G. d'Aquili, C. D. Laughlin, Jr. and J. McManus, *The Spectrum of Ritual: A Biogenetic Structural Analysis* (New York, 1979) whose analysis of the evolutionary development of hominid brain structure and corticalization leads them to postulate that *Homo erectus* was already at about 750,000 B.C. "a complex mythmaker and religious ritual practitioner" (p. 167).

²¹ J. Pfeiffer, op. cit., p. 473.

²² H. Gardner, *The Arts and Human Development* (New York, 1973), pp. 98–107.

²³ H. Gardner, op. cit., pp. 100–01.

²⁴ There is unfortunately not space here to amplify this or discuss other "universal" biologically-based predisposing factors for affect in works of art—e.g., depicting psychologically-salient body parts such as staring eyes, faces, sexual organs; employing appar-

ently universally-satisfying (or disturbing) shapes and proportions; using light and dark, silence and loud sounds, balance and imbalance, bodily associated rhythms and gestures, and other innately-significant stimuli.

²⁵ Systematizing these criteria and these qualities is of course a major concern of the subject called Aesthetics.

²⁶ Musical style has been called "a complex internalized probability system." See L. B. Meyer, "Meaning in music and information theory," *Journal of Aesthetics and Art Criticism* (June, 1957), pp. 412–24. This formulation is not unlike what I mean by "code." Meyer distinguishes three aspects of musical experience with which I would not disagree, although in my two-tier scheme his sensuous and associative-characterizing aspects would be combined as the "lower" tier and his syntactical aspect is my "upper" tier.

²⁷ See C. R. Hallpike, *The Foundation of Primitive Thought* (Oxford, 1980) for a recent application of Piaget's theory to an understanding of primitive mentality.

²⁸ A. Fuglesang, *Applied Communication in Developing Countries: Ideas and Observations* (Dag Hammarskjöld Foundation, 1973).

²⁹ J. Goody, *The Domestication of the Savage Mind* (Cambridge, England, 1977).

³⁰ S. Gablik, *Progress in Art* (London, 1976).

³¹ M. Donaldson, *Children's Minds* (New York, 1978).

³² H. Gardner, op. cit., pp. 305–06.

³³ Why this is so is puzzling. Perhaps the most one can say is that just as some persons have always been more agile than they needed to be, or required less sleep than their companions, or had more imagination and intelligence than the environment demanded, so has aesthetic aptitude and concern been retained among the myriad qualities that give men their selectively-advantageous great variability and adaptability.

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