Alland: The Artistic Animal: An Inquiry into the Biological Roots of Art

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REVIEWS AND DISCUSSION


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The Artistic Animal by Alexander Alland, Jr., will extend the current debate on sociobiology to the subjects of aesthetics, art, and expressive culture as products of evolutionary biology, ecology, and culture history. These subjects are accorded only minimal attention by Edward O. Wilson and other sociobiologists who concentrate their research on nonhuman behavior, though they extend their results to the human animal (Wilson 1975:31, 165). Alland, best known for his work as a physical anthropologist, has had a continuing interest in art and folklore (1975a; 1975b; 1972; 1970; 1967). In this slim volume he combines his interests to speculate about the origin and evolution of art. He generalizes from human expressive behavior to "the human genetic blueprint" (p. 32).

This inexpensive paperback is obviously intended to reach a wide audience and to popularize his views. I doubt it will capture the public imagination in the way that Robert Ardrey's The Territorial Imperative (1967) and Desmond Morris's The Naked Ape (1967) have succeeded. These books, which also emphasized the instinctive basis of human behavior, provided a popular rationale in the 1960s for aggression and war. This book, concerned with less violent behavior, may still appeal to those who wish for simple solutions to complex problems in the 1970s.

Alland acknowledges the relative scarcity of structural studies in the visual arts and cross-cultural studies of children's art, artists, and aesthetics (pp. 97, 140). Partly because of this scarcity of relevant empirical data on which to base his hypotheses, Alland relies on the comparative method, reasoning by analogy from a widely scattered literature in anthropology, psychology, sociology, and art history as well as from music, art, dance, and film criticism. The examples from which the comparisons are drawn are a kaleidoscope of pop art, op art, Dadaism, surrealism, action painting, cave art, primitive art, children's art, Ingalik Indian rituals, Japanese banraku puppetry, Shakespeare, and African and European folk tales.

The author attempts to synthesize and describe the richness of the phenomenon of art. He attempts to follow the biological argument that a whole explanation must include the "how" as well as the "why" of behavior (The New York Times 1978:18). Therefore, he includes language, culture, and history as part of the proximate or immediate explanation, the "how" of behavior; and he includes genetics, adaptation, and evolution in the "why," or ultimate explanation. This is consistent with his earlier efforts to reconcile conflicting lines of major theoretical developments in anthropology, such as ecology and structuralism. It is consistent with his efforts to comprehend both equilibrium and change, underlying universals and observable differences (1975:59).

The attempt will be considered either courageous or foolhardy, depending on which side you are on in the sociobiology debate; and it will depend on your theoretical preference for dealing with macroanalysis or microanalysis, for similarities or differences in human behavior. In any event, the attempt is premature. Neither the methodology used nor the available data can support the stated purpose of the book. At this level of macroanalysis, Alland's approach precludes meaningful research. It obscures significant differences in the performance and interpretation of artistic behavior, and it glosses over profound controversies in related disciplines. It remains open to the oft repeated but justified charge of "reductionism."

It is not my intention here to deny the existence of certain predispositions in the human animal. Indeed, I have suggested elsewhere that there is probably a predisposition for art as there is for language (Kaplan 1979, 1977). What I find objectionable is the extent of the conclusions drawn by Alland from the necessarily vague concept of "predisposition" to genes, and from genes to specific behavior as complex and varied as expressive behavior in the visual arts, music, dance, theater, and ritual (pp. 32, 63). The implication seems to be that there may be "aesthetic" and "creative" genes just as there are genes for "altruism" posited by biologists and sociobiologists (Barash 1977:77; Brown 1975:196-198; Wilson 1975:3). Alland attributes aesthetics and artistic creativity to the "genetic potentialities, built into our brains" (p. xi). But this is far from a meaningful statement, given the present state of knowledge. While altruistic behavior is an accepted concept in animal biology, its relationship to genes remains problematic and awaits confirmation through quantitative studies (Brown 1975:205). Learning and experience complicate the genetic determination of behavioral differences among animals (Brown 1975:465, 607, 611). Wilson himself admits "that culture is overriding, and that therefore with reference to sociobiological theory the human species is a wild card" (The New York Times 1978:18).

Concepts such as evolution, adaptation, ecology, and culture used in the book are more complex and controversial than Alland presents them. The present study of hominin evolution encompasses a series of competing models and interpretations based on the same fossil record: Seed-eaters are opposed to hunters as opposed to hunters and scavengers (Buettner-
Evolution of the brain, based on fossil evidence derived from endocasts of the cranial cavity, reveals "there are no features observable in an endocast or in a brain that would rule out 'advanced' toolmaking from the behavioral repertoire of even the smallest-brained of our hominid ancestors or of the many living tool-using vertebrates" (Jerison 1975:28). Jerison notes, "There is no 'brain center' for this talent, nor is there a minimum amount of brain that can be associated with it" (1975:30). The challenge for researchers is to develop techniques for distinguishing a cognitive component in toolmaking (Jerison 1975:52).

Human brains only rarely provide significant and comparative information. The mammalian brain is known primarily from studies of the brain in rats and cats and, to a lesser extent, in monkeys. Even though areas of the brain have been mapped, the diffuseness of the wiring diagram means "that a 'function is not really localized' in a particular part of the brain" (Jerison 1975:31–33). While speech and language areas constitute 20 percent of the brain, they are not localized functions; and a specific response to a specific speech stimulus in a specific neuron "has never been studied" (Jerison 1975:52).

Thus, when Alland discusses "structure" as being in the brain, enabling us to perceive form, the nature of this structure must elude us (p. 74). When he states, "The rules of structure are hereditary and coded in the brain," and that the rules of form constitute aesthetic universals which provide unconscious cognitive order, these statements cannot tell us how, why, or if this takes place (p. 101). From Jerison's review of the fossil evidence and current research on the brain it is clear that much work remains to be done. The future task of neuroscientists will be especially concerned with elucidating the "wiring diagram" for the brain (Jerison 1975:31).

The concepts of adaptation and ecology, too, are more complex than they are made to seem in The Artistic Animal. Art is rooted in biology, according to Alland (p. 41). The origin of art is attributed to the brain, and to brain-based pattern recognition and discrimination which are adaptive for survival and gave rise to the evolution of mammals and man (p. 122). "Preferences for certain types of spatial arrangements" are found among ducks and apes as well as humans (p. 31). Art also includes such features as play, a particular feature of primate behavior, and information and memory storage, part of mammalian and human adaptation. Only the ability to think and behave in terms of symbols, which Alland calls "transformation-representation," is exclusively human; and he links this ability to the functions of the right and left hemispheres (pp. 34–36). I have already commented on this kind of interpretation based on available evidence in the preceding paragraphs. Known adaptations of pattern recognition and discrimination among lower animals are the result of detailed research. For example, visual perception in the leopard frog is now known to be characterized by the selectiveness of ganglion cells in recognizing and relaying information to the brain (Alcock 1975:112–114).

Environment, physical and social, plays a major role in the adaptive responses of different species, both human and animal (Alcock 1975:115, 451, 463; Brown 1975:268, 314). It must be studied in total context to be understood. Ecological anthropologists and biocultural ecologists, too, recognize the need to focus on specific human behavior and processes (Bennett, Osborne, Miller 1975:176; Vayda and McCoy 1975:302).

If response to visual stimuli and perception are so variable across species because of environment, heredity, hazards, and change, how much more complicated is the way in which people "see" culturally. The evolution of art sketched by Alland "from signifying to figurative to abstract" (p. 89), and his concern with universal, unconscious, and transcultural aspects (p. 98), tends to draw attention away from specific cultural context. For example, the Eskimo "see" the role of the carver as releasing form from the bonds of formlessness, and bringing it into consciousness (Carpenter 1971:165). And they make no distinction between form and function. These kinds of differences and much ethnographic detail are lost in studies which focus on the underlying similarities.

Investigations and generalizations about the pre-human origins of art are based on living apes who are, in fact, not our ancestors. We did share a common ancestor in the remote past, but no living representative is available for testing and comparison. Alpha, Schiller's female chimpanzee in the Yerkes Laboratory, and Congo, Desmond Morris's chimpanzee, both manipulated and explored art materials in experiments (1971; 1962). The difficulties, detailed by Schiller, involved finding clearly interpretable modes of testing and the limited nature of the kinds of questions that could be presented to the animal (1971:3). The manipulation was clearly a pleasure in motor activity itself, and an outgrowth of tool-using behavior. Nonetheless, it is not artistic behavior in the human sense and in Alland's sense of transformation-representation (Wilson 1975:564). The real question here is, perhaps, whether or not it is useful to speculate about the origins of art at all.

The acquisition of symbol systems has received little detailed attention. A study by Howard Gardner, not cited by Alland, shows that it is possible to expose the effects of culture, learning, and experience on innate abilities in humans in a controlled investigation (1976:25). His subjects were young children who were not yet proficient in mastering any symbol system in their culture, and brain-injured patients who had to construct symbol systems anew (1976:22). While there were certain regularities between types of brain damage to the right and left hemispheres and behavioral sequelae, aphasic patients relearned
symbol systems at different rates (1976:27); it depended on their special learned skills, motivation, age, and personality (1976:29, 35). Motor systems generally emerged earlier than those symbol systems which required knowledge and high-level cognitive operations. Apparently emergence is not fixed according to some invariable rule but depends on a number of variables.

Some essential concepts in The Artistic Animal are intentionally undefined, others are defined so broadly as to be useless, and still others are defined in contradictory and confusing terms. Initially, Alland declines to define art and beauty. Nonetheless, he extends the definition of aesthetics, from an unspecified edition of Webster's Collegiate Dictionary, to include "appreciative of, or responsive to, form in art and nature" (p. xii). "Good form" produces an aesthetic response in "sensitive individuals" (p. xii). This is one of the many examples of circular reasoning found in the book: aesthetic response is defined by the very individuals who respond to aesthetics, and good form is distinguished from bad form by these same sensitive individuals. Later, more than one quarter through the book, Alland defines art. It, too, is another irrefutable definition. Art is "play with form producing some aesthetically successful transformation-representation" which "arouses an aesthetic emotion in us" (pp. 39–40). Art is a kind of autotelic communication game (p. 39); its seductive aspect is biological in origin and is the essence of art (p. 41). Although Alland insists that its impact depends on the individual's perceptual and intellectual capabilities, personality, and cultural background, there is no indication of how this happens or how an individual can be interpreted within the larger evolutionary theoretical framework.

The concept of structure is central to the book, but its interpretation and exact whereabouts are uncertain. It is both in the brain and in a work of art (p. 74). Structure, unlike convention, is beneath the surface (p. 100). The rules of structure are hereditary, but the content of particular structures is cultural (p. 101). Structure is also the relation between elements of cognitive activity (p. 103) and the cognitive structure itself (p. 120). The innate nature of structure accounts for the ability to perceive good form; underlying structure may be distorted and transformed by societal change. Good form may, however, disappear with the transformation of structure into "an industrial mode" (p. 130). These conflicting and confusing uses of the concept of structure pose obvious problems for an investigator and a general reader. Alland proposes the search for underlying unity and aesthetic universals begins with the analyses of formal principles and common cross-cultural value judgments about art (p. 43). These ideas could be developed into testable hypotheses. Wilson has called attention to the absence of such multiple hypotheses for testing among structuralists (1975:559).

Obviously, implicit and explicit assumptions about the structure of the human mind and the psychic unity of mankind underlie the eclectic use of illustrative examples in The Artistic Animal. The author relies on exemplification, metaphor, and analogy as evidence of similarity. A closer examination of the book's opening comparison reveals the weakness of the methodology on which he relies. Alland compares subway graffiti with action painting of the 1950s. He equates an "erased" de Kooning drawing by Robert Rauschenberg with the "erasure," or cleaning of subway car graffiti by Transit Authority officials, as "an instance of life imitating art" (p. 3).

The Rauschenberg-graffiti analogy does not bear close scrutiny. The level of analysis is superficial, approaching the kind of remarks sometimes made by unsophisticated visitors in art museums: "My kid can do that!" "It looks just like Susie's painting!" Alland really knows better than this, so it is unclear just what the analogy is supposed to show. If this example and others that follow, juxtaposed in a series of quick cuts, television-style, are supposed to illustrate the gamelike character of art, as Alland seems to conclude in the first chapter, I am unconvinced that this notion contributes to a deeper understanding of art.

Rauschenberg's experiment with de Kooning's drawing belongs in the context of the history of Western art. It was an outgrowth of intense personal relationships and discussions among artists in New York in the 1940s and 1950s. Rauschenberg had been experimenting with erasing as a technique for creating new works of art (Tomkins 1964:66). To complete the process and attack the iconization of art, he chose a de Kooning drawing for erasure. This act, which both men saw as creative, was not repeated because Rauschenberg felt it was a successful work (Tomkins 1964:68).

Unlike the Action painters of the 1950s, teen-agers who sprayed and wrote graffiti on subway cars in the 1960s and 1970s were very much concerned with the completed car, the product. The painters were immersed with the act of painting itself, not the product (Rosenberg 1969:213–214). Graffiti were always carefully planned, if sometimes hastily executed. They were not spontaneous acts of creation. The teen-agers kept sketchbooks in which they would work out their style beforehand and in which they would collect examples (of others) they admired (Stuart 1978).

"Erasing" by subway officials was an act of destruction aimed at removing the work of hated vandals. It was a clash between generations, between authority and alienated youths. To compare this destructive act with the understanding and motivation shared by de Kooning and Rauschenberg in creating a new work of art is to confound the significance of both arts.

The concepts of structure and convention, which are central to the argument put forward in The Artistic Animal, are developed in Chapter 6, "Good Form." The author distinguishes between convention and structure, which refer to surface form and underlying form, respectively. The latter is presumed to be in the brain itself, producing gamesmanship and the universal aesthetic response to "good form." The op-
position of convention and structure, and the relation between them, may be compared to the opposition between culture and nature in art (p. 92). Alland illustrates his methods with some examples of the ways the game of art is played. He employs game theory, information theory, a biological evolutionary model, and history to account for change and make structural analysis more open and dynamic (p. 115). Some structural studies are capsuled in the previous chapter, "The Structure of Art" (pp. 86, 96). Alland admits he finds this type of analysis works better for literary texts and for visual art tied to myth and ritual (p. 97). He cites a number of structural studies of visual art. Regrettably, some references are not included in the bibliography (pp. 94, 97). Critics referred to and quoted in the text are also omitted, and no translations are given (pp. 105, 117). These omissions and similar ones may be found throughout the book.

The synthesis Alland attempts in The Artistic Animal overarches theories of evolution, ecology, and structuralism to provide an explanation of the origin and development of art. To achieve such an ambitious synthesis within the confines of this slight volume, quite apart from the problems inherent in the attempt, requires, at the very least, a closely reasoned, elegant argument. What is presented is a series of sometimes contradictory, speculative statements drawn from widely scattered writings in a number of disciplines. The argument presented does not rest on a firm data base since, as Alland acknowledges, there are very few structural studies in the visual arts. However, he announces his intention to do fieldwork in the near future, proposing a study of children's art (p. 140). It will be interesting to learn the results of this empirical study when it is completed. The speculations contained in The Artistic Animal, though lively and provocative, are illustrated with a profusion of disparate images which are not firmly tied together. The tenuous threads binding the argument can readily be plucked apart when they are examined in detail. However, the complex theoretical issues involved signify that a critical analysis will be beyond the critical capabilities of most nonprofessional readers for whom the book is apparently intended.

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This is one of the most useful—and amusing—books I have seen on an aspect of a foreign culture, in this case French "body talk." The French concept of the beau geste reveals a culture which puts as much emphasis on form and style as it does on content: it refers to a beautiful, and therefore good, altruistic deed or action. French literature and film are filled with examples of those who sacrifice all—family, riches, perhaps even reputation—with a beau geste. Laurence Wylie, one of the world's most knowledgeable scholars of French manners and customs (his Village in the Vaucluse is a text much admired by humanists and social scientists), has compiled a respectful, yet witty series of gestures (a term I prefer to "body talk") derived from his familiarity with French culture, and he has published them (with the help of the collection's photographer, Rick Stafford) under a tongue-in-cheek title which only tentatively underlines the seriousness of the enterprise.

It is this serious aspect of Wylie's effort that must not be ignored, no matter how amusing his commentary and exposition. The book's jacket has a picture of Wylie making the gesture called le pied de nez, which "indicates a feeling of defiance, expressing delight in another person's discomfort." The last picture of the book shows the most famous of European gestures—les bras d'honneur—called "the shaft" (or, less elegantly, "up yours") in English. Yet this intentional mockery of his enterprise and his bemused readers should not detract from the fact that Wylie knows that to speak a foreign language is only the first of several steps toward total expressivity in a foreign culture. I do not exaggerate when I submit that every instructor of beginning, intermediate, and advanced French should provide his or her students with a copy of this book. It is only after reading Wylie's deceptively simple commentary and seeing these telling photographs that one realizes that a very important dimension of language instruction is scarcely available to American students. I wonder, too, if some of the invertebrate opposition on the part of our students to language learning in general could not be undermined if we made our course "live" through teaching such "body language" along with the past, subjective and irregular verbs.

Wylie's introduction begins: "Words are so essential in conversation that we exaggerate their importance and overlook other signals" (p. vii). He does not offer any new theories on the relationship between verbal and nonverbal communication, nor does he cite the scholars who have done work on this connection. However, it is obvious from his remarks that he is aware of the traditions and assumptions of nonverbal communication. He warns his readers that the incorrect gesture can be just as inappropriate as the incorrect word; the book and its photographs, in other words, should be used with caution. The seriousness of his enterprise is brought to our attention when Wylie explains that he honed his skills at gesturing (all the photographs, by the way, are of Wylie, dressed simply in a dark turtleneck against a gray or black background, without props of any kind) at the Jacques Lecoq School in Paris for Mime-Mouvement-Théâtre, where he "spent the year 1972-1973 studying cultural differences in body movement and nonverbal communication" (p. ix).

There are only nineteen pages of text; the remainder of the book is taken up with about eighty photographs. These photographs, all graphic but not exhaustive, are divided into eight thematic groups ranging from "Boredom, Indecision, and Rejection (Le Jemenfoutisme)" through "Sex (Sex)" to "Threat and Mayhem (Fais Gaffe)." Wylie is not timid about using these expressions that make explicit reference to sexual and other biological impulses. My favorite among these latter (and one which shows how a concept can mean one thing in one culture and something else entirely in another) is the explicit il a du cul ("he has some ass" [I would be even more explicit here than Wylie!]) to mean not a negative but a positive "he's really lucky." Another interesting cultural aspect is what Wylie refers to as le jemenfoutisme (derived from the verb "foutre," which means, in the most gracious sense, "to screw"). Wylie translates it as "Who cares?" or "I don't give a damn," which obviously is a sentiment we all express from time to time. Wylie's point, however, is that the attitude is so deeply rooted in France's collective consciousness that there is "a long list of gestures indicating a rejection of responsibility, the belittling of one's errors, the affectation of indifference" (p. 23). Obviously a generality, this observation nonetheless pinpoints an attitude that only a series of courses in recent French history and political science would reveal to the student who has not spent more than a couple of weeks in that country.

One more such observation should be cited as an example of the potential that such studies would have for those learning how to live and communicate when in France. In the chapter entitled "Problems and Weaknesses (Les Petites Misères)," Wylie observes:

This category, which deals with the petty weaknesses of humanity, could easily be used to analyze the French value system... I do not believe that the French are more rational than other people, but they certainly have the most exaggerated concern for man's reason. All sorts of hand and finger movements around the top of the head serve to call attention to the malfunctioning of someone's brain (p. 35).

Such an observation—though, again, obviously superficial—shows how rich a rhetoric of gestures can be for anyone who studies a language with the ultimate goal of understanding a culture. And this is, I believe, the most felicitous message that comes from