

GARDNER, HOWARD. THE ARTS AND HUMAN DEVELOPMENT: A PSYCHOLOGICAL STUDY OF THE ARTISTIC PROCESS. New York: John Wiley & Sons, 1973, 395 pages, \$12.95 (emphasis on the development of creativity in the child)

Reviewed by David M. Abrams

The Arts and Human Development is a comprehensive investigation of the steps children go through in acquiring the roles of creator, performer, audience participant, and critic in the field of literature, music, and the visual arts. Although these art forms have only a tangential relationship to the dance, this well-written book should have great interest to all researchers in the arts, since it presents an overall theory of artistic development as well as giving precise and detailed suggestions how the methods of developmental psychology can help resolve many vexing problems in the arts, such as the difference between art and science, the inter-relationships among the arts, the relationship between technical skills and aesthetic perception, the question why many prodigies never develop further and why other children go on to become great artists, and the important issue of the role of aesthetic education in developing the unique characteristics of the human spirit.

One important value of a developmental approach to the arts is that it provides a general understanding of what children of different ages are capable of artistically, which then enables us to better match our educational programs to the child's developmental level. But the more important application of the kind of rigorous developmental methodology that Howard Gardner advocates here is that it is often the best way to find out how learning actually takes place, particularly if the identification of a sequence of stages in the acquisition of certain concepts or skills turns out to be the same sequence of steps that everyone passes through regardless of age.

Applying these innovative methods to many of the perennial problems of the arts has led Gardner to an original explanation for the

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David M. Abrams is a doctoral candidate in developmental psychology at Columbia University, where his research under Dr. Brain Sutton-Smith is focused on the development of improvisational rule systems in children's games, word play, melodies, and the dance. As well as his interests in the arts, Mr. Abrams is investigating new ways of using folklore and other spontaneous activities of the child's everyday play behavior for designing alternative educational environments.

emergence of symbolic behavior, a new and startling theory of aesthetics, and a more unified view of child development that reconciles the often conflicting perspectives of Freud, Erikson, Piaget, Werner, ethology, and gestalt psychology. Piaget, for example, is criticized for only considering the development of scientific problem-solving, while Freud and Erikson are taken to task for limiting themselves to emotional changes during childhood. In Gardner's opinion, postulating the goal of active "participation in the arts" becomes a much more encompassing end-state for human development than either Piaget's aim of "participation in the sciences" or Freud's goal of "normal emotional functioning."

The study of artistic development then allows one to give equal emphasis to what Gardner considers to be the three basic components of human functioning--the making, perceiving, and the feeling systems. In the early months of life, these systems are initially separate and autonomous. But gradually the infant learns to co-ordinate them together in order to solve simple problems like seeing a toy and reaching for it (the perceiving and making systems), and eventually he learns to integrate them together in smoothly executed skilled activities, such as eating, crawling, and playing. By about the end of the second year, interactions among the three systems become activities of "cross-modal matching and transfer." The infant, for example, is now able to hear a tune, and sing it himself or tap out its rhythm on a table. In this way, the symbolic elements of the tune are passed from system to system or from one mode of functioning to another. And Gardner argues convincingly that such instances of cross-modal transfer constitute evidence that the child is now capable of symbolic behavior. In this new stage, the child reconstructs his three systems on the symbolic level and the interactions among them now bring about integrations among symbolic making, perceiving, and feeling behavior. This is a critical development in Gardner's view, because at this point the "modes and vectors" of the feeling system can be integrated with the making and perceiving systems, thus providing the child with a symbolic language with which to create and perceive artistically.

Gardner takes this notion of modes and vectors from Erikson for whom they are directions of emotional and psychosexual content that are emphasized at different stages of development. The modes of passive incorporation (e.g., sucking) and active incorporation (e.g., biting and grasping) characterize the oral stage of infancy; the anal stage is characterized by the modes of retention (constipation) and expulsion (elimination), and the genital stage by intrusion (penetration) and inclusion (vaginal enveloping). This brings the child to 6 or 7 years of age, which is the time for Gardner when the modes and vectors of the feeling systems--through their interactions with the making and perceiving systems--have become basic metaphors that will be expressed in all subsequent symbolic and artistic behavior.

In perhaps his most interesting and original chapter "The World of Symbols," Gardner sets out this theory of symbolism. He agrees with Piaget's explanation that the infant is not capable of representation in any form until he learns that objects continue to exist, even when he is not looking at them; therefore a mental image of the object (which Piaget calls the concept of object permanence) is really the first symbol. But he makes no mention of Piaget's position that symbols are also derived from imitation, becoming true symbolic representations when the child is able to imitate someone who has left the room. This is called deferred imitation, and for Piaget both the concept of object permanence and deferred imitation come about towards the end of the second year, which corresponds to the time Gardner gives for the genesis of the first symbols brought about by cross-modal transfer. In my opinion, Gardner's explanation is an intriguing hypothesis that certainly warrants further empirical investigation.

However, when he outlines his idea of Erikson's first three psychosocial modes becoming generalized across the three systems on the level of symbols and thus becoming the main repertoire for all further artistic expression, this reviewer is not as readily convinced. When he reviews empirical studies of children's stories, poems, melodies, drawings, and paintings in the following chapter, he continues to insist that the most useful analysis of these art products would be one based upon the Eriksonian modes and vectors. However, although his own analysis of this research literature is very interesting and most valuable as a pioneering effort to relate a great many diverse studies into a single, unified theory of artistic development, Gardner himself never really demonstrates a modal-vectorial analysis for any of these studies. So we are left unconvinced, feeling that his modes and vectors are too general as they are presented, and therefore relatively useless. Towards the end of the book, Gardner even suggests that modal metaphors could be employed in order to synthesize both scientific and artistic development in a single theory. But again we would say that a theory is not necessarily made more powerful by becoming more general; it may actually be made "weaker" in the mathematical sense. By being so general that it predicts everything, it actually predicts nothing specifically, and rigorous empirical specificity should be the goal of any adequate theory.

But these criticisms should not lead us to lose sight of the real contribution of the book, which is Gardner's delineation of four stages of artistic development. The first stage (birth to age 2) begins with the three systems of making, perceiving, and feeling in relative isolation from each other. Gradually the systems interact and become integrated into skilled actions, allowing the infant to discover that objects are permanent even though they may become hidden from view. And the interactions of cross-modal transfer make possible the emergence of symbolic behavior such as playing, drawing, singing, dancing, and rhyming. The second stage (ages 2 to 7) is characterized by this new world of symbols.

The child can now reconstruct his three systems in a language of symbolic communication--he can perceive symbols in his environment, make representations of objects in his drawings and pretend play, and he can project his feeling modes of openness/closing or penetration/enveloping into artistic metaphors in his finger painting and spontaneous melodies. All artistic activity uses the language of symbols, and once the child begins to use symbols fluently in his making, perceiving, and feeling systems, he begins to participate fully in the arts. In other words, the three behavioral systems have now turned into the four essential roles of the artistic process. The making system has become the creator and performer, the perceiving system the audience member and critic, and the feeling system the audience participant. By the age of 7 or 8, the child has gained enough fluency in these roles for Gardner to conclude that he is now an artist.

The greatest portion of the book reports numerous studies that support this startling position that the 7 year old is capable of participating in most of the roles of the arts, except perhaps that of the critic. His drawings, songs, and storytelling have been shown to have a balanced sense of form, harmony, and composition, an imaginative use of colors, tones, or words, a rhythmic vitality, and an understanding that art can symbolize aspects of the world. Thus the child's vivid combination of symbols and his uninhibited symbolizing of private emotions in artistic forms convinces Gardner that the child of 7 is fully artistic and "does not need to go through any further qualitative reorganizations." The only aspects that he lacks is familiarity with the adult artistic traditions, sufficient motor skill in order to have complete control of his medium, the capacity for sustained effort needed to create a large integrated work, and the kind of life experiences that deepen and enrich artistic creations. But Gardner claims that these lacks do not require any qualitative reorganizations; further development is only an extension of processes already available to the 7 year old. Therefore the third stage (ages 7 to 12) is not really a discretely different stage. It is simply an extension of the second stage, becoming a period when the technical aspects of artistic media are developed. Perspective appears in drawing, harmony may be added to simple tunes the child makes up on the piano, and written stories may be embellished with stylistic flourishes and grammatical sophistication.

The fourth stage (ages 12 to adulthood) is that of adolescence when social conformity, sexual and physical changes, and the formal logical thinking stressed in our educational systems combine to block out much of the spontaneous, artistic expression of early childhood. Most children, Gardner points out, give up drawing and singing because verbal intercourse is more important culturally. Moreover, the stories, poetry, and painting of the adolescent may become more stereotyped and rigid, because their self-consciousness and desire for conformity have led them to imitate established models in the adult art tradition as well as to block the uninhibited expression of their personal feelings in an artistic medium.

This provocative theory of artistic development is likely to astound and perhaps enrage many readers of this book who have had personal experience in the arts or who have worked with large numbers of children. Most artists know the lengthy and arduous path to mastery of an artistic medium--the hard work, the intense periods of working with one theme, idea or emotion, and the discipline involved in translating an inspiration into a concrete, dramatic product--and most people who work with children know that the average 7 year old is far from being that kind of artist. Gardner illustrates his book with examples of precocious artistic excellence in poems, stories, drawings, painting, and songs, and he insists that this is his best evidence that 7 year old children have achieved full artistic status. But this is misleading, for examples of such artistic ability in a few young children does not, of course, prove that every 6 or 7 year old could produce works at this level. Moreover, in his review chapter of experimental studies, Gardner pays his closest attention to the period leading up to the 7 year old "artistic end-state." He does not really systematically examine the steps the child may pass through after this point. The middle-childhood years may well be a period of increased artistic proficiency in the technical aspects of a medium and the adolescent period has certainly been observed by many to be a time of artistic decline. However, my guess is that further qualitative stages would be discovered within these two general periods if a detailed and systematic investigation were in fact undertaken.

Gardner does devote considerable time to the question why certain individuals go on to become adult artists, and he outlines several personal qualities and experiences that may enable the artistic child to pass through his turbulent adolescence. After examining the early lives of Sartre, Thomas Wolfe, Dickens, Stravinsky, Picasso, Giotto, Mozart, Kafka, Goethe, Saint-Saens, Lewis Carroll, and others, Gardner suggests that strong motivation, a persistent self-confidence in one's work, a close personal feeling about objects and other people, a heightened sensitivity to one's own experiences, and encouraging reinforcing parents, may sustain certain individuals through the adolescent period that so often spells artistic diminution. But if the aspects of the adolescent stage, such as excessive self-consciousness and conformity, do cause a deterioration of artistic sensibilities in most children, then the middle-childhood years may well be a "critical period" for artistic development. For unless the child is encouraged in the arts by reinforcing adults, and unless he is allowed to freely express himself in a stimulating, open environment during these critical years, he may lose all his early "artistic" qualities by the time he becomes an adolescent!

If this is true--and Gardner's evidence strongly suggests that it is--then educators should focus on the arts as the center of the curriculum during the school years in order to salvage not only the "participation of children in the arts," but also to salvage and develop those precious qualities of humanity that the arts especially foster--a playful fluency of expression, a deeply sensitive communication with others, an aesthetic and unified experience of nature, a welcome openness to new experiences

and challenging new ideas, and most importantly a development of one's own uniqueness as a person.

'So whether or not we fault Gardner for the generality of his modes and vectors notion, for the simplicity of his making, perceiving, and feeling systems, or for the methodology that leads him to award the 7 year old with the crown of "artistic excellence," we nevertheless cannot afford to ignore the real message of his book that the middle-childhood years constitutes the critical period for fostering artistic development. To avoid producing adults who are conformist and rigid in their ideas and prejudices, cold and critical in their perception of the arts and of other people, and who are alienated from their own experiences and environment, we could begin by building upon the artful qualities that the 7 year old has developed. We might then employ the child's own folklore and artistic expressions as the main focus of the school and begin designing alternative educational environments that allow for the playful, artistic unfolding of each individual in an open society that values them all. Howard Gardner's stimulating and lively book thus outlines a perspective that provides a much needed first step in this important direction.