

BOOK REVIEWS

The Developmental Psychology of Music. By David J. Hargreaves. New Rochelle, NY: Cambridge University Press, 1986. 260 pp.

As chief administrator of your country's public educational program, what role would you prescribe for music? What emphasis would you advocate for music relative to other subjects? What should be taught? To whom? When? How? These would not be easy questions for any individual or committee to address. They are longstanding and contentious issues in education. David Hargreaves believes that a developmental psychology of music is necessary to provide the foundation for the right answers, and his new book, *The Developmental Psychology of Music*, is an important addition to the growing collection of books on the psychology of music. Differing from its predecessors in a number of ways, it serves a variety of new functions as a text for undergraduate and graduate students, as a resource book for researchers or music educators, and as an overview for general readers.

The book is more about what the developmental psychology of music might become, than about what the developmental psychology of music is. Hargreaves reviews the current state of knowledge with the hope of encouraging progress in this area. He is motivated by theoretical interests in psychology and experimental aesthetics, by practical pedagogical concerns, as well as by the principle that full knowledge of music processes entails an understanding of their origins in the child. This is an eclectic and ambitious work and the present review highlights some of the main features.

One unique aspect of this book is its joint emphasis on American and British research. Hargreaves, who is British and is the head of the Leicester Music Research Group has first-hand experience in an American environment having taken a study leave at the Center for Music Research at Florida State University. Thus, he is sensitive to the commonalities and differences between two cultural approaches to education and research. Hargreaves uses a wide range of other resources, research and pedagogy from many countries, autobiographical material of composers, popular culture, and other art forms. Indeed, there are 24 pages of bibliographic citations, all of which seem to have been primary sources. The text is liberally illustrated with useful diagrams and original summary tables.

The style is often conversational rather than literary, befitting an approach that pays tribute to everyone's everyday experience of music. The tone is also personal as Hargreaves shares with the reader his children's earliest music and visual art productions, opinions about directions for future research and practice, and critical commentary on the past.

One of Hargreaves' messages is to recognize the impact of all music exposure provided from earliest years. Music is not just the classical works of the great composers. In fact, for most people, music is anything but this. He states that "...psychologists have woefully neglected the 'mundane' or 'lay' aspects of musical experience. They have dealt largely with serious 'art' music, which is a

Book Reviews

minority interest relative to the many different forms of 'folk', or popular music" (pp. 7-8). Further, he argues that "...any adequate psychology of music must be based on the widest possible range of people, as well as of musical forms" (p. 108). By understanding what music is to the average person, it may be possible to delineate a psychological theory of development that could underlie principles of music education.

A second message of the book is that cross-disciplinary perspectives are relevant to questions about music and psychology. This is not a new message of course, but it is expressed in a new way, by integrating the psychological developmental literature with material from education, philosophy, musicology, sociology, and aesthetics.

The most important, and perhaps controversial message is in regard to music teaching and developmental psychology. Hargreaves advocates a progressive music education associated with learning by doing, with emphasis on freedom, discovery, and activity, and including improvisation, composition, playing by ear, and pop music (along with music of the Western symphonic tradition). He feels that these approaches are compatible with findings from music developmental studies inspired by Piaget and social psychology and he urges further research and application of this kind, particularly music conservation tasks.

In addition to the content covered, Hargreaves considers methodological issues in developmental research. For example, he refers to advantages of sequential techniques over purely longitudinal and cross-sectional designs. He points out the necessity of including control tasks which do not improve with age in order to show that development has occurred. He is skeptical of "unrepresentative subject samples" (p. 80) and contrasts experimental and naturalistic approaches (lab and field).

Surprisingly, in his concern for methodology he does not talk about practical difficulties of testing infant, child, and senior subjects. He suggests rather that the emphasis on adult subjects resulted from an interest in issues lacking a developmental slant. In any case, Hargreaves has maneuvered easily from one age level to another and from paradigm to paradigm in his own research. His versatility and productivity is impressive, filling in many gaps in current knowledge with studies, for example, of children's vocal production and early drawing, cross-cultural music conservation studies, repetition/liking in children and adults, a modified repertory grid technique for classifying responses to music, sex-role stereotyping, and creativity. However, with citations of over 500 other authors, the eight chapters of the book are by no means a stage set for Hargreaves' own research.

Chapter 1 outlines the three perspectives of the book, from music psychology, developmental psychology, and music followed by a review of approaches to music development. Here are sections on developmental theory, cognitive psychology, learning theories, experimental aesthetics, psychometric approaches, and social psychology. Also expressed is the view that music psychology should be part of every student's psychology training in that music psychology overlaps almost every area of psychology.

Hargreaves

Chapter 2 contrasts two theoretical approaches to cognitive development, the Piagetian stage approach versus the approach attributed to Howard Gardner of a separate music intelligence which is not governed by an overriding cognitive stage. Future researchers are challenged for an empirical resolution while Hargreaves presently favors a model which incorporates ideas from both perspectives.

Separate chapters are devoted to the preschooler and the schoolchild. Chapter 3, on the preschooler, including studies of infancy, concentrates on development of song and rhythm. In Chapter 4, the development of school children's melodic skills of pitch discrimination, absolute pitch, and acquisition of tonality and harmony and early representations of music are outlined. As well, the effects of environmental influences of practice, training, and the home are discussed.

Chapter 5 moves beyond the aural skills mentioned above to describe preference and other music responses. Hargreaves outlines LeBlanc's model of sources of variation in music taste which includes eighteen different factors that can influence eight different aspects of responding to music. Chapter 6 focuses on personality and creativity. Behavioristic, psychoanalytic, associative, cognitive, and psychometric approaches to creativity are discussed. The cognitive structure underlying composition and improvisation is also examined. Chapter 7 focuses on social psychology and music development including theories and research on social influence, popular culture, the school and social class, and music fashion.

Finally, Chapter 8 considers music education. It reviews methods of instruction including behavioral, pedagogical (Orff, Kodaly, and Suzuki), and programmed approaches, assessment and evaluation. The aim of the book is restated "...to draw together those parts of developmental psychology that can explain the phenomena of musical development: these explanations should form the natural foundation for musical education" (p. 213). One is first surprised that the final chapter is the shortest but Hargreaves does not need many words to make his main point clear. His comments here are, however, quite specific to the British school system, and to current British documents, in particular *Music from 5 to 16* by Her Majesty's Inspectorate (DES, 1985) which Hargreaves heartily endorses. If, as Hargreaves argues, music education must have a firm foundation in developmental psychology, one might wonder how the authors of the HMI recommendations came so close to the mark without having firsthand knowledge of developmental psychology. What Hargreaves means is that developmental psychology is needed to confirm the intuitions of enlightened music educators.

Excellent as the book is, a few minor criticisms may be mentioned. Hargreaves claims in the Preface that pedagogical practice in the sciences, in contrast to music, has a firm foundation in developmental psychology (p. ix). Since this educational model is one to which Hargreaves aspires for music, additional information about such teaching of science would have been helpful. If such evidence is not as prevalent as Hargreaves suggests, the possible application of the developmental research to music might be questionable.

While early on, Hargreaves suggests that the American educational system is more receptive to psychological theory than the British, we find later that Hargreaves does not think that the relevant theory (i.e., cognitive psychology, informa-

Book Reviews

tion processing, and Piagetian notions) has been more integrated into American than British schooling (p. 227). An American text, *Foundations of Music Education* by Abeles, Hoffer, and Klottman (1984), generally supports this view with regard to the United States, although it claims that the emphasis on movement in many American elementary-school teaching methods is (though perhaps coincidentally) consistent with Piagetian ideas about the importance of sensorimotor schemes and enactive representation. Moreover, Abeles et al. (1984) do not paint as pessimistic a view of the disparity between theory and practice.

Although Hargreaves talks about the importance of a lifespan developmental approach he neglects the last two-thirds of the lifespan. Yet, there are significant unanswered questions about effects of long-term exposure (through both passive and active music involvement) on sensitivity to music structure, preference, and other responses.

The overinclusiveness, to which Hargreaves is ready to admit, may lead to some losses along the way. The following are three examples. First, the conclusions drawn may not always be the most pertinent. For example, he describes Hair's (1977) investigation of effects of task structure on pitch discrimination which showed benefits of a nonverbal (matching) over a verbal response (p.85). On this basis, Hargreaves concludes that judgments about children's competence cannot be made directly from observations of their performance. The more important point seems to be that some kinds of tasks are more indicative of competence than others (p. 85).

Second, details of experiments sometimes supercede the theoretical question at hand. For example, in a review of Zenatti's study (p. 91) concerning tonality in which children were asked to say which one of three notes in a sequence had been altered in pitch on a second presentation, Hargreaves compares performance on tonal and atonal sequences without defining tonality. Three tones from the diatonic scale can vary considerably in degree of tonality although in the study it seems that all diatonic sets were considered to be tonal by an objective, but not necessarily psychologically valid definition. More attention by Hargreaves to the psychological definition of tonality might have been helpful here.

Third, there is some unevenness in the level of detail provided. For example, Dowling and Goedecke's study of short-term recognition memory (p. 101) which gives evidence for developmental readiness at different stages for different music skills is described in detail but, in contrast, no detail is given about studies by Botvin and Foley, mentioned at two different places in the text as demonstrating improvement in "musical conservation" tasks. The Dowling and Goedecke study was in press at the time of writing and the latter studies were available in earlier publications; nevertheless, many readers might be interested in knowing what the tasks were in all of these studies.

On the positive side, of the host of studies reviewed, Hargreaves singles out a few examples that should be followed up. Graduate students in search of thesis topics might well take note. He suggests that alternative methodological approaches and added rigour and detail would be worthwhile in documenting the shift from figural to metric representation of rhythm, which seems to parallel the shift from

Hargreaves

outline to first draft songs, and from topological to digital mapping (p. 100). He encourages the investigation of the interdependence of "formal" and "intuitive" music skills and the assessment of the age levels at which different component skills are most appropriately taught. He urges further studies of the repetition/liking relation coupled with broadcasting and audience research (p. 122). He points out the future scope for research on individual differences in aesthetic response using Machotka's approach (p. 142), and Kahneman's resource allocation model of improvising following Pressing's approach (p. 152).

The spirit of Hargreave's closing comments will no doubt be shared by many dedicated researchers in music and psychology: "The level of theoretical and empirical sophistication demanded by the arts may well be greater than that required in any other area, and our current explanations are only beginning to scratch the surface." He concludes: "I see the developmental psychology of music as a field in its infancy, with an enormous amount of as yet unfulfilled potential." With Hargreaves, it can be agreed, that the developmental psychology of music of the next 10 or 20 years is likely to look very different from the present one, especially given the boost that Hargreaves has provided.

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Reference

Abeles, H. F., Hoffer, C. R., Klottman, R. H. (1984). *Foundations of music education*. New York: Schirmer.

Author Notes

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