

## AUDIATION: A THEORETICAL AND PRACTICAL EXPLANATION\*

by Edwin E. Gordon

Audiation takes place when we hear and comprehend music for which the sound is no longer present or may have never been physically present. In contrast, aural perception takes place when we simply hear sound that is physically present. Sound is not comprehended as music until it is audiated after it is heard.

We audiate while listening to, recalling, performing, interpreting, creating, improvising, reading, and writing music. Though it may seem contradictory that we can listen to music and at the same time audiate music, we take for granted that we can think about what is being said at the same time we are listening to someone speak. The fact is that as we listen to music, we are aurally perceiving sound the moment that it is heard. It is not until a moment or so after the sound is heard that we audiate and give meaning to that sound while aurally perceiving and giving meaning to additional sounds that will follow in the music.

Although music is not a language, the process is the same for audiating and giving meaning to music as for thinking and giving meaning to speech. When listening to speech, we are giving meaning to what was just said by recalling what we have heard on earlier occasions. At the same time, we are anticipating what we will be hearing next as we are thinking about what is being said. Similarly, when listening to a performance, we are giving to what was just heard by recalling what we have heard on earlier occasions. At the same time, we are anticipating what we will be hearing next as we are audiating what is being performed. In other words, when we are audiating as we are listening to music, we are summarizing and generalizing what we have just heard while anticipating what will follow. Unfortunately, some musicians, like some members of an audience, are not always capable of audiating the music that they are hearing. Members of an audience who are not audiating usually do not know when a piece of unfamiliar, or even familiar, music is nearing its end. They may applaud at any time.

Through audiation, we interiorize singing and movement psychologically before we actually sing and move physically. That is, we learn from the outside in, from the general to the specific. Though we are capable of memorizing without audiating (comprehending) what we have memorized, we forget it more quickly than if we had audiated it. It is, of course, possible to memorize without audiating and to audiate without memorizing. Those who memorize, typically do not audiate and musicians who audiate, would have no need to memorize.

Consider the words "language," "speech," and "thought." Language is a result of the need to communicate. Speech is how communication takes place. Thought is what is communicated. The words "music," "performance," and "audiation" have parallel mean-

---

\* Freely abridged from the writer's recent publication: Edwin E. Gordon, *Learning Sequences in Music: Skill, Content, and Patterns – A Music Learning Theory*. (Chicago: GIA, 1993). 7404 South Mason Avenue, Chicago, Illinois 60638. (708) 496 3800. ISBN: 0-941050-38-6. Copyright by GIA, 1993. Used by permission of the publisher.

ings. Music is a result of the need to communicate. Performance is how the communication takes place. Audiation is what is communicated.

It would be difficult, if not impossible, to describe all of the ways and combinations of ways in which musicians audiate. Consider, for example, the unique differences between what a drummer in a jazz ensemble is doing when he is audiating the melody of a song as he is playing a solo, and what a conductor is doing as he is audiating one or more parts of a complete score as he is directing a symphony orchestra. Consider also how differently a performer is audiating when he is interpreting a piece of music as a soloist and when he is playing in ensemble. It is more difficult for one ensemble player to audiate what another ensemble player is performing than it is for him to audiate his own part. Further, consider audiation in relation to practicing and performing. When practicing, one is conscious of what he is doing and he absorbs the music. When performing, one is unconscious of what he is performing and the music absorbs him.

Some musicians are capable of audiating one piece of music as they are listening to another. Moreover, a musician who is truly improvising may be audiating aspects of a piece of music that he is performing which are different from what he is actually performing; for example, in jazz, the harmonic progressions that underlies the melody or the melody that underlies a variation. Composers who audiate, who do not need to use an instrument while composing, usually audiate concurrently several aspects of the music that they are creating; for example, melody, harmony, rhythm, instrumentation, and phrasing. Such composers audiate in silence as artists "see in the dark." All capable musicians anticipate in audiation what they expect to hear, improvise, and create before they actually engage in listening, improvisation, or composition. They are not surprised by what they are performing.

When one is audiating as he is reading or writing notation, he is notationally audiating. If one is able to audiate the music that he is reading in notation, that is, if he is able to hear and understand what is seen before he physically hears it performed by someone else or before he performs it himself on an instrument, he is notationally audiating. He may, however, read notation without audiating the music that it represents. When that occurs, he is simply decoding symbols and not hearing music. It is a matter of denotation versus connotation. To notationally audiate, one must transcend the print and hear and understand the music that the symbols represent. Notation is a window that one who audiates sees through. As with listening, unless music is being audiated as notation is being read or written, any meaning that is given to the notation is superficial. A musician is able to bring audiation meaning to notation. One who cannot audiate can only attempt to take theoretical meaning from notation. If one cannot transpose without seeing notation or relying on music theory, he is "playing by notes," but he is not "playing notes."

Music notation is a collection of visual symbols that is intended to represent the sound of music. Music theory attempts to give an explanation of those visual symbols. Notation is like still photography, whereas music flows like a motion picture. Audiation is the understanding of the flow of music. There is value in audiation without notation or music theory. However, the value of notation and music theory without audiation is questionable.

Just as aural perception is different from audiation, so is imagery different from audiation. Images are imprecise. It is possible to have an image of something without having a clue to understanding it. More important, however, is that audiation and imitation are often confused. Imitation is a product. Audiation is a process. That is, one can imitate without comprehension. Without comprehension, there is not audiation. It is impor-

tant to understand, nonetheless, that learning how to imitate is a necessary readiness for learning how to audiate. Imitation is necessary but not sufficient for becoming a mature musician.

As it is possible for one to learn to say nonsense syllables, such as “ah va di,” or to repeat a sentence in a foreign language and not know the meaning of what one is saying, there are many persons who can learn to sing a composition by rote without giving it musical meaning, that is, without understanding the music syntax of the composition. Music syntax has to do, for example, with tonality; keyality; meter; tempo; tonality, keyality, metric, and temporal modulations; harmonic progressions; phrasing; balance; interpretation; and so on. Such persons are imitating but not audiating. It is even possible for one to repeat so quickly what a singer beside him is singing that it is not immediately obvious that he is imitating the singer and not audiating. That such a person’s skill in imitating is highly developed and that it is developed to a much greater extent than his audiation becomes obvious when he is asked to sing alone. It is common to discover that while a group of singers can perform a song in ensemble relatively free of errors, only a few members of the group may be able to sing the entire song in solo.

Imitation is learning through someone else’s ears. Audiation is learning through one’s own ears. Just as one must think for himself, one must audiate for himself. Imitation is analogous to using tracing paper to draw a picture. Audiation is analogous to visualizing and then drawing a picture. One imitates when he repeats what he heard just a few seconds ago. It is a reactive response. What is imitated has almost no value for learning something new. In a practical sense, it is soon forgotten. One audiates when he retains and “thinks about” what he heard perhaps minutes, hours, days, weeks, months, or even years ago. It is an active response. When performing without the aid of notation, one who imitates knows to do next by remembering what he has just done. One who audiates knows what to do by anticipating what will be heard next. He is hearing what is to be played at the same time that he is hearing what he has just played. Moreover, what he can sing he can perform on an instrument in more than one keyality without the aid of notation. What is audiated plays a formidable role in learning something new. In that sense, it is never forgotten; it becomes a component of more complex audiation. In cognitive terms, the structure of audiation is deep and it serves in background conception. The structure of imitation is on the surface and it serves simply as foreground perception.

At this point, it might be helpful for you to begin to define for yourself the term “inner hearing.” Does it have precise meaning? Can you explain its meaning in detail? Does it relate more to imitation or audiation, does it relate more to imitation or recognition, does it relate more to recognition or memorization, or does it have a unique meaning? Particularly as a Kodály teacher, your answers to such questions are enormously important. I suggest that as you continue to read, keep an open mind to learning. Do not close it to learning by being passive or defensive. Be assured, no one method is absolutely correct.

Like imitation, memory and recognition become part of the audiation process. Alone, however, they are not audiation. It is possible for one to recognize a piece of music, even one performed with some incorrect pitches and durations, and not to be able to audiate it syntactically. He might be vaguely aware only of melodic contour. Many persons recognize “Jingle Bells” but would not be able to sing its resting tone, move to its fundamental beats, or to explain its tonality or meter, not to mention the chord progressions that underlie its melody. If they cannot sing it in another tonality, minor, for example, they are not audiating it in major. Unless what is recognized can be performed without prior memorization on a music instrument that one has learned to play, there is no audiation. Similarly, one may memorize a piece of music and not be able to audiate it syn-

tactically. The memorization of music on an instrument, for example, is primarily related to fingerings and other technical matters and not to the audiation of the music itself. Just as a calculator becomes an alternative for a student who cannot multiply or divide, a music instrument becomes an alternative for a student who cannot audiate. Audiation may be expressed through a music instrument but it cannot be taken from a music instrument. A student may have memorized scales in many keyalities, but because of a lack of audiation skill, he may nevertheless not be able to perform a melody in more than one familiar keyality. He was taught how to play only the actual instrument in his hands but not how to use the audiation instrument in his head.

In recognition and memorization, we live in the past. In audiation, the past lives in us. When one recalls music through audiation, which is a matter of memory and not memorization, there is little doubt that he must be giving it syntactical meaning. As an analogy, just as a person recalls his way home and does not memorize directions for finding his way home, a musician recalls and anticipates a piece of music through audiation as he is performing and does not need to memorize it in order to perform it. It is unfortunate that although many persons with high music aptitudes have learned to memorize and imitate very well, they have never learned to audiate.

Intrinsic meaning which is comprehension, in comparison to extrinsic meaning which is programmatic, is given to music by audiating the syntax of the music. If, for example, while listening, performing, or improvising, a person is simultaneously and continuously audiating the tonality (for example, major, minor, or dorian) and the meter (for example, duple, triple, or combined) of the music, he is audiating some aspects of the syntax of the music. He is at least audiating the music three dimensionally, the first two dimensions being the tonality and meter and the third being pitches moving in different directions as they relate to a tonal center and durations as they relate to underlying macrobeats and microbeats. He might also be audiating tone quality, harmonic implications, form, style, expression, and instrumentation. When a student complains that he is having vocal or instrumental technique problems or that he has had a memory lapse when performing a piece of music without the aid of notation, the most likely cause of those symptoms is that the student has memorized but is not audiating what he is performing. For the most part, technical and memory problems, not the least of which is tone quality, usually can be corrected indirectly through audiation.

### Types and Stages of Audiation

There are eight types of audiation and six hierarchical stages of audiation within each type. Not all types include exactly the same activities in each stage. A brief outline of the types and then the stages of audiation follow. For a more detailed and complete explanation of the types and stages of audiation, see Chapter Two, Audiation, of Edwin E. Gordon, *Learning Sequences in Music: Skill, Content, and Patterns – A Music Learning Theory*. (Chicago: GIA, 1993).

#### Types of Audiation –

- Type 1: Listening to music
- Type 2: Reading music
- Type 3: Writing music from dictation
- Type 4: Recalling and performing music from memory
- Type 5: Recalling and writing music from memory
- Type 6: Creating and improvising music

- Type 7: Creating and improvising music while reading
- Type 8: Creating and improvising music while writing
- Stages of Audiation – (as they occur in Type 1 of Audiation)
  - Stage 1: Unconscious momentary retention of sound
  - Stage 2: Imitating and audiating tonal patterns and rhythm patterns and recognizing and identifying a tonal center and macrobeats in the music
  - Stage 3: Establishing objective or subjective tonality and meter in the music
  - Stage 4: Consciously retaining in audiation tonal patterns and rhythm patterns that we have organized in the music
  - Stage 5: Consciously recalling tonal patterns and rhythm patterns that we have audiated in other pieces of music
  - Stage 6: Consciously predicting what we will hear next in the music

## THE KODÁLY CONCEPT<sup>1</sup>: EXPANDING THE RESEARCH BASE

by Micheál Houlahan and Philip Tacka

We should continue to question our teaching approaches, trying to develop theory instruction which is both faithful to musical structure and effective in challenging students to deepen and integrate their skills to deal with music in all of its wonderful aspects. Then we will be able to make the most positive use of technology and experimental ideas, facing confidently a new century of musical creativity.<sup>2</sup>

For sixty years the Kodály approach to music education has resulted in vast improvements in the way music is taught in Hungarian schools. The philosophies and techniques developed by Kodály, his colleagues and successors, have been widely adopted throughout Europe and North America.

Zoltán Kodály was a music psychologist and a very good one. He was one of those rare persons who is able to combine superior musicianship with wisdom in a quest for a better understanding of the pedagogical processes in music.<sup>3</sup>

To date there is a paucity of research concerning the effectiveness of the Kodály concept for teaching music or the effectiveness of pedagogical procedures associated with this method. The purpose of this paper is to present relevant research findings in learn-

---

<sup>1</sup> This research draws on the authors' *Journal of Music Theory Pedagogy* article "Sound Thinking: A Suggested Sequence for Teaching Musical Elements Based on the Philosophy of Zoltán Kodály for a College Music Theory Course" Vol. 4, No. 1 Spring 1990; and *Sound Thinking: Music for Sight-Singing and Ear Training* (Boosey & Hawkes, New York) 1990.

<sup>2</sup> Robert Gauldin and Mary Wennerstrom, "Pedagogy", *Music Theory Spectrum* Vol. 11 No. 1 (Spring, 1989): 69.

<sup>3</sup> Dr Edwin E. Gordon, "The Unsung Values of Kodály Instruction" Keynote Address, Organization of American Kodály Educators Conference, *Kodály Envoy* 1 (Spring 1981): 4.