Listening: The Critical Component for Understanding Music

Edwin E Gordon Research Professor Edwin E Gordon Archive Thomas Cooper Library University of South Carolina

Language Acquisition

An analogy with language in conjunction with neurological information might assist in grasping an initial understanding of the thrust of this paper. Although music is not a language, it has no grammar, the process of learning to audiate is highly similar to that of learning to attain language skills.

Only moments after birth, children hear language. A mother, nurse, or doctor speaks directly to them. The neonates, of course, do not know precisely what is being said. What is of crucial importance is they are being acculturated to a language. Without instantaneous orientation to an indigenous language, advancement of language literacy becomes more and more compromised. Babies learn more in the first eighteen months of life than during any other similar period of time throughout their lives.

Historically, it is estimated there have been 30,000 languages spoken in the world. Nearly 300 were native to peoples of North American and South American continents. Presently, more or less than 6,000 remain. Interestingly, of those, only 200 are written. Why did so many language disappear? Most phylogenic linguists agree a language is no further from extinction than just one skipped generation of adults not acculturating newborn and preschool children to that language. Listening is of decisive importance during the critical age, birth to eighteen months old, and the sensitive age, eighteen months to five years of age. Lacking fulfillment of an initial listening vocabulary, potential development of the remaining four vocabularies is likewise marginal. The five language vocabularies, in sequential order of acquisition, are listening, speaking, thinking, reading, and writing.

The speaking vocabulary is a direct outgrowth of the listening vocabulary. Children listen for about a year, engage in pre-speech vocalizations, and then begin to speak familiar words, those in their listening vocabulary. Once the second vocabulary, speaking, is established, in a few months they begin to chain single words into phrases and sentences. By two years of age or so, the third vocabulary, thinking, emerges. Children ask and answer questions, using familiar words formulated in the listening vocabulary. The interaction among the first three vocabularies occurs for an estimated five years before they enter school and are formally introduced to the fourth vocabulary, reading. The fifth vocabulary, writing, follows soon thereafter.

Before children enter kindergarten or first grade, they have had years of listening to prepare them to learn what classroom teachers will be teaching. That is, they have adequate language readiness to participate in school work. Without the first three

vocabularies concretized, for all intents and purposes it would be imprudent for parents to send children to school. Nevertheless, if those children would happen to attend school, they would learn relatively little and consequently make diminutive educational progress throughout life.

Neurology

With regard to neurology, there are approximately 100 million neurons and 1,000 billion synapses in the human brain. Before age three, given a natural environment, a child's brain makes 700 synapses every second. It is synaptic connections among neurons (brain cells) that are vital and significant. Unless a multitude of links are made within and between neurons, potential for learning becomes limited for newborn and preschool children, and appallingly, exponentially as they grow older. Dormant brain cells dedicated to one sense of perception cease to exist or are directed to making associations with alternative types of sensory perception. For example, when music guidance is not forthcoming, especially during the critical age, children are diverted from developing intelligent music listening and performance skills, setting a template for their lives.

Before addressing importance of listening to music soon after birth, salient characteristics of language accomplishment will be reiterated. Newborns listen to adults and others around them speak for about one year without speaking the language themselves. During the time span of between nine to fifteen months after birth, the initial language vocabulary of listening is acquired. Parents speak single words and simple sentences of two or three words to and for babies, not with them. That is, babies are not expected to repeat words. They are busy being acculturated to the language of their ethos. Given a firm foundation, the language listening vocabulary comprehensively continues to be developed throughout life.

The more words babies hear, the more skilled they will be in developing their four remaining language vocabularies. When only a paucity of words are used by adults, children's speaking vocabulary will be small. For example, they will be forced to identify with television personalities and rely on "like," you know," "I mean," "basically," "OK," "whatever," "awesome," and "incredible" in attempts to express themselves. Moreover, it is not only quantity of words that is decisive, it is quality of vocabulary. Hearing the same words over and over again contributes little to establishing an apposite vocabulary. Hearing many different words, although their meaning may not be clear, is the significant factor. Difference is far more important than sameness and repetition.

It may be assumed a child's music vocabulary is developed automatically because so much music is heard through media. That is an erroneous supposition. Would a reasonable adult believe a language listening vocabulary can be sufficiently developed by having babies and older children listening to dialogues only on television and recordings? Of course not. Expectation of an infant relating to a drama or a Shakespeare comedy or tragedy makes no more sense than expecting it to relate to a concerto or symphony. Babies need to hear words and short phrases systematically spoken to them with visual and oral expressiveness for a year or so on a one-to-one basis. Furthermore, a variety of

words used need to be simple and well chosen in terms of familiarity and difficulty to serve the important task of language development. Consider music. Although media plays a functional role in establishing music context (senses of tonality and meter), adults nonetheless should sing expressively a multiplicity of short tonal patterns and rhythm patterns to babies on a one-to-one basis for a functional music listening vocabulary to be actualized. Tonal patterns and rhythm patterns are the words of music.

Music Acculturation

The main purpose of this essay is to call attention to the fact the great majority of infants and preschool children are deprived of developing a music listening vocabulary. The same may be said for elementary, middle, secondary school, and private studio students, college and conservatory students notwithstanding. All professional musicians are not impervious to this dilemma. Unless serious attention is given to the fault, particularly with babies during the critical age and children during the sensitive age, an unattractive bill will obviously come due when they are older. It is not unreasonable to believe Baroque, Classical, and Romantic masterpieces are no further from extinction than just one skipped generation of adults not acculturating newborn and preschool children to tonal patterns, rhythm patterns, and harmonic patterns that form the foundation of that music.

As with language, there are five music vocabularies: 1) listening, 2) singing and chanting, 3) audiating and improvising, 4) reading music notation, and 5) writing music notation. Recall the language listening vocabulary is initiated with an adult speaking words, not sentences or extended stories. What does that tell us about appropriate music development? It is not songs or media that develop the music listening vocabulary. It is tonal patterns and rhythm patterns. Tonal patterns and rhythm patterns performed personally by teachers and adults without text are, again, the words of music.

You might be wondering what is meant by a rich and distinguishing listening vocabulary. Students best listen to short tunes and rhythm chants in a variety of tonalities and meters. They are performed without words using an abundance of labial syllables. Singing in only major tonality and chanting in only duple meter is not sufficient. Tunes in harmonic minor, Dorian, and Mixolydian are necessarily performed for contrasts to be made. That is, it is difference, not sameness, that stimulates audiation awareness. Rhythm chants in triple and combined meters, as well as duple, are also requisite. As time goes on, it will be discovered tunes in Phrygian, Lydian, Aeolian, and Locrian tonalities, and rhythm chants in unusual meters (fives and sevens) contribute immeasurably to expanding the music listening vocabulary. So-called atonal music, which is actually multitonal and multikeyal or what Schoenberg called pantonal, must not be disregarded. To some extent, all music is tonal.

A mind exposed to something new cannot ever revert to its former configuration. Hearing many different tonal patterns and rhythm patterns enables the music listening vocabulary to widen beyond a monotonous diet of major and duple. Essential possibilities for making intelligent comparisons among patterns and tonalities and meters in terms of sameness

and differences are enormous. Although humans find change difficult to cope with, the sooner persons of all ages become comfortable with characteristics of sameness and difference, expansions of the music listening vocabulary become easier and more rapid. Difficulties with relearning turn out to be almost nonexistent. It is no surprise most school music students, and many professionals as well, cannot improvise. Why? They lack a music listening vocabulary of tonal patterns and rhythm patterns in contexts of tonality and meter.

Competent teachers and adults understand the constructive distinction between sameness and difference. Two additional words also command their attention: content and context. Tonalities and meters represent context whereas tonal patterns and rhythm patterns signify content. Unless patterns are associated with context, they have only circumscribed value for developing preparatory audiation as well as audiation itself. That is why brief tunes and rhythm chants without words are performed before presentation of tonal patterns and rhythm patterns. They are an efficient means for establishing context. The remainder endeavor momentarily to imitate what peers are singing.

In music pedagogy, the role of movement and deep breathing is commonly overlooked. Keeping time is not the issue. It is engagement in free flowing, continuous movement. Becoming familiar with the body's relation to breath and space is the compelling concern. Keeping time in a musical manner is an outgrowth of being familiar and comfortable with space and relaxed breathing. Though it may seem strange to many teachers, appropriate movement is just as important when singing tonal patterns as when chanting rhythm patterns, and deep breathing is just as necessary when chanting rhythm patterns as when singing tonal patterns.

It cannot be stressed sufficiently that unless an adult feels at ease in moving in a free flowing, continuous manner when performing tunes, rhythm chants, and patterns, reactions and responses of those being guided will be similar. Students will not intuit importance of movement and deep breathing without a mature adult model. A deep breath provides time and wherewithal to audiate, just as substantial thought is conceptualized in deep breathing before speaking. It has been discovered absence of deep breathing is the primary source of imitation. In this regard, research results indicate only one or two children in an entire class can sing solo an entire song presented on a program. Obviously, when together, most are momentarily imitating one another. The situation is not materially different in elementary school instrumental ensembles.

Implications for having an inadequate music listening vocabulary are far-reaching. The majority of kindergarten and first grade children are bereft of musically understanding what a teacher is attempting to teach. Though it may be considered idealistic, there is a simple solution. Rather than skipping development of the music listening vocabulary and necessarily relying on rote imitation techniques and information related to music notation, five to ten minutes of singing and performing rhythm chants without words for students would be of great benefit to them in raising their audiation skills. Flexibility and confidence will be additional outcomes when students become members of adult audiences.

Even better, kindergarten teachers might sing and chant to children for a year and deemphasize performance preparation. Of course, older students will realize impressive benefits if they, too, are sung and chanted to as well. Particularly after eighteen months of age and then five years old, such singing and chanting can be only compensatory, not remedial. Regardless, it will be time well spent.

A book with apropos information and outlined tonal patterns and rhythm patterns in terms of their difficulty levels is Learning Sequences in Music; A Contemporary Music Learning Theory. Also, Music Listening Experiences for Newborn and Young Children: Notation and Recording of Brief Tunes and Rhythm Chants in Many Tonalities and Meters will be especially useful. There are no words to the songs and chants and, thus, they are appropriate for students of all ages.

In the not too distant past, parents and families indirectly but willingly assumed responsibility for developing the music listening vocabulary of their newborn and preschool children. There was regular church attendance incorporating an abundance of music. Also, family gatherings around a piano and participating in group singing was not unusual. Newborn and young children could not help but be acculturated to music. Unfortunately, that is no longer the case. Music teachers at all levels of instruction necessarily must be preeminently prepared to become surrogates and undertake responsibility of music acculturation.