

Letters On Music Learning

By Mary Ellen Pinzino

From the Come Children Sing Institute

Issue 9

Fall, 1992

A New Tonal Syllable System

Dear Colleagues,

When we challenge time-worn wisdom in our search to uncover the process of music learning, we begin to wonder if perhaps we have gone off the deep end. We may, however, find off the deep end, what was missing on the surface.

In my experience with music learning theory, I have always been frustrated with tonal syllables. Although without syllables my tonal skills have always been stronger than my rhythm skills, rhythm syllables have been much easier to acquire than tonal syllables. Rhythm syllables readily become married to the sound and are easily generalized. Tonal syllables in the various tonalities have been a constant source of struggle, requiring mental gymnastics that interrupts audiation. Tonal audiation is too natural to be so difficult.

Edwin Gordon's choice of syllable systems for his music learning theory is well-founded. In the development of audiation, however, Gordon's own rhythm syllable system is far superior to the borrowed tonal system. Gordon's brilliance with rhythm and music learning has created a rhythm syllable system that mirrors precisely the nature of rhythm audiation.

Built into Gordon's rhythm syllables are the relations between macro beats, micro beats, and melodic rhythm, and the likenesses as well as differences among meters. As rhythm audiation generalizes, the syllables, too, can be generalized. Gordon's rhythm syllable system functions so precisely like rhythm audiation that the syllables are very accessible to one who audiates rhythm.

For tonal syllables to be as accessible as rhythm syllables, the tonal syllable system, like Gordon's rhythm syllable system, must be the language equivalent of audiation. Although the moveable "do" tonal syllable system with a "la" based minor and "re" based dorian represents tonal audiation better than any other available system, it contradicts tonal audiation, creating the difficulty in learning tonal syllables.

The conflict between the tonal syllables and tonal audiation became apparent while composing. Once a tonality is established in audiation, the simple five line staff allows for the direct transfer of audiation to notation. The syllable system, however, requires a different configuration of the set of syllables for each tonality, creating seven different, though related, vocabularies. Although in audiation we have a unique sound vocabulary for each tonality, we do not need seven different configurations of the lines and spaces to represent our audiation of the different tonalities. The relation of the dominant pitch to the tonic in a given keyality is represented in the same place on the staff whether in dorian, phrygian, or mixolydian tonality. Yet, in syllables, dominant to tonic is represented differently in each tonality—in dorian, "la re," in phrygian, "ti mi," and in mixolydian, "re so."

Tonal audiation consists of two aspects, both of which are essential to the development of advanced skills in tonal audiation. The syllable system mirrors one of these aspects and the staff mirrors the other. The first and most basic is the audiation of tonality—aptly addressed by Gordon. The second is the audiation of what might be called "melodic function"—the "where-ness" of pitches in relation to tonic and dominant pitches. The audiation of melodic function is a sense of placement of pitches in audiation. It is not the internalization of notation, but an internal sense of placement that is represented by the placement of pitches on the staff. Further, the audiation of melodic function is not the audiation of intervals or harmonic function. It is a sense of "where-ness" of pitches in audiation as they cluster around the primary tones of the tonality—tonic and dominant pitches.

The audiation of melodic function requires the simultaneous audiation of tonality. Whereas a sense of tonality discriminates differences among tonalities, a sense of melodic function recognizes sameness among tonalities in the audiatonal placement of pitches. Once seated in a tonality, audiation functions much the same as it does in any other tonality. Melodic movement from the fifth to the sixth is the same in "where-ness" in any tonality, even though colored by the uniqueness of sound of any given tonality. The sameness in melodic function among tonalities allows for generalization in audiation across tonalities.

The audiation of melodic function might be compared to the audiation of melodic rhythm. Whereas the audiation of melodic function is a sense of "where-ness" of pitches in relation to tonic and dominant pitches, the audiation of melodic rhythm is a sense of "when-ness" of durations in relation to macro and micro beats. As the audiation of melodic function requires the simultaneous audiation of tonality, the audiation of melodic rhythm requires the simultaneous audiation of macro/micro beats.

Further, as tonal audiation both discriminates between tonalities and generalizes across tonalities, rhythm audiation is aware of both the difference in sound between meters and the sameness across meters in the function of macro beats, micro beats, and divisions. Because Gordon's rhythm syllable system mirrors rhythm audiation so precisely, his rhythm syllables reflect the difference in sound between meters as well as the likeness across meters in rhythm function, allowing for generalization of syllables across meters.

In contrast, the tonal syllable system serves well the audiation of the differences among tonalities, but breaks down in representing audiation's awareness of the sameness of melodic function across tonalities. The tonal syllables cannot be generalized across tonalities. Audiation recognizes the likeness of the pattern 1-7-1 in melodic function across tonalities while sustaining the uniqueness of sound in any given tonality. The tonal syllables, however, require that 1-7-1 be labeled differently in each tonality. Tonal audiation generalizes across tonalities but cannot generalize the syllables. Therein lies the conflict between the tonal syllable system and tonal audiation. When audiation cannot generalize syllables, "thinking" steps in to find the appropriate labels for what audiation has generalized in sound. Thinking interrupts audiation. If the tonal syllable system were an accurate verbal model of tonal audiation, tonal syllables, like rhythm syllables, would be easily generalized.

The dimension of tonal audiation that is not addressed by the tonal syllable system in question is ironically addressed by the number system. Numerical verbalizations, however, do not reflect the differences between tonalities. The number system is a verbalization of notation rather than of audiation. It serves the aspect of melodic function as does the staff, but does not address the sense of tonality that underlies that of melodic function.

Is it possible to create a tonal syllable system that reflects both the uniqueness in sound of each tonality and the sameness in melodic function across tonalities—one that so closely parallels tonal audiation that the syllables will be as accessible as Gordon's rhythm syllables?

After pondering this question for some time, the dawn came in the middle of the night. A syllable system in which the consonants relate to the individual tonalities and the vowels relate to melodic function would provide for both the differences and likenesses among tonalities. The consonant would be unique to the tonality. The vowels would be consistent across tonalities. The syllables would have to reflect in some way the preeminence of tonic and dominant pitches as vividly as Gordon's rhythm syllables reflect the prominence in audiation of macro and micro beats.

The consonants chosen for each tonality are the initial consonants of the syllables of the moveable do system— dorian, "r" (re); mixolydian, "s" (so); phrygian, "m" (mi). The tonic and dominant pitches in each tonality are represented by syllables with the short vowels "u" and "i," respectively, combined with "m." The dorian tonic is "rum," the dominant, "rim." The mixolydian tonic is "sum," the dominant, "sim." The phrygian tonic is "mum," the dominant, "mim." The set of syllables for each tonality is presented here in the familiar sequence of tones used by Gordon (5 6 5 4 3 2 7 1). Spellings and pronunciations parallel those of Gordon's rhythm syllables. Dorian—"rim re rim ra ri ro rum," mixolydian—"sim se sim sa si so su sum," phrygian—"mim me mim ma mi mo mum," lydian—"fim fe fim fa fi fo fu fum," major—"dim de dim da di do du dum," minor—"lim le lim la li lo lu lum." The consonant "v" is assigned to aeolian—"vim ve vim va vi vo vu vum." In the old syllable system, aeolian shares syllables with minor, yet aeolian is as different from minor as mixolydian is from major. To use the same syllables

for both minor and aeolian tonalities is to defeat the very purpose of syllables in audiation. Chromatic syllables in each tonality are accommodated by adding "s" to the syllables for raised half steps, and "f" for lowered half steps (deleting the "m" on altered tonic and dominant), i.e., major ascending—"dum dus do dos di," descending—"di dif do dof dum."

The new syllables in the context of the various tonalities compelled my audiation. The sound of each tonality became more powerful than ever before. Sound took precedence over syllables in defining the sound of each tonality. The identifying consonants became distinctively part of the sound of each tonality. Characteristic tones of the various tonalities unmistakably popped out against the backdrop of the consistency of vowels.

The more I changed tonalities the more distinctive each tonality became and the stronger my sense of melodic function became. I felt a new readiness for developing higher melodic and harmonic skills. With the new syllables, there was not the crutch of music theory that is built into the old syllable system with its predictable half-steps. Audiation had to be in charge with the new syllables.

Music reading in the various tonalities became easier with the new syllables. My sightsinging had been so frequently sabotaged by the old syllables. When my audiation might generalize in reading pitches, my thinking had to translate through the language of the given tonality to find the appropriate syllables. Using the new syllables so reinforced my sense of melodic function while sightsinging that I occasionally found myself reading without syllables—the ultimate goal of using syllables. Music reading depends on the audiation of melodic function, whatever syllable system is used, as the placement of pitches on the staff is the external representation of the internal placement of pitches in audiation. The new syllable system nurtures the development of the necessary skill. The old inhibits it.

My tonal audiation rejoiced in finally having a language that allowed its greater expression. Had I reached a new breakthrough in tonal audiation, or had I really gone off the deep end? My teaching staff validated my experience with their own, but did I dare implement the new tonal syllable system with children? Would I be risking their accomplished tonal development? Would the consonants color the tonalities sufficiently so that the children could discriminate between tonalities? Would singing 1-7-1, for example, in the various tonalities with rhyming syllables confuse the children, since some tonalities have a half-step leading tone and others not? My developed students were already familiar with the old syllable system. Comparing their audiatonal response with the new syllables to their response with the old would guide me. I knew that if I were on the wrong track with the new syllable system, the children's audiation would balk.

To give myself a way out in case the new syllable system was not an accurate mirror of tonal audiation, I introduced the new syllable system with "Babushka," an ethnic looking puppet from Begonia—a long way away. Babushka sings the tonalities in the language of Begonia. If the new syllable system proved inappropriate with the children, we could ship Babushka back to Begonia. If appropriate, the children would learn the foreign language.

Children's virgin audiation responds to any syllable system without the encumbrance of music theory or advanced thinking skills. If a syllable system does not speak to audiation, children will be the first to know it. The children's interaction with the new tonal syllables has more than confirmed my speculations about tonal audiation. For the children, the new tonal syllables are as accessible as Gordon's rhythm syllables, and they are accessible in every tonality. The children are not at all confused by the rhyming syllables. Rather, they demonstrate greater discrimination between tonalities with the new syllables as well as generalization across tonalities. The new syllables have given voice to children's tonal audiation.

After some exposure to the new syllables, children from kindergarten through eighth grade were asked to sing "rim rum" (5-1) in response to Babushka's short dorian melodic phrases sung on the new syllables. As Babushka switched to parallel tonalities, the children spontaneously switched to "sim sum" in response to melodic phrases on syllables in mixolydian, and "mim mum" in response to phrygian, without being told what to sing. Similarly, the children were asked to sing "rum ru rum" (1-7-1) and later, "rim ri rum" (5-3-1), in response to Babushka's melodic phrases on syllables in dorian. As Babushka shifted to parallel tonalities, the children spontaneously shifted tonalities in their response, singing precisely in tune with appropriate syllables in each different tonality. There was no confusion whatever about the half-step or whole-step configurations. Audiation of tonality dominated the children's response as they generalized melodic function across tonalities.

The children are creating, in dialogue, melodic phrases on syllables in each of the seven different tonalities. Their response is guided by the consistent verbal feedback of the audiation cornerstones of tonic and dominant pitches, stimulating much greater self-correction with the new syllables than with the old. Dominated by their sense of tonality, the children's facility with syllables in any one tonality carries over to the next, developing greater competence and confidence in using tonal syllables in all tonalities. Dialoguing with the old syllables in the various tonalities was out of reach.

The children are sight-reading in each of the seven different tonalities with the new syllables. Their audiation of tonality dominates as their audiation of melodic function guides their reading. The new syllables bring to consciousness their audiation of melodic function, making tangible the connection between audiation and tonal notation. The ease with which the children are reading with the new syllables in all tonalities is unparalleled with the old syllables.

Developed three and four year old children find the new syllables very inviting. With the old syllables they listened intently but were hesitant to interact. With the new, they listen intently and are compelled to babble in the new syllables. Many consistently attach the appropriate syllables to tonic and dominant pitches, whatever the tonality, comfortably moving from one tonality to another. After hearing patterns on syllables in any given tonality, some children are beginning to attach syllables to parallel patterns in other tonalities, inferring the appropriate syllables while singing precisely within each tonality. Consistently, their sense of tonality dominates their response. Mothers in attendance with preschoolers, intimidated by tonal syllables in the past, are comfortably

creating melodic phrases on the new syllables, and are finding greater ease in reading with the new tonal syllables.

The children's audiatonal response with the new tonal syllables has far outstripped that with the old. Through a multitude of activities designed specifically to probe the workings of tonal audiation and to compare the children's audiatonal response with the new syllable system to their previous response with the old, the children have dramatically demonstrated that the new tonal syllable system mirrors tonal audiation more precisely than the old. A syllable system, like a Styrofoam model of planets in a science fair, is a tangible model of audiation. The new syllable system presents a new model of tonal audiation, one that works in tandem with tonal audiation both in discriminating between tonalities and in generalizing across tonalities. The breakthrough from the deep end invites further investigation from all of us into the wonder of tonal audiation.

Yours truly,



Note: An audio guide and pronunciation guide to the new tonal syllable system have been added.

[Audio guide](#)

Pronunciation Guide

Dorian:

	5	6	5	4	3	2	7	1
Spelled:	rim	re	rim	ra	ri	ro	ru	rum,
Pronounced:	rĭm	ray	rĭm	rah	ree	roh	roo	rŭm.

Mixolydian

	5	6	5	4	3	2	7	1
Spelled:	sim	se	sim	sa	si	so	su	sum,
Pronounced:	sĭm	say	sĭm	sah	see	soh	soo	sŭm.