TEACHING ARTIST JOURNAL 4 (1), 12–20

ABSTRACT
A practical meditation on the learning resonance of circles, rounds and music.

A Round Is a Circle ...

A musical circle is a sensuous abstraction of life circles.

—Bruce Adolphe

Terry L. **Boyarsky**

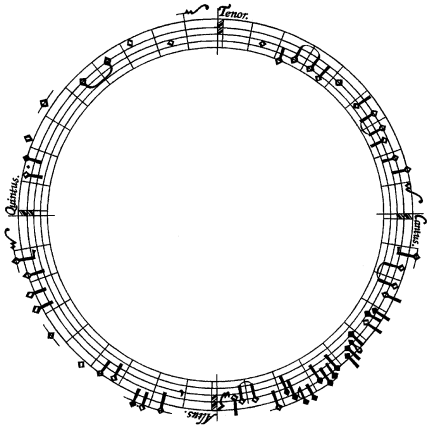
Correspondence regarding this article should go to:

Terry L. Boyarsky
2812 Fairmount Boulevard
Cleveland Heights, OH 44118
tboyarsky@ameritech.net
(216) 932-5825

Circles

Circles are everywhere and endlessly intriguing. We know, sense, and feel them in time, space, sound, and the cycles of nature. A man's life contains spirals, repetitions, going out and coming back. Poets write of circles; composers write song cycles. Circles are at the root of the curriculum, concepts deep yet accessible, infinite in their many manifestations. Circles can provide entrance into a new land of understanding by combining disciplines, meanings, modes, and media. The only things needed to make a circle are a point and a line.

On one level, this is an article about how I teach rounds (or canons) by combining music and movement. It's also about how circles and cycles manifest in many aspects of life and the arts. Music, meaning, and metaphor converge when we listen and move. Sounds suggest space, movement, and structure; different movement qualities imply and invite musical phrasing. Moving through space and moving around an axis give us access to our kinesthetic world. Activities enter into muscle memory, develop neural pathways, to form a body of human experience. We draw from this reservoir to communicate creatively, coming full circle from impression to expression. Life and learning are interconnected: the word "interdisciplinary" is an approximate description of the flow between experience and information, between Being and Doing.



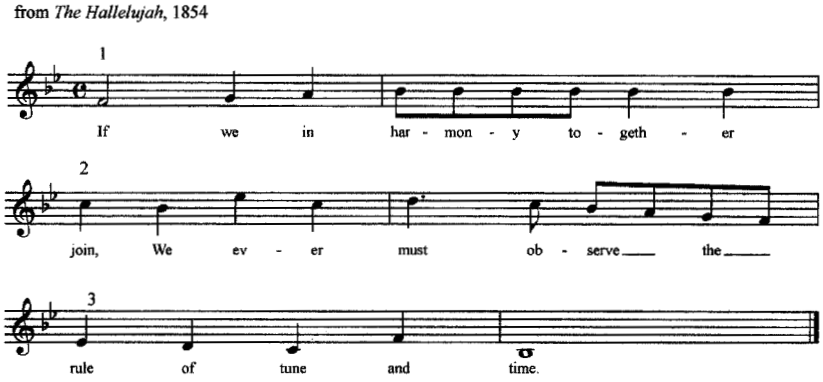
In Sacred Geometry, ancient cultures recognized that the knowledge inherent in the relationship among arithmetic, geometric, and harmonic proportion could be extrapolated to wisdom for living. Laws governing the building of structures apply to the human body; the physics of sound and vibration also pertain to the movement of celestial bodies. Reality unfolded through the geometric metaphors because "as above, so below."

The circle is often seen as a representation of unity, a container, an enclosed safe space, or as a symbol of continuity (taking the circumference as a path). With the addition of a new direction, a circle becomes a spiral. A picture of a circle or spiral can be considered a record of movement; creating the map itself demands the movement of the pen and arm in order to draw it. Goethe wrote, "Geometry is frozen music." It intrigues me to reconstitute these static forms, so to speak, rediscovering the fluidity in music and movement. Playing with circles in space and with sound invites joyful exploration.

Fits Like a Puzzle

Rounds are intriguing, fun, and beautiful—and they only work when following the rules. As Tom Chapin sings (in John Forster's song), "*A round is a circle, a circle of sound, fits like a puzzle as it goes 'round. Notes fly by like clouds in the sky. They chase each other like a sister and a brother ...*" To dissect a round can be mathematical. To perform a round we develop several types of attention. We need focus that is exclusive and inward; awareness that is expanded and inclusive. Rounds can be performed with others, or alone (in which case I have to split myself up and have different voices).

A **canon** is a musical composition where the melody is imitated by one or more voices at fixed intervals of pitch and time. The common term for canon is *round*; each part enters at a different time. Lowell Mason describes it succinctly.



There are many ways to diagram sound and movement to bridge different learning styles, but the best way is to learn and play with canons. The preparatory games offered

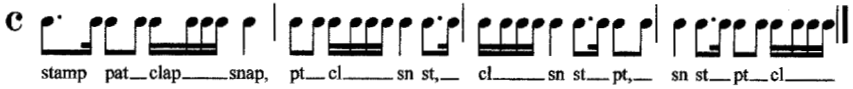
here will highlight the learning necessary for entering into the mystery of round music, as well as show points of departure for other kinds of learning and curriculum connections.

Getting a Round

A canon is based on echo, or imitation. I happened into a rudimentary interpretation of the concept of a round when my daughter and I were walking hand and hand down the street. I skipped once to see if she would notice. She was tuned in but not quite ready, so she skipped one step later in response. It became a "quick reaction" exercise that I used in my classes and transferred from movement to sound. When I play walking music on the piano, the class walks. If I play a skip and a step, ♩♪ ♩ they show that they recognize the pattern by skipping once on the very next beat. The overlap is short (one-quarter note beat) and the fragment small (a skip and step). Nevertheless, it begins to represent layers and levels. Quick reaction games require a balance between fluidity of attention and flexibility of body.

Goethe wrote, "Geometry is frozen music."

Another interpretation of the canon uses body percussion. Consider a measure of 4/4, with a different rhythmic pattern on each beat. Each beat is "played" on a different body part. For example, the rhythms are played on the body in this order: 1) stamp, 2) pat, 3) clap, 4) snap. The sequence (or "rule") circulates like this: 1234, 2341, 3412, 4123, and 1234.



Another musical variable to consider using with the same sequence is pitch. We keep a specific tonal sequence and add the solfege names to keep the brain active. In this example, we use only the first five pitches of the scale, following them around in a circle. To make it interesting, we use a syncopated ostinato.

Here, within a fixed rhythmic and metric structure, the pitches rotate in an orderly pattern. We can do this canon alone or divide up the tones amongst five people in a line. If you use groups, have five columns of people standing close to each other with the half steps standing closer to each other than the whole steps. Each person is obliged to spread his antennae out further, ready to sing his or her part of the whole.

The Rule of Tune and Time

In an interrupted canon, time is allowed for an echo, usually in a symmetrical structure—one measure to hear the material, the next measure to respond (clapping the rhythm, singing back the melody, reflecting the gesture or stepping the pattern across the floor). When the class's awareness expands enough, the "empty" measure is eliminated,

and the canon becomes continuous. The student needs adequate attention for tracking, performing, and listening. Participants have described this as receiving new information while expressing the old, or being simultaneously aware of past, present, and future.

This kind of training is invaluable. For doubters, try this with your friends or students: Have a conversation where you both talk and listen at the same time. You'll be surprised how much you hear and how well you can respond.

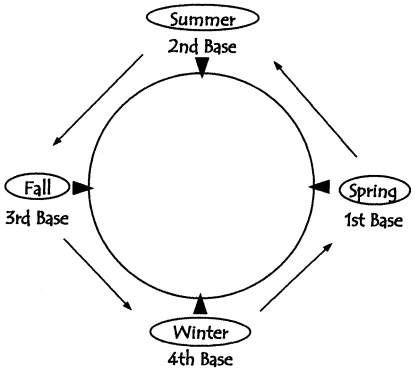
Often when people begin to sing rounds, they are afraid they will lose their way. One can succeed by blasting one's way into a round by sheer volume, but then you have people singing while covering their ears. The point is to be open to the whole sound while holding one's part in it. It takes a careful and gradual work to expand the awareness so that even those groups who cling together in hopes of success can eventually be split up. Then the individual performs with confidence, knowing where to listen for support. In *Sacred Geometry*, the singer is at the center of his circle, contained yet related, drawing an auditory line between himself and each of the other singers.

A challenge to expand both our focus and awareness is to try a canon with yourself. Tap the rhythm of a song with the right hand and follow it with the left hand coming in one phrase later. You can step the rhythm of the melody and sing the entrance of the second voice out loud. When you sing in a large group, you can thrive by listening into the mass of sound, taking yourself as the center surrounded by a circle of sound.

A Circle of Sound

A basic exercise is to echo rhythms given by a leader, preferably seated in a circle. Using this "solo and chorus" form to learn a rhythm, the students then send it around the circle, so each person has a turn, in sequence, on time. When the rhythm is secure, one can try starting the rhythm around the circle again, so there are two lines passing through at the same time. When you're really feeling adventurous, try starting it in several different places so each one chases the previous one. Each new voice requires more awareness, raising the bar on the group attentiveness.

Using locomotor movement to get people from one place to another around the room can illustrate how a song's phrases rotate. Picture a baseball diamond; divide the children up between the "bases". Learn a four-phrase song and divide up the group so those at first base sing the first phrase, those at second base sing the second phrase, and so on. When the song ends, everyone moves counterclockwise to the next base. Or decide on a special signal and call the change of base at random. The song never stops and everyone must continually pay attention, to know where his or her part fits in. If you have the additional benefit of your four-phrase song being a functioning canon, think of the possibilities!



This can also be done with more than four bases. Tom Chapin's delightful songs often play with double entendre between sound and meaning. His song *Wheel of Water* is a set of five interlocking ostinati about the water cycle and works well for this type of movement game. It is musically satisfying, simple to

learn, gives every singer a challenge, and uses a technique called *tone painting*, which matches the melodic material to the verbal meaning.

Students might well extrapolate their experiences to other disciplines and systems. If the bases are named Spring, Summer, Winter, and Fall, we can create a living metaphor, re-enacting the "canon of seasons at any one moment throughout the planet" as Bruce Adolphe wrote in his book, *What to Listen for in the World*.

Centering

What defines a circle is that each point on the perimeter is equidistant from the center. When applied to humans, the starting point is the Self, living inside a body that has an axis between earth and heaven. Preliminary experiences in contacting the silence and stillness inherent in the inner world provide significant steps in becoming familiar with the two types of attention: focus and awareness. The following exercise highlights listening with the body, which in turn enhances listening with the ear. This exercise has been successful with young children, as well as adults.

Pair up and touch palms lightly; this contact will be maintained throughout the exercise. Decide who will be the first leader. The leader, in response to music, begins to move and the partner follows. At a given signal, the other becomes the leader. At first, there is no pattern to change leadership, so each participant has time to explore his role deeply. Later, the time interval becomes specific, for example, four measures. If the exercise is going well, it can become an improvisation, trading off leadership by sensing each other and not by an external command. Just as with inhaling and exhaling, there is a slowing and softening around the edges, more like a figure eight than straight lines.

When leading, it is important to remain in touch with the other. When following, one aims to be passive and responsive. This is an exercise in wakefulness, detecting where one person leaves off and the other begins. It is also a good work for communication, aiding one in expressing and receiving information. The kind of sensitivity required to lead and follow is directly related to how one listens to music, emotions, and nuance. The movements in this exercise usually begin as straight lines, but soon curve and round out. This is a good beginning for more complicated listening because it trains one to be attuned to the moment, as determined by the partner's physical movement. One has to stay open to the unexpected.

Community

Practicing in pairs is good for learning to work in a large group. Being part of a circle is meaningful and alive; where everyone is equal and has a place and everyone can see and be seen. The following activity uses the energy of the group and addresses issues of timing—being late, early, or on time—in a nonjudgmental and revealing manner. The activity introduces a physical awareness of circles occurring in time and space; how much energy is required to draw, trace, and traverse a circular path; and how much collective attention is needed to form a group shape. I use the song *Go 'Round and 'Round the Village*, but often change "village" to "circle."

Sit in a circle, sing this or another song, and draw large circles in the air. At the end of the song, children place their hands in their laps, trying to time it, so the movement ends when the song stops. Improvise with drawing circles with different parts of the body. Exploring space encourages the shy child. It also helps one avoid static postures or limited gestures.

Drawing circles with different parts of the body is a beginning exploration in dance, as well as playing a musical instrument. In order to release the sonic energy of a wineglass or

a Tibetan singing bowl, you have to concentrate on even circular movements, contacting the rim and listening for feedback. Aikido practitioners understand that power comes from moving in arcs rather than punching in straight lines.

The next level adds locomotion. One child goes around the perimeter of the circle and returns "home" by the end of the song. Then, every other child goes around the circle, trying to arrive home on time. Eventually, everyone leaves the circle at the same time and arrives home by the last note. The class progresses from chaos to order. The circle's dispersion and re-creation teaches observation and adjustment. Participants live through a cycle of time, getting better at the game each time. The "village" or "circle" emerges as an enclosed, manageable, and safe space, where a child has permission to play with the limits of time, space, and energy. Learning to be on time as a solo and with a group requires a combination of visual, physical, and aural feedback. Forming and reforming a circle in time and space points out how the circle transforms into a spiral.

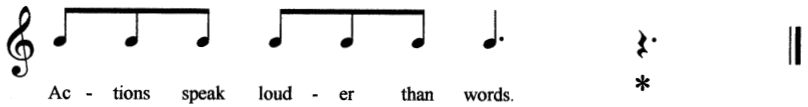
In nature, the spiral can be seen in snail shells, seed heads, and planetary motion. In *Sacred Geometry*, the spiral represents unfolding. In musical rehearsal and performance, the concept of spiral becomes a real and embodied version of how practice makes perfect. If practice becomes rote repetition, it implies duty, dread, and dullness. I prefer the French version, *En forgeant, on devient forgeron* or, loosely translated, *only by working in the forge does one become a blacksmith*. Playful and careful practice creates incremental changes. It becomes spiral-like, visiting a familiar place, but on a new level each time. "That's the power of muscle memory. It gives you a path toward genuine creation through simple re-creation" wrote Twyla Tharp, in *The Creative Habit*. (See *TAJ*, Vol. 3, No. 4.)

The relationship among arithmetic, geometric, and harmonic proportion could be extrapolated to wisdom for living …

The Catch

Rhythm is not a purely mental phenomenon; it is an attribute of the real, physical, and kinesthetic world. What is printed on the musical page is merely a flat record, a potential. Rhythm itself is a vital event, which takes place in time and space with energy. Rhythm games often highlight timing problems, which reflect time-management problems in daily life. Problems with singing, chanting and rhythmic rap can make certain listening and speech difficulties evident.

Proverbs are perfect for playing with speech rhythms. They are ideal for use as ostinato, or repeated rhythm patterns. Let's use a proverb with this rhythm:



Note the space * (a *rest*) at the end. Students become more aware of this space by filling it with a posture, a sound, or a silent gesture. After playing with these variations, I place everyone in a circle to play *Rhythm Tag*. Whoever is "it" steps the rhythm towards someone else across from them. On the final rest they tag someone else. To create a canon, several people can be "it" at the same time. Tag is a cyclical transfer of energy and a collaboration of attention, like volleyball, where keeping the ball in the air

is a group effort. Explanation cannot substitute for these sensations of impulse, energy, and space.

An older word for a round is "catch." There is a section of the *Rex Tremendae* of the Berlioz Requiem that sounds breathless. Melodic entrances a short distance apart sound like they are trying to catch up with each other. The *Fugue* is a more elaborate form of the canon, also based on imitation and layering. The word comes from the Latin, meaning, "flight." Each of these terms alludes to the kind of energy necessary for the "catch," for "fleeing" and "flying." A heightened state of alertness is essential to create a vessel or circle of energy to catch, hold, and relate all the pieces harmoniously.

Time Flies

I prefer clocks with a round face. The sweep of the hands draws a moving picture of time passing. I get a feel and sense for time. I see the portions of the hour without having to use my mind to calculate. There are infinitely small increments like points on a circle. Time reveals itself in levels, from the coarse to the subtle, e.g. hour, minute, and second. The association between the parts of a circle, movement at different rates of time, and years of timing things coalesces into a natural kind of knowing. The cold LED display of a digital tells me either/or; with it no analogies are possible.

To understand how subdivisions relate to meter, I use a mensuration canon. The illustration that follows shows the rhythmic structure.

Walk at the rate of half notes and sweep your right arm around an imaginary clock face, so that each hour represents an eighth note. The left arm creates a gesture or makes a sound to reinforce where the cycle begins. Each measure takes up the same amount of time, but the "gears" change. The song, short though it is, is quite mysterious when performed in canon with movement. It embodies and represents celestial bodies moving in space where nothing happens and everything happens, where there is movement and stillness. Here is the original version:

Turning

Imagine a wheel or a vinyl record; even if the circle turns, the center stays put. This reminds us to acknowledge and value the inherent stillness in coming back to a center point. Perhaps this is why children enjoy exploring various ways to turn around themselves by somersaulting, cartwheeling, rolling like a log, and spinning. I remember twirling so fast that things seemed to stand still and when I stopped the world turned around me. I often ask students to stand on one point and visualize a circle drawn on the floor around them. Staying in the center, if you make a quarter turn or half turn around your own axis, you can visualize the proportions of a circle. The obvious next step is to

relate these experiences to fractions, note values, parts of the hour, and pieces of pie.

Playing with canons gives a sense of depth and level to the architecture of rhythm. Playing with movement puzzles and relating movement to measured time can reinforce mathematical concepts of fractions, proportions, and ratios. It is not sufficient just to clap a rhythm, we need to "move it" or "step it." As sound progresses in time, so the body must move out into space, to represent this progression. Musical sound flows, and movement is a plastic. Moving bodies in space helps make the connection between sound and time. We mustn't underestimate the importance of transforming a concept into a physical reality: "Tell me, and I'll forget. Show me, and I may not remember. Involve me, and I'll understand."—*Native American saying*.

Once children know where center is both inside and in relation to a point in space, a related game can help them understand the compass rose and the cardinal directions. When the body orientation stays fixed, pointing north, we have an intriguing spatial puzzle. From one's center and the direction one faces, one knows absolutely where North, South, East, and West are. Adapting the children's game of "Mother May I," try variations of the game, such as: take two steps North, jump four steps towards the Southeast, slide once to the West, first without music. Next add music and rhythm, and you are on your way to choreographing your own dance.

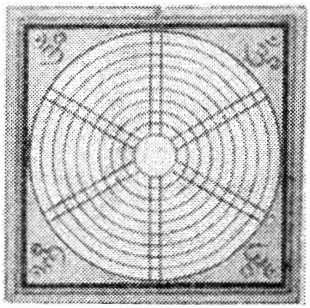
Pass It Around

We have considered many ways to describe a circle: drawing it in air, moving the body in space following a circular pathway, conceptualizing rhythmic cycles, playing with timing, and looking at melodic layers. We have juggled with numbers and pitches; run around bases; traded off words, rhythms, and tones. We have realized, incorporated, and traveled in and through circles. I would be remiss if I didn't mention one more wonderful way to connect to the wisdom and energy generated by circles. Many cultures have passing games in a circle; for example, in Germany they pass shoes; in Africa they pass stones, and in Greece they pass rings. In our "Telephone Game," we pass words, and in music class we pass rhythms and beats.

In "Sa Sakroma" (from Ghana) every person in a seated circle has a stone. Everyone sings the song and passes their stone to the person on his right for every beat. The participants are equidistant, find equipoise, and feel an equitable part of the moving whole. They may feel that they are jumping onto moving train, albeit it is a circular and rhythmic one. For the game to be effective and agreeable, everyone in the group must hook into the same energy and beat. These traditional games are simply to be enjoyed for the pure activity and pleasure of participation. Yet, because they are often old, passed on from generation to generation, we still feel included in another kind of circle that reaches us from the past and continues on to the future.

Return

The term *audiation* is the aural equivalent to *visualization*. Once I have kinesthetic acquaintance with circles and cycles, aural images (the inner hearing of pitch, rhythm, melodic shape) become stronger and clearer. In this aural way, there is more material available for stretching the imagination. We gain access to more parts of ourselves by using



the body rhythmically and musically. Finding how circles attract and release energy allows new avenues and options in our outer work and inner creative life.

Listening is a special kind of attention that resonates into everything we do. Returning to the rules of tune and time encourages a deeper search. One comes in touch with all the aspects and intelligences contained within the body, including the human spirit. "As above, so below." Listening goes two ways: inward and outward, focused and aware. Music and life will be more vital when reconnected with the body. As a stone creates ripples in water, as sound spirals out from its source, as toning the syllable "Om" vibrates the body and keeps resounding outward in concentric spheres, perhaps these ideas can serve as a springboard for new discoveries.

Works Cited

Adolphe, B. *What to Listen for in the World*. New York: Limelight Editions, 1996.

Berlioz, Hector. *Requiem, Opus 5*. Atlanta Symphony Orchestra & Chorus, Robert Spano, conductor. Telarc, 2004.

Forster, John and Chapin, "Rounds" John Forster & Tom Chapin, © 1988 Limousine Music Co. and The Last Music Co. (ASCAP). Tom Chapin. *Moonboat*. New York: Sony Wonder, 1989.

Lawlor, R. *Sacred Geometry: Philosophy and Practice*. New York: Thames & Hudson, 1989.

Tharp, T. *The Creative Habit: Learn It and Use It for Life*. New York: Simon & Schuster, 2003.

Terry Boyarsky is a pianist, Dalcroze Eurhythmics teacher, and Ethnomusicologist. A frequent presenter of workshops and retreats, Terry is a Teaching Artist for Young Audiences of Greater Cleveland. Her upcoming projects are a performance of the Brahms C minor piano quartet and singing with the Cleveland Orchestra Blossom Festival Chorus.