SEMINARS IN NEUROLOGY—VOLUME 9, NO. 2 *JUNE 1989*

Dalcroze Eurhythmics: An Approach to Early Training of the Nervous System

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THE DALCROZE METHOD

Dalcroze eurhythmics is a system of musical training that is applicable to all ages and levels. Its benefits can enhance ordinary education, aid the development of the neural responses of the child, and release latent capacities in the adult. In the early part of this century, Emile Jaques-Dalcroze, a Swiss composer and professor of harmony, developed his teaching method by finding a correlation between music and physical movement, by translating what we hear, sense, and feel musically into an equally viable world of vision, space, and movement. By enlarging what is fleeting and subjective into a tangible physical reality, he invented the perfect laboratory to study myself-as-musician. He invites the student to leave his instrument outside and enter into the confluence of time-space-energy, become fluent in the language of music, study rhythmic problems through eurhythmics ("good rhythm"), study *solfège* (work with pitches, using the voice), and express what has been understood by improvisation.

In 1920 Jaques-Dalcroze wrote:

> In evolving the educational system of Eurhythmics some twelve years ago I certainly did not realize the great influence that this new system would have in restoring man to knowledge of himself—of this I shall speak later. I thought only of making my pupils better musicians. From the outset of my career as Professor of Harmony at the Geneva Conservatoire I found that for nine-tenths of my pupils harmony was merely a question of mathematics, that they could not hear the chords they wrote down and therefore were unable to appreciate music to the full extent. Music is not purely intellectual; it works through the senses—it sets our whole organism in vibration. If this organism is incapable of responding in all its parts, the brain will register incomplete sensations. . . . the intensity of our musical feelings depends on the intensity of our physical sensations. . . . This relation depends on the condition of the nervous system. It is unfortunately rare nowadays for our faculties to be equally balanced, and the mind and body to be in complete harmony. The relation between the faculties which conceive an idea and those which carry it out is often weak owing to the lack of orientation in the nerve impulses, or to a resistance in certain muscles caused by slowness of mental action. It is the consciousness of this continual struggle to make our muscles respond, and of a weakness in our nervous system, whch causes mental confusion, lack of confidence in one's own powers, fear of oneself. This general state of uneasiness also results in lack of power of concentration. The brain is a prey to incessant demands which prevent it from working calmly, from carrying out its orders, and from controlling the body with the necessary confidence and deliberation. . . . The more ordered our life is, the freer we feel.[1]

It is said that Johann Sebastian Bach concerned himself only with creating music; it was his contemporaries who codified everything he wrote into rules of composition. So too with Dalcroze. "Dalcroze was not gifted for method because every week he invented a new method. It was his pupils who made a good system of it. The greatest pedagogical fact was Joy. . . . Living tradition is a better information than books."[2]

The concern of any Dalcroze teacher is to create an environment, not of visual beauty, not of imagination, not of sound, but of experiences. These are in the form of musical games or exercises, which must be designed to engage the attention, the interest, and must encourage the free and natural use of the body. Abramson calls them "growth-provoking games."[3] Aronoff calls it "guided discovery."[4] There is a great range of published

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material that has been culled from "what works." We Dalcroze teachers are always sharing and exchanging ideas, but, in the end, it is our own perceptions, ideas, and skill that are really at stake in the class. Not a class goes by but what we find it necessary to deviate from the lesson plan, to include a student's idea, discovery, joy, or one's own newly found insight on how to communicate more musically.

MAKING THE CORRESPONDENCE BETWEEN SOUND AND MOVEMENT

Rhythm is everywhere. We know it, see it, and feel it, but what is it and how aware of it are we? There are predictable patterns in time, from seconds, minutes, hours, and days, to the seasons, stars, and tides. Man's body is full of biologic systems that are rhythmic, pulsing, cyclic, for example, the heartbeat, breathing, ovulation, life, and death.

Man's physical work is full of rhythmic movements. Think of all those woodchopper's songs, chain gang songs, railroad songs, wool-spinning songs. These are not merely descriptive pieces, they were sung during the work, to engage the attention, lighten the burden by enabling the body and the team to work more efficiently, with better momentum, in short, to be more rhythmic.

Adults play sports. Musicians play music. Children's play is all about discovering the wonders of the body in movement: jump rope, ball bouncing, hopscotch, jacks, hand clapping, patsching (hand to body percussion), chanting, street games, hula hoops, swings, even (although not everyone could be convinced) Nintendo is all timing and rhythm.

Jaques-Dalcroze said:

> I am convinced that education through and for rhythm is able to awaken the artistic sense in all who go in for it. . . . It is not enough, as far as the arts of painting, architecture and sculpture go, to have schools where the representation of line, colour, light and shadow, contrast, and grouping is taught; the pupils of these schools must be taught to feel in themselves the rhythm which arranges, defines, gives balance to, harmonizes, and animates works of sculpture, architecture and painting. Nor is it enough to teach the pupils of conservatories to interpret with their fingers the masterpieces of music; above all they must be initiated into the feelings of the composers, which gave rise to the music, into the movement which had made their feelings immortal, into the rhythm which governs and gives style to the music.[1]

So, step into the Dalcroze class, a large empty room (no mirrors, please) with a piano in the corner, but step barefoot, so we can have, as Vanderspaar says, "musical feet."[5] Dalcroze scandalized people in his day by this practice, but he defended himself by saying, "Every pianist knows it would be impossible to acquire a good technique if one wore gloves while practicing."[6]

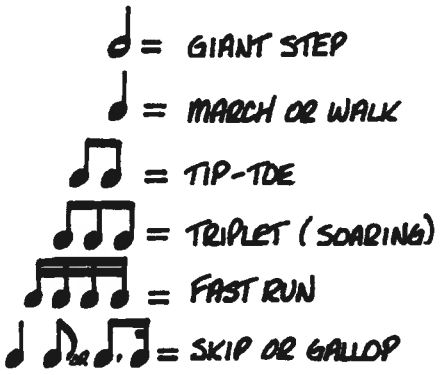

Figure 1. Music rhythms associated with locomotor movements.

The first lesson, child or adult, will begin from man's simple, inherent, natural form of locomotion—walking. Our walk is repetitive, has momentum, and moves forward in space. So, too, music has pulse and moves forward in time. The first task is to feel this correspondence: I walk when the music plays, I stop when the music stops. After this, the task is more specific: I step with each note of the music. Later still, I hear that the music is delicate, I walk delicately; I hear the speed of the music, I follow that tempo.

After this, the child's other natural locomotor movements, together with the teacher's careful accompaniment, work to make the relationship more apparent. Children understand giant steps, skipping, galloping, tiptoeing, running. Later, they will make the correlation to the written symbols, which now represent unforgettable, joyous experiences (Fig. 1).

In the beginning, the child moves freely, and the teacher improvises piano music that matches the child's own tempo and type of movement. Or, the teacher asks the child to jump and plays the drum when he lands, so that he can hear that his movement has a sound, a feel, a vibration. Large movements are best: whole body movements are more involving and more obvious. The child needs a direct relationship with the sensations of his own movement, and the feedback from sounds helps him tune in.

An important component of music is the uneven division of the beat into long and short. Skipping represents this type of rhythmic pattern. Alana, age 8, came to me for a Dalcroze class quite eager to do anything except skip. Her mother rather sourly informed me of Alana's inability and

dared me to see what I could do. After studying her movement, I invented games (for the whole class, of course, because everyone benefits from the exploration of a problem) that would, first of all, enable Alana to hear the difference between the various locomotor rhythms. Second, I invented (many) games to help the children feel the difference between left and right. For example, the children had to slide sideways facing a partner as mirror image, then change directions together at a signal from the music, remembering to keep the orientation of their bodies the same. Third, I introduced short dances that included hopping equally on one foot, then the other, that required keeping track of how many hops on each foot, in time to the music, and engaged them in inventing patterns of rhythmic hopping. Fourth, I left it to time and Alana. In a month she was skipping, and very proud of herself, too. Often, later, she would request some of the skipping games that she had difficulty with in the beginning. This shows that every skill has its prerequisite stages and building blocks, and if there is one missing, there will be a "dis"-ability.

Often a 3-year-old child will come to me "confessing" that he cannot skip, he can only gallop to the galloping/skipping music. Others do not try unless I call it galloping rather than skipping. Here is a clear case not only of the candor of the child, but of his musical perceptions surpassing his physical skills. The noncompetitive atmosphere of the Dalcroze class allows these discrepancies; they will not be judged or criticized, so that, in due time, the child can put it together for himself without becoming discouraged. Later, when a child chooses an instrument, these experiences will be retained in the muscular memory. As the body matures, these sensations will enable the movements to become smaller, more subtle, and more efficient. What once was a series of large marching steps has become an internal feeling of rhythmic pulse and vitality, without even having to tap a foot or use a metronome. There will be no need for excess external movement, only what serves to make the music on a particular instrument.

Chase[7] describes this process at the piano:

> Listening . . . feeling . . . moving . . . feeling . . . listening. This is how to explore the way to the beautiful resonant, singing tone. Once you have heard your most beautiful tone and have become aware of the sensations accompanying that sound, your understanding can be adapted to any shortening or lengthening, increasing or decreasing in volume. The core of any tone should always have substance and expressive quality. The singing quality of tone can be developed by sensitizing the ear to listen for it and sensitizing the hands and fingers to feel it as if they too were listening. . . . Notice every sensation in your body. You are learning from yourself because you are the only one who knows how you obtained this sound.

IMPORTANCE OF IMPROVISED MUSIC

The Dalcroze teacher teaches musical improvisation as well as plays improvised music for the class to move to. In order to make this sound to sensation correspondence, the teacher must tailor each moment of music from the piano to the evidence at hand. If a child has an irregular march, the music will be a little unsteady; if another child takes a little longer to finish the trip around the circle, the phrase must be extended further. If a child forgets the task and repeats or misses an element, so too the music will lack just that little trill or grace note, and the other children see and hear this. Or, if the pianist makes a mistake, there is a possibility of being quick enough to hear it in a new context. Rather than react to it negatively, it can be treated as an unexpected turn in the musical road.

The music must not be too predictable. The child must learn from the start the importance of listening. Often, I tell the children that I will play something and watch for their response "just to see if you are listening." One such game, which is quite difficult and challenging, is called "song recognition." For example, we have learned a song or a rhythm and have choreographed some movements that correspond to it. Then I "hide" the song in marching music, or running music. I simply tell them, "If you find it, do "x" on the first phrase, "y" on the second phrase, and "z" on the last phrase." Now, from the pianist's point of view, here is the opportunity to improvise in full force, for "Sweetly Sings the Donkey" can be played in a great variety of ways: in the treble, in the bass, in triplets, with extra notes, with ornamented melody, harmonic change, in minor, in whole tones, faster, slower, with humor, with seriousness. This is the whole genre of the *Variation*, which has captivated so many great composers.

When I first began teaching, I witnessed a good example of this sort of improvising. The teacher was trying to get the children to play their drums at a certain moment, but there were carpenters working on the roof. Not only was she not being heard or heeded, but the children were headed toward chaos, because there were neither clear periods of sound nor clear periods of silence. So, perceiving exactly what was needed, she whispered that they would help the workers on the roof: whenever they hammered, the children would also play their drums. It was pure magic. The entire group merged into a musical happening of sound and silence.

Improvisation on one's chosen instrument is often an obstacle. Often, the musicians divide the world into two camps: those who play by ear and those who have "real" training, and each side is envious of the other. Classically trained musicians are often petrified to deviate from the written page and are in awe of anyone who actually dares to try. Yet, most children love to express themselves musically, by creating spontaneous songs, chants, and hums. What happens that they lose this freedom? In the spoken language, we can often hear and react to whether someone is speaking from his own ideas and feelings or is "parroting." How refreshing it is to hear a child try to put together newly learned words with his own unique perceptions. The Dalcroze method, "instruction *in* rhythm and education *by* rhythm," makes possible an immediate realization and expression of "the reciprocal influence of rhythms and dynamics on melodies and harmonies."[8]

MUSIC AS LANGUAGE

Language has purpose. It is for communication of thoughts, feelings, information, experiences. Speaking has many aspects that add to the meaning of a message by the combination of inflection, tempo, dynamics, accents, rhythm, silence, breath, preparation, and tone. Conversation is another dimension of speaking. It has give and take, form, balance, structure, dynamics. We need to learn the rules of interaction and listening, expressing ourselves, creating new ideas, and sharing what we see.

All this is true about music, too. Music is a language. If you think back to when you last tried to become fluent in a foreign language, you will remember the difficulties. There are input problems and output problems. In spoken language, hearing is a different problem from speaking. In written language, reading is a different problem from writing.

Dalcroze experimented to find the best way to be at home, to be fluent, to be creative, in the language of music. After all, in our native language, we are improvising all the time.

> The whole method is based on the principle that theory must follow practice, that rules must not be taught to children until they have themselves experienced the facts that gave rise to the rules, and that the first thing one must teach them is to know themselves. The opinions and conclusions of others should not be taught them until later. Before sowing the seed the ground must be prepared. This is not done in schools or in conservatories. As far as music is concerned, tools are put into the hands of children before they know what to do with them. They are taught the pianoforte before they are musicians, i.e. before they can hear sounds or feel rhythm, before their whole organism is able to vibrate in response to artistic emotions.[1]

Music can be used to bridge the gap when a pupil does not speak English. Gracie had just come from Thailand a month before she entered preschool. She was still speaking only the language of smiles. Her first day with me, while she sat on my lap watching the children respond to the music, she was already making that connection between what she heard and what she saw. I had placed her hands on top of mine so she could feel the rhythm of my playing as I set up a predictable series of eight beats of silence, eight beats of marching. After a few times, her body was completely synchronized with mine. After another few measures, she had taken her hands off mine and was adding her own notes on the piano, exactly eight beats of sound and eight beats of silence. After a few weeks, although she still was not speaking to any of the children, she was participating fully in the music classes, even singing "Do Re Mi's" with us. English and music will be her second languages.

Many language games are constructed to enable the ear to focus specifically on one type of sound or musical event: perhaps a short rhythmic chant ("Shave and a hair cut—two bits") or two pitches to match ("cuckoo"). These musical interactions are finished in a matter of seconds, but are repeated (or varied ever so slightly) until interest is lost, or, if interest is gained, a metamorphosis into a totally different form can occur. The most important factor is to have the child's attention on the item in question and have his willingness to participate in the game. This will be impossible if the teacher has his attention only on the lesson; he must be aware of the children's every response. The teacher has to monitor every interaction, every event, for signs of fatigue, inattention, disinterest, restlessness.

Language games—the use of rhymes, chants, poems, tongue twisters—help to make the connection from voice to rhythm to body to sound. In almost every class I teach, there is a child with a speech problem—unclear articulation, poor pronunciation, lisping, or stuttering. I have seen continually how the careful, quiet, clear work we do enables the child to hear better and produce better. Kimberly, aged 3 years, was in speech therapy for her stammering. In class, within about 5 minutes, she began to see and feel the difference between sound and silence. In the course of a few weeks, she began to produce the rhythms of the words more accurately. After a few months, I noticed that she was finally making herself understood, with clear articulation.

Several years ago, I had a bright-eyed, bilingual 6-year-old boy whose father was a famous biophysicist and whose mother was a professional opera singer. He was having trouble in school remembering facts, sequences, and directions. However, in my class he would always remember the alphabet song, or the days of the week song, or a story in music. As long as it had rhythm and pitch, he could remember it.

Another connection with language is the story told through music. These games show the broader scope of musical form and structure, such as beginning, middle, and end; or sequence stories where characters are added and taken away in a definite order. These stories are replete with early mathematical problems, (if there are three birds on the telephone wire, then seven must be flying around), observations in nature (growing a garden), moral problems (rabbits eating carrots from someone else's stash), memory work (which path did Hansel take back home?), and social responsibility (going out to play when called, coming home when called). The children are learning very much indeed from these stories they enact, but the most prevalent atmosphere in the room is the enthusiasm with which they participate and the beauty called forth by the combination of choreography and music. Young children are immersed every day in the world of imagination; so these types of games "speak" to them.

SOLFÈGE

Solfège has to do with hearing, recognizing, matching, and remembering pitch. Dalcroze "set about devising exercises to enable my pupils to . . . open up between brain, ear, and larynx the necessary channels to form of the entire organism what one might call the *inner ear.*"[8] With each game, almost always in a rhythmic setting, the object is to progress in such small increments of difficulty that there is always understanding and readiness for further challenge, as we saw in Alana's difficulty with skipping. A good solfège teacher tries to keep the students in touch with the game, not to lose them by a competition. Group exercises provide good support and feedback for both bold and shy students.

The first distinction to be made is to recognize high and low tones, in a broad, nonspecific sense:

> The body is capable of expressing itself by movements and gestures that are HIGH—in a physical sense—or LOW. Then why not harness this fact to the expression of pitch and melody—a melody being a succession of sound in varying pitch.[9]

Much work is done with the scale, using "fixed Do" (Do is always the note C), and staying within the octave of Do to Do, even if the key changes. In this way, the study of half and whole tones, different intervals, key relationships, and modalities can all be examined within a constant musical space.

For example, to make a correspondence between the scale Do Re Mi Fa Sol La Si Do and an inner measure of up and down, we play games pretending to be on an elevator with only eight floors, or use stairs, or tile patterns on the floor, or evenly spaced dowel rods, or step forward when the music goes up, and backward when the music goes down.

There comes a time to use the voice, depending on the readiness of the physical instrument and the amount of understanding the student has attained. Schuster[10] said, "It's hard to represent pitch accurately with just the body. The voice is the natural instrument and expresser of pitch. That is why it is important to use the voice as soon as you can in solfège. To get your bearings pitch-wise, sing soon and with energy."

The importance of developing internal listening cannot be stressed enough. Here is an example of the beginnings of that process in Clara, a 5-year-old child in her third year of Dalcroze. After 6 months of solfège games of all kinds, which made her familiar with direction (getting higher or lower), stepwise motion, and the correspondence of syllables, I asked her to sing up the scale but to leave out one tone, then step the spacing of what she had created on the floor tiles. Figure 2 illustrates this. The first staff, the basic scale, is what she had learned intimately. The second staff represents her thinking process and the beginnings of inner listening, that is, the Fa that was silent was

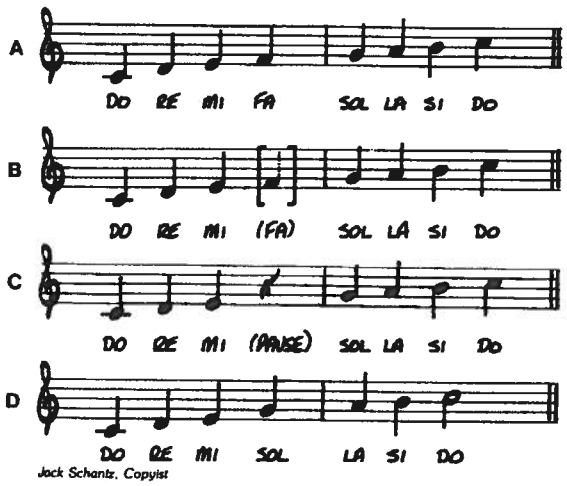

Figure 2. An example of the stages of inner hearing.

equally real to her conscious mind, but kept to herself. The third staff represents what the class heard. The fourth is the melody that she created and performed next, by stepping and singing. That is, she left out the silent space, at "Fa."

The ability to form musical images in the brain is the key to playing an instrument beautifully, as if you were "playing by ear," or improvising. Both intention and awareness are developed and placed at the service of the musical self, especially if the body has been trained to be relaxed and secure in its free execution of musical thought.

> The memory of sound movements will act on the mind and will call forth mental hearing. The ear listens to the external sound, the brain creates the inner sound, and so there comes into being the creative sense (improvisation, composition). . . . The pupil with a good ear is aware of the development of his powers of imagination. Mental hearing depends on sensation and memory, so that the art of sight-reading is based on a good receptive condition, on spontaneity of mind, and on certain powers of creative imagination, for mental hearing enables the pupil to build up intermediate sound-images that serve as bases for reading.[6]

THE FOLLOW GAME

In the Dalcroze class, there is always a "follow the music" game. To follow someone down the street, to trace over a shape with my finger, to watch a bird flying off into the distance, to follow a train of thought, to follow directions—all this requires one to pay attention intentionally.

The "follow" can be as simple as moving with the music, stopping when the music stops, or, in conservatory classes, following an unchanging rhythmic pattern through accelerando (gradual speeding up) and ritardando (gradual slowing down) to study the different qualities of energy needed for the same task at different tempi. The ear follows the piano music, the body follows the ear. To direct the attention to legato and staccato, a 4-year-old child can be asked to pretend to ice skate when he hears smooth music, and to pretend to walk with snow shoes when he hears detached music. To detect whether the music is high or low, the students form two files. The first file can hear music only in the high range and moves with their high music. The other file can hear and move only with the low tones. Of course, both files must listen to all music presented, but discriminate, and inhibit their responses. The teacher can always overlap or combine high and low, if she sees the class is really listening and responding well.

The variety of musical elements to listen for and the range of movement to engage in is as extensive as the teacher's imagination. The teacher simply must ask of herself to be as musical and attentive and relaxed and responsive as she wishes her class to be. She must plan—but be ready for anything. She must make a demand, but appreciate and accept all efforts.

Still another example, to draw the ear to texture, is to ask the children to walk alone if only one hand is playing; to walk with a partner when both hands play together. Will they peek? They soon learn the pleasure of that challenge not to look. In the beginning, some truly respond to what they hear and others imitate visually the outer form. If a child sees the entire class responding—for example, they all spin around in the same moment or all clap the same thing in one moment—he knows that he missed something, that he was not hearing what the others were hearing, and that he could be listening better. Children quickly learn that the cues are from the music. In fact, it is a great relief to many children not to have to take verbal directions, which are often fraught with bad associations, negativity, and confusion. To follow the music is one step away from obedience, and obedience is only a step away from self-control.

SIMPLICITY AND SOPHISTICATION OF THE ECHO EXERCISE

The echo exercise is another way to take a small grain of attention and expand it, deepen it, lengthen it. In its most simple form, think of it as mirroring sound. In other words, the response must be precise: Teacher claps two sounds, student claps two sounds.

For a 3-year-old child as well as for a conservatory student, the first difficulty encountered is to wait until the event to be echoed is over, not to interrupt, to wait to give his response. This can be explained, or demonstrated with another student, but it is not enough until the student himself feels that broad classification of time into "you . . . now me."

After this, the two claps can be expanded in many ways to ensure interest and attention. Perhaps, in the course of 5 minutes, the two sounds would evolve into patsching knees twice or tapping head twice. The next week the echo exercise might be played and answered on a drum, using various types of touch and dynamics. The next lesson, there could be a demand to be on time, in a specific rhythm (see Fig. 3 A). The demand would be a gentle direction of the ear and eye to notice more, try to do it together, or "What would happen if we all pretended to play on one giant drum," or "Do you hear there's a space between," or "Find a motion to put in that space." The child will learn to

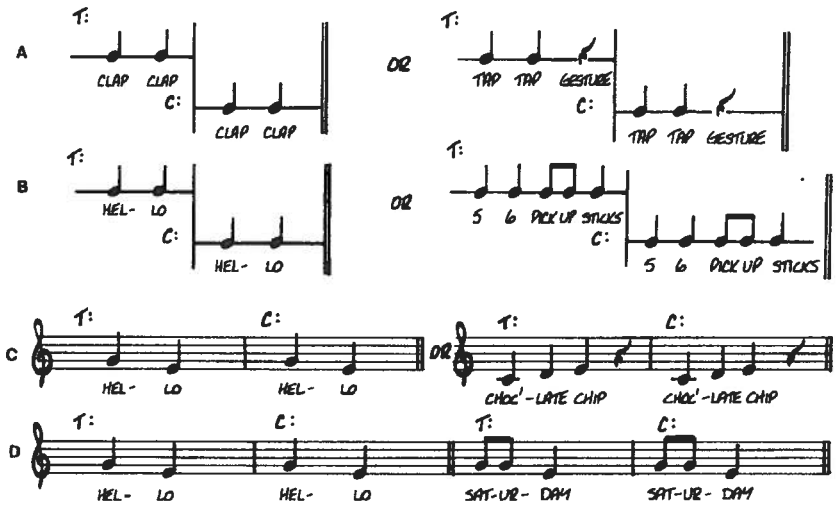

Figure 3. Examples of beginning echo exercises.

wait, to experience silence, by making it into a physical, tangible reality.

Building on these initial experiences, words may be introduced (Fig. 3 B) or pitch (Fig. 3 C) or rhythmic variety (Fig. 3 D). These echo experiences can be the basis for learning complex rhythms, new songs, choreographed games, and games for increased perception and musicality.

The echo game can be enacted in different modes. I can echo rhythm, pitch, words, and I can mirror movement and gesture. The call can be in one mode and the response can be in a different mode. The leader can be a teacher, the respondent can be a group. There can be one call and many echoes. Again, the variety is endless. Sometimes I will ask a child, "tell me something on your drum (or sticks)." Then I clap it back to them or play it back on the piano. The smile that is returned shows the moment of recognition, the feeling of pride, and the satisfaction of having communicated something.

In conservatory classes, a good listening exercise is the following (Fig. 4): T (the teacher) plays four equal beats on the piano; C (the class) returns the same four beats. T changes the pattern within the four beat meter, class responds by clapping. Next time, they respond by clapping, after which they move the rhythm through space by stepping all notes of the rhythm. Now we have two measures of echo, each in a different mode, and the student must tune in to his body in a new way. He must also not forget the rhythm.

After this is established, and just when the student is in between feeling at ease with the exercise and losing interest in it, a third echo is added: sing the same tune that the piano played initially (Fig. 4). Further challenge can be added with more advanced students, by asking them to solfège (that is, sing the musical names of pitches—Do Re Mi Fa Sol La Si) in rhythm, neither losing time nor changing the rhythm. Finally, if all has gone well, maybe I will add a measure of silence after the piano plays. What do you do in the silence? Remember, be still, prepare, relax, and still enter on time for the first echo.

After the kind of hearing developed by echo exercises has become second nature, the rhythms and tunes can be longer and more varied. When the presentation of the first "call" overlaps in time with the response, this is the beginning of the canon.

With 4-year-old children, I will take one rhythm and repeat it by clapping, tapping, or patsching it on different parts of the body or floor, each time as an echo, waiting for them to answer. Then, I eliminate my waiting time and launch onto a "new one" while they do the "old one." It is difficult not to copy what you see, to save it for the next measure. Some children begin to catch on, that they are "following" me in time. They perceive information, store it, while finishing up the job at hand.

On the conservatory level, students will continuously step the exact rhythms they hear from the piano's melody, but one measure later. During the entire exercise, they use Dalcroze's large stylized conducting arm beats, so they can keep track of where they are in time. The body remembers the physical form and movement of the conducting beats, which express the regular passage of time

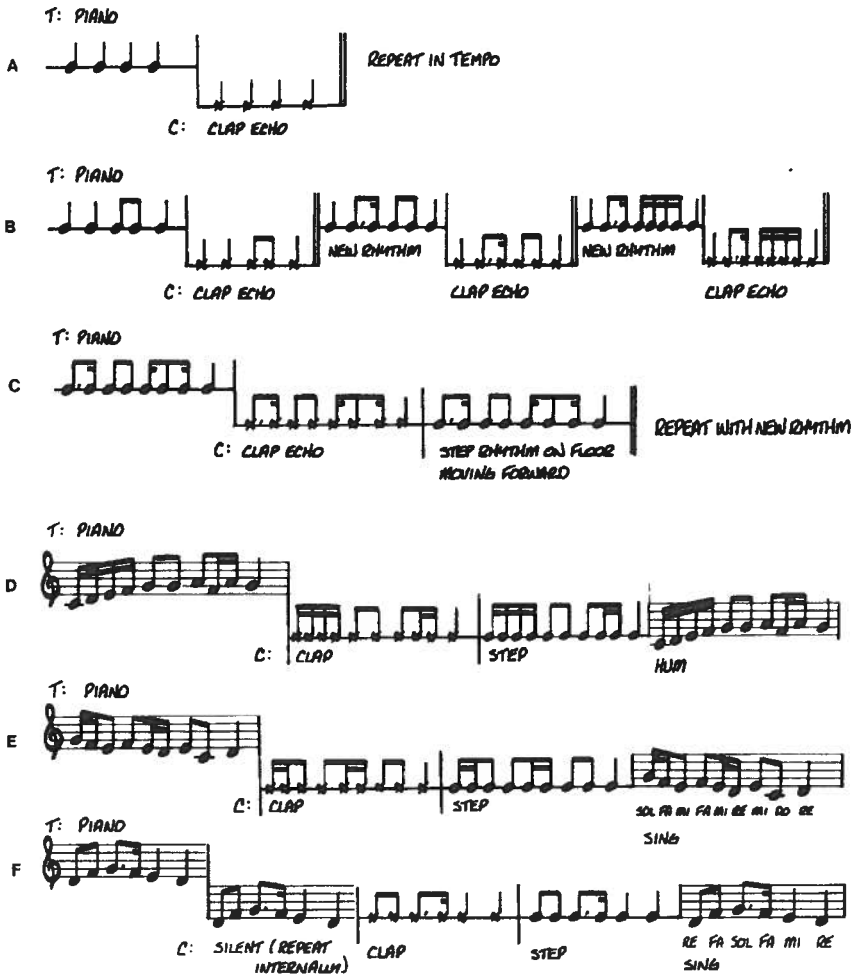

Figure 4. Step by step extension of memory and attention: examples of a series of echoes expressed in different modes.

(Fig. 5), while the feet lightly move the rhythm forward in the room.

This is easier said than done. The most difficult part is to know how to place my attention in myself. If the student analyzes the rhythms mentally, he cannot move freely; if he concentrates only on his movement, he will not hear the new rhythm; if he loses touch with either his beat or the pulse of the music, he will fall behind. The mind has to be open, but able to remember; the body must be relaxed and flexible, yet keep the conducting steady.

Canons are very educational and aesthetically pleasing. Another version of the echo-turned-canon exercise is to sing a round aloud and enter the second voice myself, by stepping the rhythm. This can be done in class, practicing several familiar rounds until they can be performed with ease. It can also be done in the practice room, playing, tapping, or singing in canon with one's instrument. Then the process of how to focus attention and hear two voices will have been better understood, so that a new round can be learned and performed with hardly any rehearsing.

Researchers are beginning to learn how and why these possibilities exist and how better to develop talent and intelligence.[11] Dalcroze teachers and students only know that the method works, that it helps, and that some inner communication between brain parts, body parts, and emotions is being developed. These types of rhythmic and melodic exercises always spark insight and growth. It is a challenge to speak about a subtle process that one is intimately engaged in performing on oneself.

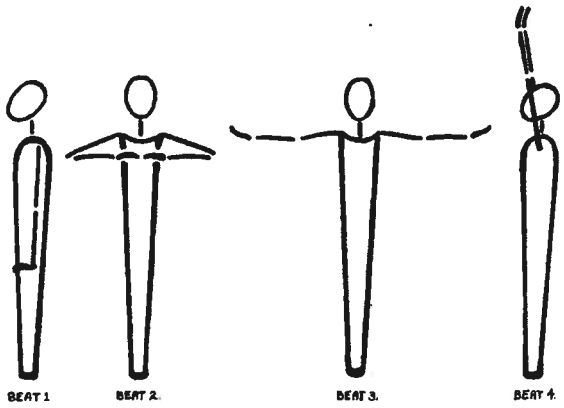

Figure 5. Dalcroze's large conducting beats describing a meter of four. Figure drawn by B. Breslin.

BEYOND THE CLASSROOM

A good course of Dalcroze eurhythmics (ideally, 2 or 3 years for preschool or college) is obviously beneficial for musicians, dancers, and actors, but what about other people not in the artistic endeavors? In a class I taught for nonmusicians, the city-planner blurted out in the middle of an exercise, "I have thought of this class all week, because I realized that not only am I always a little behind on my musical entrances in class, but I'm always a little late for all my appointments." Another student, hardware man by day, blues guitarist by night, discovered the tremendous amount of unnecessary tension he carried around with him, which made him feel blocked in his emotions and his performing. Another, an accountant, told how much more enjoyable concerts were for her; she was less intimidated by what she "didn't know" and more involved because of her own direct experience with tones and rhythms. Joshua, a lawyer, went on to study eurhythmics and classical guitar for many years, attracted to this form of study as an antidote to all the gaps in his previous education. Leonard, a NASA engineer, came to me at age 62 years, unable to clap or march to the beat. After 2 years, he was playing concertina in a contra-dance band.

I am often asked, when is a good time to start music lessons, either theory or an instrument. The question to address is, is he interested and is he ready physically, emotionally, intellectually, and constitutionally? Where there are Dalcroze programs available, many institutions and private teachers will require a course in Dalcroze before even considering a student for lessons:

> Once the child can hear, reproduce and read successions of rhythms and sounds, he will be initiated into musical *writing*. Then, possessed of the necessary qualities of receptivity and expression, i.e. ability to recognize sounds and movements, and to express rhythms and sounds in writing, he will be ready to take up the study of an instrument. His master will only have to teach him to transpose sounds and sound-images to strings or keyboard, by the aid of touch.[6]

For 3 years of Dalcroze classes, Rose (now 8 years old) was an able and enthusiastic participant. Her parents, both excellent professional musicians, asked me to teach her privately. I agreed, not realizing what had transpired at home. This little girl had been force-fed the piano for 2 years, along with her Dalcroze classes, and was quite advanced for her years. However, when she came to me, she had, in desperation, simply refused to play the piano any more. Since I already had a relationship with her, her parents were asking me to "make her play again."

I started from where we left off, so to speak, trying to engage her interest and win her trust. What began to emerge was her terrible fear of making a mistake. She had been given lessons as if she were as responsible and competitive as a conservatory student, but when we went back to the rhythm games that she loved, her fear and rigidity ceased. Another discovery was that there was no connection between her own joy of music-making with her body and voice and the piano (a foreign body on which she does what she is told). Yet, she has had many of these experiences in Dalcroze class. My job now is slowly to bridge the gap and hope that the piano will hold some positive experiences for her, as we reach toward it through our games.

If children are pushed before they have the interest, we will lose them. Piaget, Montessori, Erikson, and many others speak of a sensitive period, when the organism is ready to take something in or ready to take a new step. If the activity presented to the child is not appropriate, the possibility for growth may be lost.

> Activities such as reading with comprehension, focusing attention, and the various types of memory which we employ every day require the combined efforts of millions of neural connections. . . . What makes synapses and neural networks form? . . . Active interest and mental effort *by the child* is the key. . . . Collaborating with nature's patterns for building brains may be a better idea than creating "superbabies."[11]

Children also need the freedom and encouragement to experiment, to be allowed to "fool around" on the piano, instead of practicing only their lesson, or playing "correctly."

> If a child is not intimidated at a young age, she can enjoy discovering all kinds of sound patterns on an instrument. She can develop a tremendous sense of freedom

with the instrument and with her own expressiveness. It will give her a sense of friendship and intimacy with the instrument that can be acquired in no other way. It is a direct communicative experience for the child since she is directly responsible for the sounds and need not go through a waiting period for rewards. . . . When improvising, the child speaks to the instrument and listens to what she is saying through it.[7]

The Dalcroze method is a method of training, rather than a therapy, yet it can be a tool to rectify problems and fill in gaps. It is not a movement technique, but requires a fine use of the body as an instrument. Unlike some traditional dance training, where observation of the line and form of the body is external, coming from the mirrors and the teacher's admonitions, Dalcroze aims to enhance the kinesthetic sense and the initiative of the student. Researchers today are beginning to prove some of Dalcroze's assertions,[11] including the perennial suspicions of many teachers that joy is a great stimulus to learning.

Music is one of the most innate and mysterious of human expressions. Sounds appear and disappear; you cannot hold on to them. Inner musical impulses manifest themselves through the body, by way of the emotions, tempered by the mind's critical stance. Music takes place over time, through the physical medium of vibrations. In order to listen to or make music, we need to have a sustained, flexible attention that moves with the music. We need memory of what was and foresight into what will be. We need to be ever present to the music now, as it is.

. . . the teaching of rhythmic movement, although based on music, is not solely a preparation for musical studies, but rather a system of general culture. The Greeks attached great importance to rhythmic movements: they recognized the beneficent influence of a rhythmic education of both body and mind, and they also know that this rhythmic education was capable of influencing the inner life of man. Plato says: "Rhythm, i.e. the expression of order and symmetry, penetrates by way of the body into the soul and into the entire man, revealing to him the harmony of his whole personality.[6]

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