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\*Introductory note to teachers interested in using the material on this website

There are many exercises here as well as rationales and strategies for their presentation. For the most part, they are intended for music teachers and the leaders of music workshops. It is a small part of what I presented during my university teaching, so their application for use with young people—those without developed musical skills or a sophisticated vocabulary—would take some conscientious rewrites by those with the appropriate experience. Some of these notes have already been edited with a view to making them appropriate for a younger musician, but I feel that such editing will be best undertaken by the teachers/leaders who will be using these ideas and exercises for working with their students.

Many of the exercises here include a motivation for their creation and a rationale for their use, and I try to highlight the most important benefits of the exercise. Some are generally experiential and are designed for the students' first exposure to an idea or challenge; some are intended to impart certain skills, and those often presented with graduated materials to accommodate different levels of accomplishment. I also try to give some insights I've gleaned about the benefits of different possible presentation styles for each exercise. Lastly, I've tried to indicate possible diagnostic uses of some of the exercises that might not be evident to a new teacher. Those are often more important than the skills which are the ultimate purpose of working with the material. They can be more important because often teachers have no guidance in how to present material and how to evaluate its usefulness. (I speak for myself remembering the unripened 23 year old university instructor.) Lastly I have generally avoided any indication of intended 'outcomes.' A worthwhile exercise, for me, is more than a functional, agenda-driven activity. It should open up exploration and awaken curiosity about the way things are ... in music and elsewhere. Too often the potential flowering of our work is unfairly curtailed by the assumptions which are brought to that activity. We might only absorb the nutrients written on the package, when there is so much more available with more extensive digestion. So the outcomes will be and should be different for different teachers. Some may use an exercise mainly for its diagnostic potential while others will use it to assist in the achievement of a particular skill-set. There are many ways to use good exercises. Although not every exercise can address all three of my main teaching concerns, I hope that many of these exercises can assist the development of the sensitivity and intelligence of the body, the mind, and the intelligence of feeling.

You are welcome to make use of these exercises according to your needs. You may notice that I credit others where the idea has been taken from another source. I feel that this provides links to additional material good sources, and it adds to the credibility of the material. In fact, I would say that there are rather few truly original ideas anywhere in practice or print. We have all stood on each other's shoulders, and it's just good for your students to be aware of that, since they will be standing on yours.

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## About the rhythmic exercises which follow

### Pedagogical comment:

Jacques Dalcroze was an excellent and innovative music educator, especially for children, and he stressed the importance of incorporating full body movement, particularly in the teaching of rhythm. Long before I met with his ideas (and having enjoyed years of involvement with various traditions of folk dance), I became aware that, without movement of the body, rhythmic perception and execution will be weaker, less available and, because it will not be as deeply internalized, it will be less reliable. And since rhythmic flow is an ineluctable component of all musical performance, I feel that it is vital to include the education of the body.

For the most part, most of the rhythmic material which follows is intended to be done with hand clapping, vocalizing, miscellaneous and home-made instruments. In any case, the material is intended for use without any specific level of instrumental proficiency.

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## **Exercise: Playing for The One**

### Listening through moving

This is a great activity to get your students to really listen to the music in terms of its components and qualities and the way they integrate through tempo, meter, texture, form, articulation, and so on.

Invite your group to move around the room any way they like. They take their own path through the space and they take their own tempo and character. You might suggest that they move without considering how anyone else is moving, but not to bump or interfere with anyone else's movement. They could move like an animal or a machine, like a professional (painter, policeman, tightrope walker, ...) like a cartoon character, or their movement could just be crazy fun. It is important that they try to stick with it while they listen to the music played by the leader. Their instruction is to listen but to try NOT to be influenced by the music at all.

The musician, after observing the group, chooses only one person to accompany. Their aim is to correspond as closely as possible to that one person: to their tempo, their mood, their phrasing, and so on. All the movers are listening to feel if the music is being directed to their movement.

Essentially they ask themselves if they feel that their movement is being supported by the music. If it is not, they can quietly go to one wall and sit down to watch the others who are still moving. While they observe and listen, they can try to guess for whom the musician is playing. Ideally, only one person will be left moving, at which point the leader tells everyone if the last one moving was their choice. If it was, then they can be asked to move again to the music with everyone joining in, now trying to move in the same quality as the one who was chosen. ‘

If it is not that last mover, then there are several options for continuing the exercise. The leader can reveal who they were accompanying and ask that person to move again as they had been moving, and everyone can be invited to move along with that quality of movement. At this point a new round can begin with everyone moving in a new way. The musician can give the music responsibility to someone else who is willing. If there are no instrumentalists up to the task, someone can use their voice, which is also highly effective.

If, by the time most of the participants are sitting and watching, there are two or more people still moving, the leader can invite those who are sitting out to say who whose movement seems best supported by the music. Who do they think the musician chose to accompany? They might all be invited to imitate the movement of each of the remaining movers in turn, in order to sense in their body which one has the best correspondence to the music. Or, they could be invited to listen to the same music while moving in someone else’s style. Does the music fit this movement? Why not?

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## **Exercise: Morphing and passing**

Categories: Icebreaker / Modeling /

A number of the following games and exercises will serve very well as icebreakers as well as providing new experiences for musicianship and improvisation.

### The Play:

With everyone standing in a circle, one person creates a repeating movement together with a vocal sound. It is best if it is totally spontaneous, but some individuals may need a few moments to create something they like. When they have settled on it, they take their sound-movement into and around the circle. It’s good to make eye contact with one or more people around the circle to see who’s in the group and who is interested in what you’re doing.

\*That person then chooses someone else to continue the sound/movement. They stand in front of that person trying to make their sound/movement as clear (and as enticing) as possible. That chosen person then begins to mimic the movement and sound in sync with the originator.

\*The originator should not walk away until they are satisfied that the new person has got it all: the movement, the sound, the attitude, and energy.

\*That new person then takes the sound/movement into the center and gradually morphs both the sound and movement until it becomes something different.

\*They then take the new sound/movement around the circle while gradually changing it into something else. Finally, they choose someone to mimic their sound/movement, and they persist

in their own performance until they feel that it has been successfully transmitted to the new person. And so it continues.

There are many possible variations on this principle of passing a movement and sound. Some of these follow.

## **“Razzberries”**

Categories: Icebreaker / Modeling / Passing / Sound-Movement

### Explanation:

A ‘razz’ is really any sound intended to deliver a funny or strange vocal sound to another. It can also include gestures or larger bodily movements. Despite the origin of the word ‘razz,’ it should not be delivered in a nasty or mocking spirit.

This is a great icebreaker for a new group, but it’s also a good barometer by which the spirit of an ongoing group can be measured. ‘Mistakes’ occur frequently, and all inevitably evoke good-hearted laughter. Razzberries touches on several other important dynamics needed for a good learning environment.

### The Play:

With everyone standing in a circle, one person (A) ‘razzes’ the one on their right. That person (B) first gives back the same razz to A (on their left). Then they turn to their right and give a different razz to the person (C) on their right. And it keeps going around in that manner. In situations where there is a fear of spreading germs, the game can be played with gestures only, without making sounds.

### Pedagogical rationale (What’s the point of doing this?)

It is fun and usually gets pretty silly and often quite hilarious. It is almost impossible for anyone to resist the lunacy that usually ensues, so it puts everyone on an equal footing: those who are already known to be more proficient than the others are taken down to the same level as everyone else; there’s a mutual recognition that sounds and movements are really fun. We become like kids again. Sort of like “beginner’s mind.”

### Diagnostics:

It is also an important \*diagnostic tool for the leader who can see which parts of the participants’ bodies are really alive and those parts which do not participate; and it is the same with making vocal sounds. Some will not try to find a different ‘voice’ while others will avoid using their natural voice. Some people do not engage their face at all. Some use their hands but not their fingers or their torso. Some cannot (or do not want to) make ‘ugly’ sounds, perhaps due to their self-image. Do those with small bodies ever try to create a big sound and vice-versa?

None of these perceptions are intended to be material for ‘analysis,’ but the leader can glean a great deal of information relevant to their overall music-making. There are many things for the leader to learn from observation. The observations gleaned from this, and other activities, are not intended as material for analysis, but they may reveal insights relevant for teaching music performance and improvisation.

\* In my own teaching, “diagnostic” tools are not formal, analytical tools; they are only meant to serve as lenses through which the teacher can better identify and understand something about their students’ capacities and behaviours. Sometimes the exercise is itself a means of addressing their lack, but it is at least a way for the teacher to identify a student’s needs.

# Word association

Categories: Language / Quick reaction

## Rationale for the exercise:

Among other things, the improvising musician needs to be very responsive to the moment—to the immediate effects of impressions arising in them from both external and internal influences. This game can help foster that willingness in many participants.

## The Play:

One person begins by saying a word that pops into their mind and the next one then says the first word that they think of by association. And so it continues. Many participants will have experienced this before so you can try one of the variations below.

## Considerations:

The rapidity of associations can be very stimulating and because there are no ‘wrong’ answers, it can free people to participate, especially those who may be shy or hesitant to reveal what they consider to be their lack of skill. But some people do not like being put on the spot, even in a game-like setting, so the leader might suggest that anyone can say something like “pass” which allows them to divert the pressure but still participate. Or there can be another response such as “Back!” in which case the person who just gave a word now must come up with a new association. Another way to relieve any perceived pressure, while keeping everyone in the game, is to designate a signal by which anyone can indicate that they are starting a new word with no association at all. (What will be interesting is to review, after the exercise, to see if in fact the new word was really new or just an association that the speaker didn’t feel was ‘right.’)

## Variation 1: The Second Association:

When presented with a word, instead of voicing your first association, you can hold it for a moment until a second association comes to mind, and then they say THAT word. The idea is not to pause long enough for many options to arise. So instead of choosing from a bunch of possibilities, it is interesting to find the very next association. [Musicians often react to what they’ve just played, playing the first thing that occurs to them. This is one way that players succumb to mental or physical habits without realizing it. This exercise may encourage one to see the advantages of holding off for a moment to see what else comes to mind or hands.] This second association may feel totally unrelated because we don’t know how the person got there. They themselves might not know either. But it is useful for everyone to realize that we should try to receive the responses of others without judgment; our inner worlds are hidden.

## Variation 2:

One way to help steer clear of the most habituated responses is by expanding or limiting the scope of associations. One example of such guided associations might be that the next word must have a specified relationship to the previous one. For example, it must begin with the third letter of the previous word. Or the next association should have the same rhythm or the same number of syllables. A sensory-based association might involve color, texture, weight, aroma, or it could be based on the actual *sound* of the word such as rhyming. It could be based on the *color* of the object (if there is one) or the season or time of day. Associations might have to be related to childhood or something which was actually experienced that day. By directing the attention to a given category, it can have the effect of redirecting associations away from habituated patterns and toward a more creative response.

Example: While ‘tree’ might strongly associate with ‘swing’ or ‘branch,’ a direction from the leader to associate with color might influence someone say, ‘traffic light’ (green) or ‘novice’ (being ‘green’) or ‘American dollar’ (greenback). If the instruction was to associate with shape, the next association might be prayer (outstretched arms) or ‘family’ (family tree).

Diagnostics:

Because this exercise is mostly intended as a preparation for improvisation, the stress is best placed on spontaneity. So the leader should take note of people who are clearly associating with a word which was voiced earlier in the circle, that is, they are not being responsive to the person speaking immediately before the one whose turn it is to speak. This can indicate several things, but it essentially shows the way that our attention often ‘stops’ at a certain moment after which we no longer are actively attentive. We can become intrigued with a word for some reason, or we get fixed on the word that we would have said at some earlier point, or we start thinking about it all. This ‘bump’ in our attention happens all the time—often in a gathering when, by the time I say something, the moment of relevance has already passed. And sometimes it makes for what seem like strange non-sequiturs.

Rationale for the variations:

The suggestions are all quite germane to creativity and improvisation. Often the limiting factor for a player is the frame of reference to which they are habituated. I notice that some players get an idea fixed early in the improvisation which acts to filter out what is happening in the present moment, and on the other hand, some players are so occupied with the music they are playing, they cannot recall where they were even a half minute ago.

Thoughts and observations:

Creative improvisation is difficult to teach. We want to stimulate an immediacy of response in order to evoke authenticity and new experiences, but that very immediacy often steers us into habituated reactions. That conundrum is dealt with throughout this website — even if it is not specifically mentioned. Tricky...

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## #4 Circle Counting

Categories: Finding Your Count

*This game/exercise has been in common practice for some time. My guess is that it might have originated as a theatre exercise.*

The Set-up

Being seated in a circle works well for this exercise, but any random configuration is fine as long as the participants are able to keep track of a clear sequence of people within the group.

The Play:

The group will count, one person at a time, up to the number of people in the group. So if there are 15 people, the participants will count from 1 to 15 (repeatedly), with each person speaking individually and only once per cycle. There is no need to fix a general tempo or a rhythm and, while the counting should maintain the natural ordinal numbers, the order of speaking is improvised. As each person says the next number, they must also clap simultaneously with the number.

So someone will clap and also say “One!” at the same time. The next person will clap while saying “Two!” Both the clap and the vocalizing of the number are important. If either the clap or the number is missing, the sequence is invalidated, and the group must begin again from “One!” (Anyone may begin.)] It will continue until all fifteen people have said a number while clapping.

\*If they forget to clap, the exercise begins all over again from “One!”

\*If two people clap or speak at the same time (for example, if two people say “eight” simultaneously) the group begins again at the beginning with someone counting, “One!”) No one takes two numbers so each participant will speak and clap only once.

#### Rationale:

Musicians need to sense the immense number of ‘moments’ that potentially exist between any two beats or sub-beats or phrases. This is necessary when playing very quickly flowing music but even more so when playing music in a slow tempo or music with rubato. It’s indispensable when learning to “place” a note for interpretive emphasis. (Of course, many teachers may not be working with students at a level where this is a need.) We also confront this need when an ensemble is required to enter together after a substantial rest. When, exactly, is it the right time? A surprising amount of anticipatory tension can develop before each new number in this game/exercise.

#### Moments just go whizzing by ...

After a couple of experiences where two or three people all shout out the same number, that is, when another person ‘takes’ the number they each intended to say, everyone becomes increasingly sensitized to the silence before each new number is called. You want to say it but you’re not sure that someone else will speak for it—even just before you do. You wait a few moments in excited anticipation, so as not to collide with another person’s moment, and the silence between numbers can become quite highly charged. You want to declare it, clap and shout the number, but you’re waiting to see if someone else takes it. Then you shout the number but forget to clap, or you clap forgetting to say the number. Or you decide to shout your number (let’s say, eight) immediately after you hear ‘seven.’ And without waiting a microsecond you say “Eight” ... but simultaneously as someone else has the same strategy.

So everyone begins to feel the palpable passage of almost innumerable moments of time between the numbers—something like the falling of thousands of tiny grains of sand in an hourglass. What formerly seemed like only a “moment” begins to expand into a plethora of moments. You may not have been aware of this before playing this game. This expansion of our time-sense is the kind of impression that an artist really needs.

This exercise can make us aware of the need to ‘speed up’ our perception of time flow by appreciating the expanse of musical terrain between the notes. We often imagine, for example, that playing in a slow tempo is easier because there’s not as much going on. However, slow tempos often require the player to “go faster” inside, that is, with a finer granularity, in order to be on time, or to play on the ‘back’ of the beat, or to execute a tasteful rubato.

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## **Circle Clap ~ a**

*Categories: Rhythmic perception / Icebreaker*

#### Locating yourself in the flow

The general idea of this next series of exercises is to develop a clear sense of your musical place within an ongoing cycle. As musicians, we need to be able to ‘locate’ ourselves with and without visual cues. There are many ways to engage with this and there are many more variants than will be presented here. For teaching purposes, I suggest that rather than inventing new variants, watch your students and figure out what they need.

#### Rationale

There are many situations in which performing musicians can lose their place in an ongoing flow. For example, vocalists may lose track of the 32-measure break during a complex solo, particularly a drum solo. Heavily accented shots or syncopated phrases can be mistaken for a downbeat and can disrupt the sense of where you are in the cycle. This exercise may help strengthen the sense of rhythmic cycles and your place within them.

#### Pedagogical strategy

So these exercises each have, as their M.O., disruptive or challenging elements that dislodge the sense of one's location in the ongoing cycle. Specific strategies for practice will be suggested.

§ § §

## **Circle Clap ~ b**

*Developing Peripheral Vision*

#### The Set-up

At a slow or moderate tempo, participants begin clapping in turn around a circle in a steady pulse. The tempo should be slow enough that no one gets lost.

The leader will determine the direction of the passing clap and will begin with the first clap or designate someone else to begin. As the clap begins to move around the circle, try looking straight ahead across the circle, getting your cue from peripheral vision. At the beginning, it's okay if you need to turn your head to see where the clap is so you're not caught off-guard. However, it's good work to try looking only with your peripheral vision.

#### Pedagogical rationale:

In our normal activities we often need to incorporate a global focus as well as a narrowly directed focus. In many musical situations, it may not be possible or wise to maintain an exclusively narrow focus. For example, musicians using a notated score must learn to keep both the score and their instrument in their field of vision. This is particularly the case for keyboardists, percussionists, church organists, who are already obliged to see the entire expanse of their instrument(s) as well as the specific places they need to touch. Orchestral musicians must attend to both the conductor as well as their score; musicians accompanying dance or theatre must learn to develop their peripheral vision (as well as peripheral attention.) This exercise can develop your confidence to trust your peripheral vision and to expand your attention.

§ § §

## **Circle Clap ~ c**

*As above, but without relying on visual cues*

#### Trusting our ears, not only our eyes

The leader sets a tempo and then begins the exercise with a clap which is then passed in a steady pulse to each member of the circle. The tempo should be such that each person is able to participate with confidence and help to maintain a steady tempo. After going around the circle a few times and becoming familiar with each person's sound, you can try to keep the sound traveling around without looking at anyone. Relying exclusively on listening cues is difficult but it is easiest if each person's sound is somewhat distinct from the others. This can be done by using sounds other than clapping, such as vocalizations or with pitched percussion instruments (such as Boomwhackers). The idea is to see if the succession of sounds can itself serve as cue to locate one's spot in the cycle. Students can try closing their eyes for a short time and perhaps they might try keeping the sound going around without looking at all.

§ § §

## **Circle Clap ~ a**

*Categories: Rhythmic perception / Icebreaker*

### Locating yourself in the flow

The general idea of this next series of exercises is to develop a clear sense of your musical place within an ongoing cycle. As musicians, we need to be able to ‘locate’ ourselves with and without visual cues. There are many ways to engage with this and there are many more variants than will be presented here. For teaching purposes, I suggest that rather than inventing new variants, watch your students and figure out what they need.

### Rationale

There are many situations in which performing musicians can lose their place in an ongoing flow. For example, vocalists may lose track of the 32-measure break during a complex solo, particularly a drum solo. Heavily accented shots or syncopated phrases can be mistaken for a downbeat and can disrupt the sense of where you are in the cycle. This exercise may help strengthen the sense of rhythmic cycles and your place within them.

### Pedagogical strategy

So these exercises each have, as their M.O., disruptive or challenging elements that dislodge the sense of one’s location in the ongoing cycle. Specific strategies for practice will be suggested.

§ § §

## **Circle Clap ~ b**

*Developing Peripheral Vision*

### The Set-up

At a slow or moderate tempo, participants begin clapping in turn around a circle in a steady pulse. The tempo should be slow enough that no one gets lost.

The leader will determine the direction of the passing clap and will begin with the first clap or designate someone else to begin. As the clap begins to move around the circle, try looking straight ahead across the circle, getting your cue from peripheral vision. At the beginning, it’s okay if you need to turn your head to see where the clap is so you’re not caught off-guard. However, it’s good work to try looking only with your peripheral vision.

### Pedagogical rationale:

In our normal activities we often need to incorporate a global focus as well as a narrowly directed focus. In many musical situations, it may not be possible or wise to maintain an exclusively narrow focus. For example, musicians using a notated score must learn to keep both the score and their instrument in their field of vision. This is particularly the case for keyboardists, percussionists, church organists, who are already obliged to see the entire expanse of their instrument(s) as well as the specific places they need to touch. Orchestral musicians must attend to both the conductor as well as their score; musicians accompanying dance or theatre must learn to develop their peripheral vision (as well as peripheral attention.) This exercise can develop your confidence to trust your peripheral vision and to expand your attention.

§ § §

## **Circle Clap ~ c**

*As above, but without relying on visual cues*

### Trusting our ears, not only our eyes

The leader sets a tempo and then begins the exercise with a clap which is then passed in a steady pulse to each member of the circle. The tempo should be such that each person is able to participate with confidence and help to maintain a steady tempo. After going around the circle a

few times and becoming familiar with each person's sound, you can try to keep the sound traveling around without looking at anyone. Relying exclusively on listening cues is difficult but it is easiest if each person's sound is somewhat distinct from the others. This can be done by using sounds other than clapping, such as vocalizations or with pitched percussion instruments (such as Boomwhackers). The idea is to see if the succession of sounds can itself serve as cue to locate one's spot in the cycle. Students can try closing their eyes for a short time and perhaps they might try keeping the sound going around without looking at all.

§ § §

## Circle Clap ~ d

*with gradual acceleration & strategic visual cueing*

### The Set-up

The exercise should be set up as in #5a-1 and -2. So, again, the leader establishes a tempo (quite slow) before beginning the circular exchange.

### Controlling Acceleration

Begin the circular passing of the clap at a slow tempo. Only after two or three times around the circle—when everyone is quite relaxed and the tempo is steady—should there be an instruction to let the pace quicken. No one should intentionally try to speed up the pace of the clapping but rather allow it to accelerate. The tempo should ideally increase so gradually, that a person entering the room would not immediately realize that it's accelerating. (When someone intentionally increases the tempo, it will almost always take the next person by surprise resulting in a bump in the tempo that will disrupt the continuity. It will almost inevitably result in a loss of the beat and the breaking of the movement around the circle. But, of course, you can always begin again.)

See how fast the clap can proceed around the circle before it disintegrates. It will fall apart but try several times to see how fast it can go. Can the group reach six claps per second or faster?

### Possible discussion:

Why do we keep losing the continuity? How can we make it go faster without losing the flow?

#### Performance strategy 1 (for going really fast around the circle):

\* Here are two remarkably effective methods. First, count the number of people in the whole circle and, with everyone imagining that they are the beginning of the circle—that is, that they are “number one”—we all count to that number and clap when we say the number “One.” So, if there are 8 people, everyone will count from one to eight and clap when we count “One.” The group can accelerate their counting to a very fast tempo, with everyone clapping at the same time (because everybody is “One”—making it a sort of “Buddhist” exercise, 哈哈). This should be very easy to do.

\* Now, imagine that everyone in the circle counted just like that (counting to the same number and clapping when they say “one”), but they each started clapping and counting successively, that is, one after another. (So, I would clap and start counting when the person before me is counting “2.”) If each person enters in succession, counts to the same number (as there are people in the circle), it should be possible to do this with eyes closed. And after feeling secure with that, the group could try incorporating the acceleration. Remarkably, it works very well ... but takes some practice.

If you need to visualize it, look at the two illustrations that follow the section “Performance Strategy 2” (with blue dots and with a clock face):

Example:

There are 9 people playing: Alys, Bob, Casey, Deanna, Ed, Flora, Germaine, Hunter, Isabelle. Alys will set up a slow tempo and then she’ll clap and say “one” and, as she continues counting inwardly, she notes that Bob is 2, Casey is 3, Deanna is 4, Ed is 5, Flora is 6 and Germaine is 7.

After Alys’s clap, Bob claps and says “One,” because he is initiating a new beginning of a cycle. As Bob continues silently counting, he understands that Casey is 2, Deanna is 3, Ed is 4 and so on. Each person counts themselves as “one,” so each person will be having the same internal experience. [This is essentially the technique used by performers of certain minimalist “pattern” music.]

If there are 12 people, you can even imagine a clock face (see below). You could divide the circle into three groups of four, with you as number 1: (#1-Casey, #5-Germaine, #9-Katherine) or four groups of three people (#1-Casey, #4-Flora, #7-Isabelle and #10-Larry). If the number of people in the group is not divisible into equal groups, like 7 or 13, you can experiment and learn which groupings will be easiest for you to count.

Rationale for the exercise:

So, regardless of the number of players, you can use your spatial sensibility to keep track of the count. In other words, it is possible to keep accurate count without ‘counting’ at all. This is exactly what orchestral players do when they follow the conductor’s baton. They know the “shape” of a four-count or a five-count, so the movement of the baton through the shape does the counting and it is just as reliable as if the conductor were counting aloud. Musicians from other cultures have done this as a long-standing tradition, where gestures of the arm, hand and fingers are used to do the counting. And musicians commonly also use subtle leaning of the torso or other bodily movement to engage in non-intellectual, non-verbal counting. The intelligence of the body is perhaps our most reliable ally in matters of rhythm and perception of time-flow. [You can find a greater development of these ideas elsewhere on this website: Terry Riley—Comping Exercise; Fifty-fours, etc.]

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**Finding My Space - a**

**Musical Rests**

*Rather than the Absence of something, rests are better perceived as the Presence of nothing*

Pedagogical Comment:

There are several games and exercises in this file (and on the website) that aim to cultivate the perception of “rests” not as a cessation of music, or as the absence of notes, but rather as an active presence--an integral part of the musical fabric. Just as a buttonhole is not simply a place where there is no shirt a rest must be actively ‘played.’

The Play:

In this exercise, each person gets to clap only once. The person who begins claps their hands and, at exactly the same time, loudly and clearly says, “One!” The second person claps and declares, “Two!,” and so on, until each person has had a chance to clap and say their number. But if they say their number as someone else is also calling the same number, the group must begin again from number One. Anyone can begin. If everyone in the group has had a turn, they can try to go

through the group again, with another person starting with, “One!” If the group goes through more than one cycle, then again, each person has only one clap in each cycle. If you clap without calling your number or if you call your number and forget to clap, the group must begin again at the beginning ... and anyone can begin with “One.”

This sounds easy and sometimes it does go very smoothly, but it is surprising how difficult it can be to get through everyone without having to begin again (and again).

Some advice to teachers:

At first, no one expects to ‘collide’ with anyone else. We generally think that it will be easy to find a space for our number-and-clap but, as the game progresses, we are usually quite amazed how often someone chooses the very same moment to say their number and clap. The game often slows down as people really try to find a moment when their own clap and number will be unique with no collisions. So we are all quite surprised that, even after a long pause, just when you feel that no one is going to clap, two or three people will clap and say the same number at the same time.

And so the passing time becomes highly charged. There seems to be an infinite number of passing moments—moments of “Now!”—and yet we often manifest the identical impulse as our fellow musicians. This awakens some people to the aliveness of the passing time. The leader might find ways to point out that this energetic ‘charge’ is what is needed in their performance practice.

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## Finding My Space - b

*Finding a point of emptiness (silence) within an ongoing rhythm cycle*

*~best to do with between 5 and 20 people~*

*Categories: Rhythmic perception / Reification of silence*

Rationale

This is a group exercise which involves finding an unoccupied place in a rhythmic cycle and being able to stick with it while the cycle continues. It is based on the reification of silences (rests) in music, that is, making them a palpable experience. Younger musicians, and those who do not perform, often regard rests quite passively, as if they were ‘dead air’ to be dutifully counted until it’s time for the next notes to be sounded. This exercise aims to enhance the appreciation and value of rests, making them an active presence rather than an absence.

There are many ways to organize this exercise, and the teacher can make many variations to keep it fresh for the students. And the students can, as with almost all the other exercises here, be given an invitation to come up with their own variants.

How to play:

The leader begins by striking a definitive sound which begins a rhythmic cycle and which repeatedly re-initiates each new cycle. The group can count aloud, softly at first (and then only inwardly), from “one” up to the total number of participants. (So the count will go to fifteen if there are 15 people playing.) After the leader begins the cycle, they nod to any other person who then chooses any available count on which to make their sound. So, if they choose to play on count “10” they will play on that count each time it comes around again. Only when that person feels stable on their count do they give a nod to someone else in the circle who then also chooses any unoccupied beat to play, and they play on that beat on each subsequent cycle. The participants can continue counting to help maintain their place in the cycle, or they can begin to trust the sequence of sounds to tell them when it is their turn.

Gradually more and more beats are chosen and, as they become occupied by sounds, it becomes more difficult for the last few people to find an empty beat. This is a particularly interesting part of the exercise, because the players must deal with the increasingly difficult task of finding an available beat—an unoccupied beat. Whereas we typically listen mainly for the notes and sounds, the players here find themselves actively listening for the silences. The result is a kind of ‘reification’ of the silent beats; the ‘rests’ become more active than the sounds.

Variations:

There are many ways to make this exercise more challenging as well as more musical. The leader can suggest that, in addition to your chosen beat, you also articulate the following beat; or the next two; or skip one beat before again striking your note; and so on. Or, in place of simply articulating their chosen beat, they play a motif of their own choosing or chosen by the leader. Or they can improvise, regarding their chosen beat as the beginning of their own cycle. Or, at a cue, everyone changes from percussion to short vocal sounds ... then loud ones ... and so on. You can make eye contact with someone in the group and, while maintaining your place, make eye contact with someone else and silently agree to switch places with them—i.e., they take your beat and you take theirs; at a cue, everyone changes to a vocal sound; etc.

Rationale:

There are a few things that can be learned from this game/exercise. One lesson is that it is not so easy to keep your place in an ongoing cycle when you have a relatively small contribution to an ongoing flow. This is a bit like the skill required in many traditional (and contemporary) styles and ensembles, and your students would probably love to see and hear a few of these.

- \*[bellringing](#)
- \*[gamelan](#)
- \*[ketchak](#)
- \*[Innuist throat singing](#)
- \*[Interlocking parts in Steve Reich's Clapping Music](#)
- \*[Klangfarbenmelodie in Schoenberg's Five Pieces for Orchestra](#)

Another point—very important for playing standard repertoire—is that our typical musical training (especially in the beginning years) tends to regard rests as passive moments in the music. It is where many students begin to believe that you do “nothing.” (Isn’t that why they’re called “rests?”) Consequently, musicians (especially young ones) do not feel or sense the ongoing flow through those moments of ‘emptiness.’ They tend to be moments of hiatus in the compositional flow.

In this exercise, it becomes increasingly difficult for each person to find an unoccupied beat and they really have to listen attentively to find it. We typically do not attend to these empty moments with the same quality of musical attention that we give to the beats with interesting sounds. Students often ‘cheat’ the rests, failing to give them the fullness of time that they require. [Note: In some musical cultures, such as in Carnatic music from the south of India, the performer physically taps, claps, or conducts the beat as they perform on stage (assuming that one hand is unoccupied). If they do not keep a physical count, someone in the ensemble will do so. And they don’t simply keep an undifferentiated beat, but they rather identify the ordinal number of the beat through special formalized gestures. Just as a conductor of Western orchestral music can show, through gesture, which beat is being played (down, up, left right), some cultures can show quite precisely where they are, even in a cycle of as many as 13 or 22 beats. This is not understood to be a crutch for a weak musician, nor is it regarded as any kind of ‘cheating.’ It is also useful for

the other musicians on stage and even the audience, because it helps everyone keep in touch with the complexities of long metric cycles and highly syncopated patterns.]

## The Clapping Game

~ Looking for Nothing-2 ~

*(Composed and published by Toronto percussionist Bob Becker)*

### Background

This exercise/game is a good companion to the “*Unison Exercise*,” also on this website. Both exercises invite you to assess a musical value in “real time,” that is, without thinking about it. The Clapping Game is a published composition which is presented in the form of a “game.” It is a good exercise that serves several purposes, and it gives the teacher an opportunity to observe the students’ problems with rhythm and with musical attention. Therefore, it can be readily used as a kind of diagnostic exercise. (I no longer have the original instructions, so these are my own reconstruction.)

### The Play: Quick Description of Game Play (for younger people):

The game is meant to be played with a partner. You each choose your own number from one to six and you don’t tell it to your partner. Once you’ve chosen a number, you both begin clapping together at the same time and at the same speed. Each clap gets one count. When you reach your number, you leave one beat silent and then you begin again, counting from “one,” and leaving one beat silent at the end of your phrase. The game asks you to listen for the moment when you both have your silent beat at the same time, and then you STOP before you clap again! [This is an shortened version of the game but it’s a good place to start with younger people. Then they can move on to the full game below.]

### Detailed Description of Game Play (for older kids and adults)

Each player chooses a number from one to six and neither tells their partner which number they have chosen. Both players will begin to clap together, starting at the same time and in the same tempo. They clap up to their chosen number, then leave one beat silent, and then continue to repeat the whole phrase until they reach a common silence.

If, for example, one of them chooses “3”, they clap their hands on three successive beats and remain silent on the fourth beat. Then they repeat the whole 4-beat phrase: clapping three times plus a one-beat pause. If their partner chooses “4”, they will clap four times and leave one beat silent and then repeat that whole 5-beat phrase. The results of players #1 and #2 are visualized below.

#1 Clap Clap Clap rest Clap Clap Clap rest . . . .

#2 Clap Clap Clap Clap rest Clap Clap Clap rest . . . .

It is fun for the players to try to notice that the silences shift around; they either get further apart or closer together but, sooner or later, both players will rest on the same beat. When this occurs, both musicians change their number and, without missing a beat, they keep the game going: they clap starting from ‘one’ and count to their new number, still adding one beat ‘rest’ before they repeat the new phrase. It is important that they do this without skipping any beats, so the tempo remains steady. The graphic image below is laid out like a musical score: one part above the other. Musician #1 has chosen 3 and Musician #2 has chosen 4. (The “C” represents a “clap” and the “r” represents a rest. I have used a mono-spaced font to better illustrate the alignment.) It is easy to see that the rests eventually align because they occur at the same time.

#1|| C C C r C C C r C C C r C C C r

#2|| C C C C r C C C C r C C C C r C C C C r

The teacher can make a stronger graphic image by using large paper or objects such as playing cards, coins or anything that will help young students see that the silence is also a musical action. In this example, the players can see that, by the time the silences align, player #1 has played four silences while player #2 has played only three. For older students, the teacher can introduce the idea of “cross-rhythms,” but that’s explored in more detail elsewhere on the website. Meanwhile the teacher may choose to say something to the effect that the players don’t ‘rest’ on the silent beats (shown as ‘r’) but that they “play” the rest or the silence. When introducing this exercise, the rests can be played as active gestures on the thigh or on a pillow. Those silences are active experiences, and they eventually need to become a palpable experience without striking anything at all.

Below there’s an illustration of a full game. Player #1 has chosen ‘3’ and #4 has chosen ‘4’. When their silences converge, #1 switches to a 2-beat phrase and #2 switches to a ‘3’.

#1|| C C C \* C C C \* C C C \* C C C \*  
#2|| C C C C \* C C C C \* C C C C \*

#1|| 1 C C \* 2 C C \* 3 C C \* 4 C C \* 5 C C \* change numbers

#2|| 1 C C C \* 2 C C C \* 3 C C C \* 4 C C C \* change numbers

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Here is the beginning of the same game play written as numbers.

#1|| 1 2 3 \* 1 2 3 \* 1 2 3 \* 1 2 3 \* 1 2 3 \*

#2|| 1 2 3 4 \* 1 2 3 4 \* 1 2 3 4 \* 1 2 3 4 \*

And here, each phrase is numbered so you can see how many repetitions of phrase of #1 it takes to align with the phrase of #2. Sometimes ancillary material such as these images can be very help for some students. Others can be confused or put off. You just don’t know the scope of reactions until you try.

#1|| **1** 2 3 \* **2** C C \* **3** C C \* **4** C C \* **5** C C \* etcetera

#2|| **1** C C C \* **2** C C C \* **3** C C C \* **4** C C C \* etcetera

It is easy to see that the rests must eventually align, no matter which numbers the players choose\*. But the experience of the rests coming at the same time gives the players a fresh experience of a “rest”—a new experience of musical silence. They begin to hear the silence not as the absence of a sound but as the PRESENCE of silence. So the student may begin to have a new impression of silence as an experience rather than the lack of one. For most students, this gives that moment more ‘substance.’

On a personal note, I can relate that I was so surprised when, after years of hearing Beethoven’s Fifth Symphony, I was reading the score and was shocked to see that it began with an eighth-rest. I always assumed that it began on the downbeat, and in fact, I always wondered why it appeared that orchestras entered a bit late after the conductor’s initial downbeat. Looking at the score as an adult, it seems clear why the conductor makes such a dynamic gesture for that first bit of “nothing.” The orchestra must really feel, really sense, really “play” that first rest because, without it, the next notes cannot occupy their place in the phrase. And those five instrumental groups cannot enter exactly on time. (See the orchestral excerpt below. This is preceded by what I heard as a young piano student. (So pedestrian!)

The symphony actually begins with ‘nothing’—a solid eighth-rest on the downbeat. And what I heard as a crusic phrase is actually anacrusic. Big revelation but only the beginning!

\*It occasionally happens in the playing of the game that the silences never align, and this is due to one of two things. If the players choose the same number but do not begin together, their phrases will just keep cycling around, with its head continually chasing its tail. See the illustration below where both players have chosen “3” but player #2 accidentally begins two beats late. As you can see in the illustration below, the rests will never align.

#1|| 1 2 3 \* 1 2 3 \* 1 2 3 \* 1 2 3 \* 1 2 3 \*

#2|| ? ? 1 2 3 \* 1 2 3 \* 1 2 3 \* 1 2 3 \*

### *Coda to the Clapping Game*

The game can simply go on until there is a decision to stop but there is a published end to the game. At some point after a common silence and after both players have chosen a new number, their very first silence may align. Of course, this means that they both chose the same number. In that case, they go immediately to the Coda which ends the game. The Coda simply involves playing that last phrase two more times and then they stop.

So a complete game might look like this (just an example):

Player #1 is written above #2 as in a two-staff system of music:

Player #1|CCC\*CCC\*CCC\*CCC\*CCC\*|CC\*CC\*CC\*CC\*|CCCCC\*|

Player #2|CCCC\*CCCC\*CCCC\*CCCC\*|CCC\*CCC\*CCC\*|C\*C\*C\*|

(Both parts continue...)

Player #1 | CCC\*CCC\*CCC\*|CCCCCCC\*CCCCCCC\*CCCCCCC\*||

Player #2 | CC\*CC\*CC\*CC\*|CCCCCCC\*CCCCCCC\*CCCCCCC\*|| Game finished

### Rationale:

There are many things that can go wrong when playing this game and they are all instructive of parallel situations in ensemble music. People frequently count in an introduction but do not then continue in that tempo. People will fail to give a clear gesture of preparation to begin. Or someone will count “one two three” and begin clapping while their partner was waiting to hear a concluding syllable: either “four” or “and.” It seems trivial, but such mix-ups occur all the time even in professional chamber music. And the Coda is very useful as a way of reminding students that the piece is not over when they hit the last note. They need to listen until the very end, especially how the music re-enters the silence from which the music arose. And they need to listen to the resonance of the music inside themselves.

### For the teacher:

It may have been Mozart or Miles (or Satie or Debussy etc.) that said that the music is in the space between the notes. Various composers and performers have made remarks supporting the idea that the music is more than the sounds that are played. Miles Davis said something related: “It’s not the notes you play, it’s the notes you don’t play.” And a well-known concert pianist, when responding to the question of what makes his interpretations so alive, was proud to say that he “plays” the rests.

It is wonderfully profound to try to understand what is meant in verse 11 of the Dao de Jing (Tao te Ching). Your students will probably do better with a simplified wording but here is the ‘original.’

*“(The usefulness of what has no substantive existence)*

*“The thirty spokes unite in the one hub; but it is on the empty space (for the axle), that the use of the wheel depends. Clay is fashioned into vessels; but it is on their hollowness, that their use depends. The door and windows are cut out (from the walls) to form an apartment; but it is on*

*the empty space (within), that its use depends. Therefore, what has a (positive) existence serves for profitable adaptation, while the absence of those qualities serves for usefulness.”*  
[There are more streamlined translations on the web.]

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## MORE CIRCLE GAMES AND EXERCISES

### \* **Circle Clap Left-Right**

*Categories: Icebreaker / Physical passing*

This quickly becomes a fast-moving game with lots of fun and laughter. It's another great icebreaker and also a way to get a class energized for their work.

#### The Set-up

The group is formed in a circle with everyone facing the center. Someone starts by directing a clap to the person on their right or their left. (They then immediately face the center again.) The person who received the clap then directs a clap clearly to the person either on their left or right. Everyone looks straight ahead into the center of the circle rather than visually following the clap. Each person tries to sense the movement of the clap coming toward them but without directing their gaze to follow it. It's a bit difficult but it makes it quite exciting to realize that it's possible to do, and it allows you to see the entire circle. Your clap can be directed in either direction around the circle and anyone can change it at any time. Lots of energy.

#### Pedagogy:

The leaders will need to remind people that the clap can go in either direction, and it should be passed to the next person while clearly facing them. That is, you give it directly TO them. This gives the participants some early practice in sensing the whole group—something useful no matter what kind of ensemble music they may eventually play, whether or not there is a conductor or leader.

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## Pace and Stride

*General comment: This is an original exercise, but I assume that others have formulated the same idea. It's the kind of thing you might encounter in a dance or theater workshop, but I can say from experience that it is an excellent exercise for musicians. Distinguishing pace from stride is not intuitive for most people but it is a critical distinction for any kind of dancing. Pace and stride have several correlates in musical performance, involving parameters such as dynamics, forward ‘momentum,’ ‘placing’ a note, etc. As with most of the exercises and games presented here, there are many opportunities for a teacher to point out connections with their regular music instruction. However, it is not really necessary (or good) to verbalize about everything, since the sensitivity of the mind and body often receive lessons directly which are more subtle, and which will eventually transfer to musical awareness. (A rationale for the exercise follows.)*

*Pace is the speed at which your steps follow each other. Stride is the distance covered by each step.*

Instruction 1: Keep your eyes looking forward and walk only in straight lines through the space. When you see that you're about to collide with a wall or another person, turn in any direction and continue walking in a straight line. Keep your attention on your stride, i.e., on the length of your steps.

Instruction 2: Now slow your pace (walk more slowly, but do not change your stride). Then after a time, try to quicken your pace but, again, without changing your stride. Keep walking only in straight lines, keeping your eyes focused ahead, and don't bump into anyone. If you see that you are going to collide with someone, keep going in a straight line but, while you can take smaller or larger steps, maintain your pace. (So, you can change the length of your stride while you maintain your speed of walking.)

Instruction 3: We switch the element that is fixed with the one that we can adjust. That is, now you can adjust the size of your steps (the stride) in order not to bump into anyone, while you try to maintain the same pace, that is, the speed of your walking.

#### Rationale:

It is not so easy to distinguish between pace and stride when you are in a room with other people moving all around you. You can become distracted and easily mix up stride and pace. More importantly, there are parallel confusions that we make in our practicing and performing of music.

[For example, when we try to make our playing more exciting, we often play faster or louder when what might be needed is a more varied articulation. When feeling the need for more interesting sounds while improvising, we sometimes resort to using chords that have greater density instead of using fewer notes with wider spacing and more poignant intervals. And so on...]

## ----- **Friends and Enemies**

General Comment: I probably got this exercise in a dance workshop given by Prof. Holly Small—a wonderful teacher and a long-time colleague at York University. It's so much fun that people have no idea that they are learning anything at all!

The Set-up: Everyone begins to walk around the room on their own, at an easy pace and in a relaxed manner. It would be good to have a musician maintaining a calm, steady tempo. The walking could either be completely random or the leader could give directives concerning pace, stride, direction, saying hello or just looking at the eyes of people they pass, etc.

Instruction: At some point, the leader proposes that everyone secretly choose one person in the room to be their 'friend.' They subtly try to get closer to that person, trying to keep it hidden, i.e., not to make it obvious for example, by speeding up, or staring at them. So no one knows who has been chosen as a friend by anyone else. Of course, your chosen friend might well have chosen someone other than yourself as their friend.

After a time, the leader might suggest that everyone secretly adopt a second friend, and everyone should try to get equally close to both of them. [This means that they'll have to keep them both in their peripheral vision.] Again, everyone should avoid making it obvious by suddenly lurching toward their friends.

At the right time, the leader can propose that they keep their two friends but also choose one other person as their 'enemy.' Now they must try to keep the maximum possible distance from

their enemy while also trying to get as close as possible to both of their friends. This is a challenge to one's peripheral vision, and one's ability to navigate between 'attractions' and 'repulsions,' and it is especially tricky if you try to keep your chosen people secret.

Variations: (related to the exercise, "Pace vs. Stride")

The players can move freely, or they can be instructed not to change pace or stride, or to walk only in straight lines. The exercise could begin with the musician improvising a musical accompaniment in a comfortable walking tempo. As the music speeds up or slows down, everyone must stay in time with the music. Or by contrast, the players could be instructed to resist the changes in the tempo of the music and stick with the original tempo.

Rationale: (What might be learned from doing this exercise.)

Engagement with this exercise develops your peripheral vision as well as your ability to move with purpose but still maintaining control of your speed and direction. The players try to balance their impulses of attraction (friends) and repulsion (enemies), that is, going away and going toward a goal point.

As with all these exercises, there are many variants possible, so the leader needs to prepare by visualizing how things might work out and deciding what they will look for.

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## Body Percussion

'Orchestrating' a rhythm with the body

Call-and-response rhythms are an excellent exercise format for musicianship work. It helps develop listening skills and short-term memory, and it can be parlayed easily into notation work (learning to quickly jot down what was heard), and creative work (applying musical values to the rhythms). Clapping is commonly used for teaching throughout the world because it's simple: everyone arrives with their 'instruments' attached to the end of their arms. The main drawback of clapping is that distinctions in duration cannot be conveyed with the uniformly short duration of a clapping sound. Students invariably are misled by patterns with mixed durations, because distinctions in durations are not readily audible with only the short, uniform sounds made by clapping. Further, some students cannot absorb the rhythmic shape of patterns, even with several repetitions, because they are not able to distinguish the beginning of the pattern.

I make a semantic distinction, preferring to call a clapped sequence a 'pattern,' (or a rhythmic pattern) leaving the single word 'rhythm' for percussive sequences with more obvious musical character such as those which provide clearly perceptible shapes.

Since clapping produces very short and relatively uniform sounds, every clap may sound to some people like the beginning of a phrase and, as a result, they cannot parse the grammar of the phrase. In that case, it's important to use different sounds to help convey the impression of shape. However, rhythmic shape can be better conveyed by hand drumming on the different parts of the body (chest, thigh) striking nearby surfaces (floor, table top, etc.)

### Patterns and Rhythms

These are not standard terminology, and you can call them as you wish, but I believe it's useful (for the students and for the teacher) to make a distinction between a rhythmic continuity that has clear musical qualities such as shape, dynamics, sense of direction, etc., and one which is characterized mainly by differences in duration. It's a subjective call, of course, and patterns can be exciting for their sheer momentum, odd and changing phrase lengths, and so on. Many clapping exercises come across as simple patterns with little or nothing musically memorable. (note to self) INSERT AUDIO FILE HERE (OF ABOVE NOTATION)

The leader first establishes a rhythm cycle, and then claps or vocalizes a relatively short rhythm; everyone mimics the rhythm on the next cycle of rhythm. Of course, the rhythm cannot be too long because what this exercise challenges is the immediacy of the sensory memory, rather than an analytical memory that would be needed for a longer rhythm. But even without giving longer rhythms, there are still important challenges for the development of musicianship in your students.

One important and fun variation is to distribute the rhythm between the two hands on a surface or on different parts of the body. Or the rhythm could be divided between hand clapping and foot stomping. There are long traditions of body percussion in various cultures; hambone is one of the better known. Here's a URL in case you're not familiar with it, and there are also many instructional videos for kids. <https://youtu.be/m9kaQ3ZKPE0>. But you can start by simply dividing the elements of the rhythm between the hands and feet. Getting music students on their feet is really key to a lot of rhythmic perception.

To get you started, you can give your students a rhythmic pattern to clap. A 'tango' rhythm is short enough to learn immediately and syncopated without being complicated. Then ask them to stomp it. Finally ask them to mix it up: some stomps and some claps. As the patterns become sufficiently interesting—more musically alive—they become more like 'rhythms.' They love it, of course. Here are some ideas presented as notation. (The notation is for the leader, not the participants.)

## Three Dalcroze Eurhythms Exercises

The teaching of the Swiss pedagogue, Jacques Dalcroze, is very much worth studying for teachers and for all musicians. I have done quite a bit and, in addition to learning much, it also confirmed many aspects of my own teaching. You can find a lot of really good references at <http://www.musikinnovations.org/dalcroze.html>

There are many specific exercises that creative Dalcroze teachers have devised which are based on the following three foundational exercises. These very brief descriptions are not meant to be authoritative, but they are included here to give the gist of these ideas. They are intended to help students learn more about music through movement and vice-versa.

### 1. Follow

There are many possible variations on this idea. The group is invited to move to improvised music but they are given a rhythmic motive to maintain throughout. It could be a march, a tango, or a short rhythm with which they are not familiar. While maintaining the rhythm in their movement, they are also asked to reflect in their body any changes in the music: tempo, register, modality, texture, etc. So they try to take this rhythm through a series of changes in character. It requires the movers to make a distinction between rhythm and the changing character of the music which is incorporating that rhythm.

### 1. Quick reaction

The leader/musician plays something for the group that will serve as a cue to respond in a particular way. For example, when the music is playing a single-line melody you move on your own. When you hear two notes at the same time (two melodic lines or a line played with coupled intervals), find a partner and include them in some kind of movement. When you hear three voices, either polyphonically or if you hear a melody played with chords or a bass line, form a group of at least 3 people and make a movement together. Here's Greg Ristow leading a Quick Reaction exercise. In this case he has asked them to change their direction around the circle when they hear a mordent in the upper register. <https://youtu.be/zsROX7pQdZM>

#### 1. Canons (continuous and interrupted)

Dalcroze used two varieties of canon: continuous and interrupted. Canons are essentially call-and-response exercises which typically require the students to remember what they just heard and 'play' it back with their movement. The interrupted canon presents the group with a rhythm but the music stops while they take that rhythm with bodily movement. The much trickier continuous canon presents new musical material while they are playing back the last material with their movement. So they must be receptive while also remaining active—a basic demand for all ensemble musicians. It's a big challenge yielding great satisfaction whether they succeed or not. Here is a video of a young class doing a continuous canon.

<https://youtu.be/sWRoULMfH9k>.

## Mirroring

This is usually done with two people. As with most of the exercises described here, there is no prior musical skill needed. It is basically an imitation exercise, as with many call-and-response games and, like the Dalcroze canons, it can be done with simultaneous or delayed mirroring. It can be limited to upper body movement or it can include the whole body. Obviously, the two people must be able to see each other the whole time, so turning the body will not work.

Simultaneous mirroring: One person becomes the 'leader' and their partner imitates as closely as possible as the movement continues. The leader's movement must be slow and simple enough so that their partner can follow along. They can change roles on their own or on a signal by the teacher/leader.

Delayed mirroring with a beat or with music: The lead person can create a movement to occupy a phrase or a certain number of beats. If the leader's movement takes 6 beats, then the follower's movement must also fill 6 beats. (The teacher/musician can suggest working with a longer or shorter duration.)

Delayed mirroring with augmentation or diminution: The teacher can ask the first mover to make a movement occupying 8 beats but the follower must take the identical movement in 4 (or any number less than 8). Conversely the follower might be asked to take a short phrase (e.g., a 3-beat movement) and stretch it out to many more beats.

Rationale: Many things can be learned from this exercise. Musicians often 'cheat' the end of a long phrase ... not carrying the energy through to its conclusion. Here is a chance to see a little bit of what is required for learning to stretch a phrase to its conclusion ... also even to stretch a three-beat phrase to a full eight beats. How to keep the phrase alive through the whole time?

## Ball Rolling

### The Set-up:

*This is a partner exercise. Partners should best both sit on a flat floor with between 4 and 20 feet between. You simply try to set the ball rolling to your partner on a specific beat in the music, and have it reach your partner intentionally on another beat. That means that you try to set the ball in motion to occupy 'x' number of beats, at which moment it arrives at your partner. Since you only have contact with the ball at the outset of its movement toward your partner, the participants begin to understand that a different initial energy is required for phrases of different lengths and character ... for any sort of journey of whatever duration. That is, not all musical phrases can be properly supported with a generic energy.*

The Play: One person rolls a ball across the room with the intention that it arrives on a specific beat or after a specific number of beats. It is then returned, occupying either the same number of beats or a predetermined different number. The point is that it is intentional. To dole out the right degree of energy, the players will each have to become aware of their preparatory gesture—their anacrusic energy—a sensitivity which is directly relevant to musical performance.

It is also instructive to use differently weighted balls. Basketballs, baseballs, ping-pong balls, all require different initial energy to move all the way to their partner and at a speed that will have the ball arrive at the intended moment. This is somewhat analogous to the need to differentiate the energy needed for various musical styles and content.

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## **Sound Machine**

*An improvisation for vocal ensemble*

### The Set-up

What makes this work as an improvisational experience is the way it is set up and launched. One person is invited to go to a designated area in the room where they take a posture. A second person joins the first with their own posture. They can touch or not, but the second person should be physically related to the first. Others may join, up to a maximum of about six (but it could be more or fewer than six). When the leader/teacher feels that they are ready to go, s/he gives a signal to begin. Then each person imagines their function in this spontaneous 'machine' along with the movement and sound it might make. They can play with that for a while, until the next machine is initiated by the leader.

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## **Ball Passing with Music**

There are countless passing games that can be played in a circle. For example, Razzberries, described above, is about passing a gesture from one person to the next.

The Play: With everyone standing in a circle (facing the center), we simply pass a ball from one person to the next. If the players are listening and somehow using the rhythm as a guide to pass the ball, that is very good. The leader can suggest that we pass the ball in the tempo of the music. It should not be passed in a perfunctory way but in a musical manner: in time and in character. (It could be done in character with the music or simply in a creative way. The eyes and face can also be engaged in the passing, as well as the whole body.)

There are many variations that can be tried. At some point, when the ball might be halfway around the circle, a second ball could be introduced for passing. The leader might even want to

try passing it in the opposite direction to the first ball, to see how people deal with being in the cross-over. The passing could be a direct hand-off but you can also require that it be bounced to the next person and that it should land in the hands of the next person on the beat.

## **A Self-organizing Scale**

### The Set-up:

Organize the group into either a line or a circle (as long as the sequence of players is clear and can be maintained) and each person has an instrument or object with only one pitched sound. These could be gongs, Boomwhackers, pieces of pipe ... anything with a somewhat discernible pitch. It will be best if all the sounds are similar in quality but the exercise can be done in any case.

The exercise depends on a consistent downbeat on each cycle in order to generate a clear sense of meter. This is the responsibility of a leader/teacher, who must be cognizant of the entire class while also sounding the beginning of each new cycle.

If there are 9 in the group, then the leader's sound should come on the first beat of every nine counts. Each person will sound their own instrument one at a time. They should go around the circle a number of times so everyone can hear their pitch in relation to the others. The pitches will be higher and lower in random order. The group's task is to put all the sounds in order, lowest to highest, by changing their position in the sequence, and to do this without stopping the circular sequence of players.

There are many ways to go about this, and the group can decide together. For example, each person can change their place in the sequence any time they like. However, without something stable in the sequence, it will be difficult to know where you need to place your sound. So the leader can suggest things such as having each person in turn change their place in the sequence. And only when that person has found a new place does the next person try. Then everyone can listen and see if an ascending 'scale' is being formed.

Naturally, it will happen that two players will make their sound on the same beat. Then they have to decide (without speaking) who has the lower pitch, that is, who should go before the other.

## **Thinking and Sensing\***

### Introduction to this section:

Thinking and sensing at the same time is difficult. (How often have you misplaced your cell phone because you were thinking about something else?) Sensing, thinking and feeling, consciously and all at the same time, is a fundamental requirement for musical practice, so this is a good preview of the kind of integrated functioning that you must gradually bring to a higher level. For more advanced work in this area, you could try the exercise called Permutation and Embellishment, although most on this website have exercises which require this kind of effort. This next exercise simply integrates two previous exercises, each one of which should have been rather easy on their own.

§ § §

## **Thinking and Sensing:**

### Word Association with Hand Squeezing

Passing a clap around a circle is not so difficult, but passing can be way more interesting if there's no sound and if you cannot see any clapping.

In these variations of the exercise, each person keeps their hands hidden. In Variation I, you keep your hands behind you, in the small of your back. You hold your left-neighbor's RH hand in your LH, while your right-neighbor's LH is holding your RH. When you sense a squeeze, you can pass along the squeeze to your neighbor in the same direction.

A simple variation of this game is to allow changes of direction. So anyone can simply return the squeeze to the one who just squeezed you.

Variation II is a bit more tricky. Each person places their hands behind their *neighbor*'s back: your RH is behind the back of the person on your right and your LH is behind the one on their left. Below is an image of part of the circle, where each person is shown as a letter,

A B C D E F G ...

The RH of 'C' is behind the back of 'D' and it holds the LH of 'E'. The LH of 'C' is behind the back of 'B' and it holds the RH of 'A'. [[Maybe I should make a drawing of this hand-holding chain.]] So what is passed is not a clap but only a gentle squeeze. When 'C' squeezes their RH, 'E' gets a signal to continue the squeezing to the right. People quickly realize that there are no visual signals, so they must resort to their sensation of touch. (Increasing the sensitivity of touch is good for almost all musicians.)

You can see that only half the people in the circle will be able to transmit or receive a squeeze: A > C > E > G > etc. So the leader can then start a second line of squeezing for B > D > F > H > etc. So there will be two independent lines of squeezing and it is possible to start them in motion to travel in opposite directions.

A variation can be introduced where anyone can reverse the direction of the squeeze by simply returning the squeeze to the one who just squeezed you!

And now all this can continue while a word association game is launched around the circle. As an added level, the word associations can also change direction by simply giving your association back to the one who gave it to you.

It's simple but it gets pretty interesting trying to distinguish between words and squeezes, between sensation and mentation! As obvious as this is in the exercise, separating the two domains and then consciously reintegrating them is foundational requirement for more advanced music work.

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### Untying The Knot

*Categories: Collective intelligence—Working together*

This is another really good ice-breaker, even for a group that has been together for a while. It works best for a group between 7 and 15 people. It is done (initially) with no talking.

#### The Set-up

Everyone forms a large circle, with as much space between people as reasonable. Everyone is asked to raise their arms vertically toward the ceiling and to tilt their head up to look at their

hands. No one should be looking at the others in the circle. Then, at the same time, everyone moves slowly and carefully toward each other (toward the center) until they are close enough to hold two hands of other people. It is best not to join both hands to the same person. (Perhaps you can tell by the clothing on their wrists or forearms.)

Then the leader says, “Okay, without any talking, let’s untie the knot.” As they begin to separate from others, they can see to whom they are attached and they try to figure out how to form a simple circle without losing contact with the two hands they are holding. They need to be careful not to twist the arms of another person, but they will likely have to swivel, step over arms, turn around, and do various moves to really untie the knot so that, at the end, they are in a simple circle holding hands with one person on the right and one on the left.

Contingencies: It often happens that they make a circle but some people may be facing toward the outside. Sometimes, the final solution has one big circle and one or two smaller ones not connected to the larger one. There’s no correct solution; it’s a matter of finding a way to untie the knot. The leader can suggest variant ways of proceeding. For example, they can make any sounds to help move others in the right direction, but without using words.

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### **Follow the Leader**

This exercise is a rewrite of a piece from Pauline Oliveros’ short book of pieces in text form called, “Deep Listening.” I cannot recall the name she gave this piece in her book, so I continue to refer to it (incorrectly) as “Follow the Leader.” It is intended as a free improvisation, and I have felt that it is particularly useful in examining the question of leadership. What qualities prompts me to assign a leadership role to someone in an ensemble. What do I value in a leader?

#### The Play:

The improvisation can be done with instruments, with voices, or with movement. The improvisation is “open” (or “free”), so anyone can begin and others can drop out or enter as they wish. Anything goes but the players’ actions must be constantly guided by one of four principles. Each player decides at any moment and for as long as they like, who is the leader (that is, for them). Then they either: Imitate the leader; Accompany the leader; Follow the leader; or Be the leader.

No one needs to know who you have chosen as your leader or what your relationship is to that leader at any moment. You can choose and change your ‘leader’ at any time, but you must always adhere to one of the four principles (imitate, accompany, follow, be). As with all freely improvised pieces, it ends on the basis of general acknowledgment.

Pedagogical value: This exercise brings into question what it is that we value in musical leadership (or leadership in general). What draws our (musical) attention. Is it who is playing loudest (most confidently); Who is the most original? The most rhythmically active? But it also raises issues for each player about accompaniment, imitation and following? What is the difference between following someone and imitating them? There’s no fixed answer, but it is interesting to ponder such questions through the playing itself.

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### **Wall**

This exercise is about confronting your limitations, especially those that are mainly in your imagination. It is useful for any age group.

### The Set-up:

Each person in the group (one at a time) will slowly walk, with eyes closed, from one wall to the opposite wall of the room. It is good if the distance involves twenty or more steps--long enough to feel like a bit of a 'journey.' The person walking (the 'walker') can keep their arms in front of them (like sleepwalking) so they don't bump into the wall face-first when they get there. Because some people tend to wander off to one side or the other, everyone who is not walking should form a line on either side of the walker's path, in order to keep the walker safe and moving more or less in a straight path. They should keep a good distance away (maybe up to six feet), and while they should not give prompts of any kind, if the walker veers into one of the lines, the people there can gently make the necessary corrections and then leave them on their own again. When they touch the far wall they simply say, "Wall." However most walkers will experience a certain degree of anxiety and will sense the presence of a wall well before actually reaching it. Whenever the walker senses even the slightest hesitation or anxiety in their walk because they feel that the wall is right in front of them, they acknowledge it by intentionally stopping for a moment and simply saying aloud, "Wall." Then they resume their walk toward the real wall. Many people will have multiple experiences of a 'wall' in front of them, and each time they feel a hesitation in their progress, they should come to a full stop, say "Wall," and continue walking until they reach the real wall.

Nothing needs to be said by the leader/teacher, because what the walker learns goes directly into their physical and emotional intelligence. It is often best to learn such lessons without dilution by words and concepts. But after everyone experiences the exercise, it can be useful for some people to point out that each of us has imaginary walls that stop us from doing or trying things. And in various ways we can acknowledge these obstacles by inwardly stopping for a moment to actually say "wall" (or simply to feel the presence of our own imagination), and then to continue walking through the imaginary wall. For some people the wall might be a difficult passage in a piece of music but it could be any experience that causes resistance such as tension, hesitation or fear. But the exercise "Wall" should be light-hearted and without a lot of intellectual baggage.

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### **Crusis, metacrusis and anacrusis**

*Continuity and momentum in music*

*\*\* Put this material in a glossary? along with thinking, sensing, feeling*

These three musical ideas are somewhat sophisticated concepts even for adults, but they can be effectively introduced to young people through physical experiences. They refer to the way things 'get going' in music (*crusis*), the way they continue and conclude (*metacrusis*), and how they prepare to get going again (*anacrusis*). Every action requires some kind of preparation. This seems to be true for all actions and events at any scale. Preparatory actions might involve gestures of gathering or focusing energy. They could be mainly physical, as in getting ready to lift, launch, twist, turn, pull, push, and it could apply equally to more internal actions, such as the mental and emotional work of organizing, studying, even learning a new piece of music. Although these three aspects of continuity are almost invariably mixed, preparation can be regarded as an essentially *anacrusic* activity. It's a kind of fulcrum helping to lift the energy in order to begin a new cycle when needed.

The success of most athletic activities requires a corresponding anacrusic gesture in order to gather the appropriate energy for the moment of release or the initiation of a project: getting the

height needed to dive or the speed needed for a pole vault; setting up the back swing in baseball, tennis or golf; raising the arms in order to play the opening forte chord of a sonata or even carefully hovering the arms above the keyboard to play the very delicate opening phrase of a scherzo. You need your well-organized study notes to begin writing your essay; you need to have your ingredients and cookware at the ready before you begin cooking; and you need to plan your strategy and your attitude in order to enter into a difficult discussion. And so on. One peculiar aspect of anacrusic preparation is how it seems to run in opposition to the desired action. A trombonist breathes the ‘wrong’ way

How power and intelligence is accumulated, organized, and readied for the moment of release can all be considered as the anacrusic phase; the release is one example of crusis. The most common musical use of the word crusis is in reference to the beginning of a phrase that starts on a ‘strong’ beat--a *downbeat*. What I meant by the three phases being ‘mixed’ can be observed even in what seems like a purely receptive activity. In Ball Rolling, for example, the one receiving the ball will be fully engaged with their eyes, torso and hands, as they prepare to be in position to have it land in their waiting hands. That, too, is essentially anacrusis. Once the ball is released and begins rolling to your partner, there is no longer any possibility of control. In this exercise, the metacrusis is on automatic, subject only to physical laws. This is never true in musical performance. A musical metacrusis needs continuous attention, just like driving a car on a flat, well-paved highway; corrections and adjustments are always needed. The musical metacrusis needs to be guided by the intelligence of the body, the mind, and the intelligence of feeling. A seasoned musician cannot afford to put any of the three phases on auto-pilot.

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### **SoundWalks**

*Focusing on the pleasure of listening to your environment*

SoundWalking may not seem like an exercise but it does demand a continuous attention that is special, as it is not under the influence of habit. We do not generally give conscious attention to our environment, and there is a wealth of impressions to be harvested, both outside and inside ourselves. Our inner life is also part of our environment; it is where we live.

SoundWalking is a natural activity that must surely have been practiced for millennia and was not necessarily even highlighted by being given a special name. It is simply putting your focus on listening to what is around you as you go from place to place. Many also practice listening to what is taking place inside themself and then also the relationship between inner and outer. It is a great activity for any group that is developing a musical practice and it is a great way to balance the more intentional activities such as the games and exercises presented here and all the musicianship exercises presented throughout this website.

Soundwalks were brought into public awareness through the work of Canadian composer R. Murray Schafer and the World Soundscape Project.

“A Sound Walk is...  
a listening exercise that helps us become aware  
of our immediate acoustic environment.  
It is also about the aesthetic pleasures of listening.  
Listening to sounds we might otherwise have missed;  
listening to the rhythm of sounds;

listening for the unique 'voice' of a city.

It's about enjoying the sensual beauty and sheer surprise of sound..." <https://www.hildegardwesterkamp.ca/sound/installations/Nada/soundwalk/>

Hildegard also writes: "A soundwalk is a form of active participation in the soundscape. Though the variations are many, the essential purpose of a soundwalk is to encourage the participant to listen discriminately and moreover, to make a critical judgement about the sounds heard and their contribution to the balance or imbalance of the sonic environment.

In order to expand the listening experience, sound-making may also become an important part of a soundwalk. Its purpose is to explore sounds that are related to the environment and on the other hand, to become aware of one's own sounds (voice, footsteps, etc.) in the environmental context. A soundwalk may be recorded in the form of a map, which the participant uses both to guide the route and draw attention to features of acoustic interest."

*I will also soon upload two scores written on commission for the 1975 Dayspring Festival in Toronto. It will give you lots of useful and fun ideas to get students really listening to the environment and hunting down sounds.*

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☺ 😞 ❤ 😂 😅 🍷 ❤ UNDER CONSTRUCTION FROM HERE ONWARD ☺ 😞 ❤ 😂 😅 🍷 ❤

POTHOLE CURRENTLY BEING FILLED AND SMOOTHED

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**I HAVE PROOFREAD UP TO THIS POINT.**

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**How To Make a Rhythm**  
*Foundations of Rhythmic Shape: 70 permutations of: 11112222*

Some brief thoughts on rhythm and meter:

There are different ways the word rhythm is used in music. It is a very big subject and many articles and books coming out of many world cultures have been written about it. This writing is not intended to be a detailed or definitive article on rhythm; it's just to provide some background for the exercises that follow. You will find links to a reading/reference list if you are looking for more detailed material.

Rhythm is generally understood by many musicians as a layered continuity comprising closely related interlocking units of time. Our culture (and many others) has a great deal of music that does not proceed on the basis of beats and meters, and much of that is exquisitely beautiful, but the rhythmic exercises described here all proceed on the basis of regular increments of time. They're not necessarily toe-tapping music but they all have that sense of flow that we call rhythm.

Rhythmic structures are most typically rationalized on the basis of the beat-unit (for example, a quarter-note in 4/4), its multiples (half- and whole-notes) and the smaller units derived from its fractioning (beat subdivisions). Though this works well for many music students, I have observed numerous problems resulting from this approach even in university classes, and so I

have come to prefer introducing practical and theoretical rhythmic work directly from the ‘atomic’ level. So the initial rhythmic exercises and experiences I have presented to classes over the years have been rationalized and built up from smaller units, that is, from ‘pulses’ to beats and beyond. I don’t refer to these pulses as subdivisions at first, because that presupposes that they are fractions of a beat-unit. I have found that it is good to avoid introducing the idea of fractions at the beginning levels of rhythmic study. I will write more about this later, but working from the smallest units allows students easier access to additive phrasing, odd and changing meters, cross-rhythms, and many other things.

So, on this website, the smallest (shortest) audible units will be called pulses, irrespective of the way they appear on paper. For instance, the pulse-flow on the opening page of Beethoven’s Pathetique Sonata is notated as 32nd-notes (you cannot play the rhythms accurately without internalizing a pulse-flow of 32nd-note) while modern editions of Palestrina’s Pope Marcellus Mass shows the fastest value as (what we now call) quarter-notes. For the most part, rhythmic values do not imply a definite speed or sensation; they are all relative to one another. This is an important difference from the world of pitch, where all the Cs on a freshly tuned Western instrument will be very close, if not exactly the same. A quarter-note is only relative to the other note-values and to the tempo in which you’ve decided to play. [Yes, there’s room to quibble here.]

*A dictionary definition does not really help. Merriam Webster describes pulsation as “a periodically recurring alternate increase and decrease of a quantity (such as pressure, volume, or voltage.” That’s not a bad formulation, assuming that you already have a feeling for the idea. Otherwise it’s just more theory.)*

Pulses are typically grouped into beats; beats are grouped into measures, phrases and periods. Rhythmic terminology tends to be quite subjective, partly because the values that define it are relative, with most components depending on and being affected by neighboring elements in the musical fabric. So it all floats a fair bit, which is one thing that makes rhythm awkward to communicate about. Fortunately, my writing on rhythm is neither intended to be definitive or authoritative, so this introduction is written in the spirit of a disclaimer, and it is placed here mostly to try to avoid some basic confusions.

Often music teachers will not really speak about pulses to their students because: 1/ they almost always begin their teaching with notation instead of bodily sensation, and 2/ they tend to begin instruction with beat-units, time signatures and measures. This works okay in many cases, but I have seen many young people (which includes university students) confused by this leaving a lingering discomfort and awkwardness about events shorter than a beat-unit. Having skipped instruction at the level of pulses, they are often at a loss to read music with smaller durations such as 32nd-notes (especially with ties, rests, and tuplets) or, for example, dotted-sixteenth triplets. The presentation of rhythm as fractions of a measure stymies even seasoned musicians. [Quick: where is the exact middle of a measure in a 5/4 time signature? Is it on beat two-and-a-half? Where is the middle of a measure of three-four?]

And how long is an 8th-note supposed to be? In fact, many students—and not only beginners—are stymied by playing a note of only half a beat. If you begin your rhythmic education with the idea that music flows in beats, then playing fractions, such as even half of a beat, can be a problem, just as playing two thirds of half a beat in compound meter will be difficult and vexing for many music students. And rhythmic vocabulary itself can also be confusing. A quarter-note is so named because it is, students are often told, a quarter of a measure of 4/4 (and four quarters make a whole measure) — which is where so many lessons

begin. This sets up a future confusion with the presence of ‘quarter-notes’ in a  $\frac{3}{4}$  or a  $\frac{9}{8}$  time signature. (And even the fact that most digital writing devices default to showing three-four-time as a fraction, as you see above, just adds to the confusion.)

Over my 47 years of teaching, I have seen too many students become alienated in a class presentation that includes this fractioning of time. This is particularly true of those who already froze over ‘numbers’ in high school. It has proven much better to speak about whole units of time, and this requires prioritizing the smallest pulsations rather than the beats. (It makes for a sure-fire technique for rhythm dictation and notation.) Watching students try to clap half a beat is poignant because they often cannot figure out what to do with their hand to show “half” of a beat. (Like, where do you stop your hands to show half a beat?) It is organically necessary to feel whole, completed rhythmic units, and that is only realistic if you are sensing the flow of something shorter (or smaller or faster) than a beat-unit. There: I’ve repeated the same idea enough times!!

So the rhythm exercises on this website begin with the notion of pulse or pulsation. And rhythmic structures are built up from that. But, if you’re interested, you can read a bit more about issues in teaching rhythm.

As I wrote, there is no way to know the speed or duration of a note (or a subdivision, a beat, a measure, a phrase, a period, etc.). A sixteenth-note in the slow movement of Beethoven’s Pathetique Sonata may take as much time as an entire measure of the Scherzo in his Ninth Symphony. Nor is there any objective definition of meter or time signature that would tell the player anything definite about the sensation of musical flow.

There are also musical examples from all world cultures which don’t proceed on the basis of time units. Many pieces written by Claude Debussy, Arvo Part, or Morton Feldman do not always reveal audible rhythmic structures. The free-rhythmic improvisation in the *alapana* of Hindustani or Carnatic music proceeds with no reference whatsoever to an ongoing beat.

Most beginner lessons set out to convey two fundamental aspects of rhythm. One is that most music flows in uniform time units called beats, and that each note has a specific *duration* (or number of ‘counts’), and all the notes are sensed in regular groupings which we call *meter*. Waltz music sets out to shape a rhythmic flow in groups of three beats; a march is usually in two. However, a composer can also compose in non-regular meters, that is, time signatures which change to accommodate a line that does not proceed by regular time units. (Consider, for example, Stravinsky’s Rite of Spring.)

A time signature can give a good indication of the rhythmic organization in written music, but it cannot always give a clear indication of what some musicians call the rhythmic ‘feel.’ For one example, it is not unusual for experienced musicians playing chamber music to decide that a piece written in 4/4 has a stronger flow if they all agree to play it as if written in 2/2, that is, two longer beats, each of which simply has more activity than the quarter-notes as written on the page. Jazz musicians sometimes do this with charts written in 4/4, and it is particularly common in performances of bebop tunes. Music with many shorter beats can limit one’s expressive gestures in both music and dance. Many dancers who love dancing to funk find that there are too many strong beats in disco, leaving less space for the way the beat can be filled.

The word rhythm is commonly used when referring to harmonic rhythm, which basically describes not the order of the chords, but the duration of each harmonic change. Changing the harmonic rhythm is fairly common among improvising musicians and can be heard in pop songs

and especially in blues, where the most typical harmonic ‘template’ of changes (4+4+2+2) is sometimes stretched or compressed to accommodate the lyrics or the expressive needs of the moment.

#### Groups of Ones and Twos

Most of the world’s rhythms can be understood as groups of ones and twos. While that can be cumbersome, it ultimately provides a secure, confident basis to understand, analyze, perform, and compose all the rhythms that are based on steady pulse. [Many cultures also embrace rhythms that accelerate and decelerate, and these cannot be reduced easily to ones and twos. They include, for example, the freer rhythms of North and South Indian alap or *alapana* and *tanam*, the flux of flamenco, the standard practice of rubato in much European classical music, etc.]

Working with permutations can be interesting and fun for younger kids. It is experienced in seating everyone at a dinner table, order the chores for the day, the order of getting dressed, and so on. But it is also a critical stage for young children where they finally understand that 3+2 will give the same result as 2+3. This is called the commutative law of addition, where different orders of operation do not affect the sum. Many different experiences can be devised using this principle.

So if you have a 2 and a 1, they add up to 3 regardless of the order of adding. If you have two twos and two ones [2211], how many different orders can you make? There will be four ways to order them. These different orderings are called permutations. Here’s a task that is not difficult but will require a careful approach.

#### Find and write down the 70 permutations of 11112222

Working with 70 permutations is too much if you are working with younger students. It can easily be made easier but it’s important for teachers to try this so they have a taste of what their students will be experiencing even in the easier formats.

As you gradually find a method to go about this, try to find a way to be sure that you don’t repeat or leave any out. To do this you need an orderly method, and this is the first goal of this multi-layered exercise.

[At some point, they should be shown these rhythms as a circular diagram; then show list of 10 categories; then show the working out of those 10 categories as written out below]

These rhythms are to be read across from L to R, so the first one is 1,1,1,1,2,2,2,2 or, in solkattu syllables: Ta ta ta ta Tom - Tom - Tom - Tom - 1 1 1 1 2 2 2 2

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## DISPLACEMENT

### Rhythmic displacement (a.k.a. Phasing)

For children, ideas like this must be conveyed with simple words, but the joy in displacing a pattern is palpable. The “same” thing presented in a new and unexpected context can sound really different, (Refer to the phrase: ECDD on my website.) Rounds are an extension of this idea because you get to hear the original phrase played along with itself. And you can make a ‘round’ out of any phrase or motif. Look at Jim Tenney’s “A Rose is a Rose.” The circular notation is also charming.

Try playing this rhythmic pattern [2212221] with another person, where the second person enters at a point that is not the downbeat. The ‘1’ is like an eighth-note and the ‘2’ is like a quarter-note. The eighths are notated as ‘x’ and the quarters are written as an eighth plus an eighth-note extension, or [x -].

x-x-xx-x-x-x|x-x-xx-x-x-x| (continue...)  
x-x-xx-x-x-x|x-x-xx-x-x-x|  
x-x-xx-x-x-x|x-x-xx-x-x-x|  
x-x-xx-x-x-x|x-x-xx-x-x-x|  
x-x-xx-x-x-x|x-x-xx-x-x-x|  
x-x-xx-x-x-x|x-x-xx-x-x-x|  
x-x-xx-x-x-x|x-x-xx-x-x-x| etc.

#### Method of realization

Most people will have trouble displacing a pattern; it is difficult to suddenly reorient your sense of downbeat and that itself is a good exercise. Add to this the difficulty of actually listening to both parts and it is good work for any age. Adding more layers of displacement is also fun and interesting.

#### Suggested strategies:

\*Invite everyone to recite something well known, such as the days of the week. In rhythm: Mon-day, Tues-day, Wednes-day, Thurs-day, Fri-day, Satur-day, Sun-day. But at a signal from the teacher, they must begin again at Mon-day, even if they are about to recite the second syllable of one of the days. Example:

||Mon-day, Tues-day, Wednes-day, Thurs-||Mon-day, Tues-day, Wednes-day, etc.

If they were to try this as a round (canon), it might sound like:

Canon ON the beat:

Group 1—||Mon-day, Tues-day, Wednes-day, Thurs-day, Fri-day, Satur-day, Sun-day.

Group 2—||Mon-day, Tues-day, Wednes-day, Thurs-day, ||Mon-day, Tues-day, Wednes-day, etc.

Canon in mid-day:

Group 1—||Mon-day |Tues-day |Wednes-day |Thurs-day |Fri-day |Satur-day |Sun-day| etc.

Group 2—||Mon-day Tues-day |Wednes-day |Thurs-|Mon-day |Tues-day |Wednes-day etc.

Once a group can do this, it can be tried with numbers and finally with actually hand-clapped rhythms or sung melodies.

\*\* For the older or more sophisticated students it can be pointed out that this now well-known rhythm of twos and ones—the Ewe (Ghanaian) rhythm above (2212221)—also represents tone & semitone of semitones in a major scale: Do to Re spans two semitones, Re to Mi also spans two semitones, Mi to Fa spans only one semitone; and so on through the scale. So your students might take an interest in the way intervals of tone can have some relationships with intervals of time.