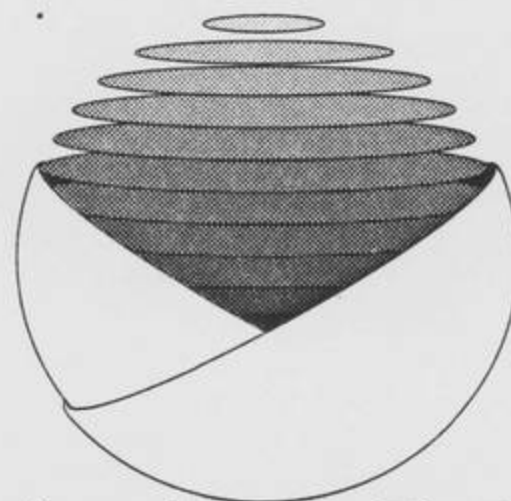


Jonathan &
Elizabeth Glasier
612 F Street
San Diego, CA 92101
(619) 237-9982



Sonic Arts Gallery

Pioneers
of music
giving birth
to sonic art

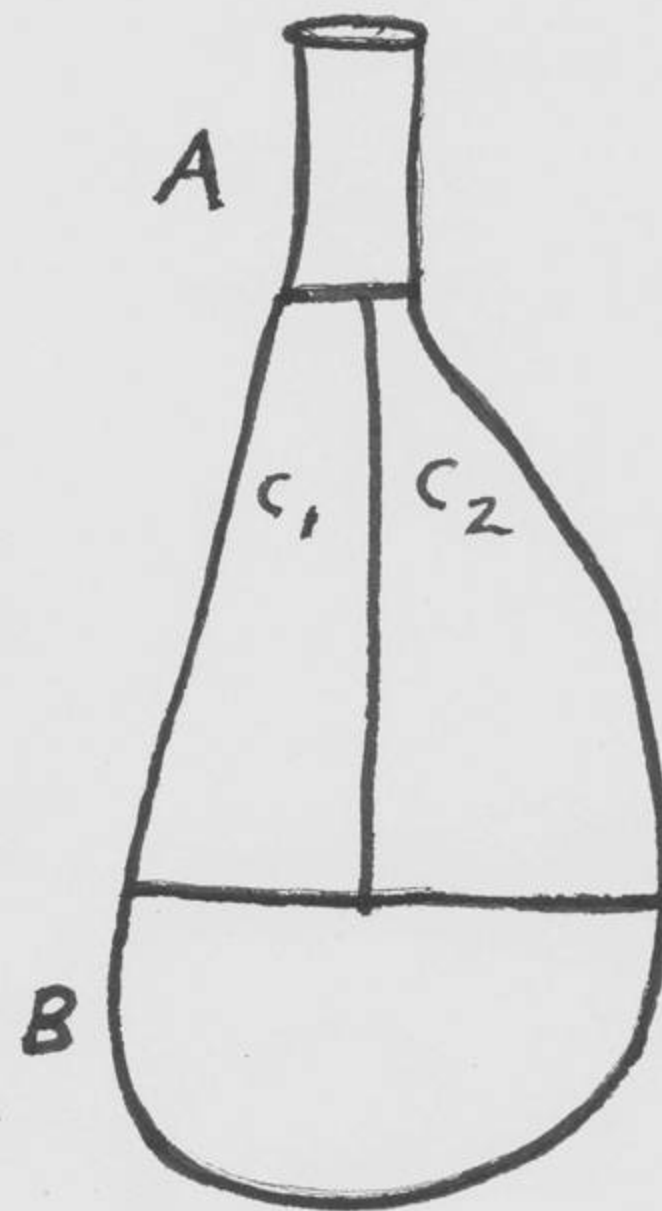
FIVE EXERCISES FOR CHILDREN

These exercises come from my work with children over the past 20 years. The first two involve making instruments and playing them immediately afterward.

Jonathan Glasier

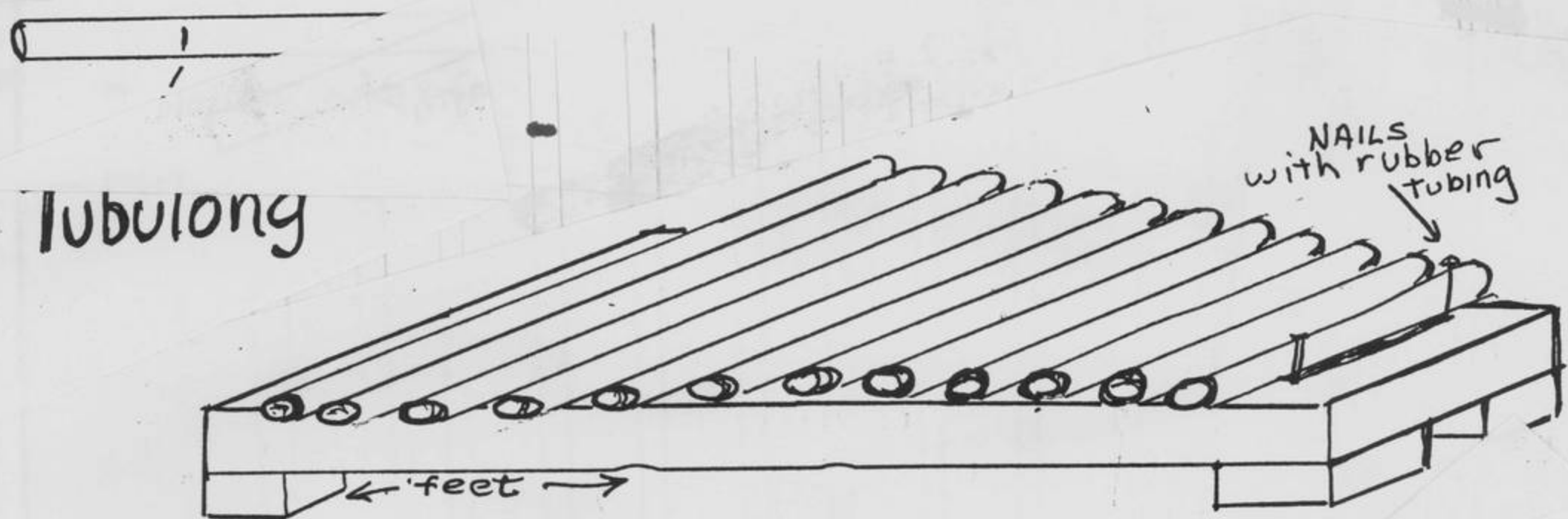
1. Three Instruments with One Balloon.

Each student receives one #9 balloon and one 3/4in. to 1in. in diameter, between 1in. and 3in. long pipe made of plastic or better, bamboo. Also the student is asked to bring a Skippy peanut butter jar lid (others will work, but the wide screw area of the Skippy is most advantageous). The first instrument is made by cutting off the top 1in. of the balloon. This is called the balloon mouthpiece or "schriek". Prepare for some odd sounds to come from this. It can be controlled quite nicely. Have students share one at a time on this. The second instrument is cut from the bottom 3/4in. of the balloon (as shown). This piece is stretched over the peanut butter jar lid. This instrument, the "aeromembranophone", is a wind instrument and a percussion. To play, put your mouth over the lid and let your top lip buzz the balloon. It takes a little doing, but shortly you will be able to make elephant squeals with the best. The third instrument is taken from the middle portion of the balloon. You cut down the middle and get two equal portions. You then attach them to the pipe with rubber-bands. The hole in the top (blow-hole) should be predrilled unless you have lots of time. To make the sounds, you blow like a flute through the hole and push the balloon pieces in and out to change the pitch. These instruments take time, but the beauty of them is that they are inexpensive enough so each student can have the set of three. Mix and match. Time to improvise.



2. TUBULONGS

This instrument is also easy to make and costs no more than \$5.00 max. The materials are more sophisticated and necessitate a trip to the local hardware store. They include: one 10ft x 3/4" length of EMT (electrical mechanical tubing). This thin walled tubing cuts fairly easily with a hacksaw. The standard is made from 1" by 2" stock. depending upon how many tubes you wish to have in your set the length will be cut accordingly. The important lesson in physics here is the discovery of the "node". The node is 2/9 times the length of the pipe, so the math lesson is to multiply each tube by 2/9ths to get the perfect mounting. The rest of the materials are 1 3/4" to 2" ringshank nails, 2" drywall screws (optional), 1/8" o.d. rubber tubing (this may be found at a medical supply business), 1/2" rubber weatherstripping with stickum on one side.



First determine what your tube lengths are going to be. The main task is not to cut any tubes the same length. The rule is pipes under 8" are not ideal and pipes can go as large as 20" or more before the sound drops off. The pipes should be put in a vise and I think it's best to have two students working on pipe cutting. After each pipe is cut it immediately needs to be filed. The best way is for a file to be clamped to a work table, and worked until the edges will not cut fingers. The 1x2's will be cut as follows: after your pipes have been cut, multiply the shortest and longest pipe by 2/9ths. That will determine the length of your end pieces. Each end piece will be slightly longer than the distance between the two nodes ($5/9 \times$ length). Then allow about 1 3/4" for each tube and cut the long pieces (plus 1" at either end). Then put the weather stripping down the middle where the tubes will rest. Attach the wooden parts. Fix the nails with the rubber tubing and put them 1 3/4" apart. Then lay the tubes in. Mallets can be made from dowels.

3. **SONIC CHOIR**

The sonic choir is a group that sings together without words. It is important not to stretch voices too much at the beginning, so one hour is plenty unless the group has been together for some time. Also some of what we do could be called "toning". The matching of one voice to another is central to this exercise. Another technique in vocal sound consciousness is gliss and gliss follow. "Gliss" or "glissando" means to slide. The type of gliss we practice is very slow. The idea is to hone your perception to very small changes. Another exercise that worked well in dyads is what I call "the feedback exercise". In this exercise two people put their backs together, sitting on the floor, and simply "feed each other's backs with sound. One person sings a note for a complete breath, and the other person matches the note as purely as he/she can. With each new breath a new note is sung. It is good to go up by a short distance (not necessarily a specific interval). Continue in the dyad for a while. Then after your back has been nicely fed, come back to the larger group for more.

4. **SONIC CHOIR -- VOCAL HARMONICS**

Continuing with the Sonic Choir format, the idea here is to create a perfect harmonic tuner inside your body. This is done by singing a nasal type of sound and sliding from one vowel to another. The main idea is to keep the fundamental note strong and not wavering. Using the nasal sound start with the "O's" and "U's", sliding to "Aw", "A" and finally to the "E's". I have been doing this for many years and can sing two-part harmony with one voice. Through practice anyone should be able to get atleasttwelve harmonis up to sixteen. This is not an exercise that can be easily taught through the written word. Enclosed spaces with resonant surfaces are the best to practice with. Try the shower or your automobile. It is the fastest way I know of to relieve stress.

5. **PERCUSSION ORCHESTRA**

This exercise takes a group of percussion instruments. The main idea is to create the role playing idea that exists in an orchestra. The instruments are divided into four categories: beat, rhythm, accent and melody. The shakers are the beat. The drums represent the rhythm. The metal instruments are accents, and xylophone or tubulongs are the melody. The main role of a percussionist is to keep the beat, so that is the role of the shakers. The difference between the beat and rhythm, is rhythm represents pattern. Patterns of short and long are then practiced on the drums. Metal objects get clanged on certain accents determined by the rhythm and then melody parts can be added. This works well especially if there is an instrument for everyone in the class.