

TEACHING CHILDREN TO CREATE MUSIC USING GRAPHIC NOTATION

Toronto-based composer, Michael Colgrass has devised a system of creating sounds and notating them with graphic markings with the intention of introducing young people to music composition. The system is simple in design and execution, especially with regard to performance skill and music literacy knowledge (theory and harmony). The following is a basic outline of Colgrass' method as recently employed at Middleton Regional High School, Middleton, Nova Scotia, Canada. (March, 2008). In September of 2009 this system was officially incorporated into the 7th grade music program for the province of Nova Scotia.

What you will need:

- Chalkboard (or whiteboard)
- 8-1/2 x 11 paper (lots!)
- Pencils & erasers
- Clear tape
- Graphic notation example sheets (Colgrass)
- Musical instruments (optional)

STEP-BY-STEP METHOD

1. THE SOUNDS (Please see “NOTE!” at the end of this document)

A. Reading from the graphic notation example sheets, have the group vocalize each individual sound. Guide as necessary but avoid verbose descriptions of the sounds. If students are unsure of what a particular graphic sounds like, ask them what they think it should sound like (preferable) or vocally model it for them. Allow 30 – 60 minutes.

B. Then have the group attempt to create the same graphic sounds with their instruments. Again, they will need guidance as to how various sounds can be achieved on different instruments. The teacher can be inventive; employ different groupings, stagger/overlap entrances/exits, experiment with dynamics and balance, etc. Allow 30 – 60 minutes.

C. Practice is crucial to gaining fluency with this method, especially on instruments. Students should practice these techniques just as they would practice scales, etc. for tonal music. Make this a regular part of your class activities and encourage students to include it in their individual practice regimen.

2. CREATING A GROUP SOUNDSCAPE – (Allow 15-30 minutes depending on group size)

A. Invite a volunteer to place a graphic notation figure on the board that represents a sound s/he is hearing. Point out that the top and bottom of the board represent how high and low the voice can go and the soundscape will read left to right.

B. The volunteer holds the chalk until a second volunteer accepts the invitation to add another figure. This continues until the group agrees the composition is satisfactorily completed.

C. Invite a volunteer from the group to go to the chalkboard and guide the group through a vocal

performance. The leader may simply use his/her hand as a “cursor” or attempt more sophisticated gestures as required to achieve a group performance, but allow the leader to discover his/her own method.

3. CREATING INDIVIDUAL SOUNDSCAPES – (Allow approximately 30 – 90 minutes)

A. While still in the group setting, each member of the group is given a sheet of blank paper. They are invited to create a graphic notation piece on their own (no grouping). Allow approximately 15 minutes for this activity.

B. Invite a volunteer to write their piece on the board and guide the group through an impromptu performance (vocal/instrumental). This can happen as many times as time will allow.

At this point it may be possible to identify those who would like to “get serious” about composing a piece. A “one-on-one” approach is recommended in working with composers. The guidelines below may assist with discussions and help composers focus their ideas and create a shape in their compositions.

GUIDELINES FOR COMPOSERS

UNIFYING IDEA: Strong pieces of music usually have one basic idea. In classical music this would be a theme or motif. Example: the first movement of Beethoven’s 5th symphony uses one motif throughout. (Demonstrate point by singing or playing a recording.) Or a programmatic theme, like the sound of rain or storm, auto traffic, birds, etc. Encourage them to pick a topic about which they feel passionate.

CONTRAST: Strong music creates interest through the use of contrast: fast/slow, loud/soft, high/low, thin/thick texture, varied use of instruments. Ask the composers to complete a “what if” or “as if” statement to get ideas. Example: “what if” I used only five instruments and then suddenly used everybody? I think I’ll try making the flutes sound “as if” they were birds.

AN INCITING MOMENT: An inciting moment is an idea that stands out from the background and gets the listener’s attention. Such an idea, once introduced, needs to be developed and resolved. A distinctive melody can be such an event. Introducing a special instrument (soloist) can be such an event. An inciting moment is what makes one piece of music stand out from another.

DREAMER-REALIST-CRITIC (“Triple position”): Suggest to the composers that they alternately place themselves in three frames of minds, or “rooms:” Dreamer, Realist and Critic. In the “Dreamer” room they can imagine anything with no limits on their thinking. They take ideas from this room to the “Realist” room where they ask questions about practical issues: how many players or singers do I need to perform this piece? How big a space? How easy will it be to prepare? Do I need any electronics? How much will it cost? Finally they will visit the “Critic” room where “why” questions are posed: Is my idea original? Is it long enough? Too long? Why flutes? Why that topic?

Remember; it is certainly possible to use conventional notation along with the graphic notation, if the desired sounds are best represented in this manner. Also, voices can be mixed with instruments.

TEACHERS: *In working with the composers you must be willing to engage yourself in their world. Imagine what they are thinking or feeling so you can advise them while minimizing your own ideas of*

how their pieces should sound. Try to understand the sounds they are trying to produce and why.

4. “THE CREATIVE CRUCIBLE” – the Composers’/Performers’ Workshop

The composers present their first drafts to the ensemble. All players receive a photo copy of the draft score from which they will play. Composers lead the players through a reading of their pieces thus hearing the effectiveness of their ideas.

To save time in rehearsal, it is vital that composers avoid talking *about* their piece. They should provide only necessary performance information and proceed directly to practical music making. As issues are identified, particularly in terms of a desired sound, the composer/conductor should sing the sounds as best as s/he can. There may also be significant input from the musicians – suggestions as to how they can produce the composers’ desired sounds, or even suggestions about the work itself. This is an exciting phase in the process.

Eventually, the pieces will reach a final state and a performance is now encouraged. Students are inspired by time limits. Setting a date for a public performance tends to stimulate their creative thinking.

GUIDING PRINCIPLE

Wherever possible throughout the creativity and performance exercise, the students should be allowed to discover the composing, performing and conducting processes on their own, without the intervention of the teacher. The teacher’s job is like that of a rudder on an ocean liner, to help keep the ship on the student’s desired course.

ANTICIPATED ISSUES

Transposition: When using specific pitches or conventional notation, transposing instruments will need to be accommodated. Either use a transposing score (easy solution) or have the players learn how to transpose (challenging solution).

Conducting: As the composers attempt to guide the players through their pieces they will need to develop a gestural language. Conventional conducting technique combined with principles of mime and inventing of new gestures may need to be investigated. But let the composers start out inventing their own gestures to best suit their pieces. One composer in the Middleton Regional High School project danced her conducting gestures, signaling the band with her head, a shoulder, an elbow for their cues.

Specific Instrument Techniques: Each musical instrument is unique. Graphics that may be easy to achieve on one may prove very challenging on another. Techniques must be carefully taught. Consider assembling a compendium of techniques – a “Graphic Notation Performance Technique Method Book.”

NOTE!

The above outline is designed for a “fast track” of this graphic notation method, as was carried out by Michael Colgrass and Richard Bennett on 27-31 March, 2008, where the entire project was initiated and completed within four 7-hour days, including the student composers conducting their own works in a public concert with the Middleton Regional High School band on the fourth day.

A “slow track” approach, where this method would be incorporated into a weekly school teaching program, would have one major difference from the above. Namely, the students would not be given any graphics in advance of creating their first piece as shown in **THE SOUNDS step 1. A.** Instead, they would start with **2. CREATING A GROUP LANDSCAPE.** With this approach, the students would be discovering and creating graphics on their own without ever having seen any previous examples, and therefore achieve the feeling of inventing the whole process themselves. This way they can take ownership of the learning. After they have created and sung their first graphic piece they can then be told: “You have just re-created the basic process of the development of classical music in the past 1000 years: you invented your own sounds, created a notation for them, made your own soundscape, created the conductor, and developed a performance practice.” NOTE THAT SINGING THE GRAPHICS WILL BE EASY FOR THE STUDENTS BECAUSE THEY ARE PRACTICED AT USING THEIR VOICES FLEXIBLY, BUT LEARNING TO PLAY GRAPHICS ON THEIR INSTRUMENTS WILL BE A NEW CHALLENGE. AT THIS POINT, THE TEACHER CAN HAND OUT THE “GRAPHIC EXAMPLES SHEETS” AND BEGIN DRILLING THE STUDENTS IN THE PLAYING OF GRAPHICS ON THEIR INSTRUMENTS. THIS INSTRUMENTAL PRACTICE OF GRAPHICS IS VITAL TO THE SUCCESS OF THE GRAHIC NOTATION LEARNING PROCESS WTH BAND OR ORCHESTRA.

READING FOR EDUCATORS ON MUSIC FOR CHILDREN

Articles by Michael Colgrass:

"Composers and Children: A New Creative force?"

(Published in the September 2004 Music Educators Journal)

"The Secret to Creativity: Think Like a Kid."

(Published in the Italian education magazine, *Adultita*, October 2004, Milan.)

These articles can be accessed on the composer's website under "Writings."

See www.michaelcolgrass.com

Articles by Stephen Budiansky in Washington Post:

"The Kids Play Great - But that Music..."

Washington Post, Sunday, January 30, 2005; Page B03

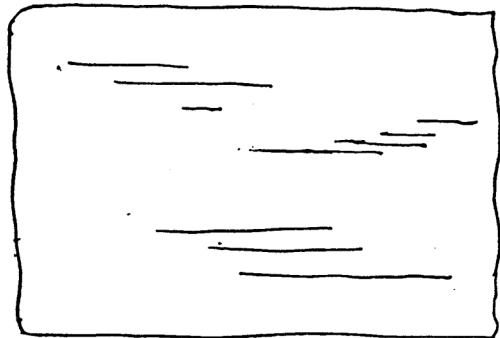
"Why there's so much bad music in the school curriculum -- and what we can do about it."

This follow-up article written by Stephen Budiansky can be obtained by e-mailing
spb@budiansky.com

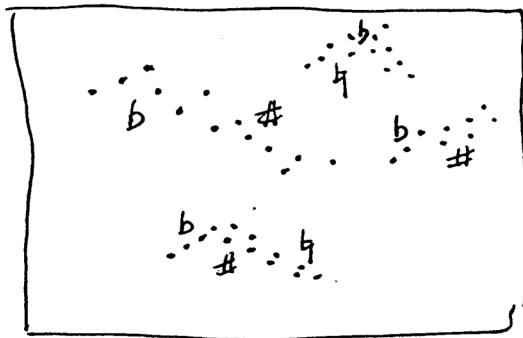
1.

GRAPHIC NOTATION EXAMPLES

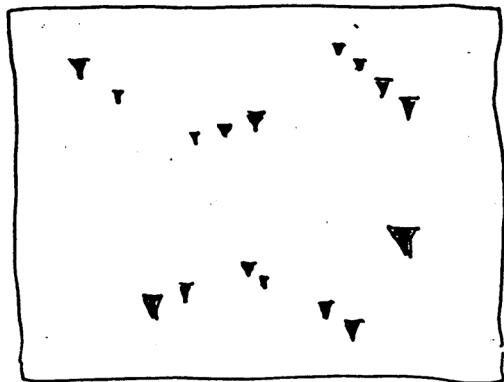
Typical graphics composers can use in creating new pieces.
 These examples can also be used by instrumentalists to practice
 performing graphics.



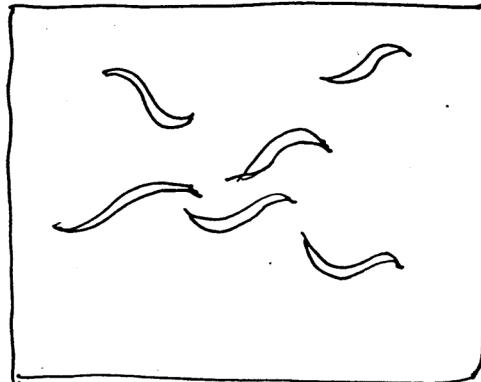
LINES
Long tones



SKITTERS
Very short notes



BITES
Short, sharp attacks

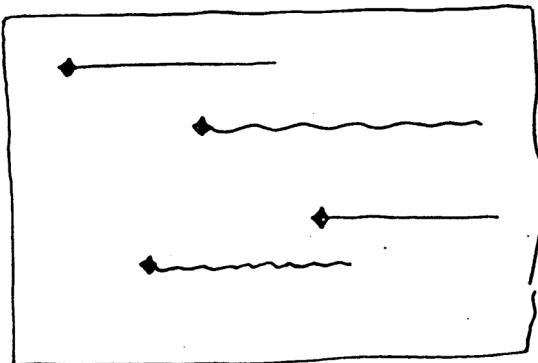


DOLPHINS
Swoops of sound
Thick = loud, thin = soft

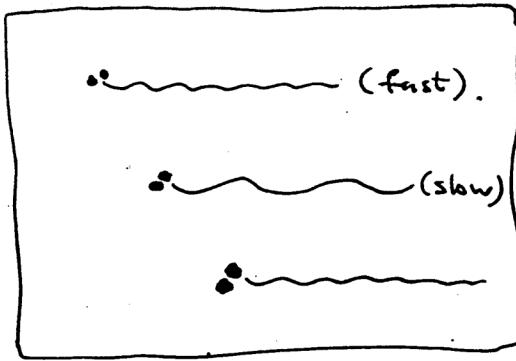
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GRAPHIC NOTATION EXAMPLES

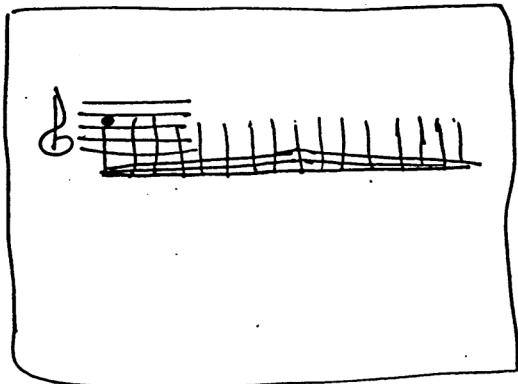
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SURPRISES

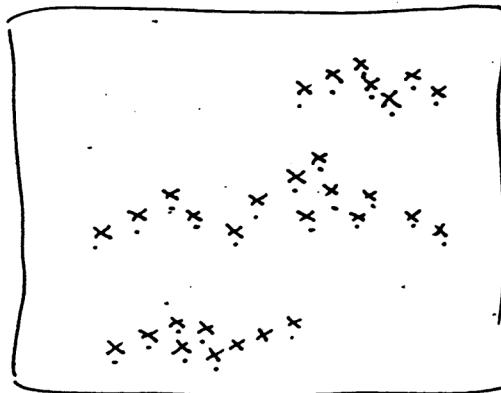
Loud attack, then immediately soft,
with straight or wavy line

QUIVERS

Alternate quickly
between two adjacent pitches

SKIDDING

Speed up and slow down
on one pitch

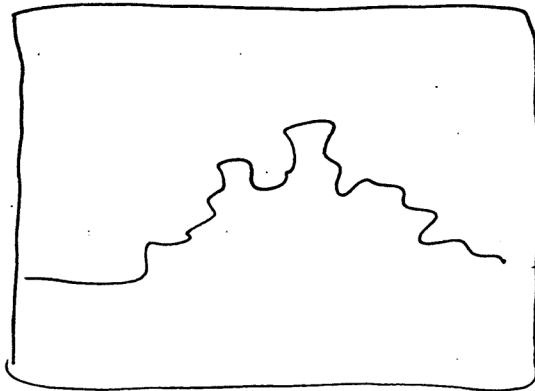
MICE

Random mouth clicks
or click keys on instruments

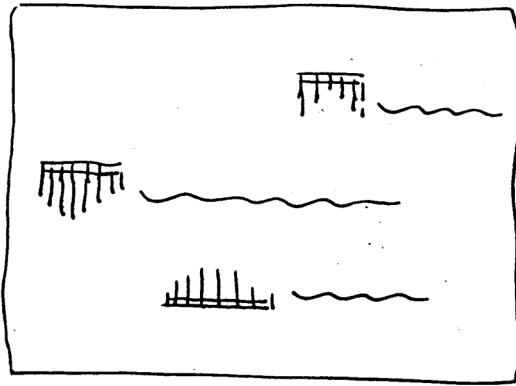
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GRAPHIC NOTATION EXAMPLES

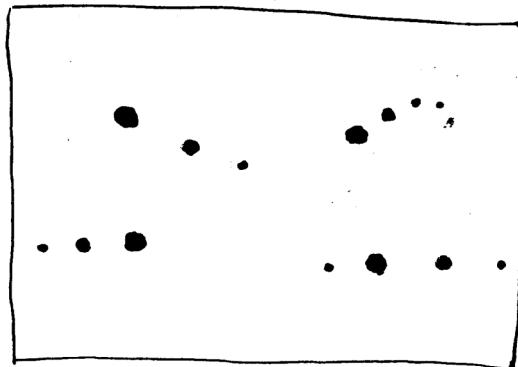
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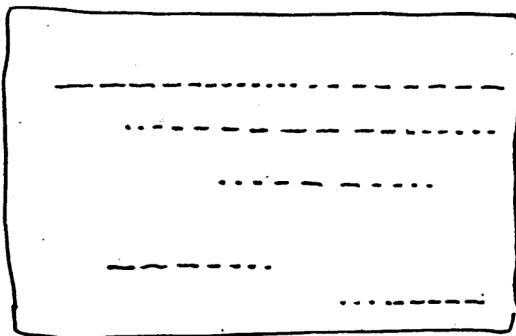
LANDSCAPE
One long uninterrupted line



MURMURING
Rapidly play any convenient
series of pitches



ROUND TONES
Short but full sounds.
Volume according to size.

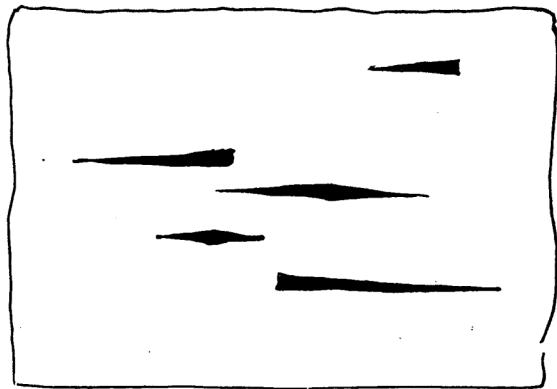


LINES & DOTS
Combine long and short
on same note

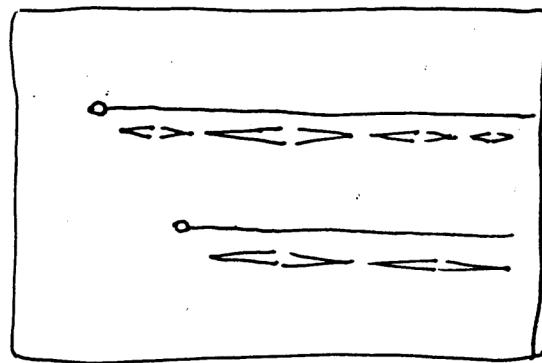
4.

GRAPHIC NOTATION EXAMPLES

(continued)

**SWELLS**

Soft to loud - loud to soft

**WAVES**

Breath accents and swells
on one long uninterrupted tone

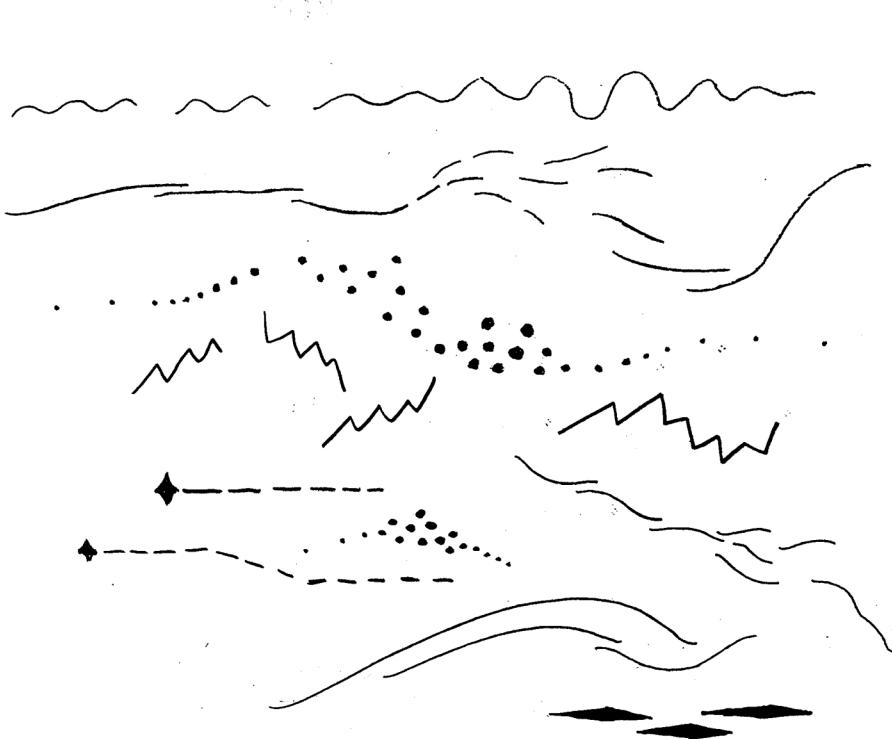
5.

EXAMPLE OF A COMPLEX GRAPHIC COMPOSITION

Note the complexity of this design. Six elements are employed: curved lines, dots, jagged lines, swells, wavy line and diamonds with straight lines.

This is a complex structure which is already so active it leaves little room for development.

Indeed, which idea would you develop?



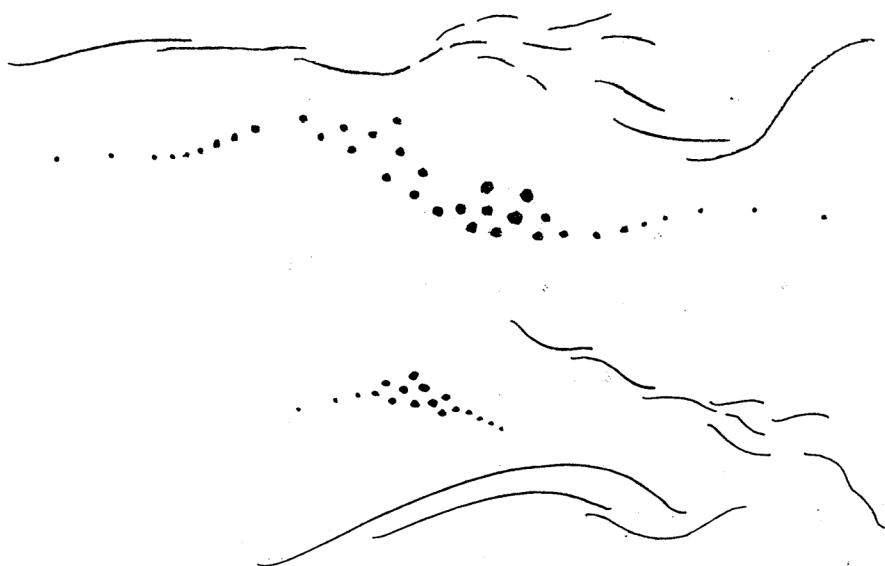
6.

EXAMPLE OF A SIMPLER GRAPHIC COMPOSITION

This graphic design employs only two elements:
curved lines and dots.

These two gestures are vividly contrasting and offer a clear
statement of the subject of the work.

Other elements can be brought in gradually, growing out of
the interplay between the dots and curved lines.

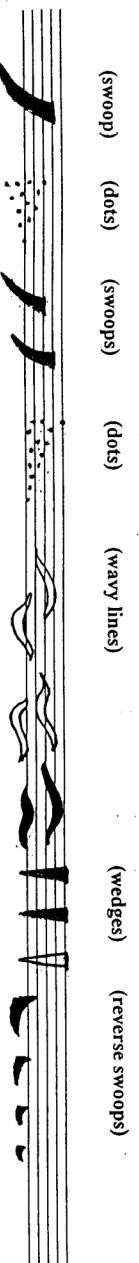


Graphic Notation into Finished Music – by Michael Colgrass 7.

1) Example of graphic notation of sounds



2) How these graphics would look on music paper.



3) Music that might be defined from the graphics.

J=108 3

(swoop) (dots) (swoops) (dots) (wavy lines) (wedges)

(reverse swoops) (reverse swoops) (reverse swoops)